Panasonic
BUSINESS

General Catalogue
2021 / 2022

Bringing nature's balance indoors



heating & cooling solutions

Editorial

Panasonic – leading the way in Heating and Cooling. With more than 50 years of experience, selling to more than 120 countries around the world, Panasonic is one of the leaders in the heating and cooling sector.

Panasonic: Eco & smart ideas for a sustainable lifestyle.

A better life, a better world. Panasonic is creating a safe and secure society with clean energy.





A desire to create things of value.

Panasonic has constantly added to its guarantee for innovation, taking tomorrow's technologies and applying them to today's needs.

Bringing nature's balance indoors.

nanoe™ X, technology with the benefits of hydroxyl radicals.





PRO Club. The professional website of Panasonic.

Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in the heating and cooling markets.

Aquarea

Aquarea is a ground breaking low energy system for heating and domestic hot water production: delivering outstanding performance, even at extreme outdoor temperatures.

Aquarea All in One Compact.

The Aquarea All in One Compact unit is the ultimate space-saving solution. Its 598 x 600 mm footprint, standard size of other big appliances, reduces the space required for the installation.



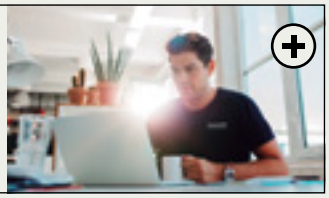


New T-CAP Mono-bloc in R32.

Offering the maximum comfort and flexibility, the new Aquarea T-CAP Mono-bloc J Generation in R32 can maintain the heat pump output capacity until -20 °C outdoor temperature or reach up to 65 °C water outlet.

Aquarea Service Cloud for professionals.

Aquarea Service Cloud will activate remote maintenance service while end user is controlling and monitoring its heating and DHW remotely.





Residential ventilation unit with heat recovery.

Ventilation systems with heat recovery offer users a high degree of living comfort thanks to temperature control and clean air.

Domestic

Panasonic has developed a range of domestic products designed for you and your clients.

New Etherea: Welcome to your new home.

Designed to produce the ultimate comfort and performance for homeowners, the new Etherea is a worthy addition to any indoor environment.





nanoe™ X , improving protection 24/7.

nanoe™ X technology brings nature's detergent – hydroxyl radicals – indoors, so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and pleasant place to be.

Simple installation and easy maintenance.

The whole domestic range has been meticulously designed for simple, stress-free installation and ongoing maintenance.





Voice Control.

Control without boundaries and get hands-free help to fully access the features of your air conditioners. Maximising your cooling comfort is now a breeze with our Network-Enabled Air Conditioners with Panasonic's Comfort Cloud and Voice Control.

Commercial

The commercial range is constantly expanding so that you can always offer your clients the optimal solutions: high performance, silent machines and a complete range of ducts, cassettes and ceiling installations.

New PACi NX Series.

This new series has been developed with 3 wired method and communication. It makes it simple and easy to replace old systems with 3 wire connections, which is prevalent in many systems.



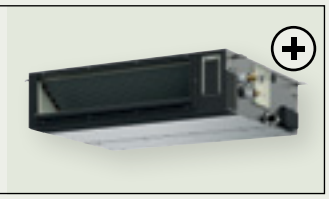


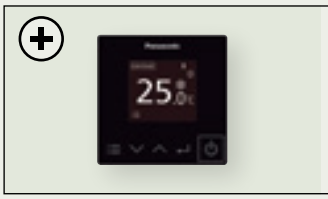
nanoe™ X , improving protection 24/7.

nanoe™ X technology brings nature's detergent – hydroxyl radicals – indoors, so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and pleasant place to be, whether at home, at work, or visiting, shops, restaurants etc.

New adaptive ducted unit - PF3.

New adaptive ducted - PF3 has been completely re-designed to provide better flexibility. The vertical installation is newly available with powerful external static pressure (maximum 150 Pa).





CONEX. New devices and apps.

CONEX provides comfort and control for varying user needs.
Accessible, flexible and scalable with different controllers and apps.
Perfectly meeting requirements of modern controls for end user, installer and service.

VRF Systems

The VRF industrial range considerably improves efficiency so even large buildings can benefit from a high-level of comfort with less energy consumption.

New Mini ECOi LZ2 Series R32.

The new Mini ECOi LZ2 Series utilizes environmentally friendly R32 refrigerant, reducing the total amount of refrigerant by 20 % and more, resulting in lower GWP, reduced by 75 %.





nanoe™ X.

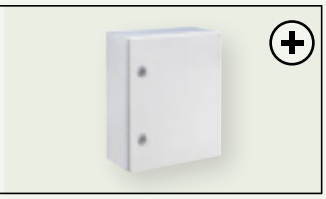
Panasonic's nanoe™ X technology brings nature's detergent – hydroxyl radicals – indoors to help improve protection 24/7. Available in 4 way 90x90 cassette, floor console and new adaptive ducted unit.

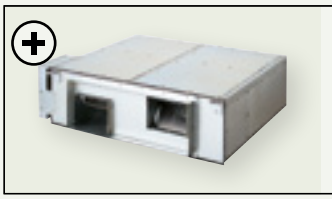
Ventilation

Panasonic ventilation solutions for maximum savings and easy integration.

New AHU connection kit 3,6 to 14,0 kW for PACi NX.

The Panasonic AHU connection kits offer a wealth of connectivity possibilities so can be easily integrated into many systems.





High pressure duct and 100 % fresh air duct function for all ECOi and ECO G systems.

The E2 range of ducted units offers improved design flexibility for extended duct layouts.

Control and connectivity

From the individual remote controller for the residential single units up to the newest technology capable of controlling your building anywhere in the world.

Panasonic AC Smart Cloud.

Panasonic AC Smart Cloud provides building mapping, remote monitoring, error notification and schedule setting for site managers. Panasonic AC Service Cloud help maintenance companies to manage multiple sites with remote checking and advance failure prediction functions.





Panasonic AC Service Cloud.

Panasonic AC Service Cloud provides to maintenance company a unique tool to deliver advanced maintenance to increase response time, reduce sites visits and allocate better the resources.

Chiller

Panasonic introduces the new ECOi-W heat pumps and cooling only chiller series. These new series provides a wide variety of HVAC system solutions, to meet all of your residential, commercial and industrial needs.

ECOi-W cooling only.

High seasonal efficiency with the line-up from 20 kW to 210 kW.
Fully customisable design gives high flexibility for commercial applications.





Explore the new range of fan coils.

Presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location.

Refrigeration

Panasonic condensing units with natural refrigerant.
Panasonic is now introducing the environmentally friendly CO_2 condensing units for commercial refrigeration.

Natural refrigerant CO_2.

CO_2 is a very attractive refrigerant from an environmental perspective.
Zero ODP and "GWP" (Global Warming Potential) =1 means natural substance in the atmosphere.





CO_2 Condensing units CR Series by trusted technology.

CR Series are made in Japan with an excellent quality control established by skilled factory team.

Dimensions

Wiring diagrams

Quality Management System Certificate

ISO 9001: 2015
Panasonic Appliances Air-Conditioning Malaysia. Sdn.Bhd.
Cert. No.: QMS 00413

GB/T 19001-2016/ISO 9001: 2015
Panasonic Appliances Air-Conditioning (GuangZhou) Co., Ltd.
Registration Number: 01218Q30835R8L

Environmental Management System Certificate

ISO 14001: 2015
Panasonic Appliances Air-Conditioning Malaysia Sdn.Bhd.
Cert. No.: EMS 00109

GB/T 24001-2016/ISO 14001: 2015
Panasonic Appliances Air-Conditioning (GuangZhou) Co., Ltd.
Registration Number: 02118E10944R7M

Panasonic: Eco & smart ideas for a sustainable lifestyle

A better life, a better world.
Panasonic is creating a safe and secure society with clean energy.









www.future-living-berlin.com

FUTURE LIVING® BERLIN

Smart City Quarter Berlin

A European Lighthouse Project for Smart Home & Connected Life. Future Living® Berlin.

The building project Future Living® Berlin is a future model for interconnected urban district. Since 2013 GSW Sigmaringen and Unternehmensgruppe Krebs are developing a model for future living – based on their long term expertise in real estate business and in cooperation with leading international technology companies. In spring 2019 first residents will move into the new quarter.
Future Living® Berlin is making use of the increasing possibility to interconnect products and services. Based on this chance smart and intelligent solutions for future living as well for the single apartments as for the quarter are developed. These solutions are enabling residents to use online services in their intelligent housing environment. Based on these opportunities a concept of living for daily routine is developed offering residents comfort, security and time saving.
A special enhancement of Future Living® Berlin is the pre-configuration for different apartments by experts that enable residents to move into a "ready to go" apartment and be directly supported in their daily routines in an intelligent way. By using one central app or native language single apartments can be steered, adopted and individually expanded by future smart products.
Cross-linkage of products and technologies provides all residents with a simple access for an exclusive community care sharing in the residential quarter which is, of course, based on e-mobility and part of an holistic energy concept containing photo-voltaic systems and battery storage. Cooperating with leading technology companies as project partners a continuous and technological progression is guaranteed in the future. Including residents and learning from their usage data participating partner a ready and enabled to improve the offered solutions pointedly further more.
Beside Future Living® Homes there is Future Living® Dialog offering extensive information and use cases for the general public. The project with it's innovative aims is also representing for sustainability and social solutions. Affordable rental and ancillary rental costs result in apartments available for many target groups.
Future Living® Berlin is aiming for conceptional and architectural answers for some of the big challenges of our society as demographical changes, energy turnaround and changing mobility manners. With it's comprehensive solution approach it is unique in Europe.

Demographic change, energy revolution and mobility change. We offer solutions for the challenges of our time.

A desire to create things of value

"Recognising our responsibilities as industrialists, we will devote ourselves to the progress and development of society and the well-being of people through our business activities, thereby enhancing the quality of life throughout the world."

Panasonic Corporation's Basic Management Objective, formulated in 1929 by the company's founder, Konosuke Matsushita.



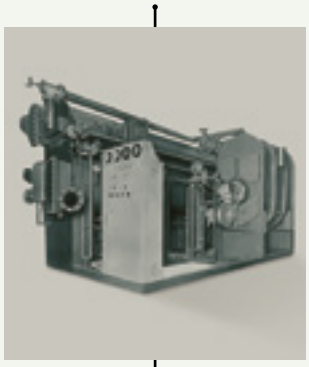
1958



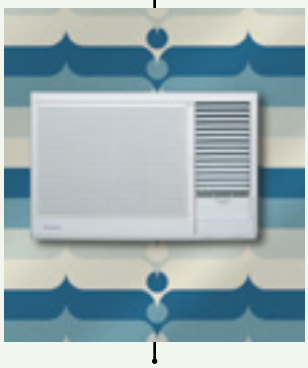
First room air conditioner launched for domestic installation.

1971

Starts production of absorption chillers.



1975



Panasonic becomes one of the first Japanese air conditioner manufacturers in Europe.

1982

Panasonic launches the first highly efficient air-to-water heat pump in Japan.



1985



Introduces first GHP (gas heat pump) VRF air conditioner.

1989

Introduces world's first simultaneous 3-Pipe heating/cooling VRF System.



New Panasonic GHP units. The gas-driven VRF Systems are ideal for projects where power restrictions apply.



Panasonic introduces a new Chiller series which is named as ECOi-W.



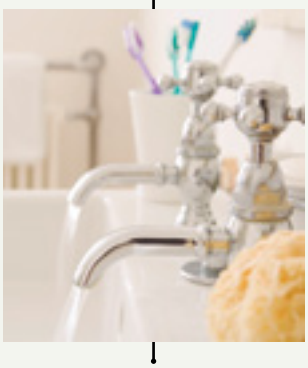
World's first air conditioner equipped with nanoe™



New VRF Systems ECOi EX with extraordinary energy saving performance.



2008 | **2010** | **2012** | **2015** | **2016** | **2018** | **2019** | **Looking ahead**



New Aquarea. Panasonic introduces Aquarea, an innovative new, low-energy system in Europe.



The first Hybrid System with VRF and GHP in Europe.



CO_2 condensing units in Europe. The ideal solution for supermarkets, shops and gas stations.



nanoe™ X, technology with the benefits of hydroxyl radicals. Improving protection 24/7.

Bringing nature's balance indoors

nanoe™ X, technology with the benefits of hydroxyl radicals.

In today's health-conscious world, we care about taking exercise, we care about what we eat and what we touch, we also care about what we breathe – and technology exists to bring good outdoor air, indoors.



Abundant in nature, hydroxyl radicals (also known as OH radicals) have the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise. nanoe™ X technology can bring these incredible benefits indoors so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and pleasant place to be, whether at home, at work, or visiting hotels, shops, restaurants etc.

A naturally occurring process

Hydroxyl radicals are unstable molecules looking to react with other elements like hydrogen, capturing it. Thanks to this reaction, hydroxyl radicals have the potential to inhibit the growth of pollutants such as bacteria, viruses, moulds, and odours, breaking them down and neutralising the unpleasant effects. This naturally occurring process has major benefits to improve indoor environments.



Hydroxyl radicals in nature.

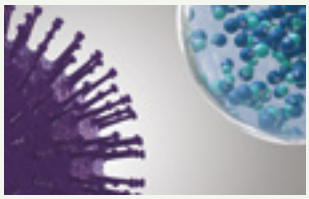


Hydroxyl radicals contained in water.

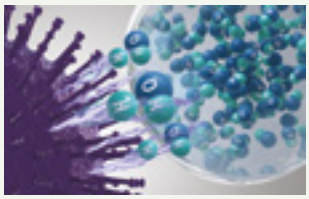
By creating hydroxyl radicals contained in water, nanoe™ X technology significantly boosts their effectiveness, increasing hydroxyl radicals lifetime from less than a second in nature, to more than 600 seconds – 10 minutes so that nanoe™ X can spread easily around the room.

Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment

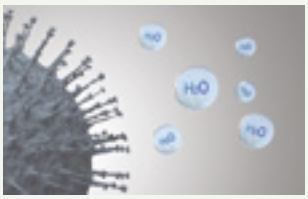
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



1 | nanoe™ X reliably reaches pollutants.



2 | Hydroxyl radicals denature pollutants' proteins.



3 | Pollutants activity is inhibited.

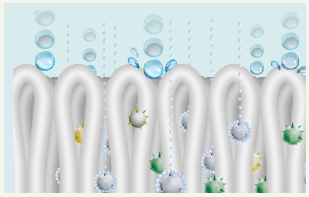
The well-being benefits of nature are well known – but do you know the power of hydroxyl radicals?

What is unique about nanoe™ X?

Hydroxyl radicals inhibit pollutants, certain types of viruses, and bacteria to clean and deodorise. Thanks to this advanced technology, even tightly woven fabrics can be treated using this solution, meaning that curtains, blinds, carpets and furniture can all benefit from this technology to inhibit hazardous substances – including on hard surfaces and, of course, the air that we breathe.



Effective on fabrics and surfaces.



1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

Longer lifespan.



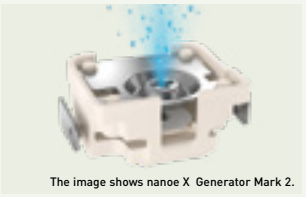
2 | Contained in tiny water particles, nanoe™ X has a longer lifespan to spread easily around the room.

Huge quantity.



3 | nanoe X Generator Mark 2 produces 9,6 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

Maintenance-free.



The image shows nanoe X Generator Mark 2.

4 | No maintenance, no replacement required. nanoe™ X is a filter free solution that does not require maintenance, as its atomisation electrode is enveloped with water during its generation process and it is made with Titatium.

7 effects of nanoe™ X – Panasonic unique technology

Deodorises



Odours

Capacity to inhibit 5 types of pollutants



Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances

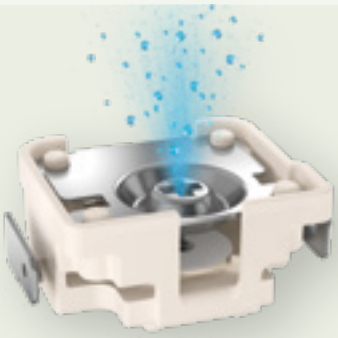
Moisturises



Skin and hair

* Refer to https://aircon.panasonic.eu for more details and validation data.

The latest nanoe™ X device uses a "multi-leader discharge" system that focuses the discharge to 4 needle-shaped electrodes, greatly expanding the hydroxyl radicals.



The image shows nanoe X Generator Mark 1.

How nanoe™ X is generated.

1 | Atomised electrode produces condensation.
2 | Electrical discharge is applied to the water
3 | nanoe™ X particles are generated

nanoe™ X, internationally-validated technology in testing facilities

The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Malaysia and Japan.

Test results conducted under controlled laboratory conditions. Performance of nanoe™ X might differ in real life environment.

Panasonic heat pump with nanoe™ X technology verified against SARS-CoV-2

Virus SARS-CoV-2: 91,4 % inhibited. Test conducted by TEXCELL (France), using a gauze saturated with SARS-CoV-2 virus solution exposed to Panasonic heat pump with nanoe™ X in a space of 6,7 m³ over 8 hours. Test report: 1140-01 C3. Performance of nanoe™ X might differ in real life environment.

	Tested contents		Result	Capacity	Time	Testing organisation	Report No.
Airborne	**Virus**	Bacteriophage ΦX174	99,7 % inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1
	Bacteria	Staphylococcus aureus	99,9 % inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	2016_0279
Adhered	**Virus**	SARS-CoV-2	91,4 % inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3
		SARS-CoV-2	99,9 % inhibited	45 L	2 h	Texcell (France)	1140-01 A1
		Feline Coronavirus	99,3 % inhibited	45 L	2 h	Yamaguchi University Faculty of Agriculture	—
		Xenotropic murine leukemia virus	99,999 % inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—
		Influenza (H1N1 subtype)	99,9 % inhibited	1 m³	2 h	Kitasato Research Center for Environmental Science	21_0084_1
		Bacteriophage ΦX174	99,80% inhibited	25 m³	8 h	Japan Food Research Laboratories	13001265005-01
	Bacteria	Staphylococcus aureus	99,9 % inhibited	20 m³	8 h	Danish Technological Institute	868988
	Pollen	Ambrosia pollen	99,4 % inhibited	20 m³	8 h	Danish Technological Institute	868988
		Cedar	97 % inhibited	Approx. 23 m³	8 h	Panasonic Product Analysis Center	4AA33-151001-F01
	Odours	Cigarette smoke odour	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

First nanoe™ device was developed by Panasonic in 2003

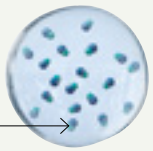
Generator: nanoe™

2003

480 billion hydroxyl radicals/sec

Ion particle structure

Hydroxyl Radicals

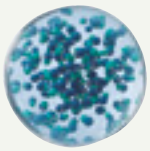


Generator: nanoe™ X

Mark 1 - 2016

4,8 trillion hydroxyl radicals/sec

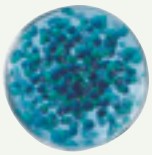
10x times



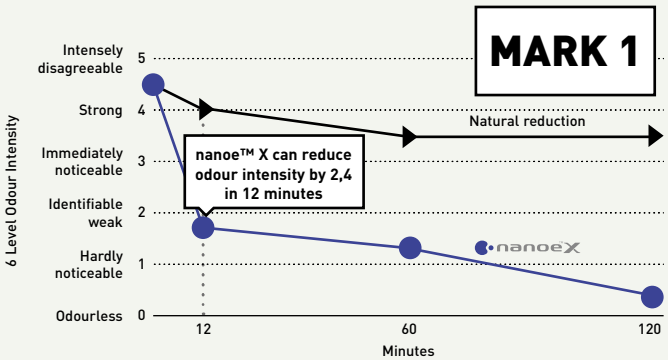
Mark 2 - 2019

9,6 trillion hydroxyl radicals/sec

20x times

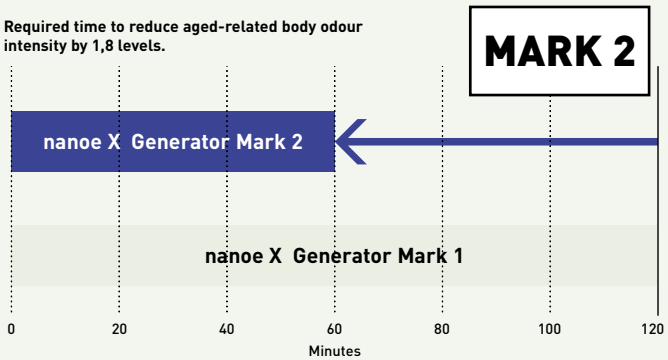


nanoe X Generator Mark 1 can reduce cigarette smoke odour intensity by 2,4 levels in 12 minutes



Deodorisation effect for adhering odour (cigarette smoke). Deodorisation test.
Testing organisation: Panasonic Product Analysis Center. Testing method: Verified using the six-level odour intensity scale method in an approximately 23 m³ sized test room. Deodorisation method: nanoe™ released. Test substance: Surface-attached cigarette smoke odour. Test result: Odour intensity reduced by 2,4 levels in 12 minutes. (4AA33-160615-N04).

nanoe X Generator Mark 2 can reduce the aged-related body odour in half of the time



Deodorisation test.
Testing organization: Panasonic Product Analysis Center. Testing method: Verified using the six-level odour intensity scale method in an approximately 23 m³ sized test room. Deodorisation method: nanoe™ released. Test substance: Surface-attached aged related body odour. Test result: Odour intensity reduced by 1.8 levels in 1 hour (Y18HM059).

Where is nanoe™ X technology used?

Since 2003, nanoe™ has become a part of people's lives in Japan and other regions.
Such technology can be found in diverse applications for cleaning air and surfaces, inside trains, elevators, cars, home appliances and personal beauty ... as well as in air conditioning.
Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment for residential applications as well as for commercial spaces and, it is a solution that does not require filters or maintenance and can work independently from heating or cooling.


Home


Shop


Gym


Hotel


Office


Clinic


Restaurant


Hospital

It has been adopted in people's homes as well as in public facilities where improved air quality is desired, such as offices, hospitals, healthcare centres and hotels etc.

nanoe™ X: improving protection 24/7









Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment

Home.
Split and Multi Split. Built-in nanoe X Generator Mark 2.



Wall-mounted Etherea Z.
CS-(M)Z**XKEW. 7 capacities: 1,6 - 7,1 kW.

Wall-mounted Etherea XZ.
CS-XZ**XKEW. 4 capacities: 2,0 - 5,0 kW.

Floor console. Built-in nanoe X Generator Mark 1.



Floor console.
CS-Z**UFEAW. 3 capacities: 2,5 - 5,0 kW.

Split. Built-in nanoe™.



Wall-mounted Heatcharge VZ.
CS-VZ**SKE. 2 capacities: 2,5 - 3,5 kW.

Commercial.
PACi. Built-in nanoe X Generator Mark 1.

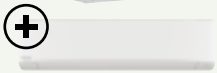


4 Way 90x90 cassette.
S-****PU3E. 7 capacities: 3,6 - 14,0 kW.

PACi. Built-in nanoe X Generator Mark 2.



Adaptive ducted unit.
S-****PF3E. 7 capacities: 3,6 - 14,0 kW.



Wall-mounted.
S-****PK3E. 5 capacities: 3,6 - 10,0 kW.



Ceiling.
S-****PT3E. 7 capacities 3,6 - 14,0 kW.

VRF. Built-in nanoe™ X.



nanoe X Generator Mark 2.
U2 Type 4 way 90x90 cassette.
S-***MU2E5B. 11 capacities: 2,2 - 16,0 kW.



nanoe X Generator Mark 2.
F3 Type adaptive duct.
S-***MF3E5B. 12 capacities: 1,5 - 16,0 kW.



nanoe X Generator Mark 1.
G1 Type floor console.
S-**MG1E5N. 5 capacities: 2,2 - 5,6 kW.

nanoe™ X: improving protection 24/7

A globally trusted air conditioning brand

Panasonic – leading the way in Heating and Cooling.
With more than 50 years of experience, selling to more than 120 countries around the world, Panasonic is one of the leaders in the heating and cooling sector.



With a diverse network of production and R&D facilities, Panasonic delivers innovative products incorporating cutting-edge technologies that set the standard for air conditioners worldwide.
Expanding globally, Panasonic provides superior international products transcending borders.



100 % Panasonic: we control the process

The company is also a world leader in innovation as it has filed more than 91539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's heat pumps.
This wish to excel has made Panasonic a leading company in heating and turn-key air conditioning solutions. These offer maximum effectiveness, comply with all environmental standards and meet the most avant-garde construction requirements of our time.

Constantly Improving

At Panasonic, we know that the best is always yet to come. This is why our air conditioning and heat pump solutions are constantly upgraded. Panasonic is committed to offering our customers innovative products in the heating and cooling market across Europe, and has the ambition to not only meet but also exceed their requirements.
Our Technology & Design teams anticipate the needs of tomorrow. We look to produce smaller, quieter, efficient solutions - with better technological features – that can reduce energy consumption while providing suitable temperature conditions for the user.

40 years of experienced organization in Europe

The partner for all Europe.
· Full European coverage and integrated organization
· One voice for European Agreements
· Availability and delivery anywhere in Europe
· Specification team to support project design throughout Europe
· European Service Network

Trained professionals.
· 22 Training centres in 15 countries
· More than 5000 professionals trained every year.
Innovation and manufacture in Europe

R&D Department designs solutions for different European needs.
· New factory set up in Czech Republic
· Design software made in Europe for Europe

More than Cooling, Heating and Refrigeration Solutions.
· Security, communication solutions, advanced digital signage technology, access control solutions, displays...



22 Training centres in 15 countries



Panasonic R&D Center Germany GmbH.
The European Research & Development Center of Panasonic focusing on technology development for intelligent and environmentally friendly future products, such as audio video, communication and energy solutions.

100 % Panasonic, the DNA of Japanese craftsmanship

JAPAN QUALITY

Applying advanced technologies that truly make life better, we live by an unparalleled commitment to product quality.
Panasonic is building on the Japanese tradition of uncompromising quality control worldwide, developing and manufacturing fine products and delivering them to customers everywhere.



At Panasonic, we believe that the best air conditioner is one that works quietly and effectively in the background whilst minimising its impact on the environment

People who use our products can look forward to long years of high-quality performance without the need for constant service. As part of our rigorous design and development process, Panasonic air conditioners undergo a variety of stringent tests to ensure their effectiveness and long-term reliability. Tests for durability, waterproofing, shock resistance, and noise are conducted on component parts or on the finished products themselves.
As a result of all of these time consuming efforts, Panasonic air conditioners meet industrial standards and regulations in every country where they are sold.

International Standard Quality

To uphold the company's reputation around the world, Panasonic strives continuously to offer quality with minimized environmental impact.





Reliable parts that meet or exceed industrial standards.
In every country where they are sold, Panasonic air conditioners comply with all required industrial standards and regulations. In addition, Panasonic conducts stringent testing to ensure the reliability of parts and materials. The strength of the resin material used in a propeller fan is confirmed by a tension test.



Compliance with RoHS / REACH substance restrictions.
Panasonic products and used materials strictly comply with chemical substance restrictions as defined by RoHS or REACH. During the development and production of parts, stringent inspections are conducted on over 100 materials to ensure that no hazardous substances are included.



Sophisticated production process.
Panasonic's air conditioner production lines employ state-of-the-art factory automation technologies to ensure products are manufactured with high attention to quality to meet expectations of reliability and trustworthiness.

Durability

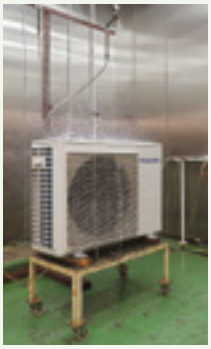
At Panasonic we know the importance of a long service life with minimal maintenance. That's why we subject our air conditioners to a wide range of stringent durability tests.



Long-term durability test.
To ensure durability and stable operation for many years, we conduct a long-term continuous operation test under conditions that are much more severe than actual operating conditions.



Compressor reliability test.
After the continuous operation test, we remove the compressor from a selected outdoor unit, disassemble it, and examine the internal mechanisms and parts for potential failure. This helps ensure reliable long-term performance under harsh conditions.





Waterproofing test.
The unit - which is subject to rain and wind - complies with IPX4 waterproof specifications. Contact sections on printed circuit boards are resin-potted to prevent adverse effects caused by exposure to water (an unlikely occurrence).

Projects & Case Studies of Panasonic Heating and Cooling Solutions

Panasonic, a partner with the knowledge and experience to achieve your objectives and green needs.



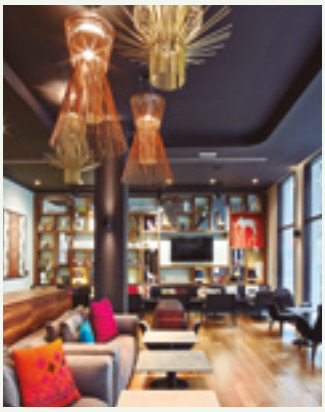
The 5-star Monument Hotel. Barcelona, Spain. ECOi VRF

Integrated technology that permits better work, easy installation, high efficiency performance, and energy savings

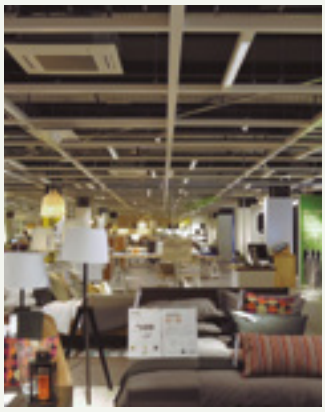
Our main targets are the distributed services and B2B-integrated solutions.
Panasonic provides a single point of contact for the design and maintenance of your system, making things easy for you. Given our experience in processes, technologies and complex business models, we can offer you effective solutions that reduce costs, whilst also being efficient, user-friendly, reliable and innovative. Another advantage we offer to our clients is a support service for systems integration projects, which we provide through our wide range of services and solutions. As a global company, we have at our disposal the financial, logistical and technical resources to develop complex and wide-ranging solutions, both at country and international level by implementing them both on-time and on-budget.



Bulgaria's stand-out residential building with efficient HVAC solution. **Aquarea**



The Hotel Vincci Gala with efficiency class A, up to 70 % save energy. Barcelona, Spain. **ECOi - ECO G**



IKEA "Click and Collect" store in city centre. Birmingham, UK. **ECOi - ECO G**



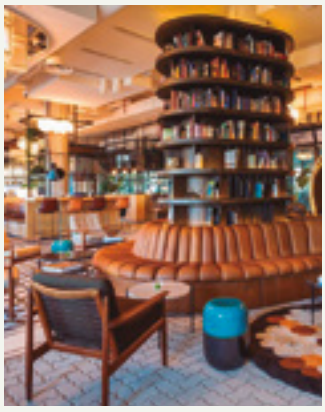
9 high quality homes in Whittle-Le-Woods near Chorley, UK. **Aquarea**



Andalucia Technology Park. Offices of high energetic efficiency. Spain. **ECOi**



14 bubble style domes to bring a 180-degree transparent window to the nature. Belfast, Ireland. **Aquarea**



Madrid's hotel Only You Atocha. The hotel has 206 rooms distributed over seven floors. **ECO G**



LIAIGRE showroom, well-known as a luxury design architect in Paris, France. **ECOi**



Marina Village Greystones. 205 apartments and 153 houses. Ireland. **Aquarea**



ITK Engineering GmbH. An innovative office building located in Germany. **ECOi - PACi**



Zalando's solution for its warehouse office conversion at Grand Canal Quay, Dublin. **ECOi**



NHS Canford house clinic, Bournemouth, UK. **VRF**

To find out more: www.aircon.panasonic.eu

PRO Club. The professional website of Panasonic

Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in the heating and cooling markets.



Panasonic PRO Club (www.panasonicproclub.com) is the online tool which makes your life easier! You just have to register and a lot of functionalities are freely available to you, where ever you are, from your computer or smartphone!

- Print catalogues with your logo and your address
- Download the latest Aquarea designer to define your system and select the good Aquarea Heat Pump.
- Calculate the specs of the fan coil based on the parameters of your system
- Get documents of conformity and all other documents you may need
- Download all the service manuals, end user manuals and installation manuals
- Know what to do with error codes
- Find out about the latest news first
- Register for training

Highlighted features

- Extensive library of resources
- Tools & apps for end users. Check availability in your country:
  - My Home: sizing wizard for domestic and air to water range
  - My Project: Contact form to Panasonic team
  - iFinder: Lists of installers displayed by postcode
- Special offers & promotions
- Training PRO Academy
- Catalogues (commercial documentation)
- Marketing (images in high resolution, advertisements, deco guidelines)
- Tools (professional software, sizing tools...)
- Installers customize leaflets in PDF format with their logo & contact details
- Energy label generator. Download energy labels of any device in PDF format
- Heating calculator
- Noise calculator for outdoor unit
- Aquarea radiator calculator
- Error code search by error code or unit ref. Compatible with smartphone and tablet computer
- Revit / CAD Images / Spec texts
- Access to Pananet, online library of technical documentation
- Download documents of conformity and other certifications
- Commissioning online

Panasonic PRO Club is fully compatible with tablet computer and smartphone.

Donwload on www.panasonicproclub.com or connect simply with your smartphone to the PRO Club using this QR.

PRO Club



Easy download Panasonic service documentation and brochures



Customise leaflets with your logo & contact details. Save and print the PDF



Energy label generator. Download Energy labels of any device in PDF format



Error Code on your smartphone and your PC: Search by error code or model reference. Online version + downloadable version for offline use

Aquarea Designer – Online Tool

With Panasonic's Aquarea Designer - Online Tool, projects can be developed simply and easily. The software allows HVAC designers, installers and distributors to identify the correct heat pump for a particular application from Panasonic's Aquarea range or calculate the savings compared to other heat sources, among others.

Aquarea Designer – Online Tool allows the user to build up the project data in a simple step-by-step process and get a complete report that includes:

- Customer and general project information
- Heating system specific data
- Heat pump dimensioning, including information about the chosen Panasonic heat pump
- Calculated energy demand and performance factors
- CO_2 savings by the different energy sources
- Comparison of yearly operational or economic costs (optional)

The tool also includes an hydraulic scheme generator for the project's heating system and an energy label calculator.

Panasonic provides bespoke tool helping system designers, installers and dealers to very quickly design and size heating systems.



Aquarea Designer also means savings

Aquarea Designer will calculate the project's energy costs in terms of hot water, heating and pumping. It will show the equipment running times and calculate the COP (coefficient of performance). It then allows the designer to show clients a comparison with other equipment options such as heating by conventional gas-fired boilers, oil systems, wood, standard electric heating and electric night storage heaters. This compares running costs, initial investment costs and maintenance costs. The comparison can also be made for CO_2 emissions and savings.

The Panasonic PRO Academy

Panasonic takes its responsibility to its distributors, specifiers and installers seriously and has developed a comprehensive Training Programme. The Panasonic Pro-Academy encompasses the traditional hands-on approach to teaching.
New training courses cover three levels. Design, installation, and commissioning & trouble-shooting.

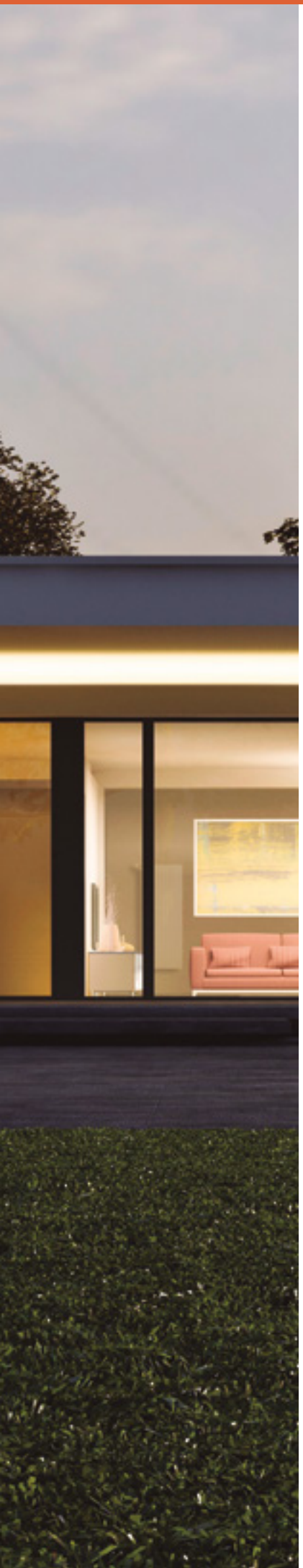
Training courses include:
· Domestic applications Air to Air
· Aquarea air source heat pumps
· PACi, ECOi
The courses are offered on site at Panasonic's premises across Europe. The Training Centres display Panasonic's latest product range and give delegates an opportunity to get a hands-on experience with the latest controllers, indoor and outdoor units from the PACi, ECOi, Etherea, GHP and Aquarea ranges.

Chiller training coming soon!



AQUAREA





Welcome to Aquarea air to water heat pump

Aquarea's Air to Water Heat Pump for residential and commercial applications.
Offering capacities from 3 kW all the way through to 16 kW, the Aquarea Heat Pump Range is the widest on the market, ensuring a system is available whatever your heating and cooling needs. Suitable for new build and refurbishment projects, the solutions are cost-effective with minimised environmental impact.

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Aquarea T-CAP

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Aquarea HT

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Highlighted features

Panasonic's Aquarea range of heat pumps deliver major energy savings thanks to its incredible efficiency even at -20 °C. The Panasonic Aquarea Heat Pumps are designed and produced by Panasonic and not by other companies.



The Aquarea Heat Pump is a system that generates the perfect temperature and produces hot water, in an easy, cheap and environmentally conscious way, by transferring heat instead of generating it. It is among the Technologies listed on the International Energy Agency (IEA) Blue Map, whose goal is to reduce CO_2 emissions to half the levels emitted in 2005, by the year 2050. Aquarea is part of a new generation of heating solutions that use a renewable, free energy source (the air) to heat or cool the home and to produce hot water.

The Good Design Award is among the most prestigious awards for product design excellence. Winning this award has underscored the outstanding performance and energy savings of the Panasonic indoor units All in One and Bi-bloc. In addition, these units' clean, tidy design and functionality make the Aquarea line the ideal system for household applications.

Energy saving



Refrigerant gas R32
Our heat pumps containing the refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP).



Better efficiency & value for medium temperature applications.
Energy efficiency class up to A++ in a scale from A+++ to D.



Better efficiency & value for low temperature applications.
Energy efficiency class up to A+++ in a scale from A+++ to D.



Better efficiency & value for domestic hot water.
Energy efficiency class up to A+ in a scale from A+ to F.



Inverter Plus.
Panasonic Inverter Plus compressors are designed to achieve outstanding level of performance.



A class water pump.
Aquarea are built-in with A class energy efficiency water pump. High efficiency circulating the water in the heating installation.

High Performance



Aquarea High Performance for low consumption houses.
From 3 to 16 kW. For a house with low temperature radiators or under-floor heating, our high performance Aquarea HP is a good solution.
*COP of 5,33 for J Generation 3 kW.



Aquarea T-CAP for extremely low temperatures.
From 9 to 16 kW. If the most important aspect is to maintain nominal heating capacities even at temperatures as low as -7 °C or -20 °C, select the Aquarea T-CAP.



Aquarea HT ideal for retrofit. From 9 to 12 kW.
For a house with traditional high-temperature radiators, the Aquarea HT solution is the most appropriate, can work in output water temperatures of 65 °C even at outdoor temperatures as low as -20 °C.



DHW.
With Aquarea you can also heat your domestic hot water at a very low cost with the optional hot water cylinder.



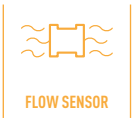
Down to -20 °C in heating mode.
The heat pumps work in heating mode with an outdoor temperature is as low as -20 °C.



Water filter with magnet.
Easy access & fast clip technology for J Generation.
Water filter only for H Generation.



60 °C output water.
Reaches water outlet temperature up to 60 °C.



Water flow sensor.
Included on J and H Generation.



5 years compressor warranty.
We guarantee the outdoor unit compressors in the entire range for five years.



Aquarea J and H Generation heat pumps in combination with the optional PCB CZ-NSP4 hold the SG Ready Label (Smart Grid Ready Label), given by Bundesverband Warmepumpe (German Heat Pump Association). This Label shows the real capacity of Aquarea to be connected in an intelligent grid control.
MCS Certificate number: MCS HP0086.*
Keymark: Check all our certified heat pumps on: www.heatpumpkeymark.com.
Passive House Institute: Certified models can be checked in https://database.passivehouse.com.

High connectivity



Renovation.
Our Aquarea Heat Pumps can be connected to an existing or new boiler for optimum comfort even at very low outdoor temperatures.



Solar kit.
For even greater efficiency, our Aquarea Heat Pumps can be connected to photovoltaic solar panels with an optional kit.



Advanced control.
Remote controller with full dotted 3,5'' wide back light screen.
Menu with 17 available languages easy to use for installer and user.
Included on J and H Generation.



Internet control.
A next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone, tablet or PC via the internet.



Connectivity.
The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.

Warning on quality of water and groundwater use:
This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

* Not all products certified. As the certification process is on-going and the list of certified products constantly changing, please check for latest details on the official websites.

Introducing the Panasonic Aquarea – air source heat pump

At the forefront of energy innovation, Aquarea is resolutely positioned as a “green” heating and air conditioning solution.

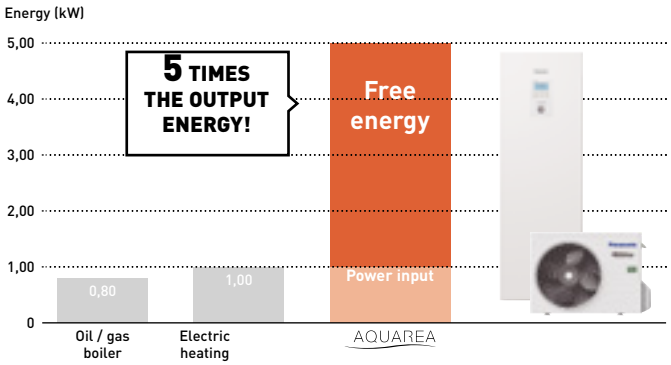


Introducing the Panasonic Aquarea – air source heat pump

In European households, 79 %* of energy consumption comes from heating and producing domestic hot water. By converting heat energy in the air into household warmth, highly efficient Aquarea technology reduces CO_2 emissions and environmental impact, compared to conventional boilers and electric heaters. Compared to an electric heater, the Aquarea Heat Pumps offer up to five times the output in kilowatts per every input in kilowatts.

* ec.europa.eu/eurostat

Comparison:1 kW input versus output in kW.



* 35 °C flow temperature.



Why Panasonic Aquarea air source heat pumps?

Optimum solutions for premium comfort.

Panasonic Aquarea Heat Pumps warm your home effectively and efficiently, to optimise the comfort.

- Precise control the indoor temperature thanks to reliable Panasonic Inverter Compressors
- Aquarea can cool space in summer and brings hot water all year round
- Night mode to reduce the noise when it's needed
- Aquarea T-CAP heat pumps can work in outdoor temperatures as low as -28 °C (for All in One and Bi-bloc)
- Energy savings, comfort and convenient control from any location thanks to Aquarea Smart Cloud
- Aquarea Service Cloud enables remote maintenance of the system

Adapts to your needs.

Panasonic Aquarea Heat Pumps produce heating, cooling and domestic hot water with a single system.

- From 3 kW to 16 kW, there is always an option for lower initial investment and lower operational cost
- Aquarea can be connected to floor heating, radiators or fan coil units
- In refurbishment projects, Aquarea can be integrated in existing heating systems
- Able to reach up to 65 °C water outlet[1)]
- Large piping length of up to 50 m between indoor and outdoor
- Aquarea T-CAP heat pumps guarantee the capacity without backup heating down to -20 °C[2)]

1) Aquarea T-CAP Mono-bloc J Generation and Aquarea HT.
2) At 35 °C flow temperature.

Energy saving means money savings.

Panasonic Aquarea Heat Pumps are a smart choice for saving in heating, all leading to large savings in electricity bills.

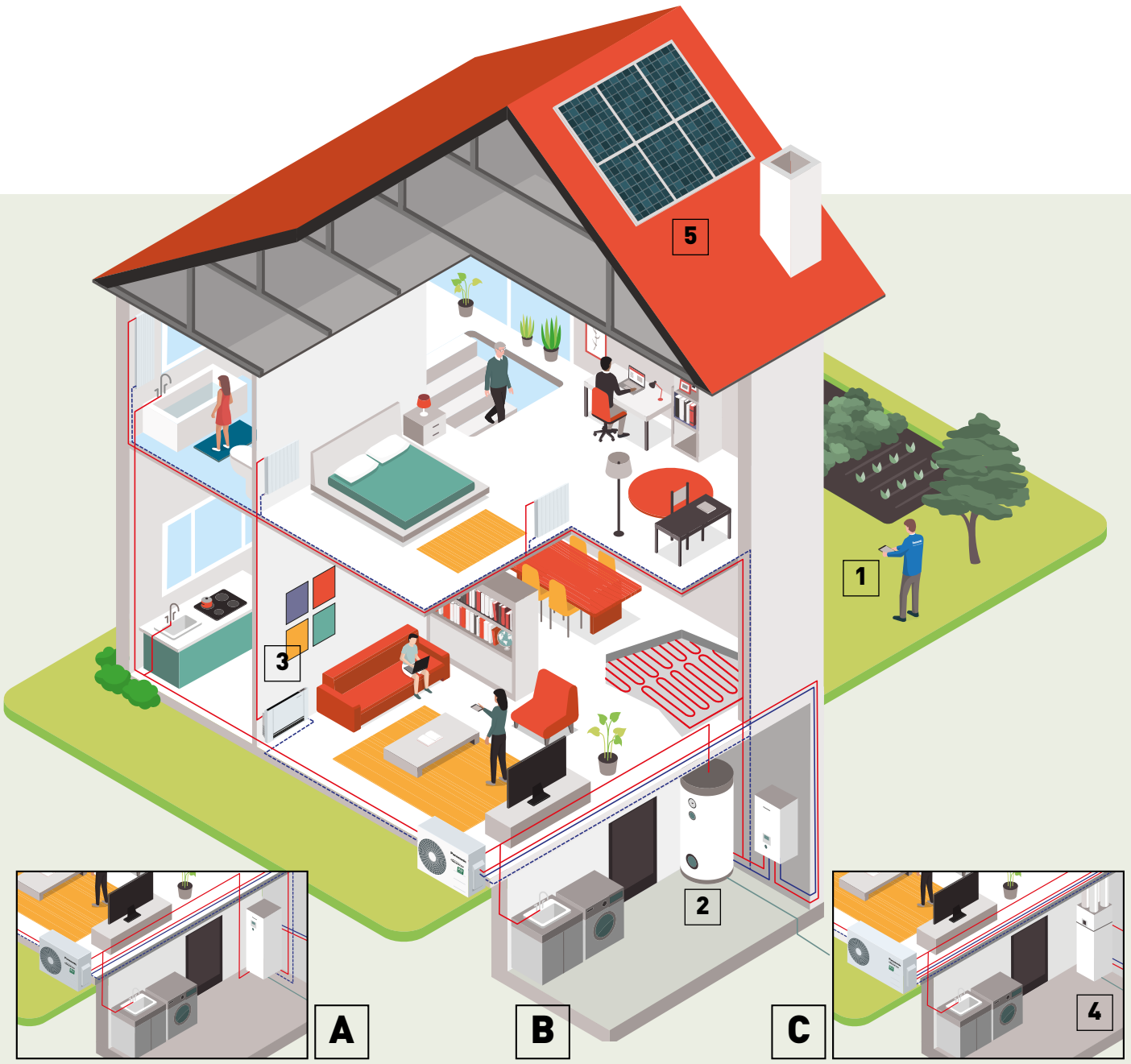
- Savings of up to 80 % on heating expenses, compared to electrical heaters
- Up to A+++ in heating, within the range of A+++ to D, and A+ in domestic hot water, in the range of A+ to F
- Energy consumption can be further reduced by connecting photovoltaic panels to the system
- In combination with a ventilation solution, the indoor air becomes cleaner and the heating requirements of the building are reduced

Contributing to a descarbonised society.

The heat pump is considered a 'green' choice as the heat energy is taken from the environment, making it a sustainable option.

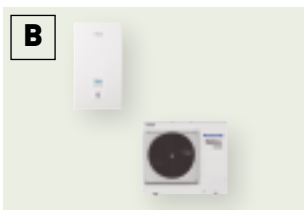
- It maintains a comfortable indoor temperature while significantly reducing environmental burden
- All Aquarea Heat Pumps can also be connected to a solar thermal or PV system in order to increase efficiency and minimise environmental impact

Aquarea Heat Pump line-up

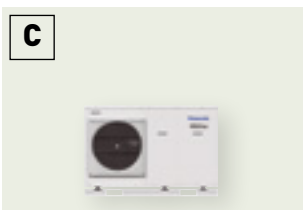




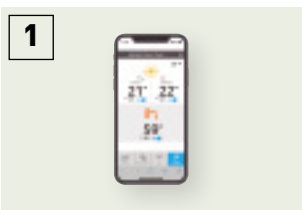
All in One system.



Bi-bloc system.



Mono-bloc system.



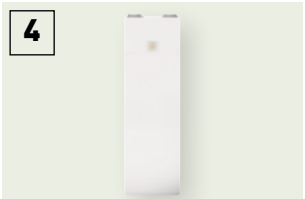
Control through smartphone, tablet or computer (optional).



Super High Efficiency cylinder (optional).



Fan coils for heating and cooling (optional).



Heat recovery Ventilation + DHW Tank (optional).



Heat Pump + HIT Photovoltaic solar panel (optional).

Panasonic Aquarea offers you solutions, helping to make the home more efficient and the installation cheaper and easier.

Aquarea High Performance

For new installations and low consumption homes.
Outstanding efficiency and energy savings with minimised CO_2 emissions and minimum space. Improved performance with COPs up to 5,33 for J Generation 3 kW.

Aquarea T-CAP

For extremely low temperatures, refurbishment and innovation.
Ideal to ensure that the heating capacity is maintained even at very low temperatures. This line-up is able to maintain the heat pump output capacity until -20 °C[1] outdoor temperature without the help of an electrical booster heater.

1) At 35 °C flow temperature.

Aquarea HT

For a house with old high-temperature radiators.
Ideal for retrofit: green energy source works with existing radiators. Aquarea HT Solution is the most appropriate, providing output water temperatures of 65 °C even at outdoor temperatures as low as -15 °C.

DHW Stand Alone

Highly efficient heat pump water heater.
Ideal to cover the hot water needs of a family house, stand alone DHW heat pumps are designed to provide maximum comfort and savings in the production of DHW. Consumption of the A+ DHW heat pump is reduced up to 72 % compared with traditional electric water heaters.

Aquarea High Performance	Aquarea T-CAP	Aquarea HT	DHW Stand Alone
Heating - Cooling - DHW Single phase from 3 to 16 kW Three phase from 9 to 16 kW	Heating - Cooling - DHW Single phase from 9 to 12 kW Three phase from 9 to 16 kW	Heating - DHW Single phase from 9 to 12 kW Three phase from 9 to 12 kW	Only DHW From 100 to 270 L
Connectable to			
Radiators - Fan coil - Underfloor heating - DHW	Radiators - Fan coil - Underfloor heating - DHW	Traditional high-temperature radiators - DHW	Domestic hot water
Application			
Normal installation	For extreme cold ambient	Retrofit for old radiators	Only DHW
Energy efficiency			
A+++ / A++ Heating 35 °C / 55 °C [1]	A++ / A++ Heating 35 °C / 55 °C [1]	A++ / A++ Heating 35 °C / 55 °C [1]	A+ DHW 50 ~ 62 °C [2]
Minimum outdoor temperature			
-20 °C	-28 °C (All in One and Bi-bloc) -20 °C (Mono-bloc) [3]	-20 °C	-5 °C
Minimum outdoor temperature to provide constant capacity at 35 °C supply water temperature			
-7 °C (not for all units)	-20 °C [3]	-15 °C	—
Supply temperature for heating. Maximum / Heat pump only			
75 °C [4] / 55 °C [5] (or 60 °C for Aquarea J Generation)	75 °C [4] / 60 °C [5] (65 °C [6] for Aquarea J Generation)	75 °C [4] / 65 °C	—
Control and connectivity			
Smart Grid Contact [7] Wireless LAN Ready	Smart Grid Contact [7] Wireless LAN Ready	Smart Grid Contact [7]	—
Range			
All in One from 3 to 16 kW (185 L) Bi-bloc from 3 to 16 kW Mono-bloc from 5 to 9 kW	All in One from 9 to 16 kW (185 L) Bi-bloc from 9 to 16 kW Mono-bloc from 9 to 16 kW	Bi-bloc from 9 to 12 kW Mono-bloc from 9 to 12 kW	Wall-mounted 100 and 150 L Floor-standing 200 and 270 L

All data in this chart is applicable in most of models in each line up, check product specs to confirm. 1) Scale from A+++ to D. 2) Scale from A+ to F. 3) 9 and 12 kW. 4) DHW maximum temperature with heater. 5) In case of outdoor temperature over -10 °C. 6) It is possible to set temperature by 65 °C on remote controller. Normally, outlet water temperature is 60 °C or lower. In case of ΔT setting with remote controller is 15 °C and the outdoor ambient temperature is 5 to 20 °C, outlet water temperature 65 °C is possible. 7) H Generation with CZ-NS4P, F and G Generation with Heat Pump Manager. * DHW Stand Alone is produced by S.A.T.E.

Aquarea All in One

Aquarea All in One: This range intelligently integrates the best hydrokit technology with a premium quality stainless steel tank, which is maintenance-free.

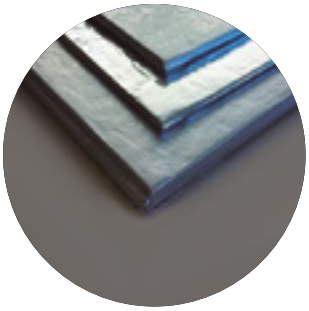


Aquarea All in One: the best Panasonic technology for your home

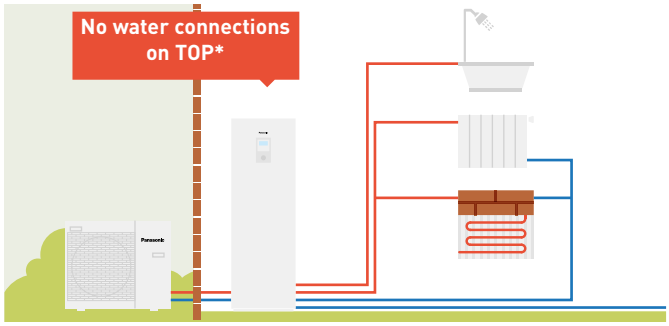
All in One with U-Vacua insulation technology
Panasonic U-Vacua™ is a high performance vacuum insulation panel with very low thermal conductivity, that performs about 19 times better than standard urethane foam.

High quality components inside:
· Maintenance free Inox stainless 185 l tank
· Variable speed water pump (class A)
· Magnetic Filter with shut-off valves
· Expansion vessel
· Vortex flow sensor
· Back up heater
· Safety valve
· Air purge valves
· 3 way valve inside

U-Vacua™ VIPs consist of a unique fiberglass core encased in a laminate film made up of several layers that include nylon, aluminium, and a protective layer. Interior pressure is reduced to a vacuum of 1-20 Pa, thereby minimising thermal conductivity.







Technology to save space

Space-saving solutions, ideal for installations with restricted space.
· Hydrokit and tank in a single unit
· Water piping connections at the bottom, keeping more space above the unit free for use
· No buffer tank required
· Piping length up to 50 m (for J Generation 7 and 9 kW)
· Modern remote controller can be installed up to 50 m from the indoor unit

* Excluding 2 Zone model.

All in One, easy to install

The Aquarea All in One belongs to the new generation of Panasonic heat pumps for heating, cooling and providing domestic hot water in the home.
Improved square design with white goods finish. Modern remote controller can be installed up to 50 m from the indoor unit.

Installer Friendly:
· Electrical connections is now located on front side
· Easy access to parts and easy to install by having all pipings in a row
· Remote controller with full dotted wide screen and new functions
· Can connect additional room temperature sensor, solar kit, 2 zones control, swimming pool and circulating pump (need optional PCB: CZ-NS4P)
· No buffer tank is required

All in One with 2 zones control.
· 2 heating circuits, with 2 different water temperatures
· 2 water pumps and 2 water filters
· Floor heating water control with mixing valve

2 Zones with control of 2 water temperatures (such as underfloor with water at 35 °C and radiators with water at 45 °C).



Aquarea All in One Compact

The Aquarea All in One Compact unit is the ultimate space-saving solution. Its 598 x 600 mm footprint, standard size of other big appliances, reduces the space required for the installation



High Performance All in One Compact J Generation

With its small 598 x 600 mm footprint, the All in One Compact can be neatly lined up with other big appliances like a refrigerator and/or washing machine to reduce the space required for installation.
And thanks to its low height, it can be installed with a ventilation unit on top.



Aquarea All in One: the best Panasonic technology for your home

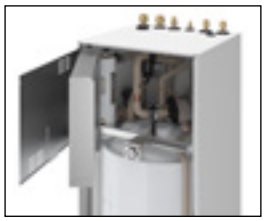
Compact and slim design.
- 598 x 600 mm footprint reduces required installation space
- Lower height leaves space for a ventilation unit

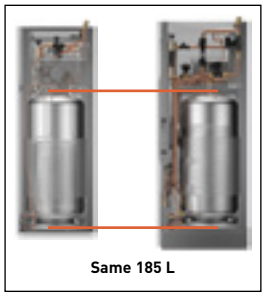
Further flexibility.
- Easy access to hydraulic parts
- Less frequent maintenance with pre-installed improved magnet filter
- Operation without backup heating at -20 °C
- Can supply 60 °C hot water even at -10 °C outside temp.

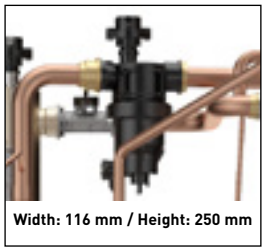
Top-level energy efficiency.
- Top class ErP for heating and DHW COP
- Tank boasts high heat retention thanks to U-Vacua™

The same depth as a regular refrigerator/washing machine.

Made compact but maintenance is still easy




Same 185 L


Width: 116 mm / Height: 250 mm



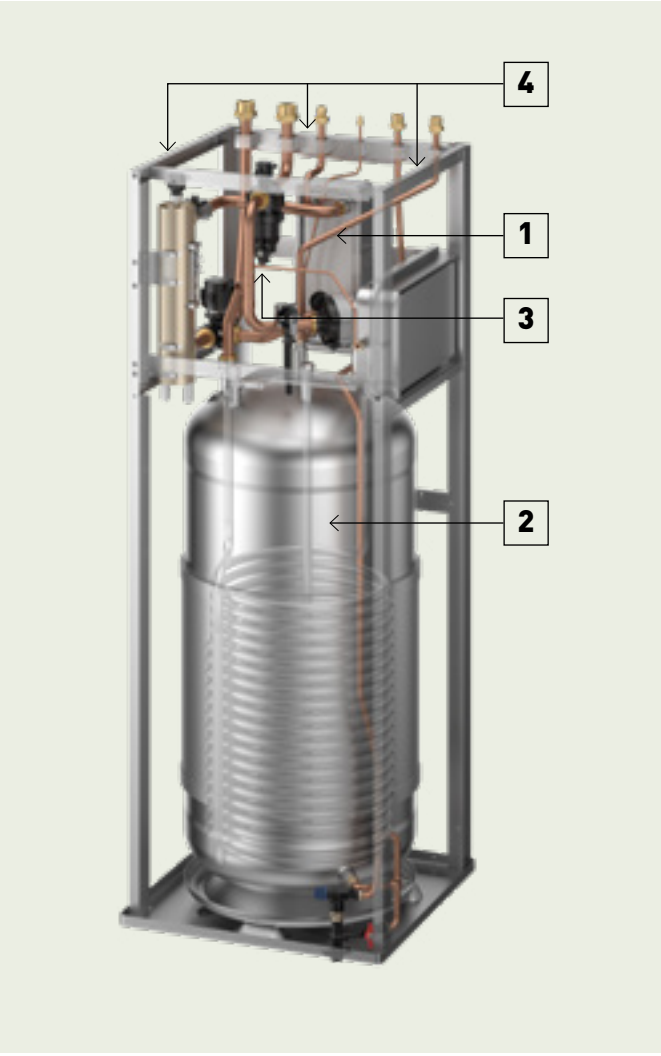
1 | Maintained serviceability.
- Easy maintenance concept
- Access to hydraulic parts thanks to door opening mechanism
- No buffer tank required, reducing space, cost and installation time

2 | Slimmer, yet same tank capacity.
Piping layout at the top in order to maintain large 185 L tank capacity.

3 | Advanced magnetic water filter for less maintenance.
Dust removal capacity of the water filter has been increased 5 times*. Less frequent filter cleaning means more convenience.

*Compared to conventional model.

4 | Robust body for top ventilation unit.
Strengthening the body and top surface with a frame enables installation of a top ventilation unit. For safety, it's secured with bolts to prevent it falling.



Aquarea High Performance

For new installations and low consumption homes. Outstanding efficiency and energy savings with minimised CO_2 emissions and minimum space.



High Performance helps you to meet strict building requirements and reduce building costs

The heating and production of domestic hot water have a very important impact on the energy consumption of a house. Efficient Panasonic heat pumps can help to significantly reduce the energy consumption of the house.

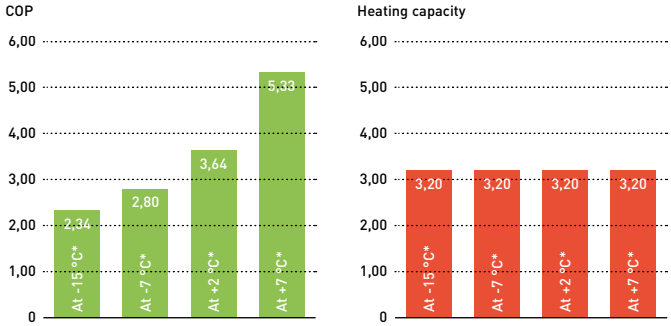
Key points of the line-up

- Improved performance with COPs up to 5,33 for J Generation 3kW
- Reduced energy consumption through our circulating pump with energy efficiency class "A"
- Remote controller functions added: Auto mode, holiday mode, power consumption display

Panasonic has designed the Aquarea All in One, Bi-bloc and Mono-bloc heat pumps for homes which have high performance requirements. Whatever the weather, Aquarea can work even at -20 °C! The Aquarea is easy to install on new or existing installations, in all types of properties.

High Performance Heat Pumps are highly efficient (KIT-ADC03JE5 for example)



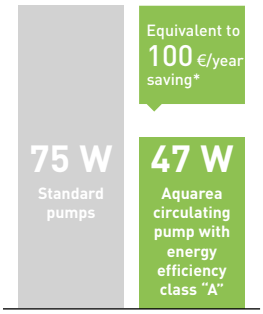


* Heating water at 35 °C.

Standard circulating pumps vs our circulating pump with energy efficiency class "A"

Comparison of energy consumption of circulation pumps. Circulating pump with energy efficiency class "A" with Dynamic flow control for 5 kW Mono-bloc.

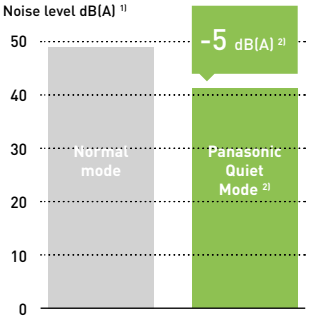
* Based on German market: Assuming Standard pump may vary depending on consumption and energy cost.



Panasonic created a night mode to reduce the noise when it's needed

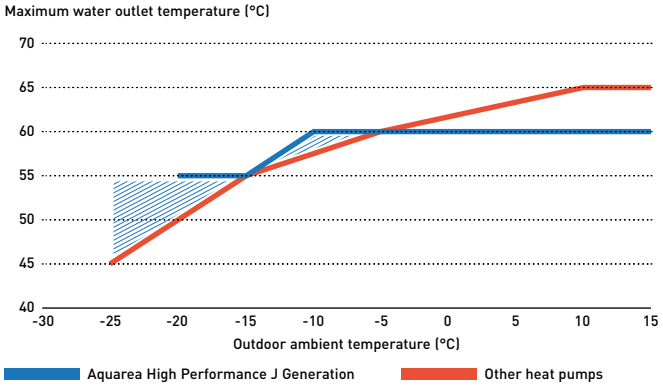
Special attention has been given to noise levels.

1) Sound pressure measured at 1 m from the outdoor unit and at 1,5 m height.
2) At standard condition working at heating capacity at +7 °C (heating water at 35 °C) for two fans outdoor units. For one fan outdoor units, night mode reduction is 3 dB(A).



High Performance J Generation keeps 60 °C water outlet temperature even at very low temperatures

Aquarea High performance J Generation is able to keep 60 °C water outlet temperature in outdoor temperatures down to -10 °C, keeping high comfort in the room even at low temperatures. With other heat pumps, water temperature dramatically drops at low outdoor temperatures, making the heat pump to work out of the design conditions and creating discomfort inside the room.





Aquarea T-CAP

For retrofit and new builds, Aquarea T-CAP is the ideal solution for those installations where the output capacity is demanding.
The entire Aquarea T-CAP line-up is excellent for replacing gas or oil boilers and for connecting to new underfloor heating, radiators or fan coil units. Aquarea T-CAP can maintain the heat pump output capacity until -20 °C[1)] outdoor temperature without the help of an electrical booster heater, offering high heating capacity even at low ambient temperatures.

1) At 35 °C flow temperature.



New Aquarea T-CAP Mono-bloc J Generation R32

R32 Refrigerant: A 'small' change that changes everything.
With Mono-bloc, the refrigerant circuit is sealed inside the outdoor unit, so there is no need to worry about the amount of refrigerant per room.

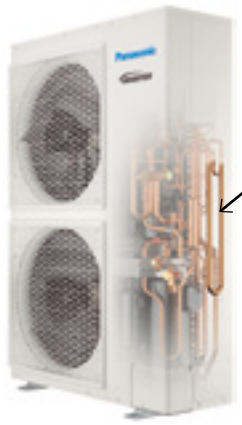
65 °C[1] water temperature possible.
By optimising the system and the refrigerant cycle, the unit can work under higher pressure and realise a water temperature of 65°C.

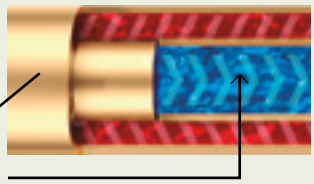
1) In case of ΔT setting with remote controller is 15 °C and outdoor ambient temperature is 5 to 20 °C, 65 °C hot water temperature is possible. Even with the T-CAP series, capacity will drop when water temperature reaches 65 °C.

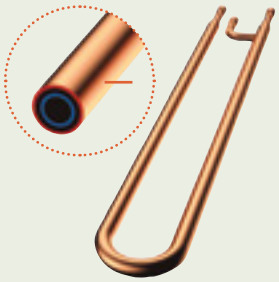


How Aquarea T-CAP maintains performance even at -20 °C outdoors

A patent has been obtained for technology that can maintain heating capacity even in low outdoor temperatures through optimal control that comes from incorporating dual-piped heat exchanger into the refrigeration cycle.



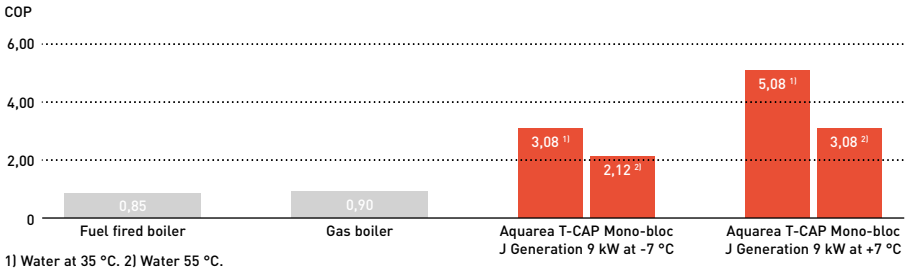




Dual-piped heat exchanger.
Low pressure and low-temperature refrigerant in the inner pipe.

Higher efficiency compared to other heating systems

Panasonic heat pumps have a maximum COP of 5,08 at +7 °C which makes them much more efficient than others heating systems.
T-CAP is also able to provide extremely high efficiencies, whatever the outside or the water temperature.

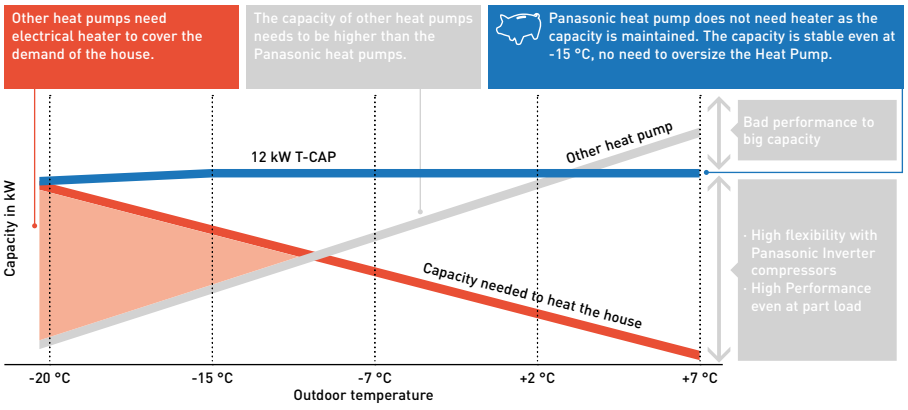


1) Water at 35 °C. 2) Water 55 °C.

No need to oversize to reach required capacity at low temperatures

With AquareaT-CAP technology, Panasonic heat pumps can work in outdoor temperatures as low as -20 °C and maintain capacity without backup heating at -20 °C[1]. With other heat pumps, a larger capacity is required to achieve the same level of comfort at low temperatures.

1) 35 °C flow temperature.



* 55 °C flow temperature. In case of 35 °C the capacity is maintained down to -20 °C.

Aquarea Super Quiet T-CAP Bi-bloc

The special outdoor chassis notably reduces operation sound by up to 15 dB.[1] [2]

1) When comparing WH-UQ12HE8 at quiet mode level 3 operation with WH-UX12HE8 at full load operation. 2) Heating capacity may drop.

Aquarea HT

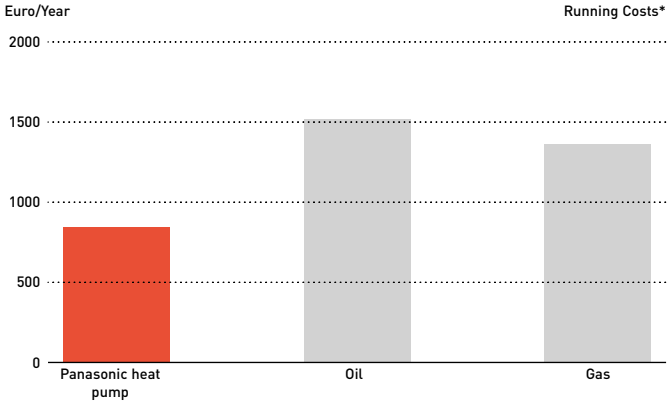
Aquarea HT can produce a flow temperature of 65 °C making it the ideal high efficiency replacement for oil/gas boilers connected to high temperature radiators.



Green energy source works with existing radiators

The Aquarea HT (9 kW & 12 kW) allows you to replace your traditional heating source (such as oil or gas) while keeping the existing old style radiators for minimum disruption to the home.

Yearly savings with Aquarea HT



* For a 170 m² house and 40 W/m² energy losses in central Europe Conditions, outside minimum conditions -10 °C.

Aquarea HT: High savings and low CO_2

The benefit of replacing a traditional heating systems with Aquarea HT are clear: Reduced CO_2 emissions, future proofing running costs.
Panasonic heat pumps are much more efficient than fossil fueled boilers and help you to reach your house energy targets.

Easy installation

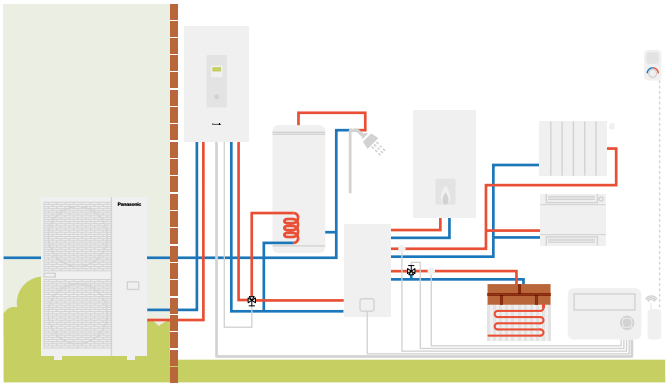
Air source heat pumps are simple to install. They do not require a chimney, gas connection or oil/lpg tank. All that is required is a power supply connection.

Smart bivalent operation

Using the Aquarea bivalent controller, it is now possible to combine different heat sources (boiler with heat pump) allowing to set up the system to operate in the most efficient way.

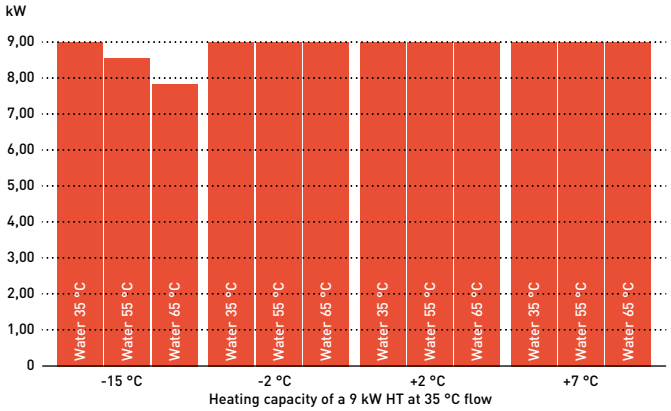


Heat pump + boiler with DHW cylinder controlled by the smart bivalent controller.

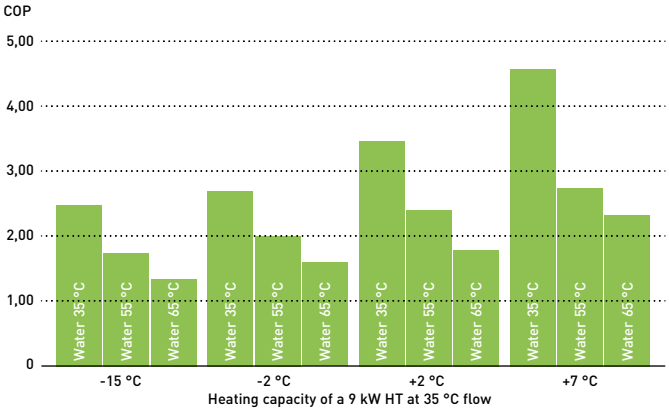


Panasonic Aquarea HT is highly efficient even at low outdoor temperatures

Heating Capacity of a 9 kW HT (WH-SHF09F3E5).



COP (Coefficient of Performance) of a 9 kW HT (WH-MHF09G3E5).

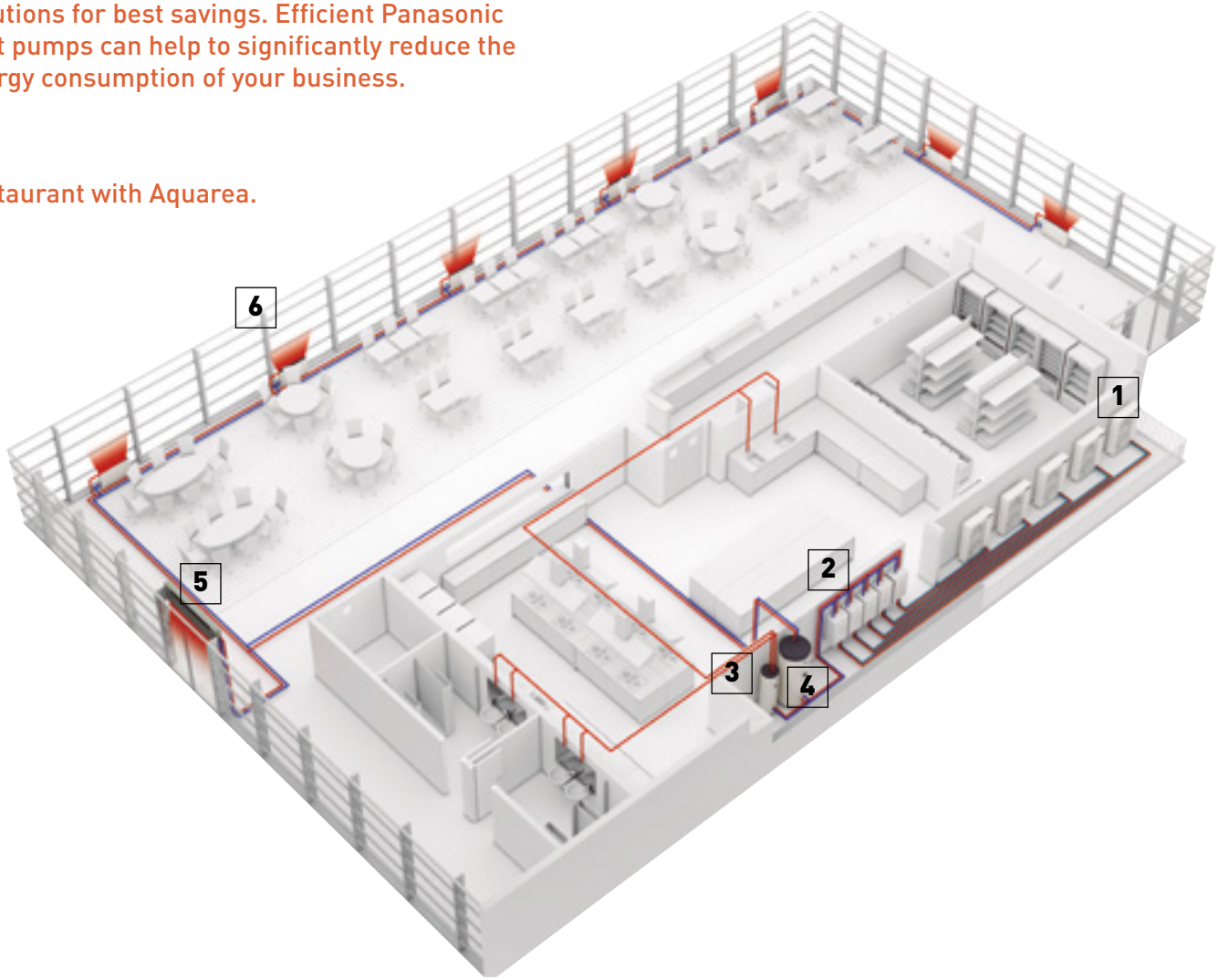


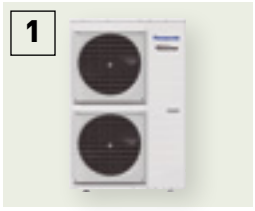
The Aquarea HT range is easy to install and is available with nominal heat outputs of 9 kW or 12 kW. These can be either single or three phase, in both Bi-bloc and Mono-bloc versions.

Aquarea commercial

Solutions for best savings. Efficient Panasonic heat pumps can help to significantly reduce the energy consumption of your business.

Restaurant with Aquarea.





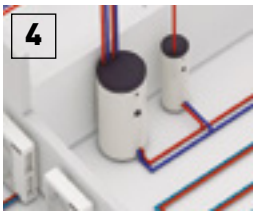
Aquarea T-CAP.
16 kW heat pumps on cascade mode.
T-CAP line-up is an ideal replacement for old gas/ oil boilers.



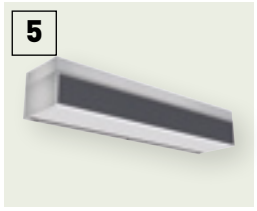
High efficiency Aquarea T-CAP hydromodule.
Indoor unit of Aquarea Bi-bloc systems. When a Mono-bloc system is used, the hydromodule is integrated in the outdoor unit.



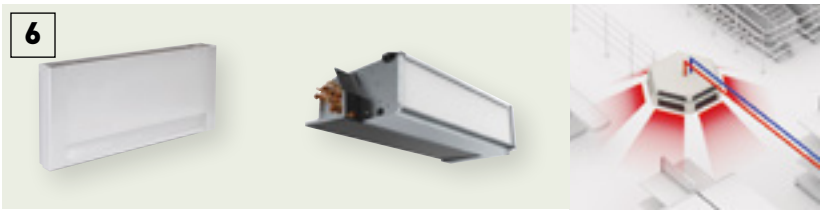
Super high efficiency Tanks.
Combining Panasonic Aquarea with a high efficiency tank ensures the desired volume of hot water, at the correct temperature while reduced energy costs.



Buffer Tank.
Panasonic Aquarea can be combined with the hydraulic elements of the new or existing water system.



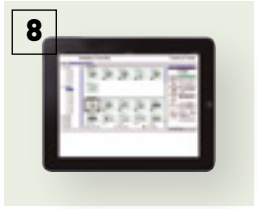
Air Curtain with water Coil.
Water coil air curtains can be used in the hydraulic system to have efficient performance of the water system.



Fan coils for heating and cooling.
Aquarea Heat Pumps can be easily connected to the existing water system: 2 way and 4 way fan coils, floor heating, DHW tanks...



Cascade manager.
The Cascade manager enables the control of up to 10 Aquarea Heat Pumps (balancing the working hours and making the operation more efficient) and up to 2 buffer tanks.

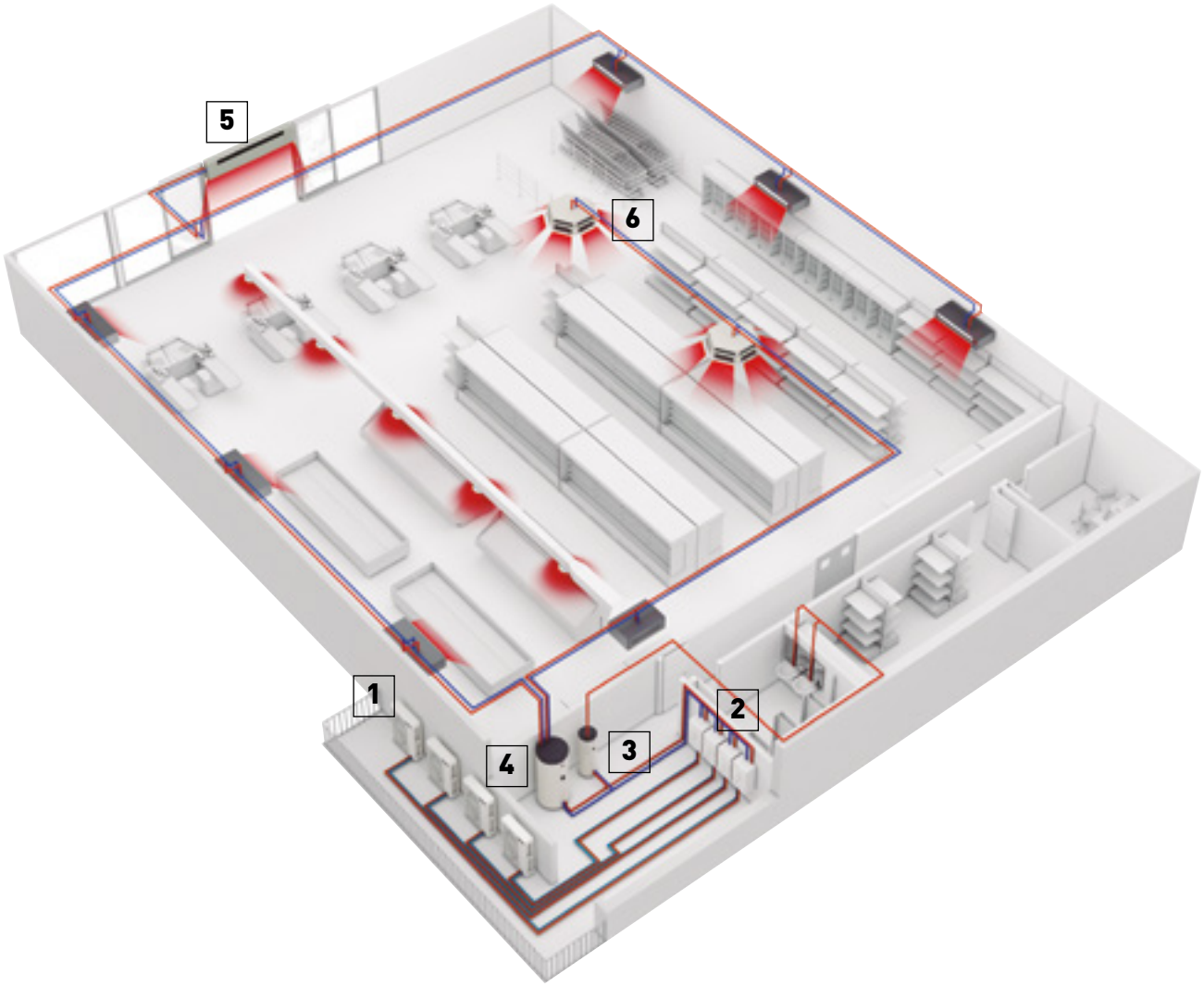


BMS integration.
The cascade system can be easily in integrated in a Modbus project thanks to the Cascade manager.

Panasonic Aquarea Heat Pumps offer space saving, energy-efficient heating and can be easily adapted for installation in flats, houses and commercial premises. Businesses producing heating, cooling and big quantities of hot water at 65 °C, such as restaurants or supermarkets, installing an Aquarea Heat Pump system can also use this wasted heat to improve energy efficiency further.
Heat pump technology is scalable, meaning that it can be installed in buildings of varying sizes, offering both small and large-scale heating solutions. The technology is also environmentally friendly when compared to traditional heating systems alternatives based on fossil fuel energy and in addition it is more energy efficient.

Key points:
· Efficient hot water production
· Fast return of investment
· Easy control
· Easy integration in the existing water system: fan coils, floor heating, domestic hot water tanks, etc
· Very good part load management
· High efficiency

Supermarket with Aquarea.





Burger & Lobster restaurant. Bath, UK.
Panasonic's air-to-water Aquarea system has been installed in the latest glamorous Burger & Lobster restaurant in Bath. The Octagon Chapel, a large listed building in the city centre, was converted to accommodate the restaurant, and Panasonic's Aquarea system provided an extensive, energy efficient and unobtrusive heating and cooling solution.

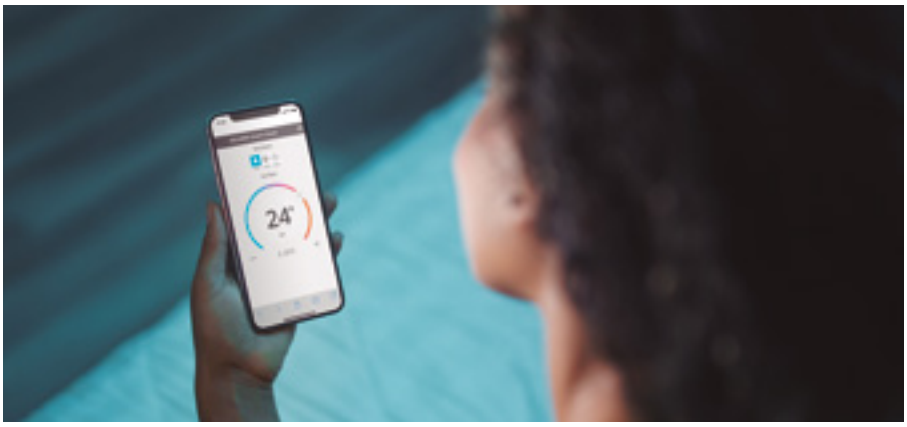


Carluccio's restaurant. UK.
One of UK's leading Italian restaurant, Carluccio's, wanted to install a system which would provide the desired volume of hot water, at the correct temperature while at the same time reduced energy costs. FWP installed a 12 kW Aquarea T-CAP mono bloc unit which would allow for the free air from the kitchen roof space to be transferred through condensing unit providing hot water at the optimum temperature.

Aquarea Smart Cloud for the users

The most advanced heating control for today and for the future. Aquarea can be connected to the Cloud with the accessory CZ-TAW1, enabling both user control and remote maintenance by service partners.

WATCH DEMO





* User interface image may change without notification.

Easy and powerful energy management

The Aquarea Smart Cloud is much more than a simple thermostat for switching a heating device ON or OFF. It is a powerful and intuitive service for remotely controlling the full range of heating and hot water functions, including monitoring energy consumption.

How does it work?

After connecting an Aquarea J or H generation to the cloud by wireless LAN or by wired LAN, the user accesses the Cloud portal to remotely operate all functions of his units. He can also permit service partners to access customised functions for remote maintenance and monitoring.

Works with IFTTT

More possibilities with IFTTT.

IF This Then That: IFTTT service enables user to automatically trigger actions for Aquarea system based on other apps, web services or devices.

Connect your Aquarea to your voice assistant, get an e-mail if your Aquarea gets an error or automatically turn on your Aquarea on Heat Mode when outdoor temperature drops below specified level.

Requirements

1. Aquarea J or H Generation
2. In-house internet connection with router wireless LAN or wired LAN
3. Get a Panasonic ID in https://aquarea-smart.panasonic.com/

Functions:

· Visualization and Control
· Scheduling
· Energy Statistics
· Malfunction notification

Advantages

Energy savings, comfort and control from anywhere.
Increased efficiency and resources management, operating costs savings and owner satisfaction.
The Aquarea Smart Cloud services are focused on enabling full remote maintenance of the Aquarea system. This allows maintenance specialists to engage in predictive maintenance and system fine-tuning, as well as fixing malfunctions when they occur.

Aquarea compatibility	J and H Generation
Connection point	CN-CNT Aquarea port
Home router connection	Wireless or Wired LAN
Temperature sensor	Can use remote controller sensor
Tablet or PC browser compatibility*	Yes
Operation from remote — ON/OFF — Temperature setting Mode selection — DHW setting — Error codes — Scheduling	Yes
Heating areas	Up to 2 zones
Power consumption estimation — Operation log history	Yes — Yes

* Check browsers and version compatibility.

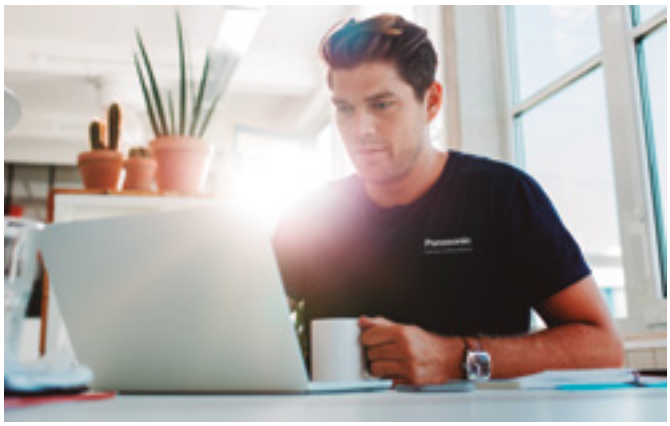
Get the most out of your Aquarea Heat Pump.

Aquarea+ offers end user useful information to operate a Panasonic Aquarea Heat Pump to provide heating, cooling & hot water in the most efficient and cost effective way.

AQUAREA+

Aquarea Service Cloud for Installers / Maintenance

WATCH DEMO



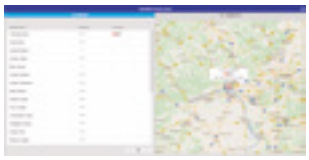
The real remote maintenance made simple

The Aquarea Service Cloud allows installers to take care of their customers' heating systems remotely. It saves time and money and shortens the response time, thus increasing the customers' satisfaction.

Advanced functions for remote maintenance with professional screens:

- Global view at a glance
- Error log history
- Full unit information
- Statistics always available
- Most settings available

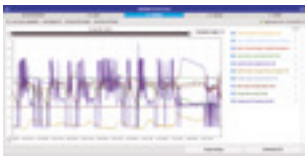
Home page.
Status of connected users at a glance. 2 view options: map view or list view.



Status tab.
Current status of unit with a maximum 28 parameters.



Statistics tab.
Customisable statistics of a maximum of 71 parameters. Available anytime with the information of the last 7 days.



Settings tab.
Most of the user and installer settings can be done remotely.



Activation of the Aquarea Service Cloud

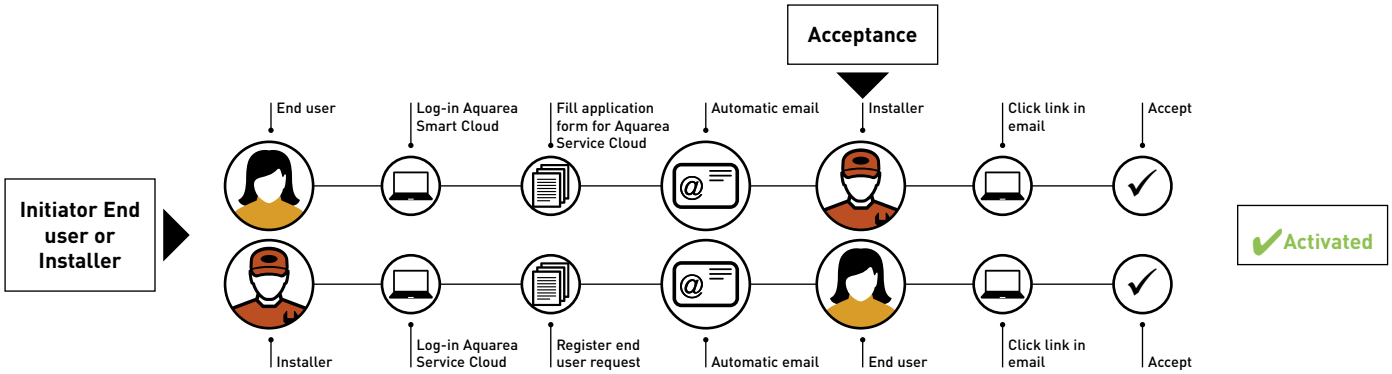
Requirements.

Hardware and connection	End user registration	Installer / maintenance registration
J or H Generation Aquarea connected to CZ-TAW1	Get Panasonic ID	Get Service ID
In-house internet connection with Wireless LAN or Wired LAN	Aquarea Smart Cloud	Aquarea Service Cloud

Connecting the unit to the Aquarea Service Cloud.
The process can be initiated by the end user or by the installer.
The end user can select and change the installer's level of control anytime (4 levels).

Installer registration: https://aquarea-service.panasonic.com/

End user registration: https://aquarea-smart.panasonic.com/



Control and connectivity

Home connectivity and Home Managements Systems integration is becoming more and more popular. These integrations helps to control all house devices from centralised platform and helps to optimise the operation and running costs. Panasonic interfaces are made to work with both KNX and Modbus, the most populars protocols. Also for non integrated control, Panasonic developed a simple connection to Wireless LAN, with this end user can control remotely its own heat pump from wherever.



Connectivity. Control by BMS

Great flexibility for integration into your KNX / Modbus projects allows fully bi-directional monitoring and control of all the functioning parameters.

Reference	KNX PAW-AW-KNX-1i / PAW-AW-KNX-H	Modbus® PAW-AW-MBS-1 / PAW-AW-MBS-H
Small dimensions	✔	✔
Quick installation and possibility of hidden installation	✔	✔
External power not required	✔	✔
Direct connection to the unit	✔	✔
Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication	✔ Fully interoperable	
Control and monitoring, from any BMS or PLC Modbus Master, of internal variables of the indoor unit and error codes and indication		✔ Fully interoperable
Aquarea unit can be controlled simultaneously by its remote controller and by KNX / Modbus Master devices	✔	✔

These interfaces allows full monitoring and control, bi-directional, of most of the functioning parameters of Aquarea control from KNX / Modbus installations.

Advanced controller for J and H Generation



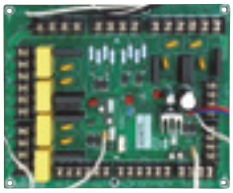
Improved visibility & Easy operation with large full dot LCD display and large touch panel!
Remote controller can be removed from indoor unit and installed in living room.

Key Points:
Full large dot LCD screen (3,5 inch): High resolution screen with backlight, easy set up, check conditions easily, flat, innovative design, temperature sensor included in controller.

Function for installer:
- Floor heating concrete dry mode: Allows for a slow increase in temperature of underfloor heating via software.
- Heating and Cooling Mode: Authorised PRO Partners can enable the cooling mode through a special operation via the remote controller on site
- Installer can select delta T. Water pump speed is selected automatically due to this setting

Function for End User:
- Auto Mode: Automatically changes from heating to cooling depending on outdoor temperature.
- Energy Consumption Display: Displays the heat pump's energy consumption, split by heating, cooling and domestic hot water, showing the total consumption figure.
- Holiday Mode: Enables the system to resume at the preset temperature after your holiday

PCB for additional functions



CZ-NS4P. Optional PCB for advanced functions.
The optional PCB CZ-NS4P enable advanced control functions for Aquarea Heat Pumps J and H Generation.
The optional PCB is connected to the main.
These functions are available through the connection of the optional PCB (CZ-NS4P) to the main PCB:
- Control of 2 zones with 2 mixing valves, 2 pumps and 2 room thermostats or sensors
- Control of swimming pool
- 0-10 V signal for heat pump demand control
- Buffer tank temperature sensor
- Solar thermal control
- External heating / cooling mode switch
- Stop compressor by external compressor switch
- Error output signal
- SG ready*

* Aquarea H and J Generation heat pumps in combination with the optional PCB CZ-NSP4 hold the SG Ready Label (Smart Grid Ready Label), given by Bundesverband Warmepumpe (German Heat Pump Association). This Label shows the real capacity of Aquarea to be connected in an intelligent grid control.

Cascade controller



PAW-A2W-CMH. Cascade Manager.
- Cascade up to 10 heat pumps, getting up to 160 kW.
- Manages the heat demand based on a PID logic, balancing working hours
- Can control 3 way valves for cooling (2 buffer tanks)
- Modbus IP for BMS communication
- DHW control logic
- Large, easy-to- use touch screen display, with information about the heat pump
- All components in one case
- Compatible with Aquarea heat pumps, J or H Generation*.

* Requires 1 PAW-AW-MBS-H per each Aquarea.

Model name	Interface
PAW-AW-KNX-H	KNX Interface for J and H Generation
PAW-AW-MBS-H	Modbus Interface for J and H Generation
PAW-AW-KNX-1i	KNX interface (not compatible with J and H Generation)
PAW-AW-MBS-1	Modbus interface (not compatible with J and H Generation)

Model name	Interface
PAW-A2W-CMH	Cascade controller
CZ-TAW1	Aquarea Smart Cloud, internet control through wireless or wired LAN for Aquarea J and H generation
CZ-NS4P	PCB for advanced functions in J and H Generation

How Panasonic contributes to Nearly Zero Energy Buildings (nZEB)

Panasonic is committed to develop products with greater energy efficiency.
Our expertise gained over the years has helped to launch a range of products that contribute to a more carbon-free society.
Highly efficient Panasonic solutions can help to significantly reduce the energy consumption of the house , at the same time a high level of comfort and good indoor air quality are kept.

- Aquarea High performance heat pump for heating, cooling and domestic hot water production
- Aquarea Smart Cloud, for energy monitoring
- Heat recovery ventilation system
- PV panels to produce renewable energy on-site



Aquarea heat pumps and the ventilation unit with heat recovery certified as Passive House Component

Aquarea High Performance All in One Compact and Bi-bloc J Generation heat pumps[1)] and the ventilation unit with heat recovery PAW-A2W-VENTA have been certified by the Passive House Institute (PHI) as Passive House Component. This certification ensures highly energy efficient components according to international criteria for respective thermal performance, comfort and indoor air quality.

1) 3, 5 and 7 kW models.

Certified models can be checked under the certification section of https://database.passivehouse.com.

CERTIFIED COMPONENT Passive House Institute

cool, temperate climate
CERTIFIED COMPONENT Passive House Institute

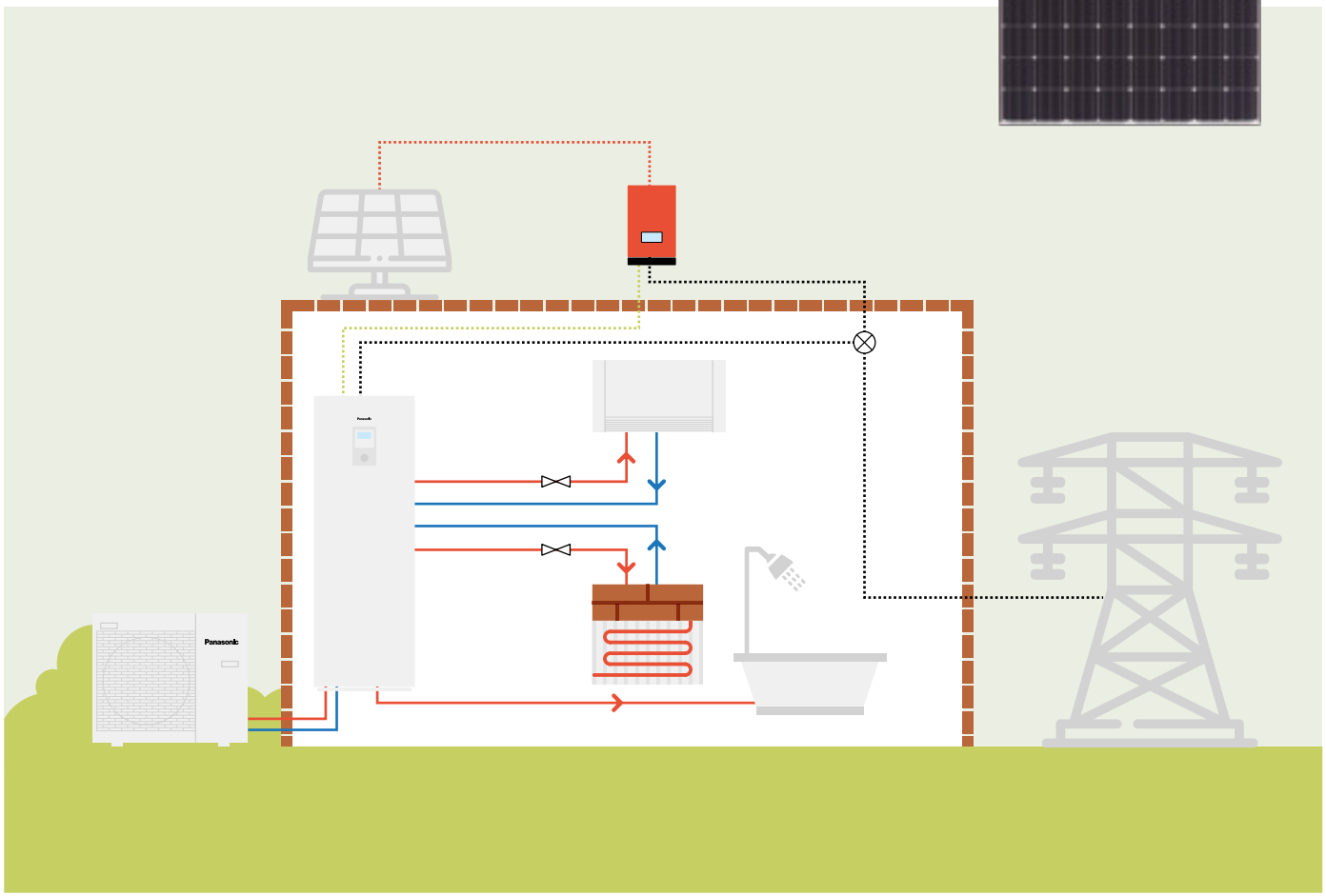




H3 Grande Passive House, Poland.
When looking for a energy-efficient heating solution, Polish construction company Procyon selected a 5 kW Panasonic Aquarea High Performance heat pump for its passive house project, H3 Grande. Procyon found this solution reduced annual heating expenses by almost half compared to an oil-based system, or by 10 % in comparison to natural gas.
H3 Grande is a 175 m² detached house certified by the Passive House Institute (PHI) in Darmstadt. It is designed to minimise energy losses while incorporating an attractive, yet simple aesthetic. The building's shape, interior design and pitched roof contribute to the energy balance of the house, while large south-facing windows and wall insulation provide passive thermal comfort by retaining heat. The building has very low heating demand of approximately 15 kW/m² and is designed to minimise energy.

Aquarea + PV panels





Aquarea Heat Pumps are designed with the future in mind. They can synchronise with PV panels with simple CZ-NS4P PCB. Thanks to this feature, demand of heating, cooling and domestic hot water production is adapted to the PV panel production.

A part of converting Aquarea in Smart Grid ready, the additional PCB allows 0-10 V control, for and advanced energy management.



Turning a family home into an energy-neutral home with Panasonic air to water.
Sinne Technyk, installer, opts for Aquarea T-CAP heat pump combined with HIT KURO photovoltaic panels for a house in Oudemirdum in Friesland, the Netherlands. With this combination, the household enjoys energy-neutral and free heating, as well as domestic hot water, and benefit for a more comfortable indoor climate
The house had an annual gas consumption of 1800 to 2200 cubic meters per year. "The aim was to realize an energy-neutral home and reduce the usage of gas to zero," explains Leo van der Molen of Sinne Technyk. "That makes a heat pump an interesting option." With the comfort of the customers and neighbours in mind, a silent Aquarea T-CAP heat pump was chosen, powered by solar panels. A total of 24 Panasonic HIT KURO solar panels of 325 Wp each were installed. "The products of Panasonic are high end but offer a higher quality than other solutions. The price-quality ratio is, therefore, considerably better," says Van der Molen.

Panasonic PRO Club makes your life easier. All Aquarea design tools can be found there

Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in air-to-water heat pump projects.

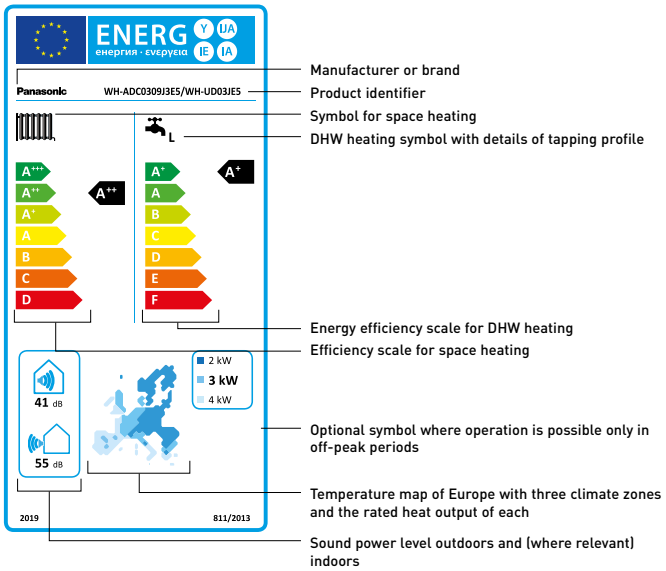


Energy Label

Fridges, dishwashers, washing machines, ovens – it all started with white goods in the 1990s. Today, other energy-consuming appliances also carry the European energy efficiency label, such as televisions and lighting. From 2013, the regulations applied to air conditioners and heat pumps but since September 2015, it has also been applicable to room heaters, water heaters and storage water heaters.
Minimum energy efficiency requirements are also specified for manufacturers of system and combi boilers, water heaters and DHW cylinders.
The purpose of Energy Labels are to assist consumers in their purchasing decisions, as well as ecodesign requirements on products which help reduce private energy demand and help to reduce global warming.

Panasonic helps you to calculate the system label.
From 26th September 2015, installers can be assured that all products manufactured after this date will be sold with the required energy efficiency labels which will aid installers with their paperwork. While it is the manufacturer's responsibility to issue their products with the required labels, the installers will need to calculate and issue an energy efficiency label for the entire heating system. Whether installing a new heating system or installing new boilers, controls or renewables into an existing system, it is, and will continue to be, the installer's responsibility to calculate and issue energy efficiency labels. Calculators which assist installers with this process are available on www.panasonicproclub.com.

Information on the energy efficiency label.
The rating system for heat pumps classifies them into seven efficiency categories. From 26th September 2019, the best energy efficiency category is A+++, least energy efficient is D. The energy efficiency label for system boilers shows its efficiency category on a scale from A+++ to D, and from A+ to F for hot water cylinders.



Aquarea design tools

Panasonic provides bespoke software helping system designers, installers and dealers to very quickly design and size systems, create wiring diagrams and issue bills of quantities at the push of a button.

Aquarea Designer – Online Tool

With Panasonic's Aquarea Designer - Online Tool, projects can be developed simply and easily. The software allows HVAC designers, installers and distributors to identify the correct heat pump for a particular application from Panasonic's Aquarea range or calculate the savings compared to other heat sources, among others. Aquarea Designer – Online Tool allows the user to build up the project data in a simple step-by-step process and get a complete report that includes:

- Customer and general project information
- Heating system specific data
- Heat pump dimensioning, including information about the chosen Panasonic heat pump
- Calculated energy demand and performance factors
- CO_2 savings by the different energy sources
- Comparison of yearly operational or economic costs (optional)

The tool also includes an hydraulic scheme generator for the project's heating system and an energy label calculator.

Aquarea Designer also means savings

Aquarea Designer will calculate the project's energy costs in terms of hot water, heating and pumping. It will show the equipment running times and calculate the COP (coefficient of performance). It then allows the designer to show clients a comparison with other equipment options such as heating by conventional gas-fired boilers, oil systems, wood, standard electric heating and electric night storage heaters. This compares running costs, initial investment costs and maintenance costs. The comparison can also be made for CO_2 emissions and savings.



Panasonic
AQUAREA DESIGNER

Heating demand calculator

This software can quickly and easily determine the heating requirements for the rooms in a project. The Heating demand calculator will help determine approximately how much power is needed to heat each room individually. The result in kilowatts will help you choose the space heater best suited to your needs.

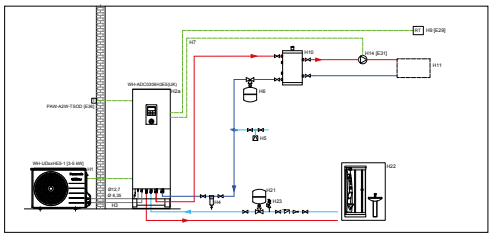
CAD images and spec texts

In order to add value in the design of projects, Panasonic has a wide library of 2D CAD, BIM objects (Building Information Modeling) and Spec texts to be used in Revit.

All the support tools are available in Panasonic PRO Club (www.panasonicproclub.com).
Among many others, these are the main tools for the design of Aquarea projects.

Hydraulic scheme generator

This tool allows costumers to select the scheme between more than 110 different type according to their installation requirements in a simple way. It possible to download hydraulic and electric part in pdf and in cad file. Moreover it is available a list, one for each scheme type, with the Panasonic codes and third party codes that the costumers need to realize the installation in a proper way.



Panasonic helps you to calculate the system label www.panasonicproclub.com or connect simply with your smartphone to the PRO Club using this QR.

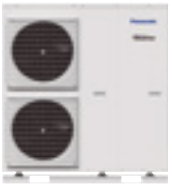
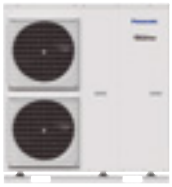
PRO Club

Aquarea Heat Pump range

		3 kW	5 kW	7 kW
Aquarea High Performance **P. 51, 52 , 53, 54**	**All in One** 1 Phase 3 Phase	 WH-ADC0309J3E5 WH-ADC0309J3E5B WH-ADC0309J3E5C WH-UD03JE5	 WH-ADC0309J3E5 WH-ADC0309J3E5B WH-ADC0309J3E5C WH-UD05JE5	 WH-ADC0309J3E5 WH-ADC0309J3E5B WH-ADC0309J3E5C WH-UD07JE5
P. 55, 56	**Bi-bloc** 1 Phase 3 Phase	 WH-SDC0305J3E5 WH-UD03JE5	 WH-SDC0305J3E5 WH-UD05JE5	 WH-SDC0709J3E5 WH-UD07JE5
P. 57, 58	**Mono-bloc** 1 Phase		 WH-MDC05J3E5	 WH-MDC07J3E5
Aquarea T-CAP **P. 59, 60, 61**	**All in One** 1 Phase 3 Phase			
P. 62, 63	**Bi-bloc** 1 Phase 3 Phase			
P. 64, 65	**Mono-bloc** 1 Phase 3 Phase			
Aquarea HT **P. 66**	**Bi-bloc** 1 Phase 3 Phase			
P. 67	**Mono-bloc** 1 Phase			

Heating. Cooling. DHW. WH-__E5 1 Phase // WH-__E8 3 Phase. Green color: J Generation models with R32 refrigerant. 1) Available in May 2021. 2) Available in summer 2021.

Check all our certified heat pumps on:
www.heatpumpkeymark.com

	9 kW	12 kW	16 kW
	 WH-ADC0309J3E5 WH-ADC0309J3E5B WH-ADC0309J3E5C WH-UD09JE5-1 WH-ADC0916H9E8 WH-UD09HE8	 WH-ADC1216H6E5 WH-UD12HE5 WH-ADC0916H9E8 WH-UD12HE8 **NEW** WH-ADC1216H6E5C [1] WH-UD12HE5	 WH-ADC1216H6E5 WH-UD16HE5 WH-ADC0916H9E8 WH-UD16HE8 **NEW** WH-ADC1216H6E5C [1] WH-UD16HE5
	 WH-SDC0709J3E5 WH-UD09JE5-1 WH-SDC09H3E8 WH-UD09HE8	 WH-SDC12H6E5 WH-UD12HE5 WH-SDC12H9E8 WH-UD12HE8	 WH-SDC16H6E5 WH-UD16HE5 WH-SDC16H9E8 WH-UD16HE8
	 WH-MDC09J3E5	 WH-MDC12H6E5	 WH-MDC16H6E5
	 WH-ADC1216H6E5 WH-UX09HE5 WH-ADC0916H9E8 WH-UX09HE8 WH-ADC0916H9E8 WH-UQ09HE8 **NEW** WH-ADC1216H6E5C WH-UX09HE5	 WH-ADC1216H6E5 WH-UX12HE5 WH-ADC0916H9E8 WH-UX12HE8 WH-ADC0916H9E8 WH-UQ12HE8 **NEW** WH-ADC1216H6E5C [1] WH-UX12HE5	 WH-ADC0916H9E8 WH-UX16HE8 WH-ADC0916H9E8 WH-UQ16HE8
	 WH-SXC09H3E5 WH-UX09HE5 WH-SXC09H3E8 WH-UX09HE8 WH-SQC09H3E8 WH-UQ09HE8	 WH-SXC12H6E5 WH-UX12HE5 WH-SXC12H9E8 WH-UX12HE8 WH-SQC12H9E8 WH-UQ12HE8	 WH-SXC16H9E8 WH-UX16HE8 WH-SQC16H9E8 WH-UQ16HE8
	 WH-MXC09H3E5 WH-MXC09H3E8 **NEW** WH-MXC09J3E5 WH-MXC09J3E8 [2]	 WH-MXC12H6E5 WH-MXC12H9E8 **NEW** WH-MXC12J6E5 WH-MXC12J9E8 [2]	 WH-MXC16H9E8 **NEW** WH-MXC16J9E8 [2]
	 WH-SHF09F3E5 WH-UH09FE5 WH-SHF09F3E8 WH-UH09FE8	 WH-SHF12F6E5 WH-UH12FE5 WH-SHF12F9E8 WH-UH12FE8	
	 WH-MHF09G3E5	 WH-MHF12G6E5	

Aquarea, top-level efficiency across the board

Aquarea J Generation: much more than Aquarea in R32. Available in 3/5/7/9 kW All in One / Bi-bloc and 5/7/9/12/16 kW Mono-bloc.

R32
NEW REFRIGERANT GAS



1 Keeping Aquarea essence

- A+++ in heating mode at 35 °C (scale from A+++ to D)
- Optional Aquarea Smart and Service Cloud

2 Higher efficiency

- SCOP up to + 5 % vs H Generation
- DHW COP up to 3,30 (for 3 kW All in One and 5 kW models)

3 More flexibility in design

- 60 °C water temperature (up to 65 °C in T-CAP Mono-bloc)
- Piping length between indoor and outdoor units improved: 7/9 kW: 50/30 m (up to 40 m without minimum floor area*) - 3/5 kW: 25/20 m
- Chiller function: cooling down to 10 °C outdoor temperature

* With a 5 % decrease of the capacity.

4 New smart functions

- SG ready for heating, cooling and DHW modes
- Utility remote bivalent control: By dry contacts*
- Stop external device when defrost by Dry contact (for fan coil fan stop)*

* Can not be used at same time.

5 More comfort

- Better comfort in extreme low temperature: Heating curve can be set up down to -20 °C
- Efficient or comfort mode for DHW: Part load for better efficiency or full load to reduce the heat up time
- DHW two sensor position selectable for All in One: Efficient position (best DHW COP) or bigger volume of hot water

Other improvements: More silent outdoor units / Magnet filter for water cycle.

R32 refrigerant gas: A 'small' change that changes everything

Panasonic recommends R32 because it is comparably environmentally friendly. Compared to R22 and R410A, R32 has a very low potential impact on the depletion of ozone layer and global warming.

In line with the European countries who are concerned in protecting and maintaining the environment by participating in the Montreal Protocol to protect the Ozone Layer and prevent Global Warming, Panasonic is leading the switch to R32.





GOOD DESIGN 011-1W0207 011-1W0208 011-1W0209

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A+ DHW Scale from A+ to F

Aquarea High Performance All in One J Generation Single phase. Heating and Cooling 1 or 2 zones • R32

Energy efficiency: COP up to 5,33 / A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: Long piping lengths / Built-in magnetic water filter.

Comfort: Heating curve down to -20 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)			
Kit 1 zone (for 2 zone add B at the end)			**KIT-ADC03JE5**	**KIT-ADC05JE5**	**KIT-ADC07JE5**	**KIT-ADC09JE5-1**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	3,20 / 5,33	5,00 / 5,00	7,00 / 4,76	9,00 / 4,48
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	3,20 / 2,81	5,00 / 2,72	7,00 / 2,82	8,95 / 2,78
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	3,20 / 3,64	4,20 / 3,18	6,85 / 3,41	7,00 / 3,40
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	3,20 / 2,19	4,10 / 1,99	6,20 / 2,21	6,30 / 2,16
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	3,30 / 2,80	4,20 / 2,59	5,60 / 2,87	6,12 / 2,78
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	3,20 / 1,79	3,55 / 1,71	5,25 / 1,94	5,90 / 1,93
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	3,20 / 3,52	4,50 / 3,00	6,70 / 3,03	8,20 / 2,72
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	3,20 / 4,71	4,80 / 4,29	6,70 / 4,72	9,00 / 4,18
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	200 / 136	200 / 136	193 / 130	193 / 130
		SCOP	5,07 / 3,47	5,07 / 3,47	4,90 / 3,32	4,90 / 3,32
	Energy class [1]	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245 / 165	245 / 165	227 / 160	227 / 160
		SCOP	6,20 / 4,20	6,20 / 4,20	5,75 / 4,07	5,75 / 4,07
	Energy class [1]	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	157 / 110	157 / 110	164 / 116	164 / 116
		SCOP	4,00 / 2,83	4,00 / 2,83	4,18 / 2,98	4,18 / 2,98
	Energy class [1]	A+++ to D	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Indoor unit 1 zone hydrokit			**WH-ADC0309J3E5**	**WH-ADC0309J3E5**	**WH-ADC0309J3E5**	**WH-ADC0309J3E5**
Indoor unit 2 zones built-in hydrokit			**WH-ADC0309J3E5B**	**WH-ADC0309J3E5B**	**WH-ADC0309J3E5B**	**WH-ADC0309J3E5B**
Sound pressure	Heat / Cool	dB(A)	28 / 28	28 / 28	28 / 28	28 / 28
Dimension	H x W x D	mm	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717
Net weight 1 zone / 2 zones		kg	122 / 130	122 / 130	122 / 130	122 / 130
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	30 / 120	30 / 120	30 / 120	30 / 120
Heating water flow (ΔT=5 K. 35 °C)		L/min	9,20	14,30	20,10	25,80
Capacity of integrated electric heater		kW	3,00	3,00	3,00	3,00
Recommended fuse		A	16 / 16	16 / 16	25 / 16	25 / 16
Recommended cable size, supply 1 / 2		mm²	3 x 1,5 / 3 x 1,5	3 x 1,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5
Water volume		L	185	185	185	185
Maximum water temperature		°C	65	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L	L
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	A+ / A+ / A	A+ / A+ / A	A+ / A+ / A	A+ / A+ / A
DHW tank ERP average climate η / COPdHW		ηwh % / COPdHW	132 / 3,30	132 / 3,30	120 / 3,00	120 / 3,00
DHW tank ERP warm climate η / COPdHW		ηwh % / COPdHW	155 / 3,88	155 / 3,88	140 / 3,50	140 / 3,50
DHW tank ERP cold climate η / COPdHW		ηwh % / COPdHW	99 / 2,48	99 / 2,48	99 / 2,47	99 / 2,47
Outdoor unit			**WH-UD03JE5**	**WH-UD05JE5**	**WH-UD07JE5**	**WH-UD09JE5-1**
Sound power [3]	Heat	dB(A)	55	55	59	59
Dimension / Net weight	H x W x D	mm / kg	622 x 824 x 298 / 37	622 x 824 x 298 / 37	795 x 875 x 320 / 61	795 x 875 x 320 / 61
Refrigerant (R32) / CO_2 Eq.		kg / T	0,9 / 0,608	0,9 / 0,608	1,27 / 0,857	1,27 / 0,857
Pipe diameter	Liquid / Gas	Inch (mm)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 5/8 (15,88)	1/4 (6,35) / 5/8 (15,88)
Pipe length range / Elevation difference (in/out)		m / m	3 ~ 25 / 20	3 ~ 25 / 20	3 ~ 50 / 30	3 ~ 50 / 30
Pipe length for additional gas / Additional gas amount		m / g/m	10 / 20	10 / 20	10 / 25	10 / 25
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

Accessories	
PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
PAW-ADC-CV150	Decorative magnetic side cover
CZ-NS4P	Additional functions PCB

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



GOOD DESIGN

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A+ DHW Scale from A+ to F

Aquarea High Performance All in One H Generation Single phase / Three phase. Heating and Cooling • R410A

Energy efficiency: A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Operation range down to -20 °C.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)		Three phase (Power to indoor)		
Kit			**KIT-ADC12HE5**	**KIT-ADC16HE5**	**KIT-ADC09HE8**	**KIT-ADC12HE8**	**KIT-ADC16HE8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	12,00/4,74	16,00/4,28	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	12,00/2,93	14,50/2,72	9,00/2,94	12,00/2,93	14,50/2,72
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	11,40/3,44	13,00/3,28	9,00/3,59	11,40/3,44	13,00/3,28
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,10/2,23	9,80/2,21	8,80/2,23	9,10/2,23	9,80/2,21
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	10,00/2,73	11,40/2,57	9,00/2,85	10,00/2,73	11,40/2,57
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	8,20/1,95	9,00/1,85	7,90/2,05	8,20/1,95	9,00/1,85
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	10,00/2,81	12,20/2,56	7,00/3,17	10,00/2,85	12,20/2,56
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	10,00/4,17	12,20/4,12	7,00/4,67	10,00/4,26	12,20/4,12
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190/134	190/130	190/133	190/134	190/130
		SCOP	4,82/3,42	4,82/3,33	4,81/3,41	4,82/3,42	4,82/3,33
	Energy class [1]	A+++ to D	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245/159	245/169	245/159	245/159	245/169
		SCOP	6,21/4,05	6,21/4,30	6,21/4,05	6,21/4,05	6,20/4,30
	Energy class [1]	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168/121	168/121	168/121	168/121	168/121
		SCOP	4,29/3,10	4,28/3,10	4,28/3,10	4,29/3,10	4,28/3,10
	Energy class [1]	A+++ to D	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+
Indoor unit			**WH-ADC1216H6E5**	**WH-ADC1216H6E5**	**WH-ADC0916H9E8**	**WH-ADC0916H9E8**	**WH-ADC0916H9E8**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33	33/33	33/33
Dimension	H x W x D	mm	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717
Net weight		kg	124	124	126	126	126
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	36/152	36/152	36/152	36/152	36/152
Heating water flow (ΔT=5 K. 35 °C)		L/min	34,4	45,9	25,8	34,4	45,9
Capacity of integrated electric heater		kW	6,00	6,00	9,00	9,00	9,00
Recommended fuse		A	30/30	30/30	16/16	16/16	16/16
Recommended cable size, supply 1 / 2		mm²	3 x 4,0/3 x 4,0	3 x 4,0/3 x 4,0	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5
Water volume		L	185	185	185	185	185
Maximum water temperature		°C	65	65	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L	L	L
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	A/A/A	A/A/B	A/A/A	A/A/A	A/A/B
DHW tank ERP average climate η / COPdHW		ηwh %/COPdHW	95/2,37	91/2,28	95/2,37	95/2,37	91/2,27
DHW tank ERP warm climate η / COPdHW		ηwh %/COPdHW	110/2,75	107/2,67	110/2,75	110/2,75	107/2,67
DHW tank ERP cold climate η / COPdHW		ηwh %/COPdHW	75/1,87	72/1,80	75/1,87	75/1,87	72/1,80
Outdoor unit			**WH-UD12HE5**	**WH-UD16HE5**	**WH-UD09HE8**	**WH-UD12HE8**	**WH-UD16HE8**
Sound power [3]	Heat	dB(A)	65	65	65	65	65
Dimension / Net weight	H x W x D	mm / kg	1340 x 900 x 320/101	1340 x 900 x 320/101	1340 x 900 x 320/107	1340 x 900 x 320/107	1340 x 900 x 320/107
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,55/5,324	2,55/5,324	2,55/5,324	2,55/5,324	2,55/5,324
Pipe diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range / Elevation difference (in/out)		m / m	3 ~ 50/30	3 ~ 50/30	3 ~ 30/20	3 ~ 30/20	3 ~ 30/20
Pipe length for additional gas / Additional gas amount		m / g/m	10/50	10/50	10/50	10/50	10/50
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20

Accessories	
PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
PAW-ADC-CV150	Decorative magnetic side cover
CZ-NS4P	Additional functions PCB
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN

Accessories	
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

ErP 55°C | ErP 35°C | DHW | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 4,84 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



011-1W0207
011-1W0208
011-1W0209

3, 5 and 7 kW models.

ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

DHW Scale from A+ to F

Aquarea High Performance All in One Compact J Generation Single phase. Heating and Cooling • R32

Energy efficiency: COP up to 5,33 / A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: 598 x 600 footprint / Long piping lengths / Built-in magnetic water filter.

Comfort: Heating curve down to -20 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)			
Kit			**KIT-ADC03JE5C**	**KIT-ADC05JE5C**	**KIT-ADC07JE5C**	**KIT-ADC09JE5C-1**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	3,20 / 5,33	5,00 / 5,00	7,00 / 4,76	9,00 / 4,48
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	3,20 / 2,81	5,00 / 2,72	7,00 / 2,82	8,95 / 2,78
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	3,20 / 3,64	4,20 / 3,18	6,85 / 3,41	7,00 / 3,40
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	3,20 / 2,19	4,10 / 1,99	6,20 / 2,21	6,30 / 2,16
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	3,30 / 2,80	4,20 / 2,59	5,60 / 2,87	6,12 / 2,78
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	3,20 / 1,79	3,55 / 1,71	5,25 / 1,94	5,90 / 1,93
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	3,20 / 3,52	4,50 / 3,00	6,70 / 3,03	8,20 / 2,72
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	3,20 / 4,71	4,80 / 4,29	6,70 / 4,72	9,00 / 4,18
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	200 / 136	200 / 136	193 / 130	193 / 130
		SCOP	5,07 / 3,47	5,07 / 3,47	4,90 / 3,32	4,90 / 3,32
	Energy class [1]	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245 / 165	245 / 165	227 / 160	227 / 160
		SCOP	6,20 / 4,20	6,20 / 4,20	5,75 / 4,07	5,75 / 4,07
	Energy class [1]	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	157 / 110	157 / 110	164 / 116	164 / 116
		SCOP	4,00 / 2,83	4,00 / 2,83	4,18 / 2,98	4,18 / 2,98
	Energy class [1]	A+++ to D	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Indoor unit			**WH-ADC0309J3E5C**	**WH-ADC0309J3E5C**	**WH-ADC0309J3E5C**	**WH-ADC0309J3E5C**
Sound pressure	Heat / Cool	dB(A)	28 / 28	28 / 28	28 / 28	28 / 28
Dimension	H x W x D	mm	1640 x 598 x 600	1640 x 598 x 600	1640 x 598 x 600	1640 x 598 x 600
Net weight		kg	101	101	101	101
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	30 / 120	30 / 120	30 / 120	30 / 120
Heating water flow (ΔT=5 K. 35 °C)		L/min	9,20	14,30	20,10	25,80
Capacity of integrated electric heater		kW	3,00	3,00	3,00	3,00
Recommended fuse		A	16 / 16	16 / 16	25 / 16	25 / 16
Recommended cable size, supply 1 / 2		mm²	3 x 1,5 / 3 x 1,5	3 x 1,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5
Water volume		L	185	185	185	185
Maximum water temperature		°C	65	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L	L
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	A+ / A+ / A	A+ / A+ / A	A+ / A+ / A	A+ / A+ / A
DHW tank ERP average climate η / COPdHW		ηwh % / COPdHW	128 / 3,20	128 / 3,20	116 / 2,90	116 / 2,90
DHW tank ERP warm climate η / COPdHW		ηwh % / COPdHW	154 / 3,86	154 / 3,86	134 / 3,35	134 / 3,35
DHW tank ERP cold climate η / COPdHW		ηwh % / COPdHW	99 / 2,48	99 / 2,48	98 / 2,45	98 / 2,45
Outdoor unit			**WH-UD03JE5**	**WH-UD05JE5**	**WH-UD07JE5**	**WH-UD09JE5-1**
Sound power [3]	Heat	dB(A)	55	55	59	59
Dimension / Net weight	H x W x D	mm / kg	622 x 824 x 298 / 37	622 x 824 x 298 / 37	795 x 875 x 320 / 61	795 x 875 x 320 / 61
Refrigerant (R32) / CO_2 Eq.		kg / T	0,9 / 0,608	0,9 / 0,608	1,27 / 0,857	1,27 / 0,857
Pipe diameter	Liquid / Gas	Inch (mm)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 5/8 (15,88)	1/4 (6,35) / 5/8 (15,88)
Pipe length range / Elevation difference (in/out)		m / m	3 ~ 25 / 20	3 ~ 25 / 20	3 ~ 50 / 30	3 ~ 50 / 30
Pipe length for additional gas / Additional gas amount		m / g/m	10 / 20	10 / 20	10 / 25	10 / 25
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB

Accessories	
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

R32 | A+++ ErP 55°C | A+++ ErP 35°C | A+ DHW | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 5,33 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | WATER FILTER WITH MAGNET | 60°C OUTPUT WATER FLOW TEMPERATURE | FLOW SENSOR | BOILER CONNECTION | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



NEW 2021

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A DHW Scale from A+ to F

NEW Aquarea High Performance All in One Compact H Generation Single phase. Heating and Cooling • R410A

Energy efficiency: A+++ in heating at 35 °C and A in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: 598 x 600 footprint / Built-in magnetic water filter.

Comfort: Operation range down to -20 °C.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)	
Kit			**KIT-ADC12HE5C**	**KIT-ADC16HE5C**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	12,00 / 4,74	16,00 / 4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	— / —	— / —
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	11,40 / 3,44	13,00 / 3,28
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	— / —	— / —
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	— / —	— / —
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	— / —	— / —
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	10,00 / 2,81	12,20 / 2,56
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	— / —	— / —
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190 / 134	190 / 130
		SCOP	4,82 / 3,42	4,82 / 3,33
	Energy class [1]	A+++ to D	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245 / 159	245 / 169
		SCOP	6,21 / 4,05	6,20 / 4,30
	Energy class [1]	A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168 / 121	168 / 121
		SCOP	4,29 / 3,10	4,28 / 3,10
	Energy class [1]	A+++ to D	A++ / A+	A++ / A+
Indoor unit			**WH-ADC1216H6E5C**	**WH-ADC1216H6E5C**
Sound pressure	Heat / Cool	dB(A)	33 / 33	33 / 33
Dimension	H x W x D	mm	1640 x 598 x 600	1640 x 598 x 600
Net weight		kg	101	101
Water pipe connector		Inch	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed
	Input power (Min / Max)	W	— / —	— / —
Heating water flow (ΔT=5 K. 35 °C)		L/min	34,40	45,90
Capacity of integrated electric heater		kW	6,00	6,00
Recommended fuse		A	— / —	— / —
Recommended cable size, supply 1 / 2		mm²	— / —	— / —
Water volume		L	185	185
Maximum water temperature		°C	65	65
Material inside tank			Stainless steel	Stainless steel
Tapping profile according EN16147			—	—
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	— / — / —	— / — / —
DHW tank ERP average climate η / COPdHW		ηwh % / COPdHW	92 / 2,30	88 / 2,20
DHW tank ERP warm climate η / COPdHW		ηwh % / COPdHW	107 / 2,67	104 / 2,59
DHW tank ERP cold climate η / COPdHW		ηwh % / COPdHW	72 / 1,81	70 / 1,74
Outdoor unit			**WH-UD12HE5**	**WH-UD16HE5**
Sound power [3]	Heat	dB(A)	65	65
Dimension / Net weight	H x W x D	mm / kg	1340 x 900 x 320 / 101	1340 x 900 x 320 / 101
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,55 / 5,324	2,55 / 5,324
Pipe diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)
Pipe length range / Elevation difference (in/out)		m / m	3 ~ 50 / 30	3 ~ 50 / 30
Pipe length for additional gas / Additional gas amount		m / g/m	10 / 50	10 / 50
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 55 / 5 ~ 20	20 ~ 55 / 5 ~ 20

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB

Accessories	
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility. *** Available in May 2021.

ErP 55°C | ErP 35°C | DHW | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 4,74 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | WATER FILTER WITH MAGNET | FLOW SENSOR | BOILER CONNECTION | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



011-1W0207
011-1W0208
011-1W0209

GOOD DESIGN

3, 5 and 7 kW models.

ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D



Aquarea High Performance Bi-bloc J Generation Single phase. Heating and Cooling - SDC • R32

Energy efficiency: COP up to 5,33 / A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Long piping lengths / Built-in magnetic water filter.

Comfort: Operation range and heating curve down to -20 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)			
Kit			**KIT-WC03J3E5**	**KIT-WC05J3E5**	**KIT-WC07J3E5**	**KIT-WC09J3E5**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	3,20 / 5,33	5,00 / 5,00	7,00 / 4,76	9,00 / 4,48
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	3,20 / 2,81	5,00 / 2,72	7,00 / 2,82	8,95 / 2,78
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	3,20 / 3,64	4,20 / 3,18	6,85 / 3,41	7,00 / 3,40
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	3,20 / 2,19	4,10 / 1,99	6,20 / 2,21	6,30 / 2,16
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	3,30 / 2,80	4,20 / 2,59	5,60 / 2,87	6,12 / 2,78
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	3,20 / 1,79	3,55 / 1,71	5,25 / 1,94	5,90 / 1,93
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	3,20 / 3,52	4,50 / 3,00	6,70 / 3,03	8,20 / 2,72
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	3,20 / 4,71	4,80 / 4,29	6,70 / 4,72	9,00 / 4,18
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	200 / 136	200 / 136	193 / 130	193 / 130
		SCOP	5,07 / 3,47	5,07 / 3,47	4,90 / 3,32	4,90 / 3,32
	Energy class	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245 / 165	245 / 165	227 / 160	227 / 160
		SCOP	6,20 / 4,20	6,20 / 4,20	5,75 / 4,07	5,75 / 4,07
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	157 / 110	157 / 110	164 / 116	164 / 116
		SCOP	4,00 / 2,83	4,00 / 2,83	4,18 / 2,98	4,18 / 2,98
	Energy class	A+++ to D	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Indoor unit			**WH-SDC0305J3E5**	**WH-SDC0305J3E5**	**WH-SDC0709J3E5**	**WH-SDC0709J3E5**
Sound pressure	Heat / Cool	dB(A)	28 / 28	28 / 28	30 / 30	30 / 31
Dimension	H x W x D	mm	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340
Net weight		kg	42	42	42	42
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	30 / 100	33 / 106	34 / 114	40 / 120
Heating water flow (ΔT=5 K. 35 °C)		L/min	9,2	14,3	20,1	25,8
Capacity of integrated electric heater		kW	3	3	3	3
Recommended fuse		A	15 / 30	15 / 30	15 / 30	15 / 30
Recommended cable size, supply 1 / 2		mm²	3 x 1,5 / 3 x 1,5	3 x 1,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5
Outdoor unit			**WH-UD03JE5**	**WH-UD05JE5**	**WH-UD07JE5**	**WH-UD09JE5-1**
Sound power [1]	Heat	dB(A)	55	55	59	59
Dimension	H x W x D	mm	622 x 824 x 298	622 x 824 x 298	795 x 875 x 320	795 x 875 x 320
Net weight		kg	37	37	61	61
Refrigerant (R32) / CO_2 Eq.		kg / T	0,9 / 0,608	0,9 / 0,608	1,27 / 0,857	1,27 / 0,857
Pipe diameter	Liquid / Gas	Inch (mm)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 5/8 (15,88)	1/4 (6,35) / 5/8 (15,88)
Pipe length range		m	3 ~ 25	3 ~ 25	3 ~ 50	3 ~ 50
Elevation difference (in/out)		m	20	20	30	30
Pipe length for additional gas		m	10	10	10	10
Additional gas amount		g/m	20	20	25	25
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit

Accessories	
PAW-BTANK50L-2	Buffer tank 50 L
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

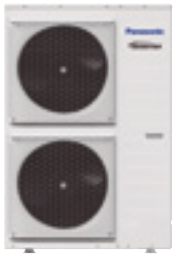
1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511.

R32 | ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | DHW | -20°C HEATING MODE | WATER FILTER WITH MAGNET | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



GOOD DESIGN



ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

Aquarea High Performance Bi-bloc H Generation Single phase / Three phase. Heating and Cooling - SDC • R410A

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Operation range down to -20 °C.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase		Three phase (Power to indoor)		
Kit			**KIT-WC12H6E5**	**KIT-WC16H6E5**	**KIT-WC09H3E8**	**KIT-WC12H9E8**	**KIT-WC16H9E8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	12,00/4,74	16,00/4,28	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	12,00/2,93	14,50/2,72	9,00/2,94	12,00/2,93	14,50/2,72
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	11,40/3,44	13,00/3,28	9,00/3,59	11,40/3,44	13,00/3,28
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,10/2,23	9,80/2,21	8,80/2,23	9,10/2,23	9,80/2,21
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	10,00/2,73	11,40/2,57	9,00/2,85	10,00/2,73	11,40/2,57
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	8,20/1,95	9,00/1,85	7,90/2,05	8,20/1,95	9,00/1,85
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	10,00/2,81	12,20/2,56	7,00/3,17	10,00/2,85	12,20/2,56
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	10,00/4,17	12,20/4,12	7,00/4,67	10,00/4,26	12,20/4,12
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190/134	190/130	190/133	190/134	190/130
		SCOP	4,82/3,42	4,82/3,33	4,81/3,41	4,82/3,42	4,82/3,33
	Energy class	A+++ to D	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245/159	245/169	245/159	245/159	245/169
		SCOP	6,21/4,05	6,21/4,30	6,21/4,05	6,21/4,05	6,20/4,30
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168/121	168/121	168/121	168/121	168/121
		SCOP	4,29/3,10	4,28/3,10	4,28/3,10	4,29/3,10	4,28/3,10
	Energy class	A+++ to D	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+
Indoor unit			**WH-SDC12H6E5**	**WH-SDC16H6E5**	**WH-SDC09H3E8**	**WH-SDC12H9E8**	**WH-SDC16H9E8**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33	33/33	33/33
Dimension	H x W x D	mm	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340
Net weight		kg	43	44	43	44	45
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	34/110	30/105	32/102	34/110	30/105
Heating water flow (ΔT=5 K. 35 °C)		L/min	34,4	45,9	25,8	34,4	45,9
Capacity of integrated electric heater		kW	6	6	3	9	9
Recommended fuse		A	30/30	30/30	15/30	15/30	15/30
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0/3 x 4,0	3 x 4,0 or 6,0/3 x 4,0	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5
Outdoor unit			**WH-UD12HE5**	**WH-UD16HE5**	**WH-UD09HE8**	**WH-UD12HE8**	**WH-UD16HE8**
Sound power [1]	Heat	dB(A)	65	65	65	65	65
Dimension	H x W x D	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Net weight		kg	101	101	107	107	107
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,55/5,324	2,55/5,324	2,55/5,324	2,55/5,324	2,55/5,324
Pipe diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range		m	3 ~ 50	3 ~ 50	3 ~ 30	3 ~ 30	3 ~ 30
Elevation difference (in/out)		m	30	30	20	20	20
Pipe length for additional gas		m	10	10	10	10	10
Additional gas amount		g/m	50	50	50	50	50
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20	20 ~ 55/5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511.

ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 4,84 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

011-1W0398
011-1W0399
011-1W0400



Aquarea High Performance Mono-bloc J Generation Single phase. Heating and Cooling - MDC • R32

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Built-in magnetic water filter / Built-in 6L expansion vessel.

Comfort: Operation range and heating curve down to -20 °C / 60 °C water outlet temperature / Cooling mode down to +10 °C.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase		
Outdoor unit			**WH-MDC05J3E5**	**WH-MDC07J3E5**	**WH-MDC09J3E5**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	5,00 / 5,08	7,00 / 4,76	9,00 / 4,48
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	5,00 / 3,01	7,00 / 2,82	8,95 / 2,78
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	5,00 / 3,57	7,00 / 3,40	7,45 / 3,13
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	5,00 / 2,27	6,30 / 2,16	7,00 / 2,12
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	5,00 / 2,78	6,80 / 2,81	7,50 / 2,63
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	5,00 / 1,85	6,30 / 1,86	7,00 / 1,80
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	5,00 / 3,31	7,00 / 3,06	9,00 / 2,71
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	5,00 / 5,05	7,00 / 4,73	9,00 / 4,25
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	202 / 142	193 / 130	193 / 130
		SCOP	5,12 / 3,63	4,90 / 3,32	4,90 / 3,32
	Energy class	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	237 / 165	227 / 160	227 / 160
		SCOP	6,00 / 4,20	5,75 / 4,07	5,75 / 4,07
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160 / 115	164 / 116	164 / 116
		SCOP	4,08 / 2,95	4,18 / 2,98	4,18 / 2,98
	Energy class	A+++ to D	A++ / A+	A++ / A+	A++ / A+
Sound power [1]	Heat	dB(A)	59	59	59
Dimension	H x W x D	mm	865 x 1283 x 320	865 x 1283 x 320	865 x 1283 x 320
Net weight		kg	99	104	104
Refrigerant (R32) / CO_2 Eq. [2]		kg / T	1,3 / 0,878	1,3 / 0,878	1,3 / 0,878
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼
Pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	34 / 96	36 / 100	39 / 108
Heating water flow (ΔT=5 K. 35 °C)		L/min	14,3	20,1	25,8
Capacity of integrated electric heater		kW	3	3	3
Input power	Heat	kW	0,985	1,47	2,01
	Cool	kW	1,51	2,29	3,32
Running and starting current	Heat	A	4,7	7,0	9,3
	Cool	A	7,0	10,5	14,7
Current 1		A	12	17	17
Current 2		A	13	13	13
Recommended fuse		A	30 / 15	30 / 15	30 / 16
Recommended cable size, supply 1 / 2		mm²	3 x 1,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5	3 x 2,5 / 3 x 1,5
Operation range - outdoor ambient	Heat	°C	-20 ~ 35	-20 ~ 35	-20 ~ 35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat	°C	20 ~ 60	20 ~ 60	20 ~ 60
	Cool	°C	5 ~ 20	5 ~ 20	5 ~ 20

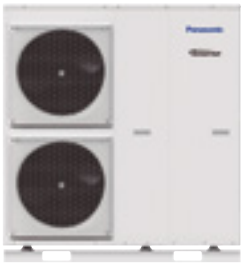
Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L – Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L – Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW Tanks

Accessories	
PAW-BTANK50L-2	Buffer tank 50 L
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MDC models are hermetically sealed. * EER and COP calculation is based in accordance to EN14511.

R32 | ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 5,08 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | WATER FILTER WITH MAGNET | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

Aquarea High Performance Mono-bloc H Generation Single Phase. Heating and Cooling - MDC • R410A

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Operation range and heating curve down to -20 °C / 55 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase	
Outdoor unit			**WH-MDC12H6E5**	**WH-MDC16H6E5**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	12,00 / 4,74	16,00 / 4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	12,00 / 2,93	14,50 / 2,72
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	11,40 / 3,44	13,00 / 3,28
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,10 / 2,23	9,80 / 2,21
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	10,00 / 2,73	11,40 / 2,57
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	8,20 / 1,95	9,00 / 1,84
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	10,00 / 2,81	12,20 / 2,56
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	10,00 / 4,65	12,20 / 4,12
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190 / 134	190 / 130
		SCOP	4,83 / 3,43	4,83 / 3,33
	Energy class	A+++ to D	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245 / 159	245 / 169
		SCOP	6,20 / 4,05	6,20 / 4,30
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168 / 121	168 / 121
		SCOP	4,28 / 3,10	4,28 / 3,10
	Energy class	A+++ to D	A++ / A+	A++ / A+
Sound power [1]	Heat	dB(A)	65	65
Dimension	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	140	140
Refrigerant (R410A) / CO_2 Eq. [2]		kg / T	2,10 / 4,385	2,10 / 4,385
Water pipe connector		Inch	R 1¼	R 1¼
Pump	Number of speeds		Variable Speed	Variable Speed
	Input power (Min / Max)	W	34 / 110	38 / 120
Heating water flow (ΔT=5 K. 35 °C)		L/min	34,4	45,9
Capacity of integrated electric heater		kW	6	6
Input Power	Heat	kW	2,53	3,74
	Cool	kW	3,56	4,76
Running and Starting current	Heat	A	11,7	16,9
	Cool	A	16,2	21,5
Current 1		A	24,0	26,0
Current 2		A	26,0	26,0
Recommended fuse		A	30 / 30	30 / 30
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0 / 3 x 4,0	3 x 4,0 or 6,0 / 3 x 4,0
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43
Water outlet	Heat	°C	25 ~ 55	25 ~ 55
	Cool	°C	5 ~ 20	5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L – Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L – Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MDC models are hermetically sealed. * EER and COP calculation is based in accordance to EN14511.

ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 4,74 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



GOOD DESIGN

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A DHW Scale from A+ to F

Aquarea T-CAP All in One H Generation Single phase / Three phase. Heating and Cooling • R410A

Energy efficiency: A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Constant capacity down to -20 °C / Operation range down to -28 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)		Three phase (Power to indoor)		
Kit			**KIT-AXC09HE5**	**KIT-AXC12HE5**	**KIT-AXC09HE8**	**KIT-AXC12HE8**	**KIT-AXC16HE8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,84	12,00/4,74	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/2,94	12,00/2,88	9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,59	12,00/3,44	9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,21	12,00/2,19	9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,85	12,00/2,72	9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,02	12,00/1,92	9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	7,00/3,17	10,00/2,81	7,00/3,17	10,00/2,81	12,20/2,57
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	7,00/5,19	10,00/5,13	7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130	181/130	170/130	160/125
		SCOP	4,59/3,32	4,32/3,32	4,59/3,32	4,32/3,32	4,08/3,20
	Energy class [1]	A+++ to D	A+++/A++	A++/A++	A+++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	235/158	231/158	231/159
		SCOP	5,95/4,02	5,86/4,02	5,95/4,02	5,86/4,02	5,86/4,05
	Energy class [1]	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	160/125	160/125	150/125
		SCOP	4,08/3,20	4,08/3,20	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class [1]	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++	A++/A++
Indoor unit			**WH-ADC1216H6E5**	**WH-ADC1216H6E5**	**WH-ADC0916H9E8**	**WH-ADC0916H9E8**	**WH-ADC0916H9E8**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33	33/33	33/33
Dimension	H x W x D	mm	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717
Net weight		kg	124	124	126	126	126
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	36/152	36/152	36/152	36/152	36/152
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	25,8	34,4	45,9
Capacity of integrated electric heater		kW	6	6	9	9	9
Recommended fuse		A	30/30	30/30	16/16	16/16	16/16
Recommended cable size, supply 1 / 2		mm²	3 x 4,0/3 x 4,0	3 x 4,0/3 x 4,0	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5
Water volume		L	185	185	185	185	185
Maximum water temperature		°C	65	65	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L	L	L
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	A/A/A	A/A/A	A/A/A	A/A/A	A/A/B
DHW tank ERP average climate η / COPdHW		ηwh%/COPdHW	95/2,37	95/2,37	95/2,37	95/2,37	91/2,27
DHW tank ERP warm climate η / COPdHW		ηwh%/COPdHW	110/2,75	110/2,75	110/2,75	110/2,75	107/2,67
DHW tank ERP cold climate η / COPdHW		ηwh%/COPdHW	75/1,87	75/1,87	75/1,87	75/1,87	72/1,80
Outdoor unit			**WH-UX09HE5**	**WH-UX12HE5**	**WH-UX09HE8**	**WH-UX12HE8**	**WH-UX16HE8**
Sound power [3]	Heat	dB(A)	66	66	65	65	67
Dimension / Net weight	H x W x D	mm / kg	1340 x 900 x 320/101	1340 x 900 x 320/101	1340 x 900 x 320/108	1340 x 900 x 320/108	1340 x 900 x 320/118
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,85/5,951	2,85/5,951	2,85/5,951	2,85/5,951	2,90/6,055
Pipe diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range / Elevation difference (in/out)		m / m	3 ~ 30/20	3 ~ 30/20	3 ~ 30/20	3 ~ 30/20	3 ~ 30/20
Pipe length for additional gas / Additional gas amount		m / g/m	10/50	10/50	10/50	10/50	10/50
Operation range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20

Accessories	
PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
PAW-ADC-CV150	Decorative magnetic side cover
CZ-NS4P	Additional functions PCB
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN

Accessories	
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

ErP 55°C | ErP 35°C | DHW | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | -20°C CONSTANT HEATING T-CAP | 60°C OUTPUT WATER FLOW TEMPERATURE | DHW | -28°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



GOOD DESIGN

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A DHW Scale from A+ to F

Aquarea T-CAP All in One H Generation Three phase. Super Quiet outdoor unit. Heating and Cooling • R410A

Energy efficiency: A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Low noise level / Constant capacity down to -20 °C / Operation range down to -28 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Three phase (Power to indoor)		
Kit			**KIT-AQC09HE8**	**KIT-AQC12HE8**	**KIT-AQC16HE8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	7,00/3,17	10,00/2,81	12,20/2,57
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130	160/125
		SCOP	4,59/3,32	4,32/3,32	4,08/3,20
	Energy class [1]	A+++ to D	A+++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	231/159
		SCOP	5,95/4,02	5,86/4,02	5,86/4,05
	Energy class [1]	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	150/125
		SCOP	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class [1]	A+++ to D	A++/A++	A++/A++	A++/A++
Indoor unit			**WH-ADC0916H9E8**	**WH-ADC0916H9E8**	**WH-ADC0916H9E8**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33
Dimension	H x W x D	mm	1800 x 598 x 717	1800 x 598 x 717	1800 x 598 x 717
Net weight		kg	126	126	126
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	36/152	36/152	36/152
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	45,9
Capacity of integrated electric heater		kW	9	9	9
Recommended fuse		A	16/16	16/16	16/16
Recommended cable size, supply 1 / 2		mm²	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5
Water volume		L	185	185	185
Maximum water temperature		°C	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	A/A/A	A/A/A	A/A/B
DHW tank ERP average climate η / COPdHW		ηwh %/COPdHW	95/2,37	95/2,37	91/2,27
DHW tank ERP warm climate η / COPdHW		ηwh %/COPdHW	110/2,75	110/2,75	107/2,67
DHW tank ERP cold climate η / COPdHW		ηwh %/COPdHW	75/1,87	75/1,87	72/1,80
Outdoor unit			**WH-UQ09HE8**	**WH-UQ12HE8**	**WH-UQ16HE8**
Sound power [3]	Heat	dB(A)	58	58	62
Dimension / Net weight	H x W x D	mm / kg	1410 x 1283 x 320/151	1410 x 1283 x 320/151	1410 x 1283 x 320/161
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,85/5,951	2,85/5,951	2,99/6,243
Pipe diameter	Liquid / Gas	Inch (mm)	3/8 (9,52)/5/8 (15,88)	3/8 (9,52)/5/8 (15,88)	3/8 (9,52)/5/8 (15,88)
Pipe length range / Elevation difference (in/out)		m / m	3 ~ 30/20	3 ~ 30/20	3 ~ 30/20
Pipe length for additional gas / Additional gas amount		m / g/m	10/50	10/50	10/50
Operation range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20

Accessories	
PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
PAW-ADC-CV150	Decorative magnetic side cover
CZ-NS4P	Additional functions PCB
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN

Accessories	
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

ErP 55°C | ErP 35°C | DHW | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | -20°C CONSTANT HEATING T-CAP | 60°C OUTPUT WATER FLOW TEMPERATURE | DHW | -28°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



NEW 2021

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A DHW Scale from A+ to F

NEW Aquarea T-CAP All in One Compact H Generation Single phase. Heating and Cooling • R410A

Energy efficiency: A+++ in heating at 35 °C and A in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

Flexibility: 598 x 600 footprint / Built-in magnetic water filter.

Comfort: Constant capacity down to -20 °C / Operation range down to -28 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)	
Kit			**KIT-AXC09HE5C**	**KIT-AXC12HE5C**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,84	12,00/4,74
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	—/—	—/—
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,59	12,00/3,44
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	—/—	—/—
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	—/—	—/—
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	—/—	—/—
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	7,00/3,17	10,00/2,81
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	—/—	—/—
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130
		SCOP	4,59/3,32	4,32/3,32
	Energy class [1]	A+++ to D	A+++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158
		SCOP	5,95/4,02	5,86/4,02
	Energy class [1]	A+++ to D	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125
		SCOP	4,08/3,20	4,08/3,20
	Energy class [1]	A+++ to D	A++/A++	A++/A++
Indoor unit			**WH-ADC1216H6E5C**	**WH-ADC1216H6E5C**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33
Dimension	H x W x D	mm	1640 x 598 x 600	1640 x 598 x 600
Net weight		kg	101	101
Water pipe connector		Inch	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed
	Input power (Min/Max)	W	—/—	—/—
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,80	34,40
Capacity of integrated electric heater		kW	6,00	6,00
Recommended fuse		A	—/—	—/—
Recommended cable size, supply 1 / 2		mm²	—/—	—/—
Water volume		L	185	185
Maximum water temperature		°C	60	60
Material inside tank			Stainless steel	Stainless steel
Tapping profile according EN16147			—	—
DHW tank ERP efficiency average / warm / cold [2]		A+ to F	—/—/—	—/—/—
DHW tank ERP average climate η / COPdHW		ηwh%/COPdHW	92/2,30	92/2,30
DHW tank ERP warm climate η / COPdHW		ηwh%/COPdHW	107/2,67	107/2,67
DHW tank ERP cold climate η / COPdHW		ηwh%/COPdHW	72/1,81	72/1,81
Outdoor unit			**WH-UX09HE5**	**WH-UX12HE5**
Sound power [3]	Heat	dB(A)	66	66
Dimension / Net weight	H x W x D	mm / kg	1340 x 900 x 320/101	1340 x 900 x 320/101
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,85/5,951	2,85/5,951
Pipe diameter	Liquid / Gas	Inch (mm)	3/8 (9,52)/5/8 (15,88)	3/8 (9,52)/5/8 (15,88)
Pipe length range / Elevation difference (in/out)		m / m	3~30/20	3~30/20
Pipe length for additional gas / Additional gas amount		m / g/m	10/50	10/50
Operation range - outdoor ambient	Heat	°C	-28~+35	-28~+35
	Cool	°C	+16~+43	+16~+43
Water outlet	Heat / Cool	°C	20~60/5~20	20~60/5~20

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB

Accessories	
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

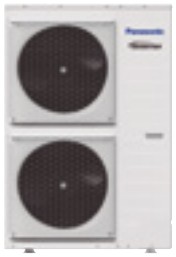
1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility. *** Available in May 2021.

ErP 55°C · ErP 35°C · DHW · INVERTER+ · A CLASS WATER PUMP AUTO SPEED · 4,84 COP HIGH PERFORMANCE · DHW · -28°C HEATING MODE · WATER FILTER WITH MAGNET · 60°C OUTPUT WATER FLOW TEMPERATURE · FLOW SENSOR · BOILER CONNECTION · ADVANCED CONTROL · OPTIONAL WI-FI · BMS CONNECTIVITY · 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



GOOD DESIGN



ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

Aquarea T-CAP Bi-bloc H Generation Single phase / Three phase. Heating and Cooling - SXC • R410A

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Constant capacity down to -20 °C / Operation range down to -28 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase (Power to indoor)		Three phase (Power to indoor)		
Kit			**KIT-WXC09H3E5**	**KIT-WXC12H6E5**	**KIT-WXC09H3E8**	**KIT-WXC12H9E8**	**KIT-WXC16H9E8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,84	12,00/4,74	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/2,94	12,00/2,88	9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,59	12,00/3,44	9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,21	12,00/2,19	9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,85	12,00/2,72	9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,02	12,00/1,92	9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	7,00/3,17	10,00/2,81	7,00/3,17	10,00/2,81	12,20/2,57
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	7,00/5,19	10,00/5,13	7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130	181/130	170/130	160/125
		SCOP	4,59/3,32	4,32/3,32	4,59/3,32	4,32/3,32	4,08/3,20
	Energy class	A+++ to D	A+++/A++	A++/A++	A+++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	235/158	231/158	231/159
		SCOP	5,95/4,02	5,86/4,02	5,95/4,02	5,86/4,02	5,86/4,05
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	160/125	160/125	150/125
		SCOP	4,08/3,20	4,08/3,20	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++	A++/A++
Indoor unit			**WH-SXC09H3E5**	**WH-SXC12H6E5**	**WH-SXC09H3E8**	**WH-SXC12H9E8**	**WH-SXC16H9E8**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33	33/33	33/33
Dimension	H x W x D	mm	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340
Net weight		kg	43	43	43	44	45
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min / Max)	W	32/102	34/110	32/102	34/110	30/105
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	25,8	34,4	45,9
Capacity of integrated electric heater		kW	3	6	3	9	9
Recommended fuse		A	30/30	30/30	16/16	16/16	16/16
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0 / 3 x 4,0	3 x 4,0 or 6,0 / 3 x 4,0	5 x 1,5 / 3 x 1,5	5 x 1,5 / 5 x 1,5	5 x 1,5 / 5 x 1,5
Outdoor unit			**WH-UX09HE5**	**WH-UX12HE5**	**WH-UX09HE8**	**WH-UX12HE8**	**WH-UX16HE8**
Sound power [1]	Heat	dB(A)	66	66	65	65	67
Dimension	H x W x D	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Net weight		kg	101	101	108	108	118
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,85/5,951	2,85/5,951	2,85/5,951	2,85/5,951	2,90/6,055
Pipe diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range		m	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 30
Elevation difference (in/out)		m	20	20	20	20	20
Pipe length for additional gas		m	10	10	10	10	10
Additional gas amount		g/m	50	50	50	50	50
Operation range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

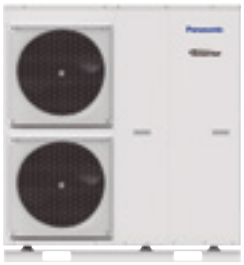
1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511.

ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | -20°C CONSTANT HEATING T-CAP | 60°C OUTPUT WATER FLOW TEMPERATURE | DHW | -28°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



GOOD DESIGN



A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

Aquarea T-CAP Bi-bloc H Generation Three phase. Super Quiet outdoor unit. Heating and Cooling - SQC • R410A

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Low noise level / Constant capacity down to -20 °C / Operation range down to -28 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Three phase (Power to indoor)		
Kit			**KIT-WQC09H3E8**	**KIT-WQC12H9E8**	**KIT-WQC16H9E8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	7,00/3,17	10,00/2,81	12,20/2,57
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130	160/125
		SCOP	4,59/3,32	4,32/3,32	4,08/3,20
	Energy class		A+++ to D	A+++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	231/159
		SCOP	5,95/4,02	5,86/4,02	5,86/4,05
	Energy class		A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	150/125
		SCOP	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class		A+++ to D	A++/A++	A++/A++	A++/A++
Indoor unit			**WH-SQC09H3E8**	**WH-SQC12H9E8**	**WH-SQC16H9E8**
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33
Dimension	H x W x D	mm	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340
Net weight		kg	43	44	45
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	32/102	34/110	30/105
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	45,9
Capacity of integrated electric heater		kW	3	9	9
Recommended fuse		A	15/30	15/30	15/30
Recommended cable size, supply 1 / 2		mm²	5 x 1,5/3 x 1,5	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5
Outdoor unit			**WH-UQ09HE8**	**WH-UQ12HE8**	**WH-UQ16HE8**
Sound power [1]	Heat	dB(A)	58	58	62
Dimension	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	151	151	161
Refrigerant (R410A) / CO_2 Eq.		kg / T	2,85/5,951	2,85/5,951	2,99/6,243
Pipe diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)
Pipe length range		m	3 ~ 30	3 ~ 30	3 ~ 30
Elevation difference (in/out)		m	20	20	20
Pipe length for additional gas		m	10	10	10
Additional gas amount		g/m	50	50	50
Operation range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit
PAW-BTANK50L-2	Buffer tank 50 L

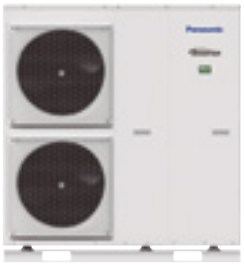
Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-NS4P	Additional functions PCB
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511.

A++ ErP 55°C | A+++ ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | -20°C CONSTANT HEATING T-CAP | 60°C OUTPUT WATER FLOW TEMPERATURE | DHW | -28°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

NEW 2021





ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

NEW Aquarea T-CAP Mono-bloc J Generation Single phase / Three phase. Heating and Cooling - MXC • R32

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Built-in magnetic water filter.

Comfort: Constant capacity and operation range down to -20 °C / 65 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase		Three phase		
Outdoor unit			**WH-MXC09J3E5**	**WH-MXC12J6E5**	**WH-MXC09J3E8**	**WH-MXC12J9E8**	**WH-MXC16J9E8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/5,08	12,00/4,80	9,00/—	12,00/—	16,00/—
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/3,08	12,00/3,05	—	—	—
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,81	12,00/3,53	9,00/—	12,00/—	16,00/—
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,54	12,00/2,42	—	—	—
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/3,08	12,00/2,82	—	—	—
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,12	12,00/2,00	—	—	—
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	9,00/3,18	12,00/2,90	9,00/—	12,00/—	14,50/—
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	9,00/4,62	12,00/3,95	—	—	—
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	195/140	195/140	—	—	—
		SCOP	4,96/3,57	4,96/3,57	—	—	—
	Energy class	A+++ to D	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	256/171	256/171	—	—	—
		SCOP	6,47/4,34	6,47/4,34	—	—	—
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	169/127	169/127	—	—	—
		SCOP	4,31/3,26	4,31/3,26	—	—	—
	Energy class	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++	A++/A++
Sound power [1]	Heat	dB(A)	65	65	65	65	66
Dimension	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	140	140	151	151	164
Refrigerant (R32) / CO_2 Eq. [2]		kg / T	1,60/1,080	1,60/1,080	1,60/1,080	1,60/1,080	1,80/1,215
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
Pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	32/102	34/110	32/102	34/110	38/120
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	25,8	34,4	45,9
Capacity of integrated electric heater		kW	3	6	3	9	9
Input power	Heat	kW	1,77	2,50	1,77	2,50	—
	Cool	kW	2,83	4,14	2,83	4,14	—
Running and starting current	Heat	A	8,3	11,6	—	—	—
	Cool	A	13,1	19,1	—	—	—
Current 1		A	29,0	29,0	14,7	11,9	15,5
Current 2		A	13,0	26,0	13,0	13,0	13,0
Recommended fuse, supply 1 / 2		A	30/30	30/30	20/16	20/20	20/20
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0/3 x 4,0	3 x 4,0 or 6,0/3 x 4,0	5 x 1,5/3 x 1,5	5 x 1,5/5 x 1,5	5 x 2,5/5 x 1,5
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	10 ~ +43	10 ~ +43	10 ~ +43	10 ~ +43	10 ~ +43
Water outlet [3]	Heat	°C	20 ~ 65	20 ~ 65	20 ~ 65	20 ~ 65	20 ~ 65
	Cool	°C	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20

Tentative data

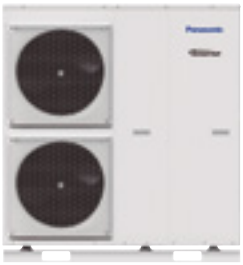
Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L – Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L – Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW Tanks

Accessories	
PAW-BTANK50L-2	Buffer tank 50 L
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MXC models are hermetically sealed. 3) It is possible to set temperature by 65 °C on remote controller. Normally, outlet water temperature is 60 °C or lower. In case of ΔT setting with remote controller is 15 °C and the outdoor ambient temperature is 5 to 20 °C, outlet water temperature 65 °C is possible. * EER and COP calculation is based in accordance to EN14511.

R32 | A++ ErP 55°C | A+++ ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 5,08 COP HIGH PERFORMANCE | 65°C OUTPUT WATER FLOW TEMPERATURE | DHW | -20°C HEATING MODE | WATER FILTER WITH MAGNET | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



011-1W0206
For 9 and 12 kW.

ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

Aquarea T-CAP Mono-bloc H Generation Single phase / Three phase. Heating and Cooling - MXC • R410A

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Constant capacity and operation range down to -20 °C / 60 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

			Single phase		Three phase		
Outdoor unit			**WH-MXC09H3E5**	**WH-MXC12H6E5**	**WH-MXC09H3E8**	**WH-MXC12H9E8**	**WH-MXC16H9E8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,84	12,00/4,74	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/2,94	12,00/2,88	9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,59	12,00/3,44	9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,21	12,00/2,19	9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,85	12,00/2,72	9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,02	12,00/1,92	9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	7,00/3,17	10,00/2,81	7,00/3,17	10,00/2,81	12,20/2,56
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	7,00/5,19	10,00/5,13	7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130	181/130	170/130	160/125
		SCOP	4,59/3,32	4,32/3,32	4,59/3,32	4,32/3,32	4,08/3,20
	Energy class	A+++ to D	A+++/A++	A++/A++	A+++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	235/158	231/158	231/159
		SCOP	5,95/4,03	5,86/4,02	5,95/4,02	5,86/4,02	5,86/4,05
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	160/125	160/125	150/125
		SCOP	4,08/3,20	4,08/3,20	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++	A++/A++
Sound power [1]	Heat	dB(A)	65	65	65	65	66
Dimension	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	142	142	151	151	164
Refrigerant (R410A) / CO_2 Eq. [2]		kg / T	2,30/4,802	2,30/4,802	2,30/4,802	2,30/4,802	2,35/4,907
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
Pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	32/102	34/110	32/102	34/110	38/120
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	25,8	34,4	45,9
Capacity of integrated electric heater		kW	3	6	3	9	9
Input power	Heat	kW	1,86	2,53	1,86	2,53	3,74
	Cool	kW	2,21	3,56	2,21	3,56	4,76
Running and starting current	Heat	A	8,8	11,7	3,0	4,0	5,7
	Cool	A	10,4	16,5	3,5	5,3	7,1
Current 1		A	29,0	29,0	14,7	11,9	15,5
Current 2		A	13,0	26,0	13,0	13,0	13,0
Recommended fuse		A	30/30	30/30	16/16	16/16	16/16
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0/3 x 4,0	3 x 4,0 or 6,0/3 x 4,0	5 x 1,5/3 x 1,5	5 x 1,5/5 x 1,5	5 x 1,5/5 x 1,5
Operation range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat	°C	20 ~ 60	20 ~ 60	20 ~ 60	20 ~ 60	20 ~ 60
	Cool	°C	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L – Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L – Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MXC models are hermetically sealed. * EER and COP calculation is based in accordance to EN14511.

ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | -15°C CONSTANT HEATING T-CAP | 60°C OUTPUT WATER FLOW TEMPERATURE | DHW | -20°C HEATING MODE | WATER FILTER | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



A++ ErP 55 °C Scale from A+++ to D

A++ ErP 35 °C Scale from A+++ to D

Aquarea HT Bi-bloc F Generation Single phase / Three phase. Heating Only - SHF • R407C

Energy efficiency: "A" water pump with variable speed.

Comfort: Operation range down to -20 °C outdoor temperature / 65 °C water outlet temperature

Control: Efficient control of room temperature based on outdoor and indoor temperatures, thanks to the Aquarea Manager.

Connectivity: Optional integration into BMS projects.

			Single phase (Power to indoor)		Three phase (Power to indoor)	
Kit			**KIT-WHF09F3E5**	**KIT-WHF12F6E5**	**KIT-WHF09F3E8**	**KIT-WHF12F9E8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,64	12,00/4,46	9,00/4,64	12,00/4,46
Heating capacity / COP (A +7 °C, W 65 °C)		kW / COP	9,00/2,48	12,00/2,41	9,00/2,48	12,00/2,41
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,45	12,00/3,26	9,00/3,45	12,00/3,26
Heating capacity / COP (A +2 °C, W 65 °C)		kW / COP	9,00/2,06	10,30/2,01	9,00/2,06	10,30/2,01
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,74	12,00/2,52	9,00/2,74	12,00/2,52
Heating capacity / COP (A -7 °C, W 65 °C)		kW / COP	9,00/1,79	9,60/1,77	9,00/1,79	9,60/1,77
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	153/125	150/125	153/125	150/125
		SCOP	3,90/3,20	3,82/3,21	3,90/3,20	3,82/3,21
	Energy class	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	191/156	188/156	191/156	188/156
		SCOP	4,84/3,97	4,77/3,97	4,84/3,97	4,77/3,97
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	137/116	134/113	137/116	134/113
		SCOP	3,50/2,97	3,42/2,90	3,50/2,97	3,42/2,90
	Energy class	A+++ to D	A+/A+	A+/A+	A+/A+	A+/A+
Indoor unit			**WH-SHF09F3E5**	**WH-SHF12F6E5**	**WH-SHF09F3E8**	**WH-SHF12F9E8**
Sound pressure		dB(A)	33	33	33	33
Dimension	H x W x D	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Net weight		kg	46	47	47	48
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		7	7	7	7
	Input power (Min/Max)	W	38/100	40/106	38/100	40/106
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4	25,8	34,4
Capacity of integrated electric heater		kW	3	6	3	9
Recommended fuse		A	30/30	30/30	30/16	30/16
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0/3 x 4,0	3 x 4,0 or 6,0/3 x 4,0	5 x 1,5/3 x 1,5	5 x 1,5/5 x 1,5
Outdoor unit			**WH-UH09FE5**	**WH-UH12FE5**	**WH-UH09FE8**	**WH-UH12FE8**
Sound power [1]		dB(A)	—	—	—	—
Dimension	H x W x D	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Net weight		kg	104	104	110	110
Refrigerant (R407C) / CO_2 Eq.		kg / T	2,90/5,145	2,90/5,145	2,90/5,145	2,90/5,145
Pipe diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)
Pipe length range		m	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 30
Elevation difference (in/out)		m	20	20	20	20
Pipe length for additional gas		m	10	10	10	10
Additional gas amount		g/m	70	70	70	70
Operation range	Outdoor ambient (Heat)	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
Water outlet	Heat	°C	25 ~ 65	25 ~ 65	25 ~ 65	25 ~ 65

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled

Accessories	
PAW-3WYVLV-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511.

A++ ErP 55°C | A++ ErP 35°C | INVERTER+ | A CLASS WATER PUMP 7 SPEEDS | 65°C OUTPUT WATER HIGH TEMPERATURE | DHW | -20°C HEATING MODE | BOILER CONNECTION | SOLAR KIT | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



ErP 55 °C Scale from A+++ to D

ErP 35 °C Scale from A+++ to D

Aquarea HT Mono-bloc G Generation Single phase. Heating Only - MHF • R407C

Energy efficiency: "A" water pump with variable speed.

Comfort: Operation range down to -20 °C outdoor temperature / 65 °C water outlet temperature

Control: Efficient control of room temperature based on outdoor and indoor temperatures, thanks to the Aquarea Manager.

Connectivity: Optional integration into BMS projects.

			Single phase	
Outdoor unit			**WH-MHF09G3E5**	**WH-MHF12G6E5**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/4,64	12,00/4,46
Heating capacity / COP (A +7 °C, W 65 °C)		kW / COP	9,00/2,48	12,00/2,41
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,45	12,00/3,26
Heating capacity / COP (A +2 °C, W 65 °C)		kW / COP	9,00/2,06	10,30/2,01
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/2,74	12,00/2,52
Heating capacity / COP (A -7 °C, W 65 °C)		kW / COP	9,00/1,79	9,60/1,77
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	153/125	150/125
		SCOP	3,90/3,20	3,82/3,21
	Energy class	A+++ to D	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	191/156	188/156
		SCOP	4,84/3,97	4,77/3,97
	Energy class	A+++ to D	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	137/116	134/113
		SCOP	3,50/2,97	3,42/2,90
	Energy class	A+++ to D	A+/A+	A+/A+
Sound power [1]		dB(A)	—	—
Dimension	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	151	151
Refrigerant (R407C) / CO_2 Eq. [2]		kg / T	1,92/3,406	1,92/3,406
Water pipe connector		Inch	R 1¼	R 1¼
Pump	Number of speeds		7	7
	Input power (Min/Max)	W	—	—
Heating water flow (ΔT=5 K. 35 °C)		L/min	25,8	34,4
Capacity of integrated electric heater		kW	3	6
Input power		kW	1,94	2,69
Running and starting current		A	9,3	12,8
Current 1		A	28,5	29,0
Current 2		A	13,0	26,0
Recommended fuse		A	30/30	30/30
Recommended cable size, supply 1 / 2		mm²	3 x 4,0 or 6,0/3 x 4,0	3 x 4,0 or 6,0/3 x 4,0
Operation range	Outdoor ambient (Heat)	°C	-20 ~ +35	-20 ~ +35
Water outlet	Heat	°C	25 ~ 65	25 ~ 65

Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L – Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L – Stainless Steel

Accessories	
PAW-3WYVLV-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MHF models are hermetically sealed. * EER and COP calculation is based in accordance to EN14511.

ErP 55°C | ErP 35°C | INVERTER+ | A CLASS WATER PUMP | 7 SPEEDS | 65°C OUTPUT WATER HIGH TEMPERATURE | DHW | -20°C HEATING MODE | BOILER CONNECTION | SOLAR KIT | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.

Fan coils highlighted features

Presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location.

MORE FAN COIL OPTIONS IN CHILLERS SECTION



1 **Innovation for an optimum comfort**

Range of fan coil for heating and cooling with capacities from 0,2 to 9,6 kW in cooling and from 0,2 to 13,6 kW in heating. Bring full year comfort with water based systems.

2 **Energy efficient and low noise fan**

Dynamically balanced and specially designed fans, reinforced acoustic insulation and optimized fan speed staging for lower noise levels.
Improved efficiency with optional EC fan motor.

3 **Quality and efficient coil**

Constructed from staggered copper tubes, mechanically expanded into aluminium fins, providing maximum heat transfer efficiency, durability and hygiene.

4 **Flexible installation**

Various types of unit to fit your needs with flexible installation options. A choice of service side for hydraulic connections, piping configuration and horizontal or vertical installation for ducted units.

Offering a great range of capacities and performance, presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location. Whether the requirements are for cooling only, or for both heating and cooling, there is a fan coil to suit. With a variety of piping and fan configuration, the range is capable of meeting the most stringent of requirement. Line up available in AC and EC fans, it is possible to achieve both powerful performance, but with sustainability in mind.

Controllers with sophisticated designs, provide a user friendly interface while enabling an easy and low cost integration to building management systems.



PAW-FC-RC1
Optional wired remote controller for AC fan, 2-pipe and 4-pipe application.



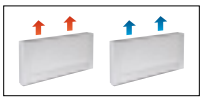
PAW-FC-TC903
Optional wired remote controller for AC fan 2-pipe application.



PAW-FC-907TC
Optional wired remote controller for EC fan, 2-pipe and 4-pipe application.

Smart fan coils







Built-in advanced thermostat.

			PAW-AAIR-200-2	PAW-AAIR-700-2	PAW-AAIR-900-2
Total cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,6	0,8/1,0/1,2	1,2/1,5/1,7
Sensible cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,5	0,6/0,9/1,1	1,1/1,4/1,6
Water flow	Lo/Med/Hi	kg/h	40,0/59,0/95,0	129,0/178,0/207,0	198,0/261,0/300,0
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	1,0/2,0/2,0	6,0/9,0/12,0
Inlet water temperature		°C	10	10	10
Outlet water temperature		°C	15	15	15
Inlet air temperature		°C	27,0	27,0	27,0
Outlet air temperature	Lo/Med/Hi	°C	15,0/17,0/18,0	14,0/16,0/17,0	16,0/17,0/18,0
Relative humidity of inlet air		%	47	47	47
Total heating capacity	Lo/Med/Hi	kW	0,2/0,5/0,6	0,7/1,0/1,2	0,9/1,4/1,7
Water flow	Lo/Med/Hi	kg/h	37,3/80,8/98,0	121,8/177,5/204,3	152,4/244,2/292,9
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	0,3/0,8/1,0	0,5/1,6/2,2
Inlet water temperature		°C	35	35	35
Outlet water temperature		°C	30	30	30
Inlet air temperature		°C	19,0	19,0	19,0
Outlet air temperature	Lo/Med/Hi	°C	38,9/32,0/30,0	33,3/31,8/30,6	30,2/31,1/30,6
Air flow	Lo/Med/Hi	m³/min	0,9/1,9/2,7	2,6/4,2/5,3	4,1/6,1/7,7
Maximum input power	Lo/Med/Hi	W	7,0/9,0/13,0	14,0/18,0/22,0	16,0/20,0/24,0
Sound pressure	Lo/Med/Hi	dB(A)	23/33/40	24/36/42	25/36/44
Dimension (H x W x D)		mm	735 x 579 x 129	935 x 579 x 129	1135 x 579 x 129
Net weight		kg	17	20	23
3 Ways valve included			Yes	Yes	Yes
Touch screen thermostat			Yes	Yes	Yes

Accessories	
PAW-AAIR-LEGS-1	Kits of 2 legs to protect the water pipings

Accessories	
PAW-AAIR-RHCABLE	Motor connection cable for units with hydraulic connections on the right

* Smart fan coils is produced by Innova.

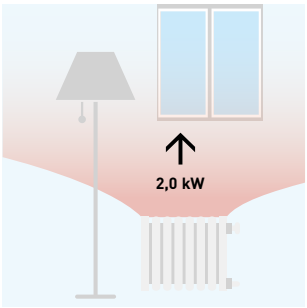
Stylish floor-standing fan coils with advanced controller

The slimline of Smart fan coils delivers high efficiency climate control.

With a depth of just under 13 cm they are at the cutting edge of the market. Blending easily into the home, Smart fan coil's elegant design and product refinements are clear to see in every detail.

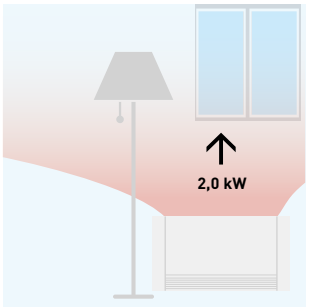
Exceptional ventilation efficiency means the motor uses considerably less energy (low wattage). The fan speed is continuously modulated by the temperature controller with proportional integral logic, with undoubted advantages for regulating the temperature and humidity in summer mode.

With standard cast radiators.



Water at 65 °C needed.

With Smart fan coil.



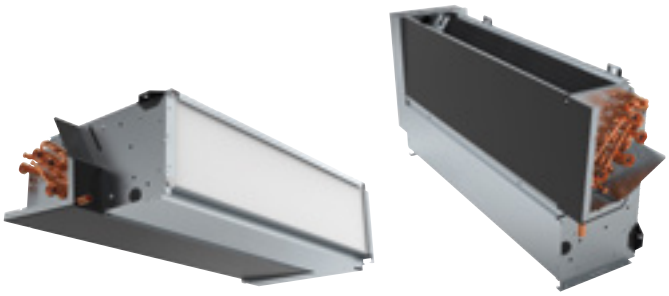
Water at 35 °C needed.

Technical focus

- 4 operation modes (auto, silent, night-time and maximum ventilation speed)
- Exclusive design
- Extremely compact (only 12,9 cm deep)
- Cooling and dehumidification functions possible (drain is needed)
- 3-way valve included (no overflow valve needed on the installation if more than 3 units installed)
- Touch screen thermostat

All temperature curves and capacity are available on www.panasonicproclub.com

Fan coils - ducted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

	Left connection (PAW-)		FC2A-D010L	FC2A-D020L	FC2A-D030L	FC2A-D040L	FC2A-D050L	FC2A-D060L	FC2A-D070L	FC2A-D080L
	Right connection (PAW-)		FC2A-D010R	FC2A-D020R	FC2A-D030R	FC2A-D040R	FC2A-D050R	FC2A-D060R	FC2A-D070R	FC2A-D080R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
Sound levels										
Global sound power	S-Lo/Med/S-Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	S-Lo/Med/S-Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Maximum external pressure		Pa	55	55	65	85	85	115	125	70
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Dimensions and weight										
Dimension	H x W x D	mm	430 x 220 x 570	430 x 220 x570	430x 220 x 730	430 x 220 x 938	430 x 220 x 1122	430 x 220 x 1307	530 x 220 x 1121	530 x 220 x 1316
Weight		kg	13	13	15	20	22	26	27	38

Accessories	
PAW-FC-RC1	Advanced wired remote controller for fan coil
PAW-FC-903TC	Wired remote controller for fan coil
PAW-FC-2WY-11/55-1	2 way valve + drain pan for models 010-060

Accessories	
PAW-FC-2WY-65/90-1	2 way valve + drain pan for models 070-080
PAW-FC-3WY-11/55-1	3 way valve + drain pan for models 010-060
PAW-FC-3WY-65/90-1	3 way valve + drain pan for models 070-080

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual. * Fan coil units are produced by Systemair.

Technical focus

· Cooling capacity from 0,7 to 8,1 kW
· Heating capacity from 0,7 to 10,3 kW
· 5-speed AC fan motor(s)

Main features and accessories

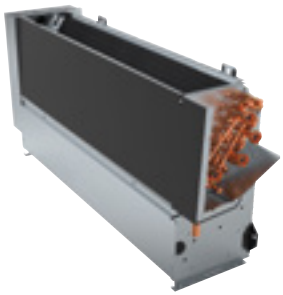
· Left or right hand arrangements
· Ease of installation
· Very low acoustic levels
· 2 way or 3 way ON/OFF valves
· Auxiliary drain pan
· Air intake with removable grid
· G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ducted (EC)



Optional controller. Wired remote controller for EC fans.
PAW-FC-907TC

	Left connection (PAW-)		FC2E-D010L	FC2E-D020L	FC2E-D030L	FC2E-D040L	FC2E-D050L	FC2E-D060L	FC2E-D070L	FC2E-D080L	FC2E-F040L
	Right connection (PAW-)		FC2E-D010R	FC2E-D020R	FC2E-D030R	FC2E-D040R	FC2E-D050R	FC2E-D060R	FC2E-D070R	FC2E-D080R	FC2E-F040R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8	3,6/6,6/9,2
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6	2,9/6,1/9,1
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254	627/1142/1575
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6	10,6/51,2/93,8
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3	4,4/8,3/11,8
Sound levels											
Global sound power	S-Lo/Med/S-Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64	42/58/68 [3]
Global sound pressure [4]	S-Lo/Med/S-Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55	23/39/52
Fan											
Number			1	1	1	2	2	2	2	3	1
Air flow	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398	592/1284/1935
Maximum external pressure		Pa	75	75	75	105	70	105	115	115	190
Filter			G2	G2	G2	G2	G2	G2	G2	G2	G2
Electrical data											
Power supply	Voltage	V	230	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108	11/62/197
Water connections											
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
Dimensions and weight											
Dimension	H x W x D	mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530	223 x 1233 x 653
Weight		kg	13	13	15	20	22	26	27	38	19

Accessories	
PAW-FC-907TC	Wired remote controller for fan coil
PAW-FC-2WY-11/55-1	2 way valve + drain pan for models 010-060
PAW-FC-2WY-65/90-1	2 way valve + drain pan for models 070-080
PAW-FC-2WY-F040	2 way valve + drain pan for model F040

Accessories	
PAW-FC-3WY-11/55-1	3 way valve + drain pan for models 010-060
PAW-FC-3WY-65/90-1	3 way valve + drain pan for models 070-080
PAW-FC-3WY-F040	3 way valve + drain pan for model F040

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound power levels indicated are from return and radiated measurements. 4) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual. * Fan coil units are produced by Systemair.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Main features and accessories

- Left or right hand arrangements
- Can be installed both horizontally and vertically*
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

* PAW-FC2E-F040 may only be installed horizontally.

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EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - wall-mounted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1



Infrared remote supplied with IR versions.
IR Controller

2-pipe			PAW-FC2A-K007 PAW-FC2A-K007IR	PAW-FC2A-K009 PAW-FC2A-K009IR	PAW-FC2A-K018 PAW-FC2A-K018IR	PAW-FC2A-K022 PAW-FC2A-K022IR
Total cooling capacity [1]	Lo/Med/Hi	kW	1,0/1,3/1,7	1,6/1,7/2,4	2,8/3,0/3,5	2,9/3,1/3,9
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,2	1,2/1,3/1,9	2,1/2,3/2,7	2,3/2,5/3,1
Water flow	Lo/Med/Hi	l/h	172/231/287	270/291/418	483/508/609	502/535/669
Water pressure drop	Lo/Med/Hi	kPa	18,6/24,9/30,9	18,5/27,0/40,0	34,6/41,3/55,6	37,2/33,7/45,2
Heating capacity [2]	Lo/Med/Hi	kW	1,4/1,7/2,0	1,7/2,0/2,7	2,9/3,2/4,0	3,1/3,7/4,4
Sound levels						
Sound power	Lo/Med/Hi	dB(A)	45/49/51	47/52/57	49/53/56	53/57/63
Sound pressure [3]	Lo/Med/Hi	dB(A)	30/33/35	32/36/40	39/41/43	39/43/48
Fan						
Number			1	1	1	1
Air flow	Lo/Med/Hi	m³/h	282/321/360	367/413/551	532/592/680	617/709/850
Filter			G1	G1	G1	G1
Electrical data						
Power supply	Voltage	V	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50
Fuse rating		A	3	3	3	3
Power consumption	Lo/Med/Hi	W	39/42/62	30/47/59	44/50/55	50/55/70
Water connections						
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2
Dimensions and weight						
Dimension	H x W x D	mm	275 x 180 x 845	275 x 180 x 845	298 x 200 x 940	298 x 200 x 940
Weight		kg	11	11	13	13

Accessories	
PAW-FC-RC1	Advanced wired remote controller for fan coil
PAW-FC-903TC	Wired remote controller for fan coil

Accessories	
PAW-FC2-2WY-K007	2 way valve
PAW-FC2-3WY-K007	3 way valve

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in/out: 45 °C / 40 °C. 3) Sound pressure considering a local of 100 m³ a reverberation time of 0,5 seconds and a distance of 1 m.

Technical focus

- 4 sizes
- Cooling capacity from 1,0 to 3,9 kW
- Heating capacity from 1,4 to 4,1 kW
- Version: 2-pipes, AC fan

Main features and accessories

- 2 way or 3 way valve ON/OFF
- 3-speed AC fan motor
- Silent unit for optimum customer comfort
- Aesthetic design suitable for residential and hotel applications
- Compatible with IR controller (supplied with IR versions)
- Coil with hydrophilic fins to improve the condensate flow

Operating limits	
Entering water temperature	From 5 to 60 °C
Indoor air temperature	From 6 to 40 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Wired controllers for AC and EC fan coils

Advanced wired remote controller (AC)



PAW-FC-RC1
This advanced controller provides a higher level of comfort in heating. The sensor can be used as a water flow sensor, stopping the fan when the water temperature is low, avoiding cold drafts in winter.

Features:
· For 2-pipe and 4-pipe, AC fan
· Change Over function (cold draft prevention)
· Room thermostat
· 3 outputs, 230 V relays for fan control
· 2 outputs, 230 V relays for heating / cooling control
· Connection to BMS - Modbus RTU slave
· 1 DI for presence detection (key card switch)
· 1 AI for sensor

Wired remote controller (EC)



PAW-FC-907TC
Stylish and sophisticated design with backlit LCD display, is suitable for installation within a wide variety of locations such as office, hotel and residential applications. By connecting the controller to the range of EC fan coils, the user can take advantage of the improved performance, higher levels of efficiency and thus improved energy savings.

Features:
· For 2-pipe and 4-pipe, EC fan
· Back lit LCD screen with touch control
· Adjustable range EC fan control
· Economiser
· Connection to BMS via Modbus
· 1 DI for presence detection (key card switch)

Wired remote controller (AC)



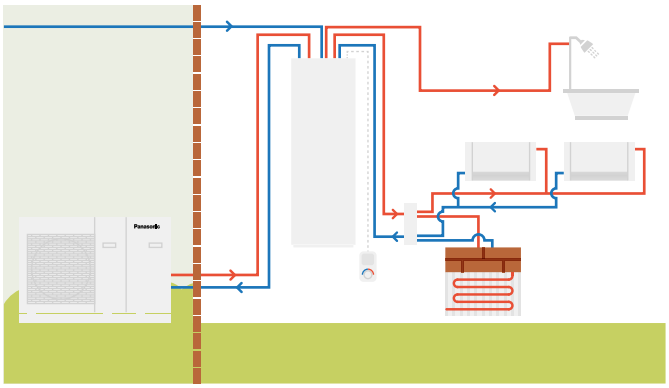
PAW-FC-903TC
Feature rich and perfectly adapted to control AC fan coils, the PAW-FC-903TC is the ideal addition for any fan coil. With intuitive user interface provided by the push button control and large LCD display, it will fit seamlessly with almost any location.

Features:
· For 2-pipe, AC fan
· Back lit LCD screen
· 3 speed control relay, for fan
· Economizer

Sanitary Tanks

Combo tanks.

The best option to combine with Mono-bloc units. DHW tank with buffer tank. Designed for retrofit applications, the DHW tank with a buffer tank is particularly suitable for fast integration on an existing installation. Easy to install, nice looking, high efficiency for DHW production and for heating.



		Enamelled		Stainless steel	
Model		**PAW-TD20B8E3-2**		**PAW-TD23B6E5**	
Dimension H x W x D	mm	1770 x 640 x 690		1750 x 600 x 646	
Weight (empty)	kg	150		111	
Volume	L	185 + 80		230 + 60	
Power supply	V, Phase, Hz	230, 1, 50		230, 1, 50	
		Hot water tank	**Buffer tank**	**Hot water tank**	**Buffer tank**
Volume	L	185	80	230	60
Max working pressure	MPa (bar)	0,8 (8)	0,6 (6)	1,0 (10)	0,3 (3,0)
Pressure test	MPa (bar)	1,2 (12)	0,9 (9)	1,5 (15)	0,39 (3,9)
Max working temp	°C	90	90	80	80
Connections	mm	Ø22	Ø22	Ø22	Ø22, copper
Material		S 275 JR vitrified	S235 JR	EN 14521	EN 14521
Insulation	Material, t=mm	PUR, 50	PUR 40	PUR, 50	PUR, 50
Heating coil surface	m²	2,1	—	1,8	—
Electrical heater	W	3000	—	2800	—
Energy loss at 65 °C	kWh/24h	1,3	—	1,25	—
Energy efficiency class (from A+ to F)		**B**	**B**	**B**	**A**
Standing loss	W	53	46	52	29

1) EU Regulation 812/2013. 2) Tested pursuant to EN 12897:2006. * Enamelled Combo Tank is produced by Lapesa. Stainless Steel Combo Tank is produced by OSO.



Buffer tanks.

Model		**PAW-BTANK50L-2**	**NEW PAW-BTANK100L**	**NEW PAW-BTANK200L**	**NEW PAW-BTANK300L**
Capacity	L	48	100	199	289
Energy losses	W	35	55	50	66
Energy Efficiency Class (from A+ to F)		**B**	**C**	**B**	**B**
Material		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Dimension (Hight / Diameter)	mm	636 / 430	1175 / 430	1275 / 595	1755 / 595
Net weight	kg	17	28	47	57

* Automatic air vent and drain cock are included. Built-in pocket sensor (sensor not included). ** Buffer Tank are produced by OSO.



Enamelled tanks.

		Enamelled Tank				Enamelled 2 coils Tank (for bivalent Solar + HP)	Square Tank
Model		**PAW-TA15C1E5STD**	**PAW-TA20C1E5STD**	**PAW-TA30C1E5STD**	**PAW-TA40C1E5STD**	**PAW-TA30C2E5STD**	**PAW-TA20C1E5C**
Water volume	L	150	200	290	380	350	200
Maximum water temperature	°C	95	95	95	95	95	95
Dimension (Hight / Diameter)	mm	1210/520	1340/610	1800/610	1835/670	1835/670	1550 x 600 x 600
Weight / filled with water	kg	109/254	90/280	120/389	191/572	169/519	134 / 327
Electric heater	kW	—	3,00	3,00	3,00	3,00	—
Power supply	V	—	230	230	230	230	—
Material inside tank		Enamelled	Enamelled	Enamelled	Enamelled	Enamelled	Enamelled
Exchange surface	m²	1,2	1,8	2,6	3,8	3,5 / 1,2	1,83
Energy loss at 65 °C [1]	kWh/24h	1,45	1,37	1,61	1,76	1,76	1,37
3 way valve accessory PAW-3WYVLV-HW or CZ-NV1		Optional	Optional	Optional	Optional	Optional	Built-in 3 way valve
20 m temperature sensor cable included		Yes	Yes	Yes	Yes	Yes	Yes
Energy losses	W	60	57	67	73	73	57
Energy Efficiency Class (from A+ to F)		**C**	**B**	**B**	**B**	**B**	**B**
Warranty of the inner vessel		5 Years	5 Years	5 Years	5 Years	5 Years	5 Years
Maintenance required		Every 2 years	Every 2 years	Every 2 years	Every 2 years	Every 2 years	Every 2 years

1) Insulated tested under EN12897. ** Enamelled Tanks and Square Tank are produced by AEmail.



Stainless steel tanks.

Model		**PAW-TD20C1E5**	**PAW-TD30C1E5**	**NEW PAW-TD30C1E5-HI**
Water volume	L	192	284	280
Maximum water temperature	°C	75	75	75
Dimension (Hight / Diameter)	mm	1270/595	1750/595	1750 / 595
Weight / filled with water	kg	50/—	61/—	65 / -
Electric heater	kW	1,5	1,5	1,5
Power supply	V	230	230	230
Material inside tank		Stainless steel	Stainless steel	Stainless steel
Exchange surface	m²	1,8	1,8	2,35
Energy loss at 65 °C [1]	kWh/24h	1,01	1,18	1,18
3 way valve accessory PAW-3WYVLV-HW or CZ-NV1		Optional	Optional	Optional
20 m temperature sensor cable included		Yes	Yes	Yes
Energy losses	W	42	49	49
Energy Efficiency Class (from A+ to F)		**A**	**A**	**A**
Warranty		2 Years	2 Years	2 Years
Maintenance required		No	No	No

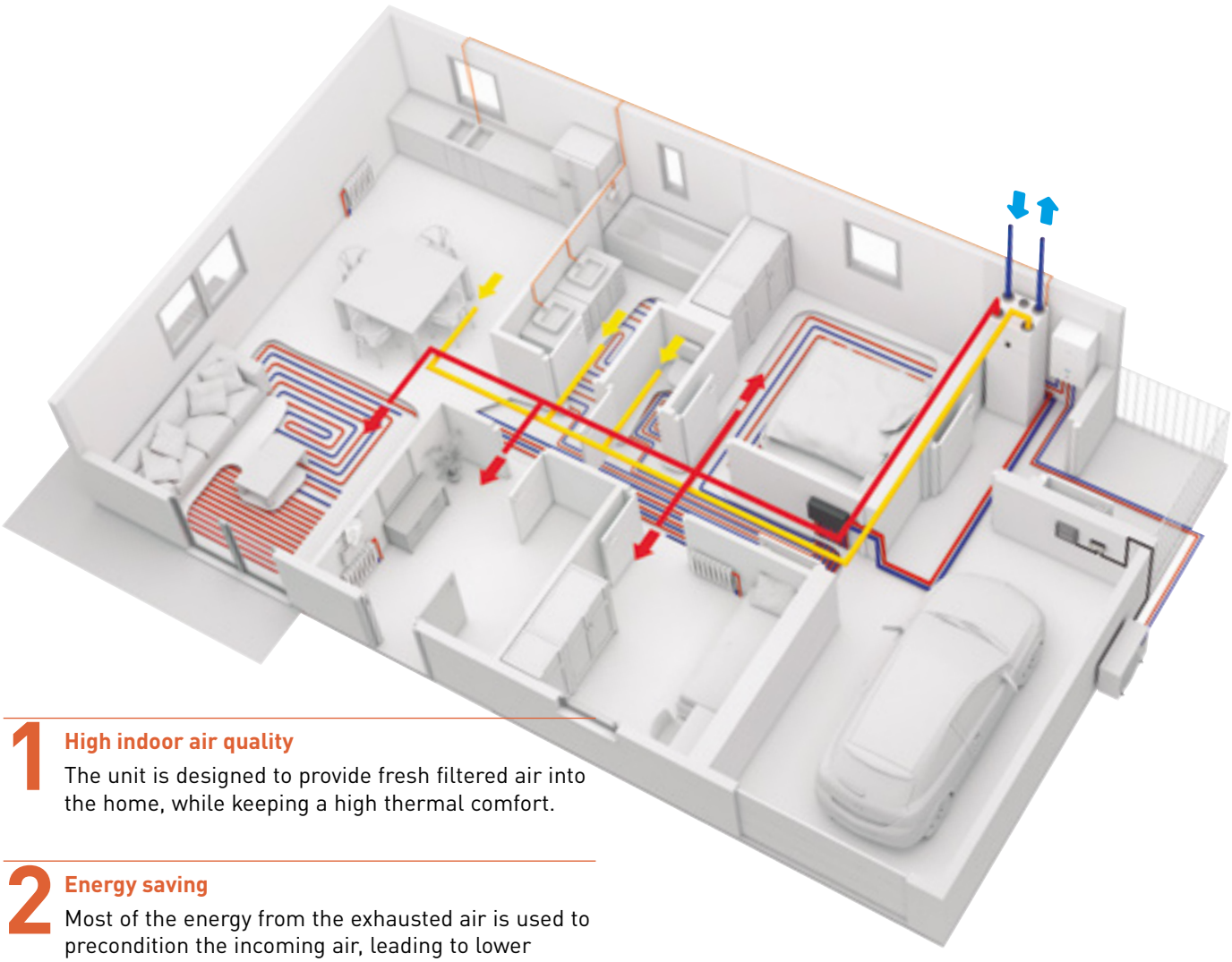
1) Insulated tested under EN12897. ** Stainless Steel Tanks are produced by OSO.

Accessories for sanitary tanks	
PAW-3WYVLV-HW	3 way valve for DHW Tanks

Accessories for sanitary tanks	
CZ-NV1	3 way valve kit for inside of hydrokit

Heat recovery ventilation unit

The heat recovery ventilation unit is design not only to provide a good indoor air quality, but it is also designed to recover heat that would otherwise be lost throughout ventilation. These heat recovery ventilation systems are used to assist in the retention of heat.



1 **High indoor air quality**

The unit is designed to provide fresh filtered air into the home, while keeping a high thermal comfort.

2 **Energy saving**

Most of the energy from the exhausted air is used to precondition the incoming air, leading to lower heating requirements in the building.

3 **Space saving**

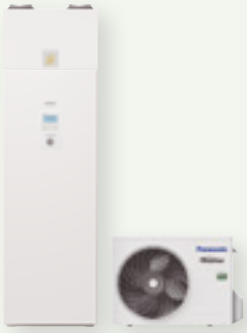
The compact ventilation unit can be installed over the DHW square tank or the Aquarea All in One Compact indoor unit for an space-saving solution.

4 **Better user interface**

The Residential ventilation unit and the Aquarea Heat Pump can be controlled with one single user-friendly controller.

AQUAREA

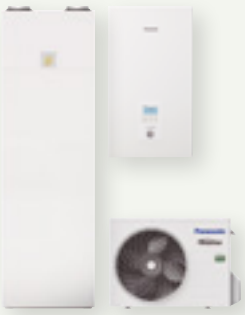
Combine the Residential ventilation unit with Panasonic Aquarea for an space saving and highly efficient solution for heating, cooling, ventilation and DHW.



Heat Recovery Ventilation + Aquarea All in One Compact



Heat Recovery Ventilation + DHW Square Tank + Aquarea Mono-bloc



Heat Recovery Ventilation + DHW Square Tank + Aquarea Bi-bloc

* The unit can be mounted on a PAW-TA20C1E5C, on a WH-ADC0309J3E5C or installed on the wall (PAW-VEN-WBRK is needed).

PAW-A2W-VENTA-R



PAW-A2W-VENTA-L



cool, temperate climate
CERTIFIED COMPONENT
Passive House Institute

Heat recovery Ventilation unit		PAW-A2W-VENTA-R	PAW-A2W-VENTA-L
Nominal airflow rate	m³/h	204 @ 50 Pa	
Maximum airflow rate	m³/h	292 @ 100 Pa	
SPF		1,24 @ 204 m³/h	
Heat exchanger rotor drive type		Variable speed	
Exchanger type		Rotating	
Heat recovery efficiency		84 %	
Power supply	V / Hz	230 / 50 / 1 phase	
Power consumption	W	176	
Energy Class, basic unit		**A**	
Energy Class, unit with local control on demand		**A**	
Noise level	dB(A)	40	
Dimension (W x H x D)	mm	598 x 450 x 500	
Weight	kg	46	
Mounting position		Vertical	
Supply side		Right	Left
Duct connections	mm	DN125	
Filter class, supply air		F7/ePM1 60 %	
Filter class, extract air		M5/ePM10 50 %	
Minimum outdoor temperature	°C	-20	

Accessories	
PAW-VEN-FLTKIT	Supply and extract filters kit
PAW-VEN-ACCPCB	Optional PCB for additional functions
PAW-VEN-DPL	HRV touch control panel. White frame (cable must be ordered separately)
PAW-VEN-CBLEXT12	Cable with plug for electrical connection between unit and control panel, type CE and CD (12 m)
PAW-VEN-DIVPLG	Twin plugs for installation of several control panels type CD or CE for one unit

Accessories	
PAW-VEN-DPLBOX	HRV touch control panel wall-mounted kit
PAW-VEN-S-C02RH-W	CO_2 RH wall-mounted sensor
PAW-VEN-S-C02-W	CO_2 wall-mounted sensor
PAW-VEN-S-C02-D	CO_2 duct sensor
PAW-VEN-WBRK	Wall bracket kit for stand-alone installation on the wall
PAW-VEN-HTR06	Electrical duct heater 0,6 kW (includes relay)
PAW-VEN-HTR12	Electrical duct heater 1,2 kW (includes relay)

*** Heat recovery efficiency according to EN 13141-7. ** Heat recovery Ventilation unit is produced by Systemair.**

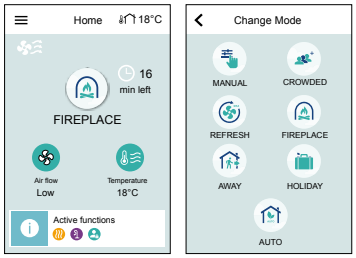
Main features of the residential ventilation unit

- Designed for areas up to approximately 140 m²
- High energy-efficiency rotary heat exchanger with EC - technology fans
- Moisture transfer function to minimize condensation in supply air during wintertime
- The built in humidity sensor in extract air can be used for demand control
- Control via touch display and Startup Wizard for easy commissioning
- Modbus communication via RS-485
- Option to control an Aquarea H or J Generation heat pump from PAW-A2W-VENTA control panel (PAW-AW-MBS-H and PAW-VEN-ACCPCB required)

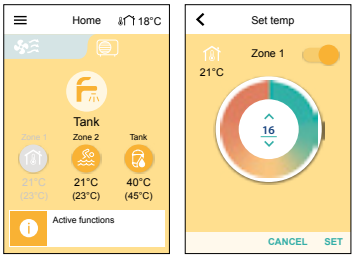
Control user-friendly interface

All settings and features accessible via a control panel, integrated into the front cover. The option for connecting one or more external control panels is available.

- Color touch screen with a user-friendly interface
- MANUAL and AUTO mode or choose preferred settings from the pre-configured user modes



- If Aquarea J and H Generations heat pumps are connected with PAW-A2W-VENTA, the heat pump control options appear on the home screen in a separate tab



DHW Stand Alone



DHW Stand Alone: highly efficient heat pump water heater.

The wide range of DHW Stand Alone heat pump is a great solution to adapt to any type of family house. The wall type is available in 100 and 150 L capacities, and the floor-standing in 200 and 270 L. For reaching even more efficient use the 270 L is available in additional coil, it is able to connect solar water production.

- A+ Highly efficient domestic hot water heat pump
- Provides reduced power consumption up to 72 % compared with traditional electric water heater
- Easy to install
- Being CFC-free, this water heater is environmentally friendly

1 Energy saving

- Digital control panel with energy consumption monitoring
- Photovoltaic function
- Compatible with ducted fresh air intake installations
- Boiler/Solar Coil (only PAW-DHW270C1F)

2 Comfort

- Different modes of operation based on user needs
- Mode AUTO: Intelligent Temperature Set Point, thanks to monitoring hot water usage
- Mode BOOST, Mode ECO and Mode ABSENCE

3 Durability

- Diamond-quality enamel lining the inner tank
- Pressure relief valve which provides safety if any malfunctions or pressure rise
- Dielectric union preventing corrosion
- Specific lip gasket preventing rust around the flange



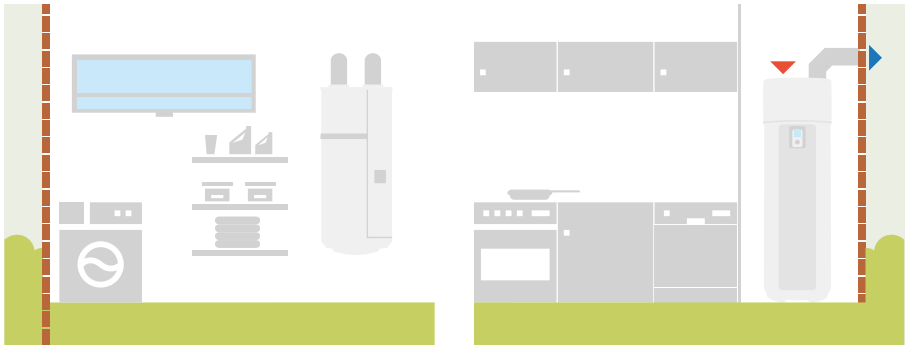
Model		Wall-mounted		Floor-standing		
Reference		**PAW-DHW100W-1**	**PAW-DHW150W-1**	**PAW-DHW200F**	**PAW-DHW270F**	**PAW-DHW270C1F**
Nominal capacity	L	100	150	200	270	263
Dimension (H x W x D)	mm	1209 x 522 x 538	1527 x 522 x 538	1617 x 620 x 665	1957 x 620 x 665	1957 x 620 x 665
Empty weight	kg	57	66	80	92	111
Hot and cold connection		¾" M	¾" M	¾" M	¾" M	¾" M
Anticorrosion system	Anode	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium
Rated water pressure	Mpa (bar)	0,8 (8)	0,8 (8)	0,8 (8)	0,8 (8)	0,8 (8)
Electrical connection	V / Hz	230/50	230/50	230/50	230/50	230/50
Total maximum power	W	1550	1950	2300	2300	2300
Maximal power heat pump	W	350	350	700	700	700
Power electric heating element	W	1200	1600	1600	1600	1600
Heat pump water temperature range	°C	50 ~ 62	50 ~ 62	50 ~ 62	50 ~ 62	50 ~ 62
Heat pump air temperature range	°C	-5 ~ +43	-5 ~ +43	-5 ~ +43	-5 ~ +43	-5 ~ +43
Duct diameter	mm	125	125	160	160	160
Air flow (without duct)	m³/h	160	160	310/390	310/390	310/390
Load losses acceptable on ventilation circuit, without affecting performance	Pa	70	70	25	25	25
Sound power [1]	dB(A)	45	45	53	53	53
Refrigerant R134a (wall-mounted) / R513A (floor-standing)	kg	0,52	0,58	0,80	0,86	0,86
Refrigerant volume in tons of CO_2 equivalent	TCO_2 Eq.	0,74	0,83	0,50	0,54	0,54
Refrigerant weight per liter	kg/L	0,0052	0,0039	0,0040	0,0032	0,0032
Hot water quantity at 40 °C: V40td	L	151,0	182,0	265,5	361,2	357,9
Acoustic power ErP [2]	dB(A)	45	45	53	53	53
Energy Efficiency Class (from A+ to F)		**A+**	**A+**	**A+**	**A+**	**A+**
Connectable to PV		Yes	Yes	Yes	Yes	Yes
Additional coil exchanger connection		—	—	—	—	1''M
Additional coil surface	m²	—	—	—	—	1,2
Warranty of the inner vessel		5 Years	5 Years	5 Years	5 Years	5 Years
Performance at 7 °C air temperature		**(EN 16147) ducted at 25 Pa**		**(CDC LCIE 103-15/C) ducted at 30 Pa [3]**		
Coefficient of performance (COP) according load profile		2,66 - M	3,05 - L	2,81 - L	3,16 - XL	3,05 - XL
Standby Input power (P_{es})	W	18	24	32	29	33
Heating up time (t_h)	h. Min	6h47	10h25	07h11	10h39	11h04
Reference hot water temperature (T_{ref})	°C	52,7	53,2	52,7	53,1	52,9
Flow rate (air)	m³/h	140	110	320	320	320
Performance at 15 °C air temperature (EN 16147)						
Coefficient of performance (COP) according load profile		2,88 - M	3,28 - L	3,05 - L	3,61 - XL	3,44 - XL
Standby Input power (P_{es})	W	19	25	30	30	33
Heating up time (t_h)	h. Min	6h07	9h29	6h24	8h34	8h40
Reference hot water temperature (T_{ref})	°C	52,6	53,4	52,8	53,0	53,1
Flow rate (air)	m³/h	140	110	320	320	320

Accessories	
PAW-DHW-STAND	Rack for suspended device for 100 and 150 liters models

1) According to ISO3744. 2) Compliant with EN 16147 conditions. 3) Performance measured for a water heater from 10 °C to T_{ref} according to the protocol of the NF Electricity Performance Mark specifications No.LCIE 103-15C, selfheating thermodynamic water heaters (based on standard EN 16147). * DHW Stand Alone is produced by S.A.T.E.

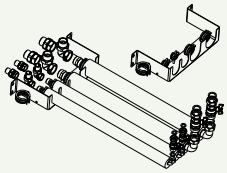
Ideal for small surfaces

Suitable for all installations (adapted to small surfaces, low ceiling, corner).



Accessories and control

All in One accessories



Flexible pipings and wall mounting plate for All in One H Generation.

————
PAW-ADC-PREKIT-H

Flexible pipings and wall mounting plate for All in One J Generation (not compatible with WH-ADC0309J3E5C).

————
PAW-ADC-PREKIT-1



Decorative magnetic side cover.

————
PAW-ADC-CV150

Special outdoor supports



Tray for condenser water compatible with outdoor elevation platform.

————
PAW-WTRAY



Outdoor elevation platform.
Dimension (H x W x D): 400 x 900 x 400 mm

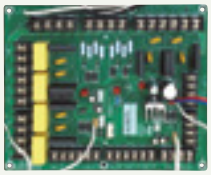
————
PAW-GRDSTD40



Outdoor base ground support for noise and vibration absorption.
Dimension (H x W x D): 600 x 95 x 130 mm
Weight: 500 kg

————
PAW-GRDBSE20

PCB's for additional functions



PCB for advanced functions in J and H Generation.

————
CZ-NS4P

Deice accessories



Base pan heater (for all old Bi-bloc and Mono-bloc, not for the 3 and 5 kW).

————
CZ-NE1P

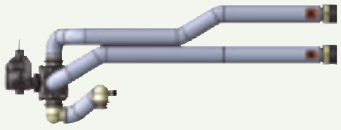
Base pan heater (for Bi-bloc 3 and 5 kW).

————
CZ-NE2P

Base pan heater for J and H Generation.

————
CZ-NE3P

Hydraulic accessories



3 way valve kit for inside of hydrokit.

————
CZ-NV1



3 way valve for DHW Tanks.

————
PAW-3WYVLV-HW



1 anti-freeze valve.
It is required to order 2 valves per system.

————
PAW-A2W-AFVLV

Optional magnet for the water filter in H Generation models.

————
PAW-A2W-MGTFILTER

Connectivity Solutions



Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN.

————

CZ-TAW1

10 m extension cable for CZ-TAW1.

————

CZ-TAW1-CBL



KNX Interface for J and H Generation.

————

PAW-AW-KNX-H



Modbus Interface for J and H Generation.

————

PAW-AW-MBS-H

Cascade Controller



Cascade Manager for Aquarea heat pumps

————

PAW-A2W-CMH

Room thermostats



Wired LCD room thermostat with weekly timer.

————

PAW-A2W-RTWIRED



Wireless LCD room thermostat with weekly timer.

————

PAW-A2W-RTWIRELESS

Sensors for Aquarea J and H Generation



Outdoor ambient sensor.

————

PAW-A2W-TSOD



Zone room sensor.

————

PAW-A2W-TSRT



Zone water sensor.

————

PAW-A2W-TSHC



Solar sensor.

————

PAW-A2W-TSSO



Buffer tank sensor.

————

PAW-A2W-TSBU

Accessories and control

Aquarea Manager accessories (not compatible with J and H Generation units)



Aquarea Manager with LCD.

PAW-HPM1



Aquarea Manager without LCD.

PAW-HPM2



Touch screen.

PAW-HPMED



Buffer tank sensor.

PAW-HPMB1



Buffer tank sensor with well.

PAW-HPMDHW



Water flow pipe sensor for heating circuit.

PAW-HPMAH1



Outdoor temperature sensor.

PAW-HPMUH

Interface to connect Aquarea Manager to Heat pump Aquarea Bi-bloc (HPM can control all parameters from HP).

PAW-HPMINT-U

Interface to connect Aquarea Manager to Heat pump Aquarea Mono-bloc (HPM can control all parameters from HP).

PAW-HPMINT-M

Interface to connect Aquarea Manager to Heat pump Aquarea Mono-bloc and Bi-bloc F type (HPM can control all parameters from HP).

PAW-HPMINT-F

Buffer tank sensor solar (with higher temperature range).

PAW-HPMSOL1

Room sensor + set point adaptation.

PAW-HPMR4

Dew point sensor.

PAW-DEWPOINTSENSOR

Smart fan coil accessories

Kits of 2 legs to protect the water pipings.

PAW-AAIR-LEGS-1

Motor connection cable for units with hydraulic connections on the right.

PAW-AAIR-RHCABLE

Fan coil accessories



Wired remote controller for fan coil.

PAW-FC-903TC



Advanced wired remote controller for fan coil.

PAW-FC-RC1



Wired remote controller for EC fan coil.

PAW-FC-907TC



Infrared remote supplied with IR versions.

IR Controller

2 way valve + drain pan for ducted models 010-060.

PAW-FC-2WY-11/55-1

2 way valve + drain pan for ducted models 070-080.

PAW-FC-2WY-65/90-1

2 way valve + drain pan for ducted models F040.

PAW-FC-2WY-F040

2 way valve for wall-mounted.

PAW-FC2-2WY-K007

3 way valve + drain pan for ducted models 010-060.

PAW-FC-3WY-11/55-1

3 way valve + drain pan for ducted models 070-080.

PAW-FC-3WY-65/90-1

3 way valve + drain pan for ducted models F040.

PAW-FC-3WY-F040

3 way valve for wall-mounted.

PAW-FC2-3WY-K007

Sanitary Tank accessories



Tank sensor with 6 m cable length.

PAW-TS1

Tank sensor with 20 m cable length.

PAW-TS2

Tank sensor with 6 m cable length and only 6 mm diameter.

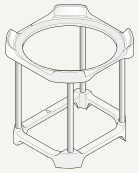
PAW-TS4



Temperature sensor kit for third party tank (with copper pocket and 6 m length sensor cable).

CZ-TK1

DHW Stand Alone accessories



Rack for suspended device for 100 and 150 liters models.

PAW-DHW-STAND

Heat recovery Ventilation accessories



Supply and extract filters kit.

PAW-VEN-FLTKIT



Optional PCB for additional functions.

PAW-VEN-ACCPCB



HRV touch control panel. White frame (cable must be ordered separately).

PAW-VEN-DPL



Cable with plug for electrical connection between unit and control panel, type CE and CD (12 m).

PAW-VEN-CBLEXT12



Twin plugs for installation of several control panels type CD or CE for one unit.

PAW-VEN-DIVPLG



HRV touch control panel wall-mounted kit.

PAW-VEN-DPLBOX



CO_2 RH wall-mounted sensor.

PAW-VEN-S-CO2RH-W



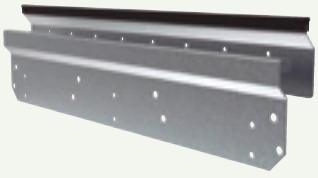
CO_2 wall-mounted sensor.

PAW-VEN-S-CO2-W



CO_2 duct sensor.

PAW-VEN-S-CO2-D



Wall bracket kit for stand-alone installation on the wall.

PAW-VEN-WBRK



Electrical duct heater 0,6 kW (includes relay).

PAW-VEN-HTR06

Electrical duct heater 1,2 kW (includes relay).

PAW-VEN-HTR12

Heating & Cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea High Performance Bi-bloc J Generation Single Phase. Heating and Cooling • R32 refrigerant

WH-UD03JE5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	2,50	1,11	2,25	2,52	1,31	1,92	2,24	1,59	1,41	2,12	1,80	1,18	—	—	—
-15	3,00	1,14	2,63	3,20	1,37	2,34	3,00	1,62	1,85	2,75	1,92	1,43	—	—	—
-7	2,99	0,91	3,29	3,30	1,18	2,80	3,25	1,47	2,21	3,20	1,79	1,79	3,00	1,88	1,60
2	2,92	0,69	4,23	3,20	0,88	3,64	3,20	1,13	2,83	3,20	1,46	2,19	3,15	1,67	1,89
7	3,09	0,49	6,31	3,20	0,60	5,33	3,20	0,84	3,81	3,20	1,14	2,81	2,95	1,22	2,42
25	3,27	0,23	14,22	3,27	0,38	8,61	3,61	0,63	5,73	4,06	1,11	3,66	4,03	1,14	3,54
WH-UD05JE5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	3,60	1,57	2,29	3,51	1,81	1,94	3,16	1,99	1,59	2,46	2,11	1,17	—	—	—
-15	4,46	1,72	2,59	4,20	1,93	2,18	3,75	2,18	1,72	3,00	2,12	1,42	—	—	—
-7	4,18	1,33	3,14	4,20	1,62	2,59	3,80	1,82	2,09	3,55	2,08	1,71	3,25	2,15	1,51
2	4,07	1,01	4,03	4,20	1,32	3,18	4,20	1,64	2,56	4,10	2,06	1,99	4,10	2,21	1,86
7	5,20	0,83	6,27	5,00	1,00	5,00	5,00	1,41	3,55	5,00	1,84	2,72	4,25	2,10	2,02
25	5,00	0,52	9,62	5,00	0,72	6,94	5,30	0,98	5,41	5,60	1,27	4,41	4,80	1,27	3,78
WH-UD07JE5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	4,33	1,64	2,64	3,98	1,88	2,12	3,83	2,26	1,69	3,30	2,77	1,19	—	—	—
-15	5,16	1,69	3,05	4,75	2,00	2,38	4,65	2,40	1,94	4,50	2,96	1,52	—	—	—
-7	5,64	1,56	3,62	5,60	1,95	2,87	5,50	2,30	2,39	5,25	2,70	1,94	4,98	2,90	1,72
2	6,80	1,57	4,33	6,85	2,01	3,41	6,75	2,40	2,81	6,20	2,80	2,21	6,18	2,91	2,12
7	7,55	1,15	6,57	7,00	1,47	4,76	7,00	1,96	3,57	7,00	2,48	2,82	6,86	2,75	2,49
25	7,00	0,62	11,29	6,88	0,90	7,64	7,00	1,33	5,26	6,92	1,75	3,95	6,83	1,90	3,59
WH-UD09JE5-1															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	4,95	1,93	2,56	6,20	3,00	2,07	5,28	3,09	1,71	4,23	3,33	1,27	—	—	—
-15	7,58	2,70	2,81	7,40	3,20	2,31	6,29	3,26	1,93	5,20	3,42	1,52	—	—	—
-7	6,39	1,81	3,53	6,12	2,20	2,78	5,88	2,61	2,25	5,90	3,06	1,93	5,65	3,24	1,74
2	6,96	1,61	4,32	7,00	2,06	3,40	6,85	2,50	2,74	6,30	2,92	2,16	7,26	3,33	2,18
7	9,44	1,55	6,09	9,00	2,01	4,48	9,00	2,61	3,45	8,95	3,22	2,78	8,62	3,47	2,48
25	8,27	0,95	8,71	8,12	1,29	6,29	8,71	1,80	4,84	7,83	1,97	3,97	6,08	1,72	3,53

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Aquarea High Performance Bi-bloc J Generation Single Phase. Heating and Cooling • R32 refrigerant

WH-UD03JE5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	3,56	0,57	6,25	4,32	0,55	7,85	3,47	0,41	8,46
25	3,29	0,73	4,51	4,06	0,72	5,64	3,27	0,52	6,29
35	3,20	0,91	3,52	3,56	0,93	3,83	3,20	0,68	4,71
43	2,68	1,06	2,53	3,34	1,09	3,06	2,79	0,82	3,40
WH-UD05JE5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	3,59	0,56	6,41	4,23	0,54	7,83	4,79	0,52	9,21
25	4,61	1,18	3,91	5,54	1,21	4,58	5,23	0,90	5,81
35	4,50	1,50	3,00	5,08	1,51	3,36	4,80	1,12	4,29
43	3,77	1,71	2,20	4,94	1,80	2,74	4,30	1,35	3,19
WH-UD07JE5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	5,20	0,81	6,42	6,62	0,73	9,07	7,04	0,72	9,78
25	7,40	1,73	4,28	9,30	1,78	5,22	7,65	1,10	6,95
35	6,70	2,21	3,03	8,10	2,23	3,63	6,70	1,42	4,72
43	4,50	1,99	2,26	5,44	2,00	2,72	5,10	1,71	2,98
WH-UD09JE5-1									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	6,85	1,18	5,81	8,80	1,15	7,65	9,11	1,15	7,92
25	9,00	2,35	3,83	10,40	2,48	4,19	9,10	1,58	5,76
35	8,20	3,02	2,72	9,90	3,02	3,28	9,00	2,15	4,19
43	3,80	1,99	1,91	4,70	1,97	2,39	5,35	1,99	2,69

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Heating & Cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea High Performance Bi-bloc H Generation Single Phase. Heating and Cooling • R410A refrigerant

WH-UD12HE5																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	9,30	3,46	2,69	8,90	3,62	2,46	8,50	3,79	2,24	8,10	3,95	2,05	7,50	4,05	1,85	7,00	4,16	1,68
-7	10,40	3,37	3,09	10,00	3,66	2,73	9,60	3,95	2,43	9,20	4,24	2,17	8,70	4,26	2,04	8,20	4,27	1,92
2	11,80	3,10	3,81	11,40	3,31	3,44	11,00	3,53	3,12	10,60	3,74	2,83	9,80	3,94	2,49	9,10	4,14	2,20
7	12,00	2,10	5,71	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	12,00	1,38	8,70	12,00	1,66	7,23	11,80	1,94	6,08	11,70	2,23	5,25	11,50	2,49	4,62	11,40	2,74	4,16
WH-UD16HE5																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	10,60	4,09	2,59	10,30	4,38	2,35	10,00	4,67	2,14	9,70	4,96	1,96	8,80	4,94	1,78	7,90	4,91	1,61
-7	11,90	4,03	2,95	11,40	4,43	2,57	10,80	4,83	2,24	10,30	5,22	1,97	9,60	5,09	1,89	9,00	4,95	1,82
2	13,50	3,74	3,61	13,00	3,96	3,28	12,40	4,18	2,97	11,90	4,40	2,70	10,80	4,46	2,42	9,80	4,51	2,17
7	16,00	3,21	4,98	16,00	3,74	4,28	16,00	4,27	3,75	16,00	4,80	3,33	15,20	5,11	2,97	14,50	5,41	2,68
25	16,00	2,31	6,93	16,00	2,69	5,95	16,00	3,07	5,21	16,00	3,45	4,64	16,00	3,67	4,36	15,90	3,89	4,09

Aquarea High Performance Bi-bloc H Generation Single Phase. Heating and Cooling • R410A refrigerant

WH-UD12HE5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	7,86	1,18	6,66	13,15	1,40	9,39	10,00	1,73	5,78
25	12,08	2,90	4,17	15,70	2,05	7,66	10,00	1,97	5,08
35	10,00	2,56	3,91	12,00	2,67	4,49	10,00	2,40	4,17
43	7,80	3,80	2,05	11,10	3,19	3,48	8,00	2,85	2,81
WH-UD16HE5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	9,20	1,62	5,68	16,40	2,58	6,36	12,20	2,45	4,98
25	14,40	3,92	3,67	19,20	3,83	5,01	12,20	2,79	4,37
35	12,20	4,76	2,56	15,00	4,98	3,01	12,20	2,96	4,12
43	7,75	3,40	2,28	13,80	5,95	2,32	9,70	4,00	2,43

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Aquarea High Performance Bi-bloc H Generation Three Phase. Heating and Cooling • R410A refrigerant

WH-UD09HE8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	8,65	3,06	2,83	8,30	3,21	2,59	7,95	3,41	2,33	7,60	3,61	2,11	7,15	3,71	1,93	6,70	3,81	1,76
-7	9,35	2,91	3,21	9,00	3,16	2,85	8,85	3,54	2,50	8,70	3,92	2,22	8,30	3,89	2,13	7,90	3,86	2,05
2	9,31	2,35	3,96	9,00	2,51	3,59	9,00	2,78	3,24	9,00	3,05	2,95	8,90	3,49	2,55	8,80	3,94	2,23
7	9,00	1,54	5,84	9,00	1,86	4,84	9,00	2,16	4,17	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94
25	9,00	1,05	8,57	9,00	1,24	7,26	8,73	1,44	6,06	8,46	1,64	5,16	8,28	1,82	4,55	8,10	2,00	4,05
WH-UD12HE8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,30	3,46	2,69	8,90	3,62	2,46	8,50	3,79	2,24	8,10	3,95	2,05	7,50	4,05	1,85	7,00	4,16	1,68
-7	10,40	3,37	3,09	10,00	3,66	2,73	9,60	3,95	2,43	9,20	4,24	2,17	8,70	4,26	2,04	8,20	4,27	1,92
2	11,80	3,10	3,81	11,40	3,31	3,44	11,00	3,53	3,12	10,60	3,74	2,83	9,80	3,94	2,49	9,10	4,14	2,20
7	12,00	2,10	5,71	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	12,00	1,38	8,70	12,00	1,66	7,23	11,80	1,94	6,08	11,70	2,23	5,25	11,50	2,49	4,62	11,40	2,74	4,16
WH-UD16HE8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	10,60	4,09	2,59	10,30	4,38	2,35	10,00	4,67	2,14	9,70	4,96	1,96	8,80	4,94	1,78	7,90	4,91	1,61
-7	11,90	4,03	2,95	11,40	4,43	2,57	10,80	4,83	2,24	10,30	5,22	1,97	9,60	5,09	1,89	9,00	4,95	1,82
2	13,50	3,74	3,61	13,00	3,96	3,28	12,40	4,18	2,97	11,90	4,40	2,70	10,80	4,46	2,42	9,80	4,51	2,17
7	16,00	3,21	4,98	16,00	3,74	4,28	16,00	4,27	3,75	16,00	4,80	3,33	15,20	5,11	2,97	14,50	5,41	2,68
25	16,00	2,31	6,93	16,00	2,69	5,95	16,00	3,07	5,21	16,00	3,45	4,64	16,00	3,67	4,36	15,90	3,89	4,09

Aquarea High Performance Bi-bloc H Generation Three Phase. Heating and Cooling • R410A refrigerant

WH-UD09HE8									
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	7,50	1,15	6,52	9,10	1,20	7,58	7,00	1,13	6,19
25	8,35	1,77	4,72	10,90	1,78	6,12	7,00	1,24	5,65
35	7,00	2,23	3,14	8,30	2,32	3,58	7,00	1,52	4,61
43	5,52	2,54	2,17	7,69	2,77	2,78	5,60	1,80	3,11
WH-UD12HE8									
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	7,86	1,18	6,66	13,15	1,40	9,39	10,00	1,73	5,78
25	12,08	2,90	4,17	15,70	2,05	7,66	10,00	1,97	5,08
35	10,00	2,56	3,91	12,00	2,67	4,49	10,00	2,40	4,17
43	7,80	3,80	2,05	11,10	3,19	3,48	8,00	2,85	2,81
WH-UD16HE8									
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	9,20	1,62	5,68	16,40	2,58	6,36	12,20	2,45	4,98
25	14,40	3,92	3,67	19,20	3,83	5,01	12,20	2,79	4,37
35	12,20	4,76	2,56	15,00	4,98	3,01	12,20	2,96	4,12
43	7,75	3,40	2,28	13,80	5,95	2,32	9,70	4,00	2,43

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Heating & Cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea High Performance Mono-bloc J Generation Single Phase. Heating and Cooling - MDC • R32 refrigerant

WH-MDC05J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	4,37	1,73	2,53	4,16	2,03	2,05	3,84	2,37	1,62	3,43	2,64	1,30	—	—	—
-15	5,13	1,78	2,88	5,00	2,17	2,30	4,75	2,51	1,89	3,70	2,45	1,51	—	—	—
-7	5,17	1,49	3,47	5,00	1,80	2,78	4,80	2,16	2,22	5,00	2,70	1,85	4,68	2,71	1,73
2	5,00	1,11	4,50	5,00	1,40	3,57	5,00	1,81	2,76	5,00	2,20	2,27	4,80	2,40	2,00
7	5,09	0,78	6,53	5,00	0,99	5,05	5,00	1,31	3,82	5,00	1,66	3,01	4,58	1,90	2,41
25	4,96	0,77	6,44	5,04	0,90	5,60	5,31	1,16	4,58	5,61	1,34	4,19	5,15	1,33	3,87
WH-MDC07J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	4,86	2,03	2,39	4,66	2,35	1,98	4,44	2,75	1,61	4,23	3,13	1,35	—	—	—
-15	5,80	2,11	2,75	5,60	2,40	2,33	5,30	2,84	1,87	5,00	3,32	1,51	—	—	—
-7	6,76	2,07	3,27	6,80	2,42	2,81	6,30	2,82	2,23	6,30	3,39	1,86	4,74	2,76	1,72
2	6,83	1,66	4,11	7,00	2,06	3,40	6,85	2,50	2,74	6,30	2,92	2,16	4,80	2,40	2,00
7	7,32	1,19	6,15	7,00	1,47	4,76	7,00	1,96	3,57	7,00	2,48	2,82	6,18	2,44	2,53
25	6,80	0,64	10,63	6,67	0,93	7,17	6,79	1,38	4,92	6,70	1,80	3,72	6,22	1,78	3,49
WH-MDC09J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	5,33	2,36	2,26	6,43	3,60	1,79	5,78	3,83	1,51	4,83	3,64	1,33	—	—	—
-15	7,76	3,20	2,43	7,60	3,41	2,23	7,00	3,71	1,89	5,60	3,80	1,47	—	—	—
-7	7,39	2,45	3,02	7,50	2,85	2,63	7,30	3,37	2,17	7,00	3,89	1,80	6,44	3,67	1,75
2	7,38	1,89	3,90	7,45	2,38	3,13	7,00	2,85	2,46	7,00	3,30	2,12	5,46	2,72	2,01
7	9,15	1,59	5,75	9,00	2,01	4,48	9,00	2,61	3,45	8,95	3,22	2,78	7,25	2,87	2,53
25	8,02	0,98	8,18	7,88	1,32	5,97	8,46	1,86	4,55	7,60	2,03	3,74	6,30	1,87	3,37

Aquarea High Performance Mono-bloc J Generation Single Phase. Heating and Cooling - MDC • R32 refrigerant

WH-MDC05J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	5,18	0,82	6,32	6,17	0,84	7,35	5,78	0,60	9,63
25	5,38	1,22	4,41	6,64	1,25	5,31	5,55	0,78	7,12
35	5,00	1,54	3,25	5,86	1,61	3,64	5,00	0,99	5,05
43	4,19	1,85	2,26	5,36	1,92	2,79	4,37	1,30	3,36
WH-MDC07J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	5,38	0,83	6,48	6,69	0,85	7,87	7,65	0,76	10,07
25	6,96	1,82	3,82	9,06	1,98	4,58	7,58	1,23	6,16
35	7,00	2,29	3,06	8,37	2,47	3,39	7,00	1,48	4,73
43	5,60	2,55	2,20	6,87	2,58	2,66	6,10	1,88	3,24
WH-MDC09J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	6,89	1,21	5,69	8,65	1,23	7,03	9,82	1,19	8,25
25	9,50	2,84	3,35	11,55	3,06	3,77	9,68	1,82	5,32
35	9,00	3,32	2,71	10,10	3,51	2,88	9,00	2,12	4,25
43	5,42	2,56	2,12	6,56	2,56	2,56	7,40	2,56	2,89

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
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Aquarea High Performance Mono-bloc H Generation Single Phase. Heating and Cooling - MDC • R410A refrigerant

WH-MDC12H6E5																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	9,30	3,46	2,69	8,90	3,62	2,46	8,50	3,79	2,24	8,10	3,95	2,05	—	—	—	7,00	4,10	1,71
-7	10,40	3,37	3,09	10,00	3,66	2,73	9,60	3,95	2,43	9,20	4,24	2,17	—	—	—	8,20	4,21	1,95
2	11,80	3,10	3,81	11,40	3,31	3,44	11,00	3,53	3,12	10,60	3,74	2,83	—	—	—	9,10	4,08	2,23
7	12,00	2,10	5,71	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	—	—	—	12,00	4,10	2,93
12	12,00	1,38	8,70	12,00	1,66	7,23	11,80	1,94	6,08	11,70	2,23	5,25	—	—	—	11,40	2,74	4,16
WH-MDC16H6E5																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	10,60	4,09	2,59	10,30	4,38	2,35	10,00	4,67	2,14	9,70	4,96	1,96	7,90	4,84	1,63	—	—	—
-7	11,90	4,03	2,95	11,40	4,43	2,57	10,80	4,83	2,24	10,30	5,22	1,97	9,00	4,88	1,84	—	—	—
2	13,50	13,74	0,98	13,00	3,96	3,28	12,40	4,18	2,97	11,90	4,40	2,70	9,80	4,44	2,21	—	—	—
7	16,00	3,21	4,98	16,00	3,74	4,28	16,00	4,27	3,75	16,00	4,80	3,33	14,50	5,33	2,72	—	—	—
12	16,00	2,31	6,93	16,00	2,69	5,95	16,00	3,07	5,21	16,00	3,45	4,64	15,90	3,89	4,09	—	—	—

Aquarea High Performance Mono-bloc H Generation Single Phase. Heating and Cooling - MDC • R410A refrigerant

WH-MDC12H6E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	7,86	1,18	6,66	13,15	2,05	6,41	10,00	1,73	5,78
25	12,08	2,90	4,17	15,70	3,05	5,15	10,00	1,97	5,08
35	10,00	3,56	2,81	12,00	3,67	3,27	10,00	2,15	4,65
43	7,80	3,80	2,05	11,10	3,19	3,48	8,00	2,85	2,81
WH-MDC16H6E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	9,20	1,62	5,68	16,40	2,58	6,36	12,20	2,45	4,98
25	14,40	3,92	3,67	19,20	3,83	5,01	12,20	2,79	4,37
35	12,20	4,76	2,56	15,00	4,98	3,01	12,20	2,96	4,12
43	7,75	3,40	2,28	13,80	5,95	2,32	9,70	4,00	2,43

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Heating & Cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea T-CAP Bi-bloc H Generation Single phase / Three phase. Heating and Cooling • R410A refrigerant

WH-UX09HE5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,24	2,78	9,00	3,51	2,56	9,00	3,91	2,30	9,00	4,30	2,09	9,00	4,73	1,90	9,00	5,16	1,74
-7	9,00	2,71	3,32	9,00	3,16	2,85	9,00	3,62	2,49	9,00	4,07	2,21	9,00	4,27	2,11	9,00	4,46	2,02
2	9,00	2,36	3,81	9,00	2,51	3,59	9,00	2,78	3,24	9,00	3,05	2,95	9,00	3,56	2,53	9,00	4,07	2,21
7	9,00	1,64	5,49	9,00	1,86	4,84	9,00	2,16	4,17	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94
25	13,60	1,50	9,07	13,60	1,71	7,95	13,20	1,93	6,84	12,80	2,14	5,98	12,00	2,41	4,98	11,20	2,67	4,19
WH-UX12HE5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,75	2,53	12,00	4,96	2,42	12,00	5,41	2,22	11,00	5,38	2,04	10,80	5,82	1,86	10,50	6,26	1,68
-7	12,00	3,85	3,12	12,00	4,41	2,72	12,00	4,98	2,41	12,00	5,54	2,17	12,00	5,90	2,03	12,00	6,26	1,92
2	12,00	3,19	3,76	12,00	3,49	3,44	12,00	3,87	3,10	12,00	4,25	2,82	12,00	4,86	2,47	12,00	5,47	2,19
7	12,00	2,18	5,50	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	13,60	1,55	8,77	13,60	1,76	7,73	13,40	2,10	6,38	13,20	2,43	5,43	12,60	2,66	4,74	12,00	2,89	4,15
WH-UX09HE8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,24	2,78	9,00	3,51	2,56	9,00	3,91	2,30	9,00	4,30	2,09	9,00	4,73	1,90	9,00	5,16	1,74
-7	9,00	2,71	3,32	9,00	3,16	2,85	9,00	3,62	2,49	9,00	4,07	2,21	9,00	4,27	2,11	9,00	4,46	2,02
2	9,00	2,36	3,81	9,00	2,51	3,59	9,00	2,78	3,24	9,00	3,05	2,95	9,00	3,56	2,53	9,00	4,07	2,21
7	9,00	1,64	5,49	9,00	1,86	4,84	9,00	2,16	4,17	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94
25	13,60	1,50	9,07	13,60	1,71	7,95	13,20	1,93	6,84	12,80	2,14	5,98	12,00	2,41	4,98	11,20	2,67	4,19
WH-UX12HE8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,75	2,53	12,00	4,96	2,42	12,00	5,41	2,22	12,00	5,86	2,05	11,80	6,24	1,89	11,60	6,62	1,75
-7	12,00	3,85	3,12	12,00	4,41	2,72	12,00	4,98	2,41	12,00	5,54	2,17	12,00	5,90	2,03	12,00	6,26	1,92
2	12,00	3,19	3,76	12,00	3,49	3,44	12,00	3,87	3,10	12,00	4,25	2,82	12,00	4,86	2,47	12,00	5,47	2,19
7	12,00	2,18	5,50	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	13,60	1,55	8,77	13,60	1,76	7,73	13,40	2,10	6,38	13,20	2,43	5,43	12,60	2,66	4,74	12,00	2,89	4,15
WH-UX16HE8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	16,00	6,30	2,54	16,00	6,89	2,32	16,00	7,45	2,15	16,00	8,10	1,98	16,00	8,48	1,89	15,20	8,96	1,70
-7	16,00	5,85	2,74	16,00	6,42	2,49	16,00	7,00	2,29	16,00	7,57	2,11	16,00	8,10	1,98	16,00	8,62	1,86
2	16,00	4,67	3,43	16,00	5,21	3,07	16,00	5,74	2,79	16,00	6,31	2,54	16,00	6,90	2,32	16,00	7,50	2,13
7	16,00	3,35	4,78	16,00	3,74	4,28	16,00	4,30	3,72	16,00	4,80	3,33	16,00	5,43	2,95	16,00	5,91	2,71
16	16,00	2,59	6,18	16,00	3,18	5,03	16,00	3,71	4,31	16,00	4,27	3,75	16,00	4,86	3,29	16,00	5,22	3,07
25	16,00	2,02	7,92	16,00	2,58	6,20	16,00	2,91	5,50	16,00	3,36	4,76	16,00	3,74	4,28	16,00	4,00	4,00

Aquarea T-CAP Bi-bloc H Generation Single phase / Three phase. Heating and Cooling • R410A refrigerant

Models	WH-UX09HE5									WH-UX12HE5								
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18	7	7	7	14	14	14	18	18	18
18	7,00	1,36	5,15	8,55	1,41	6,06	7,00	1,00	7,00	10,00	1,75	5,71	13,20	1,96	6,73	10,00	1,40	7,14
25	7,65	1,91	4,01	11,10	1,98	5,61	7,00	1,10	6,36	11,20	2,67	4,19	16,50	3,01	5,48	10,00	1,60	6,25
35	7,00	2,21	3,17	9,23	2,37	3,89	7,00	1,35	5,19	10,00	3,56	2,81	12,55	3,63	3,46	10,00	1,95	5,13
43	6,25	2,66	2,35	8,55	2,71	3,15	5,60	1,60	3,50	8,00	3,35	2,39	10,00	3,46	2,89	8,00	2,30	3,48
Models	**WH-UX09HE8**						**WH-UX12HE8**						**WH-UX16HE8**					
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	18	18	18	7	7	7	18	18	18	7	7	7	18	18	18
18	7,00	1,36	5,15	—	—	—	7,50	1,41	5,32	—	—	—	8,50	1,70	5,00	10,00	1,70	5,88
25	7,65	1,91	4,01	—	—	—	8,90	2,16	4,12	—	—	—	14,00	4,00	3,50	14,00	2,94	4,76
35	7,00	2,21	3,17	—	—	—	10,00	3,56	2,81	—	—	—	12,20	4,76	2,56	12,20	3,50	3,49
43	6,25	2,66	2,35	—	—	—	8,00	3,01	2,66	—	—	—	7,10	3,31	2,15	9,80	3,31	2,96

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Aquarea T-CAP Bi-bloc H Generation Three Phase. Super Quiet outdoor unit. Heating and Cooling - SQC • R410A refrigerant

WH-UQ09HE8																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	9,00	3,24	2,78	9,00	3,51	2,56	9,00	3,91	2,30	9,00	4,30	2,09	9,00	4,73	1,90	9,00	5,16	1,74
-7	9,00	2,71	3,32	9,00	3,16	2,85	9,00	3,62	2,49	9,00	4,07	2,21	9,00	4,27	2,11	9,00	4,46	2,02
2	9,00	2,36	3,81	9,00	2,51	3,59	9,00	2,78	3,24	9,00	3,05	2,95	9,00	3,56	2,53	9,00	4,07	2,21
7	9,00	1,64	5,49	9,00	1,86	4,84	9,00	2,16	4,17	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94
25	13,60	1,50	9,07	13,60	1,71	7,95	13,20	1,93	6,84	12,80	2,14	5,98	12,00	2,41	4,98	11,20	2,67	4,19
WH-UQ12HE8																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	12,00	4,75	2,53	12,00	4,96	2,42	12,00	5,41	2,22	12,00	5,86	2,05	11,80	6,24	1,89	11,60	6,62	1,75
-7	12,00	3,85	3,12	12,00	4,41	2,72	12,00	4,98	2,41	12,00	5,54	2,17	12,00	5,90	2,03	12,00	6,26	1,92
2	12,00	3,19	3,76	12,00	3,49	3,44	12,00	3,87	3,10	12,00	4,25	2,82	12,00	4,86	2,47	12,00	5,47	2,19
7	12,00	2,18	5,50	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	13,60	1,55	8,77	13,60	1,76	7,73	13,40	2,10	6,38	13,20	2,43	5,43	12,60	2,66	4,74	12,00	2,89	4,15
WH-UQ16HE8																		
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**30**	**30**	**30**	**35**	**35**	**35**	**40**	**40**	**40**	**45**	**45**	**45**	**50**	**50**	**50**	**55**	**55**	**55**
-15	16,00	6,30	2,54	16,00	6,89	2,32	16,00	7,45	2,15	16,00	8,10	1,98	16,00	8,48	1,89	15,20	8,96	1,70
-7	16,00	5,85	2,74	16,00	6,42	2,49	16,00	7,00	2,29	16,00	7,57	2,11	16,00	8,10	1,98	16,00	8,62	1,86
2	16,00	4,67	3,43	16,00	5,21	3,07	16,00	5,74	2,79	16,00	6,31	2,54	16,00	6,90	2,32	16,00	7,50	2,13
7	16,00	3,35	4,78	16,00	3,74	4,28	16,00	4,30	3,72	16,00	4,80	3,33	16,00	5,43	2,95	16,00	5,91	2,71
16	16,00	2,59	6,18	16,00	3,18	5,03	16,00	3,71	4,31	16,00	4,27	3,75	16,00	4,86	3,29	16,00	5,22	3,07
25	16,00	2,02	7,92	16,00	2,58	6,20	16,00	2,91	5,50	16,00	3,36	4,76	16,00	3,74	4,28	16,00	4,00	4,00

Aquarea T-CAP Bi-bloc H Generation Three Phase. Super Quiet outdoor unit. Heating and Cooling - SQC • R410A refrigerant

WH-UQ09HE8						
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**18**	**18**	**18**
18	7,00	1,36	5,15	—	—	—
25	7,65	1,91	4,01	—	—	—
35	7,00	2,21	3,17	—	—	—
43	6,25	2,66	2,35	—	—	—
WH-UQ12HE8						
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**18**	**18**	**18**
18	7,50	1,41	5,32	—	—	—
25	8,90	2,16	4,12	—	—	—
35	10,00	3,56	2,81	—	—	—
43	8,00	3,01	2,66	—	—	—
WH-UQ16HE8						
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**18**	**18**	**18**
18	8,50	1,70	5,00	10,00	1,70	5,88
25	14,00	4,00	3,50	14,00	2,94	4,76
35	12,20	4,76	2,56	12,20	3,50	3,49
43	7,10	3,31	2,15	9,80	3,31	2,96

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Heating & Cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea T-CAP Mono-bloc J Generation Single phase. Heating and Cooling - MXC • R32 refrigerant

WH-MXC09J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	9,00	3,44	2,62	9,00	3,95	2,28	9,00	4,65	1,94	7,90	5,58	1,42	—	—	—
-15	9,00	2,98	3,02	9,00	3,41	2,64	9,00	4,04	2,23	9,00	4,83	1,86	8,70	5,37	1,62
-7	10,50	2,72	3,86	9,00	2,92	3,08	9,00	3,54	2,54	9,00	4,24	2,12	9,00	4,62	1,95
2	10,80	2,14	5,05	9,00	2,36	3,81	9,00	2,91	3,09	9,00	3,55	2,54	9,00	4,05	2,22
7	9,00	1,38	6,52	9,00	1,77	5,08	9,00	2,37	3,80	9,00	2,92	3,08	9,00	3,29	2,74
25	9,00	0,77	11,69	9,00	1,00	9,00	10,00	1,67	5,99	10,00	2,28	4,39	11,00	2,86	3,85
WH-MXC12J6E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	12,00	5,02	2,39	12,00	5,80	2,07	11,00	5,95	1,85	10,00	6,50	1,54	—	—	—
-15	12,00	4,14	2,90	12,00	4,83	2,48	11,00	5,20	2,12	10,50	6,00	1,75	8,90	6,30	1,41
-7	13,50	4,30	3,14	12,00	4,25	2,82	12,00	5,02	2,39	12,00	6,00	2,00	11,00	6,30	1,75
2	14,50	3,23	4,49	12,00	3,40	3,53	12,00	4,20	2,86	12,00	4,95	2,42	12,00	5,77	2,08
7	12,00	2,00	6,00	12,00	2,50	4,80	12,00	3,24	3,70	12,00	3,94	3,05	12,00	4,52	2,65
25	12,00	1,20	10,00	12,00	1,49	8,05	12,00	2,10	5,71	12,00	2,75	4,36	12,00	3,11	3,86

Aquarea T-CAP Mono-bloc J Generation Single phase. Heating and Cooling - MXC • R32 refrigerant

WH-MXC09J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	9,00	1,61	5,59	11,00	1,49	7,38	11,40	1,30	8,77
25	9,00	2,00	4,50	12,60	2,38	5,29	10,50	1,54	6,82
35	9,00	2,83	3,18	10,90	2,98	3,66	9,00	1,95	4,62
43	7,20	3,26	2,21	8,70	3,23	2,69	7,30	2,43	3,00
WH-MXC12J6E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	11,40	2,10	5,43	13,60	2,09	6,51	15,00	2,06	7,28
25	12,00	2,87	4,18	15,70	3,60	4,36	14,00	2,56	5,47
35	12,00	4,14	2,90	13,60	4,35	3,13	12,00	3,04	3,95
43	10,30	4,89	2,11	11,80	4,98	2,37	10,40	3,72	2,80

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Aquarea T-CAP Mono-bloc H Generation Single phase / Three phase. Heating and Cooling - MXC • R410A refrigerant

WH-MXC09H3E5 / WH-MXC09H3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,24	2,78	9,00	3,51	2,56	9,00	3,91	2,30	9,00	4,30	2,09	9,00	4,73	1,90	9,00	5,16	1,74
-7	9,00	2,71	3,32	9,00	3,16	2,85	9,00	3,62	2,49	9,00	4,07	2,21	9,00	4,27	2,11	9,00	4,46	2,02
2	9,00	2,36	3,81	9,00	2,51	3,59	9,00	2,78	3,24	9,00	3,05	2,95	9,00	3,56	2,53	9,00	4,07	2,21
7	9,00	1,64	5,49	9,00	1,86	4,84	9,00	2,16	4,17	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94
25	13,60	1,50	9,07	13,60	1,71	7,95	13,20	1,93	6,84	12,80	2,14	5,98	12,00	2,41	4,98	11,20	2,67	4,19
WH-MXC12H6E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,75	2,53	12,00	4,96	2,42	12,00	5,41	2,22	11,00	5,38	2,04	10,80	5,82	1,86	10,50	6,26	1,68
-7	12,00	3,85	3,12	12,00	4,41	2,72	12,00	4,98	2,41	12,00	5,54	2,17	12,00	5,90	2,03	12,00	6,26	1,92
2	12,00	3,19	3,76	12,00	3,49	3,44	12,00	3,87	3,10	12,00	4,25	2,82	12,00	4,86	2,47	12,00	5,47	2,19
7	12,00	2,18	5,50	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	13,60	1,55	8,77	13,60	1,76	7,73	13,40	2,10	6,38	13,20	2,43	5,43	12,60	2,66	4,74	12,00	2,89	4,15
WH-MXC12H9E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,75	2,53	12,00	4,96	2,42	12,00	5,41	2,22	12,00	5,86	2,05	11,80	6,24	1,89	11,60	6,62	1,75
-7	12,00	3,85	3,12	12,00	4,41	2,72	12,00	4,98	2,41	12,00	5,54	2,17	12,00	5,90	2,03	12,00	6,26	1,92
2	12,00	3,19	3,76	12,00	3,49	3,44	12,00	3,87	3,10	12,00	4,25	2,82	12,00	4,86	2,47	12,00	5,47	2,19
7	12,00	2,18	5,50	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	13,60	1,55	8,77	13,60	1,76	7,73	13,40	2,10	6,38	13,20	2,43	5,43	12,60	2,66	4,74	12,00	2,89	4,15
WH-MXC16H9E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	16,00	6,30	2,54	16,00	6,89	2,32	16,00	7,45	2,15	16,00	8,10	1,98	16,00	8,48	1,89	15,20	8,96	1,70
-7	16,00	5,85	2,74	16,00	6,42	2,49	16,00	7,00	2,29	16,00	7,57	2,11	16,00	8,10	1,98	16,00	8,62	1,86
2	16,00	4,67	3,43	16,00	5,21	3,07	16,00	5,74	2,79	16,00	6,31	2,54	16,00	6,90	2,32	16,00	7,50	2,13
7	16,00	3,35	4,78	16,00	3,74	4,28	16,00	4,30	3,72	16,00	4,80	3,33	16,00	5,43	2,95	16,00	5,91	2,71
16	16,00	2,59	6,18	16,00	3,18	5,03	16,00	3,71	4,31	16,00	4,27	3,75	16,00	4,86	3,29	16,00	5,22	3,07
25	16,00	2,02	7,92	16,00	2,58	6,20	16,00	2,91	5,50	16,00	3,36	4,76	16,00	3,74	4,28	16,00	4,00	4,00

Aquarea T-CAP Mono-bloc H Generation Single phase / Three phase. Heating and Cooling - MXC • R410A refrigerant

Models	WH-MXC09H3E5									WH-MXC12H6E5								
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18	7	7	7	14	14	14	18	18	18
18	7,00	1,36	5,15	8,55	1,41	6,06	7,00	1,00	7,00	10,00	1,75	5,71	13,20	1,96	6,73	10,00	1,40	7,14
25	7,65	1,91	4,01	11,10	1,98	5,61	7,00	1,10	6,36	11,20	2,67	4,19	16,50	3,01	5,48	10,00	1,60	6,25
35	7,00	2,21	3,17	9,23	2,37	3,89	7,00	1,35	5,19	10,00	3,56	2,81	12,55	3,63	3,46	10,00	1,95	5,13
43	6,25	2,66	2,35	8,55	2,71	3,15	5,60	1,60	3,50	8,00	3,35	2,39	10,00	3,46	2,89	8,00	2,30	3,48
Models	**WH-MXC09H3E8**						**WH-MXC12H9E8**						**WH-MXC16H9E8**					
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	18	18	18	7	7	7	18	18	18	7	7	7	18	18	18
18	7,00	1,36	5,15	—	—	—	7,50	1,41	5,32	—	—	—	8,50	1,70	5,00	10,00	1,70	5,88
25	7,65	1,91	4,01	—	—	—	8,90	2,16	4,12	—	—	—	14,00	4,00	3,50	14,00	2,94	4,76
35	7,00	2,21	3,17	—	—	—	10,00	3,56	2,81	—	—	—	12,20	4,76	2,56	12,20	3,50	3,49
43	6,25	2,66	2,35	—	—	—	8,00	3,01	2,66	—	—	—	7,10	3,31	2,15	9,80	3,31	2,96

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Heating & Cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea HT Bi-bloc F Generation Single phase / Three phase. Heating Only • R407C refrigerant

WH-UH09FE5

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	60	60	60	65	65	65
-15	9,00	3,46	2,60	9,00	3,71	2,43	9,00	4,01	2,24	8,80	4,26	2,07	8,60	4,61	1,87	8,50	4,91	1,73	8,00	5,06	1,58	7,80	5,86	1,33
-7	9,00	3,06	2,94	9,00	3,29	2,74	9,00	3,56	2,53	8,90	3,83	2,32	8,90	4,11	2,17	8,90	4,46	2,00	8,90	4,96	1,79	8,90	5,46	1,63
2	9,00	2,43	3,70	9,00	2,61	3,45	9,00	2,91	3,09	9,00	3,21	2,80	9,00	3,55	2,54	9,00	3,88	2,32	9,00	4,35	2,07	9,00	4,76	1,89
7	9,00	1,82	4,95	9,00	1,94	4,64	9,00	2,21	4,07	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94	9,00	3,46	2,60	9,00	3,96	2,27
16	9,00	1,46	6,16	9,00	1,56	5,77	9,00	1,81	4,97	8,90	2,02	4,41	8,80	2,31	3,81	8,60	2,52	3,41	8,20	2,77	2,96	8,20	3,18	2,58
25	12,00	1,66	7,23	12,00	1,76	6,82	12,00	2,01	5,97	10,80	2,14	5,05	10,60	2,46	4,31	10,20	2,66	3,83	9,80	2,89	3,39	9,60	3,31	2,90

WH-UH12FE5

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	60	60	60	65	65	65
-15	12,00	5,16	2,33	12,00	5,53	2,17	11,00	5,51	2,00	10,60	5,53	1,92	10,30	5,63	1,83	9,70	5,76	1,68	9,00	6,01	1,50	8,00	6,11	1,31
-7	12,00	4,43	2,71	12,00	4,76	2,52	11,50	4,91	2,34	11,20	5,06	2,21	10,80	5,16	2,09	10,10	5,28	1,91	10,00	5,66	1,77	9,60	5,91	1,62
2	12,00	3,42	3,51	12,00	3,68	3,26	11,50	3,86	2,98	11,30	4,14	2,73	11,00	4,51	2,44	10,80	4,86	2,22	10,65	5,31	2,01	10,30	5,59	1,84
7	12,00	2,52	4,76	12,00	2,69	4,46	12,00	3,06	3,92	12,00	3,44	3,49	12,00	3,81	3,15	12,00	4,28	2,80	12,00	4,76	2,52	12,00	5,41	2,22
16	12,00	2,03	5,91	12,00	2,17	5,53	12,00	2,52	4,76	12,00	2,86	4,20	11,50	3,19	3,61	11,50	3,48	3,30	11,00	3,82	2,88	11,00	4,37	2,52
25	12,00	1,66	7,23	12,00	1,76	6,82	12,00	2,01	5,97	11,80	2,41	4,90	11,20	2,64	4,24	10,80	2,86	3,78	10,50	3,11	3,38	10,30	3,62	2,85

WH-UH09FE8

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	60	60	60	65	65	65
-15	9,00	3,46	2,60	9,00	3,71	2,43	9,00	4,01	2,24	8,80	4,26	2,07	8,60	4,61	1,87	8,50	4,91	1,73	8,00	5,06	1,58	7,80	5,86	1,33
-7	9,00	3,06	2,94	9,00	3,29	2,74	9,00	3,56	2,53	8,90	3,83	2,32	8,90	4,11	2,17	8,90	4,46	2,00	8,90	4,96	1,79	8,90	5,46	1,63
2	9,00	2,43	3,70	9,00	2,61	3,45	9,00	2,91	3,09	9,00	3,21	2,80	9,00	3,55	2,54	9,00	3,88	2,32	9,00	4,35	2,07	9,00	4,76	1,89
7	9,00	1,82	4,95	9,00	1,94	4,64	9,00	2,21	4,07	9,00	2,46	3,66	9,00	2,76	3,26	9,00	3,06	2,94	9,00	3,46	2,60	9,00	3,96	2,27
16	9,00	1,46	6,16	9,00	1,56	5,77	9,00	1,81	4,97	8,90	2,02	4,41	8,80	2,31	3,81	8,60	2,52	3,41	8,20	2,77	2,96	8,20	3,18	2,58
25	12,00	1,66	7,23	12,00	1,76	6,82	12,00	2,01	5,97	10,80	2,14	5,05	10,60	2,46	4,31	10,20	2,66	3,83	9,80	2,89	3,39	9,60	3,31	2,90

WH-UH12FE8

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	60	60	60	65	65	65
-15	12,00	5,16	2,33	12,00	5,53	2,17	11,00	5,51	2,00	10,60	5,53	1,92	10,30	5,63	1,83	9,70	5,76	1,68	9,00	6,01	1,50	8,00	6,11	1,31
-7	12,00	4,43	2,71	12,00	4,76	2,52	11,50	4,91	2,34	11,20	5,06	2,21	10,80	5,16	2,09	10,10	5,28	1,91	10,00	5,66	1,77	9,60	5,91	1,62
2	12,00	3,42	3,51	12,00	3,68	3,26	11,50	3,86	2,98	11,30	4,14	2,73	11,00	4,51	2,44	10,80	4,86	2,22	10,65	5,31	2,01	10,30	5,59	1,84
7	12,00	2,52	4,76	12,00	2,69	4,46	12,00	3,06	3,92	12,00	3,44	3,49	12,00	3,81	3,15	12,00	4,28	2,80	12,00	4,76	2,52	12,00	5,41	2,22
16	12,00	2,03	5,91	12,00	2,17	5,53	12,00	2,52	4,76	12,00	2,86	4,20	11,50	3,19	3,61	11,50	3,48	3,30	11,00	3,82	2,88	11,00	4,37	2,52
25	12,00	1,66	7,23	12,00	1,76	6,82	12,00	2,01	5,97	11,80	2,41	4,90	11,20	2,64	4,24	10,80	2,86	3,78	10,50	3,11	3,38	10,30	3,62	2,85

Aquarea HT Mono-bloc G Generation Single Phase. Heating Only - MHF • R407C refrigerant

WH-MHF09G3E5

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,46	2,60	9,00	3,71	2,43	9,00	4,01	2,24	8,80	4,26	2,07	8,50	4,71	1,80	7,80	5,38	1,45
-7	9,00	3,06	2,94	9,00	3,29	2,74	9,00	3,56	2,53	8,90	3,83	2,32	8,90	4,28	2,08	9,00	5,02	1,79
2	9,00	2,43	3,70	9,00	2,61	3,45	9,00	2,91	3,09	9,00	3,21	2,80	9,00	3,72	2,42	9,00	4,37	2,06
7	9,00	1,82	4,95	9,00	1,94	4,64	9,00	2,21	4,07	9,00	2,46	3,66	9,00	2,99	3,01	9,00	3,64	2,47
25	9,00	1,52	5,92	9,00	1,70	5,29	9,00	1,88	4,79	9,00	2,16	4,17	9,00	2,63	3,42	9,00	3,20	2,81

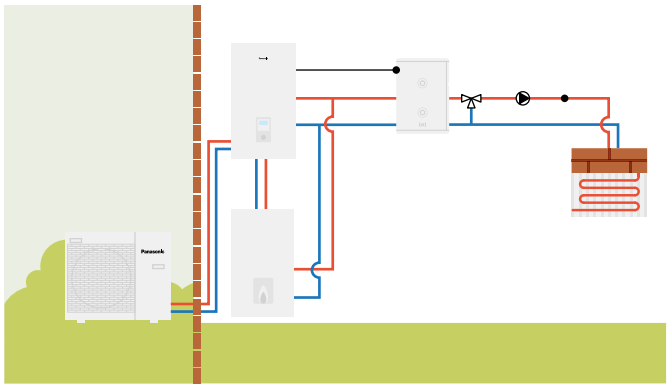
WH-MHF12G6E5

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	5,16	2,33	12,00	5,53	2,17	11,00	5,51	2,00	10,80	5,49	1,97	9,70	5,52	1,76	8,00	5,61	1,43
-7	12,00	4,43	2,71	12,00	4,76	2,52	11,50	4,91	2,34	11,20	5,06	2,21	10,10	5,06	2,00	9,60	5,43	1,77
2	12,00	3,42	3,51	12,00	3,68	3,26	11,50	3,86	2,98	11,30	4,14	2,73	10,80	4,66	2,32	10,30	5,13	2,01
7	12,00	2,52	4,76	12,00	2,69	4,46	12,00	3,06	3,92	12,00	3,44	3,49	12,00	4,10	2,93	12,00	4,97	2,41
25	12,00	2,03	5,91	12,00	2,36	5,08	12,00	2,69	4,46	12,00	3,02	3,97	12,00	3,61	3,32	12,00	4,37	2,75

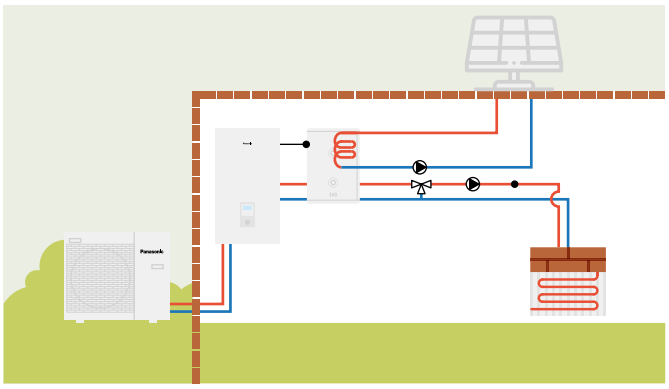
Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

Examples of installations

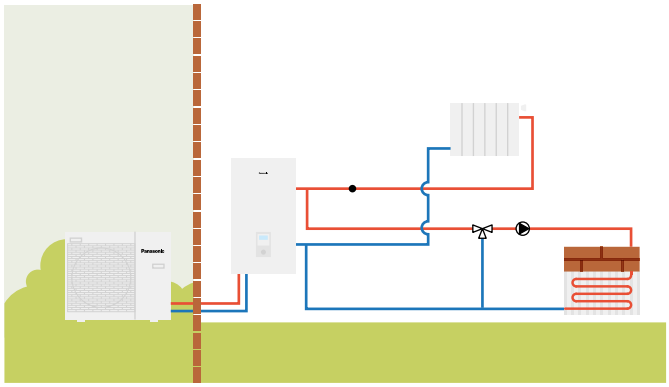
Aquarea J and H Generation:
Bivalent with buffer tank and mixing valve



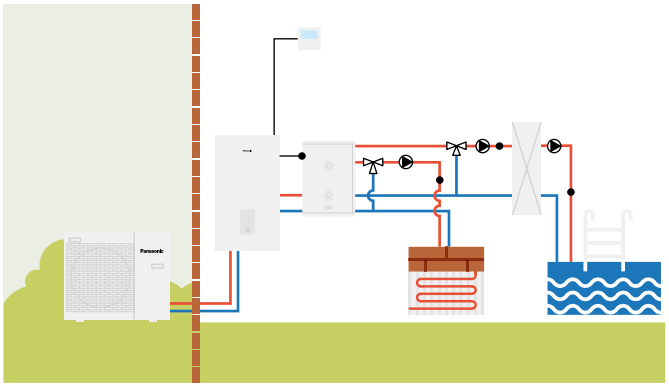
Aquarea J and H Generation:
Buffer tank with solar and mixing valve



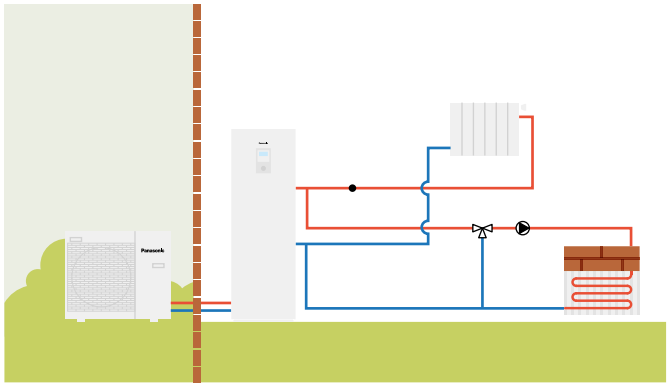
Aquarea J and H Generation:
2 zones with external kit without buffer tank



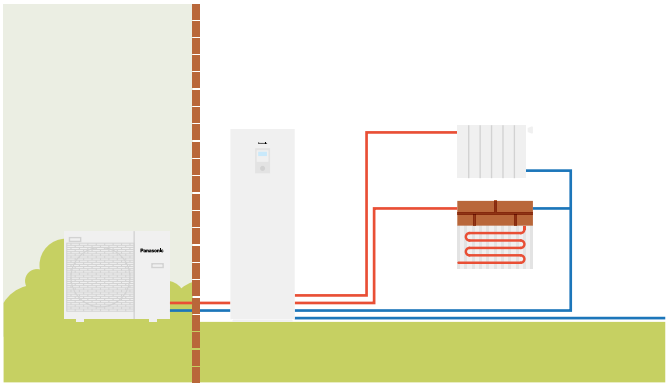
Aquarea J and H Generation:
2 zones with external kit, buffer tank and swimming pool



Aquarea All in One J and H Generation:
2 zones with external kit, without buffer tank



Aquarea All in One 2 zones J and H Generation:
2 zones built-in, without buffer tank




ETHEREA



Panasonic domestic air to air heat pump

Panasonic has developed a range of products designed for you, better than ever before. Above all, it is also a range for air conditioning professionals, such as yourself, thanks to its broad range of products which are capable of conditioning rooms of all sizes – always with optimal efficiency and incomparable ease of installation.

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Highlighted features

Panasonic has developed a range of products designed for you, better than ever before.
With innovative design, high efficiency and advanced technologies, such as Panasonic Comfort Cloud App for smart control and nanoe™ X for indoor air quality improvement, the residential range has been designed with you and your clients in mind.





Panasonic air conditioners provide more savings and more comfort

We believe that going green shouldn't compromise on comfort.
Our super silent air conditioners guarantee clean indoor air to take care of you and your family. For a cleaner living environment, the nanoe™ X helps improve the quality of the indoor air as well as your surroundings. Together, these breakthrough technologies embody Panasonic's Eco Clean Life Innovation - innovations that improve our environment whilst making life as comfortable as possible.

The Good Design Award is among the most prestigious awards for product design excellence.
An "excellent design" indicated by Good Design Award is a design which focusses on humanity, honesty, innovation, aesthetics and ethics.
Panasonic's award-winning TZ proves to be a worthy addition to any home.

GOOD DESIGN

Energy saving



Refrigerant gas R32.
Our heat pumps containing the refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP). An important step to reduce greenhouse gases. R32 is also a component refrigerant, making it easy to recycle.



Exceptional seasonal cooling efficiency based on the ErP regulation.
Higher SEER ratings mean greater efficiency - year-round cooling savings!



Exceptional seasonal heating efficiency based on the ErP regulation.
Higher SCOP ratings mean greater efficiency - year-round heating savings!



Econavi.
Sunlight Sensor technology can detect and reduce the waste of energy by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy.



Inverter Plus.
Inverter Plus System classification highlights Panasonic's highest performing systems.



Inverter.
The Inverter range provides greater efficiency and comfort. Provides more precise temperature control, without highs and lows, and keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration levels.



Panasonic R2 rotary compressor.
Designed to withstand extreme conditions, it delivers high performance and efficiency.

High performance and indoor air quality



nanoe™ X.
Technology with the benefits of hydroxyl radicals has the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise.



PM2,5 filter.
Particulate matter (PM2,5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. This filter can catch PM2,5 particles including hazardous pollutants as well as house dust and pollen.



Dust Collection Filter.
This filter collects and retains particles suspended in the air, resulting in cleaner air in the room.



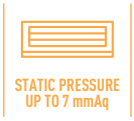
Super Quiet.
With Super Quiet technology our devices are quieter than a library (30 dB(A)).



Mild dry.
The humidity controls level the air to prevent over-dryness.



More comfort with Aerowings.
Direct airflow to the ceiling, creating a shower cooling effect with built-in twin flap.



Static pressure up to 7 mmAq.
Low static pressure Hide Away RAC with selectable static pressure up to 7 mmAq.



Filter included.
Low static pressure Hide Away RAC with filter included.



Down to -10 °C in cooling mode.
The air conditioner works in cooling mode when the outdoor temperature of -10 °C.



Down to -15 °C in heating mode.
The air conditioner works in heat pump mode when the outdoor temperature is as low as -15 °C.



Summer House.
This innovative function keeps the house at 8/10 or 8/15 °C to avoid freezing pipes during the winter. This function is beneficial for summer or weekend homes.



R410A/R22 renewal.
The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing new high efficiency R32 systems.



5 Years compressor warranty.
We guarantee the outdoor unit compressors in the entire range for five years.

High connectivity



Domestic integration to P-Link - CZ-CAPRA1.
Can connect RAC range to P-Link. Full control is now possible.



Internet control.
A next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone, tablet or PC via the internet.



BMS connectivity.
The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.

Bringing nature's balance indoors

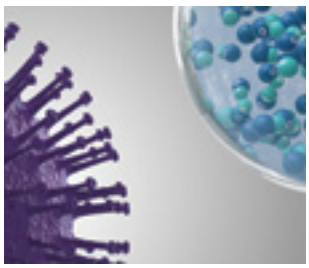
nanoe™ X, technology with the benefits of hydroxyl radicals.

Abundant in nature, hydroxyl radicals (also known as OH radicals) have the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise. nanoe™ X technology can bring these incredible benefits indoors so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and pleasant place to be.

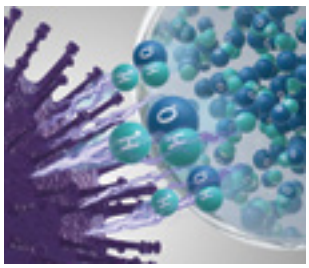


Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment

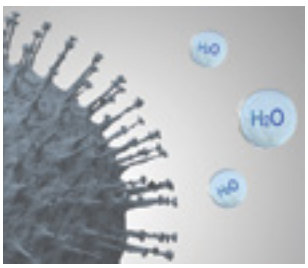
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



1 | nanoe™ X reliably reaches pollutants.



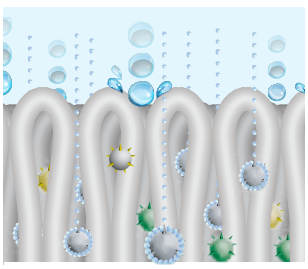
2 | Hydroxyl radicals denature pollutants' proteins.



3 | Pollutants activity is inhibited.

What is unique about nanoe™ X?

Effective on fabrics and surfaces.



1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

Longer lifespan.



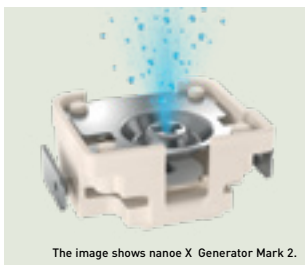
2 | Contained in tiny water particles, nanoe™ X has a longer lifespan to spread easily around the room.

Huge quantity.



3 | nanoe X Generator Mark 2 produces 9,6 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

Maintenance-free.



The image shows nanoe X Generator Mark 2.

4 | No maintenance, no replacement required. nanoe™ X is a filter free solution that does not require maintenance, as its atomisation electrode is enveloped with water during its generation process and it is made with Titatium.

7 effects of nanoe™ X – Panasonic unique technology

Deodorises



Odours

Capacity to inhibit 5 types of pollutants



Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances

Moisturises



Skin and hair

* Refer to https://aircon.panasonic.eu for more details and validation data.

nanoe™ X, internationally-validated technology in testing facilities

The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Malaysia and Japan.

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

Test results conducted under controlled laboratory conditions. Performance of nanoe™ X might differ in real life environment.

	Tested contents		Result	Capacity	Time	Testing organisation	Report No.
Airborne	**Virus**	Bacteriophage ΦX174	99,7 % inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1
Airborne	**Bacteria**	Staphylococcus aureus	99,9 % inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	2016_0279
Adhered	**Virus**	SARS-CoV-2	91,4 % inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3
Adhered	**Virus**	SARS-CoV-2	99,9 % inhibited	45 L	2 h	Texcell (France)	1140-01 A1
Adhered	**Virus**	Xenotropic murine leukemia virus	99,999 % inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—
Adhered	**Virus**	Influenza (H1N1 subtype)	99,9 % inhibited	1 m³	2 h	Kitasato Research Center for Environmental Science	21_0084_1
Adhered	**Virus**	Bacteriophage ΦX174	99,80% inhibited	25 m³	8 h	Japan Food Research Laboratories	13001265005-01
Adhered	**Bacteria**	Staphylococcus aureus	99,9 % inhibited	20 m³	8 h	Danish Technological Institute	868988
Adhered	**Pollen**	Ambrosia pollen	99,4 % inhibited	20 m³	8 h	Danish Technological Institute	868988
Adhered	**Odours**	Cigarette smoke odour	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04

First nanoe™ device was developed by Panasonic in 2003

	nanoe™	nanoe™ X	
Generator	2003	**Mark 1** - 2016	**Mark 2** - 2019
	480 billion hydroxyl radicals/sec	4,8 trillion hydroxyl radicals/sec	9,6 trillion hydroxyl radicals/sec
Ion particle structure	Hydroxyl Radicals	**10x** times	**20x** times

nanoe™ X: improving protection 24/7



Acts to clean your air, so that the indoor environment can be a cleaner and pleasant place to be all day long. nanoe™ X works together with heating or cooling function when you are at home and can work independently when you are away.
Give the air conditioning the strength to increase the protection at home with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.



Cleans the air when you are away.
Leave the nanoe™ mode ON to inhibit certain pollutants and deodorise before you return home.

Improves your environment when you are at home.
Enjoy a cleaner, comfortable space with loved ones.

Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment



Etherea.
Built-in nanoe X Generator Mark 2.



Floor console.
Built-in nanoe X Generator Mark 1.



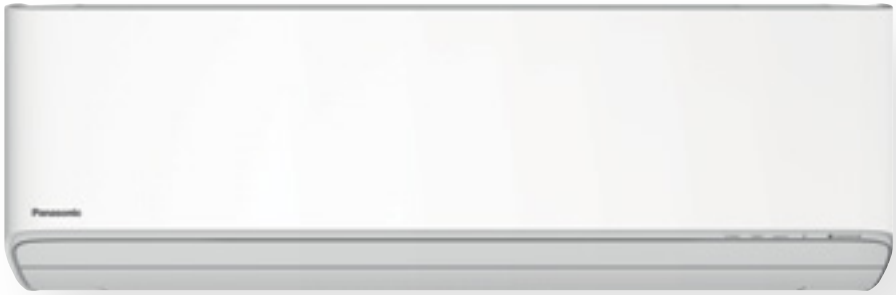
Heatcharge VZ.
Built-in nanoe™.

New Etherea 2021 with nanoe™ X technology

A smart solution to keep your home clean, comfortable and welcoming
The smart, new Etherea comes with nanoe™ X technology with the benefits of hydroxyl radicals. With advanced control options, class-leading performance, a stylish design and intelligent features, Etherea is designed to make your home comfortable, clean and the ideal place to be.



ETHEREA



SEE PRODUCT SPECIFICATIONS

1 Air quality

· nanoe™ X technology with the benefits of hydroxyl radicals
· Acts to clean your air, so that the indoor environment can be a cleaner and pleasant place to be all day long

2 Smart control

· Built-in Wi-Fi
· Advanced control via smartphone
· Compatible with Amazon Alexa

3 High efficiency

· Top class energy efficiency up to A+++ in heating and cooling

4 Ultimate comfort

· Aerowings 2.0, end-to-end vanes enhance comfortable airflow
· Super Quiet ambient

5 New design

· Stylish, monolithic design
· Chassis and parts designed for easier installation and servicing
· High class, easy-to-use remote control with backlight

nanoe™ X: Improving protection 24/7



Acts to clean your air, so that the indoor environment can be a cleaner and pleasant place to be all day long.
nanoe™ X works together with heating or cooling function when you are at home and can work independently when you are away.
Give the air conditioning the strength to increase the protection at home with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.

Cleans the air when you are away.
Leave the nanoe™ mode ON to inhibit certain pollutants and deodorise before you return home.

Improves your environment when you are at home.
Enjoy a cleaner, comfortable space with loved ones.



Technology for the ultimate comfort

Introducing the Aerowings 2.0 to the Etherea range
Panasonic's Aerowings technology consists of two independent flexible vanes that concentrate airflow to heat or cool a room in the shortest time possible and helps distribute air evenly throughout a room.
Thanks to the larger sub vane (72 mm), which is more than doubled in size than other conventional designs, the ability to lift airflow has been further improved.





Aerowings 2.0 has a new shower cooling feature which allows air flow to be concentrated evenly towards the ceiling to achieve comfortable cooling across a room, showering gently down into a room rather than one area subject to a continuous icy blast.



For heating, Aerowings 2.0 releases a concentrated airflow downwards to achieve an effect similar to floor heating the air, which rises and fills the room.

Sleek design with easy-to-use remote controller

Panasonic has meticulously designed a new Etherea for a sleek and stylish solution to blend with any interior. Its elegant monolithic design is robust and allows for a high-performance air conditioner, with a large air discharge area to optimise performance.

The easy-to-use remote controller features an ergonomic design with tapered rear housing for the most comfortable grip. The new controller's intuitive design provides easy operation with five quick access keys for convenient use. The controller also has a minimalist design with the less frequently used keys concealed under a sliding cover.



Heatcharge. Energy Charge System

Energy class A +++ and offers maximum comfort and energy savings. This powerful air heat pump is designed for commercial and residential climate that places extremely high demands on the heating system.



heatcharge



SEE PRODUCT SPECIFICATIONS

1 Powerful, reliable heating even at low ambient winter temperatures

When the air conditioner is operating, the compressor, which is the power source of the unit, generates heat.
Until now, this heat was released into the atmosphere. Panasonic has utilised this waste heat!

Constant heating.
Using stored heat provides stable heating with less drop in temperature.
Even when heating operation stops during defrost operation, stored heat continues to constantly warm the room. This eliminates the previous discomfort due to the temperature dropping when heating temporarily stops to ensure stable air conditioner heating.

2 Panasonic's full line-up of A+++ heat pumps

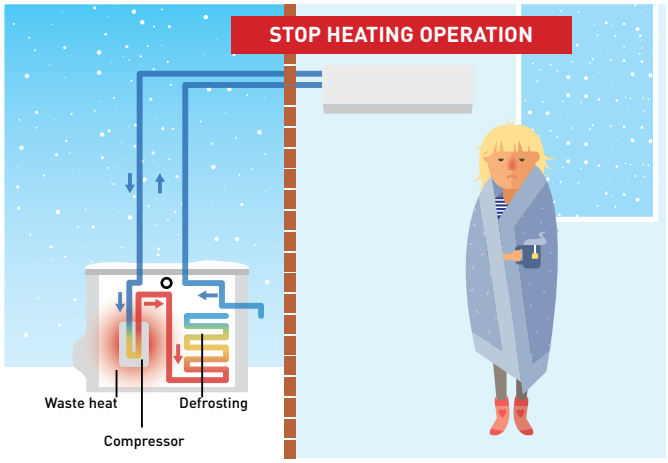
In response to the Kyoto Protocol, the European Union set some challenging targets for the reduction in greenhouse-gas emissions. By the year 2020, across the member states, the EU wants to have achieved the following objectives:
- A 20 % cut in greenhouse gas emissions (from 1990 base levels)
- The share of renewables in the energy mix to increase by 20 %
- An overall reduction of 20 % in energy consumption

3 Comfort and efficiency

- nanoe™ technology with the benefits of hydroxyl radicals
- Higher efficiency and comfort with Econavi sunlight detection and human activity detection
- Powerful air flow to quickly reach the desired temperature

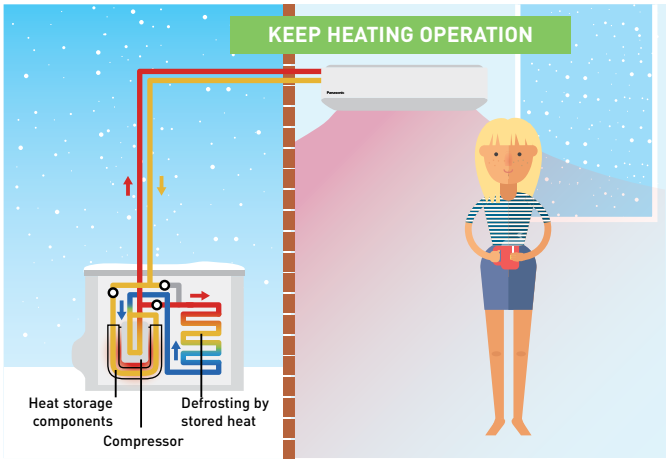
Conventional. The room gradually becomes cold.

Defrost operation: About 11 to 15 min. Fall in room temperature: About 5 to 6 °C.



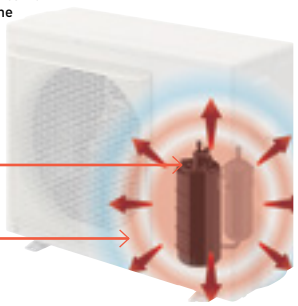
Heatcharge. The room is thoroughly warmed.

Defrost operation: About 5 to 6 min. Fall in room temperature: About 1 to 2 °C.



Conventional.

During operation, heat is generated inside the compressor.



Heatcharge.

Heat generated by the compressor is stored inside and used to warm the refrigerant to efficiently increase heating power.

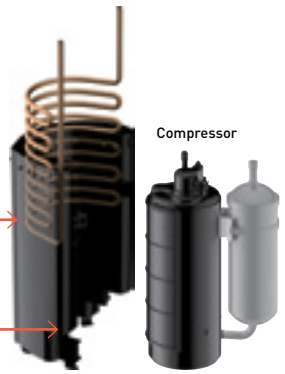


Heatcharge.

The compressor is wrapped and exhaust heat is used for charging.

Heatcharge tank. Waste heat from the compressor is stored.

Finless heat exchanger. Stored heat is converted to energy.



* Defrost operation time and how low room temperature falls differ depending on the environment in which the unit is being used (how insulated and airtight the room is), operation conditions, and temperature conditions. Output air temperature falls during defrost operation. How low room temperature falls differs depending on the environment in which the unit is being used (how insulated and airtight the room is), operation conditions, and temperature conditions. In environments where a lot of frost accumulates, heating may stop during defrost operation.

Wall-mounted TZ super-compact

The perfect air conditioner for the smallest spaces in your home.
TZ with R32 refrigerant powerful and efficient.





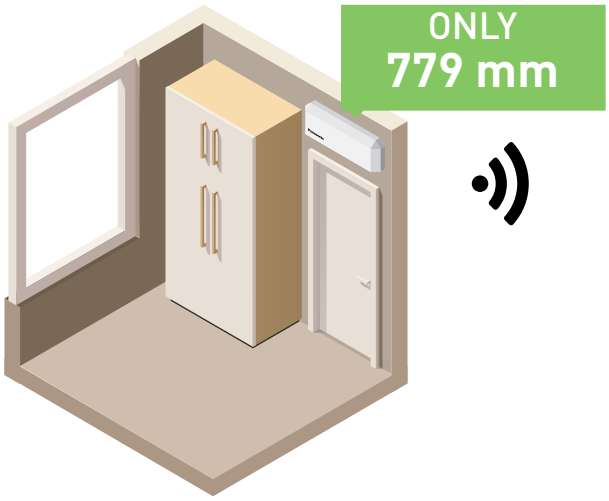
GOOD DESIGN

An "excellent design" indicated by Good Design Award is a design which focusses on humanity, honesty, innovation, aesthetics and ethics. Panasonic's award-winning TZ proves to be a worthy addition to any home.

SEE PRODUCT SPECIFICATIONS

1 Super-compact design

The compact design of the indoor units have a width of just 779 mm. This allows for more installation possibilities, including the limited space above a door.
Meticulously designed for both installer and user benefit, installation time of the TZ has been dramatically decreased.
The inner workings of the unit have also been redesigned to make maintenance quicker and easier. Electronics and wiring components are now on just one side of the unit to simplify maintenance.



2 Built-in Wi-Fi and compatible with Voice Assistant

The unit is ready to connect to the internet and to be controlled by smartphone with Panasonic Comfort Cloud App. Control, monitor, and schedule with easy interface.
By connecting Panasonic Comfort Cloud the unit can be managed by the Amazon Alexa*.

* Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

3 PM2,5

Particulate matter (PM2,5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. The filter can catch PM2,5 particles including hazardous pollutants as well as house dust and pollen and is able to maintain the air quality of the room.

4 Stylish infrared control

Enjoy innovative design at your fingertips with the stylish and sleek Backlit Sky Controller. Bigger screen and easier to use.



Silent ambient and relaxing atmosphere 20 dB(A)

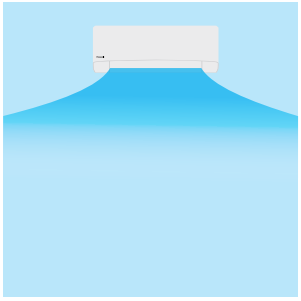
We have succeeded in making one of the most silent air conditioners on the market. Panasonic Inverter air conditioner's indoor operating noise has been reduced as the Inverter constantly varies its output power to enable more precise temperature control.

* 2,5 and 3,5 kW models: In the Quiet Mode during cooling operation with low fan speed.

Aerowings

Panasonic's Aerowings feature incorporates two independent blades that concentrate airflow to cool you down in the shortest time possible. This also helps distribute cool air evenly throughout the room.

Superior airflow control.
Aerowings features two independent blades that give you more control over the direction of the airflow. Without Aerowings, with direct airflow, the target never changes, so you can easily begin to feel too cold as you are subjected to the continuous icy blast.



Comfort that goes on and on with Shower Cooling.
When the Aerowings twin blades direct air towards the ceiling they create the Shower Cooling effect.

Panasonic Air Conditioners with Aerowings feature an indoor design with wider intake grille and super-high fan speed to produce bigger air volume.

For Shower Cooling.
This ensures cool air is evenly distributed throughout the room and you can stay comfortable without experiencing continuous direct cooling.

Wall-mounted indoor units, designed for simple installation and maintenance

The full range of wall-mounted indoor units has been carefully designed for simple, stress-free installation and ongoing maintenance.

* Not applicable to VZ.





FEATURE AVAILABLE IN ETHEREA, TZ, FZ

SEE PRODUCT SPECIFICATIONS

1 Simple installation

Thanks to advanced improvements, installation time has been dramatically decreased. The models have been designed to provide more stability and strength for neat installation, with newly built-in support and convenient access to the drain hose, cabling inserts and larger space for secure installation.

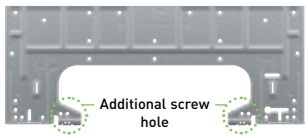
2 Easy maintenance

Meticulously designed for both installer and user benefit, the unit features an easy to remove front grille for convenient access to the interior.
The inner workings of the unit have also been redesigned to make maintenance quicker and easier. Electronics and wiring components are now on just one side of the unit to simplify maintenance.



1. Stronger installation plate.
The models feature a stronger, solid installation plate that provides more stability and strength. For uneven surfaces, there are 2 additional screws to ensure a neat and secure installation .

Installation plate: Strong and solid.



Screw holder for uneven surface (screws not provided).



2. One-piece front grille.
The model comes with a one-piece front grille design to make servicing easier. First, open the intake grille and remove the screws. Next, slide the three slider locks and remove the front grille.

One-piece front grille: Easy removal.



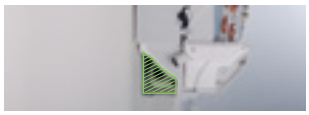
3. Built-in support holder.
The model features a built-in support holder, making installation easier and providing convenience and workspace improvements.

Convenient installation and serviceability.

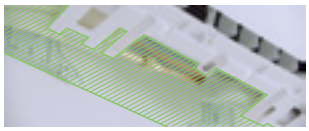


4. Easy access to drain hose & piping connection.
With larger piping space, pipes and insulations are securely and neatly hidden.
With the visible piping storage, pipes can easily be inspected for leaks without lifting the unit.

Piping storage: up to 15 % larger (for TZ-WKE).

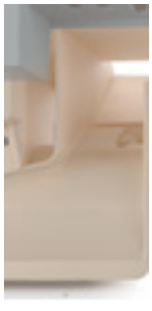


Bigger working space.



5. Easy wire insertion & tightening.
The models have combined 2 wire inserts into 1, ensuring front visibility and convenience while inserting wires from the back.

Single tunnel: easy wire insert.

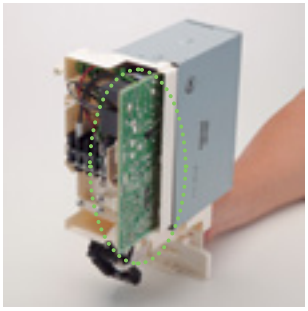


Bigger working space for wiring connection.



6. Easy removal of PCB.
PCB removal is achieved in just 4 easy steps. Simply remove the control board cover, disconnect all connectors from the indicator, disconnect all connectors and pull out the main PCB.

Simple steps for PCB removal.



7. Easy / hidden installation of the Wi-Fi adapter.
The latest model features a dedicated space for a network adapter. Easy to plug in, the guided wire slots allow for clear, easy installation and can be neatly tucked away - simple and out of sight!

* Only for models without built-in network adapter.



8. Cross flow fan removal.
The models are carefully designed to make removal of cross flow fans easier compared to the previous models, saving valuable time.

Bigger diameter: up to Ø105 (for Z-XKE).



Floor console. Efficient comfort and clean air all year round

Floor console with new nanoe™ X technology: outstanding efficiency A++, comfort (Super Quiet technology only 20 dB(A)) and better air quality combined in a breakthrough design.



nanoe™ X: Improving protection 24/7
Acts to clean your air, so that the indoor environment can be a cleaner and pleasant place to be all day long. nanoe™ X works together with heating or cooling function when you are at home and can work independently when you are away.



nanoe™ X

DESIGN AWARD 2019

The iF Product Design Awards are among the most prestigious awards for product design excellence. Winning the award thanks to its highly intelligent functionality, the Panasonic Floor console is the ideal air-conditioning system for domestic and commercial applications.

SEE PRODUCT SPECIFICATIONS

1 nanoe™ X: Bringing nature's balance indoors

Panasonic's nanoe™ X technology brings nature's detergent – hydroxyl radicals – indoors to help improve protection 24/7 against several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen or hazardous substances.

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect (see page 101 for more detail). nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

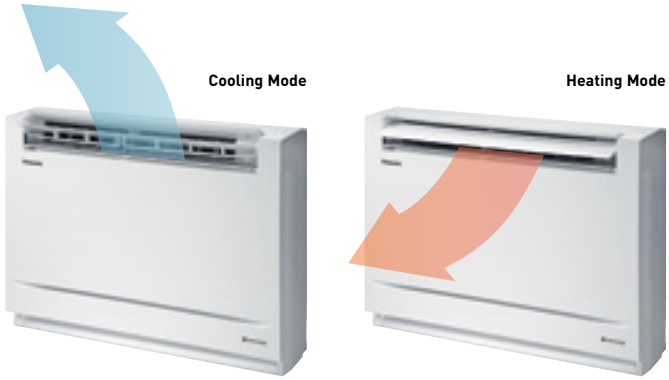
2 Superquiet operation

When the system reaches its set temperature, the unit will operate at only 20 dB(A). Creating a comfortable home is not only by temperature - a quiet atmosphere is also important.

3 Designed to follow the high European demands

Superquiet operation, highly efficient and technology to help clean the air.

Double airflow for improved comfort and temperature dispersion: through the top for an efficient operation



Stylish infrared control

Enjoy innovative design at your fingertips with the stylish and sleek Backlit Sky Controller. Bigger screen and easier to use.



Easy to integrate into your home

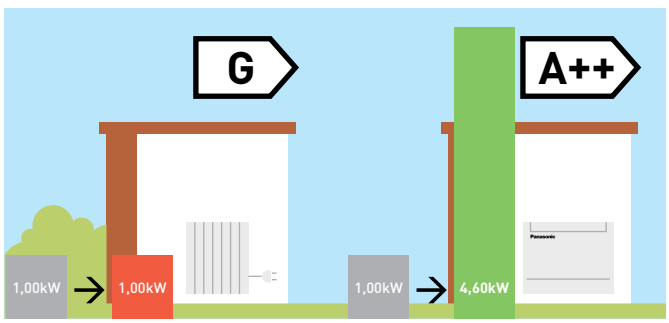
A breakthrough design that integrates perfectly with any style. We have carefully selected materials and processes to create an elegant design. Compact in size and with a stylish design, the floor console will easily integrate into your home's interior decoration. There are four options available:



Floor Installation | Wall Installation | Half Concealed | Concealed

High energy efficiency class A++

The floor console brings the outdoor heat energy inside. Can provide heat inside even when it is -15 °C outside.



* SCOP on heating mode for Floor console Type KIT-Z25-UFE and KIT-Z35-UFE compared with electrical heaters at +7 °C.

The perfect solution for the replacement of old boiler heating systems





Panasonic R2 Rotary Compressor

The secret is flexibility. Panasonic Inverter air conditioners have the flexibility to vary the rotation speed of the compressor. This allows it to use less energy to maintain the set temperature while also being able to cool the room quicker at start up.
So you can enjoy better savings on your electricity bills while maintaining cooling comfort.



R2 rotary compressors utilize rolling piston technology.
The R2 compressor has been tested in extreme conditions: higher efficiency, single and dual piston, R32 / R410A refrigerant, compact size.

Making the world a cooler place since 1978

Panasonic Rotary Compressors for Room Air Conditioners have been installed in the most demanding environments around the world. Designed to withstand extreme conditions, Panasonic Rotary delivers high performance, efficiency and reliable service, no matter where you are. Panasonic, the world's largest manufacturer of rotary compressors.

Why is the Panasonic R2 Rotary Compressor so efficient?

1. High efficiency motor. The premium silicon steel motor meets industry efficiency requirements.
2. Improved lubrication of high volume oil pump. The extended, high volume oil pump in conjunction with a larger capacity oil reservoir provides superior lubrication.
3. Accumulator has larger refrigerant capacity. The larger accumulator accommodates generous refrigerant amounts needed in longer line length installations.



* This image is for 5,0 / 7,1 kW.

R2 Compressor Value

About R2 Compressor.

Built upon 36 years of compressor design and production experience, R2 is the next generation of Rotary Compressors for residential central air conditioning. The technology improvements, enhanced materials and simple design ensure R2 compressors are reliable, efficient and quiet. The R2 Compressor delivers quality, comfort and peace of mind in homes around the world. Panasonic's Rotary Compressors have been life tested in some of the world's most demanding environments and the R2 design is the compressor of choice by contractors and homeowners in these challenging climates. For the high performance that home-owners demand, R2 Rotary Compressors are considered by the industry experts.

Leading Technology.

Used in over 80 % of cooling solutions globally, rotary is the world's dominant residential air conditioning compression technology. Panasonic is the leading rotary and residential AC compressor manufacturer in the world, with over 200 million compressors produced.

Benefits.

Central air conditioning delivered with a Panasonic R2 Rotary Compressor ensures a superior level of comfort at an economical cost.

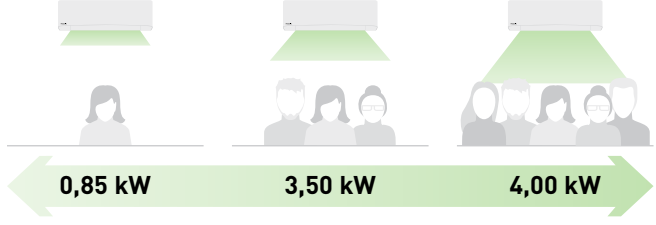
Inverter technology

Great energy-saving performance. Reduces electricity consumption.

Panasonic Inverter air conditioners are designed to give you exceptional energy savings and performance. At the start up of an air conditioner's operation, a boost in power is required to reach the set temperature. After the set temperature is reached, less power is required to maintain it. The Panasonic Inverter air conditioner varies the rotation speed of the compressor. This provides a highly precise method of maintaining the set temperature.

Constant Comfort.

Precise temperature control with a wide power output range enables an inverter air conditioner to meet different room occupancy levels – thus ensuring constant comfort.



Minimum power
Compressor rotation speed: SLOW.
When not required, the unit operates at low power to save energy.

Medium power
Normal Condition.

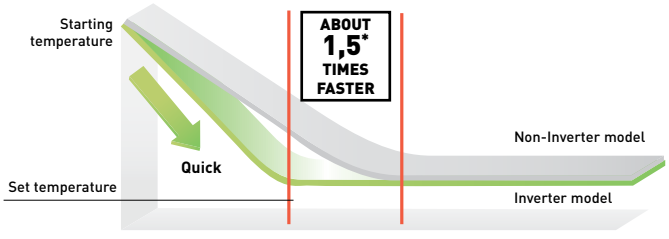
Maximum power
Compressor rotation speed: HIGH.
When required, the unit operates at full power.

Graph shows the 3,5 kW Inverter model's wide power output range during cooling.

Quick Comfort.

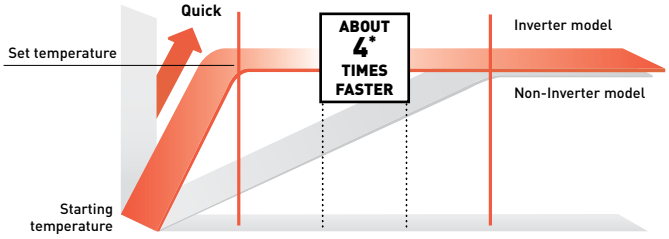
Panasonic Inverter air conditioners can operate with higher power during the start up period to cool the room 1,5 times faster and heat the room 4 times faster than non-Inverter models.

Comparison of cooling speed.



* 3,5 kW Inverter vs. non-Inverter. Outside room temperature: 35 °C; setting temperature: 25 °C.

Comparison of heating speed.



* Comparison of 2,5 kW Inverter and Non-Inverter. Outside room temperature: 2 °C ; Setting temperature: 25 °C.

R22 Renewal. Panasonic standard units can be installed on existing R22 pipings

Change your old air conditioning system to a more efficient system!



An important drive to further reduce the potential damage to our ozone

· All Panasonic standard SKE, TKE and UKE units can be installed on existing R22 pipings
· No need for additional accessories (only pipe reductions)
· Approximately 30 % energy savings compared to R22 units

Panasonic is doing its part

We at Panasonic are also doing our part – recognising that all finances are under pressure at the moment. Panasonic has developed a clean and cost effective solution to enable this latest legislation to be introduced with as minimum an effect on businesses and cash reserves as possible.
The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A / R32 systems.
By bringing a simple solution to the problem Panasonic can renew all Split Systems and PACi systems; and depending upon certain restrictions we don't even limit the manufacturer's equipment we are replacing.
By installing a new high efficiency Panasonic R410A / R32 system you can benefit from around 30 % running cost saving compared to the R22 system.

Yes...
1. Check the capacity of the system you wish to replace
2. Select from the Panasonic range the best system to replace it with
3. Follow the procedure detailed in the brochure and technical data
Simple...

R22 - The reduction of Chlorine critical for a cleaner future.



Guidance on re-using existing R22 piping for a new R410A / R32 installation

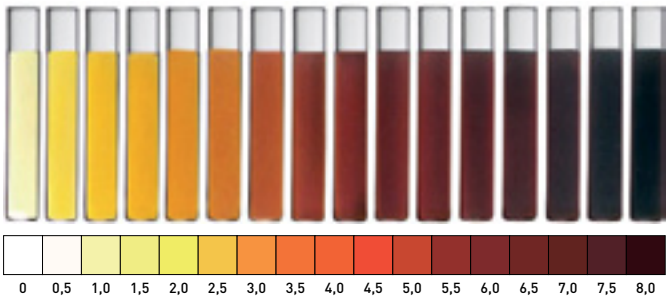
1. Precaution.
The existing R22 piping can be re-used for a R410A / R32 system installation if the following conditions are met and the piping are finally verified to be:
· Dry (no moisture remaining in the piping)
· Clean (no dust remaining in the piping)
· Tight (no refrigerant leak at the joining and piping)

2. Conditions.
· Recover the refrigerant and oil.
Operate "force cooling" according to the recommended operation time, regardless of the piping length. Single split: 10 min. Multi Split: 30 min. After that, carry out "pump down" to recover the refrigerant and oil from the existing R22 system

* Note: If pump down operation is not possible due to the malfunction of the system, flush and wash the existing piping to collect back the oil and dirt inside the system.

· Check the oil condition. If the oil contains dirt, wash the existing pipes
· Check the oil colour. After pump down, use a cotton bud to wipe the oil from the existing pipe. If the oil colour is higher than ASTM3, use a new pipe as re-use of old piping is not allowed
· Check pipe thickness. Make sure that the pipe thickness is more than 0,8 mm. If the thickness is less than 0,8 mm, use a new pipe
· Rework the flare for R410A / R32 connection. Do not reuse the old flare nuts

Deterioration Criteria for Refrigerant Oil



Make sure to use the new flare nuts attached to the R410A / R32 system.

* Note: If the existing piping size is 1/4" (6,35 mm) and 1/2" (12,7 mm), and the new R410A / R32 system is 1/4" (6,35 mm) and 3/8" (9,52 mm), use a pipe reducer connected at indoor and outdoor unit.

3. Applicable Model.
Panasonic single split room air conditioner from CS/CU-RE/UE/YE/XE/CE/NE/E*NKE and PKE series onwards.
Panasonic multi split room air conditioner from CU-2E/3E/4E/5PBE series onwards.

		Liquid	1/4 (6,35)		
		Gas	3/8 (9,52)	1/2 (12,70)	5/8 (15,88)
Split	16 / 20 / 25 / 35	1,6 - 3,5 kW	✔	▲	✖
	42 / 50 / 60	4,2 - 6,0 kW	✖	✔	▲
	71	6,8 - 7,5 kW	✖	✖	✔

✔ Standard piping connection with current piping length and refrigerant charge rules.
▲ This combinations is allowed respecting maximum piping length and refrigerant charged declared in model installed as new.
✖ This combinations is not allowed as it is out of piping diameter.

Panasonic Comfort Cloud App. Convenient centralised control

Easily control and access all features of remote control anytime, anywhere.



1 Smart Control

In control of cooling comfort anytime, anywhere.

Connect & control operation.
· 20 units per location and up to 10 different locations
· Transform multiple remote controls into one device

Manage multiple units at once.
· Turn on all AC units at the same time or by group settings
· Set weekly timers for multiple units to cater to your daily routines

2 Smart Comfort

Easily manage your comfort and air quality.

Adjust set temperature.
Set temperature by monitoring real time indoor and outdoor temperatures.

Pre-heat or cool.
Control your house or office comfort before you arrive!

nanoe™ X [1].
Activate nanoe™ X technology with the with the benefits of hydroxyl radicals

3 Smart Efficiency

More comfort with less wasted energy.

Energy usage analysis [2].
Monitor energy consumption based on different temperature settings.

Energy usage comparison (day/week/month/year).
Compare energy usage history of AC units for better budget planning.

4 Smart Assist

Be informed of breakdowns.

Error codes notification and identification [3].
Launch the app to check error codes for effortless troubleshooting. Help technicians to easily identify the issues.

User's control right.
Register multiple users. Set administrator rights and assign users access.

1) nanoe™ X is available in certain series. 2) Estimated energy consumption data accuracy depends on power supply quantity. 3) Contact trained technicians to perform any repairing/service.

Advanced smartphone control for domestic range.

Control air to air heat pump operation with Panasonic Comfort Cloud plus additional functions only available through the Cloud from wherever and whenever. One user can manage up to 200 units and also set up different user rights. Also, energy monitoring is possible allowing opportunity to learn how to reduce the operating cost even more.



Panasonic

App Store

Google Play

New possibilities, new applications

Families: Different users can be set up, such as each child can manage their own room. In second homes, rooms can be remotely pre-cooled or pre-warmed, or turned off if needed.

Multi tenant owner: The ability to manage up to 200 units with just one smartphone. It allows for quick and efficient maintenance through remote error codes and the knowledge of consumption.

Small and medium sized offices: Owner can control different rooms of the office easily and give unit by unit access to their staff. Also provides information to know where energy might be wasted for heating and cooling and promoting best comfort practices.

Smart control at your fingertips

With Panasonic Comfort Cloud, the user can manage all functions of the heat pump such as nanoe™ X, air flow direction, speed, temperature setting, mode, plus more.





Scalability and users management

Easy to include additional units and locations, as well as the ability to include several users with different access rights. This creates more possibilities to manage the family home, a second house and also provides opportunities for small/medium sized offices or multi-tenant properties.

Energy monitor and statistics

Knowing the energy each unit uses when operating is key to see opportunities to reduce the energy bill. Panasonic Comfort Cloud stores the energy consumption* of each unit, which can then be shown in easy and powerful statistics graphs. This function is available from WKE, VKE, TKE and UKE generation.
With the weekly timer the operation can be adjusted to optimize the usage of the energy.

*Estimated energy consumption data accuracy depends on power supply quality.





Connection Diagram to Panasonic Comfort Cloud App

Indoor Unit



Network

Built-in Wi-Fi in certain models or with optional adaptor CZ-TACG1 connected to port CN-CNT.

Other hardware requirements (purchase and subscribe separately).

Panasonic Cloud Server is designed, operated and managed by Panasonic.

Download free app

Panasonic

Panasonic Comfort Cloud

Compatibility: Built-in Wi-Fi: CS-Z**XKEW, CS-MZ16XKE, CS-XZ**XKEW, CS-Z**VKEW, CS-MZ16VKE, CS-XZ**VKEW, CS-TZ**WKEW and CS-RZ**WKEW. Optional CZ-TACG1 Wi-Fi accessory required: CS-VZ**SKE, CS-FZ**UKE, CS-UZ**VKE, CS-PZ**VKE, CS-FZ**WKE, CZ-UZ**WKE, CS-PZ**WKE, CS-DZ**VKE, CS-Z**TKEA, CS-Z**UFEAW, CS-Z**UB4EAW, CS-Z**UD3EAW, CS-XE**SKEW, CS-E**SKEM-M, CS-TE**TKEW, CS-FE**UKE, CS-BE**TKE, CS-DE**TKE, CS-E**PKEA, CS-E**PB4EA, CS-E**PD3EA.
Remark: indoor temperature display and some special functions are not available through the app for all models. Languages: Available in 19 European languages: Bulgarian, Croatian, Czech, Danish, Deutsch, English, Estonian, Finnish, French, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese, Slovenian, Spanish, Swedish and Turkish.

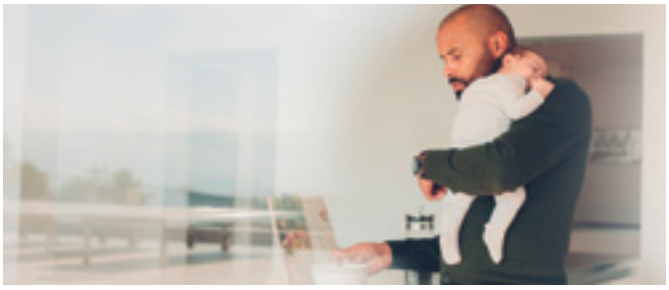
Voice Control. Words do more than actions

Control without boundaries and get hands-free help to fully access the features of your air conditioners. Maximising your cooling comfort is now a breeze with our Network-Enabled air conditioners with Panasonic Comfort Cloud and Voice Control.



1 Turn on/off air conditioner

Convenient control for blissful rest.
Turn on/off AC with ease when preparing a comfortable space for your little ones.



2 Change mode

Extra help when you have a hectic day.
Conveniently change your AC operation mode to cool / heat / auto when your hands are full.



3 Adjust temperature

Easy control for uninterrupted quality time.
Adjust AC temperature to your comfort with a simple voice command.



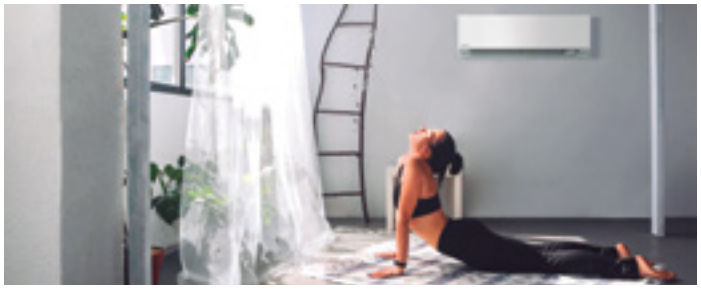
4 Check current status

Hands-free comfort for the whole family.
Easy access for the elderly to check current AC operation status and adjust AC settings.



Get multiple things done with your voice

Simplify your day with your personalised routine by grouping individual actions.





Schedule your routine with your voice.

With the routine function, you can customise voice commands and control multiple voice-controlled devices including our network-enabled air conditioners to help you with your personalised routine.

Example of morning routine.



Example of night routine.



Find out more: [Amazon] https://www.techhive.com/article/3327501/how-to-use-alexa-routines.html

Voice Control with Network-Enabled air conditioners

Functions		When you are home		When away from home
		Remote Control	Voice Control	Comfort Cloud App
Smart control	Power ON/OFF	✔	✔	✔
	Control multiple AC units in 1 location	–	–	✔
	Control multiple units in multiple locations	–	–	✔
	Set up and manage routines	–	✔	–
Smart comfort	Cooling mode	✔	✔	✔
	Heating mode	✔	✔	✔
	Auto mode	✔	✔	✔
	nanoe™ X mode	✔	–	✔
	Summer House mode	✔	–	✔
	Pre-cool	–	–	✔
	Change temperature	✔	✔	✔
Smart efficiency	Analyse energy usage patterns	–	–	✔
	Compare historical usage	–	–	✔
Smart assist	Receive error notifications	–	–	✔
	Assign multiple users		✔	✔
	Check power ON/OFF	✔	✔	✔
	Check current mode	✔	✔	✔
	Check temperature settings	✔	✔	✔
	Check room temperature	✔	✔	✔

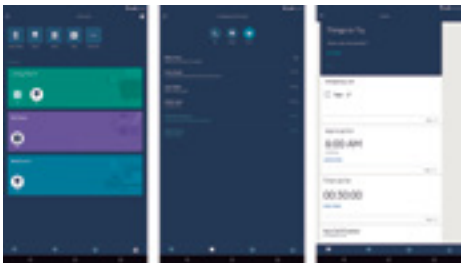
How to setup

To sync with your Voice Assistant, first the AC unit has to be registered in Panasonic Comfort Cloud.

How to sync Comfort Cloud with the Amazon Alexa.

1. Open the Amazon Alexa App.
2. Tap "Devices".
3. Choose "Your Smart Home Skills".
4. Choose "Enable Smart Home Skills".
5. Search for "Comfort Cloud".
6. Insert your "Comfort Cloud" username and password.





Compatible device and browsers as of June 2020

1. Android™ 5.0 Lollipop or above
2. iOS 9.0 or above

Please note:
· This is not a definitive list of all compatible devices, other similar devices which use supported Operating Systems should also work either via dedicated apps. Please note that user experience may vary slightly depending on hardware and software combination
. Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates
· Availability of Voice Assistant services varies depending on country and language
· More information about set up procedures: https://aircon.panasonic.com/connectivity/application.html
· Alexa are compatible with the models shown in pages 122, 123

Control and Connectivity

Panasonic offers its customers cutting-edge technology, specially designed to ensure our air conditioning systems deliver even higher performance.



CZ-TACG1 Network Adaptor (optional)*

- Optional RAC Network Adaptor
- Compact size for easy installation
- Available for built-in or exposed installation depending on model type.

* Functionality varies depending on models. Please contact your local dealers for compatible models.



Specifications

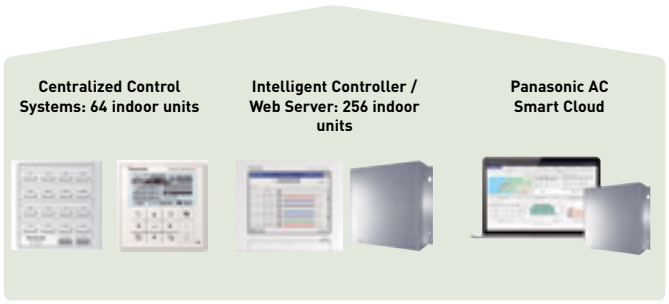
Input Voltage	DC 12V
Power Consumption	Max. 660 mW
Size (H x W x D)	66 x 36 x 12 mm
Mass	Approx. 85g
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4GHz band
Encryption	WPA2-PSK (TKIP/AES)

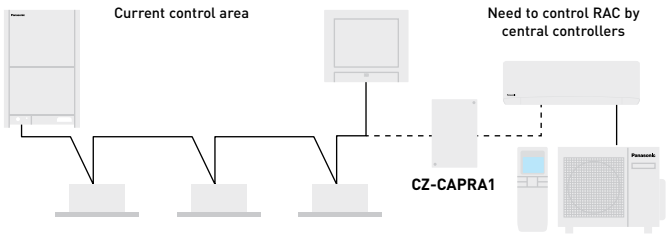
Domestic integration to P-Link - CZ-CAPRA1

Can connect RAC range to P-Link. Full control is now possible.

Integrates any unit in big system control.

- TKEA server room integration
- Small offices with domestic indoors
- Tender for refurbishment (old system Domestic and VRF in one installation)





Current system for PACi / VRF. Central controller can connect to P-Link line to control units directly.

RAC units cannot connect directly to P-Link to be managed by Central Controllers.

It's necessary to have interface between P-Link and RAC protocol to cover basic operating items.

Basic operation items: ON/OFF, Mode select, Temperature setting, Fan speed, Flap setting, Remote control prohibit.
External input: ON/OFF control signal, Abnormal stop signal.
External output for Relay [1]**:** Operation status (ON/OFF), Alarm status output.

1) Because current CN-CNT connector can not provide the power for external output relay, additional Input power for external relay is necessary.

You can properly manage the air conditioning and perform comprehensive monitoring and control, with all of the features the remote controller provides at home, from anywhere in the world thanks to the internet applications Panasonic has created for you.

Connectivity. Control by BMS

Great flexibility for integration into your KNX, Modbus and BACnet projects allows fully bi-directional monitoring and control of all the functioning parameters.

Reference	KNX PAW-AC-KNX-1i	Modbus® PAW-AC-MBS-1	BACnet™ PAW-AC-BAC-1 [1]
Quick installation and possibility of hidden installation	✔	✔	✔
External power not required	✔	✔	✔
Direct connection to the AC indoor unit	✔ (Split or Multi Split)	✔ (Split or Multi Split)	✔ (Split or Multi Split)
Control and monitoring of the internal variables of the indoor unit and error codes and indication	✔ Fully compatible	✔ Fully compatible	✔ Fully compatible
Use the AC ambient temperature or the one measured by external sensor	✔	✔	Only internal temperature
AC unit can be controlled simultaneously by the remote controller of the AC unit and interface devices	✔	✔	✔
Advanced control functions	✔	✔	✔
4 binary inputs. They work as standard interface binary inputs as well as being used to control the AC directly	✔	✘	✘
Total Control and Supervision. Real states of the AC unit's internal variables	✔	✔	✔

1) This interface allows a complete and natural integration of Panasonic air conditioners into either BACnet IP or MS/TP networks. Is a BTL certified device.

PAW-AC-DIO

Dry contact ON/OFF Interface. Panasonic has developed for hotels applications a dry contact PCB which works with Etherea, RE, UE and YE indoor units in order to control simply the unit centrally.

· ON/OFF signal by 3rd party BMS
· PCB connected to CN-RMT port on indoor unit PCB

Easy connectivity

CN-CNT port easy to access in all indoor units, without dismanteling the unit to reach the connector. Can easier connect: Wireless accessory / KNX / Modbus / CZ-TACG1 / CZ-CAPRA1 to integrate to PACi control.



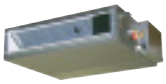


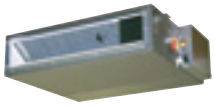


Model name	Interface
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App
CZ-CAPRA1	RAC interface adapter for integration into P-Link, plus external input and alarm/status output
PAW-AC-KNX-1i	This interface can be used with all models which have a CN-CNT connector
PAW-AC-MBS-1	This interface can be used with all models which have a CN-CNT connector

Model name	Interface
PAW-AC-BAC-1	This interface can be used with all models which have a CN-CNT connector
PAW-AC-HEAT-1	Heating only PCB for Etherea, 4 Way 60x60 cassette and Low static pressure hide away
PAW-AC-DIO	This interface can be used with all models which have a CN-RMT connector
PAW-SMSCONTROL	Control of the Etherea, Flagship and Heatcharge by SMS (need additional SIM card)

Domestic air conditioner R32 range

Page	Single split units	2,0 kW	2,5 kW	3,5 kW	4,2 kW	5,0 kW	6,0 kW	7,1 kW
P. 124	Wall-mounted Heatcharge VZ Inverter+ • R32							
			CS-VZ9SKE CU-VZ9SKE	CS-VZ12SKE CU-VZ12SKE				
P. 125	NEW wall-mounted Etherea Inverter+ • R32							
		CS-XZ20XKEW CU-Z20XKE	CS-XZ25XKEW CU-Z25XKE	CS-XZ35XKEW CU-Z35XKE		CS-XZ50XKEW CU-Z50XKE		
		CS-Z20XKEW CU-Z20XKE	CS-Z25XKEW CU-Z25XKE	CS-Z35XKEW CU-Z35XKE	CS-Z42XKEW CU-Z42XKE	CS-Z50XKEW CU-Z50XKE		CS-Z71XKEW CU-Z71XKE
P. 126	Wall-mounted TZ super-compact Inverter • R32							
		CS-TZ20WKEW CU-TZ20WKE	CS-TZ25WKEW CU-TZ25WKE	CS-TZ35WKEW CU-TZ35WKE	CS-TZ42WKEW CU-TZ42WKE	CS-TZ50WKEW CU-TZ50WKE	CS-TZ60WKEW CU-TZ60WKE	CS-TZ71WKEW CU-TZ71WKE
P. 127	Wall-mounted FZ super-compact Inverter • R32							
			CS-FZ25WKE CU-FZ25WKE	CS-FZ35WKE CU-FZ35WKE		CS-FZ50WKE CU-FZ50WKE	CS-FZ60WKE CU-FZ60WKE	
P. 129	Floor console Inverter+ • R32							
			CS-Z25UFEAW CU-Z25UBEA	CS-Z35UFEAW CU-Z35UBEA		CS-Z50UFEAW CU-Z50UBEA		
P. 130	4 Way 60x60 cassette Inverter • R32							
			CS-Z25UB4EAW CZ-BT20EW CU-Z25UBEA	CS-Z35UB4EAW CZ-BT20EW CU-Z35UBEA		CS-Z50UB4EAW CZ-BT20EW CU-Z50UBEA	CS-Z60UB4EAW CZ-BT20EW CU-Z60UBEA	
P. 131	Low static pressure hide-away Inverter • R32							
			CS-Z25UD3EAW CU-Z25UBEA	CS-Z35UD3EAW CU-Z35UBEA		CS-Z50UD3EAW CU-Z50UBEA	CS-Z60UD3EAW CU-Z60UBEA	

Page	Free Multi indoors	1,6 kW	2,0 kW	2,5 kW	3,5 kW	4,2 kW	5,0 kW	6,0 kW	7,1 kW
P. 135	NEW wall-mounted Etherea Inverter+								
			CS-XZ20XKEW	CS-XZ25XKEW	CS-XZ35XKEW		CS-XZ50XKEW		
		CS-MZ16XKE	CS-Z20XKEW	CS-Z25XKEW	CS-Z35XKEW	CS-Z42XKEW	CS-Z50XKEW		CS-Z71XKEW
P. 135	Wall-mounted TZ super-compact Inverter								
		CS-MTZ16WKE	CS-TZ20WKEW	CS-TZ25WKEW	CS-TZ35WKEW	CS-TZ42WKEW	CS-TZ50WKEW	CS-TZ60WKEW	CS-TZ71WKEW
P. 135	Floor console Inverter+								
			CS-MZ20UFEA	CS-Z25UFEAW	CS-Z35UFEAW		CS-Z50UFEAW		
P. 135	4 Way 60x60 cassette Inverter								
			CS-MZ20UB4EA CZ-BT20EW	CS-Z25UB4EAW CZ-BT20EW	CS-Z35UB4EAW CZ-BT20EW		CS-Z50UB4EAW CZ-BT20EW	CS-Z60UB4EAW CZ-BT20EW	
P. 135	Low static pressure hide-away Inverter								
			CS-MZ20UD3EA	CS-Z25UD3EAW	CS-Z35UD3EAW		CS-Z50UD3EAW	CS-Z60UD3EAW	

Page	Free Multi Outdoors	3,2 ~ 6,0 kW	3,2 ~ 6,0 kW	3,2 ~ 7,7 kW	4,5 ~ 9,5 kW	4,5 ~ 11,2 kW	4,5 ~ 11,5 kW	4,5 ~ 14,7 kW	4,5 ~ 18,3 kW
P. 134	Outdoor unit Free Multi System Z • R32	 CU-2Z35TBE	 CU-2Z41TBE	 CU-2Z50TBE	 CU-3Z52TBE	 CU-3Z68TBE	 CU-4Z68TBE	 CU-4Z80TBE	 CU-5Z90TBE





Wall-mounted Heatcharge VZ Inverter+ • R32

- Energy Charge System. Heat storage unit which utilizes non-stop heating and fast heating function
- Econavi Sunlight Detection sensor: Even higher efficiency and great comfort
- nanoe™ technology to improve protection 24/7
- Super Quiet! Only 18 dB(A), equivalent to night-time in the countryside
- Performance tested at -35 °C outdoor temperature

Kit			**KIT-VZ9-SKE**	**KIT-VZ12-SKE**
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,60 - 3,00)	3,50 (0,60 - 4,00)
SEER [1]			**10,50 A+++**	**10,00 A+++**
Pdesign (cooling)		kW	2,50	3,50
Input power cooling	Nominal (Min - Max)	kW	0,43 (0,14 - 0,61)	0,80 (0,14 - 0,98)
Annual energy consumption [3]		kWh/a	83	122
Heating capacity	Nominal (Min - Max)	kW	3,60 (0,60 - 7,80)	4,20 (0,60 - 9,20)
COP [2]		W/W	5,63	5,04
Heating capacity at -7 °C		kW	5,00	5,60
COP at -7 °C [2]		W/W	2,07	2,00
SCOP [1]			**6,20 A+++**	**5,90 A+++**
Pdesign at -10 °C		kW	3,60	4,20
Input power heating	Nominal (Min - Max)	kW	0,64 (0,14 - 2,72)	0,83 (0,14 - 3,16)
Annual energy consumption [3]		kWh/a	812	995
Indoor unit			**CS-VZ9SKE**	**CS-VZ12SKE**
Power source		V	230	230
Recommended fuse		A	16	16
Connection indoor / outdoor		mm²	4 x 1,5	4 x 1,5
Air flow	Cool / Heat (Hi)	m³/min	12,5 / 15,5	12,9 / 15,9
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	44 / 27 / 18	45 / 33 / 18
	Heat (Hi / Lo / Q-Lo)	dB(A)	44 / 26 / 18	45 / 29 / 18
Dimension	H x W x D	mm	295 x 798 x 375	295 x 798 x 375
Net weight		kg	14,5	14,5
Outdoor unit			**CU-VZ9SKE**	**CU-VZ12SKE**
Air flow	Cool / Heat (Hi)	m³/min	33,1 / 33,1	35,4 / 33,9
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	49 / 49	50 / 50
Dimension [5]	H x W x D	mm	630 x 799 x 299	630 x 799 x 299
Net weight		kg	39,5	39,5
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)
Pipe length range		m	3 ~ 15	3 ~ 15
Elevation difference (in/out) [6]		m	12	12
Pipe length for additional gas		m	7,5	7,5
Additional gas amount		g/m	20	20
Refrigerant (R32) / CO_2 Eq.		kg / T	1,05 / 0,70875	1,10 / 0,7425
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-30 ~ +24	-30 ~ +24
Lowest outdoor temperature tested by 3rd party laboratory [7]		°C	-35	-35

Accessories	
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App

Accessories	
CZ-CAPRA1	RAC interface adapter for integration into P-Link
PAW-SMSCONTROL	Control by SMS (need additional SIM card)

1) Energy Label Scale from A+++ to D. 2) EER and COP calculation is based in accordance to EN14511. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit. 7) Tested by 3rd party laboratory, SP, according to EN14511:2013 and SP Method 1721, this temperature is not guaranteed by Factory.

R32 | A+++ 10,50 SEER | A+++ 6,20 SCOP | 38% ECONAVI | INVERTER+ | R2 ROTARY COMPRESSOR | nanoe | 18dB(A) | -35°C HEATING MODE TESTED BY SP | SUMMER HOUSE | R22 R410A R32 R22/R410A RENEWAL | INTEGRATION TO P-LINK | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For KIT-VZ9-SKE. -35 °C HEATING MODE: Heating performance tested at -35 °C by SP, European third party laboratory. INTERNET CONTROL: Optional.



NEW 2021

Silver



nanoe™ X

NEW wall-mounted Etherea Inverter+ • R32

- nanoe™ X technology to improve protection 24/7 (nanoe X Generator Mark 2).
- New sleek and stylish design
- Improved SEER/SCOP to achieve top class energy efficiency
- Aerowings 2.0 for the ultimate comfort
- New easy-to-use remote controller
- Built-in Wi-Fi for instant connectivity via Panasonic Comfort Cloud App
- Compatible with Amazon Alexa
- Chassis and parts designed for easier installation

Kit Silver			**KIT-XZ20-XKE**	**KIT-XZ25-XKE**	**KIT-XZ35-XKE**	**—**	**KIT-XZ50-XKE**	**—**
Kit Pure White Matt			**KIT-Z20-XKE**	**KIT-Z25-XKE**	**KIT-Z35-XKE**	**KIT-Z42-XKE**	**KIT-Z50-XKE**	**KIT-Z71-XKE**
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75 - 2,65)	2,50 (0,85 - 3,50)	3,50 (0,85 - 4,20)	4,20 (0,85 - 5,00)	5,00 (0,98 - 6,00)	7,10 (0,98 - 8,50)
EER [1]	Nominal (Min - Max)	W/W	4,56 (4,69 - 3,96)	4,90 (5,00 - 3,89)	4,12 (4,25 - 3,62)	3,39 (3,62 - 3,18)	3,68 (3,92 - 3,16)	3,17 (2,33 - 2,83)
SEER [2]			**8,10 A++**	**9,40 A+++**	**9,50 A+++**	**7,00 A++**	**8,50 A+++**	**6,50 A++**
Pdesign (cooling)		kW	2,1	2,5	3,5	4,2	5,0	7,1
Input power cooling	Nominal (Min - Max)	kW	0,45 (0,16 - 0,67)	0,51 (0,17 - 0,90)	0,85 (0,20 - 1,16)	1,24 (0,24 - 1,57)	1,36 (0,25 - 1,90)	2,24 (0,42 - 3,00)
Annual energy consumption [3]		kWh/a	91	93	129	210	206	382
Heating capacity	Nominal (Min - Max)	kW	2,80 (0,75 - 4,00)	3,40 (0,80 - 4,80)	4,00 (0,80 - 5,50)	5,30 (0,80 - 6,80)	5,80 (0,98 - 8,00)	8,20 (0,98 - 10,20)
Heating capacity at -7 °C		kW	2,38	2,80	3,20	4,11	4,80	6,31
COP [1]	Nominal (Min - Max)	W/W	4,52 (4,69 - 4,26)	4,86 (5,00 - 4,07)	4,44 (4,44 - 3,77)	3,68 (4,21 - 3,66)	4,14 (4,26 - 3,35)	3,69 (2,45 - 3,29)
SCOP [2]			**4,80 A++**	**5,20 A+++**	**5,20 A+++**	**4,20 A+**	**4,80 A++**	**4,20 A+**
Pdesign at -10 °C		kW	2,1	2,4	2,8	3,6	4,2	5,5
Input power heating	Nominal (Min - Max)	kW	0,62 (0,16 - 0,94)	0,70 (0,16 - 1,18)	0,90 (0,18 - 1,46)	1,44 (0,19 - 1,86)	1,40 (0,23 - 2,39)	2,22 (0,40 - 3,10)
Annual energy consumption [3]		kWh/a	613	646	754	1200	1225	1833
Indoor unit Silver			**CS-XZ20XKEW**	**CS-XZ25XKEW**	**CS-XZ35XKEW**	**—**	**CS-XZ50XKEW**	**—**
Indoor unit Pure White Matt			**CS-Z20XKEW**	**CS-Z25XKEW**	**CS-Z35XKEW**	**CS-Z42XKEW**	**CS-Z50XKEW**	**CS-Z71XKEW**
Power source		V	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20
Connection indoor / outdoor		mm²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Air flow	Cool / Heat	m³/min	11,7 / 13,0	12,7 / 14,1	12,7 / 14,7	14,4 / 15,4	17,4 / 19,1	19,0 / 19,9
Moisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8	4,1
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	37 / 24 / 19	39 / 25 / 19	42 / 28 / 19	43 / 31 / 25	44 / 37 / 30	47 / 38 / 30
	Heat (Hi / Lo / Q-Lo)	dB(A)	38 / 25 / 19	41 / 27 / 19	43 / 33 / 19	43 / 35 / 29	44 / 37 / 30	47 / 38 / 30
Dimension	H x W x D	mm	295 x 870 x 229	295 x 870 x 229	295 x 870 x 229	295 x 870 x 229	295 x 1040 x 244	295 x 1040 x 244
Net weight		kg	10	10	11	10	12	14
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**CU-Z20XKE**	**CU-Z25XKE**	**CU-Z35XKE**	**CU-Z42XKE**	**CU-Z50XKE**	**CU-Z71XKE**
Air flow	Cool / Heat	m³/min	27,4 / 26,7	28,7 / 27,2	29,8 / 30,6	29,8 / 30,9	39,8 / 36,9	44,7 / 45,8
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	49 / 51	47 / 47	52 / 54
Dimension [5]	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	695 x 875 x 320	695 x 875 x 320
Net weight		kg	25	27	30	30	40	50
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 30	3 ~ 30
Elevation difference (in/out) [6]		m	15	15	15	15	15	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5	7,5	10
Additional gas amount		g/m	10	10	10	10	15	25
Refrigerant (R32) / CO_2 Eq.		kg / T	0,67 / 0,45	0,80 / 0,54	0,89 / 0,60	0,95 / 0,64	1,13 / 0,76	1,35 / 0,91
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-CAPRA1	RAC interface adapter for integration into P-Link
PAW-SMSCONTROL	Control by SMS (need additional SIM card)

Accessories	
CZ-RD514C	Wired remote controller for wall-mounted and floor console

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit.



SEER and SCOP: For KIT-XZ35-XKE and KIT-Z35-XKE. SUPER QUIET: For KIT-XZ20-XKE, KIT-XZ25-XKE, KIT-XZ35-XKE, KIT-Z20-XKE, KIT-Z25-XKE and KIT-Z35-XKE. INTERNET CONTROL: Built-in Wi-Fi.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



GOOD DESIGN



Wall-mounted TZ super-compact • R32

- Compact and elegant design with only 779 mm wide
- Built-in Wi-Fi for instant connectivity via Panasonic Comfort Cloud App
- Compatible with Amazon Alexa
- Stylish Sky remote controller
- Cleaner air with PM2,5 filter
- Super Quiet! Only 20 dB(A)
- Aerowings to control air draft direction
- High energy savings

Kit			KIT-TZ20-WKE	KIT-TZ25-WKE	KIT-TZ35-WKE	KIT-TZ42-WKE	KIT-TZ50-WKE	KIT-TZ60-WKE	KIT-TZ71-WKE
Cooling capacity	Nominal (Min - Max)	kW	2,00 (0,75 - 2,40)	2,50 (0,85 - 3,00)	3,50 (0,85 - 3,90)	4,20 (0,85 - 4,60)	5,00 (0,98 - 5,60)	6,00 (0,98 - 6,60)	7,10 (0,98 - 8,20)
EER [1]	Nominal (Min - Max)	W/W	4,08 (4,17 - 4,00)	3,85 (4,05 - 3,41)	3,57 (3,62 - 3,36)	3,36 (3,62 - 2,80)	3,13 (3,92 - 2,95)	3,24 (3,92 - 2,87)	3,17 (2,33 - 2,98)
SEER [2]			**7,00 A++**	**7,00 A++**	**6,80 A++**	**6,40 A++**	**6,90 A++**	**6,80 A++**	**6,20 A++**
Pdesign (cooling)		kW	2,00	2,50	3,50	4,20	5,00	6,00	7,10
Input power cooling	Nominal (Min - Max)	kW	0,49 (0,18 - 0,60)	0,65 (0,21 - 0,88)	0,98 (0,24 - 1,16)	1,25 (0,24 - 1,64)	1,60 (0,25 - 1,90)	1,85 (0,25 - 2,30)	2,24 (0,42 - 2,75)
Annual energy consumption [3]		kWh/a	100	125	180	230	254	309	401
Heating capacity	Nominal (Min - Max)	kW	2,70 (0,70 - 3,60)	3,30 (0,80 - 4,10)	4,00 (0,80 - 5,10)	5,00 (0,80 - 6,80)	5,80 (0,98 - 7,50)	7,00 (0,98 - 8,20)	8,60 (0,98 - 9,90)
Heating capacity at -7 °C		kW	2,14	2,70	3,30	3,90	4,62	4,90	6,13
COP [1]	Nominal (Min - Max)	W/W	4,15 (4,24 - 3,53)	4,18 (4,21 - 3,66)	4,04 (4,10 - 3,70)	3,73 (4,10 - 3,33)	3,41 (4,67 - 3,26)	3,68 (4,67 - 3,57)	3,51 (2,45 - 3,47)
SCOP [2]			**4,60 A++**	**4,60 A++**	**4,60 A++**	**4,00 A+**	**4,50 A+**	**4,30 A+**	**4,00 A+**
Pdesign at -10 °C		kW	1,90	2,40	2,80	3,60	4,00	4,40	5,50
Input power heating	Nominal (Min - Max)	kW	0,65 (0,17 - 1,02)	0,79 (0,19 - 1,12)	0,99 (0,20 - 1,38)	1,34 (0,20 - 2,04)	1,70 (0,21 - 2,30)	1,90 (0,21 - 2,30)	2,45 (0,40 - 2,85)
Annual energy consumption [3]		kWh/a	578	730	852	1260	1244	1433	1925
Indoor unit			**CS-TZ20WKEW**	**CS-TZ25WKEW**	**CS-TZ35WKEW**	**CS-TZ42WKEW**	**CS-TZ50WKEW**	**CS-TZ60WKEW**	**CS-TZ71WKEW**
Power source		V	230	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20	20
Connection indoor / outdoor		mm²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5	4 x 2,5
Air flow	Cool / Heat	m³/min	10,3 / 10,8	11,0 / 11,5	11,8 / 12,3	12,5 / 13,2	12,5 / 13,2	20,9 / 21,9	22,1 / 22,9
Moisture removal volume		L/h	1,3	1,5	2,0	2,4	2,8	3,3	4,1
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	37 / 25 / 20	40 / 26 / 20	42 / 30 / 20	44 / 31 / 29	44 / 37 / 33	45 / 37 / 34	47 / 38 / 35
	Heat (Hi / Lo / Q-Lo)	dB(A)	38 / 26 / 22	40 / 27 / 22	42 / 33 / 22	44 / 35 / 28	44 / 37 / 33	45 / 37 / 34	47 / 38 / 35
Dimension	H x W x D	mm	290 x 779 x 209	290 x 779 x 209	290 x 779 x 209	290 x 779 x 209	290 x 779 x 209	302 x 1102 x 244	302 x 1102 x 244
Net weight		kg	8	8	8	8	8	13	13
Outdoor unit			**CU-TZ20WKE**	**CU-TZ25WKE**	**CU-TZ35WKE**	**CU-TZ42WKE**	**CU-TZ50WKE**	**CU-TZ60WKE**	**CU-TZ71WKE**
Air flow	Cool / Heat	m³/min	29,7 / 29,7	30,0 / 28,9	28,7 / 29,7	30,4 / 30,8	32,7 / 32,7	34,0 / 34,0	44,7 / 45,9
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	46 / 47	47 / 48	48 / 50	49 / 51	48 / 49	49 / 51	52 / 54
Dimension [5]	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320
Net weight		kg	24	25	31	31	36	36	50
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 20	3 ~ 30	3 ~ 30
Elevation difference (in/out) [6]		m	15	15	15	15	15	15	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5	7,5	10	10
Additional gas amount		g/m	10	10	10	10	15	15	25
Refrigerant (R32) / CO_2 Eq.		kg / T	0,54 / 0,365	0,67 / 0,452	0,77 / 0,520	0,79 / 0,533	1,14 / 0,770	1,22 / 0,824	1,32 / 0,891
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-CAPRA1	RAC interface adapter for integration into P-Link

Accessories	
CZ-RD514C	Wired remote controller for wall-mounted and floor console

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit.



SEER and SCOP: For KIT-TZ20-WKE and KIT-TZ25-WKE. SUPER QUIET: For KIT-TZ20-WKE, KIT-TZ25-WKE and KIT-TZ35-WKE. INTERNET CONTROL: Built-in Wi-Fi.



Wall-mounted FZ super-compact Inverter • R32

- Compact design with only 779 mm wide
- Cleaner air with PM2,5 Filter
- Super Quiet! Only 20 dB(A)
- Aerowings to control air draft direction
- High energy savings
- Cooling even at -10 °C
- Optional internet and voice control

Kit			**KIT-FZ25-WKE**	**KIT-FZ35-WKE**	**KIT-FZ50-WKE**	**KIT-FZ60-WKE**
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,40 (0,85 - 3,90)	5,00 (0,98 - 5,40)	6,00 (0,98 - 6,50)
EER [1]	Nominal (Min - Max)	W/W	3,68 (4,05 - 3,33)	3,18 (3,54 - 3,05)	3,03 (3,92 - 2,90)	3,03 (3,92 - 2,83)
SEER [2]			**6,20 A++**	**6,10 A++**	**6,50 A++**	**6,30 A++**
Pdesign (cooling)		kW	2,50	3,40	5,00	6,00
Input power cooling	Nominal (Min - Max)	kW	0,68 (0,21 - 0,90)	1,07 (0,24 - 1,28)	1,65 (0,25 - 1,86)	1,98 (0,25 - 2,30)
Annual energy consumption [3]		kWh/a	141	195	269	333
Heating capacity	Nominal (Min - Max)	kW	3,15 (0,80 - 3,60)	3,84 (0,80 - 4,40)	5,40 (0,98 - 7,50)	6,80 (0,98 - 8,00)
Heating capacity at -7 °C		kW	2,14	2,60	4,58	5,10
COP [1]	Nominal (Min - Max)	W/W	4,04 (4,21 - 3,46)	3,66 (4,10 - 3,41)	3,42 (4,67 - 3,06)	3,15 (4,26 - 3,02)
SCOP [2]			**4,20 A+**	**4,20 A+**	**4,10 A+**	**4,00 A+**
Pdesign at -10 °C		kW	1,90	2,40	4,00	4,40
Input power heating	Nominal (Min - Max)	kW	0,78 (0,19 - 1,04)	1,05 (0,20 - 1,29)	1,58 (0,21 - 2,45)	2,16 (0,23 - 2,65)
Annual energy consumption [3]		kWh/a	633	800	1366	1540
Indoor unit			**CS-FZ25WKE**	**CS-FZ35WKE**	**CS-FZ50WKE**	**CS-FZ60WKE**
Power source		V	230	230	230	230
Recommended fuse		A	16	16	16	20
Connection indoor / outdoor		mm²	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Air flow	Cool / Heat	m³/min	10,5 / 11,1	10,8 / 11,3	12,5 / 13,2	12,7 / 13,6
Moisture removal volume		L/h	1,5	2,0	2,8	3,3
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	37 / 26 / 20	38 / 30 / 20	44 / 37 / 34	45 / 37 / 34
	Heat (Hi / Lo / Q-Lo)	dB(A)	37 / 27 / 24	38 / 33 / 25	44 / 37 / 34	45 / 37 / 34
Dimension	H x W x D	mm	290 x 779 x 209	290 x 779 x 209	290 x 779 x 209	290 x 779 x 209
Net weight		kg	8	8	8	9
Outdoor unit			**CU-FZ25WKE**	**CU-FZ35WKE**	**CU-FZ50WKE**	**CU-FZ60WKE**
Air flow	Cool / Heat	m³/min	30,4 / 30,4	31,1 / 31,1	32,7 / 32,7	42,6 / 41,5
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	48 / 49	48 / 50	48 / 49	50 / 50
Dimension [5]	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	619 x 824 x 299	695 x 875 x 320
Net weight		kg	24	25	36	43
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 15	3 ~ 30
Elevation difference (in/out) [6]		m	15	15	15	15
Pipe length for additional gas		m	7,5	7,5	7,5	7,5
Additional gas amount		g/m	10	10	15	15
Refrigerant (R32) / CO_2 Eq,		kg / T	0,54 / 0,365	0,67 / 0,452	1,14 / 0,770	1,11 / 0,749
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App
CZ-CAPRA1	RAC interface adapter for integration into P-Link

Accessories	
CZ-RD514C	Wired remote controller for wall-mounted and floor console

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit.

R32 | A++ 6,50 SEER | A+ 4,10 SCOP | INVERTER | R2 ROTARY COMPRESSOR | PM2,5 FILTER | 20dB(A) | AEROWINGS | R22 R410A R32 R22/R410A RENEWAL | INTEGRATION TO P-LINK | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For KIT-FZ50-WKE. SUPER QUIET: For KIT-FZ25-WKE and KIT-FZ35-WKE. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Floor console Inverter+

Built-in nanoe X Generator Mark 1.





Floor console Inverter+ • R32

- nanoe™ X technology to improve protection 24/7 (nanoe X Generator Mark 1)
- Stylish Sky remote controller
- A breakthrough design that integrates perfectly with the most modern environments
- High energy efficiency class A++ SEER and A++ SCOP
- Optional internet and voice control

Kit			KIT-Z25-UFE	KIT-Z35-UFE	KIT-Z50-UFE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,40)	3,50 (0,85 - 3,80)	5,00 (0,90 - 5,70)
EER [1]	Nominal (Min - Max)	W/W	4,81 (3,54 - 3,78)	4,07 (3,54 - 3,73)	3,60 (3,53 - 3,15)
SEER [2]			**7,90 A++**	**8,10 A++**	**6,70 A++**
Pdesign (cooling)		kW	2,50	3,50	5,00
Input power cooling	Nominal (Min - Max)	kW	0,52 (0,24 - 0,90)	0,86 (0,24 - 1,02)	1,39 (0,26 - 1,81)
Annual energy consumption [3]		kWh/a	111	151	261
Heating capacity	Nominal (Min - Max)	kW	3,40 (0,85 - 5,00)	4,30 (0,85 - 6,00)	5,80 (0,90 - 8,10)
Heating capacity at -7 °C		kW	2,88	3,37	5,03
COP [1]	Nominal (Min - Max)	W/W	4,47 (3,54 - 3,70)	3,98 (3,54 - 3,43)	3,74 (3,46 - 3,12)
SCOP [2]			**4,60 A++**	**4,60 A++**	**4,30 A+**
Pdesign at -10 °C		kW	2,70	3,20	4,40
Input power heating	Nominal (Min - Max)	kW	0,76 (0,24 - 1,35)	1,08 (0,24 - 1,75)	1,55 (0,26 - 2,60)
Annual energy consumption [3]		kWh/a	822	974	1433
Indoor unit			**CS-Z25UFEAW**	**CS-Z35UFEAW**	**CS-Z50UFEAW**
Air flow	Cool / Heat	m³/min	9,6 / 9,9	9,9 / 10,1	11,6 / 13,2
Moisture removal volume		L/h	1,5	2,0	2,8
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	38 / 25 / 20	39 / 26 / 20	44 / 31 / 27
	Heat (Hi / Lo / Q-Lo)	dB(A)	38 / 25 / 19	39 / 26 / 19	46 / 33 / 29
Dimension	H x W x D	mm	600 x 750 x 207	600 x 750 x 207	600 x 750 x 207
Net weight		kg	13	13	13
nanoe X Generator			Mark 1	Mark 1	Mark 1
Outdoor unit			**CU-Z25UBEA**	**CU-Z35UBEA**	**CU-Z50UBEA**
Power source		V	230	230	230
Recommended fuse		A	16	16	16
Connection indoor / outdoor		mm²	—	—	—
Air flow	Cool / Heat	m³/min	28,7 / 27,2	34,3 / 33,5	39,7 / 38,6
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	46 / 47	48 / 48	48 / 48
Dimension [5]	H x W x D	mm	542 x 780 x 289	619 x 824 x 299	695 x 875 x 320
Net weight		kg	33	35	43
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)
Pipe length range		m	3 ~ 20	3 ~ 20	3 ~ 30
Elevation difference (in/out) [6]		m	15	15	20
Pipe length for additional gas		m	7,5	7,5	7,5
Additional gas amount		g/m	10	10	15
Refrigerant (R32) / CO_2 Eq.		kg / T	0,88 / 0,594	0,93 / 0,628	1,13 / 0,763
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App
CZ-CAPRA1	RAC interface adapter for integration into P-Link

Accessories	
CZ-RD514C	Wired remote controller for wall-mounted and floor console

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the units shows the value measured of a position 1 m in front of the main body and 1 m above floor. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit.

R32 | A++ 8,10 SEER | A++ 4,60 SCOP | INVERTER+ | R2 ROTARY COMPRESSOR | nanoeX | 20dB(A) | -10°C COOLING MODE | -15°C HEATING MODE | R22/R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For KIT-Z35-UFE. SUPER QUIET: For KIT-Z25-UFE and KIT-Z35-UFE. INTERNET CONTROL: Optional. iF DESIGN AWARD 2019: Floor console awarded with the prestigious IF Design Award 2019.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



MORE 4 WAY 60x60 CASSETTES IN PACi SECTION

RAL9010 panel for 4 way 60x60 cassette.
CZ-BT20EW



4 Way 60x60 cassette Inverter • R32

- Cassettes can be controlled by KNX and Modbus
- Designed for easy installation in the standard european 60x60 ceiling grid
- Ultra compact outdoor units for easy installation
- High pressure selector in case of high ceilings (higher than 2,7 m)
- Drain pump included (maximum 750 mm high)
- Air fresh entry available on the cassette

Kit*			**KIT-Z25-UB4**	**KIT-Z35-UB4**	**KIT-Z50-UB4**	**KIT-Z60-UB4**
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,20)	3,50 (0,85 - 4,00)	5,00 (0,90 - 5,80)	6,00 (0,90 - 6,35)
EER [1]	Nominal (Min - Max)	W/W	4,55 (3,54 - 3,90)	3,89 (3,54 - 3,39)	3,25 (3,53 - 3,09)	2,93 (3,53 - 2,89)
SEER [2]			**6,30 A++**	**6,50 A++**	**6,40 A++**	**6,20 A++**
Pdesign (cooling)		kW	2,50	3,50	5,00	6,00
Input power cooling	Nominal (Min - Max)	kW	0,55 (0,24 - 0,82)	0,90 (0,24 - 1,18)	1,54 (0,26 - 1,88)	2,05 (0,26 - 2,20)
Annual energy consumption [3]		kWh/a	139	188	273	339
Heating capacity	Nominal (Min - Max)	kW	3,20 (0,85 - 4,80)	4,50 (0,85 - 5,60)	5,60 (0,90 - 7,10)	7,00 (0,90 - 8,00)
Heating capacity at -7 °C		kW	2,88	3,37	4,40	5,10
COP [1]	Nominal (Min - Max)	W/W	4,05 (3,70 - 3,64)	3,31 (3,70 - 3,20)	3,03 (3,46 - 2,95)	2,92 (3,46 - 2,91)
SCOP [2]			**4,30 A+**	**4,20 A+**	**4,30 A+**	**4,20 A+**
Pdesign at -10 °C		kW	2,70	3,00	3,80	4,00
Input power heating	Nominal (Min - Max)	kW	0,79 (0,23 - 1,32)	1,36 (0,23 - 1,75)	1,85 (0,26 - 2,41)	2,40 (0,26 - 2,75)
Annual energy consumption [3]		kWh/a	879	1000	1237	1333
Indoor unit			**CS-Z25UB4EAW**	**CS-Z35UB4EAW**	**CS-Z50UB4EAW**	**CS-Z60UB4EAW**
Panel			**CZ-BT20EW**	**CZ-BT20EW**	**CZ-BT20EW**	**CZ-BT20EW**
Air flow	Cool / Heat	m³/min	10,5 / 10,8	10,5 / 10,8	11,5 / 11,8	12,4 / 13,5
Moisture removal volume		L/h	1,5	2,0	2,8	3,3
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	34 / 25 / 22	34 / 26 / 23	37 / 28 / 25	42 / 32 / 29
	Heat (Hi / Lo / Q-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	38 / 29 / 26	43 / 32 / 29
Dimension (H x W x D)	Indoor	mm	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575
	Panel	mm	51 x 700 x 700	51 x 700 x 700	51 x 700 x 700	51 x 700 x 700
Net weight	Indoor / Panel	kg	18 / 2,5	18 / 2,5	18 / 2,5	18 / 2,5
Outdoor unit			**CU-Z25UBEA**	**CU-Z35UBEA**	**CU-Z50UBEA**	**CU-Z60UBEA**
Power source		V	230	230	230	230
Recommended fuse		A	—	—	—	—
Connection indoor / outdoor		mm²	—	—	—	—
Air flow	Cool / Heat	m³/min	28,7 / 27,2	34,3 / 33,5	39,7 / 38,6	42,6 / 41,5
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	46 / 47	48 / 48	48 / 48	49 / 50
Dimension [5]	H x W x D	mm	542 x 780 x 289	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320
Net weight		kg	33	35	43	43
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)
Pipe length range		m	3 ~ 20	3 ~ 20	3 ~ 30	3 ~ 30
Elevation difference (in/out) [6]		m	15	15	20	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5
Additional gas amount		g/m	10	10	15	15
Refrigerant (R32) / CO_2 Eq.		kg / T	0,88 / 0,594	0,93 / 0,628	1,13 / 0,763	1,13 / 0,763
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

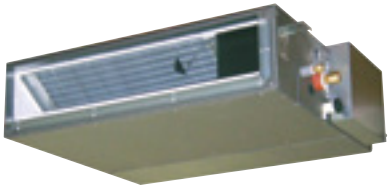
Accessories	
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App

Accessories	
CZ-CAPRA1	RAC interface adapter for integration into P-Link
CZ-RD52CP	Wired remote controller for cassette

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1,5 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit. * This product will be discontinued in Autumn 2021.

R32 | A++ 6,50 SEER | A+ 4,20 SCOP | INVERTER | R2 ROTARY COMPRESSOR | 22dB(A) | -10°C COOLING MODE | -15°C HEATING MODE | R22 R410A → R32 R22/R410A RENEWAL | INTEGRATION TO P-LINK | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For KIT-Z35-UB4. SUPER QUIET: For KIT-Z25-UB4. INTERNET CONTROL: Optional.





MORE DUCT TYPE SOLUTIONS IN PACi SECTION

Optional wireless control kit.
CZ-RL511D





Low static pressure hide-away Inverter • R32

- Duct type can be controlled by KNX and Modbus
- Eco mode for 20 % energy saving
- Extremely compact indoor units without losing static pressure (only 200 mm high)
- Weekly timer, 42 settings per week
- Easy check mode for failure detection
- Drain pump included

Kit			**KIT-Z25-UD3**	**KIT-Z35-UD3**	**KIT-Z50-UD3**	**KIT-Z60-UD3**
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,20)	3,50 (0,85 - 4,00)	5,10 (0,90 - 5,70)	6,00 (0,90 - 6,50)
EER [1]	Nominal (Min - Max)	W/W	4,31 (3,54 - 3,76)	3,85 (3,54 - 3,36)	3,27 (3,53 - 3,20)	2,94 (3,53 - 2,83)
SEER [2]			**5,90 A+**	**5,80 A+**	**5,90 A+**	**5,60 A+**
Pdesign (cooling)		kW	2,50	3,50	5,10	6,00
Input power cooling	Nominal (Min - Max)	kW	0,58 (0,24 - 0,85)	0,91 (0,24 - 1,19)	1,56 (0,26 - 1,78)	2,04 (0,26 - 2,30)
Annual energy consumption [3]		kWh/a	148	211	303	375
Heating capacity	Nominal (Min - Max)	kW	3,20 (0,85 - 4,60)	4,20 (0,85 - 5,10)	6,10 (0,90 - 7,20)	7,00 (0,90 - 8,00)
Heating capacity at -7 °C		kW	2,60	3,00	4,50	5,10
COP [1]	Nominal (Min - Max)	W/W	4,00 (3,70 - 3,68)	3,82 (3,70 - 3,59)	3,35 (3,46 - 3,27)	3,24 (3,46 - 3,08)
SCOP [2]			**4,20 A+**	**4,10 A+**	**4,10 A+**	**4,10 A+**
Pdesign at -10 °C		kW	2,60	2,80	4,00	4,60
Input power heating	Nominal (Min - Max)	kW	0,80 (0,23 - 1,25)	1,10 (0,23 - 1,42)	1,82 (0,26 - 2,20)	2,16 (0,26 - 2,60)
Annual energy consumption [3]		kWh/a	867	956	1366	1571
Indoor unit			**CS-Z25UD3EAW**	**CS-Z35UD3EAW**	**CS-Z50UD3EAW**	**CS-Z60UD3EAW**
External static pressure [4]	Min - Max	Pa	15 - 45	15 - 45	15 - 50	15 - 50
Air flow	Cool / Heat	m³/min	10,5 / 10,5	11,2 / 11,2	15,3 / 15,3	15,7 / 15,7
Moisture removal volume		L/h	1,5	2,0	2,8	3,3
Sound pressure [5]	Cool (Hi / Lo / Q-Lo)	dB(A)	33 / 27 / 24	33 / 27 / 24	39 / 29 / 26	41 / 30 / 27
	Heat (Hi / Lo / Q-Lo)	dB(A)	35 / 27 / 24	35 / 27 / 24	39 / 30 / 27	41 / 32 / 29
Dimension	H x W x D	mm	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640
Net weight		kg	19	19	19	19
Outdoor unit			**CU-Z25UBEA**	**CU-Z35UBEA**	**CU-Z50UBEA**	**CU-Z60UBEA**
Power source		V	230	230	230	230
Recommended fuse		A	16	16	16	—
Connection indoor / outdoor		mm²	4 x 1,5 ~ 2,5	4 x 1,5 ~ 2,5	4 x 1,5 ~ 2,5	—
Air flow	Cool / Heat	m³/min	28,7 / 27,2	34,3 / 33,5	39,7 / 38,6	42,6 / 41,5
Sound pressure [5]	Cool / Heat (Hi)	dB(A)	46 / 47	48 / 48	48 / 48	49 / 50
Dimension [6]	H x W x D	mm	542 x 780 x 289	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320
Net weight		kg	33	35	43	43
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)
Pipe length range		m	3 ~ 20	3 ~ 20	3 ~ 30	3 ~ 30
Elevation difference (in/out) [7]		m	15	15	20	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5
Additional gas amount		g/m	10	10	15	15
Refrigerant (R32) / CO_2 Eq.		kg / T	0,88 / 0,594	0,93 / 0,628	1,13 / 0,763	1,13 / 0,763
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App

Accessories	
CZ-CAPRA1	RAC interface adapter for integration into P-Link
CZ-RL511D	Optional wireless control kit

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The specification listed on the table indicates values under the condition of 25 Pa (2,5 mmAq) which are applied for factory default setting. Change switch on PCB from Hi to S-Hi to have more than 6,0 mmAq. 5) The sound pressure of the indoor unit shows the value measured of a position of 1,5 m below the unit with 1 m duct on the suction side and 2 m duct on the discharge side. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. 6) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port. 7) When installing the outdoor unit at a higher position than the indoor unit.



SEER and SCOP: For KIT-Z25-UD3. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Multi Split and Free Multi System



If air conditioning requirements exceed the ambit of a single room, Panasonic offers an extensive range of possibilities with up to 5 indoor units connected to a single outdoor unit.

Panasonic offers widest range in Multi Split systems

Two different ranges of Multi split outdoor units, to meet the needs of your project. From 3,5 to 9,0 kW, up to 5 indoor units connectable to a single outdoor unit.

Free Multi Z
Full flexibility up to 9,0 kW and up to 5 ports with wide range of indoor units including high performance Etherea indoor units, reaching up to A+++ / A++

				Indoor units				
Line up	**Capacities**	**Indoor unit ports**	**Efficiency up to**	**Etherea**	**TZ super-compact**	**Floor console**	**Cassette**	**Hide-away**
Multi Z	8 units (3,5 ~ 9,0 kW)	2~5	**A+++ / A++**	Yes	Yes	Yes	Yes	Yes

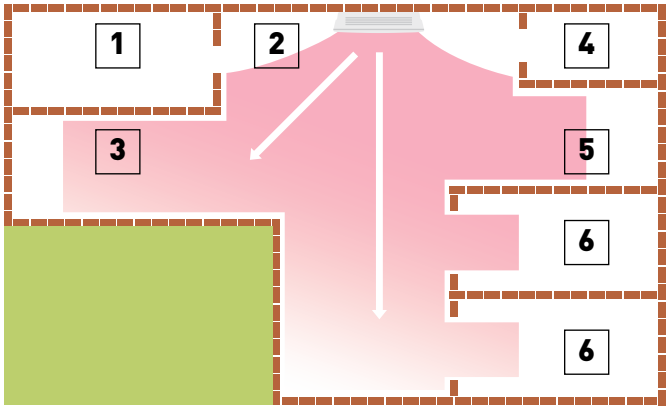
Multi Split solutions

Day and Night	Simultaneous
Ideal for 2 day and night areas. Simultaneous use possible.	When indoor units are most time working at same time.

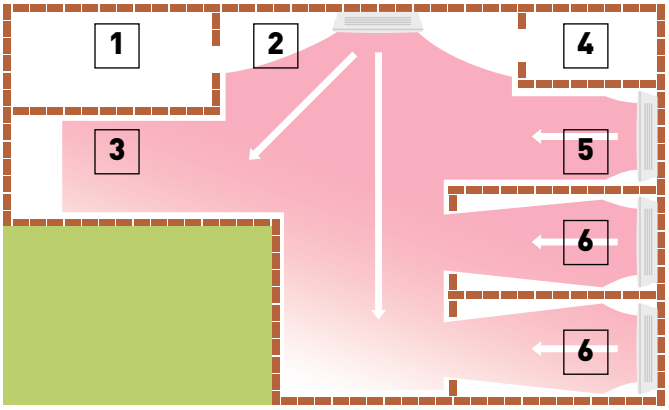
Why a Multi Split is better than several separate split units

Up to 5 indoor units with a single outdoor unit.
- Just one compact outdoor unit
- Increased comfort in the house since every room has its own indoor unit for heating or cooling
- Much more powerful than a single split
- More efficient since the units are always operating at full capacity
- You can connect all types of indoor units, such as wall types and consoles, depending on what suits your house best

Solution with single split.
One indoor unit is connected to one outdoor unit. The indoor unit is placed in the main hallway and heats the entire house. Certain rooms may not be perfectly heated, which causes inadequate comfort.



Solution with Multi Split.
With one outdoor unit, you can connect up to five indoor units. There is one indoor unit per room or area. It gives an extreme increase in comfort levels. On the roof, there is only one outdoor unit.



1. Laundry room. 2. Entrance. 3. Kitchen/dining area. 4. Bathroom. 5. Living room. 6. Bedroom.



SEE THE COMBINATIONS TABLES

R32 · INVERTER+ · R2 ROTARY COMPRESSOR · -15°C HEATING MODE · R22 R410A → R32 R22/R410A RENEWAL · 5 YEARS COMPRESSOR WARRANTY

Outdoor unit Free Multi System Z • R32

Indoor nominal capacity (Min - Max)			3,2 ~ 6,0 kW	3,2 ~ 6,0 kW	3,2 ~ 7,7 kW	4,5 ~ 9,5 kW	4,5 ~ 11,2 kW	4,5 ~ 11,5 kW	4,5 ~ 14,7 kW	4,5 ~ 18,3 kW
Unit			**CU-2Z35TBE**	**CU-2Z41TBE**	**CU-2Z50TBE**	**CU-3Z52TBE**	**CU-3Z68TBE**	**CU-4Z68TBE**	**CU-4Z80TBE**	**CU-5Z90TBE**
Cooling capacity	Nom. (Min - Max)	kW	3,50 (1,50 - 4,50)	4,10 (1,50 - 5,20)	5,00 (1,50 - 5,40)	5,20 (1,80 - 7,30)	6,80 (1,90 - 8,00)	6,80 (1,90 - 8,80)	8,00 (3,00 - 9,20)	9,00 (2,90 - 11,50)
EER [1]	Nom. (Min - Max)	W/W	4,86 (6,00 - 4,09)	4,56 (6,00 - 3,80)	4,24 (6,00 - 3,62)	4,77	3,66 (7,04 - 3,38)	4,39 (5,59 - 3,56)	4,04 (5,66 - 3,21)	4,09 (5,27 - 2,98)
SEER [2]			**8,50 A+++**	**8,50 A+++**	**8,50 A+++**	**8,50 A+++**	**8,00 A++**	**8,00 A++**	**7,90 A++**	**8,50 A+++**
Pdesign (cooling)		kW	3,50	4,10	5,00	5,20	6,80	6,80	8,00	9,00
Input power cooling	Nom. (Min - Max)	kW	0,72 (0,25 - 1,10)	0,90 (0,25 - 1,37)	1,18 (0,25 - 1,49)	1,09 (0,36 - 2,18)	1,86 (0,27 - 2,37)	1,55 (0,34 - 2,47)	1,98 (0,53 - 2,87)	2,20 (0,55 - 3,86)
Annual energy consumption [3]		kWh/a	144	169	206	214	298	298	990	1100
Heating capacity	Nom. (Min - Max)	kW	4,20 (1,10 - 5,60)	4,60 (1,10 - 7,00)	5,60 (1,10 - 7,20)	6,80 (1,60 - 8,30)	8,50 (3,30 - 10,40)	8,50 (3,00 - 10,60)	9,40 (4,20 - 10,60)	10,40 (3,40 - 14,50)
Heating capacity at -7 °C		kW	—	—	—	3,95	4,45	4,45	—	—
COP [1]	Nom. (Min - Max)	W/W	4,88 (5,24 - 4,18)	4,79 (5,24 - 3,91)	4,63 (5,24 - 4,00)	4,63 (5,00 - 3,82)	3,95 (5,32 - 3,64)	4,47 (5,17 - 3,96)	4,63 (6,00 - 3,46)	4,84 (6,42 - 3,42)
SCOP [2]			**4,60 A++**	**4,60 A++**	**4,60 A++**	**4,20 A+**	**4,20 A+**	**4,20 A+**	**4,70 A++**	**4,68 A++**
Pdesign at -10 °C		kW	3,20	3,50	4,20	5,00	5,20	5,80	6,80	8,50
Input power heating	Nom. (Min - Max)	kW	0,86 (0,21 - 1,34)	0,96 (0,21 - 1,79)	1,21 (0,21 - 1,80)	1,47 (0,32 - 2,17)	2,15 (0,62 - 2,86)	1,90 (0,58 - 2,68)	2,03 (0,70 - 3,06)	2,15 (0,53 - 4,24)
Annual energy consumption [3]		kWh/a	974	1065	1278	1667	1733	1933	2026	2543
Current	Cool / Heat	A	3,35 / 4,00	4,15 / 4,45	5,35 / 5,50	5,00 / 6,70	8,40 / 9,70	7,00 / 8,60	9,50 / 9,50	10,50 / 10,10
Power source		V	230	230	230	230	230	230	230	230
Recommended fuse		A	16	16	16	16	16	20	20	25
Recommended power cable section		mm²	2,5	2,5	2,5	2,5	2,5	2,5	2,5	3,5
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	48 / 50	48 / 50	50 / 52	47 / 48	51 / 52	49 / 50	51 / 52	53 / 54
Dimension [5]	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	619 x 824 x 299	795 x 875 x 320	795 x 875 x 320	795 x 875 x 320	999 x 940 x 340	999 x 940 x 340
Net weight		kg	39	39	39	71	71	72	80	81
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
Pipe length range total [6]		m	6 ~ 30	6 ~ 30	6 ~ 30	6 ~ 50	6 ~ 60	6 ~ 60	6 ~ 70	6 ~ 80
Pipe length range to one unit		m	3 ~ 20	3 ~ 20	3 ~ 20	3 ~ 25	3 ~ 25	3 ~ 25	3 ~ 25	3 ~ 25
Elevation difference (in/out)		m	10	10	10	15	15	15	15	15
Pipe length for additional gas		m	20	20	20	30	30	30	45	45
Additional gas amount		g/m	15	15	15	20	20	20	20	20
Refrigerant (R32) / CO_2 Eq.		kg / T	1,12 / 0,756	1,12 / 0,756	1,12 / 0,756	2,10 / 1,418	2,10 / 1,418	2,10 / 1,418	2,72 / 1,836	2,72 / 1,836
Operating range	Cool Min ~ Max	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the units shows the value measured of a position 1 m in front and 1 m in rear side of the main body. The sound pressure is measured in accordance with JIS C 9612. 5) Add 70 or 95 mm for piping port. 6) Minimum piping length is 3 meters per indoor unit.

Possible outdoor / indoor units combinations • R32

Rooms	Model	Indoor capacity connected (Min - Max)	Wall-mounted Etherea								Wall-mounted TZ super-compact								Floor console*								4 Way 60x60 cassette								Low Static Pressure Hide-away							
			16	20	25	35	42	50	60	71	16	20	25	35	42	50	60	71	16	20	25	35	42	50	60	71	16	20	25	35	42	50	60	71	16	20	25	35	42	50	60	71
2	CU-2Z35TBE	3,2 ~ 6,0 kW	✔	✔	✔	✔					✔	✔	✔	✔						✔	✔	✔						✔	✔	✔						✔	✔	✔				
	CU-2Z41TBE	3,2 ~ 6,0 kW	✔	✔	✔	✔					✔	✔	✔	✔						✔	✔	✔						✔	✔	✔						✔	✔	✔				
	CU-2Z50TBE	3,2 ~ 7,7 kW	✔	✔	✔	✔	✔[1]	✔[1]			✔	✔	✔	✔	✔[1]	✔[1]				✔	✔	✔		✔[1]				✔	✔	✔		✔[1]				✔	✔	✔		✔[1]		
3	CU-3Z52TBE	4,5 ~ 9,5 kW	✔	✔	✔	✔	✔[1]	✔[1]			✔	✔	✔	✔	✔[1]	✔[1]												✔	✔	✔		✔[1]				✔	✔	✔		✔[1]		
	CU-3Z68TBE	4,5 ~ 11,2 kW	✔	✔	✔	✔	✔[1]	✔[1]			✔	✔	✔	✔	✔[1]	✔[1]	✔[1]											✔	✔	✔		✔[1]	✔[1]			✔	✔	✔		✔[1]	✔[1]	
4	CU-4Z68TBE	4,5 ~ 11,5 kW	✔	✔	✔	✔	✔[1]	✔[1]			✔	✔	✔	✔	✔[1]	✔[1]	✔[1]											✔	✔	✔		✔[1]	✔[1]			✔	✔	✔		✔[1]	✔[1]	
	CU-4Z80TBE	4,5 ~ 14,7 kW	✔	✔	✔	✔	✔[1]	✔[1]		✔[1][2]	✔	✔	✔	✔	✔[1]	✔[1]	✔[1]	✔[1]										✔	✔	✔		✔[1]	✔[1]			✔	✔	✔		✔[1]	✔[1]	
5	CU-5Z90TBE	4,5 ~ 18,3 kW	✔	✔	✔	✔	✔[1]	✔[1]		✔[1][2]	✔	✔	✔	✔	✔[1]	✔[1]	✔[1]	✔[1]										✔	✔	✔		✔[1]	✔[1]			✔	✔	✔		✔[1]	✔[1]	

1) A CZ-MA1P pipe reducer is needed on the 42 and 50, a CZ-MA2P pipe expander is needed on the 60 and 71, and CZ-MA3P pipe reducer on the 71. 2) Only for Pure White Matt model.
* Compatible only with 2 ports R32 outdoor CU-2Z35TBE / CU-2Z41TBE / CU-2Z50TBE. Minimum quantity of connection: 2 indoor units. Floor console indoor unit is compatible with R410A outdoors with 3, 4 or 5 ports: CU-3E18PBE, CU-3E23SBE, CU-4E23PBE, CU-4E27PBE and CU-5E34PBE.

Outdoor Multi combination model

		Model
CS-MZ16XKE / CS-MTZ16WKE CS-XZ20XKEW / CS-Z20XKEW / CS-TZ20WKEW / CS-MZ20UFEA / CS-MZ20UB4EA / CS-MZ20UD3EA CS-XZ25XKEW / CS-Z25XKEW / CS-TZ25WKEW / CS-Z25UFEAW / CS-Z25UB4EAW / CS-Z25UD3EAW CS-XZ35XKEW / CS-Z35XKEW / CS-TZ35WKEW / CS-Z35UFEAW / CS-Z35UB4EAW / CS-Z35UD3EAW	CU-2Z35TBE / CU-2Z41TBE / CU-2Z50TBE / CU-3Z52TBE / CU-3Z68TBE / CU-4Z68TBE / CU-4Z80TBE / CU-5Z90TBE	—
CS-Z42XKEW / CS-TZ42WKEW CS-XZ50XKEW / CS-Z50XKEW / CS-TZ50WKEW / CS-Z50UFEAW / CS-Z50UB4EAW / CS-Z50UD3EAW	CU-2Z50TBE / CU-3Z52TBE / CU-3Z68TBE / CU-4Z68TBE / CU-4Z80TBE / CU-5Z90TBE	CZ-MA1P
CS-TZ60WKEW / CS-Z60UB4EAW / CS-Z60UD3EAW	CU-3Z68TBE / CU-4Z68TBE / CU-4Z80TBE / CU-5Z90TBE	CZ-MA2P
CS-Z71XKEW / CS-TZ71WKEW	CU-4Z80TBE / CU-5Z90TBE	CZ-MA2P / CZ-MA3P*

* For CZ-MA3P necessary to use adaptor CZ-MA2P too.




NEW 2021


Optional wired remote controller.
CZ-RD514C

INTERNET CONTROL: Built-in Wi-Fi.

NEW Wall-mounted Etherea	Indoor unit Silver	Indoor unit Pure White Matt	Cooling capacity	Heating capacity	Connection in. / out.	Sound pressure [1]	Dimension / Net weight	Piping connections
						Cool — Heat (Hi/Lo/S-Lo)	H x W x D	Liquid / Gas pipe
			kW	kW	mm²	dB(A)	mm / kg	Inch (mm)
1,6 kW	—	CS-MZ16XKE	1,60	2,60	4 x 1,5	38 / 26 / 21 — 39 / 27 / 21	295 x 870 x 229 / 10	1/4 (6,35) / 3/8 (9,52)
2,0 kW	CS-XZ20XKEW	CS-Z20XKEW	2,00	3,20	4 x 1,5	39 / 26 / 21 — 40 / 27 / 21	295 x 870 x 229 / 10	1/4 (6,35) / 3/8 (9,52)
2,5 kW	CS-XZ25XKEW	CS-Z25XKEW	2,50	3,60	4 x 1,5	41 / 27 / 21 — 43 / 29 / 21	295 x 870 x 229 / 10	1/4 (6,35) / 3/8 (9,52)
3,5 kW [2]	CS-XZ35XKEW	CS-Z35XKEW	3,50	4,50	4 x 1,5	44 / 30 / 21 — 45 / 35 / 21	295 x 870 x 229 / 11	1/4 (6,35) / 3/8 (9,52)
4,2 kW [3]	—	CS-Z42XKEW	4,20	5,60	4 x 1,5	44 / 33 / 27 — 45 / 37 / 31	295 x 870 x 229 / 10	1/4 (6,35) / 1/2 (12,70)
5,0 kW [4]	CS-XZ50XKEW	CS-Z50XKEW	5,00	6,80	4 x 2,5	44 / 39 / 32 — 46 / 39 / 32	295 x 1040 x 244 / 12	1/4 (6,35) / 1/2 (12,70)
7,1 kW	—	CS-Z71XKEW	7,10	8,70	4 x 2,5	49 / 40 / 32 — 49 / 40 / 32	295 x 1040 x 244 / 14	1/4 (6,35) / 5/8 (15,88)






Optional wired remote controller.
CZ-RD514C

INTERNET CONTROL: Built-in Wi-Fi.

Wall-mounted TZ super-compact	Indoor unit	Cooling capacity	Heating capacity	Connection in. / out.	Sound pressure [1]	Dimension / Net weight	Piping connections
					Cool — Heat (Hi/Lo/S-Lo)	H x W x D	Liquid / Gas pipe
		kW	kW	mm²	dB(A)	mm / kg	Inch (mm)
1,6 kW*	CS-MTZ16WKE	1,60	2,60	4 x 1,5	38 / 27 / 22 — 39 / 28 / 24	290 x 779 x 209 / 8	1/4 (6,35) / 3/8 (9,52)
2,0 kW	CS-TZ20WKEW	2,00	2,70	4 x 1,5	37 / 25 / 20 — 38 / 26 / 22	290 x 779 x 209 / 8	1/4 (6,35) / 3/8 (9,52)
2,5 kW	CS-TZ25WKEW	2,50	3,30	4 x 1,5	40 / 26 / 20 — 40 / 27 / 22	290 x 779 x 209 / 8	1/4 (6,35) / 3/8 (9,52)
3,5 kW [2]	CS-TZ35WKEW	3,50	4,00	4 x 1,5	42 / 30 / 20 — 42 / 33 / 22	290 x 779 x 209 / 8	1/4 (6,35) / 3/8 (9,52)
4,2 kW	CS-TZ42WKEW	4,20	5,00	4 x 1,5	44 / 31 / 29 — 44 / 35 / 34	290 x 779 x 209 / 8	1/4 (6,35) / 1/2 (12,70)
5,0 kW	CS-TZ50WKEW	5,00	5,80	4 x 2,5	44 / 37 / 33 — 44 / 37 / 33	290 x 779 x 209 / 8	1/4 (6,35) / 1/2 (12,70)
6,0 kW	CS-TZ60WKEW	6,00	7,00	4 x 2,5	45 / 37 / 34 — 45 / 37 / 34	302 x 1102 x 244 / 13	1/4 (6,35) / 1/2 (12,70)
7,1 kW	CS-TZ71WKEW	7,10	8,60	4 x 2,5	47 / 38 / 35 — 47 / 38 / 35	302 x 1102 x 244 / 13	1/4 (6,35) / 5/8 (15,88)





Optional wired remote controller.
CZ-RD514C

INTERNET CONTROL: Optional.

Floor console [5]	Indoor unit	Cooling capacity	Heating capacity	Connection in. / out.	Sound pressure [6]	Dimension / Net weight	Piping connections
					Cool — Heat (Hi/Lo/S-Lo)	H x W x D	Liquid / Gas pipe
		kW	kW	mm²	dB(A)	mm / kg	Inch (mm)
2,0 kW	CS-MZ20UFEA	2,00	3,20	4 x 1,5	39 / 27 / 22 — 39 / 27 / 21	600 x 750 x 207 / 13	1/4 (6,35) / 3/8 (9,52)
2,5 kW	CS-Z25UFEAW	2,50	3,60	4 x 1,5	40 / 27 / 22 — 40 / 27 / 21	600 x 750 x 207 / 13	1/4 (6,35) / 3/8 (9,52)
3,5 kW [2]	CS-Z35UFEAW	3,50	4,50	4 x 1,5	41 / 28 / 22 — 41 / 28 / 21	600 x 750 x 207 / 13	1/4 (6,35) / 3/8 (9,52)
5,0 kW	CS-Z50UFEAW	5,00	5,30	4 x 1,5	44 / 33 / 29 — 48 / 35 / 31	600 x 750 x 207 / 13	1/4 (6,35) / 1/2 (12,70)





RAL9010 panel for 4 way 60x60 cassette (sold separately).
CZ-BT20EW



Optional wired remote controller.
CZ-RD52CP

INTERNET CONTROL and BMS CONNECTIVITY: Optional.

4 Way 60x60 cassette	Indoor unit (Panel CZ-BT20EW)	Cooling capacity	Heating capacity	Connection in. / out.	Sound pressure [7]	Dimension / Net weight		Piping connections
					Cool — Heat (Hi/Lo/S-Lo)	Indoor H x W x D	Panel H x W x D	Liquid / Gas pipe
		kW	kW	mm²	dB(A)	mm / kg	mm / kg	Inch (mm)
2,0 kW	CS-MZ20UB4EA	2,00	3,20	4 x 1,5	35 / 27 / 24 — 36 / 30 / 27	260 x 575 x 575 / 18	51 x 700 x 700 / 2,5	1/4 (6,35) / 3/8 (9,52)
2,5 kW	CS-Z25UB4EAW	2,50	3,60	4 x 1,5	36 / 27 / 24 — 37 / 30 / 27	260 x 575 x 575 / 18	51 x 700 x 700 / 2,5	1/4 (6,35) / 3/8 (9,52)
3,5 kW [2]	CS-Z35UB4EAW	3,50	4,50	4 x 1,5	36 / 28 / 25 — 37 / 30 / 27	260 x 575 x 575 / 18	51 x 700 x 700 / 2,5	1/4 (6,35) / 3/8 (9,52)
5,0 kW [4]	CS-Z50UB4EAW	5,00	6,80	4 x 1,5	39 / 30 / 27 — 40 / 31 / 28	260 x 575 x 575 / 18	51 x 700 x 700 / 2,5	1/4 (6,35) / 1/2 (12,70)
6,0 kW	CS-Z60UB4EAW	6,00	8,50	4 x 1,5	44 / 34 / 31 — 45 / 34 / 31	260 x 575 x 575 / 18	51 x 700 x 700 / 2,5	1/4 (6,35) / 1/2 (12,70)





Optional wireless control kit.
CZ-RL511D

INTERNET CONTROL and BMS CONNECTIVITY: Optional.

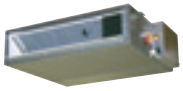
Low static pressure hide-away	Indoor unit	Cooling capacity	Heating capacity	Connection in. / out.	Sound pressure [8]	Dimension / Net weight	Piping connections
					Cool — Heat (Hi/Lo/S-Lo)	H x W x D	Liquid / Gas pipe
		kW	kW	mm²	dB(A)	mm / kg	Inch (mm)
2,0 kW	CS-MZ20UD3EA	2,00	3,20	4 x 1,5	34 / 29 / 26 — 36 / 29 / 26	200 x 750 x 640 / 19	1/4 (6,35) / 3/8 (9,52)
2,5 kW	CS-Z25UD3EAW	2,50	3,60	4 x 1,5	35 / 29 / 26 — 37 / 29 / 26	200 x 750 x 640 / 19	1/4 (6,35) / 3/8 (9,52)
3,5 kW [2]	CS-Z35UD3EAW	3,50	4,50	4 x 1,5	35 / 29 / 26 — 37 / 29 / 26	200 x 750 x 640 / 19	1/4 (6,35) / 3/8 (9,52)
5,0 kW [4]	CS-Z50UD3EAW	5,00	6,80	4 x 1,5	41 / 31 / 28 — 41 / 32 / 29	200 x 750 x 640 / 19	1/4 (6,35) / 1/2 (12,70)
6,0 kW	CS-Z60UD3EAW	6,00	8,50	4 x 1,5	43 / 32 / 29 — 43 / 34 / 31	200 x 750 x 640 / 19	1/4 (6,35) / 1/2 (12,70)

1) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 2) Heating capacity in combination with Free Multi outdoor units except with CU-2Z50TBE. In this case, the heating capacity is 4,20 kW. 3) Heating capacity in combination with Free Multi outdoor units except with CU-2Z50TBE. In this case, the heating capacity is 5,00 kW. 4) Heating capacity in combination with Free Multi outdoor units except with CU-2Z35TBE. In this case, the heating capacity is 5,30 kW. 5) Compatible only with 2 ports R32 outdoor CU-2Z35TBE / CU-2Z41TBE / CU-2Z50TBE. Minimum quantity of connection: 2 indoor units. Floor console indoor unit is compatible with R410A outdoors with 3, 4 or 5 ports: CU-3E18PBE, CU-3E23SBE, CU-4E23PBE, CU-4E27PBE and CU-5E34PBE. 6) The sound pressure of the units shows the value measured of a position 1 m in front of the main body and 1 m above floor. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 7) The sound pressure of the indoor unit shows the value measured of a position 1,5 m below the unit. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 8) The sound pressure of the indoor unit shows the value measured of a position of 1,5 m below the unit with 1 m duct on the suction side and 2 m duct on the discharge side. The sound pressure is measured in accordance with JIS C 9612. * Tentative data.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



Compare solutions

			Indoor unit dimension	Efficiency [1]	Indoor air quality	Comfort			Connectivity
Wall-mounted Heatcharge VZ 	White	2,5 to 3,5 kW	295 x **798** x 375	A+++ A+++	nanoe	-10 °C in cooling mode -30 °C in heating mode		18 dB(A)	Optional Wi-Fi CZ-TACG1
Wall-mounted Etherea 	Silver / Pure White Matt	2,0 to 7,1 kW	295 x **870** x 229 (295 x 1040 x 244 wide model)	A+++ A+++	nanoeX nanoe X Generator Mark 2	-10 °C in cooling mode -15 °C in heating mode	Aerowings 2.0	19 dB(A)	**Built-in Wi-Fi**
Wall-mounted TZ super-compact 	Matte white	2,0 to 7,1 kW	290 x **779** x 209 (295 x 1040 x 244 wide model)	A++ A++	PM2,5 Filter	-10 °C in cooling mode -15 °C in heating mode	Aerowings	20 dB(A)	**Built-in Wi-Fi**
Wall-mounted FZ super-compact 	Matte white	2,5 to 6,0 kW	290 x **779** x 209	A++ A+	PM2,5 Filter	-10 °C in cooling mode -15 °C in heating mode	Aerowings	20 dB(A)	Optional Wi-Fi CZ-TACG1
Floor console 	White	2,5 to 5,0 kW	600 x 750 x 207	A++ A++	nanoeX nanoe X Generator Mark 1	-10 °C in cooling mode -15 °C in heating mode	Double airflow	20 dB(A)	Optional Wi-Fi CZ-TACG1
4 Way 60x60 cassette 		2,5 to 6,0 kW	260 x 700 x 700	A++ A+	Air filter	-10 °C in cooling mode -15 °C in heating mode	Air fresh entry	22 dB(A)	Optional Wi-Fi CZ-TACG1
Low static pressure hide-away 		2,5 to 6,0 kW	200 x 750 x 640	A+ A+	Air filter	-10 °C in cooling mode -15 °C in heating mode		24 dB(A)	Optional Wi-Fi CZ-TACG1

1) Energy efficiency class in 2,5 kW references. * All data in this chart is applicable in most of the models in each line up, check product specifications to confirm.

Feature comparison

	Models	Wall-mounted Heatcharge VZ • R32	NEW Wall-mounted Etherea • R32	Wall-mounted TZ super-compact • R32	Wall-mounted FZ super-compact • R32
R32	Refrigerant R32	✔	✔	✔	✔
38% ECONAVI	Econavi. Sunlight Sensor	✔			
	Inverter+ system	✔	✔		
	Inverter system			✔	✔
	R2 Rotary Compressor	✔	✔	✔	✔
nanoeX	nanoe X Generator Mark 1	✔ nanoe™	✔		
	PM2,5 Filter			✔	✔
	Dust collection filter				
	Antiallergy properties	✔	✔		
	Super Quiet[1]	✔	✔ 19 dB(A) for XZ/Z20, XZ/Z25 and XZ/Z35	✔ 20 dB(A) for TZ20, TZ25 and TZ35	✔ 20 dB(A) for FZ25 and FZ35
	Mild Dry Cooling		✔		
	Aerowings		✔	✔	✔
-10°C	Down to -10 °C in cooling only	✔	✔	✔	✔
-15°C	Down to -15 °C in heating mode	✔ -35 °C[2]	✔	✔	✔
	Summer House	✔			
R32	R410A/R22 Renewal	✔	✔	✔	✔
	Odour-removing function	✔	✔	✔	✔
	Removable, washable panel	✔	✔	✔	✔
	Powerful mode	✔	✔	✔	✔
	Soft dry operation mode	✔	✔	✔	✔
	Personal airflow creation	✔	✔	✔ For TZ50, TZ60 and TZ71	
	Automatic vertical airflow control			✔ For TZ20, TZ25, TZ35 and TZ42	✔
	Manual horizontal airflow control			✔ For TZ20, TZ25, TZ35 and TZ42	✔
	Auto mode	✔	✔	✔	✔
	Hot start mode	✔	✔	✔	✔
24	Real time clock with dual ON&OFF timer	✔	✔	✔	✔
7	Weekly timer				
	LCD infrared remote controller	✔	✔	✔	✔
	Automatic restart	✔	✔	✔	✔
	Long piping	✔ 15 m	✔ 15 m, 30 m (XZ/Z50, XZ/Z71)	✔ 15 m, 20 m (TZ50), 30 m (TZ71 and TZ60)	✔ 15 m, 30 m (FZ60)
	Top-Panel maintenance access	✔	✔	✔	✔
	Self-diagnosis function	✔	✔	✔	✔
	CZ-CAPRA1: RAC interface adapter for integration into P-Link	✔	✔	✔	✔
	Internet control	✔	✔ Built-in	✔ Built-in	✔
	Easy control by BMS	✔	✔	✔	✔
5	Warranty on the compressor	✔	✔	✔	✔

1) At the lowest fan speed. 2) Tested by 3rd party laboratory, SP, according to EN14511:2013 and SP Method 1721, this temperature is not guaranteed by Factory.

	Wall-mounted Professional -20 °C • R32	Floor console • R32	4 Way 60x60 Cassette • R32	Low Static Pressure Hide Away • R32
	✔	✔	✔	✔
		✔		
	✔		✔	✔
	✔	✔	✔	✔
		✔		
		✔		
	✔ 21 dB(A) for Z25 and Z35	✔ 20 dB(A) for Z25 and Z35	✔ 22 dB(A) for Z25	
	✔			
	✔ -20 °C	✔	✔	✔
	✔	✔	✔	✔
	✔	✔	✔	✔
	✔	✔	✔	✔
	✔	✔		
	✔	✔	✔	✔
	✔	✔	✔	✔
		✔	✔	
		✔		
	✔	✔	✔	✔
	✔	✔	✔	✔
		✔	✔	
	✔			✔
		✔	✔	
	✔	✔	✔	✔
	✔ 15 m, 20 m (Z50)	✔ 20 m, 30 m (Z50)	✔ 20 m, 30 m (Z50 and Z60)	✔ 20 m, 30 m (Z50 and Z60)
	✔	✔	✔	✔
	✔	✔	✔	✔
	✔	✔	✔	✔
	✔	✔	✔	✔
	✔	✔	✔	✔
	✔	✔	✔	✔

Features explained

Energy saving

Domestic Econavi.
Sunlight Sensor technology can detect and reduce the waste of energy by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy.

Inverter Plus system.
This classification highlights Panasonic's highest performing systems.

Inverter system.
The Inverter range provides greater efficiency and comfort. Provides more precise temperature control, without highs and lows, and keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration levels.

R2 Rotary compressor.
Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, it delivers high performance and efficiency.

Refrigerant R32.
Our heat pumps containing the refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP). An important step to reduce greenhouse gases. R32 is also a component refrigerant, making it easy to recycle.

High performance and indoor air quality

nanoe™ X.
Technology with the benefits of hydroxyl radicals has the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise.

PM2,5 filter.
Particulate matter (PM2,5) can be found suspended in the air, including dust, dirt, smoke and liquid droplets. Sized at 2,5µm, these particles are said to pose health problems as they can easily enter our lungs.

Dust collection filter.
This filter collects and retains particles suspended in the air, resulting in cleaner air in the room.

Antiallergy properties.
System is equipped with antiallergy properties filter.

Super Quiet.
Thanks to its latest generation compressor and its twin blade fan, our outdoor unit is one of the most silent on the market. The indoor unit emits an almost imperceptible 18 dB(A).

Mild Dry cooling.
Fine control helps prevent a rapid decrease in room humidity while maintaining the set temperature. Maintains an RH* up to 10 % higher than cooling operation (*RH: Relative Humidity). Ideal when sleeping with the air conditioner on.

Aerowings.
More comfort with Aerowings. Direct airflow to the ceiling, creating a shower cooling effect with built-in twin flap.

Down to -10 °C in cooling only mode.
The air conditioner works in cooling mode when the outdoor temperature of -10 °C.

Down to -15 °C in heating mode.
The air conditioner works in heat pump mode when the outdoor temperature is as low as -15 °C.

Summer House.
This innovative function keeps the house at 7/8 °C to avoid freezing pipes during the winter. This function is beneficial for summer or weekend homes.

R22/R410A Renewal.
The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing new high efficiency R32 systems.

Odour-removing function.
Allows the exchanger to be cleaned, preventing possible odours. While this function is connected, the fan also remains OFF momentarily to avoid unpleasant odours while the exchanger is being cleaned.

Removable, washable panel.
The front panel is easy to keep clean. It can be removed quickly in one single step and can be washed in water. A clean front panel ensures smoother, more efficient operation, which can save energy.

Powerful mode.
The rapid and effective powerful mode is ideal for when you come home on the hottest or coldest days. It works at maximum power to reach the desired temperature in just 15 minutes.

Soft Dry operation mode.
The soft dry mode eliminates excess moisture with a soft breeze and provides a sense of wellbeing without much change in temperature.

Personal airflow creation.
Permits the air direction to be adjusted vertically and horizontally. This feature can be conveniently selected by remote controller.

Automatic vertical airflow control.
The flap swings up and down automatically. The flow can also be set at a fixed angle with the remote controller.

Manual horizontal airflow control.

Auto mode.
Automatically switches the current operation mode to heating or cooling mode necessary to keep the temperature at a constantly comfortable level based on the temperature of the room. In case of Multi Split installation the function is limited to first unit working and logic of switching is different considering also the outdoor temperature.

Hot Start mode.
At the start of heating cycle and after defrost cycle, the indoor fan will start up once the indoor heat exchanger is warm.

Real time clock with dual ON&OFF timer.
This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 24-hour time frame.

Weekly timer.
Allow to fix per each day of the week up to 6 operations per day.

LCD infrared remote controller.

Automatic restart.
This function permits automatic restarting if safe mode operation has stopped for some unusual reason, such as after a power cut. As soon as the power is back, the unit restarts with the parameters selected before it stopped.

Long piping.
Indicates the maximum length of pipe between the outdoor unit and the indoor unit(s). The distances permitted, demonstrate the installations possible.

Top-panel maintenance access.
Maintenance of an outdoor unit used to be quite a tedious task. Now, with the possibility of removing the top cover, maintenance is quick and easy.

Self-diagnosis function.
With this function the unit carries out a process self-diagnosis when a particular function does not work correctly. This allows faster servicing.

High connectivity

RAC interface adapter for integration into P-Link.
CZ-CNT port integration to PACi and ECOi. Domestic integration to P-Link. Can connect ranges to P-Link. Full control is now possible.

Internet control.
A next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone, tablet or PC via the internet.

Easy control by BMS.
The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.

5 Years warranty.
Panasonic guarantees the compressors in the entire range for five years.

Accessories and Control

Connectivity



Wi-Fi adapter for smart control via Panasonic Comfort Cloud App.

CZ-TACG1



RAC interface adapter for integration into P-Link, plus external input and alarm/ status output.

CZ-CAPRA1



This interface can be used with all models which have a CN-CNT connector.

PAW-AC-KNX-1i



This interface can be used with all models which have a CN-CNT connector.

PAW-AC-MBS-1



This interface can be used with all models which have a CN-CNT connector.

PAW-AC-BAC-1



This interface can be used with all models which have a CN-RMT connector.

PAW-AC-DIO



Heating only PCB for Etherea, 4 Way 60x60 cassette and Low static pressure hide away.

PAW-AC-HEAT-1



Control of the Etherea, Flagship and Heatcharge by SMS (need additional SIM card).

PAW-SMSCONTROL



Redundancy of 2 units TKEA.

PAW-SERVER-PKEA

Individual controls



Wired remote controller for wall-mounted and floor console.

CZ-RD514C



Wired remote controller for cassette.

CZ-RD52CP



Infrared remote controller Sky Remote. 2 m cable length of infrared receiver for hide-away.

CZ-RL511D

Panel



RAL9010 panel for 4 way 60x60 cassette.

CZ-BT20EW

Free Multi R32 combinations table

Free Multi 2x1 CU-2Z35TBE. Minimum capacity connected: 3,2 kW. Maximum capacity connected: 6,0 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms			EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms			COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	Total (Min - Max)	W/W		kW	kWh	230V	A	B	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																
16	1,60		1,60 (1,10 - 2,30)	3,90		0,41 (0,22 - 0,60)	205	1,95	2,60		2,60 (0,70 - 3,80)	3,77		0,69 (0,17 - 1,11)	345	3,20
20	2,00		2,00 (1,10 - 2,90)	3,85		0,52 (0,22 - 0,77)	260	2,45	3,20		3,20 (0,70 - 4,80)	3,76		0,85 (0,17 - 1,41)	425	3,95
25	2,50		2,50 (1,10 - 3,50)	3,73		0,67 (0,22 - 1,00)	335	3,15	3,60		3,60 (0,70 - 5,50)	3,50		1,03 (0,17 - 1,70)	515	4,75
35	3,50		3,50 (1,10 - 4,00)	3,47		1,01 (0,22 - 1,22)	505	4,70	4,20		4,20 (0,70 - 5,60)	3,44		1,22 (0,17 - 1,68)	610	5,65
2 Rooms																
16 + 16	1,60	1,60	3,20 (1,50 - 4,00)	4,92	**8,50 A+++**	0,65 (0,25 - 1,00)	325	3,05	2,10	2,10	4,20 (1,10 - 5,60)	4,88	**4,60 A++**	0,86 (0,21 - 1,34)	430	4,00
16 + 20	1,55	1,95	3,50 (1,50 - 4,50)	4,86	**8,50 A+++**	0,72 (0,25 - 1,10)	360	3,35	1,85	2,35	4,20 (1,10 - 5,60)	4,88	**4,60 A++**	0,86 (0,21 - 1,34)	430	4,00
16 + 25	1,35	2,15	3,50 (1,50 - 4,50)	4,86	**8,50 A+++**	0,72 (0,25 - 1,10)	360	3,35	1,65	2,55	4,20 (1,10 - 5,60)	4,88	**4,60 A++**	0,86 (0,21 - 1,34)	430	4,00
16 + 35	1,10	2,40	3,50 (1,50 - 4,50)	4,86	**8,50 A+++**	0,72 (0,25 - 1,10)	360	3,35	1,30	2,90	4,20 (1,10 - 5,60)	4,88	**4,60 A++**	0,86 (0,21 - 1,34)	430	4,00
20 + 20	1,75	1,75	3,50 (1,50 - 4,50)	4,86	**8,50 A+++**	0,72 (0,25 - 1,10)	360	3,35	2,10	2,10	4,20 (1,10 - 5,60)	4,88	**4,60 A++**	0,86 (0,21 - 1,34)	430	4,00
20 + 25	1,55	1,95	3,50 (1,50 - 4,50)	4,86	**8,50 A+++**	0,72 (0,25 - 1,10)	360	3,35	1,85	2,35	4,20 (1,10 - 5,60)	4,88	**4,60 A++**	0,86 (0,21 - 1,34)	430	4,00
20 + 35	1,25	2,25	3,50 (1,50 - 4,50)	5,07	**8,50 A+++**	0,69 (0,25 - 1,05)	345	3,25	1,55	2,65	4,20 (1,10 - 5,60)	5,00	**4,60 A++**	0,84 (0,21 - 1,29)	420	3,90
25 + 25	1,75	1,75	3,50 (1,50 - 4,50)	5,07	**8,50 A+++**	0,69 (0,25 - 1,05)	345	3,25	2,10	2,10	4,20 (1,10 - 5,60)	5,00	**4,60 A++**	0,84 (0,21 - 1,29)	420	3,90
25 + 35	1,45	2,05	3,50 (1,50 - 4,50)	5,07	**8,50 A+++**	0,69 (0,25 - 1,05)	345	3,25	1,75	2,45	4,20 (1,10 - 5,60)	5,00	**4,60 A++**	0,84 (0,21 - 1,29)	420	3,90

Free Multi 2x1 CU-2Z41TBE. Minimum capacity connected: 3,2 kW. Maximum capacity connected: 6,0 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms			EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms			COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	Total (Min - Max)	W/W		kW	kWh	230V	A	B	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																
16	1,60		1,60 (1,10 - 2,30)	3,90		0,41 (0,22 - 0,60)	205	1,95	2,60		2,60 (0,70 - 3,80)	3,77		0,69 (0,17 - 1,11)	345	3,20
20	2,00		2,00 (1,10 - 2,90)	3,85		0,52 (0,22 - 0,77)	260	2,45	3,20		3,20 (0,70 - 4,80)	3,76		0,85 (0,17 - 1,41)	425	3,95
25	2,50		2,50 (1,10 - 3,50)	3,73		0,67 (0,22 - 1,00)	335	3,15	3,60		3,60 (0,70 - 5,50)	3,50		1,03 (0,17 - 1,70)	515	4,75
35	3,50		3,50 (1,10 - 4,00)	3,47		1,01 (0,22 - 1,22)	505	4,70	4,50		4,50 (0,70 - 6,20)	3,60		1,25 (0,17 - 1,81)	625	5,80
2 Rooms																
16 + 16	1,60	1,60	3,20 (1,50 - 4,00)	4,71	**8,50 A+++**	0,68 (0,25 - 0,99)	340	3,15	2,20	2,20	4,40 (1,10 - 7,00)	4,68	**4,60 A++**	0,94 (0,21 - 1,81)	470	4,35
16 + 20	1,60	2,00	3,60 (1,50 - 4,50)	4,62	**8,50 A+++**	0,78 (0,25 - 1,15)	390	3,60	2,05	2,55	4,60 (1,10 - 7,00)	4,79	**4,60 A++**	0,96 (0,21 - 1,79)	480	4,45
16 + 25	1,60	2,50	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	1,80	2,80	4,60 (1,10 - 7,00)	4,79	**4,60 A++**	0,96 (0,21 - 1,79)	480	4,45
16 + 35	1,30	2,80	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	1,45	3,15	4,60 (1,10 - 7,00)	4,79	**4,60 A++**	0,96 (0,21 - 1,79)	480	4,45
20 + 20	2,00	2,00	4,00 (1,50 - 5,00)	4,49	**8,50 A+++**	0,89 (0,25 - 1,31)	445	4,10	2,30	2,30	4,60 (1,10 - 7,00)	4,84	**4,60 A++**	0,95 (0,21 - 1,77)	475	4,40
20 + 25	1,80	2,30	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	2,05	2,55	4,60 (1,10 - 7,00)	4,84	**4,60 A++**	0,95 (0,21 - 1,77)	475	4,40
20 + 35	1,50	2,60	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	1,65	2,95	4,60 (1,10 - 7,00)	4,84	**4,60 A++**	0,95 (0,21 - 1,77)	475	4,40
25 + 25	2,05	2,05	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	2,30	2,30	4,60 (1,10 - 7,00)	4,84	**4,60 A++**	0,95 (0,21 - 1,77)	475	4,40
25 + 35	1,70	2,40	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	1,90	2,70	4,60 (1,10 - 7,00)	4,84	**4,60 A++**	0,95 (0,21 - 1,77)	475	4,40

Free Multi 2x1 CU-2Z50TBE. Minimum capacity connected: 3,2 kW. Maximum capacity connected: 7,7 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms			EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms			COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	Total (Min - Max)	W/W		kW	kWh	230V	A	B	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																
16	1,60		1,60 (1,10 - 2,30)	3,90		0,41 (0,22 - 0,60)	205	1,95	2,60		2,60 (0,70 - 3,80)	3,77		0,69 (0,17 - 1,11)	345	3,20
20	2,00		2,00 (1,10 - 2,90)	3,85		0,52 (0,22 - 0,77)	260	2,45	3,20		3,20 (0,70 - 4,80)	3,76		0,85 (0,17 - 1,41)	425	3,95
25	2,50		2,50 (1,10 - 3,50)	3,73		0,67 (0,22 - 1,00)	335	3,15	3,60		3,60 (0,70 - 5,50)	3,50		1,03 (0,17 - 1,70)	515	4,75
35	3,50		3,50 (1,10 - 4,00)	3,47		1,01 (0,22 - 1,22)	505	4,70	4,50		4,50 (0,70 - 6,20)	3,60		1,25 (0,17 - 1,81)	625	5,80
42	4,20		4,20 (1,10 - 4,50)	3,09		1,36 (0,22 - 1,50)	680	6,35	5,00		5,00 (1,10 - 6,40)	3,23		1,55 (0,21 - 2,18)	775	7,15
50	5,00		5,00 (1,20 - 5,10)	2,96		1,69 (0,23 - 1,79)	845	7,80	5,30		5,30 (1,10 - 6,80)	3,23		1,64 (0,21 - 2,29)	820	7,60
2 Rooms																
16 + 16	1,60	1,60	3,20 (1,50 - 4,00)	4,71	**8,50 A+++**	0,68 (0,25 - 0,99)	340	3,15	2,60	2,60	5,20 (1,10 - 7,00)	4,60	**4,60 A++**	1,13 (0,21 - 1,81)	565	5,10
16 + 20	1,60	2,00	3,60 (1,50 - 4,50)	4,62	**8,50 A+++**	0,78 (0,25 - 1,15)	390	3,60	2,40	3,00	5,40 (1,10 - 7,00)	4,58	**4,60 A++**	1,18 (0,21 - 1,79)	590	5,35
16 + 25	1,60	2,50	4,10 (1,50 - 5,20)	4,56	**8,50 A+++**	0,90 (0,25 - 1,37)	450	4,15	2,10	3,30	5,40 (1,10 - 7,00)	4,58	**4,60 A++**	1,18 (0,21 - 1,79)	590	5,35
16 + 35	1,55	3,45	5,00 (1,50 - 5,20)	4,24	**8,50 A+++**	1,18 (0,25 - 1,37)	590	5,35	1,70	3,70	5,40 (1,10 - 7,00)	4,58	**4,60 A++**	1,18 (0,21 - 1,79)	590	5,35
16 + 42	1,40	3,60	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	1,55	4,05	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
16 + 50	1,20	3,80	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	1,35	4,25	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
20 + 20	2,00	2,00	4,00 (1,50 - 5,00)	4,49	**8,50 A+++**	0,89 (0,25 - 1,31)	445	4,10	2,70	2,70	5,40 (1,10 - 7,00)	4,62	**4,60 A++**	1,17 (0,21 - 1,77)	585	5,30
20 + 25	2,00	2,50	4,50 (1,50 - 5,20)	4,37	**8,50 A+++**	1,03 (0,25 - 1,37)	515	4,65	2,40	3,00	5,40 (1,10 - 7,00)	4,62	**4,60 A++**	1,17 (0,21 - 1,77)	585	5,30
20 + 35	1,80	3,20	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	2,05	3,55	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
20 + 42	1,60	3,40	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	1,80	3,80	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
20 + 50	1,45	3,55	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	1,60	4,00	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
25 + 25	2,50	2,50	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	2,80	2,80	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
25 + 35	2,10	2,90	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	2,35	3,25	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
25 + 42	1,85	3,15	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	2,10	3,50	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
25 + 50	1,65	3,35	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	1,85	3,75	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
35 + 35	2,50	2,50	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	2,80	2,80	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50
35 + 42	2,25	2,75	5,00 (1,50 - 5,40)	4,24	**8,50 A+++**	1,18 (0,25 - 1,49)	590	5,35	2,55	3,05	5,60 (1,10 - 7,20)	4,63	**4,60 A++**	1,21 (0,21 - 1,80)	605	5,50

1) Energy Label Scale from A+++ to D.

Free Multi 3x1 CU-3Z52TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 9,5 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms				EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms				COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																		
16	1,60			1,60 (1,30 - 2,30)	4,00		0,40 (0,25 - 0,64)	200	2,00	2,60			2,60 (1,20 - 3,20)	4,33		0,60 (0,30 - 0,96)	300	3,00
20	2,00			2,00 (1,80 - 2,90)	4,00		0,50 (0,34 - 0,81)	250	2,50	3,20			3,20 (1,20 - 4,10)	4,32		0,74 (0,30 - 1,23)	370	3,70
25	2,50			2,50 (1,80 - 2,90)	3,97		0,63 (0,34 - 0,81)	315	3,00	3,60			3,60 (1,20 - 4,30)	3,83		0,94 (0,30 - 1,23)	470	4,50
35	3,50			3,50 (1,80 - 3,80)	3,72		0,94 (0,34 - 1,36)	470	4,30	4,50			4,50 (1,20 - 5,80)	3,66		1,23 (0,30 - 2,10)	615	5,80
42	4,20			4,20 (1,80 - 4,30)	3,07		1,37 (0,34 - 1,99)	685	6,10	5,60			5,60 (1,20 - 6,80)	3,26		1,72 (0,30 - 2,93)	860	7,70
50	5,00			5,00 (1,90 - 5,70)	3,23		1,55 (0,34 - 2,13)	775	6,80	6,80			6,80 (1,20 - 6,90)	3,24		2,10 (0,30 - 2,52)	1050	9,20
2 Rooms																		
16 + 16	1,60	1,60		3,20 (1,80 - 6,20)	5,42	**7,00 A++**	0,59 (0,33 - 2,09)	295	2,90	2,60	2,60		5,20 (1,40 - 7,00)	4,13	**3,80 A**	1,26 (0,34 - 1,99)	630	5,80
16 + 20	1,60	2,00		3,60 (1,80 - 6,20)	4,93	**7,00 A++**	0,73 (0,33 - 2,05)	365	3,50	2,58	3,22		5,80 (1,40 - 7,00)	4,03	**3,80 A**	1,44 (0,33 - 1,95)	720	6,60
16 + 25	1,60	2,50		4,10 (1,80 - 6,20)	4,66	**7,00 A++**	0,88 (0,33 - 2,05)	440	4,10	2,42	3,78		6,20 (1,40 - 7,00)	3,95	**3,80 A**	1,57 (0,33 - 1,95)	785	7,20
16 + 35	1,60	3,50		5,10 (1,80 - 6,30)	3,89	**7,00 A++**	1,31 (0,33 - 2,06)	655	6,00	2,13	4,67		6,80 (1,40 - 7,30)	3,89	**3,80 A**	1,75 (0,29 - 2,05)	875	7,90
16 + 42	1,43	3,77		5,20 (1,90 - 6,40)	3,85	**7,00 A++**	1,35 (0,35 - 2,10)	675	6,20	1,88	4,92		6,80 (1,40 - 7,30)	3,98	**3,80 A**	1,71 (0,31 - 2,04)	855	7,80
16 + 50	1,26	3,94		5,20 (1,90 - 6,80)	4,44	**7,20 A++**	1,17 (0,34 - 2,04)	585	5,40	1,65	5,15		6,80 (1,40 - 8,00)	4,36	**4,00 A+**	1,56 (0,27 - 2,15)	780	7,10
20 + 20	2,00	2,00		4,00 (1,80 - 6,20)	4,71	**7,00 A++**	0,85 (0,33 - 2,01)	425	4,00	3,20	3,20		6,40 (1,40 - 7,00)	3,93	**3,80 A**	1,63 (0,32 - 1,95)	815	7,40
20 + 25	2,00	2,50		4,50 (1,80 - 6,20)	4,33	**7,00 A++**	1,04 (0,33 - 2,01)	520	4,80	3,02	3,78		6,80 (1,40 - 7,00)	3,86	**3,80 A**	1,76 (0,29 - 1,95)	880	8,00
20 + 35	1,89	3,31		5,20 (1,80 - 6,30)	3,85	**7,00 A++**	1,35 (0,33 - 2,02)	675	6,20	2,47	4,33		6,80 (1,40 - 7,30)	3,98	**3,80 A**	1,71 (0,28 - 2,04)	855	7,80
20 + 42	1,68	3,52		5,20 (1,90 - 6,40)	3,94	**7,00 A++**	1,32 (0,35 - 2,06)	660	6,00	2,19	4,61		6,80 (1,40 - 7,30)	4,00	**3,80 A**	1,70 (0,30 - 2,00)	850	7,80
20 + 50	1,49	3,71		5,20 (1,90 - 6,80)	4,44	**7,20 A++**	1,17 (0,34 - 2,04)	585	5,40	1,94	4,86		6,80 (1,40 - 8,00)	4,36	**4,00 A+**	1,56 (0,27 - 2,15)	780	7,10
25 + 25	2,50	2,50		5,00 (1,80 - 6,20)	3,91	**7,00 A++**	1,28 (0,33 - 2,01)	640	5,80	3,40	3,40		6,80 (1,40 - 7,00)	3,86	**3,80 A**	1,76 (0,29 - 1,95)	880	8,00
25 + 35	2,17	3,03		5,20 (1,90 - 6,30)	3,85	**7,00 A++**	1,35 (0,35 - 2,02)	675	6,20	2,83	3,97		6,80 (1,40 - 7,30)	3,98	**3,80 A**	1,71 (0,28 - 2,04)	855	7,80
25 + 42	1,94	3,26		5,20 (1,90 - 6,40)	3,94	**7,00 A++**	1,32 (0,35 - 2,06)	660	6,00	2,54	4,26		6,80 (1,40 - 7,30)	4,00	**3,80 A**	1,70 (0,28 - 2,00)	850	7,80
25 + 50	1,73	3,47		5,20 (1,90 - 6,80)	4,44	**7,20 A++**	1,17 (0,34 - 2,04)	585	5,40	2,27	4,53		6,80 (1,40 - 8,00)	4,36	**4,00 A+**	1,56 (0,24 - 2,15)	780	7,10
35 + 35	2,60	2,60		5,20 (1,90 - 6,40)	4,06	**7,00 A++**	1,28 (0,35 - 2,02)	640	5,80	3,40	3,40		6,80 (1,40 - 7,50)	4,02	**3,80 A**	1,69 (0,27 - 2,06)	845	7,70
35 + 42	2,36	2,84		5,20 (1,90 - 6,50)	4,06	**7,00 A++**	1,28 (0,35 - 2,07)	640	5,80	3,09	3,71		6,80 (1,40 - 7,50)	4,02	**3,80 A**	1,69 (0,26 - 2,06)	845	7,70
35 + 50	2,14	3,06		5,20 (1,90 - 6,90)	4,60	**7,20 A++**	1,13 (0,36 - 2,04)	565	5,20	2,80	4,00		6,80 (1,40 - 8,00)	4,42	**4,00 A+**	1,54 (0,24 - 2,08)	770	7,00
42 + 42	2,60	2,60		5,20 (1,90 - 6,50)	4,06	**7,00 A++**	1,28 (0,35 - 2,07)	640	5,80	3,40	3,40		6,80 (1,40 - 7,60)	4,12	**3,80 A**	1,65 (0,26 - 2,09)	825	7,50
42 + 50	2,37	2,83		5,20 (1,90 - 6,90)	4,60	**7,20 A++**	1,13 (0,36 - 2,04)	565	5,20	3,10	3,70		6,80 (1,40 - 8,00)	4,44	**4,00 A+**	1,53 (0,24 - 2,08)	765	7,00
3 Rooms																		
16 + 16 + 16	1,60	1,60	1,60	4,80 (1,80 - 7,20)	5,05	**8,50 A+++**	0,95 (0,36 - 2,13)	475	4,40	2,26	2,26	2,26	6,78 (1,50 - 8,10)	4,58	**4,20 A+**	1,48 (0,29 - 2,10)	740	6,80
16 + 16 + 20	1,60	1,60	2,00	5,20 (1,80 - 7,30)	4,77	**8,50 A+++**	1,09 (0,36 - 2,18)	545	5,00	2,09	2,09	2,62	6,80 (1,60 - 8,30)	4,63	**4,20 A+**	1,47 (0,32 - 2,17)	735	6,70
16 + 16 + 25	1,46	1,46	2,28	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,91	1,91	2,98	6,80 (1,60 - 8,30)	4,63	**4,20 A+**	1,47 (0,32 - 2,17)	735	6,70
16 + 16 + 35	1,24	1,24	2,72	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,04)	545	5,00	1,62	1,62	3,56	6,80 (1,60 - 8,30)	4,69	**4,20 A+**	1,45 (0,34 - 2,10)	725	6,60
16 + 16 + 42	1,12	1,12	2,96	5,20 (1,80 - 7,30)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,47	1,47	3,86	6,80 (1,60 - 8,30)	4,69	**4,20 A+**	1,45 (0,31 - 2,10)	725	6,60
16 + 16 + 50	1,01	1,01	3,18	5,20 (1,80 - 7,30)	5,15	**8,50 A+++**	1,01 (0,42 - 1,91)	505	4,70	1,33	1,33	4,14	6,80 (1,60 - 8,30)	5,07	**4,20 A+**	1,34 (0,33 - 1,96)	670	6,10
16 + 20 + 20	1,48	1,86	1,86	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,94	2,43	2,43	6,80 (1,60 - 8,30)	4,66	**4,20 A+**	1,46 (0,31 - 2,12)	730	6,70
16 + 20 + 25	1,36	1,70	2,14	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,78	2,23	2,79	6,80 (1,60 - 8,30)	4,66	**4,20 A+**	1,46 (0,31 - 2,12)	730	6,70
16 + 20 + 35	1,17	1,46	2,57	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,00)	545	5,00	1,53	1,92	3,35	6,80 (1,60 - 8,30)	4,69	**4,20 A+**	1,45 (0,34 - 2,10)	725	6,60
16 + 20 + 42	1,07	1,33	2,80	5,20 (1,80 - 7,30)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,39	1,74	3,67	6,80 (1,60 - 8,30)	4,72	**4,20 A+**	1,44 (0,31 - 2,09)	720	6,60
16 + 20 + 50	0,97	1,21	3,02	5,20 (1,80 - 7,30)	5,15	**8,50 A+++**	1,01 (0,42 - 1,86)	505	4,70	1,27	1,58	3,95	6,80 (1,60 - 8,30)	5,11	**4,20 A+**	1,33 (0,34 - 1,95)	665	6,10
16 + 25 + 25	1,26	1,97	1,97	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,64	2,58	2,58	6,80 (1,60 - 8,30)	4,66	**4,20 A+**	1,46 (0,31 - 2,12)	730	6,70
16 + 25 + 35	1,09	1,71	2,40	5,20 (1,80 - 7,30)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,43	2,24	3,13	6,80 (1,60 - 8,30)	4,69	**4,20 A+**	1,45 (0,34 - 2,10)	725	6,60
16 + 25 + 42	1,00	1,57	2,63	5,20 (1,80 - 7,30)	4,77	**8,50 A+++**	1,09 (0,39 - 2,09)	545	5,00	1,31	2,05	3,44	6,80 (1,60 - 8,30)	4,72	**4,20 A+**	1,44 (0,31 - 2,09)	720	6,60
16 + 25 + 50	0,91	1,43	2,86	5,20 (1,80 - 7,30)	5,15	**8,50 A+++**	1,01 (0,42 - 1,86)	505	4,70	1,19	1,87	3,74	6,80 (1,60 - 8,30)	5,11	**4,20 A+**	1,33 (0,34 - 1,95)	665	6,10
16 + 35 + 35	0,96	2,12	2,12	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,04)	525	4,80	1,26	2,77	2,77	6,80 (1,60 - 8,30)	4,76	**4,20 A+**	1,43 (0,32 - 2,07)	715	6,50
16 + 35 + 42	0,89	1,96	2,35	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,04)	525	4,80	1,17	2,56	3,07	6,80 (1,60 - 8,30)	4,79	**4,20 A+**	1,42 (0,32 - 2,06)	710	6,50
20 + 20 + 20	1,73	1,73	1,73	5,19 (1,90 - 7,20)	4,76	**8,50 A+++**	1,09 (0,39 - 2,04)	545	5,00	2,26	2,26	2,26	6,78 (1,60 - 8,30)	4,64	**4,20 A+**	1,46 (0,31 - 2,11)	730	6,70
20 + 20 + 25	1,60	1,60	2,00	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,04)	545	5,00	2,09	2,09	2,62	6,80 (1,60 - 8,30)	4,66	**4,20 A+**	1,46 (0,31 - 2,11)	730	6,70
20 + 20 + 35	1,39	1,39	2,42	5,20 (1,90 - 7,20)	4,95	**8,50 A+++**	1,05 (0,39 - 2,00)	525	4,80	1,81	1,81	3,18	6,80 (1,60 - 8,30)	4,72	**4,20 A+**	1,44 (0,34 - 2,09)	720	6,60
20 + 20 + 42	1,27	1,27	2,66	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,04)	525	4,80	1,66	1,66	3,48	6,80 (1,60 - 8,30)	4,76	**4,20 A+**	1,43 (0,32 - 2,08)	715	6,50
20 + 20 + 50	1,16	1,16	2,88	5,20 (1,80 - 7,30)	5,15	**8,50 A+++**	1,01 (0,42 - 1,86)	505	4,70	1,51	1,51	3,78	6,80 (1,60 - 8,30)	5,11	**4,20 A+**	1,33 (0,34 - 1,94)	665	6,10
20 + 25 + 25	1,48	1,86	1,86	5,20 (1,90 - 7,20)	4,77	**8,50 A+++**	1,09 (0,39 - 2,04)	545	5,00	1,94	2,43	2,43	6,80 (1,60 - 8,30)	4,66	**4,20 A+**	1,46 (0,31 - 2,11)	730	6,70
20 + 25 + 35	1,29	1,63	2,28	5,20 (1,90 - 7,20)	4,95	**8,50 A+++**	1,05 (0,39 - 2,00)	525	4,80	1,69	2,13	2,98	6,80 (1,60 - 8,30)	4,72	**4,20 A+**	1,44 (0,34 - 2,09)	720	6,60
20 + 25 + 42	1,20	1,49	2,51	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,04)	525	4,80	1,56	1,95	3,29	6,80 (1,60 - 8,30)	4,76	**4,20 A+**	1,43 (0,32 - 2,08)	715	6,50
20 + 25 + 50	1,09	1,37	2,74	5,20 (1,80 - 7,30)	5,15	**8,50 A+++**	1,01 (0,42 - 1,86)	505	4,70	1,43	1,79	3,58	6,80 (1,60 - 8,30)	5,11	**4,20 A+**	1,33 (0,34 - 1,94)	665	6,10
20 + 35 + 35	1,16	2,02	2,02	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,00)	525	4,80	1,52	2,64	2,64	6,80 (1,60 - 8,30)	4,79	**4,20 A+**	1,42 (0,32 - 2,06)	710	6,50
25 + 25 + 25	1,73	1,73	1,73	5,19 (1,90 - 7,20)	4,76	**8,50 A+++**	1,09 (0,39 - 2,04)	545	5,00	2,26	2,26	2,26	6,78 (1,60 - 8,30)	4,64	**4,20 A+**	1,46 (0,31 - 2,11)	730	6,70
25 + 25 + 35	1,53	1,53	2,14	5,20 (1,90 - 7,20)	4,95	**8,50 A+++**	1,05 (0,39 - 2,00)	525	4,80	2,00	2,00	2,80	6,80 (1,60 - 8,30)	4,72	**4,20 A+**	1,44 (0,31 - 2,09)	720	6,60
25 + 25 + 42	1,41	1,41	2,38	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,04)	525	4,80	1,85	1,85	3,10	6,80 (1,60 - 8,30)	4,76	**4,20 A+**	1,43 (0,68 - 2,08)	715	6,50
25 + 35 + 35	1,36	1,92	1,92	5,20 (1,80 - 7,30)	4,95	**8,50 A+++**	1,05 (0,39 - 2,00)	525	4,80	1,78	2,51	2,51	6,80 (1,60 - 8,30)	4,79	**4,20 A+**	1,42 (0,68 - 2,06)	710	6,50

1) Energy Label Scale from A+++ to D.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 3x1 CU-3Z68TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 11,2 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms				EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms				COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																		
16	1,60			1,60 (1,30 - 2,30)	4,00		0,40 (0,25 - 0,64)	200	2,00	2,60			2,60 (1,20 - 3,20)	4,33		0,60 (0,30 - 0,96)	300	3,00
20	2,00			2,00 (1,80 - 2,90)	4,00		0,50 (0,34 - 0,81)	250	2,50	3,20			3,20 (1,20 - 4,10)	4,32		0,74 (0,30 - 1,23)	370	3,70
25	2,50			2,50 (1,80 - 2,90)	3,97		0,63 (0,34 - 0,81)	315	3,20	3,60			3,60 (1,20 - 4,30)	3,83		0,94 (0,30 - 1,23)	470	4,70
35	3,50			3,50 (1,80 - 3,80)	3,72		0,94 (0,34 - 1,36)	470	4,50	4,50			4,50 (1,20 - 5,80)	3,66		1,23 (0,30 - 2,10)	615	6,00
42	4,20			4,20 (1,80 - 4,30)	3,07		1,37 (0,34 - 1,99)	685	6,40	5,60			5,60 (1,20 - 6,80)	3,26		1,72 (0,30 - 2,93)	860	8,00
50	5,00			5,00 (1,90 - 5,70)	3,23		1,55 (0,34 - 2,13)	775	7,20	6,80			6,80 (1,20 - 6,90)	3,24		2,10 (0,30 - 2,52)	1050	9,70
60	6,00			6,00 (1,90 - 6,20)	2,96		2,03 (0,34 - 2,33)	1015	9,20	8,50			8,50 (1,30 - 9,00)	3,54		2,40 (0,62 - 2,55)	1200	11,10
2 Rooms																		
16 + 16	1,60	1,60		3,20 (1,90 - 6,40)	5,71	**6,10 A++**	0,56 (0,27 - 2,12)	280	2,80	2,60	2,60		5,20 (2,70 - 9,80)	4,00	**3,80 A**	1,30 (0,66 - 3,01)	650	5,90
16 + 20	1,60	2,00		3,60 (1,90 - 6,40)	5,22	**6,10 A++**	0,69 (0,27 - 2,08)	345	3,40	2,58	3,22		5,80 (2,70 - 9,80)	3,92	**3,80 A**	1,48 (0,65 - 3,02)	740	6,80
16 + 25	1,60	2,50		4,10 (1,90 - 6,40)	4,94	**6,10 A++**	0,83 (0,27 - 2,08)	415	3,90	2,42	3,78		6,20 (2,70 - 9,80)	3,85	**3,80 A**	1,61 (0,65 - 3,02)	805	7,40
16 + 35	1,60	3,50		5,10 (1,90 - 6,90)	4,08	**6,10 A++**	1,25 (0,27 - 2,48)	625	5,70	2,23	4,87		7,10 (2,70 - 9,90)	3,74	**3,80 A**	1,90 (0,63 - 3,02)	950	8,60
16 + 42	1,60	4,20		5,80 (1,90 - 6,90)	3,60	**6,10 A++**	1,61 (0,27 - 2,44)	805	7,40	2,26	5,94		8,20 (2,70 - 9,90)	3,52	**3,80 A**	2,33 (0,63 - 3,02)	1165	10,50
16 + 50	1,60	5,00		6,60 (2,00 - 7,50)	3,63	**6,50 A++**	1,82 (0,28 - 2,52)	910	8,20	2,06	6,44		8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
16 + 60	1,43	5,37		6,80 (2,00 - 7,50)	3,49	**6,50 A++**	1,95 (0,28 - 2,52)	975	8,80	1,79	6,71		8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
20 + 20	2,00	2,00		4,00 (1,90 - 6,40)	5,00	**6,10 A++**	0,80 (0,27 - 2,04)	400	3,80	3,20	3,20		6,40 (2,70 - 9,80)	3,83	**3,80 A**	1,67 (0,64 - 3,02)	835	7,60
20 + 25	2,00	2,50		4,50 (1,90 - 6,40)	4,59	**6,10 A++**	0,98 (0,27 - 2,04)	490	4,60	3,02	3,78		6,80 (2,70 - 9,80)	3,78	**3,80 A**	1,80 (0,64 - 3,02)	900	8,10
20 + 35	2,00	3,50		5,50 (1,90 - 6,90)	3,85	**6,10 A++**	1,43 (0,27 - 2,44)	715	6,50	2,80	4,90		7,70 (2,70 - 9,90)	3,65	**3,80 A**	2,11 (0,63 - 3,02)	1055	9,50
20 + 42	2,00	4,20		6,20 (1,90 - 6,90)	3,35	**6,10 A++**	1,85 (0,27 - 2,40)	925	8,40	2,74	5,76		8,50 (2,70 - 9,90)	3,48	**3,80 A**	2,44 (0,62 - 3,03)	1220	11,00
20 + 50	1,94	4,86		6,80 (2,00 - 7,50)	3,49	**6,50 A++**	1,95 (0,28 - 2,48)	975	8,80	2,43	6,07		8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
20 + 60	1,70	5,10		6,80 (2,00 - 7,50)	3,49	**6,50 A++**	1,95 (0,28 - 2,48)	975	8,80	2,12	6,38		8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
25 + 25	2,50	2,50		5,00 (1,90 - 6,80)	4,13	**6,10 A++**	1,21 (0,27 - 2,43)	605	5,60	3,60	3,60		7,20 (2,70 - 9,80)	3,71	**3,80 A**	1,94 (0,64 - 3,02)	970	8,80
25 + 35	2,50	3,50		6,00 (1,90 - 6,90)	3,47	**6,10 A++**	1,73 (0,27 - 2,44)	865	7,90	3,37	4,73		8,10 (2,70 - 9,90)	3,60	**3,80 A**	2,25 (0,63 - 3,02)	1125	10,20
25 + 42	2,50	4,20		6,70 (1,90 - 6,90)	2,94	**6,10 A++**	2,28 (0,27 - 2,40)	1140	10,30	3,17	5,33		8,50 (2,70 - 9,90)	3,48	**3,80 A**	2,44 (0,62 - 3,03)	1220	11,00
25 + 50	2,27	4,53		6,80 (1,90 - 7,50)	3,49	**6,50 A++**	1,95 (0,26 - 2,48)	975	8,80	2,83	5,67		8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
25 + 60	2,00	4,80		6,80 (1,90 - 7,50)	3,49	**6,50 A++**	1,95 (0,26 - 2,48)	975	8,80	2,50	6,00		8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
35 + 35	3,40	3,40		6,80 (1,90 - 7,00)	2,97	**6,10 A++**	2,29 (0,27 - 2,40)	1145	10,40	4,25	4,25		8,50 (2,80 - 10,00)	3,56	**3,80 A**	2,39 (0,64 - 3,02)	1195	10,80
35 + 42	3,09	3,71		6,80 (1,90 - 7,10)	3,04	**6,10 A++**	2,24 (0,27 - 2,50)	1120	10,10	3,86	4,64		8,50 (2,80 - 10,00)	3,56	**3,80 A**	2,39 (0,60 - 3,02)	1195	10,80
35 + 50	2,80	4,00		6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,48)	935	8,50	3,50	5,00		8,50 (2,80 - 10,30)	3,86	**3,80 A**	2,20 (0,54 - 2,97)	1100	10,00
35 + 60	2,51	4,29		6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,48)	935	8,50	3,13	5,37		8,50 (2,80 - 10,30)	3,86	**3,80 A**	2,20 (0,54 - 2,97)	1100	10,00
42 + 42	3,40	3,40		6,80 (1,90 - 7,10)	3,02	**6,10 A++**	2,25 (0,26 - 2,45)	1125	10,20	4,25	4,25		8,50 (2,80 - 10,00)	3,57	**3,80 A**	2,38 (0,60 - 2,98)	1190	10,80
42 + 50	3,10	3,70		6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,44)	935	8,50	3,88	4,62		8,50 (2,80 - 10,30)	3,88	**3,80 A**	2,19 (0,54 - 2,96)	1095	9,90
42 + 60	2,80	4,00		6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,44)	935	8,50	3,50	5,00		8,50 (2,80 - 10,30)	3,88	**3,80 A**	2,19 (0,54 - 2,96)	1095	9,90
50 + 50	3,40	3,40		6,80 (2,10 - 8,10)	4,10	**6,50 A++**	1,66 (0,32 - 2,50)	830	7,60	4,25	4,25		8,50 (2,80 - 10,50)	4,15	**3,80 A**	2,05 (0,51 - 2,87)	1025	9,30
50 + 60	3,09	3,71		6,80 (2,10 - 8,10)	4,10	**6,50 A++**	1,66 (0,32 - 2,50)	830	7,60	3,86	4,64		8,50 (2,80 - 10,50)	4,15	**3,80 A**	2,05 (0,51 - 2,87)	1025	9,30
3 Rooms																		
16 + 16 + 16	1,60	1,60	1,60	4,80 (1,90 - 8,00)	4,85	**8,00 A++**	0,99 (0,27 - 2,50)	495	4,60	2,60	2,60	2,60	7,80 (3,30 - 10,40)	3,98	**4,20 A+**	1,96 (0,64 - 2,95)	980	8,90
16 + 16 + 20	1,60	1,60	2,00	5,20 (1,90 - 8,00)	4,60	**8,00 A++**	1,13 (0,27 - 2,46)	565	5,20	2,58	2,58	3,24	8,40 (3,30 - 10,40)	3,84	**4,20 A+**	2,19 (0,64 - 2,94)	1095	9,90
16 + 16 + 25	1,60	1,60	2,50	5,70 (1,90 - 8,00)	4,19	**8,00 A++**	1,36 (0,27 - 2,46)	680	6,20	2,39	2,39	3,72	8,50 (3,30 - 10,40)	3,81	**4,20 A+**	2,23 (0,64 - 2,94)	1115	10,10
16 + 16 + 35	1,60	1,60	3,50	6,70 (1,90 - 8,00)	3,68	**8,00 A++**	1,82 (0,27 - 2,37)	910	8,20	2,03	2,03	4,44	8,50 (3,30 - 10,40)	3,94	**4,20 A+**	2,16 (0,63 - 2,92)	1080	9,80
16 + 16 + 42	1,47	1,47	3,86	6,80 (1,90 - 8,10)	3,66	**8,00 A++**	1,86 (0,27 - 2,46)	930	8,40	1,84	1,84	4,82	8,50 (3,30 - 10,50)	3,95	**4,20 A+**	2,15 (0,62 - 2,95)	1075	9,70
16 + 16 + 50	1,33	1,33	4,14	6,80 (2,00 - 8,50)	3,93	**8,00 A++**	1,73 (0,32 - 2,42)	865	7,90	1,66	1,66	5,18	8,50 (3,20 - 10,60)	4,21	**4,20 A+**	2,02 (0,60 - 2,80)	1010	9,10
16 + 16 + 60	1,18	1,18	4,44	6,80 (2,00 - 8,50)	3,93	**8,00 A++**	1,73 (0,32 - 2,42)	865	7,90	1,48	1,48	5,54	8,50 (3,20 - 10,60)	4,21	**4,20 A+**	2,02 (0,60 - 2,80)	1010	9,10
16 + 20 + 20	1,60	2,00	2,00	5,60 (1,90 - 8,00)	4,38	**8,00 A++**	1,28 (0,27 - 2,46)	640	5,80	2,42	3,04	3,04	8,50 (3,30 - 10,40)	3,83	**4,20 A+**	2,22 (0,63 - 2,93)	1110	10,00
16 + 20 + 25	1,60	2,00	2,50	6,10 (1,90 - 8,00)	4,01	**8,00 A++**	1,52 (0,27 - 2,46)	760	6,90	2,23	2,79	3,48	8,50 (3,30 - 10,40)	3,83	**4,20 A+**	2,22 (0,63 - 2,93)	1110	10,00
16 + 20 + 35	1,53	1,92	3,35	6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,37)	930	8,40	1,92	2,39	4,19	8,50 (3,30 - 10,40)	3,95	**4,20 A+**	2,15 (0,62 - 2,86)	1075	9,70
16 + 20 + 42	1,39	1,74	3,67	6,80 (1,90 - 8,10)	3,66	**8,00 A++**	1,86 (0,27 - 2,42)	930	8,40	1,74	2,18	4,58	8,50 (3,30 - 10,50)	3,95	**4,20 A+**	2,15 (0,62 - 2,90)	1075	9,70
16 + 20 + 50	1,27	1,58	3,95	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,32 - 2,42)	840	7,70	1,58	1,98	4,94	8,50 (3,20 - 10,60)	4,23	**4,20 A+**	2,01 (0,60 - 2,79)	1005	9,10
16 + 20 + 60	1,13	1,42	4,25	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,32 - 2,42)	840	7,70	1,42	1,77	5,31	8,50 (3,20 - 10,60)	4,23	**4,20 A+**	2,01 (0,60 - 2,79)	1005	9,10
16 + 25 + 25	1,60	2,50	2,50	6,60 (1,90 - 8,00)	3,73	**8,00 A++**	1,77 (0,27 - 2,46)	885	8,00	2,06	3,22	3,22	8,50 (3,30 - 10,40)	3,83	**4,20 A+**	2,22 (0,63 - 2,93)	1110	10,00
16 + 25 + 35	1,43	2,24	3,13	6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,37)	930	8,40	1,79	2,80	3,91	8,50 (3,30 - 10,40)	3,95	**4,20 A+**	2,15 (0,62 - 2,86)	1075	9,70
16 + 25 + 42	1,31	2,05	3,44	6,80 (1,90 - 8,10)	3,66	**8,00 A++**	1,86 (0,27 - 2,42)	930	8,40	1,64	2,56	4,30	8,50 (3,30 - 10,50)	3,95	**4,20 A+**	2,15 (0,62 - 2,90)	1075	9,70
16 + 25 + 50	1,19	1,87	3,74	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,32 - 2,42)	840	7,70	1,49	2,34	4,67	8,50 (3,20 - 10,60)	4,23	**4,20 A+**	2,01 (0,60 - 2,79)	1005	9,10
16 + 25 + 60	1,08	1,68	4,04	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,32 - 2,42)	840	7,70	1,35	2,10	5,05	8,50 (3,20 - 10,60)	4,23	**4,20 A+**	2,01 (0,60 - 2,79)	1005	9,10
16 + 35 + 35	1,26	2,77	2,77	6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,37)	910	8,20	1,58	3,46	3,46	8,50 (3,30 - 10,50)	3,99	**4,20 A+**	2,13 (0,64 - 2,88)	1065	9,60
16 + 35 + 42	1,17	2,56	3,07	6,80 (1,90 - 8,20)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,46	3,20	3,84	8,50 (3,30 - 10,50)	4,01	**4,20 A+**	2,12 (0,64 - 2,87)	1060	9,60
16 + 35 + 50	1,07	2,36	3,37	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,34	2,95	4,21	8,50 (3,20 - 10,60)	4,27	**4,20 A+**	1,99 (0,60 - 2,77)	995	9,00
16 + 35 + 60	0,98	2,14	3,68	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,23	2,68	4,59	8,50 (3,20 - 10,60)	4,27	**4,20 A+**	1,99 (0,60 - 2,77)	995	9,00
16 + 42 + 42	1,08	2,86	2,86	6,80 (1,90 - 8,20)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,36	3,57	3,57	8,50 (3,30 - 10,50)	4,03	**4,20 A+**	2,11 (0,64 - 2,86)	1055	9,50
16 + 42 + 50	1,01	2,64	3,15	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,25	3,31	3,94	8,50 (3,20 - 10,60)	4,29	**4,20 A+**	1,98 (0,60 - 2,76)	990	9,00
20 + 20 + 20	2,00	2,00	2,00	6,00 (1,90 - 8,00)	4,05	**8,00 A++**	1,48 (0,27 - 2,41)	740	6,80	2,83	2,83	2,83	8,49 (3,30 - 10,40)	3,91	**4,20 A+**	2,17 (0,63 - 2,92)	1085	9,80
20 + 20 + 25	2,00	2,00	2,50	6,50 (1,90 - 8,00)	3,76	**8,00 A++**	1,73 (0,27 - 2,41)	865	7,90	2,62	2,62	3,26	8,50 (3,30 - 10,40)	3,92	**4,20 A+**	2,17 (0,63 - 2,92)	1085	9,80
20 + 20 + 35	1,81	1,81	3,18	6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,32)	930	8,40	2,27	2,27	3,96	8,50 (3,30 - 10,40)	3,95	**4,20 A+**	2,15 (0,62 - 2,85)	1075	9,70
20 + 20 + 42	1,66	1,66	3,48	6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	2,07	2,07	4,36	8,50 (3,30 - 10,50)	3,97	**4,20 A+**	2,14 (0,62 - 2,89)	1070	9,70
20 + 20 + 50	1,51	1,51	3,78	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,89	1,89	4,72	8,50 (3,20 - 10,60)	4,25	**4,20 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 20 + 60	1,36	1,36	4,08	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,70	1,70	5,10	8,50 (3,20 - 10,60)	4,25	**4,20 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 25 + 25	1,94	2,43	2,43	6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,41)	930	8,40	2,42	3,04	3,04	8,50 (3,30 - 10,40)	3,92	**4,20 A+**	2,17 (0,63 - 2,92)	1085	9,80
20 + 25 + 35	1,69	2,13	2,98	6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,32)	930	8,40	2,12	2,66	3,72	8,50 (3,30 - 10,40)	3,95	**4,20 A+**	2,15 (0,62 - 2,85)	1075	9,70
20 + 25 + 42	1,56	1,95	3,29	6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,95	2,44	4,11	8,50 (3,30 - 10,50)	3,97	**4,20 A+**	2,14 (0,62 - 2,89)	1070	9,70
20 + 25 + 50	1,43	1,79	3,58	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,79	2,24	4,47	8,50 (3,20 - 10,60)	4,25	**4,20 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 25 + 60	1,29	1,62	3,89	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,62	2,02	4,86	8,50 (3,20 - 10,60)	4,25	**4,20 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 35 + 35	1,52	2,64	2,64	6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,33)	910	8,20	1,88	3,31	3,31	8,50 (3,30 - 10,50)	4,01	**4,20 A+**	2,12 (0,64 - 2,87)	1060	9,60
20 + 35 + 42	1,40	2,45	2,95	6,80 (1,90 - 8,20)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,75	3,07	3,68	8,50 (3,30 - 10,50)	4,03	**4,20 A+**	2,11 (0,64 - 2,86)	1055	9,50
20 + 35 + 50	1,29	2,27	3,24	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,62	2,83	4,05	8,50 (3,20 - 10,60)	4,29	**4,20 A+**	1,98 (0,60 - 2,76)	990	9,00
20 + 42 + 42	1,30	2,75	2,75	6,80 (1,90 - 8,20)	3,84	**8,00 A++**	1,77 (0,29 - 2,37)	885	8,00	1,64	3,43	3,43	8,50 (3,30 - 10,50)	4,05	**4,20 A+**	2,10 (0,63 - 2,86)	1050	9,50
20 + 42 + 50	1,21	2,55	3,04	6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,52	3,19	3,79	8,50 (3,20 - 10,60)	4,31	**4,20 A+**	1,97 (0,62 - 2,75)	985	8,90

Free Multi 3x1 CU-3Z68TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 11,2 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms				EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms				COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V
25+25+25	2,26	2,26	2,26	6,78 (1,90 - 8,00)	3,65	**8,00 A+++**	1,86 (0,27 - 2,41)	930	8,40	2,83	2,83	2,83	8,49 (3,30 - 10,40)	3,91	**4,20 A+**	2,17 (0,63 - 2,92)	1085	9,80
25+25+35	2,00	2,00	2,80	6,80 (1,90 - 8,00)	3,66	**8,00 A+++**	1,86 (0,27 - 2,32)	930	8,40	2,50	2,50	3,50	8,50 (3,30 - 10,40)	3,95	**4,20 A+**	2,15 (0,62 - 2,85)	1075	9,70
25+25+42	1,85	1,85	3,10	6,80 (1,90 - 8,10)	3,74	**8,00 A+++**	1,82 (0,29 - 2,42)	910	8,20	2,31	2,31	3,88	8,50 (3,30 - 10,50)	3,97	**4,20 A+**	2,14 (0,62 - 2,89)	1070	9,70
25+25+50	1,70	1,70	3,40	6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,34 - 2,38)	840	7,70	2,13	2,13	4,24	8,50 (3,20 - 10,60)	4,25	**4,20 A+**	2,00 (0,60 - 2,78)	1000	9,00
25+25+60	1,55	1,55	3,70	6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,34 - 2,38)	840	7,70	1,93	1,93	4,64	8,50 (3,20 - 10,60)	4,25	**4,20 A+**	2,00 (0,60 - 2,78)	1000	9,00
25+35+35	1,78	2,51	2,51	6,80 (1,90 - 8,10)	3,74	**8,00 A+++**	1,82 (0,29 - 2,33)	910	8,20	2,24	3,13	3,13	8,50 (3,30 - 10,50)	4,01	**4,20 A+**	2,12 (0,64 - 2,87)	1060	9,60
25+35+42	1,67	2,33	2,80	6,80 (1,90 - 8,20)	3,74	**8,00 A+++**	1,82 (0,29 - 2,42)	910	8,20	2,08	2,92	3,50	8,50 (3,30 - 10,50)	4,03	**4,20 A+**	2,11 (0,64 - 2,86)	1055	9,50
25+35+50	1,55	2,16	3,09	6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,34 - 2,33)	840	7,70	1,93	2,70	3,87	8,50 (3,20 - 10,60)	4,29	**4,20 A+**	1,98 (0,60 - 2,76)	990	9,00
25+42+42	1,56	2,62	2,62	6,80 (1,90 - 8,20)	3,84	**8,00 A+++**	1,77 (0,29 - 2,37)	885	8,00	1,94	3,28	3,28	8,50 (3,30 - 10,50)	4,05	**4,20 A+**	2,10 (0,63 - 2,86)	1050	9,50
35+35+35	2,26	2,26	2,26	6,78 (1,90 - 8,20)	3,83	**8,00 A+++**	1,77 (0,29 - 2,33)	885	8,00	2,83	2,83	2,83	8,49 (3,30 - 10,50)	4,12	**4,20 A+**	2,06 (0,63 - 2,85)	1030	9,30
35+35+42	2,13	2,13	2,54	6,80 (1,90 - 8,20)	3,84	**8,00 A+++**	1,77 (0,29 - 2,33)	885	8,00	2,66	2,66	3,18	8,50 (3,30 - 10,50)	4,15	**4,20 A+**	2,05 (0,63 - 2,80)	1025	9,30

1) Energy Label Scale from A+++ to D.

Free Multi 4x1 CU-4Z68TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 11,5 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms					EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms					COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																				
16	1,60				1,60 (1,30 - 2,30)	4,00		0,40 (0,25 - 0,64)	200	2,00	2,60				2,60 (1,20 - 3,20)	4,33		0,60 (0,30 - 0,96)	300	3,00
20	2,00				2,00 (1,80 - 2,90)	4,00		0,50 (0,34 - 0,81)	250	2,50	3,20				3,20 (1,20 - 4,10)	4,32		0,74 (0,30 - 1,23)	370	3,70
25	2,50				2,50 (1,80 - 2,90)	3,97		0,63 (0,34 - 0,81)	315	3,20	3,60				3,60 (1,20 - 4,30)	3,83		0,94 (0,30 - 1,23)	470	4,70
35	3,50				3,50 (1,80 - 3,80)	3,72		0,94 (0,34 - 1,36)	470	4,50	4,50				4,50 (1,20 - 5,80)	3,66		1,23 (0,30 - 2,10)	615	6,00
42	4,20				4,20 (1,80 - 4,30)	3,07		1,37 (0,34 - 1,99)	685	6,40	5,60				5,60 (1,20 - 6,80)	3,26		1,72 (0,30 - 2,93)	860	8,00
50	5,00				5,00 (1,90 - 5,70)	3,23		1,55 (0,34 - 2,13)	775	7,20	6,80				6,80 (1,20 - 6,90)	3,24		2,10 (0,30 - 2,52)	1050	9,70
60	6,00				6,00 (1,90 - 6,20)	2,96		2,03 (0,34 - 2,33)	1015	9,20	8,50				8,50 (1,30 - 9,00)	3,54		2,40 (0,62 - 2,55)	1200	11,10
2 Rooms																				
16+16	1,60	1,60			3,20 (1,90 - 6,40)	5,71	**6,10 A++**	0,56 (0,27 - 2,12)	280	2,80	2,60	2,60			5,20 (2,70 - 9,80)	4,00	**3,80 A**	1,30 (0,66 - 3,01)	650	5,90
16+20	1,60	2,00			3,60 (1,90 - 6,40)	5,22	**6,10 A++**	0,69 (0,27 - 2,08)	345	3,40	2,58	3,22			5,80 (2,70 - 9,80)	3,92	**3,80 A**	1,48 (0,65 - 3,02)	740	6,80
16+25	1,60	2,50			4,10 (1,90 - 6,40)	4,94	**6,10 A++**	0,83 (0,27 - 2,08)	415	3,90	2,42	3,78			6,20 (2,70 - 9,80)	3,85	**3,80 A**	1,61 (0,65 - 3,02)	805	7,40
16+35	1,60	3,50			5,10 (1,90 - 6,90)	4,08	**6,10 A++**	1,25 (0,27 - 2,48)	625	5,70	2,23	4,87			7,10 (2,70 - 9,90)	3,74	**3,80 A**	1,90 (0,63 - 3,02)	950	8,60
16+42	1,60	4,20			5,80 (1,90 - 6,90)	3,60	**6,10 A++**	1,61 (0,27 - 2,44)	805	7,40	2,26	5,94			8,20 (2,70 - 9,90)	3,52	**3,80 A**	2,33 (0,63 - 3,02)	1165	10,50
16+50	1,60	5,00			6,60 (2,00 - 7,50)	3,63	**6,50 A++**	1,82 (0,28 - 2,52)	910	8,20	2,06	6,44			8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
16+60	1,43	5,37			6,80 (2,00 - 7,50)	3,49	**6,50 A++**	1,95 (0,28 - 2,52)	975	8,80	1,79	6,71			8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
20+20	2,00	2,00			4,00 (1,90 - 6,40)	5,00	**6,10 A++**	0,80 (0,27 - 2,04)	400	3,80	3,20	3,20			6,40 (2,70 - 9,80)	3,83	**3,80 A**	1,67 (0,64 - 3,02)	835	7,60
20+25	2,00	2,50			4,50 (1,90 - 6,40)	4,59	**6,10 A++**	0,98 (0,27 - 2,04)	490	4,60	3,02	3,78			6,80 (2,70 - 9,80)	3,78	**3,80 A**	1,80 (0,64 - 3,02)	900	8,10
20+35	2,00	3,50			5,50 (1,90 - 6,90)	3,85	**6,10 A++**	1,43 (0,27 - 2,44)	715	6,50	2,80	4,90			7,70 (2,70 - 9,90)	3,65	**3,80 A**	2,11 (0,63 - 3,02)	1055	9,50
20+42	2,00	4,20			6,20 (1,90 - 6,90)	3,35	**6,10 A++**	1,85 (0,27 - 2,40)	925	8,40	2,74	5,76			8,50 (2,70 - 9,90)	3,48	**3,80 A**	2,44 (0,62 - 3,03)	1220	11,00
20+50	1,94	4,86			6,80 (2,00 - 7,50)	3,49	**6,50 A++**	1,95 (0,28 - 2,48)	975	8,80	2,43	6,07			8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
20+60	1,70	5,10			6,80 (2,00 - 7,50)	3,49	**6,50 A++**	1,95 (0,28 - 2,48)	975	8,80	2,12	6,38			8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
25+25	2,50	2,50			5,00 (1,90 - 6,80)	4,13	**6,10 A++**	1,21 (0,27 - 2,43)	605	5,60	3,60	3,60			7,20 (2,70 - 9,80)	3,71	**3,80 A**	1,94 (0,64 - 3,02)	970	8,80
25+35	2,50	3,50			6,00 (1,90 - 6,90)	3,47	**6,10 A++**	1,73 (0,27 - 2,44)	865	7,90	3,37	4,73			8,10 (2,70 - 9,90)	3,60	**3,80 A**	2,25 (0,63 - 3,02)	1125	10,20
25+42	2,50	4,20			6,70 (1,90 - 6,90)	2,94	**6,10 A++**	2,28 (0,27 - 2,40)	1140	10,30	3,17	5,33			8,50 (2,70 - 9,90)	3,48	**3,80 A**	2,44 (0,62 - 3,03)	1220	11,00
25+50	2,27	4,53			6,80 (1,90 - 7,50)	3,49	**6,50 A++**	1,95 (0,26 - 2,48)	975	8,80	2,83	5,67			8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
25+60	2,00	4,80			6,80 (1,90 - 7,50)	3,49	**6,50 A++**	1,95 (0,26 - 2,48)	975	8,80	2,50	6,00			8,50 (2,80 - 10,20)	3,76	**3,80 A**	2,26 (0,56 - 2,99)	1130	10,20
35+35	3,40	3,40			6,80 (1,90 - 7,00)	2,97	**6,10 A++**	2,29 (0,27 - 2,40)	1145	10,40	4,25	4,25			8,50 (2,80 - 10,00)	3,56	**3,80 A**	2,39 (0,64 - 3,02)	1195	10,80
35+42	3,09	3,71			6,80 (1,90 - 7,10)	3,04	**6,10 A++**	2,24 (0,27 - 2,50)	1120	10,10	3,86	4,64			8,50 (2,80 - 10,00)	3,56	**3,80 A**	2,39 (0,60 - 3,02)	1195	10,80
35+50	2,80	4,00			6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,48)	935	8,50	3,50	5,00			8,50 (2,80 - 10,30)	3,86	**3,80 A**	2,20 (0,54 - 2,97)	1100	10,00
35+60	2,51	4,29			6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,48)	935	8,50	3,13	5,37			8,50 (2,80 - 10,30)	3,86	**3,80 A**	2,20 (0,54 - 2,97)	1100	10,00
42+42	3,40	3,40			6,80 (1,90 - 7,10)	3,02	**6,10 A++**	2,25 (0,26 - 2,45)	1125	10,20	4,25	4,25			8,50 (2,80 - 10,00)	3,57	**3,80 A**	2,38 (0,60 - 2,98)	1190	10,80
42+50	3,10	3,70			6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,44)	935	8,50	3,88	4,62			8,50 (2,80 - 10,30)	3,88	**3,80 A**	2,19 (0,54 - 2,96)	1095	9,90
42+60	2,80	4,00			6,80 (2,00 - 7,60)	3,64	**6,50 A++**	1,87 (0,28 - 2,44)	935	8,50	3,50	5,00			8,50 (2,80 - 10,30)	3,88	**3,80 A**	2,19 (0,54 - 2,96)	1095	9,90
50+50	3,40	3,40			6,80 (2,10 - 8,10)	4,10	**6,50 A++**	1,66 (0,32 - 2,50)	830	7,60	4,25	4,25			8,50 (2,80 - 10,50)	4,15	**3,80 A**	2,05 (0,51 - 2,87)	1025	9,30
50+60	3,09	3,71			6,80 (2,10 - 8,10)	4,10	**6,50 A++**	1,66 (0,32 - 2,50)	830	7,60	3,86	4,64			8,50 (2,80 - 10,50)	4,15	**3,80 A**	2,05 (0,51 - 2,87)	1025	9,30
3 Rooms																				
16+16+16	1,60	1,60	1,60		4,80 (1,90 - 8,00)	4,85	**8,00 A+++**	0,99 (0,27 - 2,50)	495	4,60	2,60	2,60	2,60		7,80 (3,30 - 10,40)	3,98	**4,00 A+**	1,96 (0,64 - 2,95)	980	8,90
16+16+20	1,60	1,60	2,00		5,20 (1,90 - 8,00)	4,60	**8,00 A+++**	1,13 (0,27 - 2,46)	565	5,20	2,58	2,58	3,24		8,40 (3,30 - 10,40)	3,84	**4,00 A+**	2,19 (0,64 - 2,94)	1095	9,90
16+16+25	1,60	1,60	2,50		5,70 (1,90 - 8,00)	4,19	**8,00 A+++**	1,36 (0,27 - 2,46)	680	6,20	2,39	2,39	3,72		8,50 (3,30 - 10,40)	3,81	**4,00 A+**	2,23 (0,64 - 2,94)	1115	10,10
16+16+35	1,60	1,60	3,50		6,70 (1,90 - 8,00)	3,68	**8,00 A+++**	1,82 (0,27 - 2,37)	910	8,20	2,03	2,03	4,44		8,50 (3,30 - 10,40)	3,94	**4,00 A+**	2,16 (0,63 - 2,92)	1080	9,80
16+16+42	1,47	1,47	3,86		6,80 (1,90 - 8,10)	3,66	**8,00 A+++**	1,86 (0,27 - 2,46)	930	8,40	1,84	1,84	4,82		8,50 (3,30 - 10,50)	3,95	**4,00 A+**	2,15 (0,62 - 2,95)	1075	9,70
16+16+50	1,33	1,33	4,14		6,80 (2,00 - 8,50)	3,93	**8,00 A+++**	1,73 (0,32 - 2,42)	865	7,90	1,66	1,66	5,18		8,50 (3,20 - 10,60)	4,21	**4,00 A+**	2,02 (0,60 - 2,80)	1010	9,10
16+16+60	1,18	1,18	4,44		6,80 (2,00 - 8,50)	3,93	**8,00 A+++**	1,73 (0,32 - 2,42)	865	7,90	1,48	1,48	5,54		8,50 (3,20 - 10,60)	4,21	**4,00 A+**	2,02 (0,60 - 2,80)	1010	9,10
16+20+20	1,60	2,00	2,00		5,60 (1,90 - 8,00)	4,38	**8,00 A+++**	1,28 (0,27 - 2,46)	640	5,80	2,42	3,04	3,04		8,50 (3,30 - 10,40)	3,83	**4,00 A+**	2,22 (0,63 - 2,93)	1110	10,00
16+20+25	1,60	2,00	2,50		6,10 (1,90 - 8,00)	4,01	**8,00 A+++**	1,52 (0,27 - 2,46)	760	6,90	2,23	2,79	3,48		8,50 (3,30 - 10,40)	3,83	**4,00 A+**	2,22 (0,63 - 2,93)	1110	10,00
16+20+35	1,53	1,92	3,35		6,80 (1,90 - 8,00)	3,66	**8,00 A+++**	1,86 (0,27 - 2,37)	930	8,40	1,92	2,39	4,19		8,50 (3,30 - 10,40)	3,95	**4,00 A+**	2,15 (0,62 - 2,86)	1075	9,70
16+20+42	1,39	1,74	3,67		6,80 (1,90 - 8,10)	3,66	**8,00 A+++**	1,86 (0,27 - 2,42)	930	8,40	1,74	2,18	4,58		8,50 (3,30 - 10,50)	3,95	**4,00 A+**	2,15 (0,62 - 2,90)	1075	9,70
16+20+50	1,27	1,58	3,95		6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,32 - 2,42)	840	7,70	1,58	1,98	4,94		8,50 (3,20 - 10,60)	4,23	**4,00 A+**	2,01 (0,60 - 2,79)	1005	9,10
16+20+60	1,13	1,42	4,25		6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,32 - 2,42)	840	7,70	1,42	1,77	5,31		8,50 (3,20 - 10,60)	4,23	**4,00 A+**	2,01 (0,60 - 2,79)	1005	9,10
16+25+25	1,60	2,50	2,50		6,60 (1,90 - 8,00)	3,73	**8,00 A+++**	1,77 (0,27 - 2,46)	885	8,00	2,06	3,22	3,22		8,50 (3,30 - 10,40)	3,83	**4,00 A+**	2,22 (0,63 - 2,93)	1110	10,00
16+25+35	1,43	2,24	3,13		6,80 (1,90 - 8,00)	3,66	**8,00 A+++**	1,86 (0,27 - 2,37)	930	8,40	1,79	2,80	3,91		8,50 (3,30 - 10,40)	3,95	**4,00 A+**	2,15 (0,62 - 2,86)	1075	9,70
16+25+42	1,31	2,05	3,44		6,80 (1,90 - 8,10)	3,66	**8,00 A+++**	1,86 (0,27 - 2,42)	930	8,40	1,64	2,56	4,30		8,50 (3,30 - 10,50)	3,95	**4,00 A+**	2,15 (0,62 - 2,90)	1075	9,70
16+25+50	1,19	1,87	3,74		6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,32 - 2,42)	840	7,70	1,49	2,34	4,67		8,50 (3,20 - 10,60)	4,23	**4,00 A+**	2,01 (0,60 - 2,79)	1005	9,10
16+25+60	1,08	1,68	4,04		6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,32 - 2,42)	840	7,70	1,35	2,10	5,05		8,50 (3,20 - 10,60)	4,23	**4,00 A+**	2,01 (0,60 - 2,79)	1005	9,10
16+35+35	1,26	2,77	2,77		6,80 (1,90 - 8,10)	3,74	**8,00 A+++**	1,82 (0,29 - 2,37)	910	8,20	1,58	3,46	3,46		8,50 (3,30 - 10,50)	3,99	**4,00 A+**	2,13 (0,64 - 2,88)	1065	9,60
16+35+42	1,17	2,56	3,07		6,80 (1,90 - 8,20)	3,74	**8,00 A+++**	1,82 (0,29 - 2,42)	910	8,20	1,46	3,20	3,84		8,50 (3,30 - 10,50)	4,01	**4,00 A+**	2,12 (0,64 - 2,87)	1060	9,60
16+35+50	1,07	2,36	3,37		6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,34 - 2,38)	840	7,70	1,34	2,95	4,21		8,50 (3,20 - 10,60)	4,27	**4,00 A+**	1,99 (0,60 - 2,77)	995	9,00
16+35+60	0,98	2,14	3,68		6,80 (2,00 - 8,50)	4,05	**8,00 A+++**	1,68 (0,34 - 2,38)	840	7,70	1,23	2,68	4,59		8,50 (3,20 - 10,60)	4,27	**4,00 A+**	1,99 (0,60 - 2,77)	995	9,00

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 4x1 CU-4Z68TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 11,5 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms					EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms					COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V
16 + 42 + 42	1,08	2,86	2,86		6,80 (1,90 - 8,20)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,36	3,57	3,57		8,50 (3,30 - 10,50)	4,03	**4,00 A+**	2,11 (0,64 - 2,86)	1055	9,50
16 + 42 + 50	1,01	2,64	3,15		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,25	3,31	3,94		8,50 (3,20 - 10,60)	4,29	**4,00 A+**	1,98 (0,60 - 2,76)	990	9,00
20 + 20 + 20	2,00	2,00	2,00		6,00 (1,90 - 8,00)	4,05	**8,00 A++**	1,48 (0,27 - 2,41)	740	6,80	2,83	2,83	2,83		8,49 (3,30 - 10,40)	3,91	**4,00 A+**	2,17 (0,63 - 2,92)	1085	9,80
20 + 20 + 25	2,00	2,00	2,50		6,50 (1,90 - 8,00)	3,76	**8,00 A++**	1,73 (0,27 - 2,41)	865	7,90	2,62	2,62	3,26		8,50 (3,30 - 10,40)	3,92	**4,00 A+**	2,17 (0,63 - 2,92)	1085	9,80
20 + 20 + 35	1,81	1,81	3,18		6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,32)	930	8,40	2,27	2,27	3,96		8,50 (3,30 - 10,40)	3,95	**4,00 A+**	2,15 (0,62 - 2,85)	1075	9,70
20 + 20 + 42	1,66	1,66	3,48		6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	2,07	2,07	4,36		8,50 (3,30 - 10,50)	3,97	**4,00 A+**	2,14 (0,62 - 2,89)	1070	9,70
20 + 20 + 50	1,51	1,51	3,78		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,89	1,89	4,72		8,50 (3,20 - 10,60)	4,25	**4,00 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 20 + 60	1,36	1,36	4,08		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,70	1,70	5,10		8,50 (3,20 - 10,60)	4,25	**4,00 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 25 + 25	1,94	2,43	2,43		6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,41)	930	8,40	2,42	3,04	3,04		8,50 (3,30 - 10,40)	3,92	**4,00 A+**	2,17 (0,63 - 2,92)	1085	9,80
20 + 25 + 35	1,69	2,13	2,98		6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,32)	930	8,40	2,12	2,66	3,72		8,50 (3,30 - 10,40)	3,95	**4,00 A+**	2,15 (0,62 - 2,85)	1075	9,70
20 + 25 + 42	1,56	1,95	3,29		6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,95	2,44	4,11		8,50 (3,30 - 10,50)	3,97	**4,00 A+**	2,14 (0,62 - 2,89)	1070	9,70
20 + 25 + 50	1,43	1,79	3,58		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,79	2,24	4,47		8,50 (3,20 - 10,60)	4,25	**4,00 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 25 + 60	1,29	1,62	3,89		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,62	2,02	4,86		8,50 (3,20 - 10,60)	4,25	**4,00 A+**	2,00 (0,60 - 2,78)	1000	9,00
20 + 35 + 35	1,52	2,64	2,64		6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,33)	910	8,20	1,88	3,31	3,31		8,50 (3,30 - 10,50)	4,01	**4,00 A+**	2,12 (0,64 - 2,87)	1060	9,60
20 + 35 + 42	1,40	2,45	2,95		6,80 (1,90 - 8,20)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	1,75	3,07	3,68		8,50 (3,30 - 10,50)	4,03	**4,00 A+**	2,11 (0,64 - 2,86)	1055	9,50
20 + 35 + 50	1,29	2,27	3,24		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,62	2,83	4,05		8,50 (3,20 - 10,60)	4,29	**4,00 A+**	1,98 (0,60 - 2,76)	990	9,00
20 + 35 + 60	1,18	2,07	3,55		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,48	2,59	4,43		8,50 (3,20 - 10,60)	4,29	**4,00 A+**	1,98 (0,60 - 2,76)	990	9,00
20 + 42 + 42	1,30	2,75	2,75		6,80 (1,90 - 8,20)	3,84	**8,00 A++**	1,77 (0,29 - 2,37)	885	8,00	1,64	3,43	3,43		8,50 (3,30 - 10,50)	4,05	**4,00 A+**	2,10 (0,63 - 2,86)	1050	9,50
20 + 42 + 50	1,21	2,55	3,04		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,52	3,19	3,79		8,50 (3,20 - 10,60)	4,31	**4,00 A+**	1,97 (0,62 - 2,75)	985	8,90
25 + 25 + 25	2,26	2,26	2,26		6,78 (1,90 - 8,00)	3,65	**8,00 A++**	1,86 (0,27 - 2,41)	930	8,40	2,83	2,83	2,83		8,49 (3,30 - 10,40)	3,91	**4,00 A+**	2,17 (0,63 - 2,92)	1085	9,80
25 + 25 + 35	2,00	2,00	2,80		6,80 (1,90 - 8,00)	3,66	**8,00 A++**	1,86 (0,27 - 2,32)	930	8,40	2,50	2,50	3,50		8,50 (3,30 - 10,40)	3,95	**4,00 A+**	2,15 (0,62 - 2,85)	1075	9,70
25 + 25 + 42	1,85	1,85	3,10		6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	2,31	2,31	3,88		8,50 (3,30 - 10,50)	3,97	**4,00 A+**	2,14 (0,62 - 2,89)	1070	9,70
25 + 25 + 50	1,70	1,70	3,40		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	2,13	2,13	4,24		8,50 (3,20 - 10,60)	4,25	**4,00 A+**	2,00 (0,60 - 2,78)	1000	9,00
25 + 25 + 60	1,55	1,55	3,70		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,38)	840	7,70	1,93	1,93	4,64		8,50 (3,20 - 10,60)	4,25	**4,00 A+**	2,00 (0,60 - 2,78)	1000	9,00
25 + 35 + 35	1,78	2,51	2,51		6,80 (1,90 - 8,10)	3,74	**8,00 A++**	1,82 (0,29 - 2,33)	910	8,20	2,24	3,13	3,13		8,50 (3,30 - 10,50)	4,01	**4,00 A+**	2,12 (0,64 - 2,87)	1060	9,60
25 + 35 + 42	1,67	2,33	2,80		6,80 (1,90 - 8,20)	3,74	**8,00 A++**	1,82 (0,29 - 2,42)	910	8,20	2,08	2,92	3,50		8,50 (3,30 - 10,50)	4,03	**4,00 A+**	2,11 (0,64 - 2,86)	1055	9,50
25 + 35 + 50	1,55	2,16	3,09		6,80 (2,00 - 8,50)	4,05	**8,00 A++**	1,68 (0,34 - 2,33)	840	7,70	1,93	2,70	3,87		8,50 (3,20 - 10,60)	4,29	**4,00 A+**	1,98 (0,60 - 2,76)	990	9,00
25 + 42 + 42	1,56	2,62	2,62		6,80 (1,90 - 8,20)	3,84	**8,00 A++**	1,77 (0,29 - 2,37)	885	8,00	1,94	3,28	3,28		8,50 (3,30 - 10,50)	4,05	**4,00 A+**	2,10 (0,63 - 2,86)	1050	9,50
35 + 35 + 35	2,26	2,26	2,26		6,78 (1,90 - 8,20)	3,83	**8,00 A++**	1,77 (0,29 - 2,33)	885	8,00	2,83	2,83	2,83		8,49 (3,30 - 10,50)	4,12	**4,00 A+**	2,06 (0,63 - 2,85)	1030	9,30
35 + 35 + 42	2,13	2,13	2,54		6,80 (1,90 - 8,20)	3,84	**8,00 A++**	1,77 (0,29 - 2,33)	885	8,00	2,66	2,66	3,18		8,50 (3,30 - 10,50)	4,15	**4,00 A+**	2,05 (0,63 - 2,80)	1025	9,30
4 Rooms																				
16 + 16 + 16 + 16	1,65	1,65	1,65	1,65	6,60 (1,90 - 8,70)	4,49	**8,50 A+++**	1,47 (0,34 - 2,38)	735	6,70	2,12	2,12	2,12	2,12	8,48 (3,00 - 10,60)	4,44	**4,20 A+**	1,91 (0,58 - 2,69)	955	8,60
16 + 16 + 16 + 20	1,60	1,60	1,60	2,00	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,47)	775	7,00	2,00	2,00	2,00	2,50	8,50 (3,00 - 10,60)	4,47	**4,20 A+**	1,90 (0,58 - 2,68)	950	8,60
16 + 16 + 16 + 25	1,49	1,49	1,49	2,33	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,47)	775	7,00	1,86	1,86	1,86	2,92	8,50 (3,00 - 10,60)	4,47	**4,20 A+**	1,90 (0,58 - 2,68)	950	8,60
16 + 16 + 16 + 35	1,31	1,31	1,31	2,87	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,38)	775	7,00	1,64	1,64	1,64	3,58	8,50 (3,00 - 10,60)	4,52	**4,20 A+**	1,88 (0,58 - 2,66)	940	8,50
16 + 16 + 16 + 42	1,21	1,21	1,21	3,17	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,34 - 2,38)	755	6,80	1,51	1,51	1,51	3,97	8,50 (3,00 - 10,60)	4,55	**4,20 A+**	1,87 (0,58 - 2,65)	935	8,50
16 + 16 + 16 + 50	1,11	1,11	1,11	3,47	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,40 - 2,24)	755	6,80	1,39	1,39	1,39	4,33	8,50 (3,00 - 10,60)	4,64	**4,20 A+**	1,83 (0,65 - 2,55)	915	8,30
16 + 16 + 16 + 60	1,01	1,01	1,01	3,77	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,40 - 2,24)	755	6,80	1,26	1,26	1,26	4,72	8,50 (3,00 - 10,60)	4,64	**4,20 A+**	1,83 (0,65 - 2,55)	915	8,30
16 + 16 + 20 + 20	1,51	1,51	1,89	1,89	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,89	1,89	2,36	2,36	8,50 (3,10 - 10,60)	4,50	**4,20 A+**	1,89 (0,60 - 2,67)	945	8,50
16 + 16 + 20 + 25	1,41	1,41	1,77	2,21	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,77	1,77	2,20	2,76	8,50 (3,10 - 10,60)	4,50	**4,20 A+**	1,89 (0,60 - 2,67)	945	8,50
16 + 16 + 20 + 35	1,25	1,25	1,56	2,74	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,34 - 2,38)	755	6,80	1,56	1,56	1,95	3,43	8,50 (3,00 - 10,60)	4,55	**4,20 A+**	1,87 (0,58 - 2,65)	935	8,50
16 + 16 + 20 + 42	1,16	1,16	1,44	3,04	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,45	1,45	1,80	3,80	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,60 - 2,64)	930	8,40
16 + 16 + 20 + 50	1,07	1,07	1,33	3,33	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,40 - 2,20)	755	6,80	1,33	1,33	1,67	4,17	8,50 (3,00 - 10,60)	4,64	**4,20 A+**	1,83 (0,66 - 2,54)	915	8,30
16 + 16 + 20 + 60	0,97	0,97	1,21	3,65	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,40 - 2,20)	755	6,80	1,21	1,21	1,52	4,56	8,50 (3,00 - 10,60)	4,64	**4,20 A+**	1,83 (0,66 - 2,54)	915	8,30
16 + 16 + 25 + 25	1,33	1,33	2,07	2,07	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,66	1,66	2,59	2,59	8,50 (3,10 - 10,60)	4,50	**4,20 A+**	1,89 (0,60 - 2,67)	945	8,50
16 + 16 + 25 + 35	1,18	1,18	1,85	2,59	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,34 - 2,38)	755	6,80	1,48	1,48	2,31	3,23	8,50 (3,00 - 10,60)	4,55	**4,20 A+**	1,87 (0,58 - 2,65)	935	8,50
16 + 16 + 25 + 42	1,10	1,10	1,72	2,88	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,37	1,37	2,15	3,61	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,60 - 2,64)	930	8,40
16 + 16 + 25 + 50	1,02	1,02	1,58	3,18	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,40 - 2,20)	755	6,80	1,27	1,27	1,99	3,97	8,50 (3,00 - 10,60)	4,64	**4,20 A+**	1,83 (0,66 - 2,54)	915	8,30
16 + 16 + 35 + 35	1,07	1,07	2,33	2,33	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,33	1,33	2,92	2,92	8,50 (3,00 - 10,60)	4,59	**4,20 A+**	1,85 (0,61 - 2,62)	925	8,40
16 + 16 + 35 + 42	1,00	1,00	2,18	2,62	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,25	1,25	2,72	3,28	8,50 (3,00 - 10,60)	4,62	**4,60 A++**	1,84 (0,61 - 2,61)	920	8,30
16 + 20 + 20 + 20	1,43	1,79	1,79	1,79	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,78	2,24	2,24	2,24	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,67)	940	8,50
16 + 20 + 20 + 25	1,34	1,68	1,68	2,10	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,68	2,10	2,10	2,62	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,67)	940	8,50
16 + 20 + 20 + 35	1,20	1,49	1,49	2,62	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,49	1,87	1,87	3,27	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,60 - 2,64)	930	8,40
16 + 20 + 20 + 42	1,11	1,39	1,39	2,91	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,39	1,73	1,73	3,65	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40
16 + 20 + 20 + 50	1,03	1,28	1,28	3,21	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,42 - 2,20)	755	6,80	1,28	1,60	1,60	4,02	8,50 (3,00 - 10,60)	4,67	**4,20 A+**	1,82 (0,68 - 2,53)	910	8,20
16 + 20 + 25 + 25	1,26	1,58	1,98	1,98	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,58	1,98	2,47	2,47	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,67)	940	8,50
16 + 20 + 25 + 35	1,13	1,42	1,77	2,48	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,42	1,77	2,21	3,10	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,60 - 2,64)	930	8,40
16 + 20 + 25 + 42	1,06	1,32	1,65	2,77	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,32	1,65	2,06	3,47	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40
16 + 20 + 25 + 50	0,98	1,23	1,53	3,06	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,42 - 2,20)	755	6,80	1,23	1,53	1,91	3,83	8,50 (3,00 - 10,60)	4,67	**4,20 A+**	1,82 (0,68 - 2,53)	910	8,20
16 + 20 + 35 + 35	1,02	1,28	2,25	2,25	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,28	1,60	2,81	2,81	8,50 (3,00 - 10,60)	4,62	**4,60 A++**	1,84 (0,61 - 2,61)	920	8,30
16 + 20 + 35 + 42	0,96	1,20	2,11	2,53	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,20	1,50	2,63	3,17	8,50 (3,00 - 10,60)	4,62	**4,60 A++**	1,84 (0,61 - 2,61)	920	8,30
16 + 25 + 25 + 25	1,19	1,87	1,87	1,87	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,43)	775	7,00	1,48	2,34	2,34	2,34	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,67)	940	8,50
16 + 25 + 25 + 35	1,08	1,68	1,68	2,36	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,35	2,10	2,10	2,95	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,60 - 2,64)	930	8,40
16 + 25 + 25 + 42	1,01	1,57	1,57	2,65	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,38)	755	6,80	1,25	1,97	1,97	3,31	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40
16 + 25 + 35 + 35	0,98	1,54	2,14	2,14	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,23	1,91	2,68	2,68	8,50 (3,00 - 10,60)	4,62	**4,60 A++**	1,84 (0,61 - 2,61)	920	8,30
20 + 20 + 20 + 20	1,70	1,70	1,70	1,70	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,38)	775	7,00	2,12	2,12	2,12	2,12	8,48 (3,10 - 10,60)	4,51	**4,20 A+**	1,88 (0,60 - 2,66)	940	8,50
20 + 20 + 20 + 25	1,60	1,60	1,60	2,00	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,38)	775	7,00	2,00	2,00	2,00	2,50	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,66)	940	8,50
20 + 20 + 20 + 35	1,43	1,43	1,43	2,51	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,79	1,79	1,79	3,13	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40
20 + 20 + 20 + 42	1,33	1,33	1,33	2,81	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,67	1,67	1,67	3,49	8,50 (3,00 - 10,60)	4,59	**4,20 A+**	1,85 (0,61 - 2,62)	925	8,40
20 + 20 + 20 + 50	1,24	1,24	1,24	3,08	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,42 - 2,20)	755	6,80	1,55	1,55	1,55	3,85	8,50 (3,00 - 10,60)	4,70	**4,20 A+**	1,81 (0,68 - 2,52)	905	8,20
20 + 20 + 25 + 25	1,51	1,51	1,89	1,89	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,38)	775	7,00	1,89	1,89	2,36	2,36	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,66)	940	8,50
20 + 20 + 25 + 35	1,36	1,36	1,70	2,38	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,70	1,70	2,12	2,98	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40
20 + 20 + 25 + 42	1,27	1,27	1,59	2,67	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,59	1,59	1,98	3,34	8,50 (3,00 - 10,60)	4,59	**4,20 A+**	1,85 (0,61 - 2,62)	925	8,40
20 + 20 + 25 + 50	1,18	1,18	1,48	2,96	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,42 - 2,20)	755	6,80	1,48	1,48	1,84	3,70	8,50 (3,00 - 10,60)	4,70	**4,20 A+**	1,81 (0,68 - 2,52)	905	8,20
20 + 20 + 35 + 35	1,24	1,24	2,16	2,16	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,55	1,55	2,70	2,70	8,50 (3,00 - 10,60)	4,62	**4,60 A++**	1,84 (0,61 - 2,61)	920	8,30
20 + 25 + 25 + 25	1,43	1,79	1,79	1,79	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,38)	775	7,00	1,78	2,24	2,24	2,24	8,50 (3,10 - 10,60)	4,52	**4,20 A+**	1,88 (0,60 - 2,66)	940	8,50
20 + 25 + 25 + 35	1,29	1,62	1,62	2,27	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,62	2,02	2,02	2,84	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40
20 + 25 + 25 + 42	1,21	1,52	1,52	2,55	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,51	1,90	1,90	3,19	8,50 (3,00 - 10,60)	4,59	**4,20 A+**	1,85 (0,61 - 2,62)	925	8,40
20 + 25 + 35 + 35	1,18	1,48	2,07	2,07	6,80 (1,90 - 8,80)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,47	1,85	2,59	2,59	8,50 (3,00 - 10,60)	4,62	**4,60 A++**	1,84 (0,61 - 2,61)	920	8,30
25 + 25 + 25 + 25	1,70	1,70	1,70	1,70	6,80 (1,90 - 8,80)	4,39	**8,00 A++**	1,55 (0,34 - 2,38)	775	7,00	2,12	2,12	2,12	2,12	8,48 (3,10 - 10,60)	4,51	**4,20 A+**	1,88 (0,60 - 2,66)	940	8,50
25 + 25 + 25 + 35	1,55	1,55	1,55	2,15	6,80 (1,90 - 8,8 0)	4,50	**8,00 A++**	1,51 (0,37 - 2,33)	755	6,80	1,93	1,93	1,93	2,71	8,50 (3,00 - 10,60)	4,57	**4,20 A+**	1,86 (0,61 - 2,63)	930	8,40

1] Energy Label Scale from A+++ to D.

Free Multi 4x1 CU-4Z80TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 14,7 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms					EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms					COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																				
16	1,60				1,60 (1,30 - 2,30)	4,00		0,40 (0,25 - 0,64)	200	2,00	2,60				2,60 (1,20 - 3,20)	4,33		0,60 (0,30 - 0,96)	300	3,00
20	2,00				2,00 (1,80 - 2,90)	4,00		0,50 (0,34 - 0,81)	250	2,50	3,20				3,20 (1,20 - 4,10)	4,32		0,74 (0,30 - 1,23)	370	3,70
25	2,50				2,50 (1,80 - 2,90)	3,97		0,63 (0,34 - 0,81)	315	3,20	3,60				3,60 (1,20 - 4,30)	3,83		0,94 (0,30 - 1,23)	470	4,70
35	3,50				3,50 (1,80 - 4,10)	3,72		0,94 (0,34 - 1,36)	470	4,50	4,50				4,50 (1,20 - 5,80)	3,66		1,23 (0,30 - 2,10)	615	6,00
42	4,20				4,20 (1,80 - 4,50)	3,07		1,37 (0,34 - 1,99)	685	6,40	5,60				5,60 (1,20 - 6,80)	3,26		1,72 (0,30 - 2,93)	860	8,00
50	5,00				5,00 (1,90 - 5,70)	3,23		1,55 (0,34 - 2,13)	775	7,20	6,80				6,80 (1,20 - 6,90)	3,24		2,10 (0,30 - 2,52)	1050	9,70
60	6,00				6,00 (1,90 - 6,20)	2,96		2,03 (0,34 - 2,33)	1015	9,20	8,50				8,50 (1,30 - 9,00)	3,54		2,40 (0,62 - 2,55)	1200	11,10
71	7,10				7,10 (2,00 - 7,20)	2,81		2,53 (0,37 - 2,77)	1265	11,40	8,70				8,70 (1,40 - 9,20)	3,41		2,55 (0,68 - 2,72)	1275	11,80
2 Rooms																				
16+16	1,60	1,60			3,20 (2,40 - 5,80)	4,38	**5,60 A+**	0,73 (0,38 - 1,99)	365	3,70	2,60	2,60			5,20 (2,20 - 8,20)	3,33	**3,90 A**	1,56 (0,43 - 2,84)	780	7,40
16+20	1,60	2,00			3,60 (2,40 - 5,80)	4,14	**5,60 A+**	0,87 (0,38 - 1,99)	435	4,30	2,58	3,22			5,80 (2,20 - 8,20)	3,45	**3,90 A**	1,68 (0,43 - 2,83)	840	8,00
16+25	1,60	2,50			4,10 (2,40 - 5,80)	3,83	**5,60 A+**	1,07 (0,38 - 1,99)	535	5,20	2,42	3,78			6,20 (2,20 - 8,20)	3,41	**3,90 A**	1,82 (0,43 - 2,83)	910	8,60
16+35	1,60	3,50			5,10 (2,40 - 5,80)	3,45	**5,60 A+**	1,48 (0,37 - 1,92)	740	7,20	2,23	4,87			7,10 (2,20 - 8,60)	3,57	**3,90 A**	1,99 (0,38 - 2,91)	995	9,40
16+42	1,60	4,20			5,80 (2,40 - 6,70)	3,19	**5,60 A+**	1,82 (0,37 - 2,48)	910	8,70	2,26	5,94			8,20 (2,20 - 9,80)	3,46	**3,90 A**	2,37 (0,37 - 3,44)	1185	11,10
16+50	1,60	5,00			6,60 (2,40 - 7,20)	3,20	**6,10 A++**	2,06 (0,35 - 2,48)	1030	9,90	2,28	7,12			9,40 (2,20 - 10,00)	3,82	**4,10 A+**	2,46 (0,33 - 3,25)	1230	11,60
16+60	1,60	6,00			7,60 (2,40 - 8,50)	2,83	**6,10 A++**	2,69 (0,35 - 3,49)	1345	12,90	1,98	7,42			9,40 (2,20 - 10,00)	3,82	**4,10 A+**	2,46 (0,33 - 3,25)	1230	11,60
16+71	1,47	6,53			8,00 (2,50 - 8,50)	2,82	**6,10 A++**	2,84 (0,38 - 3,34)	1420	13,60	1,73	7,67			9,40 (2,20 - 10,30)	3,92	**4,10 A+**	2,40 (0,32 - 3,42)	1200	11,30
20+20	2,00	2,00			4,00 (2,40 - 5,80)	3,96	**5,60 A+**	1,01 (0,38 - 1,93)	505	5,00	3,20	3,20			6,40 (2,20 - 8,20)	3,44	**3,90 A**	1,86 (0,39 - 2,82)	930	8,70
20+25	2,00	2,50			4,50 (2,40 - 5,80)	3,63	**5,60 A+**	1,24 (0,38 - 1,93)	620	6,00	3,02	3,78			6,80 (2,20 - 8,20)	3,54	**3,90 A**	1,92 (0,39 - 2,82)	960	9,00
20+35	2,00	3,50			5,50 (2,40 - 5,80)	3,33	**5,60 A+**	1,65 (0,37 - 1,86)	825	8,00	2,80	4,90			7,70 (2,20 - 8,60)	3,55	**3,90 A**	2,17 (0,37 - 2,85)	1085	10,20
20+42	2,00	4,20			6,20 (2,40 - 7,20)	3,00	**5,60 A+**	2,07 (0,37 - 2,90)	1035	9,90	2,84	5,96			8,80 (2,20 - 10,00)	3,64	**3,90 A**	2,42 (0,37 - 3,55)	1210	11,40
20+50	2,00	5,00			7,00 (2,40 - 8,10)	3,17	**6,10 A++**	2,21 (0,35 - 3,10)	1105	10,60	2,69	6,71			9,40 (2,20 - 10,00)	3,84	**4,10 A+**	2,45 (0,32 - 3,23)	1225	11,50
20+60	2,00	6,00			8,00 (2,40 - 8,50)	2,75	**6,10 A++**	2,91 (0,35 - 3,49)	1455	13,90	2,35	7,05			9,40 (2,20 - 10,00)	3,84	**4,10 A+**	2,45 (0,32 - 3,23)	1225	11,50
20+71	1,76	6,24			8,00 (2,50 - 8,50)	2,89	**6,10 A++**	2,77 (0,38 - 3,34)	1385	13,30	2,07	7,33			9,40 (2,20 - 10,30)	3,93	**4,10 A+**	2,39 (0,32 - 3,40)	1195	11,20
25+25	2,50	2,50			5,00 (2,40 - 5,80)	3,50	**5,60 A+**	1,43 (0,38 - 1,93)	715	6,90	3,60	3,60			7,20 (2,20 - 8,60)	3,51	**3,90 A**	2,05 (0,39 - 2,93)	1025	9,60
25+35	2,50	3,50			6,00 (2,40 - 6,70)	3,09	**5,60 A+**	1,94 (0,37 - 2,48)	970	9,30	3,37	4,73			8,10 (2,20 - 9,80)	3,49	**3,90 A**	2,32 (0,37 - 3,44)	1160	10,90
25+42	2,50	4,20			6,70 (2,40 - 7,20)	2,78	**5,60 A+**	2,41 (0,37 - 2,90)	1205	11,50	3,43	5,77			9,20 (2,20 - 10,00)	3,58	**3,90 A**	2,57 (0,37 - 3,55)	1285	12,10
25+50	2,50	5,00			7,50 (2,40 - 8,50)	2,94	**6,10 A++**	2,55 (0,35 - 3,49)	1275	12,20	3,13	6,27			9,40 (2,20 - 10,00)	3,84	**4,10 A+**	2,45 (0,32 - 3,23)	1225	11,50
25+60	2,35	5,65			8,00 (2,50 - 8,50)	2,75	**6,10 A++**	2,91 (0,39 - 3,49)	1455	13,90	2,76	6,64			9,40 (2,20 - 10,00)	3,84	**4,10 A+**	2,45 (0,32 - 3,23)	1225	11,50
25+71	2,08	5,92			8,00 (2,50 - 8,50)	2,89	**6,10 A++**	2,77 (0,38 - 3,34)	1385	13,30	2,45	6,95			9,40 (2,20 - 10,30)	3,93	**4,10 A+**	2,39 (0,32 - 3,40)	1195	11,20
35+35	3,50	3,50			7,00 (2,40 - 8,10)	2,75	**5,60 A+**	2,55 (0,37 - 3,63)	1275	12,20	4,50	4,50			9,00 (2,20 - 10,00)	3,67	**3,90 A**	2,45 (0,36 - 3,47)	1225	11,50
35+42	3,50	4,20			7,70 (2,40 - 8,50)	2,53	**5,60 A+**	3,04 (0,37 - 4,12)	1520	14,60	4,27	5,13			9,40 (2,20 - 10,00)	3,63	**3,90 A**	2,59 (0,35 - 3,46)	1295	12,20
35+50	3,29	4,71			8,00 (2,50 - 8,50)	2,89	**6,10 A++**	2,77 (0,38 - 3,34)	1385	13,30	3,87	5,53			9,40 (2,20 - 10,00)	3,95	**4,10 A+**	2,38 (0,32 - 3,20)	1190	11,20
35+60	2,95	5,05			8,00 (2,50 - 8,50)	2,89	**6,10 A++**	2,77 (0,38 - 3,34)	1385	13,30	3,46	5,94			9,40 (2,20 - 10,30)	3,95	**4,10 A+**	2,38 (0,32 - 3,32)	1190	11,20
35+71	2,64	5,36			8,00 (2,50 - 8,60)	2,96	**6,10 A++**	2,70 (0,38 - 3,34)	1350	12,90	3,10	6,30			9,40 (2,20 - 10,50)	3,98	**4,10 A+**	2,36 (0,31 - 3,43)	1180	11,10
42+42	4,00	4,00			8,00 (2,50 - 8,50)	2,40	**5,60 A+**	3,34 (0,40 - 4,04)	1670	16,00	4,70	4,70			9,40 (2,20 - 10,00)	3,64	**3,90 A**	2,58 (0,35 - 3,45)	1290	12,10
42+50	3,65	4,35			8,00 (2,50 - 8,50)	2,89	**6,10 A++**	2,77 (0,38 - 3,34)	1385	13,30	4,29	5,11			9,40 (2,20 - 10,30)	3,98	**4,10 A+**	2,36 (0,32 - 3,31)	1180	11,10
42+60	3,29	4,71			8,00 (2,50 - 8,60)	2,89	**6,10 A++**	2,77 (0,38 - 3,42)	1385	13,30	3,87	5,53			9,40 (2,20 - 10,30)	3,98	**4,10 A+**	2,36 (0,32 - 3,31)	1180	11,10
42+71	2,97	5,03			8,00 (2,50 - 8,60)	2,96	**6,10 A++**	2,70 (0,38 - 3,26)	1350	12,90	3,49	5,91			9,40 (2,20 - 10,50)	4,00	**4,10 A+**	2,35 (0,31 - 3,42)	1175	11,00
50+50	4,00	4,00			8,00 (2,50 - 8,60)	3,31	**6,10 A++**	2,42 (0,38 - 2,95)	1210	11,60	4,70	4,70			9,40 (2,20 - 10,30)	4,27	**4,10 A+**	2,20 (0,31 - 3,09)	1100	10,30
50+60	3,64	4,36			8,00 (2,50 - 8,60)	3,31	**6,10 A++**	2,42 (0,38 - 2,95)	1210	11,60	4,27	5,13			9,40 (2,20 - 10,50)	4,27	**4,10 A+**	2,20 (0,31 - 3,15)	1100	10,30
50+71	3,31	4,69			8,00 (2,50 - 8,60)	3,40	**6,10 A++**	2,35 (0,38 - 2,88)	1175	11,20	3,88	5,52			9,40 (2,20 - 10,50)	4,31	**4,10 A+**	2,18 (0,31 - 3,13)	1090	10,20
60+60	4,00	4,00			8,00 (2,50 - 8,60)	3,31	**6,10 A++**	2,42 (0,38 - 2,95)	1210	11,60	4,70	4,70			9,40 (2,20 - 10,50)	4,27	**4,10 A+**	2,20 (0,31 - 3,15)	1100	10,30
60+71	3,66	4,34			8,00 (2,50 - 8,60)	3,40	**6,10 A++**	2,35 (0,38 - 2,88)	1175	11,20	4,31	5,09			9,40 (2,20 - 10,50)	4,31	**4,10 A+**	2,18 (0,31 - 3,13)	1090	10,20
71+71	4,00	4,00			8,00 (2,50 - 8,60)	3,51	**6,10 A++**	2,28 (0,41 - 2,80)	1140	10,90	4,70	4,70			9,40 (2,20 - 10,50)	4,33	**4,10 A+**	2,17 (0,32 - 3,12)	1085	10,20
3 Rooms																				
16+16+16	1,60	1,60	1,60		4,80 (3,00 - 8,50)	4,44	**7,40 A++**	1,08 (0,49 - 3,11)	540	5,30	2,60	2,60	2,60		7,80 (3,20 - 10,40)	4,15	**4,20 A+**	1,88 (0,50 - 3,34)	940	8,80
16+16+20	1,60	1,60	2,00		5,20 (3,00 - 8,50)	4,41	**7,40 A++**	1,18 (0,49 - 3,11)	590	5,80	2,58	2,58	3,24		8,40 (3,20 - 10,40)	3,98	**4,20 A+**	2,11 (0,50 - 3,26)	1055	9,90
16+16+25	1,60	1,60	2,50		5,70 (3,00 - 8,50)	4,10	**7,40 A++**	1,39 (0,49 - 3,11)	695	6,70	2,47	2,47	3,86		8,80 (3,20 - 10,40)	4,21	**4,20 A+**	2,09 (0,50 - 3,26)	1045	9,80
16+16+35	1,60	1,60	3,50		6,70 (3,00 - 8,50)	3,92	**7,40 A++**	1,71 (0,48 - 3,03)	855	8,30	2,24	2,24	4,92		9,40 (3,20 - 10,40)	4,18	**4,30 A+**	2,25 (0,49 - 3,23)	1125	10,60
16+16+42	1,60	1,60	4,20		7,40 (3,00 - 8,50)	3,57	**7,40 A++**	2,07 (0,48 - 2,95)	1035	9,90	2,03	2,03	5,34		9,40 (3,20 - 10,40)	4,20	**4,30 A+**	2,24 (0,49 - 3,21)	1120	10,50
16+16+50	1,56	1,56	4,88		8,00 (3,00 - 8,60)	3,81	**7,40 A++**	2,10 (0,52 - 2,73)	1050	10,10	1,83	1,83	5,74		9,40 (3,20 - 10,40)	4,41	**4,40 A+**	2,13 (0,48 - 3,00)	1065	10,00
16+16+60	1,39	1,39	5,22		8,00 (3,00 - 8,60)	3,81	**7,40 A++**	2,10 (0,52 - 2,73)	1050	10,10	1,63	1,63	6,14		9,40 (3,20 - 10,50)	4,41	**4,40 A+**	2,13 (0,48 - 3,06)	1065	10,00
16+16+71	1,24	1,24	5,52		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,46	1,46	6,48		9,40 (3,20 - 10,50)	4,43	**4,40 A+**	2,12 (0,51 - 3,04)	1060	10,00
16+20+20	1,60	2,00	2,00		5,60 (3,00 - 8,50)	4,18	**7,40 A++**	1,34 (0,49 - 3,03)	670	6,50	2,58	3,21	3,21		9,00 (3,20 - 10,40)	4,23	**4,20 A+**	2,13 (0,49 - 3,25)	1065	10,00
16+20+25	1,60	2,00	2,50		6,10 (3,00 - 8,50)	3,94	**7,40 A++**	1,55 (0,49 - 3,03)	775	7,50	2,47	3,08	3,85		9,40 (3,20 - 10,40)	4,14	**4,30 A+**	2,27 (0,49 - 3,25)	1135	10,70
16+20+35	1,60	2,00	3,50		7,10 (3,00 - 8,50)	3,78	**7,40 A++**	1,88 (0,48 - 2,95)	940	9,00	2,12	2,65	4,63		9,40 (3,20 - 10,40)	4,20	**4,30 A+**	2,24 (0,49 - 3,21)	1120	10,50
16+20+42	1,60	2,00	4,20		7,80 (3,00 - 8,50)	3,59	**7,40 A++**	2,17 (0,48 - 2,95)	1085	10,40	1,93	2,41	5,06		9,40 (3,20 - 10,40)	4,22	**4,30 A+**	2,23 (0,49 - 3,20)	1115	10,50
16+20+50	1,49	1,86	4,65		8,00 (3,00 - 8,60)	3,81	**7,40 A++**	2,10 (0,52 - 2,73)	1050	10,10	1,75	2,19	5,46		9,40 (3,20 - 10,50)	4,43	**4,40 A+**	2,12 (0,51 - 3,05)	1060	10,00
16+20+60	1,33	1,67	5,00		8,00 (3,00 - 8,60)	3,81	**7,40 A++**	2,10 (0,52 - 2,73)	1050	10,10	1,57	1,96	5,87		9,40 (3,20 - 10,50)	4,43	**4,40 A+**	2,12 (0,51 - 3,05)	1060	10,00
16+20+71	1,20	1,50	5,30		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,41	1,76	6,23		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
16+25+25	1,60	2,50	2,50		6,60 (3,00 - 8,50)	3,69	**7,40 A++**	1,79 (0,49 - 3,03)	895	8,60	2,28	3,56	3,56		9,40 (3,20 - 10,40)	4,14	**4,30 A+**	2,27 (0,49 - 3,25)	1135	10,70
16+25+35	1,60	2,50	3,50		7,60 (3,00 - 8,50)	3,47	**7,40 A++**	2,19 (0,48 - 2,95)	1095	10,50	1,98	3,09	4,33		9,40 (3,20 - 10,40)	4,20	**4,30 A+**	2,24 (0,49 - 3,21)	1120	10,50
16+25+42	1,54	2,41	4,05		8,00 (3,00 - 8,60)	3,49	**7,40 A++**	2,29 (0,48 - 3,03)	1145	11,00	1,81	2,83	4,76		9,40 (3,20 - 10,40)	4,22	**4,40 A+**	2,23 (0,49 - 3,20)	1115	10,50
16+25+50	1,41	2,20	4,39		8,00 (3,00 - 8,60)	3,81	**7,40 A++**	2,10 (0,52 - 2,73)	1050	10,10	1,65	2,58	5,17		9,40 (3,20 - 10,50)	4,43	**4,40 A+**	2,12 (0,51 - 3,05)	1060	10,00
16+25+60	1,27	1,98	4,75		8,00 (3,00 - 8,80)	3,81	**7,40 A++**	2,10 (0,52 - 2,80)	1050	10,10	1,49	2,33	5,58		9,40 (3,20 - 10,50)	4,43	**4,40 A+**	2,12 (0,51 - 3,05)	1060	10,00
16+25+71	1,14	1,79	5,07		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,34	2,10	5,96		9,40 (3,20 - 10,60)	4,45	**4,40 A+**	2,11 (0,51 - 3,09)	1055	9,90
16+35+35	1,48	3,26	3,26		8,00 (3,00 - 8,60)	3,59	**7,40 A++**	2,23 (0,48 - 2,95)	1115	10,70	1,74	3,83	3,83		9,40 (3,20 - 10,50)	4,25	**4,40 A+**	2,21 (0,48 - 3,24)	1105	10,40
16+35+42	1,38	3,01	3,61		8,00 (3,00 - 8,60)	3,59	**7,40 A++**	2,23 (0,48 - 2,95)	1115	10,70	1,62	3,54	4,24		9,40 (3,20 - 10,50)	4,27	**4,40 A+**	2,20 (0,48 - 3,16)	1100	10,30
16+35+50	1,27	2,77	3,96		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,49	3,26	4,65		9,40 (3,20 - 10,50)	4,50	**4,40 A+**	2,09 (0,51 - 3,01)	1045	9,80
16+35+60	1,15	2,52	4,33		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,35	2,96	5,09		9,40 (3,20 - 10,60)	4,50	**4,40 A+**	2,09 (0,51 - 3,07)	1045	9,80
16+35+71	1,05	2,30	4,65		8,00 (3,00 - 9,00)	3,92	**7,40 A++**	2,04 (0,52 - 2,87)	1020	9,80	1,23	2,70	5,47		9,40 (3,20 - 10,60)	4,52	**4,40 A+**	2,08 (0,51 - 3,06)	1040	9,80
16+42+42	1,28	3,36	3,36		8,00 (3,00 - 8,80)	3,59	**7,40 A++**	2,23 (0,48 - 3,10)	1115	10,70	1,50	3,95	3,95		9,40 (3,20 - 10,50)	4,29	**4,40 A+**	2,19 (0,48 - 3,15)	1095	10,30
16+42+50	1,19	3,11	3,70		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,39	3,66	4,35		9,40 (3,20 - 10,50)	4,50	**4,40 A+**	2,09 (0,51 - 3,00)	1045	9,80
16+42+60	1,08	2,85	4,07		8,00 (3,00 - 9,00)	3,92	**7,40 A++**	2,04 (0,52 - 2,87)	1020	9,80	1,27	3,35	4,78		9,40 (3,20 - 10,60)	4,50	**4,40 A+**	2,09 (0,51 - 3,06)	1045	9,80
16+42+71	0,99	2,60	4,41		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	1,17	3,06	5,17		9,40 (3,20 - 10,60)	4,54	**4,40 A+**	2,07 (0,51 - 3,04)	1035	9,70

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 4x1 CU-4Z80TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 14,7 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms					EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms					COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V
16+50+50	1,10	3,45	3,45		8,00 (3,00 - 8,80)	4,17	**7,40 A++**	1,92 (0,57 - 2,58)	960	9,20	1,30	4,05	4,05		9,40 (3,20 - 10,60)	4,70	**4,40 A+**	2,00 (0,57 - 2,93)	1000	9,40
16+50+60	1,02	3,17	3,81		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,19	3,73	4,48		9,40 (3,20 - 10,60)	4,70	**4,40 A+**	2,00 (0,57 - 2,93)	1000	9,40
16+50+71	0,93	2,92	4,15		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,10	3,43	4,87		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
16+60+60	0,94	3,53	3,53		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,10	4,15	4,15		9,40 (3,20 - 10,60)	4,70	**4,40 A+**	2,00 (0,57 - 2,93)	1000	9,40
16+60+71	0,87	3,27	3,86		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,02	3,84	4,54		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
20+20+20	2,00	2,00	2,00		6,00 (3,00 - 8,50)	4,00	**7,40 A++**	1,50 (0,48 - 3,03)	750	7,30	3,13	3,13	3,13		9,39 (3,20 - 10,40)	4,15	**4,30 A+**	2,26 (0,49 - 3,24)	1130	10,60
20+20+25	2,00	2,00	2,50		6,50 (3,00 - 8,50)	3,76	**7,40 A++**	1,73 (0,48 - 3,03)	865	8,40	2,89	2,89	3,62		9,40 (3,20 - 10,40)	4,16	**4,30 A+**	2,26 (0,49 - 3,24)	1130	10,60
20+20+35	2,00	2,00	3,50		7,50 (3,00 - 8,50)	3,64	**7,40 A++**	2,06 (0,48 - 2,95)	1030	9,90	2,51	2,51	4,38		9,40 (3,20 - 10,40)	4,22	**4,30 A+**	2,23 (0,49 - 3,20)	1115	10,50
20+20+42	1,95	1,95	4,10		8,00 (3,00 - 8,60)	3,49	**7,40 A++**	2,29 (0,48 - 3,03)	1145	11,00	2,29	2,29	4,82		9,40 (3,20 - 10,40)	4,23	**4,40 A+**	2,22 (0,48 - 3,19)	1110	10,40
20+20+50	1,78	1,78	4,44		8,00 (3,00 - 8,60)	3,92	**7,40 A++**	2,04 (0,52 - 2,65)	1020	9,80	2,09	2,09	5,22		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
20+20+60	1,60	1,60	4,80		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,88	1,88	5,64		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
20+20+71	1,44	1,44	5,12		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,72)	1020	9,80	1,69	1,69	6,02		9,40 (3,20 - 10,60)	4,48	**4,40 A+**	2,10 (0,51 - 3,08)	1050	9,90
20+25+25	2,00	2,50	2,50		7,00 (3,00 - 8,50)	3,70	**7,40 A++**	1,89 (0,48 - 3,03)	945	9,00	2,68	3,36	3,36		9,40 (3,20 - 10,40)	4,16	**4,30 A+**	2,26 (0,49 - 3,24)	1130	10,60
20+25+35	2,00	2,50	3,50		8,00 (3,00 - 8,60)	3,49	**7,40 A++**	2,29 (0,48 - 3,03)	1145	11,00	2,35	2,94	4,11		9,40 (3,20 - 10,40)	4,22	**4,40 A+**	2,23 (0,49 - 3,20)	1115	10,50
20+25+42	1,84	2,30	3,86		8,00 (3,00 - 8,60)	3,49	**7,40 A++**	2,29 (0,48 - 3,03)	1145	11,00	2,16	2,70	4,54		9,40 (3,20 - 10,50)	4,23	**4,40 A+**	2,22 (0,48 - 3,25)	1110	10,40
20+25+50	1,68	2,11	4,21		8,00 (3,00 - 8,60)	3,92	**7,40 A++**	2,04 (0,52 - 2,65)	1020	9,80	1,98	2,47	4,95		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
20+25+60	1,52	1,90	4,58		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,79	2,24	5,37		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
20+25+71	1,38	1,72	4,90		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,72)	1020	9,80	1,62	2,03	5,75		9,40 (3,20 - 10,60)	4,48	**4,40 A+**	2,10 (0,51 - 3,08)	1050	9,90
20+35+35	1,78	3,11	3,11		8,00 (3,00 - 8,60)	3,59	**7,40 A++**	2,23 (0,48 - 2,95)	1115	10,70	2,08	3,66	3,66		9,40 (3,20 - 10,50)	4,27	**4,40 A+**	2,20 (0,48 - 3,16)	1100	10,30
20+35+42	1,65	2,89	3,46		8,00 (3,00 - 8,60)	3,59	**7,40 A++**	2,23 (0,48 - 2,95)	1115	10,70	1,94	3,39	4,07		9,40 (3,20 - 10,50)	4,29	**4,40 A+**	2,19 (0,48 - 3,15)	1095	10,30
20+35+50	1,52	2,67	3,81		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,79	3,13	4,48		9,40 (3,20 - 10,50)	4,50	**4,40 A+**	2,09 (0,51 - 3,00)	1045	9,80
20+35+60	1,39	2,43	4,18		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	1,63	2,86	4,91		9,40 (3,20 - 10,60)	4,50	**4,40 A+**	2,09 (0,51 - 3,06)	1045	9,80
20+35+71	1,27	2,22	4,51		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	1,49	2,61	5,30		9,40 (3,20 - 10,60)	4,54	**4,40 A+**	2,07 (0,51 - 3,04)	1035	9,70
20+42+42	1,54	3,23	3,23		8,00 (3,00 - 8,80)	3,59	**7,40 A++**	2,23 (0,48 - 3,03)	1115	10,70	1,80	3,80	3,80		9,40 (3,20 - 10,50)	4,31	**4,40 A+**	2,18 (0,48 - 3,14)	1090	10,20
20+42+50	1,43	3,00	3,57		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,72)	1020	9,80	1,68	3,53	4,19		9,40 (3,20 - 10,60)	4,52	**4,40 A+**	2,08 (0,51 - 3,05)	1040	9,80
20+42+60	1,31	2,75	3,94		8,00 (3,00 - 9,00)	3,92	**7,40 A++**	2,04 (0,52 - 2,87)	1020	9,80	1,54	3,24	4,62		9,40 (3,20 - 10,60)	4,52	**4,40 A+**	2,08 (0,51 - 3,05)	1040	9,80
20+42+71	1,20	2,53	4,27		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	1,41	2,97	5,02		9,40 (3,20 - 10,60)	4,54	**4,40 A+**	2,07 (0,52 - 3,03)	1035	9,70
20+50+50	1,33	3,33	3,33		7,99 (3,00 - 9,00)	4,16	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,56	3,92	3,92		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
20+50+60	1,23	3,08	3,69		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,45	3,62	4,33		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
20+50+71	1,13	2,84	4,03		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,33	3,33	4,74		9,40 (3,20 - 10,60)	4,75	**4,40 A+**	1,98 (0,60 - 2,91)	990	9,30
20+60+60	1,14	3,43	3,43		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,34	4,03	4,03		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
25+25+25	2,50	2,50	2,50		7,50 (3,00 - 8,50)	3,52	**7,40 A++**	2,13 (0,48 - 3,03)	1065	10,20	3,13	3,13	3,13		9,39 (3,20 - 10,40)	4,15	**4,30 A+**	2,26 (0,49 - 3,24)	1130	10,60
25+25+35	2,35	2,35	3,30		8,00 (3,00 - 8,60)	3,49	**7,40 A++**	2,29 (0,48 - 3,03)	1145	11,00	2,76	2,76	3,88		9,40 (3,20 - 10,40)	4,22	**4,40 A+**	2,23 (0,49 - 3,20)	1115	10,50
25+25+42	2,17	2,17	3,66		8,00 (3,00 - 8,60)	3,49	**7,40 A++**	2,29 (0,48 - 3,03)	1145	11,00	2,55	2,55	4,30		9,40 (3,20 - 10,50)	4,23	**4,40 A+**	2,22 (0,48 - 3,25)	1110	10,40
25+25+50	2,00	2,00	4,00		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	2,35	2,35	4,70		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
25+25+60	1,82	1,82	4,36		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	2,14	2,14	5,12		9,40 (3,20 - 10,50)	4,45	**4,40 A+**	2,11 (0,51 - 3,03)	1055	9,90
25+25+71	1,65	1,65	4,70		8,00 (3,00 - 9,00)	3,92	**7,40 A++**	2,04 (0,52 - 2,87)	1020	9,80	1,94	1,94	5,52		9,40 (3,20 - 10,60)	4,48	**4,40 A+**	2,10 (0,51 - 3,08)	1050	9,90
25+35+35	2,10	2,95	2,95		8,00 (3,00 - 8,60)	3,59	**7,40 A++**	2,23 (0,48 - 2,95)	1115	10,70	2,48	3,46	3,46		9,40 (3,20 - 10,50)	4,27	**4,40 A+**	2,20 (0,48 - 3,16)	1100	10,30
25+35+42	1,96	2,75	3,29		8,00 (3,00 - 8,80)	3,59	**7,40 A++**	2,23 (0,48 - 3,10)	1115	10,70	2,30	3,23	3,87		9,40 (3,20 - 10,50)	4,29	**4,40 A+**	2,19 (0,48 - 3,15)	1095	10,30
25+35+50	1,82	2,55	3,63		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,80)	1020	9,80	2,14	2,99	4,27		9,40 (3,20 - 10,50)	4,50	**4,40 A+**	2,09 (0,51 - 3,00)	1045	9,80
25+35+60	1,67	2,33	4,00		8,00 (3,00 - 9,00)	3,92	**7,40 A++**	2,04 (0,52 - 2,87)	1020	9,80	1,96	2,74	4,70		9,40 (3,20 - 10,60)	4,50	**4,40 A+**	2,09 (0,51 - 3,06)	1045	9,80
25+35+71	1,53	2,14	4,33		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	1,79	2,51	5,10		9,40 (3,20 - 10,60)	4,54	**4,40 A+**	2,07 (0,51 - 3,04)	1035	9,70
25+42+42	1,84	3,08	3,08		8,00 (3,00 - 8,80)	3,59	**7,40 A++**	2,23 (0,48 - 3,03)	1115	10,70	2,16	3,62	3,62		9,40 (3,20 - 10,50)	4,31	**4,40 A+**	2,18 (0,48 - 3,14)	1090	10,20
25+42+50	1,71	2,87	3,42		8,00 (3,00 - 8,80)	3,92	**7,40 A++**	2,04 (0,52 - 2,72)	1020	9,80	2,01	3,37	4,02		9,40 (3,20 - 10,60)	4,52	**4,40 A+**	2,08 (0,51 - 3,05)	1040	9,80
25+42+60	1,57	2,65	3,78		8,00 (3,00 - 9,00)	3,92	**7,40 A++**	2,04 (0,52 - 2,87)	1020	9,80	1,85	3,11	4,44		9,40 (3,20 - 10,60)	4,52	**4,40 A+**	2,08 (0,51 - 3,05)	1040	9,80
25+42+71	1,45	2,43	4,12		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	1,70	2,86	4,84		9,40 (3,20 - 10,60)	4,54	**4,40 A+**	2,07 (0,52 - 3,03)	1035	9,70
25+50+50	1,60	3,20	3,20		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,88	3,76	3,76		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
25+50+60	1,48	2,96	3,56		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,74	3,48	4,18		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
25+50+71	1,37	2,74	3,89		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,61	3,22	4,57		9,40 (3,20 - 10,60)	4,75	**4,40 A+**	1,98 (0,60 - 2,91)	990	9,30
25+60+60	1,38	3,31	3,31		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	1,62	3,89	3,89		9,40 (3,20 - 10,60)	4,72	**4,40 A+**	1,99 (0,59 - 2,92)	995	9,40
35+35+35	2,66	2,66	2,66		7,98 (3,00 - 8,80)	3,68	**7,40 A++**	2,17 (0,48 - 3,03)	1085	10,40	3,13	3,13	3,13		9,39 (3,20 - 10,50)	4,31	**4,40 A+**	2,18 (0,48 - 3,13)	1090	10,20
35+35+42	2,50	2,50	3,00		8,00 (3,00 - 8,80)	3,69	**7,40 A++**	2,17 (0,48 - 3,03)	1085	10,40	2,94	2,94	3,52		9,40 (3,20 - 10,60)	4,33	**4,40 A+**	2,17 (0,48 - 3,17)	1085	10,20
35+35+50	2,33	2,33	3,33		7,99 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,87)	990	9,50	2,74	2,74	3,92		9,40 (3,20 - 10,60)	4,56	**4,40 A+**	2,06 (0,52 - 3,03)	1030	9,70
35+35+60	2,15	2,15	3,70		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,87)	990	9,50	2,53	2,53	4,34		9,40 (3,20 - 10,60)	4,56	**4,40 A+**	2,06 (0,52 - 3,03)	1030	9,70
35+35+71	1,99	1,99	4,02		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	2,33	2,33	4,74		9,40 (3,20 - 10,60)	4,59	**4,40 A+**	2,05 (0,52 - 3,01)	1025	9,60
35+42+42	2,36	2,82	2,82		8,00 (3,00 - 9,00)	3,69	**7,40 A++**	2,17 (0,48 - 3,10)	1085	10,40	2,76	3,32	3,32		9,40 (3,20 - 10,60)	4,35	**4,40 A+**	2,16 (0,48 - 3,16)	1080	10,20
35+42+50	2,20	2,65	3,15		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	2,59	3,11	3,70		9,40 (3,20 - 10,60)	4,59	**4,40 A+**	2,05 (0,52 - 3,02)	1025	9,60
35+42+60	2,04	2,45	3,51		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	2,40	2,88	4,12		9,40 (3,20 - 10,60)	4,59	**4,40 A+**	2,05 (0,52 - 3,02)	1025	9,60
35+50+50	2,08	2,96	2,96		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	2,44	3,48	3,48		9,40 (3,20 - 10,60)	4,77	**4,40 A+**	1,97 (0,60 - 2,89)	985	9,30
35+50+60	1,93	2,76	3,31		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	2,27	3,24	3,89		9,40 (3,20 - 10,60)	4,77	**4,40 A+**	1,97 (0,60 - 2,89)	985	9,30
42+42+42	2,66	2,66	2,66		7,98 (3,00 - 9,00)	3,68	**7,40 A++**	2,17 (0,48 - 3,10)	1085	10,40	3,13	3,13	3,13		9,39 (3,20 - 10,60)	4,37	**4,40 A+**	2,15 (0,48 - 3,15)	1075	10,10
42+42+50	2,51	2,51	2,98		8,00 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	2,95	2,95	3,50		9,40 (3,20 - 10,60)	4,59	**4,40 A+**	2,05 (0,54 - 3,00)	1025	9,60
42+42+60	2,33	2,33	3,33		7,99 (3,00 - 9,00)	4,04	**7,40 A++**	1,98 (0,52 - 2,80)	990	9,50	2,74	2,74	3,92		9,40 (3,20 - 10,60)	4,59	**4,40 A+**	2,05 (0,54 - 3,00)	1025	9,60
42+50+50	2,36	2,82	2,82		8,00 (3,00 - 9,00)	4,17	**7,40 A++**	1,92 (0,57 - 2,65)	960	9,20	2,78	3,31	3,31		9,40 (3,20 - 10,60)	4,77	**4,40 A+**	1,97 (0,61 - 2,88)	985	9,30
4 Rooms																				
16+16+16+16	1,60	1,60	1,60	1,60	6,40 (3,00 - 9,20)	4,30	**8,50 A+++**	1,49 (0,52 - 2,95)	745	7,20	2,35	2,35	2,35	2,35	9,40 (4,20 - 10,60)	4,54	**4,60 A++**	2,07 (0,68 - 3,03)	1035	9,70
16+16+16+20	1,60	1,60	1,60	2,00	6,80 (3,00 - 9,20)	4,28	**8,50 A+++**	1,59 (0,52 - 2,87)	795	7,70	2,21	2,21	2,21	2,77	9,40 (4,20 - 10,60)	4,56	**4,60 A++**	2,06 (0,68 - 3,02)	1030	9,70
16+16+16+25	1,60	1,60	1,60	2,50	7,30 (3,00 - 9,20)	4,15	**7,90 A++**	1,76 (0,52 - 2,87)	880	8,40	2,06	2,06	2,06	3,22	9,40 (4,20 - 10,60)	4,56	**4,60 A++**	2,06 (0,68 - 3,02)	1030	9,70
16+16+16+35	1,54	1,54	1,54	3,38	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,81	1,81	1,81	3,97	9,40 (4,20 - 10,60)	4,61	**4,70 A++**	2,04 (0,69 - 2,99)	1020	9,60
16+16+16+42	1,42	1,42	1,42	3,74	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,67	1,67	1,67	4,39	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,98)	1015	9,50
16+16+16+50	1,31	1,31	1,31	4,07	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,73)	935	9,00	1,53	1,53	1,53	4,81	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,76 - 2,86)	1000	9,40
16+16+16+60	1,19	1,19	1,19	4,43	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,73)	935	9,00	1,39	1,39	1,39	5,23	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,76 - 2,86)	1000	9,40
16+16+16+71	1,08	1,08	1,08	4,76	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,26	1,26	1,26	5,62	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,77 - 2,85)	995	9,40
16+16+20+20	1,60	1,60	2,00	2,00	7,20 (3,00 - 9,20)	4,24	**7,90 A++**	1,70 (0,53 - 2,87)	850	8,20	2,09	2,09	2,61	2,61	9,40 (4,20 - 10,60)	4,59	**4,60 A++**	2,05 (0,68 - 3,01)	1025	9,60
16+16+20+25	1,60	1,60	2,00	2,50	7,70 (3,00 - 9,20)	4,14	**7,90 A++**	1,86 (0,53 - 2,87)	930	8,90	1,95	1,95	2,44	3,06	9,40 (4,20 - 10,60)	4,59	**4,60 A++**	2,05 (0,68 - 3,01)	1025	9,60
16+16+20+35	1,47	1,47	1,84	3,22	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,53 - 2,87)	960	9,20	1,73	1,73	2,16	3,78	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,98)	1015	9,50
16+16+20+42	1,36	1,36	1,70	3,58	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,56 - 2,87)	960	9,20	1,60	1,60	2,00	4,20	9,40 (4,20 - 10,60)	4,65	**4,70 A++**	2,02 (0,71 - 2,97)	1010	9,50

Free Multi 4x1 CU-4Z80TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 14,7 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms					EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms					COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V
16+16+20+50	1,25	1,25	1,57	3,93	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,47	1,47	1,84	4,62	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,77 - 2,85)	995	9,40
16+16+20+60	1,14	1,14	1,43	4,29	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,34	1,34	1,68	5,04	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,77 - 2,85)	995	9,40
16+16+20+71	1,04	1,04	1,30	4,62	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,22	1,22	1,53	5,43	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,79 - 2,90)	990	9,30
16+16+25+25	1,56	1,56	2,44	2,44	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,83	1,83	2,87	2,87	9,40 (4,20 - 10,60)	4,59	**4,70 A++**	2,05 (0,68 - 3,01)	1025	9,60
16+16+25+35	1,39	1,39	2,17	3,05	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,53 - 2,87)	960	9,20	1,63	1,63	2,55	3,59	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,98)	1015	9,50
16+16+25+42	1,29	1,29	2,02	3,40	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,56 - 2,87)	960	9,20	1,52	1,52	2,37	3,99	9,40 (4,20 - 10,60)	4,65	**4,70 A++**	2,02 (0,71 - 2,97)	1010	9,50
16+16+25+50	1,20	1,20	1,87	3,73	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,41	1,41	2,20	4,38	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,77 - 2,85)	995	9,40
16+16+25+60	1,09	1,09	1,71	4,11	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,29	1,29	2,01	4,81	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,77 - 2,85)	995	9,40
16+16+25+71	1,00	1,00	1,56	4,44	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,18	1,18	1,84	5,20	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,79 - 2,90)	990	9,30
16+16+35+35	1,25	1,25	2,75	2,75	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,47	1,47	3,23	3,23	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,72 - 2,95)	1005	9,40
16+16+35+42	1,17	1,17	2,57	3,09	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,38	1,38	3,02	3,62	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,94)	1000	9,40
16+16+35+50	1,09	1,09	2,39	3,43	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,29	1,29	2,81	4,01	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
16+16+35+60	1,01	1,01	2,20	3,78	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,18	1,18	2,59	4,45	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
16+16+35+71	0,93	0,93	2,03	4,11	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,09	1,09	2,38	4,84	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,87)	985	9,30
16+16+42+42	1,10	1,10	2,90	2,90	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,30	1,30	3,40	3,40	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,93)	1000	9,40
16+16+42+50	1,03	1,03	2,71	3,23	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,21	1,21	3,18	3,80	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
16+16+42+60	0,96	0,96	2,51	3,57	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,66)	935	9,00	1,12	1,12	2,95	4,21	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
16+16+42+71	0,88	0,88	2,32	3,92	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,04	1,04	2,72	4,60	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+16+50+50	0,97	0,97	3,03	3,03	8,00 (3,00 - 9,20)	4,26	**7,90 A++**	1,88 (0,69 - 2,60)	940	9,00	1,14	1,14	3,56	3,56	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,92 - 2,85)	1005	9,40
16+16+50+60	0,90	0,90	2,82	3,38	8,00 (3,00 - 9,20)	4,26	**7,90 A++**	1,88 (0,69 - 2,60)	940	9,00	1,06	1,06	3,31	3,97	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,92 - 2,85)	1005	9,40
16+20+20+20	1,60	2,00	2,00	2,00	7,60 (3,00 - 9,20)	4,06	**7,90 A++**	1,87 (0,53 - 2,87)	935	9,00	1,99	2,47	2,47	2,47	9,40 (4,20 - 10,60)	4,61	**4,60 A++**	2,04 (0,69 - 3,00)	1020	9,60
16+20+20+25	1,58	1,98	1,98	2,46	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,86	2,32	2,32	2,90	9,40 (4,20 - 10,60)	4,61	**4,70 A++**	2,04 (0,69 - 3,00)	1020	9,60
16+20+20+35	1,41	1,76	1,76	3,07	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,65	2,07	2,07	3,61	9,40 (4,20 - 10,60)	4,65	**4,70 A++**	2,02 (0,71 - 2,97)	1010	9,50
16+20+20+42	1,31	1,63	1,63	3,43	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,53	1,92	1,92	4,03	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
16+20+20+50	1,21	1,51	1,51	3,77	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,42	1,77	1,77	4,44	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,79 - 2,90)	995	9,40
16+20+20+60	1,10	1,38	1,38	4,14	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,30	1,62	1,62	4,86	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,79 - 2,90)	995	9,40
16+20+20+71	1,01	1,26	1,26	4,47	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,18	1,48	1,48	5,26	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
16+20+25+25	1,48	1,86	2,33	2,33	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,75	2,19	2,73	2,73	9,40 (4,20 - 10,60)	4,61	**4,70 A++**	2,04 (0,69 - 3,00)	1020	9,60
16+20+25+35	1,33	1,67	2,08	2,92	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,57	1,96	2,45	3,42	9,40 (4,20 - 10,60)	4,65	**4,70 A++**	2,02 (0,71 - 2,97)	1010	9,50
16+20+25+42	1,24	1,55	1,94	3,27	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,46	1,83	2,28	3,83	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
16+20+25+50	1,15	1,44	1,80	3,61	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,35	1,69	2,12	4,24	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,79 - 2,90)	995	9,40
16+20+25+60	1,06	1,32	1,65	3,97	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,24	1,55	1,94	4,67	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,79 - 2,90)	995	9,40
16+20+25+71	0,97	1,21	1,52	4,30	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,14	1,42	1,78	5,06	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
16+20+35+35	1,21	1,51	2,64	2,64	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,42	1,78	3,10	3,10	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,94)	1000	9,40
16+20+35+42	1,13	1,42	2,48	2,97	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,33	1,66	2,91	3,50	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,93)	1000	9,40
16+20+35+50	1,06	1,32	2,31	3,31	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,24	1,55	2,72	3,89	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
16+20+35+60	0,98	1,22	2,14	3,66	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,15	1,44	2,51	4,30	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
16+20+35+71	0,90	1,13	1,97	4,00	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,06	1,32	2,32	4,70	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+20+42+42	1,07	1,33	2,80	2,80	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,25	1,57	3,29	3,29	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,72 - 2,92)	995	9,40
16+20+42+50	1,00	1,25	2,63	3,12	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,18	1,47	3,08	3,67	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+20+42+60	0,93	1,16	2,43	3,48	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,09	1,36	2,86	4,09	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+20+50+50	0,94	1,18	2,94	2,94	8,00 (3,00 - 9,20)	4,23	**7,90 A++**	1,89 (0,69 - 2,60)	945	9,00	1,10	1,38	3,46	3,46	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,93 - 2,90)	1005	9,40
16+20+50+60	0,88	1,10	2,74	3,28	8,00 (3,00 - 9,20)	4,23	**7,90 A++**	1,89 (0,69 - 2,60)	945	9,00	1,03	1,29	3,22	3,86	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,93 - 2,90)	1005	9,40
16+25+25+25	1,40	2,20	2,20	2,20	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,66	2,58	2,58	2,58	9,40 (4,20 - 10,60)	4,61	**4,70 A++**	2,04 (0,69 - 3,00)	1020	9,60
16+25+25+35	1,27	1,98	1,98	2,77	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,49	2,33	2,33	3,25	9,40 (4,20 - 10,60)	4,65	**4,70 A++**	2,02 (0,71 - 2,97)	1010	9,50
16+25+25+42	1,19	1,85	1,85	3,11	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,39	2,18	2,18	3,65	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
16+25+25+50	1,10	1,72	1,72	3,46	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,30	2,03	2,03	4,04	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,79 - 2,90)	995	9,40
16+25+25+60	1,02	1,59	1,59	3,80	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,19	1,87	1,87	4,47	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,79 - 2,90)	995	9,40
16+25+25+71	0,93	1,46	1,46	4,15	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,10	1,72	1,72	4,86	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
16+25+35+35	1,15	1,81	2,52	2,52	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,35	2,13	2,96	2,96	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,94)	1000	9,40
16+25+35+42	1,08	1,69	2,37	2,86	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,27	1,99	2,79	3,35	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,93)	1000	9,40
16+25+35+50	1,02	1,59	2,22	3,17	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,19	1,87	2,61	3,73	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
16+25+35+60	0,94	1,47	2,06	3,53	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,10	1,73	2,42	4,15	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
16+25+35+71	0,87	1,36	1,90	3,87	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,02	1,60	2,24	4,54	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+25+42+42	1,02	1,60	2,69	2,69	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,20	1,88	3,16	3,16	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,72 - 2,92)	995	9,40
16+25+42+50	0,96	1,50	2,53	3,01	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,13	1,77	2,97	3,53	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+25+42+60	0,90	1,40	2,35	3,35	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,05	1,64	2,76	3,95	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
16+25+50+50	0,90	1,42	2,84	2,84	8,00 (3,00 - 9,20)	4,23	**7,90 A++**	1,89 (0,69 - 2,60)	945	9,00	1,07	1,67	3,33	3,33	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,93 - 2,90)	1005	9,40
16+35+35+35	1,07	2,31	2,31	2,31	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,24	2,72	2,72	2,72	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,72 - 2,91)	990	9,30
16+35+35+42	1,00	2,19	2,19	2,62	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,18	2,57	2,57	3,08	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,75 - 2,90)	990	9,30
16+35+35+50	0,94	2,06	2,06	2,94	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,11	2,42	2,42	3,45	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,84 - 2,86)	1000	9,40
16+35+35+60	0,88	1,92	1,92	3,28	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,03	2,25	2,25	3,87	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,84 - 2,86)	1000	9,40
16+35+42+42	0,95	2,07	2,49	2,49	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,11	2,45	2,92	2,92	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,75 - 2,89)	985	9,30
16+35+42+50	0,90	1,96	2,35	2,79	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,05	2,30	2,76	3,29	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,84 - 2,85)	1000	9,40
16+42+42+42	0,89	2,37	2,37	2,37	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,06	2,78	2,78	2,78	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,76 - 2,88)	985	9,30
20+20+20+20	2,00	2,00	2,00	2,00	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	2,35	2,35	2,35	2,35	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,99)	1015	9,50
20+20+20+25	1,88	1,88	1,88	2,36	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	2,21	2,21	2,21	2,77	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,99)	1015	9,50
20+20+20+35	1,68	1,68	1,68	2,96	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,98	1,98	1,98	3,46	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
20+20+20+42	1,57	1,57	1,57	3,29	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,84	1,84	1,84	3,88	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,72 - 2,95)	1005	9,40
20+20+20+50	1,45	1,45	1,45	3,65	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,71	1,71	1,71	4,27	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
20+20+20+60	1,33	1,33	1,33	4,01	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,57	1,57	1,57	4,69	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
20+20+20+71	1,22	1,22	1,22	4,34	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,44	1,44	1,44	5,08	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
20+20+25+25	1,78	1,78	2,22	2,22	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	2,09	2,09	2,61	2,61	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,99)	1015	9,50
20+20+25+35	1,60	1,60	2,00	2,80	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,88	1,88	2,35	3,29	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
20+20+25+42	1,50	1,50	1,87	3,13	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,76	1,76	2,20	3,68	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,72 - 2,95)	1005	9,40
20+20+25+50	1,39	1,39	1,74	3,48	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,63	1,63	2,04	4,10	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
20+20+25+60	1,28	1,28	1,60	3,84	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,50	1,50	1,88	4,52	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 4x1 CU-4Z80TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 14,7 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms					EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms					COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	Total (Min - Max)	W/W		kW	kWh	230V
20+20+25+71	1,18	1,18	1,47	4,17	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,38	1,38	1,73	4,91	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
20+20+35+35	1,45	1,45	2,55	2,55	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,71	1,71	2,99	2,99	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,93)	1000	9,40
20+20+35+42	1,37	1,37	2,39	2,87	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,61	1,61	2,81	3,37	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,72 - 2,92)	995	9,40
20+20+35+50	1,28	1,28	2,24	3,20	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,50	1,50	2,63	3,77	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
20+20+35+60	1,19	1,19	2,07	3,55	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,39	1,39	2,44	4,18	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
20+20+35+71	1,10	1,10	1,92	3,88	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,29	1,29	2,25	4,57	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,83 - 2,86)	1000	9,40
20+20+42+42	1,29	1,29	2,71	2,71	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,52	1,52	3,18	3,18	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,72 - 2,91)	990	9,30
20+20+42+50	1,21	1,21	2,55	3,03	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,42	1,42	2,99	3,57	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,81 - 2,86)	1000	9,40
20+20+42+60	1,13	1,13	2,37	3,37	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,32	1,32	2,78	3,98	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,81 - 2,86)	1000	9,40
20+20+50+50	1,14	1,14	2,86	2,86	8,00 (3,00 - 9,20)	4,23	**7,90 A++**	1,89 (0,70 - 2,60)	945	9,00	1,34	1,34	3,36	3,36	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,94 - 2,89)	1005	9,40
20+25+25+25	1,67	2,11	2,11	2,11	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	1,99	2,47	2,47	2,47	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,99)	1015	9,50
20+25+25+35	1,52	1,90	1,90	2,68	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,79	2,24	2,24	3,13	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
20+25+25+42	1,43	1,79	1,79	2,99	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,68	2,10	2,10	3,52	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,72 - 2,95)	1005	9,40
20+25+25+50	1,33	1,67	1,67	3,33	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,57	1,96	1,96	3,91	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
20+25+25+60	1,23	1,54	1,54	3,69	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,45	1,81	1,81	4,33	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
20+25+25+71	1,13	1,42	1,42	4,03	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,33	1,67	1,67	4,73	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
20+25+35+35	1,39	1,75	2,43	2,43	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,63	2,05	2,86	2,86	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,93)	1000	9,40
20+25+35+42	1,31	1,64	2,30	2,75	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,54	1,93	2,70	3,23	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,72 - 2,92)	995	9,40
20+25+35+50	1,23	1,54	2,15	3,08	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,45	1,81	2,53	3,61	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
20+25+35+60	1,14	1,43	2,00	3,43	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,34	1,68	2,35	4,03	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
20+25+42+42	1,24	1,56	2,60	2,60	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,46	1,82	3,06	3,06	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,72 - 2,91)	990	9,30
20+25+42+50	1,17	1,46	2,45	2,92	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,37	1,72	2,88	3,43	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,81 - 2,86)	1000	9,40
20+25+42+60	1,09	1,36	2,29	3,26	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,28	1,60	2,69	3,83	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,81 - 2,86)	1000	9,40
20+25+50+50	1,10	1,38	2,76	2,76	8,00 (3,00 - 9,20)	4,23	**7,90 A++**	1,89 (0,70 - 2,60)	945	9,00	1,30	1,62	3,24	3,24	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,94 - 2,89)	1005	9,40
20+35+35+35	1,28	2,24	2,24	2,24	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,51	2,63	2,63	2,63	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,75 - 2,90)	990	9,30
20+35+35+42	1,21	2,12	2,12	2,55	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,42	2,49	2,49	3,00	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,75 - 2,89)	985	9,30
20+35+35+50	1,14	2,00	2,00	2,86	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,34	2,35	2,35	3,36	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,84 - 2,85)	1000	9,40
20+35+42+42	1,15	2,01	2,42	2,42	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,35	2,37	2,84	2,84	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,76 - 2,88)	985	9,30
20+35+42+50	1,09	1,90	2,29	2,72	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,28	2,24	2,69	3,19	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,85 - 2,84)	995	9,40
20+42+42+42	1,10	2,30	2,30	2,30	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,58 - 2,72)	935	9,00	1,30	2,70	2,70	2,70	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,76 - 2,87)	1000	9,40
25+25+25+25	2,00	2,00	2,00	2,00	8,00 (3,00 - 9,20)	4,04	**7,90 A++**	1,98 (0,53 - 2,87)	990	9,50	2,35	2,35	2,35	2,35	9,40 (4,20 - 10,60)	4,63	**4,70 A++**	2,03 (0,69 - 2,99)	1015	9,50
25+25+25+35	1,82	1,82	1,82	2,54	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	2,14	2,14	2,14	2,98	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,71 - 2,96)	1005	9,40
25+25+25+42	1,71	1,71	1,71	2,87	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	2,01	2,01	2,01	3,37	9,40 (4,20 - 10,60)	4,68	**4,70 A++**	2,01 (0,72 - 2,95)	1005	9,40
25+25+25+50	1,60	1,60	1,60	3,20	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,88	1,88	1,88	3,76	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
25+25+25+60	1,48	1,48	1,48	3,56	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,62 - 2,65)	935	9,00	1,74	1,74	1,74	4,18	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,80 - 2,89)	990	9,30
25+25+25+71	1,37	1,37	1,37	3,89	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,61	1,61	1,61	4,57	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,80 - 2,88)	985	9,30
25+25+35+35	1,67	1,67	2,33	2,33	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,96	1,96	2,74	2,74	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,72 - 2,93)	1000	9,40
25+25+35+42	1,57	1,57	2,20	2,66	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,85	1,85	2,59	3,11	9,40 (4,20 - 10,60)	4,72	**4,70 A++**	1,99 (0,72 - 2,92)	995	9,40
25+25+35+50	1,48	1,48	2,07	2,97	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,74	1,74	2,44	3,48	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
25+25+35+60	1,38	1,38	1,93	3,31	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,62	1,62	2,27	3,89	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,81 - 2,87)	985	9,30
25+25+42+42	1,49	1,49	2,51	2,51	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,80)	960	9,20	1,75	1,75	2,95	2,95	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,72 - 2,91)	990	9,30
25+25+42+50	1,41	1,41	2,37	2,81	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,65	1,65	2,78	3,32	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,81 - 2,86)	1000	9,40
25+35+35+35	1,55	2,15	2,15	2,15	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,81	2,53	2,53	2,53	9,40 (4,20 - 10,60)	4,75	**4,70 A++**	1,98 (0,75 - 2,90)	990	9,30
25+35+35+42	1,46	2,04	2,04	2,46	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,72	2,40	2,40	2,88	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,75 - 2,89)	985	9,30
25+35+35+50	1,38	1,93	1,93	2,76	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,63 - 2,66)	935	9,00	1,62	2,27	2,27	3,24	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,84 - 2,85)	1000	9,40
25+35+42+42	1,39	1,95	2,33	2,33	8,00 (3,00 - 9,20)	4,17	**7,90 A++**	1,92 (0,57 - 2,72)	960	9,20	1,63	2,29	2,74	2,74	9,40 (4,20 - 10,60)	4,77	**4,70 A++**	1,97 (0,76 - 2,88)	985	9,30
35+35+35+35	2,00	2,00	2,00	2,00	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,58 - 2,72)	935	9,00	2,35	2,35	2,35	2,35	9,40 (4,20 - 10,60)	4,70	**4,70 A++**	2,00 (0,76 - 2,87)	1000	9,40
35+35+35+42	1,90	1,90	1,90	2,30	8,00 (3,00 - 9,20)	4,28	**7,90 A++**	1,87 (0,58 - 2,72	935	9,00	2,24	2,24	2,24	2,68	9,40 (4,20 - 10,60	4,70	**4,70 A++**	2,00 (0,76 - 2,86)	1000	9,40

1) Energy Label Scale from A+++ to D.

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																						
16	1,60					1,60 (1,30 - 2,30)	4,00		0,40 (0,25 - 0,64)	200	2,00	2,60					2,60 (1,20 - 3,20)	4,33		0,60 (0,30 - 0,96)	300	3,00
20	2,00					2,00 (1,80 - 2,90)	4,00		0,50 (0,34 - 0,81)	250	2,50	3,20					3,20 (1,20 - 4,10)	4,32		0,74 (0,30 - 1,23)	370	3,70
25	2,50					2,50 (1,80 - 2,90)	3,97		0,63 (0,34 - 0,81)	315	3,20	3,60					3,60 (1,20 - 4,30)	3,83		0,94 (0,30 - 1,23)	470	4,70
35	3,50					3,50 (1,80 - 4,10)	3,72		0,94 (0,34 - 1,36)	470	4,50	4,50					4,50 (1,20 - 5,80)	3,66		1,23 (0,30 - 2,10)	615	6,00
42	4,20					4,20 (1,80 - 4,50)	3,07		1,37 (0,34 - 1,99)	685	6,40	5,60					5,60 (1,20 - 6,80)	3,26		1,72 (0,30 - 2,93)	860	8,00
50	5,00					5,00 (1,90 - 5,70)	3,23		1,55 (0,34 - 2,13)	775	7,20	6,80					6,80 (1,20 - 6,90)	3,24		2,10 (0,30 - 2,52)	1050	9,70
60	6,00					6,00 (1,90 - 6,20)	2,96		2,03 (0,34 - 2,33)	1015	9,20	8,50					8,50 (1,30 - 9,00)	3,54		2,40 (0,62 - 2,55)	1200	11,10
71	7,10					7,10 (2,00 - 7,20)	2,81		2,53 (0,37 - 2,77)	1265	11,40	8,70					8,70 (1,40 - 9,20)	3,41		2,55 (0,68 - 2,72)	1275	11,80
2 Rooms																						
16 + 16	1,60	1,60				3,20 (2,40 - 5,80)	4,85	**5,60 A+**	0,66 (0,27 - 1,74)	330	3,40	2,35	2,35				4,70 (2,00 - 8,20)	3,88	**3,80 A**	1,21 (0,22 - 2,41)	605	5,80
16 + 20	1,60	2,00				3,60 (2,40 - 5,80)	4,56	**5,60 A+**	0,79 (0,27 - 1,74)	395	4,00	2,31	2,89				5,20 (2,00 - 8,20)	3,80	**3,80 A**	1,37 (0,22 - 2,40)	685	6,50
16 + 25	1,60	2,50				4,10 (2,40 - 5,80)	4,27	**5,60 A+**	0,96 (0,27 - 1,74)	480	4,70	2,19	3,41				5,60 (2,00 - 8,20)	3,73	**3,80 A**	1,50 (0,22 - 2,40)	750	7,10
16 + 35	1,60	3,50				5,10 (2,40 - 5,80)	3,86	**5,60 A+**	1,32 (0,26 - 1,68)	660	6,40	2,01	4,39				6,40 (2,00 - 8,60)	3,79	**3,80 A**	1,69 (0,21 - 2,48)	845	8,00
16 + 42	1,60	4,20				5,80 (2,40 - 6,70)	3,56	**5,60 A+**	1,63 (0,26 - 2,13)	815	7,90	2,04	5,36				7,40 (2,00 - 10,10)	3,72	**3,80 A**	1,99 (0,21 - 3,03)	995	9,40
16 + 50	1,60	5,00				6,60 (2,40 - 7,20)	3,59	**6,10 A++**	1,84 (0,25 - 2,13)	920	8,80	2,06	6,44				8,50 (2,00 - 11,00)	3,86	**4,00 A+**	2,20 (0,16 - 3,04)	1100	10,30
16 + 60	1,60	6,00				7,60 (2,40 - 8,60)	3,21	**6,10 A++**	2,37 (0,25 - 3,08)	1185	11,30	2,11	7,89				10,00 (2,00 - 11,00)	3,75	**4,00 A+**	2,67 (0,16 - 3,04)	1335	12,50
16 + 71	1,60	7,10				8,70 (2,50 - 9,10)	2,98	**6,10 A++**	2,92 (0,27 - 3,16)	1460	14,00	1,88	8,32				10,20 (2,00 - 13,00)	3,82	**4,00 A+**	2,67 (0,16 - 3,83)	1335	12,50
20 + 20	2,00	2,00				4,00 (2,40 - 5,80)	4,35	**5,60 A+**	0,92 (0,26 - 1,68)	460	4,50	2,90	2,90				5,80 (2,00 - 8,20)	3,79	**3,80 A**	1,53 (0,22 - 2,39)	765	7,30
20 + 25	2,00	2,50				4,50 (2,40 - 5,80)	4,02	**5,60 A+**	1,12 (0,26 - 1,68)	560	5,50	2,71	3,39				6,10 (2,00 - 8,20)	3,77	**3,80 A**	1,62 (0,22 - 2,39)	810	7,70
20 + 35	2,00	3,50				5,50 (2,40 - 5,80)	3,74	**5,60 A+**	1,47 (0,26 - 1,63)	735	7,10	2,51	4,39				6,90 (2,00 - 8,60)	3,81	**3,80 A**	1,81 (0,21 - 2,42)	905	8,50
20 + 42	2,00	4,20				6,20 (2,40 - 7,20)	3,37	**5,60 A+**	1,84 (0,26 - 2,49)	920	8,80	2,55	5,35				7,90 (2,00 - 11,00)	3,66	**3,80 A**	2,16 (0,20 - 3,23)	1080	10,20
20 + 50	2,00	5,00				7,00 (2,40 - 8,10)	3,59	**6,10 A++**	1,95 (0,25 - 2,61)	975	9,30	2,57	6,43				9,00 (2,00 - 11,00)	3,98	**4,00 A+**	2,26 (0,16 - 2,98)	1130	10,60
20 + 60	2,00	6,00				8,00 (2,40 - 8,60)	3,14	**6,10 A++**	2,55 (0,25 - 3,01)	1275	12,20	2,60	7,80				10,40 (2,00 - 11,90)	3,88	**4,00 A+**	2,68 (0,16 - 3,33)	1340	12,60
20 + 71	1,98	7,02				9,00 (2,50 - 10,00)	2,88	**6,10 A++**	3,12 (0,27 - 4,03)	1560	14,90	2,29	8,11				10,40 (2,00 - 13,00)	3,97	**4,00 A+**	2,62 (0,16 - 3,82)	1310	12,30
25 + 25	2,50	2,50				5,00 (2,40 - 5,80)	3,94	**5,60 A+**	1,27 (0,26 - 1,68)	635	6,10	3,25	3,25				6,50 (2,00 - 8,60)	3,82	**3,80 A**	1,70 (0,22 - 2,50)	850	8,10
25 + 35	2,50	3,50				6,00 (2,40 - 6,70)	3,47	**5,60 A+**	1,73 (0,26 - 2,13)	865	8,40	3,04	4,26				7,30 (2,00 - 10,10)	3,76	**3,80 A**	1,94 (0,21 - 3,03)	970	9,10
25 + 42	2,50	4,20				6,70 (2,40 - 7,20)	3,15	**5,60 A+**	2,13 (0,26 - 2,49)	1065	10,20	3,10	5,20				8,30 (2,00 - 11,00)	3,61	**3,80 A**	2,30 (0,20 - 3,23)	1150	10,80
25 + 50	2,50	5,00				7,50 (2,40 - 8,60)	3,33	**6,10 A++**	2,25 (0,25 - 3,01)	1125	10,80	3,13	6,27				9,40 (2,00 - 11,00)	3,84	**4,00 A+**	2,45 (0,16 - 2,98)	1225	11,50
25 + 60	2,50	6,00				8,50 (2,50 - 9,10)	2,89	**6,10 A++**	2,94 (0,27 - 3,29)	1470	14,10	3,06	7,34				10,40 (2,00 - 13,00)	3,88	**4,00 A+**	2,68 (0,16 - 3,83)	1340	12,60
25 + 71	2,34	6,66				9,00 (2,50 - 10,10)	2,88	**6,10 A++**	3,12 (0,27 - 4,18)	1560	14,90	2,71	7,69				10,40 (2,00 - 13,00)	3,97	**4,00 A+**	2,62 (0,16 - 3,82)	1310	12,30
35 + 35	3,50	3,50				7,00 (2,40 - 8,10)	3,11	**5,60 A+**	2,25 (0,26 - 3,06)	1125	10,80	4,05	4,05				8,10 (2,00 - 11,00)	3,70	**3,80 A**	2,19 (0,20 - 3,22)	1095	10,30
35 + 42	3,50	4,20				7,70 (2,40 - 8,60)	2,88	**5,60 A+**	2,67 (0,26 - 3,55)	1335	12,80	4,14	4,96				9,10 (2,00 - 11,00)	3,65	**3,80 A**	2,49 (0,20 - 3,16)	1245	11,70
35 + 50	3,50	5,00				8,50 (2,50 - 9,10)	3,02	**6,10 A++**	2,81 (0,27 - 3,16)	1405	13,50	4,20	6,00				10,20 (2,00 - 13,00)	3,94	**4,00 A+**	2,59 (0,16 - 3,81)	1295	12,20
35 + 60	3,32	5,68				9,00 (2,50 - 10,10)	2,82	**6,10 A++**	3,19 (0,27 - 4,18)	1595	15,30	3,83	6,57				10,40 (2,00 - 13,00)	3,98	**4,00 A+**	2,61 (0,16 - 3,81)	1305	12,30
35 + 71	2,97	6,03				9,00 (2,50 - 10,40)	3,01	**6,10 A++**	2,99 (0,27 - 4,34)	1495	14,30	3,43	6,97				10,40 (2,00 - 13,80)	4,02	**4,00 A+**	2,59 (0,16 - 4,14)	1295	12,20
42 + 42	4,20	4,20				8,40 (2,50 - 9,10)	2,51	**5,60 A+**	3,34 (0,28 - 3,96)	1670	16,00	5,05	5,05				10,10 (2,00 - 13,00)	3,62	**3,80 A**	2,79 (0,19 - 3,99)	1395	13,10
42 + 50	4,11	4,89				9,00 (2,50 - 10,00)	2,88	**6,10 A++**	3,12 (0,27 - 4,03)	1560	14,90	4,75	5,65				10,40 (2,00 - 13,00)	4,00	**4,00 A+**	2,60 (0,16 - 3,74)	1300	12,20
42 + 60	3,71	5,29				9,00 (2,50 - 10,40)	2,88	**6,10 A++**	3,12 (0,27 - 4,33)	1560	14,90	4,28	6,12				10,40 (2,00 - 13,80)	4,00	**4,00 A+**	2,60 (0,16 - 4,15)	1300	12,20
42 + 71	3,35	5,65				9,00 (2,50 - 10,40)	3,01	**6,10 A++**	2,99 (0,27 - 4,34)	1495	14,30	3,87	6,53				10,40 (2,00 - 13,80)	4,03	**4,00 A+**	2,58 (0,16 - 4,13)	1290	12,10
50 + 50	4,50	4,50				9,00 (2,50 - 10,40)	3,38	**6,10 A++**	2,66 (0,26 - 3,61)	1330	12,70	5,20	5,20				10,40 (2,00 - 13,80)	4,28	**4,00 A+**	2,43 (0,17 - 3,90)	1215	11,40
50 + 60	4,09	4,91				9,00 (2,50 - 10,40)	3,38	**6,10 A++**	2,66 (0,26 - 3,61)	1330	12,70	4,73	5,67				10,40 (2,00 - 13,80)	4,28	**4,00 A+**	2,43 (0,17 - 3,90)	1215	11,40
50 + 71	3,72	5,28				9,00 (2,50 - 10,40)	3,46	**6,10 A++**	2,60 (0,26 - 3,48)	1300	12,40	4,30	6,10				10,40 (2,00 - 13,80)	4,32	**4,00 A+**	2,41 (0,17 - 3,89)	1205	11,30
60 + 60	4,50	4,50				9,00 (2,50 - 10,40)	3,38	**6,10 A++**	2,66 (0,26 - 3,61)	1330	12,70	5,20	5,20				10,40 (2,00 - 13,80)	4,28	**4,00 A+**	2,43 (0,17 - 3,90)	1215	11,40
60 + 71	4,12	4,88				9,00 (2,50 - 10,40)	3,46	**6,10 A++**	2,60 (0,26 - 3,48)	1300	12,40	4,76	5,64				10,40 (2,00 - 13,80)	4,32	**4,00 A+**	2,41 (0,17 - 3,89)	1205	11,30
71 + 71	4,50	4,50				9,00 (2,50 - 10,40)	3,64	**6,10 A++**	2,47 (0,29 - 3,34)	1235	11,80	5,20	5,20				10,40 (2,00 - 13,80)	4,43	**4,00 A+**	2,35 (0,18 - 3,87)	1175	11,00
3 Rooms																						
16 + 16 + 16	1,60	1,60	1,60			4,80 (2,90 - 8,50)	4,85	**7,20 A++**	0,99 (0,32 - 2,62)	495	4,90	2,33	2,33	2,33			6,99 (2,70 - 12,30)	4,54	**4,00 A+**	1,54 (0,23 - 3,38)	770	7,30
16 + 16 + 20	1,60	1,60	2,00			5,20 (2,90 - 8,50)	4,73	**7,20 A++**	1,10 (0,32 - 2,62)	550	5,40	2,34	2,34	2,92			7,60 (2,70 - 12,30)	4,37	**4,00 A+**	1,74 (0,23 - 3,37)	870	8,30
16 + 16 + 25	1,60	1,60	2,50			5,70 (2,90 - 8,50)	4,42	**7,20 A++**	1,29 (0,32 - 2,62)	645	6,20	2,22	2,22	3,46			7,90 (2,70 - 12,30)	4,32	**4,00 A+**	1,83 (0,23 - 3,37)	915	8,60
16 + 16 + 35	1,60	1,60	3,50			6,70 (2,90 - 8,50)	4,16	**7,20 A++**	1,61 (0,31 - 2,55)	805	7,80	2,08	2,08	4,54			8,70 (2,70 - 12,30)	4,31	**4,10 A+**	2,02 (0,23 - 3,28)	1010	9,50
16 + 16 + 42	1,60	1,60	4,20			7,40 (2,90 - 8,50)	3,79	**7,20 A++**	1,95 (0,34 - 2,49)	975	9,30	2,10	2,10	5,50			9,70 (2,70 - 12,30)	4,06	**4,10 A+**	2,39 (0,23 - 3,27)	1195	11,20
16 + 16 + 50	1,60	1,60	5,00			8,20 (2,90 - 8,70)	3,89	**7,20 A++**	2,11 (0,34 - 2,29)	1055	10,10	2,03	2,03	6,34			10,40 (2,70 - 12,90)	4,50	**4,10 A+**	2,31 (0,25 - 3,36)	1155	10,90
16 + 16 + 60	1,57	1,57	5,86			9,00 (2,90 - 10,10)	3,64	**7,20 A++**	2,47 (0,34 - 3,00)	1235	11,80	1,81	1,81	6,78			10,40 (2,70 - 13,60)	4,50	**4,20 A+**	2,31 (0,25 - 3,70)	1155	10,90
16 + 16 + 71	1,40	1,40	6,20			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,34)	1205	11,50	1,62	1,62	7,16			10,40 (2,70 - 13,60)	4,52	**4,20 A+**	2,30 (0,25 - 3,62)	1150	10,80
16 + 20 + 20	1,60	2,00	2,00			5,60 (2,90 - 8,50)	4,52	**7,20 A++**	1,24 (0,31 - 2,55)	620	6,00	2,32	2,89	2,89			8,10 (2,70 - 12,30)	4,33	**4,00 A+**	1,87 (0,23 - 3,36)	935	8,80
16 + 20 + 25	1,60	2,00	2,50			6,10 (2,90 - 8,50)	4,21	**7,20 A++**	1,45 (0,31 - 2,55)	725	7,00	2,23	2,79	3,48			8,50 (2,70 - 12,30)	4,15	**4,10 A+**	2,05 (0,23 - 3,36)	1025	9,60
16 + 20 + 35	1,60	2,00	3,50			7,10 (2,90 - 8,50)	3,99	**7,20 A++**	1,78 (0,34 - 2,49)	890	8,50	2,10	2,62	4,58			9,30 (2,70 - 12,30)	4,23	**4,10 A+**	2,20 (0,23 - 3,27)	1100	10,30
16 + 20 + 42	1,60	2,00	4,20			7,80 (2,90 - 8,50)	3,79	**7,20 A++**	2,06 (0,34 - 2,49)	1030	9,90	2,11	2,64	5,55			10,30 (2,70 - 12,90)	4,26	**4,10 A+**	2,42 (0,23 - 3,54)	1210	11,40
16 + 20 + 50	1,60	2,00	5,00			8,60 (2,90 - 9,60)	3,74	**7,20 A++**	2,30 (0,34 - 2,62)	1150	11,00	1,93	2,42	6,05			10,40 (2,70 - 13,60)	4,52	**4,20 A+**	2,30 (0,25 - 3,63)	1150	10,80
16 + 20 + 60	1,49	1,88	5,63			9,00 (2,90 - 10,10)	3,73	**7,20 A++**	2,41 (0,34 - 2,94)	1205	11,50	1,73	2,17	6,50			10,40 (2,70 - 13,60)	4,52	**4,20 A+**	2,30 (0,25 - 3,63)	1150	10,80
16 + 20 + 71	1,35	1,68	5,97			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	1,56	1,94	6,90			10,40 (2,70 - 13,80)	4,54	**4,20 A+**	2,29 (0,25 - 3,73)	1145	10,80
16 + 25 + 25	1,60	2,50	2,50			6,60 (2,90 - 8,50)	3,98	**7,20 A++**	1,66 (0,31 - 2,55)	830	8,00	2,14	3,33	3,33			8,80 (2,70 - 12,30)	4,23	**4,10 A+**	2,08 (0,23 - 3,36)	1040	9,80
16 + 25 + 35	1,60	2,50	3,50			7,60 (2,90 - 8,50)	3,69	**7,20 A++**	2,06 (0,34 - 2,49)	1030	9,90	2,02	3,16	4,42			9,60 (2,70 - 12,30)	4,10	**4,10 A+**	2,34 (0,23 - 3,27)	1170	11,00
16 + 25 + 42	1,60	2,50	4,20			8,30 (2,90 - 8,70)	3,52	**7,20 A++**	2,36 (0,34 - 2,54)	1180	11,30	2,00	3,13	5,27			10,40 (2,70 - 12,90)	4,23	**4,10 A+**	2,46 (0,23 - 3,54)	1230	11,60
16 + 25 + 50	1,58	2,47	4,95			9,00 (2,90 - 10,10)	3,73	**7,20 A++**	2,41 (0,34 - 2,94)	1205	11,50	1,83	2,86	5,71			10,40 (2,70 - 13,60)	4,52	**4,20 A+**	2,30 (0,25 - 3,63)	1150	10,80
16 + 25 + 60	1,42	2,23	5,35			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,48)	1205	11,50	1,65	2,57	6,18			10,40 (2,70 - 13,60)	4,52	**4,20 A+**	2,30 (0,25 - 3,63)	1150	10,80
16 + 25 + 71	1,28	2,01	5,71			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	1,49	2,32	6,59			10,40 (2,70 - 13,80)	4,54	**4,20 A+**	2,29 (0,25 - 3,73)	1145	10,80
16 + 35 + 35	1,60	3,50	3,50			8,60 (2,90 - 9,60)	3,45	**7,20 A++**	2,49 (0,34 - 2,93)	1245	11,90	1,94	4,23	4,23			10,40 (2,70 - 13,60)	4,24	**4,20 A+**	2,45 (0,23 - 3,86)	1225	11,50
16 + 35 + 42	1,55	3,39	4,06			9,00 (2,90 - 10,10)	3,38	**7,20 A++**	2,66 (0,34 - 3,33)	1330	12,70	1,79	3,91	4,70			10,40 (2,70 - 13,60)	4,28	**4,20 A+**	2,43 (0,24 - 3,85)	1215	11,40
16 + 35 + 50	1,42	3,12	4,46			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,34)	1205	11,50	1,65	3,60	5,15			10,40 (2,70 - 13,60)	4,58	**4,20 A+**	2,27 (0,25 - 3,59)	1135	10,70
16 + 35 + 60	1,30	2,84	4,86			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,34)	1205	11,50	1,50	3,28	5,62			10,40 (2,70 - 13,80)	4,58	**4,20 A+**	2,27 (0,25 - 3,71)	1135	10,70
16 + 35 + 71	1,18	2,58	5,24			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,20)	1175	11,20	1,36	2,98	6,06			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,69)	1130	10,60
16 + 42 + 42	1,44	3,78	3,78			9,00 (2,90 - 10,70)	3,38	**7,20 A++**	2,66 (0,34 - 3,91)	1330	12,70	1,66	4,37	4,37			10,40 (2,70 - 13,60)	4,30	**4,20 A+**	2,42 (0,24 - 3,78)	1210	11,40
16 + 42 + 50	1,33	3,50	4,17			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	1,54	4,04	4,82			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,70)	1130	10,60
16 + 42 + 60	1,22	3,20	4,58			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	1,41	3,70	5,29			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,70)	1130	10,60
16 + 42 + 71	1,12	2,93	4,95			9,00 (2,90 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	1,29	3,39	5,72			10,40 (2,70 - 14,10)	4,62	**4,20 A+**	2,25 (0,27 - 3,80)	1125	10,60
16 + 50 + 50	1,24	3,88	3,88			9,00 (2,90 - 10,70)	4,17	**7,20 A++**	2,16 (0,37 - 2,94)	1080	10,30	1,44	4,48	4,48			10,40 (2,70 - 13,80)	4,79	**4,20 A+**	2,17 (0,30 - 3,50)	1085	10,20
16 + 50 + 60	1,14	3,57	4,29			9,00 (2,90 - 10,70)	4,17	**7,20 A++**	2,16 (0,37 - 2,94)	1080	10,30	1,32	4,13	4,95			10,40 (2,70 - 13,80)	4,79	**4,20 A+**	2,17 (0,30 - 3,50)	1085	10,20
16 + 50 + 71	1,05	3,28	4,67			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	1,21	3,80	5,39			10,40 (2,70 - 14,10)	4,81	**4,20 A+**	2,16 (0,31 - 3,65)	1080	10,20

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
16 + 60 + 60	1,06	3,97	3,97			9,00 (3,00 - 10,70)	4,17	**7,20 A++**	2,16 (0,40 - 2,94)	1080	10,30	1,22	4,59	4,59			10,40 (2,70 - 14,10)	4,79	**4,20 A+**	2,17 (0,30 - 3,67)	1085	10,20
16 + 60 + 71	0,98	3,67	4,35			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	1,13	4,24	5,03			10,40 (2,70 - 14,10)	4,81	**4,20 A+**	2,16 (0,31 - 3,65)	1080	10,20
16 + 71 + 71	0,92	4,04	4,04			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,40 - 2,81)	1055	10,10	1,06	4,67	4,67			10,40 (2,70 - 14,40)	4,75	**4,20 A+**	2,19 (0,32 - 3,75)	1095	10,30
20 + 20 + 20	2,00	2,00	2,00			6,00 (2,90 - 8,50)	4,32	**7,20 A++**	1,39 (0,31 - 2,55)	695	6,70	2,86	2,86	2,86			8,58 (2,70 - 12,30)	4,33	**4,10 A+**	1,98 (0,23 - 3,35)	990	9,30
20 + 20 + 25	2,00	2,00	2,50			6,50 (2,90 - 8,50)	4,06	**7,20 A++**	1,60 (0,31 - 2,55)	800	7,70	2,77	2,77	3,46			9,00 (2,70 - 12,30)	4,25	**4,10 A+**	2,12 (0,23 - 3,35)	1060	10,00
20 + 20 + 35	2,00	2,00	3,50			7,50 (2,90 - 8,50)	3,85	**7,20 A++**	1,95 (0,34 - 2,49)	975	9,30	2,61	2,61	4,58			9,80 (2,70 - 12,30)	4,12	**4,10 A+**	2,38 (0,23 - 3,26)	1190	11,20
20 + 20 + 42	2,00	2,00	4,20			8,20 (2,90 - 8,70)	3,57	**7,20 A++**	2,30 (0,34 - 2,54)	1150	11,00	2,54	2,54	5,32			10,40 (2,70 - 12,90)	4,24	**4,10 A+**	2,45 (0,23 - 3,53)	1225	11,50
20 + 20 + 50	2,00	2,00	5,00			9,00 (2,90 - 9,60)	3,73	**7,20 A++**	2,41 (0,34 - 2,62)	1205	11,50	2,31	2,31	5,78			10,40 (2,70 - 13,60)	4,54	**4,20 A+**	2,29 (0,25 - 3,62)	1145	10,80
20 + 20 + 60	1,80	1,80	5,40			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,41)	1205	11,50	2,08	2,08	6,24			10,40 (2,70 - 13,60)	4,54	**4,20 A+**	2,29 (0,25 - 3,62)	1145	10,80
20 + 20 + 71	1,62	1,62	5,76			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	1,87	1,87	6,66			10,40 (2,70 - 13,80)	4,56	**4,20 A+**	2,28 (0,25 - 3,71)	1140	10,70
20 + 25 + 25	2,00	2,50	2,50			7,00 (2,90 - 8,50)	3,93	**7,20 A++**	1,78 (0,31 - 2,55)	890	8,50	2,68	3,36	3,36			9,40 (2,70 - 12,30)	4,16	**4,10 A+**	2,26 (0,23 - 3,35)	1130	10,60
20 + 25 + 35	2,00	2,50	3,50			8,00 (2,90 - 8,50)	3,67	**7,20 A++**	2,18 (0,34 - 2,49)	1090	10,40	2,55	3,19	4,46			10,20 (2,70 - 12,90)	4,16	**4,10 A+**	2,45 (0,23 - 3,54)	1225	11,50
20 + 25 + 42	2,00	2,50	4,20			8,70 (2,90 - 9,60)	3,43	**7,20 A++**	2,54 (0,34 - 3,00)	1270	12,20	2,39	2,99	5,02			10,40 (2,70 - 13,60)	4,24	**4,20 A+**	2,45 (0,23 - 3,87)	1225	11,50
20 + 25 + 50	1,89	2,37	4,74			9,00 (2,90 - 10,10)	3,73	**7,20 A++**	2,41 (0,34 - 2,94)	1205	11,50	2,19	2,74	5,47			10,40 (2,70 - 13,60)	4,54	**4,20 A+**	2,29 (0,25 - 3,62)	1145	10,80
20 + 25 + 60	1,71	2,14	5,15			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,41)	1205	11,50	1,98	2,48	5,94			10,40 (2,70 - 13,80)	4,54	**4,20 A+**	2,29 (0,25 - 3,73)	1145	10,80
20 + 25 + 71	1,55	1,94	5,51			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	1,79	2,24	6,37			10,40 (2,70 - 13,80)	4,56	**4,20 A+**	2,28 (0,25 - 3,71)	1140	10,70
20 + 35 + 35	2,00	3,50	3,50			9,00 (2,90 - 9,60)	3,38	**7,20 A++**	2,66 (0,34 - 2,93)	1330	12,70	2,32	4,04	4,04			10,40 (2,70 - 13,60)	4,28	**4,20 A+**	2,43 (0,24 - 3,85)	1215	11,40
20 + 35 + 42	1,85	3,25	3,90			9,00 (2,90 - 10,70)	3,38	**7,20 A++**	2,66 (0,34 - 3,91)	1330	12,70	2,14	3,75	4,51			10,40 (2,70 - 13,60)	4,30	**4,20 A+**	2,42 (0,24 - 3,78)	1210	11,40
20 + 35 + 50	1,71	3,00	4,29			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	1,98	3,47	4,95			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,70)	1130	10,60
20 + 35 + 60	1,56	2,74	4,70			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	1,81	3,17	5,42			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,70)	1130	10,60
20 + 35 + 71	1,43	2,50	5,07			9,00 (2,90 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	1,65	2,89	5,86			10,40 (2,70 - 13,80)	4,62	**4,20 A+**	2,25 (0,27 - 3,68)	1125	10,60
20 + 42 + 42	1,74	3,63	3,63			9,00 (2,90 - 10,70)	3,46	**7,20 A++**	2,60 (0,34 - 3,91)	1300	12,40	2,00	4,20	4,20			10,40 (2,70 - 13,60)	4,32	**4,20 A+**	2,41 (0,24 - 3,77)	1205	11,30
20 + 42 + 50	1,60	3,38	4,02			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	1,86	3,90	4,64			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,68)	1130	10,60
20 + 42 + 60	1,47	3,10	4,43			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	1,70	3,58	5,12			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,68)	1130	10,60
20 + 42 + 71	1,35	2,84	4,81			9,00 (2,90 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	1,56	3,28	5,56			10,40 (2,70 - 14,10)	4,64	**4,20 A+**	2,24 (0,27 - 3,78)	1120	10,50
20 + 50 + 50	1,50	3,75	3,75			9,00 (2,90 - 10,70)	4,17	**7,20 A++**	2,16 (0,37 - 2,94)	1080	10,30	1,74	4,33	4,33			10,40 (2,70 - 13,80)	4,81	**4,20 A+**	2,16 (0,31 - 3,48)	1080	10,20
20 + 50 + 60	1,38	3,46	4,16			9,00 (2,90 - 10,70)	4,17	**7,20 A++**	2,16 (0,37 - 2,94)	1080	10,30	1,60	4,00	4,80			10,40 (2,70 - 14,10)	4,81	**4,20 A+**	2,16 (0,31 - 3,65)	1080	10,20
20 + 50 + 71	1,28	3,19	4,53			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	1,48	3,69	5,23			10,40 (2,70 - 14,10)	4,75	**4,20 A+**	2,19 (0,32 - 3,64)	1095	10,30
20 + 60 + 60	1,28	3,86	3,86			9,00 (3,00 - 10,70)	4,17	**7,20 A++**	2,16 (0,40 - 2,94)	1080	10,30	1,48	4,46	4,46			10,40 (2,70 - 14,10)	4,81	**4,20 A+**	2,16 (0,31 - 3,65)	1080	10,20
20 + 60 + 71	1,19	3,58	4,23			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	1,38	4,13	4,89			10,40 (2,70 - 14,40)	4,75	**4,20 A+**	2,19 (0,32 - 3,75)	1095	10,30
20 + 71 + 71	1,12	3,94	3,94			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,41 - 2,81)	1055	10,10	1,28	4,56	4,56			10,40 (2,70 - 14,40)	4,77	**4,20 A+**	2,18 (0,33 - 3,74)	1090	10,20
25 + 25 + 25	2,50	2,50	2,50			7,50 (2,90 - 8,50)	3,73	**7,20 A++**	2,01 (0,31 - 2,55)	1005	9,60	3,23	3,23	3,23			9,69 (2,70 - 12,30)	4,02	**4,10 A+**	2,41 (0,23 - 3,35)	1205	11,30
25 + 25 + 35	2,50	2,50	3,50			8,50 (2,90 - 9,60)	3,41	**7,20 A++**	2,49 (0,34 - 3,00)	1245	11,90	3,06	3,06	4,28			10,40 (2,70 - 13,60)	4,23	**4,20 A+**	2,46 (0,23 - 3,89)	1230	11,60
25 + 25 + 42	2,45	2,45	4,10			9,00 (2,90 - 10,10)	3,30	**7,20 A++**	2,73 (0,34 - 3,40)	1365	13,10	2,83	2,83	4,74			10,40 (2,70 - 13,60)	4,24	**4,20 A+**	2,45 (0,23 - 3,87)	1225	11,50
25 + 25 + 50	2,25	2,25	4,50			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,41)	1205	11,50	2,60	2,60	5,20			10,40 (2,70 - 13,60)	4,54	**4,20 A+**	2,29 (0,25 - 3,62)	1145	10,80
25 + 25 + 60	2,05	2,05	4,90			9,00 (2,90 - 10,70)	3,73	**7,20 A++**	2,41 (0,34 - 3,41)	1205	11,50	2,36	2,36	5,68			10,40 (2,70 - 13,80)	4,54	**4,20 A+**	2,29 (0,25 - 3,73)	1145	10,80
25 + 25 + 71	1,86	1,86	5,28			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	2,15	2,15	6,10			10,40 (2,70 - 13,80)	4,56	**4,20 A+**	2,28 (0,25 - 3,71)	1140	10,70
25 + 35 + 35	2,36	3,32	3,32			9,00 (2,90 - 10,10)	3,38	**7,20 A++**	2,66 (0,34 - 3,33)	1330	12,70	2,74	3,83	3,83			10,40 (2,70 - 13,60)	4,28	**4,20 A+**	2,43 (0,24 - 3,85)	1215	11,40
25 + 35 + 42	2,20	3,09	3,71			9,00 (2,90 - 10,70)	3,38	**7,20 A++**	2,66 (0,34 - 3,91)	1330	12,70	2,55	3,57	4,28			10,40 (2,70 - 13,60)	4,30	**4,20 A+**	2,42 (0,24 - 3,78)	1210	11,40
25 + 35 + 50	2,05	2,86	4,09			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	2,36	3,31	4,73			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,70)	1130	10,60
25 + 35 + 60	1,87	2,63	4,50			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,34)	1175	11,20	2,17	3,03	5,20			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,70)	1130	10,60
25 + 35 + 71	1,72	2,40	4,88			9,00 (2,90 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	1,98	2,78	5,64			10,40 (2,70 - 14,10)	4,62	**4,20 A+**	2,25 (0,27 - 3,80)	1125	10,60
25 + 42 + 42	2,06	3,47	3,47			9,00 (2,90 - 10,70)	3,46	**7,20 A++**	2,60 (0,34 - 3,91)	1300	12,40	2,38	4,01	4,01			10,40 (2,70 - 13,80)	4,32	**4,20 A+**	2,41 (0,24 - 3,89)	1205	11,30
25 + 42 + 50	1,92	3,23	3,85			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	2,22	3,73	4,45			10,40 (2,70 - 13,80)	4,60	**4,20 A+**	2,26 (0,27 - 3,68)	1130	10,60
25 + 42 + 60	1,77	2,98	4,25			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,27)	1175	11,20	2,05	3,44	4,91			10,40 (2,70 - 14,10)	4,60	**4,20 A+**	2,26 (0,27 - 3,80)	1130	10,60
25 + 42 + 71	1,63	2,74	4,63			9,00 (3,00 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	1,88	3,17	5,35			10,40 (2,70 - 14,10)	4,64	**4,20 A+**	2,24 (0,27 - 3,78)	1120	10,50
25 + 50 + 50	1,80	3,60	3,60			9,00 (2,90 - 10,70)	4,17	**7,20 A++**	2,16 (0,37 - 2,94)	1080	10,30	2,08	4,16	4,16			10,40 (2,70 - 13,80)	4,81	**4,20 A+**	2,16 (0,31 - 3,48)	1080	10,20
25 + 50 + 60	1,67	3,33	4,00			9,00 (3,00 - 10,70)	4,17	**7,20 A++**	2,16 (0,40 - 2,94)	1080	10,30	1,93	3,85	4,62			10,40 (2,70 - 14,10)	4,81	**4,20 A+**	2,16 (0,31 - 3,65)	1080	10,20
25 + 50 + 71	1,54	3,08	4,38			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	1,78	3,56	5,06			10,40 (2,70 - 14,10)	4,75	**4,20 A+**	2,19 (0,32 - 3,64)	1095	10,30
25 + 60 + 60	1,56	3,72	3,72			9,00 (3,00 - 10,70)	4,17	**7,20 A++**	2,16 (0,40 - 2,94)	1080	10,30	1,80	4,30	4,30			10,40 (2,70 - 14,10)	4,81	**4,20 A+**	2,16 (0,31 - 3,65)	1080	10,20
25 + 60 + 71	1,44	3,46	4,10			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	1,67	4,00	4,73			10,40 (2,70 - 14,40)	4,75	**4,20 A+**	2,19 (0,32 - 3,75)	1095	10,30
25 + 71 + 71	1,34	3,83	3,83			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,41 - 2,81)	1055	10,10	1,56	4,42	4,42			10,40 (2,70 - 14,40)	4,77	**4,20 A+**	2,18 (0,33 - 3,74)	1090	10,20
35 + 35 + 35	3,00	3,00	3,00			9,00 (2,90 - 10,70)	3,46	**7,20 A++**	2,60 (0,34 - 3,83)	1300	12,40	3,46	3,46	3,46			10,38 (2,70 - 13,80)	4,40	**4,20 A+**	2,36 (0,24 - 3,88)	1180	11,10
35 + 35 + 42	2,81	2,81	3,38			9,00 (2,90 - 10,70)	3,46	**7,20 A++**	2,60 (0,34 - 3,76)	1300	12,40	3,25	3,25	3,90			10,40 (2,70 - 13,80)	4,43	**4,20 A+**	2,35 (0,24 - 3,87)	1175	11,00
35 + 35 + 50	2,63	2,63	3,74			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,20)	1175	11,20	3,03	3,03	4,34			10,40 (2,70 - 13,80)	4,64	**4,20 A+**	2,24 (0,27 - 3,66)	1120	10,50
35 + 35 + 60	2,42	2,42	4,16			9,00 (2,90 - 10,70)	3,83	**7,20 A++**	2,35 (0,34 - 3,20)	1175	11,20	2,80	2,80	4,80			10,40 (2,70 - 14,10)	4,64	**4,20 A+**	2,24 (0,27 - 3,78)	1120	10,50
35 + 35 + 71	2,23	2,23	4,54			9,00 (3,00 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,14)	1140	10,90	2,58	2,58	5,24			10,40 (2,70 - 14,10)	4,66	**4,20 A+**	2,23 (0,27 - 3,76)	1115	10,50
35 + 42 + 42	2,64	3,18	3,18			9,00 (2,90 - 10,70)	3,56	**7,20 A++**	2,53 (0,34 - 3,76)	1265	12,10	3,06	3,67	3,67			10,40 (2,70 - 13,80)	4,44	**4,20 A+**	2,34 (0,25 - 3,85)	1170	11,00
35 + 42 + 50	2,48	2,98	3,54			9,00 (2,90 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	2,87	3,44	4,09			10,40 (2,70 - 14,10)	4,66	**4,20 A+**	2,23 (0,27 - 3,77)	1115	10,50
35 + 42 + 60	2,30	2,76	3,94			9,00 (3,00 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	2,66	3,19	4,55			10,40 (2,70 - 14,10)	4,66	**4,20 A+**	2,23 (0,27 - 3,77)	1115	10,50
35 + 42 + 71	2,13	2,55	4,32			9,00 (3,00 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,14)	1140	10,90	2,46	2,95	4,99			10,40 (2,70 - 14,10)	4,68	**4,20 A+**	2,22 (0,28 - 3,75)	1110	10,40
35 + 50 + 50	2,34	3,33	3,33			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	2,70	3,85	3,85			10,40 (2,70 - 14,10)	4,77	**4,20 A+**	2,18 (0,33 - 3,62)	1090	10,20
35 + 50 + 60	2,17	3,10	3,73			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	2,51	3,59	4,30			10,40 (2,70 - 14,10)	4,77	**4,20 A+**	2,18 (0,33 - 3,62)	1090	10,20
35 + 50 + 71	2,02	2,88	4,10			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,40 - 2,81)	1055	10,10	2,33	3,33	4,74			10,40 (2,70 - 14,40)	4,79	**4,20 A+**	2,17 (0,33 - 3,72)	1085	10,20
35 + 60 + 60	2,04	3,48	3,48			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	2,34	4,03	4,03			10,40 (2,70 - 14,40)	4,77	**4,20 A+**	2,18 (0,33 - 3,74)	1090	10,20
35 + 60 + 71	1,90	3,25	3,85			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,40 - 2,81)	1055	10,10	2,19	3,76	4,45			10,40 (2,70 - 14,40)	4,79	**4,20 A+**	2,17 (0,33 - 3,72)	1085	10,20
35 + 71 + 71	1,78	3,61	3,61			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,43 - 2,81)	1055	10,10	2,06	4,17	4,17			10,40 (2,70 - 14,40)	4,81	**4,20 A+**	2,16 (0,34 - 3,70)	1080	10,20
42 + 42 + 42	3,00	3,00	3,00			9,00 (2,90 - 10,70)	3,56	**7,20 A++**	2,53 (0,34 - 3,69)	1265	12,10	3,46	3,46	3,46			10,38 (2,70 - 13,80)	4,45	**4,20 A+**	2,33 (0,25 - 3,78)	1165	10,90
42 + 42 + 50	2,82	2,82	3,36			9,00 (2,90 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	3,26	3,26	3,88			10,40 (2,70 - 14,10)	4,68	**4,20 A+**	2,22 (0,28 - 3,75)	1110	10,40
42 + 42 + 60	2,63	2,63	3,74			9,00 (3,00 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,20)	1140	10,90	3,03	3,03	4,34			10,40 (2,70 - 14,10)	4,68	**4,20 A+**	2,22 (0,28 - 3,75)	1110	10,40
42 + 42 + 71	2,44	2,44	4,12			9,00 (3,00 - 10,70)	3,95	**7,20 A++**	2,28 (0,37 - 3,07)	1140	10,90	2,82	2,82	4,76			10,40 (2,70 - 14,40)	4,71	**4,20 A+**	2,21 (0,28 - 3,85)	1105	10,40
42 + 50 + 50	2,66	3,17	3,17			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	3,08	3,66	3,66			10,40 (2,70 - 14,10)	4,77	**4,20 A+**	2,18 (0,33 - 3,61)	1090	10,20
42 + 50 + 60	2,49	2,96	3,55			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	2,87	3,42	4,11			10,40 (2,70 - 14,40)	4,77	**4,20 A+**	2,18 (0,33 - 3,72)	1090	10,20
42 + 50 + 71	2,32	2,76	3,92			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,41 - 2,81)	1055	10,10	2,68	3,19	4,53			10,40 (2,70 - 14,40)	4,79	**4,20 A+**	2,17 (0,34 - 3,71)	1085	10,20
42 + 60 + 60	2,34	3,33	3,33			9,00 (3,00 - 10,70)	4,15	**7,20 A++**	2,17 (0,40 - 2,87)	1085	10,40	2,70	3,85	3,85			10,40 (2,70 - 14,40)	4,77	**4,20 A+**	2,18 (0,33 - 3,72)	1090	10,20
42 + 60 + 71	2,18	3,12	3,70			9,00 (3,00 - 10,70)	4,27	**7,20 A++**	2,11 (0,41 - 2,81)	1055	10,10	2,52	3,61	4,27			10,40 (2,70 - 14,40)	4,79	**4,20 A+**	2,17 (0,34 - 3,71)	1085	10,20
50 + 50 + 50	3,00	3,00	3,00			9,00 (3,00 - 10,70)	4,37	**7,20 A++**	2,06 (0,44 - 2,68)	1030	9,90	3,46	3,46	3,46			10,38 (2,70 - 14,40)	4,83	**4,20 A+**	2,15 (0,40 - 3,64)	1075	10,10
50 + 50 + 60	2,81	2,81	3,38			9,00 (3,00 - 10,70)	4,37	**7,20 A++**	2,06 (0,44 - 2,68)	1030	9,90	3,25	3,25	3,90			10,40 (2,70 - 14,40)	4,84	**4,20 A+**	2,15 (0,40 - 3,64)	1075	10,10
50 + 50 + 71	2,63	2,63	3,74			9,00 (3,00 - 10,70)	4,37	**7,20 A++**	2,06 (0,47 - 2,69)	1030	9,90	3,04	3,04	4,32			10,40 (2,70 - 14,40)	4,86	**4,20 A+**	2,14 (0,41 - 3,63)	1070	10,10
50 + 60 + 60	2,64	3,18	3,18			9,00 (3,00 - 10,70)	4,37	**7,20 A++**	2,06 (0,44 - 2,68)	1030	9,90	3,06	3,67	3,67			10,40 (2,70 - 14,40)	4,84	**4,20 A+**	2,15 (0,40 - 3,64)	1075	10,10

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
50+60+71	2,49	2,98	3,53			9,00 (3,00 - 10,70)	4,37	**7,20 A++**	2,06 (0,47 - 2,69)	1030	9,90	2,87	3,45	4,08			10,40 (2,70 - 14,40)	4,86	**4,20 A+**	2,14 (0,41 - 3,63)	1070	10,10
60+60+60	3,00	3,00	3,00			9,00 (3,00 - 10,70)	4,37	**7,20 A++**	2,06 (0,44 - 2,68)	1030	9,90	3,46	3,46	3,46			10,38 (2,70 - 14,40)	4,83	**4,20 A+**	2,15 (0,40 - 3,64)	1075	10,10
4 Rooms																						
16+16+16+16	1,60	1,60	1,60	1,60		6,40 (2,90 - 10,60)	4,57	**8,50 A+++**	1,40 (0,37 - 3,48)	700	6,80	2,35	2,35	2,35	2,35		9,40 (3,40 - 14,20)	4,54	**4,10 A+**	2,07 (0,34 - 3,84)	1035	9,70
16+16+16+20	1,60	1,60	1,60	2,00		6,80 (2,90 - 10,60)	4,42	**8,50 A+++**	1,54 (0,37 - 3,48)	770	7,40	2,33	2,33	2,33	2,91		9,90 (3,40 - 14,20)	4,50	**4,10 A+**	2,20 (0,34 - 3,83)	1100	10,30
16+16+16+25	1,60	1,60	1,60	2,50		7,30 (2,90 - 10,60)	4,29	**8,00 A++**	1,70 (0,37 - 3,48)	850	8,20	2,26	2,26	2,26	3,52		10,30 (3,40 - 14,20)	4,70	**4,20 A+**	2,19 (0,34 - 3,83)	1095	10,30
16+16+16+35	1,60	1,60	1,60	3,50		8,30 (2,90 - 10,60)	3,97	**8,00 A++**	2,09 (0,37 - 3,40)	1045	10,00	2,00	2,00	2,00	4,40		10,40 (3,40 - 14,20)	4,71	**4,20 A+**	2,21 (0,34 - 3,80)	1105	10,40
16+16+16+42	1,60	1,60	1,60	4,20		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,40)	1190	11,40	1,85	1,85	1,85	4,85		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,78)	1100	10,30
16+16+16+50	1,47	1,47	1,47	4,59		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,11)	1125	10,80	1,70	1,70	1,70	5,30		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,39 - 3,64)	1080	10,20
16+16+16+60	1,33	1,33	1,33	5,01		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,11)	1125	10,80	1,54	1,54	1,54	5,78		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,39 - 3,64)	1080	10,20
16+16+16+71	1,21	1,21	1,21	5,37		9,00 (2,90 - 10,60)	3,98	**8,00 A++**	2,26 (0,41 - 3,04)	1130	10,80	1,40	1,40	1,40	6,20		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+16+20+20	1,60	1,60	2,00	2,00		7,20 (2,90 - 10,60)	4,36	**8,00 A++**	1,65 (0,37 - 3,40)	825	8,00	2,31	2,31	2,89	2,89		10,40 (3,40 - 14,20)	4,66	**4,20 A+**	2,23 (0,34 - 3,82)	1115	10,50
16+16+20+25	1,60	1,60	2,00	2,50		7,70 (2,90 - 10,60)	4,16	**8,00 A++**	1,85 (0,37 - 3,40)	925	8,90	2,16	2,16	2,70	3,38		10,40 (3,40 - 14,20)	4,66	**4,20 A+**	2,23 (0,34 - 3,82)	1115	10,50
16+16+20+35	1,60	1,60	2,00	3,50		8,70 (2,90 - 10,60)	3,87	**8,00 A++**	2,25 (0,37 - 3,33)	1125	10,80	1,91	1,91	2,39	4,19		10,40 (3,40 - 14,20)	4,73	**4,20 A+**	2,20 (0,34 - 3,78)	1100	10,30
16+16+20+42	1,53	1,53	1,91	4,03		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,77	1,77	2,21	4,65		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,77)	1100	10,30
16+16+20+50	1,41	1,41	1,76	4,42		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,11)	1125	10,80	1,63	1,63	2,04	5,10		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,63)	1075	10,10
16+16+20+60	1,29	1,29	1,60	4,82		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,11)	1125	10,80	1,49	1,49	1,86	5,56		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,63)	1075	10,10
16+16+20+71	1,17	1,17	1,46	5,20		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,35	1,35	1,69	6,01		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,61)	1075	10,10
16+16+25+25	1,60	1,60	2,50	2,50		8,20 (2,90 - 10,60)	4,04	**8,00 A++**	2,03 (0,37 - 3,40)	1015	9,70	2,03	2,03	3,17	3,17		10,40 (3,40 - 14,20)	4,66	**4,20 A+**	2,23 (0,34 - 3,82)	1115	10,50
16+16+25+35	1,57	1,57	2,44	3,42		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,81	1,81	2,83	3,95		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,78)	1100	10,30
16+16+25+42	1,45	1,45	2,27	3,83		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,68	1,68	2,63	4,41		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,77)	1100	10,30
16+16+25+50	1,35	1,35	2,09	4,21		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,11)	1125	10,80	1,56	1,56	2,43	4,85		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,63)	1075	10,10
16+16+25+60	1,23	1,23	1,92	4,62		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,11)	1125	10,80	1,42	1,42	2,22	5,34		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,63)	1075	10,10
16+16+25+71	1,13	1,13	1,75	4,99		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,30	1,30	2,03	5,77		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,40 - 3,67)	1075	10,10
16+16+35+35	1,41	1,41	3,09	3,09		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,63	1,63	3,57	3,57		10,40 (3,40 - 14,20)	4,77	**4,40 A+**	2,18 (0,36 - 3,75)	1090	10,20
16+16+35+42	1,32	1,32	2,89	3,47		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,53	1,53	3,34	4,00		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,36 - 3,68)	1085	10,20
16+16+35+50	1,23	1,23	2,69	3,85		9,00 (2,90 - 10,60)	3,98	**8,00 A++**	2,26 (0,41 - 3,04)	1130	10,80	1,42	1,42	3,11	4,45		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,59)	1070	10,10
16+16+35+60	1,13	1,13	2,48	4,26		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,31	1,31	2,87	4,91		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,59)	1070	10,10
16+16+35+71	1,04	1,04	2,28	4,64		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,21	1,21	2,64	5,34		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
16+16+42+42	1,24	1,24	3,26	3,26		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,43	1,43	3,77	3,77		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,37 - 3,66)	1085	10,20
16+16+42+50	1,16	1,16	3,05	3,63		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,34	1,34	3,52	4,20		10,40 (3,40 - 14,20)	4,88	**4,40 A+**	2,13 (0,42 - 3,58)	1065	10,00
16+16+42+60	1,07	1,07	2,82	4,04		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,24	1,24	3,26	4,66		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
16+16+42+71	0,99	0,99	2,61	4,41		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,15	1,15	3,01	5,09		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
16+16+50+50	1,09	1,09	3,41	3,41		9,00 (2,90 - 10,80)	4,07	**8,00 A++**	2,21 (0,48 - 2,98)	1105	10,60	1,26	1,26	3,94	3,94		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,49 - 3,57)	1080	10,20
16+16+50+60	1,01	1,01	3,17	3,81		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,48 - 3,12)	1105	10,60	1,17	1,17	3,66	4,40		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,49 - 3,57)	1080	10,20
16+16+50+71	0,94	0,94	2,94	4,18		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,52 - 3,12)	1105	10,60	1,09	1,09	3,40	4,82		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,55)	1075	10,10
16+16+60+60	0,95	0,95	3,55	3,55		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,48 - 3,12)	1105	10,60	1,09	1,09	4,11	4,11		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,49 - 3,57)	1080	10,20
16+16+60+71	0,88	0,88	3,31	3,93		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,02	1,02	3,83	4,53		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,55)	1075	10,10
16+16+71+71	0,83	0,83	3,67	3,67		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	0,96	0,96	4,24	4,24		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,51 - 3,60)	1070	10,10
16+20+20+20	1,60	2,00	2,00	2,00		7,60 (2,90 - 10,60)	4,18	**8,00 A++**	1,82 (0,37 - 3,40)	910	8,70	2,18	2,74	2,74	2,74		10,40 (3,40 - 14,20)	4,68	**4,20 A+**	2,22 (0,34 - 3,81)	1110	10,40
16+20+20+25	1,60	2,00	2,00	2,50		8,10 (2,90 - 10,60)	4,11	**8,00 A++**	1,97 (0,37 - 3,40)	985	9,40	2,05	2,57	2,57	3,21		10,40 (3,40 - 14,20)	4,68	**4,20 A+**	2,22 (0,34 - 3,81)	1110	10,40
16+20+20+35	1,58	1,98	1,98	3,46		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,83	2,29	2,29	3,99		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,77)	1100	10,30
16+20+20+42	1,46	1,84	1,84	3,86		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,70	2,12	2,12	4,46		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
16+20+20+50	1,35	1,70	1,70	4,25		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,57	1,96	1,96	4,91		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+20+20+60	1,24	1,55	1,55	4,66		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,43	1,79	1,79	5,39		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+20+20+71	1,13	1,42	1,42	5,03		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,31	1,64	1,64	5,81		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
16+20+25+25	1,60	2,00	2,50	2,50		8,60 (2,90 - 10,60)	3,89	**8,00 A++**	2,21 (0,37 - 3,40)	1105	10,60	1,93	2,43	3,02	3,02		10,40 (3,40 - 14,20)	4,68	**4,20 A+**	2,22 (0,34 - 3,81)	1110	10,40
16+20+25+35	1,50	1,88	2,34	3,28		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,73	2,17	2,71	3,79		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,77)	1100	10,30
16+20+25+42	1,40	1,75	2,18	3,67		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,62	2,02	2,52	4,24		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
16+20+25+50	1,30	1,62	2,03	4,05		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,50	1,87	2,34	4,69		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+20+25+60	1,19	1,49	1,86	4,46		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,41 - 3,18)	1125	10,80	1,38	1,72	2,15	5,15		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+20+25+71	1,09	1,36	1,70	4,85		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,26	1,58	1,97	5,59		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,42 - 3,66)	1070	10,10
16+20+35+35	1,36	1,70	2,97	2,97		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,57	1,97	3,43	3,43		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,36 - 3,68)	1085	10,20
16+20+35+42	1,27	1,59	2,79	3,35		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,47	1,84	3,22	3,87		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,37 - 3,66)	1085	10,20
16+20+35+50	1,19	1,49	2,60	3,72		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,38	1,72	3,01	4,29		10,40 (3,40 - 14,20)	4,88	**4,40 A+**	2,13 (0,42 - 3,58)	1065	10,00
16+20+35+60	1,10	1,37	2,40	4,13		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,27	1,59	2,78	4,76		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
16+20+35+71	1,01	1,27	2,22	4,50		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,17	1,46	2,56	5,21		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
16+20+42+42	1,20	1,50	3,15	3,15		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,39	1,73	3,64	3,64		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,37 - 3,65)	1080	10,20
16+20+42+50	1,12	1,41	2,95	3,52		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,30	1,63	3,41	4,06		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
16+20+42+60	1,04	1,30	2,74	3,92		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,21	1,51	3,17	4,51		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
16+20+42+71	0,96	1,21	2,54	4,29		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,12	1,40	2,93	4,95		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
16+20+50+50	1,06	1,32	3,31	3,31		9,00 (2,90 - 10,80)	4,07	**8,00 A++**	2,21 (0,49 - 2,98)	1105	10,60	1,22	1,54	3,82	3,82		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,50 - 3,56)	1075	10,10
16+20+50+60	0,99	1,23	3,08	3,70		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,14	1,42	3,56	4,28		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,50 - 3,56)	1075	10,10
16+20+50+71	0,91	1,15	2,87	4,07		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,52 - 3,05)	1105	10,60	1,06	1,32	3,31	4,71		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
16+20+60+60	0,92	1,16	3,46	3,46		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,07	1,33	4,00	4,00		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,50 - 3,56)	1075	10,10
16+20+60+71	0,86	1,08	3,23	3,83		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,00	1,25	3,74	4,41		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
16+20+71+71	0,81	1,01	3,59	3,59		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,20)	1080	10,30	0,93	1,17	4,15	4,15		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
16+25+25+25	1,59	2,47	2,47	2,47		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,40)	1190	11,40	1,82	2,86	2,86	2,86		10,40 (3,40 - 14,20)	4,68	**4,40 A+**	2,22 (0,34 - 3,81)	1110	10,40
16+25+25+35	1,42	2,23	2,23	3,12		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,65	2,57	2,57	3,61		10,40 (3,40 - 14,20)	4,73	**4,40 A+**	2,20 (0,34 - 3,77)	1100	10,30
16+25+25+42	1,33	2,08	2,08	3,51		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,54	2,41	2,41	4,04		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
16+25+25+50	1,24	1,94	1,94	3,88		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,43	2,24	2,24	4,49		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+25+25+60	1,13	1,79	1,79	4,29		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,41 - 3,18)	1125	10,80	1,32	2,06	2,06	4,96		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,40 - 3,62)	1075	10,10
16+25+25+71	1,05	1,64	1,64	4,67		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,21	1,90	1,90	5,39		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,42 - 3,66)	1070	10,10
16+25+35+35	1,29	2,03	2,84	2,84		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,50	2,34	3,28	3,28		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,36 - 3,68)	1085	10,20
16+25+35+42	1,22	1,91	2,67	3,20		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,41	2,20	3,08	3,71		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,37 - 3,66)	1085	10,20
16+25+35+50	1,14	1,79	2,50	3,57		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,32	2,06	2,89	4,13		10,40 (3,40 - 14,20)	4,88	**4,40 A+**	2,13 (0,42 - 3,58)	1065	10,00
16+25+35+60	1,06	1,65	2,32	3,97		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,41 - 3,18)	1130	10,80	1,22	1,91	2,68	4,59		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
16+25+35+71	0,98	1,53	2,14	4,35		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,13	1,77	2,48	5,02		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
16+25+42+42	1,15	1,81	3,02	3,02		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,37 - 3,40)	1155	11,10	1,33	2,09	3,49	3,49		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,37 - 3,65)	1080	10,20
16+25+42+50	1,08	1,69	2,84	3,39		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,25	1,95	3,28	3,92		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
16+25+42+60	1,01	1,57	2,64	3,78		9,00 (3,00 - 11,00)	3,98	**8,00 A++**	2,26 (0,44 - 3,26)	1130	10,80	1,16	1,82	3,05	4,37		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
16+25+42+71	0,94	1,46	2,45	4,15		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,08	1,69	2,84	4,79		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
16+25+50+50	1,02	1,60	3,19	3,19		9,00 (2,90 - 10,80)	4,07	**8,00 A++**	2,21 (0,49 - 2,98)	1105	10,60	1,18	1,84	3,69	3,69		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,50 - 3,56)	1075	10,10
16+25+50+60	0,95	1,49	2,98	3,58		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,10	1,72	3,44	4,14		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,50 - 3,56)	1075	10,10
16+25+50+71	0,89	1,39	2,78	3,94		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,03	1,60	3,21	4,56		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
16+25+60+60	0,89	1,41	3,35	3,35		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,49 - 3,19)	1105	10,60	1,03	1,61	3,88	3,88		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,50 - 3,56)	1075	10,10
16+25+60+71	0,83	1,31	3,14	3,72		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	0,97	1,51	3,63	4,29		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
16+25+71+71	0,79	1,23	3,49	3,49		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,20)	1080	10,30	0,91	1,43	4,03	4,03		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
16+35+35+35	1,20	2,60	2,60	2,60		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,38 - 3,33)	1155	11,10	1,37	3,01	3,01	3,01		10,40 (3,40 - 14,20)	4,84	**4,40 A+**	2,15 (0,37 - 3,64)	1075	10,10
16+35+35+42	1,13	2,46	2,46	2,95		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	1,30	2,84	2,84	3,42		10,40 (3,40 - 14,40)	4,75	**4,40 A+**	2,19 (0,37 - 3,75)	1095	10,30
16+35+35+50	1,05	2,32	2,32	3,31		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,22	2,68	2,68	3,82		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
16+35+35+60	0,98	2,16	2,16	3,70		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,14	2,49	2,49	4,28		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
16+35+35+71	0,91	2,01	2,01	4,07		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,47 - 3,19)	1100	10,50	1,06	2,32	2,32	4,70		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
16+35+42+42	1,07	2,33	2,80	2,80		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	1,22	2,70	3,24	3,24		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,37 - 3,73)	1090	10,20
16+35+42+50	1,01	2,20	2,64	3,15		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,16	2,55	3,05	3,64		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
16+35+42+60	0,94	2,06	2,47	3,53		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,09	2,38	2,85	4,08		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
16+35+42+71	0,88	1,92	2,30	3,90		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,47 - 3,33)	1100	10,50	1,01	2,22	2,66	4,51		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,64)	1070	10,10
16+35+50+50	0,95	2,09	2,98	2,98		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,52 - 3,05)	1105	10,60	1,10	2,42	3,44	3,44		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
16+35+50+60	0,89	1,96	2,80	3,35		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,03	2,26	3,23	3,88		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
16+35+50+71	0,83	1,83	2,62	3,72		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	0,97	2,12	3,02	4,29		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,54 - 3,57)	1090	10,20
16+35+60+60	0,84	1,84	3,16	3,16		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	0,97	2,13	3,65	3,65		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
16+35+60+71	0,79	1,73	2,97	3,51		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	0,91	2,00	3,43	4,06		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,54 - 3,57)	1090	10,20
16+42+42+42	1,02	2,66	2,66	2,66		9,00 (3,00 - 11,00)	3,90	**8,00 A++**	2,31 (0,40 - 3,48)	1155	11,10	1,16	3,08	3,08	3,08		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,39 - 3,72)	1085	10,20
16+42+42+50	0,96	2,52	2,52	3,00		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,11	2,91	2,91	3,47		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,64)	1075	10,10
16+42+42+60	0,90	2,36	2,36	3,38		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,44 - 3,33)	1100	10,50	1,04	2,73	2,73	3,90		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,64)	1075	10,10
16+42+42+71	0,84	2,21	2,21	3,74		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,34)	1100	10,50	0,97	2,55	2,55	4,33		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,46 - 3,63)	1070	10,10
16+42+50+50	0,91	2,39	2,85	2,85		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,05	2,77	3,29	3,29		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
16+42+50+60	0,86	2,25	2,68	3,21		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	0,99	2,60	3,10	3,71		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
16+42+50+71	0,80	2,11	2,51	3,58		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,20)	1080	10,30	0,93	2,44	2,91	4,12		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,56)	1085	10,20
16+42+60+60	0,81	2,13	3,03	3,03		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	0,93	2,45	3,51	3,51		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
16+50+50+50	0,87	2,71	2,71	2,71		9,00 (3,00 - 11,20)	4,15	**8,00 A++**	2,17 (0,57 - 3,14)	1085	10,40	1,01	3,13	3,13	3,13		10,40 (3,40 - 14,40)	4,66	**4,40 A+**	2,23 (0,63 - 3,58)	1115	10,50
16+50+50+60	0,81	2,56	2,56	3,07		9,00 (3,00 - 11,20)	4,15	**8,00 A++**	2,17 (0,57 - 3,14)	1085	10,40	0,95	2,95	2,95	3,55		10,40 (3,40 - 14,40)	4,66	**4,40 A+**	2,23 (0,63 - 3,58)	1115	10,50
20+20+20+20	2,00	2,00	2,00	2,00		8,00 (2,90 - 10,60)	4,06	**8,00 A++**	1,97 (0,37 - 3,40)	985	9,40	2,60	2,60	2,60	2,60		10,40 (3,40 - 14,20)	4,71	**4,20 A+**	2,21 (0,34 - 3,79)	1105	10,40
20+20+20+25	2,00	2,00	2,00	2,50		8,50 (2,90 - 10,60)	3,95	**8,00 A++**	2,15 (0,37 - 3,40)	1075	10,30	2,45	2,45	2,45	3,05		10,40 (3,40 - 14,20)	4,71	**4,20 A+**	2,21 (0,34 - 3,79)	1105	10,40
20+20+20+35	1,89	1,89	1,89	3,33		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	2,19	2,19	2,19	3,83		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
20+20+20+42	1,76	1,76	1,76	3,72		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	2,04	2,04	2,04	4,28		10,40 (3,40 - 14,20)	4,77	**4,40 A+**	2,18 (0,36 - 3,74)	1090	10,20
20+20+20+50	1,64	1,64	1,64	4,08		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,89	1,89	1,89	4,73		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
20+20+20+60	1,50	1,50	1,50	4,50		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,73	1,73	1,73	5,21		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
20+20+20+71	1,37	1,37	1,37	4,89		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,59	1,59	1,59	5,63		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
20+20+25+25	2,00	2,00	2,50	2,50		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,40)	1190	11,40	2,31	2,31	2,89	2,89		10,40 (3,40 - 14,20)	4,71	**4,40 A+**	2,21 (0,34 - 3,79)	1105	10,40
20+20+25+35	1,80	1,80	2,25	3,15		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	2,08	2,08	2,60	3,64		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
20+20+25+42	1,68	1,68	2,10	3,54		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,94	1,94	2,43	4,09		10,40 (3,40 - 14,20)	4,77	**4,40 A+**	2,18 (0,36 - 3,74)	1090	10,20
20+20+25+50	1,57	1,57	1,95	3,91		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,81	1,81	2,26	4,52		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
20+20+25+60	1,44	1,44	1,80	4,32		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,41 - 3,18)	1125	10,80	1,66	1,66	2,08	5,00		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
20+20+25+71	1,32	1,32	1,65	4,71		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,53	1,53	1,91	5,43		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
20+20+35+35	1,64	1,64	2,86	2,86		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,89	1,89	3,31	3,31		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,37 - 3,66)	1085	10,20
20+20+35+42	1,54	1,54	2,69	3,23		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,78	1,78	3,11	3,73		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,37 - 3,65)	1080	10,20
20+20+35+50	1,44	1,44	2,52	3,60		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,66	1,66	2,91	4,17		10,40 (3,40 - 14,20)	4,91	**4,40 A+**	2,12 (0,42 - 3,57)	1060	10,00
20+20+35+60	1,33	1,33	2,33	4,01		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,54	1,54	2,70	4,62		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
20+20+35+71	1,23	1,23	2,16	4,38		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,42	1,42	2,49	5,07		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
20+20+42+42	1,45	1,45	3,05	3,05		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,37 - 3,40)	1155	11,10	1,68	1,68	3,52	3,52		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,37 - 3,64)	1095	10,30
20+20+42+50	1,36	1,36	2,86	3,42		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,58	1,58	3,31	3,93		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
20+20+42+60	1,27	1,27	2,66	3,80		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,46	1,46	3,08	4,40		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
20+20+42+71	1,18	1,18	2,46	4,18		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,45 - 3,19)	1100	10,50	1,36	1,36	2,85	4,83		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,44 - 3,66)	1075	10,10
20+20+50+50	1,29	1,29	3,21	3,21		9,00 (2,90 - 10,80)	4,07	**8,00 A++**	2,21 (0,49 - 2,98)	1105	10,60	1,49	1,49	3,71	3,71		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
20+20+50+60	1,20	1,20	3,00	3,60		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,39	1,39	3,47	4,15		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
20+20+50+71	1,12	1,12	2,79	3,97		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,29	1,29	3,23	4,59		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
20+20+60+60	1,12	1,12	3,38	3,38		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,49 - 3,19)	1105	10,60	1,30	1,30	3,90	3,90		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
20+20+60+71	1,05	1,05	3,16	3,74		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,22	1,22	3,65	4,31		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
20+20+71+71	0,99	0,99	3,51	3,51		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,13)	1080	10,30	1,14	1,14	4,06	4,06		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
20+25+25+25	1,89	2,37	2,37	2,37		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,40)	1190	11,40	2,18	2,74	2,74	2,74		10,40 (3,40 - 14,20)	4,71	**4,40 A+**	2,21 (0,34 - 3,79)	1105	10,40
20+25+25+35	1,71	2,14	2,14	3,01		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,98	2,48	2,48	3,46		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
20+25+25+42	1,60	2,01	2,01	3,38		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	1,86	2,32	2,32	3,90		10,40 (3,40 - 14,20)	4,77	**4,40 A+**	2,18 (0,36 - 3,74)	1090	10,20
20+25+25+50	1,49	1,88	1,88	3,75		9,00 (2,90 - 10,60)	4,00	**8,00 A++**	2,25 (0,41 - 3,04)	1125	10,80	1,73	2,17	2,17	4,33		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
20+25+25+60	1,38	1,73	1,73	4,16		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,41 - 3,18)	1125	10,80	1,60	2,00	2,00	4,80		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,42 - 3,66)	1070	10,10
20+25+25+71	1,27	1,60	1,60	4,53		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,48	1,84	1,84	5,24		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
20+25+35+35	1,56	1,96	2,74	2,74		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	1,80	2,26	3,17	3,17		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,37 - 3,66)	1085	10,20
20+25+35+42	1,48	1,84	2,58	3,10		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,37 - 3,40)	1155	11,10	1,70	2,13	2,98	3,59		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,37 - 3,65)	1080	10,20
20+25+35+50	1,38	1,73	2,42	3,47		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,60	2,00	2,80	4,00		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
20+25+35+60	1,28	1,61	2,25	3,86		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,49	1,86	2,60	4,45		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
20+25+35+71	1,19	1,49	2,09	4,23		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,38	1,72	2,41	4,89		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
20+25+42+42	1,40	1,74	2,93	2,93		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,37 - 3,40)	1155	11,10	1,60	2,02	3,39	3,39		10,40 (3,40 - 14,40)	4,75	**4,40 A+**	2,19 (0,37 - 3,76)	1095	10,30
20+25+42+50	1,31	1,64	2,76	3,29		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,52	1,90	3,19	3,79		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
20+25+42+60	1,22	1,53	2,57	3,68		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,41	1,77	2,97	4,25		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
20+25+42+71	1,14	1,42	2,39	4,05		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,45 - 3,33)	1100	10,50	1,32	1,65	2,76	4,67		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,44 - 3,66)	1075	10,10
20+25+50+50	1,24	1,55	3,10	3,11		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,43	1,79	3,59	3,59		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
20+25+50+60	1,16	1,45	2,90	3,49		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,34	1,68	3,35	4,03		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
20+25+50+71	1,08	1,36	2,71	3,85		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,25	1,57	3,13	4,45		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
20+25+60+60	1,09	1,37	3,27	3,27		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,49 - 3,19)	1105	10,60	1,26	1,58	3,78	3,78		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
20+25+60+71	1,02	1,28	3,07	3,63		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,18	1,48	3,55	4,19		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
20+35+35+35	1,44	2,52	2,52	2,52		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	1,67	2,91	2,91	2,91		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,37 - 3,63)	1095	10,30
20+35+35+42	1,36	2,39	2,39	2,86		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	1,58	2,76	2,76	3,30		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,37 - 3,73)	1090	10,20
20+35+35+50	1,29	2,25	2,25	3,21		9,00 (2,90 - 10,80)	4,09	**8,00 A++**	2,20 (0,44 - 3,11)	1100	10,50	1,49	2,60	2,60	3,71		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
20+35+35+60	1,20	2,10	2,10	3,60		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,39	2,43	2,43	4,15		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
20+35+35+71	1,11	1,96	1,96	3,97		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,47 - 3,33)	1100	10,50	1,29	2,26	2,26	4,59		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,64)	1070	10,10
20+35+42+42	1,29	2,27	2,72	2,72		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	1,50	2,62	3,14	3,14		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,39 - 3,72)	1085	10,20
20+35+42+50	1,22	2,14	2,57	3,07		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,41	2,48	2,97	3,54		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,64)	1075	10,10
20+35+42+60	1,14	2,01	2,41	3,44		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,32	2,32	2,78	3,98		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,64)	1075	10,10
20+35+42+71	1,07	1,88	2,25	3,80		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,34)	1100	10,50	1,24	2,17	2,60	4,39		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,46 - 3,63)	1070	10,10
20+35+50+50	1,16	2,04	2,90	2,90		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,52 - 3,05)	1105	10,60	1,34	2,36	3,35	3,35		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
20+35+50+60	1,09	1,91	2,73	3,27		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,26	2,21	3,15	3,78		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
20+35+50+71	1,02	1,79	2,56	3,63		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,20)	1080	10,30	1,18	2,07	2,95	4,20		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,56)	1085	10,20
20+35+60+60	1,02	1,80	3,09	3,09		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,19	2,07	3,57	3,57		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
20+42+42+42	1,23	2,59	2,59	2,59		9,00 (3,00 - 11,00)	3,90	**8,00 A++**	2,31 (0,40 - 3,40)	1155	11,10	1,43	2,99	2,99	2,99		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,39 - 3,71)	1085	10,20
20+42+42+50	1,17	2,45	2,45	2,93		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,45 - 3,19)	1100	10,50	1,35	2,84	2,84	3,37		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,63)	1070	10,10
20+42+42+60	1,10	2,30	2,30	3,30		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,45 - 3,33)	1100	10,50	1,27	2,66	2,66	3,81		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,63)	1070	10,10
20+42+42+71	1,03	2,16	2,16	3,65		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,26)	1100	10,50	1,19	2,50	2,50	4,21		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,46 - 3,61)	1065	10,00
20+42+50+50	1,11	2,33	2,78	2,78		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,28	2,70	3,21	3,21		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,57)	1085	10,20
20+42+50+60	1,04	2,20	2,62	3,14		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,21	2,54	3,02	3,63		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,57)	1085	10,20
20+42+50+71	0,98	2,07	2,46	3,49		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,13)	1080	10,30	1,14	2,39	2,84	4,03		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,55 - 3,55)	1085	10,20
20+42+60+60	0,98	2,08	2,97	2,97		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,14	2,40	3,43	3,43		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,57)	1085	10,20
20+50+50+50	1,05	2,65	2,65	2,65		9,00 (3,00 - 11,20)	4,15	**8,00 A++**	2,17 (0,58 - 3,14)	1085	10,40	1,22	3,06	3,06	3,06		10,40 (3,40 - 14,40)	4,60	**4,40 A+**	2,26 (0,63 - 3,57)	1130	10,60
20+50+50+60	1,00	2,50	2,50	3,00		9,00 (3,00 - 11,20)	4,15	**8,00 A++**	2,17 (0,58 - 3,14)	1085	10,40	1,16	2,89	2,89	3,46		10,40 (3,40 - 14,40)	4,60	**4,40 A+**	2,26 (0,63 - 3,57)	1130	10,60
25+25+25+25	2,25	2,25	2,25	2,25		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,40)	1190	11,40	2,60	2,60	2,60	2,60		10,40 (3,40 - 14,20)	4,71	**4,40 A+**	2,21 (0,34 - 3,79)	1105	10,40
25+25+25+35	2,05	2,05	2,05	2,85		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	2,36	2,36	2,36	3,32		10,40 (3,40 - 14,20)	4,75	**4,40 A+**	2,19 (0,35 - 3,76)	1095	10,30
25+25+25+42	1,92	1,92	1,92	3,24		9,00 (2,90 - 10,60)	3,78	**8,00 A++**	2,38 (0,37 - 3,33)	1190	11,40	2,22	2,22	2,22	3,74		10,40 (3,40 - 14,20)	4,77	**4,40 A+**	2,18 (0,36 - 3,74)	1090	10,20
25+25+25+50	1,80	1,80	1,80	3,60		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,41 - 3,18)	1125	10,80	2,08	2,08	2,08	4,16		10,40 (3,40 - 14,20)	4,86	**4,40 A+**	2,14 (0,42 - 3,60)	1070	10,10
25+25+25+60	1,67	1,67	1,67	3,99		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,41 - 3,18)	1125	10,80	1,93	1,93	1,93	4,61		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,42 - 3,66)	1070	10,10
25+25+25+71	1,54	1,54	1,54	4,38		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,78	1,78	1,78	5,06		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,42 - 3,64)	1065	10,00
25+25+35+35	1,87	1,87	2,63	2,63		9,00 (2,90 - 10,60)	3,90	**8,00 A++**	2,31 (0,37 - 3,25)	1155	11,10	2,17	2,17	3,03	3,03		10,40 (3,40 - 14,20)	4,79	**4,40 A+**	2,17 (0,37 - 3,66)	1085	10,20
25+25+35+42	1,77	1,77	2,48	2,98		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,37 - 3,40)	1155	11,10	2,05	2,05	2,87	3,43		10,40 (3,40 - 14,20)	4,81	**4,40 A+**	2,16 (0,37 - 3,65)	1080	10,20
25+25+35+50	1,67	1,67	2,33	3,33		9,00 (2,90 - 10,80)	3,98	**8,00 A++**	2,26 (0,44 - 3,11)	1130	10,80	1,93	1,93	2,70	3,84		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
25+25+35+60	1,55	1,55	2,17	3,73		9,00 (3,00 - 11,00)	3,98	**8,00 A++**	2,26 (0,44 - 3,26)	1130	10,80	1,79	1,79	2,51	4,31		10,40 (3,40 - 14,40)	4,91	**4,40 A+**	2,12 (0,42 - 3,63)	1060	10,00
25+25+35+71	1,44	1,44	2,02	4,10		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,67	1,67	2,33	4,73		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,61)	1080	10,20
25+25+42+42	1,68	1,68	2,82	2,82		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,37 - 3,40)	1155	11,10	1,94	1,94	3,26	3,26		10,40 (3,40 - 14,40)	4,75	**4,40 A+**	2,19 (0,37 - 3,76)	1095	10,30
25+25+42+50	1,58	1,58	2,66	3,18		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,83	1,83	3,08	3,66		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
25+25+42+60	1,48	1,48	2,49	3,55		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,71	1,71	2,87	4,11		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,43 - 3,62)	1080	10,20
25+25+42+71	1,38	1,38	2,32	3,92		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,45 - 3,33)	1100	10,50	1,60	1,60	2,68	4,52		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,44 - 3,66)	1075	10,10
25+25+50+50	1,50	1,50	3,00	3,00		9,00 (3,00 - 11,00)	4,07	**8,00 A++**	2,21 (0,49 - 3,12)	1105	10,60	1,73	1,73	3,47	3,47		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
25+25+50+60	1,41	1,41	2,80	3,38		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,49 - 3,19)	1105	10,60	1,63	1,63	3,25	3,89		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
25+25+50+71	1,32	1,32	2,62	3,74		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,52	1,52	3,04	4,32		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
25+25+60+60	1,32	1,32	3,18	3,18		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,49 - 3,19)	1105	10,60	1,53	1,53	3,67	3,67		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,51 - 3,60)	1075	10,10
25+25+60+71	1,24	1,24	2,98	3,54		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,44	1,44	3,45	4,07		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,52 - 3,59)	1090	10,20
25+35+35+35	1,74	2,42	2,42	2,42		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	2,00	2,80	2,80	2,80		10,40 (3,40 - 14,40)	4,75	**4,40 A+**	2,19 (0,37 - 3,75)	1095	10,30
25+35+35+42	1,64	2,30	2,30	2,76		9,00 (2,90 - 10,80)	3,90	**8,00 A++**	2,31 (0,40 - 3,33)	1155	11,10	1,90	2,66	2,66	3,18		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,37 - 3,73)	1090	10,20
25+35+35+50	1,55	2,17	2,17	3,11		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,79	2,51	2,51	3,59		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
25+35+35+60	1,45	2,03	2,03	3,49		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,26)	1100	10,50	1,68	2,35	2,35	4,02		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,65)	1075	10,10
25+35+35+71	1,35	1,90	1,90	3,85		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,47 - 3,33)	1100	10,50	1,57	2,19	2,19	4,45		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,64)	1070	10,10
25+35+42+42	1,55	2,19	2,63	2,63		9,00 (3,00 - 11,00)	3,90	**8,00 A++**	2,31 (0,40 - 3,48)	1155	11,10	1,81	2,53	3,03	3,03		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,39 - 3,72)	1085	10,20
25+35+42+50	1,48	2,07	2,49	2,96		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,44 - 3,19)	1100	10,50	1,71	2,39	2,87	3,43		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,64)	1075	10,10
25+35+42+60	1,39	1,95	2,33	3,33		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,44 - 3,33)	1100	10,50	1,60	2,25	2,70	3,85		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,45 - 3,64)	1075	10,10
25+35+42+71	1,30	1,82	2,18	3,70		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,34)	1100	10,50	1,50	2,10	2,52	4,28		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,46 - 3,63)	1070	10,10
25+35+50+50	1,41	1,97	2,81	2,81		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,62	2,28	3,25	3,25		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
25+35+50+60	1,32	1,85	2,65	3,18		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,53	2,14	3,06	3,67		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
25+35+50+71	1,24	1,74	2,49	3,53		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,20)	1080	10,30	1,44	2,01	2,87	4,08		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,56)	1085	10,20
25+35+60+60	1,25	1,75	3,00	3,00		9,00 (3,00 - 11,20)	4,07	**8,00 A++**	2,21 (0,52 - 3,20)	1105	10,60	1,44	2,02	3,47	3,47		10,40 (3,40 - 14,40)	4,77	**4,40 A+**	2,18 (0,53 - 3,58)	1090	10,20
25+42+42+42	1,50	2,50	2,50	2,50		9,00 (3,00 - 11,00)	3,90	**8,00 A++**	2,31 (0,40 - 3,40)	1155	11,10	1,73	2,89	2,89	2,89		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,39 - 3,71)	1085	10,20
25+42+42+50	1,41	2,38	2,38	2,83		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,45 - 3,33)	1100	10,50	1,64	2,75	2,75	3,26		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,63)	1070	10,10
25+42+42+60	1,32	2,24	2,24	3,20		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,45 - 3,33)	1100	10,50	1,54	2,58	2,58	3,70		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,45 - 3,63)	1070	10,10
25+42+42+71	1,25	2,10	2,10	3,55		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,26)	1100	10,50	1,44	2,43	2,43	4,10		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,46 - 3,61)	1065	10,00
25+42+50+50	1,35	2,27	2,69	2,69		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,56	2,62	3,11	3,11		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,57)	1085	10,20
25+42+50+60	1,27	2,14	2,54	3,05		9,00 (3,00 - 11,20)	4,19	**8,00 A++**	2,15 (0,52 - 3,20)	1075	10,30	1,47	2,47	2,94	3,52		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,54 - 3,57)	1085	10,20
25+50+50+50	1,29	2,57	2,57	2,57		9,00 (3,00 - 11,20)	4,15	**8,00 A++**	2,17 (0,58 - 3,14)	1085	10,40	1,49	2,97	2,97	2,97		10,40 (3,40 - 14,40)	4,60	**4,40 A+**	2,26 (0,63 - 3,57)	1130	10,60
35+35+35+35	2,25	2,25	2,25	2,25		9,00 (2,90 - 10,80)	4,00	**8,00 A++**	2,25 (0,40 - 3,25)	1125	10,80	2,60	2,60	2,60	2,60		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,39 - 3,71)	1085	10,20
35+35+35+42	2,14	2,14	2,14	2,58		9,00 (3,00 - 11,00)	4,00	**8,00 A++**	2,25 (0,41 - 3,40)	1125	10,80	2,48	2,48	2,48	2,96		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,39 - 3,70)	1080	10,20
35+35+35+50	2,03	2,03	2,03	2,91		9,00 (3,00 - 11,00)	4,09	**8,00 A++**	2,20 (0,47 - 3,19)	1100	10,50	2,35	2,35	2,35	3,35		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,46 - 3,62)	1070	10,10
35+35+35+60	1,91	1,91	1,91	3,27		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,47 - 3,33)	1100	10,50	2,21	2,21	2,21	3,77		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,46 - 3,62)	1070	10,10
35+35+35+71	1,79	1,79	1,79	3,63		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,26)	1100	10,50	2,07	2,07	2,07	4,19		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,47 - 3,61)	1065	10,00
35+35+42+42	2,05	2,05	2,45	2,45		9,00 (3,00 - 11,00)	4,00	**8,00 A++**	2,25 (0,41 - 3,40)	1125	10,80	2,36	2,36	2,84	2,84		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,40 - 3,69)	1080	10,20
35+35+42+50	1,94	1,94	2,33	2,79		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,47 - 3,33)	1100	10,50	2,25	2,25	2,70	3,20		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,47 - 3,61)	1065	10,00
35+35+42+60	1,83	1,83	2,20	3,14		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,47 - 3,33)	1100	10,50	2,12	2,12	2,54	3,62		10,40 (3,40 - 14,40)	4,88	**4,40 A+**	2,13 (0,47 - 3,61)	1065	10,00
35+35+42+71	1,72	1,72	2,07	3,49		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,26)	1100	10,50	1,99	1,99	2,39	4,03		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,48 - 3,60)	1085	10,20
35+35+50+50	1,85	1,85	2,65	2,65		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,52 - 3,20)	1080	10,30	2,14	2,14	3,06	3,06		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,55 - 3,55)	1085	10,20
35+35+50+60	1,75	1,75	2,50	3,00		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,52 - 3,20)	1080	10,30	2,02	2,02	2,89	3,47		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,55 - 3,55)	1085	10,20
35+42+42+42	1,95	2,35	2,35	2,35		9,00 (3,00 - 11,20)	4,00	**8,00 A++**	2,25 (0,41 - 3,56)	1125	10,80	2,27	2,71	2,71	2,71		10,40 (3,40 - 14,40)	4,84	**4,40 A+**	2,15 (0,40 - 3,67)	1075	10,10
35+42+42+50	1,86	2,24	2,24	2,66		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,34)	1100	10,50	2,15	2,58	2,58	3,09		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,48 - 3,60)	1085	10,20
35+42+42+60	1,76	2,11	2,11	3,02		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,34)	1100	10,50	2,03	2,44	2,44	3,49		10,40 (3,40 - 14,40)	4,79	**4,40 A+**	2,17 (0,48 - 3,60)	1085	10,20
35+42+50+50	1,78	2,14	2,54	2,54		9,00 (3,00 - 11,20)	4,17	**8,00 A++**	2,16 (0,53 - 3,20)	1080	10,30	2,05	2,47	2,94	2,94		10,40 (3,40 - 14,40)	4,73	**4,40 A+**	2,20 (0,56 - 3,54)	1100	10,30
42+42+42+42	2,25	2,25	2,25	2,25		9,00 (3,00 - 11,20)	4,00	**8,00 A++**	2,25 (0,43 - 3,48)	1125	10,80	2,60	2,60	2,60	2,60		10,40 (3,40 - 14,40)	4,86	**4,40 A+**	2,14 (0,40 - 3,66)	1070	10,10
42+42+42+50	2,15	2,15	2,15	2,55		9,00 (3,00 - 11,20)	4,09	**8,00 A++**	2,20 (0,48 - 3,26)	1100	10,50	2,48	2,48	2,48	2,96		10,40 (3,40 - 14,40)	4,81	**4,40 A+**	2,16 (0,48 - 3,59)	1080	10,20

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Free Multi R32 combinations table

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
5 Rooms																						
16+16+16+16+16	1,60	1,60	1,60	1,60	1,60	8,00 (2,90 - 11,50)	4,28	8,50 A+++	1,87 (0,45 - 3,56)	935	9,00	2,08	2,08	2,08	2,08	2,08	10,40 (3,40 - 14,50)	4,81	4,40 A+	2,16 (0,43 - 3,67)	1080	10,20
16+16+16+16+20	1,60	1,60	1,60	1,60	2,00	8,40 (2,90 - 11,50)	4,24	8,50 A+++	1,98 (0,45 - 3,56)	990	9,50	1,98	1,98	1,98	1,98	2,48	10,40 (3,40 - 14,50)	4,84	4,50 A+	2,15 (0,44 - 3,66)	1075	10,10
16+16+16+16+25	1,62	1,62	1,62	1,62	2,52	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,56)	1100	10,50	1,87	1,87	1,87	1,87	2,92	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,44 - 3,66)	1075	10,10
16+16+16+16+35	1,45	1,45	1,45	1,45	3,20	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,68	1,68	1,68	1,68	3,68	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,45 - 3,63)	1070	10,10
16+16+16+16+42	1,36	1,36	1,36	1,36	3,56	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,57	1,57	1,57	1,57	4,12	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,46 - 3,67)	1070	10,10
16+16+16+16+50	1,26	1,26	1,26	1,26	3,96	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	1,46	1,46	1,46	1,46	4,56	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,54 - 3,61)	1085	10,20
16+16+16+16+60	1,16	1,16	1,16	1,16	4,36	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	1,34	1,34	1,34	1,34	5,04	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,54 - 3,61)	1085	10,20
16+16+16+16+71	1,07	1,07	1,07	1,07	4,72	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,54 - 3,28)	1080	10,30	1,23	1,23	1,23	1,23	5,48	10,40 (3,40 - 14,50)	4,71	4,68 A++	2,21 (0,56 - 3,60)	1105	10,40
16+16+16+20+20	1,60	1,60	1,60	2,00	2,00	8,80 (2,90 - 11,50)	4,11	8,50 A+++	2,14 (0,45 - 3,48)	1070	10,20	1,89	1,89	1,89	2,36	2,36	10,39 (3,40 - 14,50)	4,83	4,60 A++	2,15 (0,45 - 3,65)	1075	10,10
16+16+16+20+25	1,55	1,55	1,55	1,94	2,41	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,48)	1100	10,50	1,79	1,79	1,79	2,24	2,79	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,45 - 3,65)	1075	10,10
16+16+16+20+35	1,40	1,40	1,40	1,75	3,05	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,62	1,62	1,62	2,02	3,52	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,46 - 3,67)	1070	10,10
16+16+16+20+42	1,31	1,31	1,31	1,64	3,43	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,51	1,51	1,51	1,89	3,98	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,47 - 3,66)	1065	10,00
16+16+16+20+50	1,22	1,22	1,22	1,53	3,81	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	1,41	1,41	1,41	1,76	4,41	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,56 - 3,60)	1085	10,20
16+16+16+20+60	1,13	1,13	1,13	1,41	4,20	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	1,30	1,30	1,30	1,63	4,87	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,56 - 3,60)	1085	10,20
16+16+16+20+71	1,04	1,04	1,04	1,29	4,59	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,20	1,20	1,20	1,50	5,30	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,59)	1100	10,30
16+16+16+25+25	1,47	1,47	1,47	2,29	2,29	8,99 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,48)	1100	10,50	1,70	1,70	1,70	2,65	2,65	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,45 - 3,65)	1075	10,10
16+16+16+25+35	1,33	1,33	1,33	2,08	2,93	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,54	1,54	1,54	2,41	3,37	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,46 - 3,67)	1070	10,10
16+16+16+25+42	1,25	1,25	1,25	1,96	3,29	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,45	1,45	1,45	2,26	3,79	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,47 - 3,66)	1065	10,00
16+16+16+25+50	1,17	1,17	1,17	1,83	3,66	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	1,35	1,35	1,35	2,11	4,24	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,56 - 3,60)	1085	10,20
16+16+16+25+60	1,08	1,08	1,08	1,69	4,07	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	1,25	1,25	1,25	1,95	4,70	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,56 - 3,60)	1085	10,20
16+16+16+25+71	1,00	1,00	1,00	1,56	4,44	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,16	1,16	1,16	1,81	5,11	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,59)	1100	10,30
16+16+16+35+35	1,22	1,22	1,22	2,67	2,67	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,48 - 3,41)	1105	10,60	1,41	1,41	1,41	3,08	3,08	10,39 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,48 - 3,64)	1080	10,20
16+16+16+35+42	1,15	1,15	1,15	2,52	3,03	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,48 - 3,41)	1105	10,60	1,33	1,33	1,33	2,91	3,50	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,49 - 3,63)	1080	10,20
16+16+16+35+50	1,08	1,08	1,08	2,37	3,39	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,25	1,25	1,25	2,74	3,91	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,63)	1100	10,30
16+16+16+35+60	1,01	1,01	1,01	2,20	3,77	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,16	1,16	1,16	2,55	4,37	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,63)	1100	10,30
16+16+16+35+71	0,94	0,94	0,94	2,05	4,13	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,08	1,08	1,08	2,36	4,80	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+16+42+42	1,09	1,09	1,09	2,86	2,86	8,99 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,26	1,26	1,26	3,31	3,31	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,50 - 3,62)	1075	10,10
16+16+16+42+50	1,03	1,03	1,03	2,70	3,21	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,19	1,19	1,19	3,12	3,71	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+16+42+60	0,96	0,96	0,96	2,52	3,60	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,11	1,11	1,11	2,91	4,16	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+16+42+71	0,89	0,89	0,89	2,35	3,98	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,29)	1085	10,40	1,03	1,03	1,03	2,71	4,60	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,61)	1115	10,50
16+16+16+50+50	0,97	0,97	0,97	3,04	3,05	9,00 (2,90 - 11,50)	4,11	8,50 A+++	2,19 (0,62 - 3,23)	1095	10,50	1,12	1,12	1,12	3,52	3,52	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,69 - 3,63)	1145	10,80
16+16+16+50+60	0,91	0,91	0,91	2,85	3,42	9,00 (2,90 - 11,50)	4,11	8,50 A+++	2,19 (0,62 - 3,23)	1095	10,50	1,05	1,05	1,05	3,29	3,96	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,69 - 3,63)	1145	10,80
16+16+16+50+71	0,85	0,85	0,85	2,66	3,79	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,24)	1130	10,80	0,98	0,98	0,98	3,08	4,38	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,71 - 3,62)	1145	10,80
16+16+16+60+60	0,86	0,86	0,86	3,21	3,21	9,00 (2,90 - 11,50)	4,11	8,50 A+++	2,19 (0,62 - 3,23)	1095	10,50	0,99	0,99	0,99	3,71	3,71	10,39 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,69 - 3,63)	1145	10,80
16+16+16+60+71	0,80	0,80	0,80	3,02	3,58	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,24)	1130	10,80	0,93	0,93	0,93	3,49	4,12	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,71 - 3,62)	1145	10,80
16+16+20+20+20	1,56	1,56	1,96	1,96	1,96	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,81	1,81	2,26	2,26	2,26	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,45 - 3,64)	1070	10,10
16+16+20+20+25	1,48	1,48	1,86	1,86	2,32	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,72	1,72	2,14	2,14	2,68	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,45 - 3,64)	1070	10,10
16+16+20+20+35	1,35	1,35	1,68	1,68	2,94	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,56	1,56	1,94	1,94	3,40	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,47 - 3,66)	1065	10,00
16+16+20+20+42	1,26	1,26	1,58	1,58	3,32	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,41)	1100	10,50	1,46	1,46	1,82	1,82	3,84	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,48 - 3,65)	1085	10,20
16+16+20+20+50	1,18	1,18	1,48	1,48	3,68	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,28)	1080	10,30	1,36	1,36	1,70	1,70	4,28	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
16+16+20+20+60	1,09	1,09	1,36	1,36	4,10	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,28)	1080	10,30	1,26	1,26	1,58	1,58	4,72	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
16+16+20+20+71	1,01	1,01	1,26	1,26	4,46	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,16	1,16	1,45	1,45	5,18	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,58)	1100	10,30
16+16+20+25+25	1,41	1,41	1,76	2,21	2,21	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,63	1,63	2,04	2,55	2,55	10,40 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,45 - 3,64)	1070	10,10
16+16+20+25+35	1,29	1,29	1,61	2,01	2,80	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,49	1,49	1,86	2,32	3,24	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,47 - 3,66)	1065	10,00
16+16+20+25+42	1,21	1,21	1,51	1,89	3,18	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,41)	1100	10,50	1,40	1,40	1,75	2,18	3,67	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,48 - 3,65)	1085	10,20
16+16+20+25+50	1,13	1,13	1,42	1,77	3,55	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,28)	1080	10,30	1,31	1,31	1,64	2,05	4,09	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
16+16+20+25+60	1,05	1,05	1,31	1,64	3,95	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,28)	1080	10,30	1,21	1,21	1,52	1,90	4,56	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
16+16+20+25+71	0,97	0,97	1,22	1,52	4,32	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,12	1,12	1,41	1,76	4,99	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,58)	1100	10,30
16+16+20+35+35	1,18	1,18	1,48	2,58	2,58	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,36	1,36	1,72	2,98	2,98	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,49 - 3,63)	1080	10,20
16+16+20+35+42	1,12	1,12	1,40	2,44	2,92	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,29	1,29	1,61	2,82	3,39	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,50 - 3,62)	1075	10,10
16+16+20+35+50	1,05	1,05	1,31	2,30	3,29	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,21	1,21	1,52	2,66	3,80	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+20+35+60	0,98	0,98	1,22	2,14	3,68	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,13	1,13	1,41	2,48	4,25	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+20+35+71	0,91	0,91	1,14	1,99	4,05	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,29)	1085	10,40	1,05	1,05	1,32	2,30	4,68	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,61)	1115	10,50
16+16+20+42+42	1,06	1,06	1,32	2,78	2,78	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,22	1,22	1,54	3,21	3,21	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,61)	1075	10,10
16+16+20+42+50	1,00	1,00	1,25	2,63	3,12	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,16	1,16	1,44	3,03	3,61	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,60 - 3,61)	1095	10,30
16+16+20+42+60	0,94	0,94	1,17	2,45	3,50	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,08	1,08	1,35	2,84	4,05	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,60 - 3,61)	1095	10,30
16+16+20+42+71	0,87	0,87	1,09	2,29	3,88	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,58 - 3,29)	1085	10,40	1,01	1,01	1,26	2,65	4,47	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
16+16+20+50+50	0,95	0,95	1,18	2,96	2,96	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	1,09	1,09	1,38	3,42	3,42	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,70 - 3,62)	1145	10,80
16+16+20+50+60	0,89	0,89	1,11	2,78	3,33	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	1,03	1,03	1,28	3,21	3,85	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,70 - 3,62)	1145	10,80
16+16+20+50+71	0,83	0,83	1,04	2,60	3,70	9,00 (2,90 - 11,50)	3,96	8,50 A+++	2,27 (0,66 - 3,24)	1135	10,90	0,96	0,96	1,20	3,01	4,27	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,71 - 3,66)	1165	10,90
16+16+20+60+60	0,84	0,84	1,04	3,14	3,14	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	0,97	0,97	1,20	3,63	3,63	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,70 - 3,62)	1145	10,80
16+16+20+60+71	0,79	0,79	0,98	2,95	3,49	9,00 (2,90 - 11,50)	3,96	8,50 A+++	2,27 (0,66 - 3,24)	1135	10,90	0,91	0,91	1,14	3,41	4,03	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,71 - 3,66)	1165	10,90
16+16+25+25+25	1,35	1,35	2,10	2,10	2,10	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,45 - 3,49)	1100	10,50	1,55	1,55	2,43	2,43	2,43	10,39 (3,40 - 14,50)	4,86	4,68 A++	2,14 (0,45 - 3,64)	1070	10,10
16+16+25+25+35	1,23	1,23	1,92	1,92	2,70	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,42	1,42	2,22	2,22	3,12	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,47 - 3,66)	1065	10,00
16+16+25+25+42	1,16	1,16	1,81	1,81	3,06	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,41)	1100	10,50	1,34	1,34	2,10	2,10	3,52	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,48 - 3,65)	1085	10,20
16+16+25+25+50	1,09	1,09	1,70	1,70	3,42	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,28)	1080	10,30	1,26	1,26	1,97	1,97	3,94	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
16+16+25+25+60	1,01	1,01	1,58	1,58	3,82	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,28)	1080	10,30	1,17	1,17	1,83	1,83	4,40	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
16+16+25+25+71	0,94	0,94	1,47	1,47	4,18	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,09	1,09	1,70	1,70	4,82	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,58)	1100	10,30
16+16+25+35+35	1,13	1,13	1,78	2,48	2,48	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,31	1,31	2,04	2,87	2,87	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,49 - 3,63)	1080	10,20
16+16+25+35+42	1,07	1,07	1,68	2,35	2,83	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,24	1,24	1,94	2,72	3,26	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,50 - 3,62)	1075	10,10
16+16+25+35+50	1,01	1,01	1,58	2,22	3,18	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,17	1,17	1,83	2,56	3,67	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+25+35+60	0,95	0,95	1,48	2,07	3,55	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,09	1,09	1,71	2,39	4,12	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,59 - 3,62)	1100	10,30
16+16+25+35+71	0,88	0,88	1,38	1,93	3,93	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,29)	1085	10,40	1,02	1,02	1,60	2,23	4,53	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,61)	1115	10,50
16+16+25+42+42	1,02	1,02	1,60	2,68	2,68	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,18	1,18	1,84	3,10	3,10	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,61)	1075	10,10
16+16+25+42+50	0,97	0,97	1,51	2,54	3,01	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,12	1,12	1,74	2,93	3,49	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,60 - 3,61)	1095	10,30
16+16+25+42+60	0,91	0,91	1,42	2,38	3,38	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,05	1,05	1,64	2,75	3,91	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,60 - 3,61)	1095	10,30
16+16+25+42+71	0,85	0,85	1,32	2,22	3,76	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,58 - 3,29)	1085	10,40	0,98	0,98	1,53	2,57	4,34	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
16+16+25+50+50	0,92	0,92	1,42	2,87	2,87	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	1,06	1,06	1,66	3,31	3,31	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,70 - 3,62)	1145	10,80
16+16+25+50+60	0,86	0,86	1,35	2,69	3,24	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	1,00	1,00	1,56	3,11	3,73	10,40 (3,40 - 14,50)	4,54	4,68 A++	2,29 (0,70 - 3,62)	1145	10,80

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
16+16+25+50+71	0,81	0,81	1,26	2,53	3,59	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,66 - 3,24)	1135	10,90	0,93	0,93	1,46	2,92	4,16	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,66)	1165	10,90
16+16+25+60+60	0,81	0,81	1,28	3,05	3,05	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	0,94	0,94	1,46	3,53	3,53	10,40 (3,40 - 14,50)	4,54	**4,68 A++**	2,29 (0,70 - 3,62)	1145	10,80
16+16+35+35+35	1,05	1,05	2,30	2,30	2,30	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,21	1,21	2,66	2,66	2,66	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,60)	1075	10,10
16+16+35+35+42	1,00	1,00	2,19	2,19	2,62	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,16	1,16	2,53	2,53	3,02	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,51 - 3,59)	1090	10,20
16+16+35+35+50	0,95	0,95	2,07	2,07	2,96	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,09	1,09	2,39	2,39	3,44	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,61 - 3,59)	1115	10,50
16+16+35+35+60	0,89	0,89	1,94	1,94	3,34	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,03	1,03	2,25	2,25	3,84	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,61 - 3,59)	1115	10,50
16+16+35+35+71	0,83	0,83	1,82	1,82	3,70	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,96	0,96	2,10	2,10	4,28	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,58)	1115	10,50
16+16+35+42+42	0,95	0,95	2,10	2,50	2,50	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,34)	1105	10,60	1,10	1,10	2,42	2,89	2,89	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,52 - 3,64)	1090	10,20
16+16+35+42+50	0,91	0,91	1,98	2,38	2,82	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,29)	1085	10,40	1,05	1,05	2,29	2,75	3,26	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
16+16+35+42+60	0,85	0,85	1,86	2,24	3,20	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,29)	1085	10,40	0,98	0,98	2,15	2,58	3,71	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
16+16+35+42+71	0,80	0,80	1,75	2,10	3,55	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,92	0,92	2,02	2,43	4,11	10,40 (3,40 - 14,50)	4,68	**4,68 A++**	2,22 (0,63 - 3,63)	1110	10,40
16+16+35+50+50	0,86	0,86	1,90	2,69	2,69	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,66 - 3,24)	1130	10,80	1,00	1,00	2,18	3,11	3,11	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,65)	1165	10,90
16+16+35+50+60	0,81	0,81	1,78	2,54	3,06	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,66 - 3,24)	1130	10,80	0,94	0,94	2,06	2,94	3,52	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,65)	1165	10,90
16+16+42+42+42	0,91	0,91	2,39	2,39	2,39	8,99 (2,90 - 11,50)	4,18	**8,50 A+++**	2,15 (0,49 - 3,34)	1075	10,30	1,06	1,06	2,76	2,76	2,76	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,53 - 3,63)	1090	10,20
16+16+42+42+50	0,87	0,87	2,28	2,28	2,70	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,29)	1085	10,40	1,00	1,00	2,63	2,63	3,14	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
16+16+42+42+60	0,82	0,82	2,15	2,15	3,06	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,29)	1085	10,40	0,95	0,95	2,48	2,48	3,54	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
16+16+42+50+50	0,83	0,83	2,16	2,59	2,59	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,66 - 3,24)	1135	10,90	0,96	0,96	2,50	2,99	2,99	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,74 - 3,65)	1165	10,90
16+16+50+50+50	0,79	0,79	2,47	2,47	2,47	8,99 (2,90 - 11,50)	3,91	**8,50 A+++**	2,30 (0,76 - 3,27)	1150	11,00	0,91	0,91	2,86	2,86	2,86	10,40 (3,40 - 14,50)	4,19	**4,68 A++**	2,48 (0,86 - 3,73)	1240	11,70
16+20+20+20+20	1,48	1,88	1,88	1,88	1,88	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,45 - 3,49)	1100	10,50	1,72	2,17	2,17	2,17	2,17	10,40 (3,40 - 14,50)	4,86	**4,68 A++**	2,14 (0,46 - 3,68)	1070	10,10
16+20+20+20+25	1,43	1,78	1,78	1,78	2,23	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,45 - 3,49)	1100	10,50	1,65	2,06	2,06	2,06	2,57	10,40 (3,40 - 14,50)	4,86	**4,68 A++**	2,14 (0,46 - 3,68)	1070	10,10
16+20+20+20+35	1,30	1,62	1,62	1,62	2,84	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,48 - 3,41)	1100	10,50	1,50	1,87	1,87	1,87	3,29	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,48 - 3,65)	1085	10,20
16+20+20+20+42	1,22	1,53	1,53	1,53	3,19	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,48 - 3,41)	1105	10,60	1,41	1,76	1,76	1,76	3,71	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,48 - 3,64)	1080	10,20
16+20+20+20+50	1,14	1,43	1,43	1,43	3,57	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,54 - 3,28)	1080	10,30	1,32	1,65	1,65	1,65	4,13	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
16+20+20+20+60	1,06	1,32	1,32	1,32	3,98	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,54 - 3,28)	1080	10,30	1,22	1,53	1,53	1,53	4,59	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
16+20+20+20+71	0,98	1,22	1,22	1,22	4,36	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,13	1,41	1,41	1,41	5,04	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,62)	1100	10,30
16+20+20+25+25	1,36	1,70	1,70	2,12	2,12	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,45 - 3,49)	1100	10,50	1,58	1,96	1,96	2,45	2,45	10,40 (3,40 - 14,50)	4,86	**4,68 A++**	2,14 (0,46 - 3,68)	1070	10,10
16+20+20+25+35	1,24	1,55	1,55	1,94	2,72	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,48 - 3,41)	1100	10,50	1,43	1,79	1,79	2,24	3,15	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,48 - 3,65)	1085	10,20
16+20+20+25+42	1,17	1,46	1,46	1,83	3,08	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,48 - 3,41)	1105	10,60	1,35	1,69	1,69	2,11	3,56	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,48 - 3,64)	1080	10,20
16+20+20+25+50	1,10	1,37	1,37	1,72	3,44	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,54 - 3,28)	1080	10,30	1,27	1,59	1,59	1,98	3,97	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
16+20+20+25+60	1,02	1,28	1,28	1,60	3,82	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,54 - 3,28)	1080	10,30	1,18	1,48	1,48	1,84	4,42	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
16+20+20+25+71	0,95	1,18	1,18	1,48	4,21	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,09	1,37	1,37	1,71	4,86	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,62)	1100	10,30
16+20+20+35+35	1,14	1,43	1,43	2,50	2,50	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,41)	1105	10,60	1,32	1,65	1,65	2,89	2,89	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,50 - 3,62)	1075	10,10
16+20+20+35+42	1,08	1,35	1,35	2,37	2,85	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,25	1,56	1,56	2,74	3,29	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,61)	1075	10,10
16+20+20+35+50	1,02	1,28	1,28	2,23	3,19	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,18	1,48	1,48	2,58	3,68	10,40 (3,40 - 14,50)	4,75	**4,68 A++**	2,19 (0,60 - 3,61)	1095	10,30
16+20+20+35+60	0,95	1,19	1,19	2,09	3,58	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,10	1,38	1,38	2,41	4,13	10,40 (3,40 - 14,50)	4,75	**4,68 A++**	2,19 (0,60 - 3,61)	1095	10,30
16+20+20+35+71	0,89	1,11	1,11	1,94	3,95	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,03	1,28	1,28	2,25	4,56	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
16+20+20+42+42	1,02	1,29	1,29	2,70	2,70	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,18	1,49	1,49	3,12	3,12	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,60)	1075	10,10
16+20+20+42+50	0,97	1,22	1,22	2,55	3,04	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,12	1,41	1,41	2,95	3,51	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
16+20+20+42+60	0,91	1,14	1,14	2,39	3,42	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,05	1,32	1,32	2,76	3,95	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
16+20+20+42+71	0,85	1,07	1,07	2,24	3,77	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,98	1,23	1,23	2,58	4,38	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
16+20+20+50+50	0,94	1,15	1,15	2,88	2,88	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	1,08	1,33	1,33	3,33	3,33	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,61)	1165	10,90
16+20+20+50+60	0,87	1,08	1,08	2,71	3,26	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	1,00	1,25	1,25	3,13	3,77	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,61)	1165	10,90
16+20+20+50+71	0,81	1,02	1,02	2,54	3,61	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,67 - 3,24)	1135	10,90	0,94	1,18	1,18	2,94	4,16	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,66)	1165	10,90
16+20+20+60+60	0,82	1,02	1,02	3,07	3,07	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	0,94	1,18	1,18	3,55	3,55	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,61)	1165	10,90
16+20+25+25+25	1,29	1,62	2,03	2,03	2,03	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,45 - 3,49)	1100	10,50	1,50	1,88	2,34	2,34	2,34	10,40 (3,40 - 14,50)	4,86	**4,68 A++**	2,14 (0,46 - 3,68)	1070	10,10
16+20+25+25+35	1,19	1,49	1,86	1,86	2,60	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,48 - 3,41)	1100	10,50	1,38	1,72	2,15	2,15	3,00	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,48 - 3,65)	1085	10,20
16+20+25+25+42	1,13	1,41	1,76	1,76	2,94	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,48 - 3,41)	1105	10,60	1,30	1,63	2,03	2,03	3,41	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,48 - 3,64)	1080	10,20
16+20+25+25+50	1,06	1,32	1,65	1,65	3,32	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,54 - 3,28)	1080	10,30	1,22	1,53	1,91	1,91	3,83	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
16+20+25+25+60	0,99	1,23	1,54	1,54	3,70	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,54 - 3,28)	1080	10,30	1,14	1,42	1,78	1,78	4,28	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
16+20+25+25+71	0,92	1,15	1,43	1,43	4,07	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,06	1,32	1,66	1,66	4,70	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,62)	1100	10,30
16+20+25+35+35	1,10	1,37	1,73	2,40	2,40	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,41)	1105	10,60	1,27	1,59	1,98	2,78	2,78	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,50 - 3,62)	1075	10,10
16+20+25+35+42	1,04	1,30	1,63	2,28	2,75	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,21	1,51	1,88	2,64	3,16	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,61)	1075	10,10
16+20+25+35+50	0,99	1,23	1,54	2,16	3,08	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,14	1,42	1,78	2,49	3,57	10,40 (3,40 - 14,50)	4,75	**4,68 A++**	2,19 (0,60 - 3,61)	1095	10,30
16+20+25+35+60	0,92	1,15	1,44	2,02	3,47	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,07	1,33	1,67	2,33	4,00	10,40 (3,40 - 14,50)	4,75	**4,68 A++**	2,19 (0,60 - 3,61)	1095	10,30
16+20+25+35+71	0,86	1,08	1,35	1,89	3,82	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,00	1,25	1,56	2,18	4,41	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
16+20+25+42+42	0,99	1,24	1,55	2,61	2,61	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,15	1,43	1,80	3,01	3,01	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,60)	1075	10,10
16+20+25+42+50	0,94	1,18	1,47	2,47	2,94	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,09	1,36	1,70	2,85	3,40	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
16+20+25+42+60	0,88	1,10	1,38	2,32	3,32	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,02	1,28	1,60	2,68	3,82	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
16+20+25+42+71	0,83	1,03	1,29	2,17	3,68	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,96	1,20	1,49	2,51	4,24	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
16+20+25+50+50	0,89	1,12	1,39	2,80	2,80	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	1,03	1,29	1,62	3,23	3,23	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,61)	1165	10,90
16+20+25+50+60	0,84	1,05	1,32	2,63	3,16	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	0,97	1,22	1,52	3,04	3,65	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,61)	1165	10,90
16+20+25+50+71	0,79	0,99	1,24	2,47	3,51	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,67 - 3,24)	1135	10,90	0,91	1,14	1,43	2,86	4,06	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,66)	1165	10,90
16+20+25+60+60	0,80	0,99	1,25	2,98	2,98	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,63 - 3,23)	1130	10,80	0,91	1,15	1,44	3,45	3,45	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,71 - 3,61)	1165	10,90
16+20+35+35+35	1,02	1,29	2,23	2,23	2,23	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,34)	1105	10,60	1,18	1,48	2,58	2,58	2,58	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,51 - 3,59)	1090	10,20
16+20+35+35+42	0,97	1,22	2,13	2,13	2,55	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,49 - 3,34)	1075	10,30	1,12	1,41	2,46	2,46	2,95	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,52 - 3,64)	1090	10,20
16+20+35+35+50	0,92	1,15	2,02	2,02	2,89	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,29)	1085	10,40	1,07	1,33	2,33	2,33	3,34	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
16+20+35+35+60	0,87	1,08	1,90	1,90	3,25	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,29)	1085	10,40	1,00	1,25	2,19	2,19	3,77	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
16+20+35+35+71	0,81	1,02	1,78	1,78	3,61	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,94	1,18	2,06	2,06	4,16	10,40 (3,40 - 14,50)	4,68	**4,68 A++**	2,22 (0,63 - 3,63)	1110	10,40
16+20+35+42+42	0,93	1,16	2,03	2,44	2,44	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,49 - 3,34)	1075	10,30	1,07	1,34	2,35	2,82	2,82	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,53 - 3,63)	1090	10,20
16+20+35+42+50	0,88	1,10	1,93	2,32	2,77	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,02	1,28	2,23	2,68	3,19	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
16+20+35+42+60	0,83	1,04	1,82	2,18	3,13	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,96	1,20	2,10	2,52	3,62	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
16+20+35+50+50	0,84	1,05	1,85	2,63	2,63	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,66 - 3,24)	1135	10,90	0,97	1,22	2,13	3,04	3,04	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,74 - 3,65)	1165	10,90
16+20+35+50+60	0,80	0,99	1,74	2,49	2,98	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,66 - 3,24)	1135	10,90	0,92	1,15	2,01	2,87	3,45	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,74 - 3,65)	1165	10,90
16+20+42+42+42	0,89	1,12	2,33	2,33	2,33	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,52 - 3,34)	1075	10,30	1,02	1,28	2,70	2,70	2,70	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,62)	1085	10,20
16+20+42+42+50	0,85	1,06	2,22	2,22	2,65	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,98	1,22	2,57	2,57	3,06	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
16+20+42+42+60	0,80	1,00	2,10	2,10	3,00	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	0,92	1,16	2,43	2,43	3,46	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
16+20+42+50+50	0,81	1,01	2,12	2,53	2,53	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,67 - 3,24)	1135	10,90	0,93	1,17	2,46	2,92	2,92	10,40 (3,40 - 14,50)	4,41	**4,68 A++**	2,36 (0,75 - 3,64)	1180	11,10
16+25+25+25+25	1,24	1,94	1,94	1,94	1,94	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,45 - 3,49)	1100	10,50	1,44	2,24	2,24	2,24	2,24	10,40 (3,40 - 14,50)	4,86	**4,68 A++**	2,14 (0,46 - 3,68)	1070	10,10
16+25+25+25+35	1,14	1,79	1,79	1,79	2,49	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,48 - 3,41)	1100	10,50	1,32	2,06	2,06	2,06	2,90	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,48 - 3,65)	1085	10,20
16+25+25+25+42	1,08	1,69	1,69	1,69	2,85	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,48 - 3,41)	1105	10,60	1,25	1,95	1,95	1,95	3,30	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,48 - 3,64)	1080	10,20

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB

Free Multi R32 combinations table

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
16+25+25+25+50	1,02	1,60	1,60	1,60	3,18	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,54 - 3,28)	1080	10,30	1,18	1,84	1,84	1,84	3,70	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,58)	1100	10,30
16+25+25+25+60	0,95	1,49	1,49	1,49	3,58	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,54 - 3,28)	1080	10,30	1,10	1,72	1,72	1,72	4,14	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,57 - 3,58)	1100	10,30
16+25+25+25+71	0,89	1,39	1,39	1,39	3,94	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,03	1,60	1,60	1,60	4,57	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,62)	1100	10,30
16+25+25+35+35	1,06	1,65	1,65	2,32	2,32	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,22	1,91	1,91	2,68	2,68	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,50 - 3,62)	1075	10,10
16+25+25+35+42	1,01	1,57	1,57	2,20	2,65	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,16	1,82	1,82	2,55	3,05	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,61)	1075	10,10
16+25+25+35+50	0,95	1,49	1,49	2,09	2,98	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,10	1,72	1,72	2,41	3,45	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,60 - 3,61)	1095	10,30
16+25+25+35+60	0,89	1,40	1,40	1,96	3,35	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,03	1,61	1,61	2,26	3,89	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,60 - 3,61)	1095	10,30
16+25+25+35+71	0,84	1,31	1,31	1,83	3,71	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,97	1,51	1,51	2,12	4,29	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
16+25+25+42+42	0,96	1,50	1,50	2,52	2,52	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,12	1,73	1,73	2,91	2,91	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,60)	1075	10,10
16+25+25+42+50	0,91	1,42	1,42	2,39	2,86	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,05	1,65	1,65	2,76	3,29	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
16+25+25+42+60	0,86	1,34	1,34	2,25	3,21	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	0,99	1,55	1,55	2,60	3,71	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
16+25+25+42+71	0,80	1,26	1,26	2,11	3,57	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,93	1,45	1,45	2,44	4,13	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,62 - 3,59)	1115	10,50
16+25+25+50+50	0,86	1,36	1,36	2,71	2,71	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	1,00	1,57	1,57	3,13	3,13	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,71 - 3,61)	1165	10,90
16+25+25+50+60	0,82	1,28	1,28	2,56	3,06	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,63 - 3,23)	1130	10,80	0,95	1,48	1,48	2,95	3,54	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,71 - 3,61)	1165	10,90
16+25+35+35+35	0,99	1,53	2,16	2,16	2,16	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,34)	1105	10,60	1,14	1,79	2,49	2,49	2,49	10,40 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,51 - 3,59)	1090	10,20
16+25+35+35+42	0,94	1,47	2,06	2,06	2,47	9,00 (2,90 - 11,50)	4,19	8,50 A+++	2,15 (0,49 - 3,34)	1075	10,30	1,09	1,70	2,38	2,38	2,85	10,40 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,52 - 3,64)	1090	10,20
16+25+35+35+50	0,89	1,40	1,96	1,96	2,79	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,29)	1085	10,40	1,03	1,61	2,26	2,26	3,24	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,62 - 3,59)	1115	10,50
16+25+35+35+60	0,84	1,32	1,84	1,84	3,16	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,29)	1085	10,40	0,97	1,52	2,13	2,13	3,65	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,62 - 3,59)	1115	10,50
16+25+35+35+71	0,79	1,24	1,73	1,73	3,51	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,91	1,43	2,00	2,00	4,06	10,40 (3,40 - 14,50)	4,68	4,68 A++	2,22 (0,63 - 3,63)	1110	10,40
16+25+35+42+42	0,90	1,41	1,97	2,36	2,36	9,00 (2,90 - 11,50)	4,19	8,50 A+++	2,15 (0,49 - 3,34)	1075	10,30	1,03	1,63	2,28	2,73	2,73	10,40 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,53 - 3,63)	1090	10,20
16+25+35+42+50	0,86	1,34	1,88	2,25	2,67	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,99	1,55	2,17	2,60	3,09	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,63 - 3,63)	1115	10,50
16+25+35+42+60	0,81	1,26	1,77	2,12	3,04	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,93	1,46	2,04	2,45	3,52	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,63 - 3,63)	1115	10,50
16+25+35+50+50	0,82	1,28	1,78	2,56	2,56	9,00 (2,90 - 11,50)	3,96	8,50 A+++	2,27 (0,66 - 3,24)	1135	10,90	0,95	1,48	2,07	2,95	2,95	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,74 - 3,65)	1165	10,90
16+25+42+42+42	0,86	1,36	2,26	2,26	2,26	9,00 (2,90 - 11,50)	4,19	8,50 A+++	2,15 (0,52 - 3,34)	1075	10,30	0,98	1,56	2,62	2,62	2,62	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,54 - 3,62)	1085	10,20
16+25+42+42+50	0,82	1,29	2,16	2,16	2,57	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,95	1,49	2,50	2,50	2,96	10,40 (3,40 - 14,50)	4,60	4,68 A++	2,26 (0,63 - 3,62)	1130	10,60
16+25+42+50+50	0,79	1,23	2,06	2,46	2,46	9,00 (2,90 - 11,50)	3,96	8,50 A+++	2,27 (0,67 - 3,24)	1135	10,90	0,91	1,42	2,39	2,84	2,84	10,40 (3,40 - 14,50)	4,41	4,68 A++	2,36 (0,75 - 3,64)	1180	11,10
16+35+35+35+35	0,92	2,02	2,02	2,02	2,02	9,00 (2,90 - 11,50)	4,19	8,50 A+++	2,15 (0,52 - 3,35)	1075	10,30	1,08	2,33	2,33	2,33	2,33	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,54 - 3,62)	1085	10,20
16+35+35+35+42	0,88	1,93	1,93	1,93	2,33	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,52 - 3,35)	1080	10,30	1,02	2,23	2,23	2,23	2,69	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,54 - 3,61)	1085	10,20
16+35+35+35+50	0,84	1,84	1,84	1,84	2,64	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,97	2,13	2,13	2,13	3,04	10,40 (3,40 - 14,50)	4,60	4,68 A++	2,26 (0,65 - 3,62)	1130	10,60
16+35+35+35+60	0,80	1,74	1,74	1,74	2,98	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,92	2,01	2,01	2,01	3,45	10,40 (3,40 - 14,50)	4,60	4,68 A++	2,26 (0,65 - 3,62)	1130	10,60
16+35+35+42+42	0,86	1,85	1,85	2,22	2,22	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	0,98	2,14	2,14	2,57	2,57	10,40 (3,40 - 14,50)	4,79	4,68 A++	2,17 (0,55 - 3,60)	1085	10,20
16+35+35+42+50	0,81	1,77	1,77	2,12	2,53	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	0,93	2,04	2,04	2,45	2,94	10,40 (3,40 - 14,50)	4,60	4,68 A++	2,26 (0,65 - 3,61)	1130	10,60
16+35+42+42+42	0,81	1,77	2,14	2,14	2,14	9,00 (2,90 - 11,50)	4,17	8,50 A+++	2,16 (0,53 - 3,35)	1080	10,30	0,93	2,06	2,47	2,47	2,47	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,56 - 3,59)	1100	10,30
20+20+20+20+20	1,80	1,80	1,80	1,80	1,80	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	2,08	2,08	2,08	2,08	2,08	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,46 - 3,67)	1065	10,00
20+20+20+20+25	1,71	1,71	1,71	1,71	2,16	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,98	1,98	1,98	1,98	2,48	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,46 - 3,67)	1065	10,00
20+20+20+20+35	1,57	1,57	1,57	1,57	2,72	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,48 - 3,41)	1105	10,60	1,81	1,81	1,81	1,81	3,16	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,48 - 3,64)	1080	10,20
20+20+20+20+42	1,48	1,48	1,48	1,48	3,08	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,70	1,70	1,70	1,70	3,60	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,49 - 3,63)	1080	10,20
20+20+20+20+50	1,38	1,38	1,38	1,38	3,48	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,60	1,60	1,60	1,60	4,00	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,63)	1100	10,30
20+20+20+20+60	1,29	1,29	1,29	1,29	3,84	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,49	1,49	1,49	1,49	4,44	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,63)	1100	10,30
20+20+20+20+71	1,19	1,19	1,19	1,19	4,24	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,38	1,38	1,38	1,38	4,88	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,59 - 3,61)	1095	10,30
20+20+20+25+25	1,64	1,64	1,64	2,04	2,04	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,89	1,89	1,89	2,36	2,36	10,39 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,46 - 3,67)	1065	10,00
20+20+20+25+35	1,50	1,50	1,50	1,88	2,62	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,48 - 3,41)	1105	10,60	1,73	1,73	1,73	2,17	3,04	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,48 - 3,64)	1080	10,20
20+20+20+25+42	1,42	1,42	1,42	1,77	2,97	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,64	1,64	1,64	2,05	3,43	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,49 - 3,63)	1080	10,20
20+20+20+25+50	1,33	1,33	1,33	1,67	3,34	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,54	1,54	1,54	1,93	3,85	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,63)	1100	10,30
20+20+20+25+60	1,24	1,24	1,24	1,55	3,73	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,43	1,43	1,43	1,79	4,32	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,63)	1100	10,30
20+20+20+25+71	1,15	1,15	1,15	1,44	4,11	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,33	1,33	1,33	1,67	4,74	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,59 - 3,61)	1095	10,30
20+20+20+35+35	1,38	1,38	1,38	2,43	2,43	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,60	1,60	1,60	2,80	2,80	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,61)	1075	10,10
20+20+20+35+42	1,31	1,31	1,31	2,30	2,77	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,52	1,52	1,52	2,66	3,18	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,60)	1075	10,10
20+20+20+35+50	1,24	1,24	1,24	2,17	3,11	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,43	1,43	1,43	2,51	3,60	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
20+20+20+35+60	1,16	1,16	1,16	2,03	3,49	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,34	1,34	1,34	2,35	4,03	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
20+20+20+35+71	1,08	1,08	1,08	1,90	3,86	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	1,25	1,25	1,25	2,19	4,46	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,62 - 3,59)	1115	10,50
20+20+20+42+42	1,25	1,25	1,25	2,62	2,62	8,99 (2,90 - 11,50)	4,18	8,50 A+++	2,15 (0,49 - 3,42)	1075	10,30	1,44	1,44	1,44	3,04	3,04	10,40 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,52 - 3,59)	1090	10,20
20+20+20+42+50	1,18	1,18	1,18	2,49	2,97	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,37	1,37	1,37	2,87	3,42	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,61 - 3,59)	1115	10,50
20+20+20+42+60	1,11	1,11	1,11	2,33	3,34	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,28	1,28	1,28	2,70	3,86	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,61 - 3,59)	1115	10,50
20+20+20+42+71	1,04	1,04	1,04	2,18	3,70	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	1,20	1,20	1,20	2,52	4,28	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,63 - 3,63)	1115	10,50
20+20+20+50+50	1,13	1,13	1,13	2,80	2,80	8,99 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,23)	1130	10,80	1,30	1,30	1,30	3,25	3,25	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,72 - 3,66)	1165	10,90
20+20+20+50+60	1,06	1,06	1,06	2,65	3,17	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,23)	1130	10,80	1,22	1,22	1,22	3,06	3,68	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,72 - 3,66)	1165	10,90
20+20+20+50+71	0,99	0,99	0,99	2,49	3,54	9,00 (2,90 - 11,50)	3,96	8,50 A+++	2,27 (0,67 - 3,24)	1135	10,90	1,15	1,15	1,15	2,87	4,08	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,74 - 3,65)	1165	10,90
20+20+20+60+60	1,00	1,00	1,00	3,00	3,00	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,23)	1130	10,80	1,16	1,16	1,16	3,46	3,46	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,72 - 3,66)	1165	10,90
20+20+25+25+25	1,56	1,56	1,96	1,96	1,96	9,00 (2,90 - 11,50)	4,09	8,50 A+++	2,20 (0,48 - 3,49)	1100	10,50	1,81	1,81	2,26	2,26	2,26	10,40 (3,40 - 14,50)	4,88	4,68 A++	2,13 (0,46 - 3,67)	1065	10,00
20+20+25+25+35	1,44	1,44	1,80	1,80	2,52	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,48 - 3,41)	1105	10,60	1,66	1,66	2,08	2,08	2,92	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,48 - 3,64)	1080	10,20
20+20+25+25+42	1,36	1,36	1,70	1,70	2,88	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,41)	1105	10,60	1,58	1,58	1,97	1,97	3,30	10,40 (3,40 - 14,50)	4,81	4,68 A++	2,16 (0,49 - 3,63)	1080	10,20
20+20+25+25+50	1,29	1,29	1,61	1,61	3,20	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,49	1,49	1,86	1,86	3,70	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,63)	1100	10,30
20+20+25+25+60	1,20	1,20	1,50	1,50	3,60	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,54 - 3,28)	1085	10,40	1,39	1,39	1,73	1,73	4,16	10,40 (3,40 - 14,50)	4,73	4,68 A++	2,20 (0,58 - 3,63)	1100	10,30
20+20+25+25+71	1,12	1,12	1,40	1,40	3,96	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,29	1,29	1,61	1,61	4,60	10,40 (3,40 - 14,50)	4,75	4,68 A++	2,19 (0,59 - 3,61)	1095	10,30
20+20+25+35+35	1,33	1,33	1,68	2,33	2,33	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,54	1,54	1,92	2,70	2,70	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,61)	1075	10,10
20+20+25+35+42	1,27	1,27	1,58	2,22	2,66	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,46	1,46	1,83	2,56	3,09	10,40 (3,40 - 14,50)	4,84	4,68 A++	2,15 (0,51 - 3,60)	1075	10,10
20+20+25+35+50	1,20	1,20	1,50	2,10	3,00	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,39	1,39	1,73	2,43	3,46	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
20+20+25+35+60	1,13	1,13	1,41	1,97	3,36	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,30	1,30	1,63	2,28	3,89	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,60 - 3,60)	1115	10,50
20+20+25+35+71	1,05	1,05	1,32	1,84	3,74	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	1,22	1,22	1,52	2,13	4,31	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,62 - 3,59)	1115	10,50
20+20+25+42+42	1,21	1,21	1,50	2,54	2,54	9,00 (2,90 - 11,50)	4,07	8,50 A+++	2,21 (0,49 - 3,42)	1105	10,60	1,40	1,40	1,74	2,93	2,93	10,40 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,52 - 3,59)	1090	10,20
20+20+25+42+50	1,15	1,15	1,43	2,41	2,86	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,32	1,32	1,66	2,78	3,32	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,61 - 3,59)	1115	10,50
20+20+25+42+60	1,08	1,08	1,35	2,26	3,23	9,00 (2,90 - 11,50)	4,15	8,50 A+++	2,17 (0,57 - 3,28)	1085	10,40	1,25	1,25	1,56	2,62	3,72	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,61 - 3,59)	1115	10,50
20+20+25+42+71	1,01	1,01	1,26	2,12	3,60	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	1,17	1,17	1,46	2,45	4,15	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,63 - 3,63)	1115	10,50
20+20+25+50+50	1,09	1,09	1,36	2,73	2,73	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,23)	1130	10,80	1,26	1,26	1,58	3,15	3,15	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,72 - 3,66)	1165	10,90
20+20+25+50+60	1,03	1,03	1,29	2,57	3,08	9,00 (2,90 - 11,50)	3,98	8,50 A+++	2,26 (0,66 - 3,23)	1130	10,80	1,19	1,19	1,49	2,97	3,56	10,40 (3,40 - 14,50)	4,46	4,68 A++	2,33 (0,72 - 3,66)	1165	10,90
20+20+35+35+35	1,24	1,24	2,17	2,17	2,17	8,99 (2,90 - 11,50)	4,18	8,50 A+++	2,15 (0,49 - 3,34)	1075	10,30	1,43	1,43	2,51	2,51	2,51	10,39 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,52 - 3,64)	1090	10,20
20+20+35+35+42	1,18	1,18	2,07	2,07	2,50	9,00 (2,90 - 11,50)	4,19	8,50 A+++	2,15 (0,50 - 3,34)	1075	10,30	1,37	1,37	2,39	2,39	2,88	10,40 (3,40 - 14,50)	4,77	4,68 A++	2,18 (0,53 - 3,63)	1090	10,20
20+20+35+35+50	1,13	1,13	1,97	1,97	2,80	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	1,30	1,30	2,28	2,28	3,24	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,63 - 3,63)	1115	10,50
20+20+35+35+60	1,06	1,06	1,85	1,85	3,18	9,00 (2,90 - 11,50)	4,13	8,50 A+++	2,18 (0,58 - 3,29)	1090	10,40	1,22	1,22	2,14	2,14	3,68	10,40 (3,40 - 14,50)	4,66	4,68 A++	2,23 (0,63 - 3,63)	1115	10,50

Free Multi 5x1 CU-5Z90TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 18,3 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms						EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms						COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	D	E	Total (Min - Max)	W/W		kW	kWh	230V
20+20+35+35+71	0,99	0,99	1,74	1,74	3,54	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,61 - 3,29)	1090	10,40	1,15	1,15	2,01	2,01	4,08	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,64 - 3,62)	1130	10,60
20+20+35+42+42	1,13	1,13	1,98	2,38	2,38	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,52 - 3,35)	1075	10,30	1,31	1,31	2,28	2,75	2,75	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,62)	1085	10,20
20+20+35+42+50	1,08	1,08	1,89	2,26	2,69	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,25	1,25	2,18	2,62	3,10	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
20+20+35+42+60	1,02	1,02	1,78	2,14	3,04	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,18	1,18	2,06	2,47	3,51	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
20+20+35+50+50	1,03	1,03	1,80	2,57	2,57	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,67 - 3,24)	1135	10,90	1,19	1,19	2,08	2,97	2,97	10,40 (3,40 - 14,50)	4,41	**4,68 A++**	2,36 (0,75 - 3,64)	1180	11,10
20+20+42+42+42	1,08	1,08	2,28	2,28	2,28	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,52 - 3,35)	1075	10,30	1,25	1,25	2,63	2,63	2,63	10,39 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,61)	1085	10,20
20+20+42+42+50	1,03	1,03	2,17	2,17	2,60	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,20	1,20	2,51	2,51	2,98	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,65 - 3,61)	1130	10,60
20+20+42+50+50	0,99	0,99	2,08	2,47	2,47	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,67 - 3,24)	1135	10,90	1,14	1,14	2,40	2,86	2,86	10,40 (3,40 - 14,50)	4,39	**4,68 A++**	2,37 (0,75 - 3,69)	1185	11,10
20+25+25+25+25	1,48	1,88	1,88	1,88	1,88	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,48 - 3,49)	1100	10,50	1,72	2,17	2,17	2,17	2,17	10,40 (3,40 - 14,50)	4,88	**4,68 A++**	2,13 (0,46 - 3,67)	1065	10,00
20+25+25+25+35	1,38	1,73	1,73	1,73	2,43	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,48 - 3,41)	1105	10,60	1,60	2,00	2,00	2,00	2,80	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,48 - 3,64)	1080	10,20
20+25+25+25+42	1,31	1,64	1,64	1,64	2,77	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,41)	1105	10,60	1,52	1,90	1,90	1,90	3,18	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,49 - 3,63)	1080	10,20
20+25+25+25+50	1,24	1,55	1,55	1,55	3,11	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,54 - 3,28)	1085	10,40	1,43	1,79	1,79	1,79	3,60	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,63)	1100	10,30
20+25+25+25+60	1,16	1,45	1,45	1,45	3,49	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,54 - 3,28)	1085	10,40	1,34	1,68	1,68	1,68	4,02	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,63)	1100	10,30
20+25+25+25+71	1,08	1,36	1,36	1,36	3,84	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,25	1,57	1,57	1,57	4,44	10,40 (3,40 - 14,50)	4,75	**4,68 A++**	2,19 (0,59 - 3,61)	1095	10,30
20+25+25+35+35	1,28	1,61	1,61	2,25	2,25	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,48	1,86	1,86	2,60	2,60	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,61)	1075	10,10
20+25+25+35+42	1,22	1,53	1,53	2,14	2,58	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,41	1,77	1,77	2,48	2,97	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,60)	1075	10,10
20+25+25+35+50	1,16	1,45	1,45	2,03	2,91	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,34	1,68	1,68	2,35	3,35	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
20+25+25+35+60	1,09	1,36	1,36	1,91	3,28	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,26	1,58	1,58	2,21	3,77	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
20+25+25+35+71	1,02	1,28	1,28	1,79	3,63	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,18	1,48	1,48	2,07	4,19	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
20+25+25+42+42	1,18	1,46	1,46	2,45	2,45	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,34	1,69	1,69	2,84	2,84	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,52 - 3,59)	1090	10,20
20+25+25+42+50	1,11	1,39	1,39	2,33	2,78	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,28	1,60	1,60	2,70	3,22	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,61 - 3,59)	1115	10,50
20+25+25+42+60	1,05	1,31	1,31	2,20	3,13	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,21	1,51	1,51	2,54	3,63	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,61 - 3,59)	1115	10,50
20+25+25+42+71	0,98	1,23	1,23	2,07	3,49	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,14	1,42	1,42	2,39	4,03	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
20+25+25+50+50	1,06	1,32	1,32	2,65	2,65	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,66 - 3,23)	1130	10,80	1,22	1,53	1,53	3,06	3,06	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,66)	1165	10,90
20+25+25+50+60	1,00	1,25	1,25	2,50	3,00	9,00 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,66 - 3,23)	1130	10,80	1,16	1,44	1,44	2,89	3,47	10,40 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,66)	1165	10,90
20+25+35+35+35	1,20	1,50	2,10	2,10	2,10	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,49 - 3,34)	1075	10,30	1,38	1,73	2,43	2,43	2,43	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,52 - 3,64)	1090	10,20
20+25+35+35+42	1,15	1,43	2,01	2,01	2,40	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,50 - 3,34)	1075	10,30	1,32	1,66	2,32	2,32	2,78	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,53 - 3,63)	1090	10,20
20+25+35+35+50	1,09	1,36	1,91	1,91	2,73	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,26	1,58	2,21	2,21	3,14	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
20+25+35+35+60	1,03	1,29	1,80	1,80	3,08	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,19	1,49	2,08	2,08	3,56	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
20+25+35+42+42	1,10	1,37	1,93	2,30	2,30	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,52 - 3,35)	1075	10,30	1,27	1,59	2,22	2,66	2,66	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,62)	1085	10,20
20+25+35+42+50	1,05	1,31	1,83	2,20	2,61	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,21	1,51	2,12	2,54	3,02	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
20+25+35+42+60	0,99	1,24	1,73	2,08	2,96	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,14	1,43	2,00	2,40	3,43	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
20+25+35+50+50	1,00	1,25	1,75	2,50	2,50	9,00 (2,90 - 11,50)	3,96	**8,50 A+++**	2,27 (0,67 - 3,24)	1135	10,90	1,16	1,44	2,02	2,89	2,89	10,40 (3,40 - 14,50)	4,41	**4,68 A++**	2,36 (0,75 - 3,64)	1180	11,10
20+25+42+42+42	1,05	1,32	2,21	2,21	2,21	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,52 - 3,35)	1075	10,30	1,23	1,52	2,55	2,55	2,55	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,61)	1085	10,20
20+25+42+42+50	1,01	1,26	2,11	2,11	2,51	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,16	1,45	2,44	2,44	2,91	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,65 - 3,61)	1130	10,60
20+35+35+35+35	1,12	1,97	1,97	1,97	1,97	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,28	2,28	2,28	2,28	2,28	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,61)	1085	10,20
20+35+35+35+42	1,08	1,89	1,89	1,89	2,25	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,25	2,18	2,18	2,18	2,61	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,55 - 3,60)	1085	10,20
20+35+35+35+50	1,03	1,80	1,80	1,80	2,57	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,19	2,08	2,08	2,08	2,97	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,65 - 3,61)	1130	10,60
20+35+35+42+42	1,04	1,81	1,81	2,17	2,17	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,20	2,09	2,09	2,51	2,51	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,56 - 3,59)	1100	10,30
20+35+35+42+50	0,99	1,73	1,73	2,08	2,47	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,14	2,00	2,00	2,40	2,86	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,66 - 3,60)	1130	10,60
20+35+42+42+42	0,99	1,74	2,09	2,09	2,09	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,15	2,02	2,41	2,41	2,41	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
25+25+25+25+25	1,80	1,80	1,80	1,80	1,80	9,00 (2,90 - 11,50)	4,09	**8,50 A+++**	2,20 (0,48 - 3,49)	1100	10,50	2,08	2,08	2,08	2,08	2,08	10,40 (3,40 - 14,50)	4,88	**4,68 A++**	2,13 (0,46 - 3,67)	1065	10,00
25+25+25+25+35	1,67	1,67	1,67	1,67	2,32	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,48 - 3,41)	1105	10,60	1,93	1,93	1,93	1,93	2,68	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,48 - 3,64)	1080	10,20
25+25+25+25+42	1,58	1,58	1,58	1,58	2,68	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,41)	1105	10,60	1,83	1,83	1,83	1,83	3,08	10,40 (3,40 - 14,50)	4,81	**4,68 A++**	2,16 (0,49 - 3,63)	1080	10,20
25+25+25+25+50	1,50	1,50	1,50	1,50	3,00	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,54 - 3,28)	1085	10,40	1,73	1,73	1,73	1,73	3,48	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,63)	1100	10,30
25+25+25+25+60	1,41	1,41	1,41	1,41	3,36	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,54 - 3,28)	1085	10,40	1,63	1,63	1,63	1,63	3,88	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,58 - 3,63)	1100	10,30
25+25+25+25+71	1,32	1,32	1,32	1,32	3,72	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,52	1,52	1,52	1,52	4,32	10,40 (3,40 - 14,50)	4,75	**4,68 A++**	2,19 (0,59 - 3,61)	1095	10,30
25+25+25+35+35	1,55	1,55	1,55	2,17	2,17	8,99 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,79	1,79	1,79	2,51	2,51	10,39 (3,40 - 14,50)	4,83	**4,68 A++**	2,15 (0,51 - 3,61)	1075	10,10
25+25+25+35+42	1,48	1,48	1,48	2,07	2,49	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,71	1,71	1,71	2,39	2,88	10,40 (3,40 - 14,50)	4,84	**4,68 A++**	2,15 (0,51 - 3,60)	1075	10,10
25+25+25+35+50	1,41	1,41	1,41	1,97	2,80	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,63	1,63	1,63	2,28	3,23	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
25+25+25+35+60	1,32	1,32	1,32	1,85	3,19	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,53	1,53	1,53	2,14	3,67	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,60 - 3,60)	1115	10,50
25+25+25+35+71	1,24	1,24	1,24	1,74	3,54	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,44	1,44	1,44	2,01	4,07	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,62 - 3,59)	1115	10,50
25+25+25+42+42	1,42	1,42	1,42	2,37	2,37	9,00 (2,90 - 11,50)	4,07	**8,50 A+++**	2,21 (0,49 - 3,42)	1105	10,60	1,64	1,64	1,64	2,74	2,74	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,52 - 3,59)	1090	10,20
25+25+25+42+50	1,35	1,35	1,35	2,26	2,69	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,56	1,56	1,56	2,62	3,10	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,61 - 3,59)	1115	10,50
25+25+25+42+60	1,27	1,27	1,27	2,14	3,05	9,00 (2,90 - 11,50)	4,15	**8,50 A+++**	2,17 (0,57 - 3,28)	1085	10,40	1,47	1,47	1,47	2,47	3,52	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,61 - 3,59)	1115	10,50
25+25+25+50+50	1,29	1,29	1,29	2,56	2,56	8,99 (2,90 - 11,50)	3,98	**8,50 A+++**	2,26 (0,66 - 3,23)	1130	10,80	1,49	1,49	1,49	2,96	2,96	10,39 (3,40 - 14,50)	4,46	**4,68 A++**	2,33 (0,72 - 3,66)	1165	10,90
25+25+35+35+35	1,45	1,45	2,03	2,03	2,03	8,99 (2,90 - 11,50)	4,18	**8,50 A+++**	2,15 (0,49 - 3,34)	1075	10,30	1,67	1,67	2,35	2,35	2,35	10,39 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,52 - 3,64)	1090	10,20
25+25+35+35+42	1,39	1,39	1,94	1,94	2,34	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,50 - 3,34)	1075	10,30	1,60	1,60	2,25	2,25	2,70	10,40 (3,40 - 14,50)	4,77	**4,68 A++**	2,18 (0,53 - 3,63)	1090	10,20
25+25+35+35+50	1,32	1,32	1,85	1,85	2,66	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,53	1,53	2,14	2,14	3,06	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
25+25+35+35+60	1,25	1,25	1,75	1,75	3,00	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,44	1,44	2,02	2,02	3,48	10,40 (3,40 - 14,50)	4,66	**4,68 A++**	2,23 (0,63 - 3,63)	1115	10,50
25+25+35+42+42	1,33	1,33	1,86	2,24	2,24	9,00 (2,90 - 11,50)	4,19	**8,50 A+++**	2,15 (0,52 - 3,35)	1075	10,30	1,54	1,54	2,16	2,58	2,58	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,62)	1085	10,20
25+25+35+42+50	1,27	1,27	1,78	2,14	2,54	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,47	1,47	2,06	2,47	2,93	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,63 - 3,62)	1130	10,60
25+25+42+42+42	1,27	1,27	2,15	2,15	2,15	8,99 (2,90 - 11,50)	4,18	**8,50 A+++**	2,15 (0,52 - 3,35)	1075	10,30	1,48	1,48	2,48	2,48	2,48	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,61)	1085	10,20
25+35+35+35+35	1,36	1,91	1,91	1,91	1,91	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,56	2,21	2,21	2,21	2,21	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,54 - 3,61)	1085	10,20
25+35+35+35+42	1,31	1,83	1,83	1,83	2,20	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,51	2,12	2,12	2,12	2,53	10,40 (3,40 - 14,50)	4,79	**4,68 A++**	2,17 (0,55 - 3,60)	1085	10,20
25+35+35+35+50	1,25	1,75	1,75	1,75	2,50	9,00 (2,90 - 11,50)	4,13	**8,50 A+++**	2,18 (0,58 - 3,29)	1090	10,40	1,44	2,02	2,02	2,02	2,90	10,40 (3,40 - 14,50)	4,60	**4,68 A++**	2,26 (0,65 - 3,61)	1130	10,60
25+35+35+42+42	1,26	1,76	1,76	2,11	2,11	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	1,46	2,03	2,03	2,44	2,44	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,56 - 3,59)	1100	10,30
35+35+35+35+35	1,80	1,80	1,80	1,80	1,80	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	2,08	2,08	2,08	2,08	2,08	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,58)	1100	10,30
35+35+35+35+42	1,73	1,73	1,73	1,73	2,08	9,00 (2,90 - 11,50)	4,17	**8,50 A+++**	2,16 (0,53 - 3,35)	1080	10,30	2,00	2,00	2,00	2,00	2,40	10,40 (3,40 - 14,50)	4,73	**4,68 A++**	2,20 (0,57 - 3,63)	1100	10,30

1) Energy Label Scale from A+++ to D.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Multi Wall TZ combinations table

Multi Wall TZ 2x1 CU-2TZ41TBE. Minimum capacity connected: 3,2 kW. Maximum capacity connected: 6,0 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms			EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms			COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	Total (Min - Max)	W/W		kW	kWh	230V	A	B	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																
16	1,60		1,60 (1,10 - 2,30)	3,56		0,45 (0,24 - 0,65)	225	2,15	2,60		2,60 (0,70 - 3,80)	3,42		0,76 (0,18 - 1,24)	380	3,50
20	2,00		2,00 (1,10 - 2,90)	3,51		0,57 (0,24 - 0,83)	285	2,70	3,20		3,20 (0,70 - 4,80)	3,44		0,93 (0,18 - 1,57)	465	4,30
25	2,50		2,50 (1,10 - 3,50)	3,47		0,72 (0,24 - 1,07)	360	3,40	3,60		3,60 (0,70 - 5,50)	3,24		1,11 (0,18 - 1,88)	555	5,15
35	3,50		3,50 (1,10 - 4,00)	3,24		1,08 (0,24 - 1,30)	540	5,05	4,30		4,30 (0,70 - 6,20)	3,41		1,26 (0,18 - 2,00)	630	5,85
2 Rooms																
16 + 16	1,60	1,60	3,20 (1,50 - 4,00)	4,21	**7,10 A++**	0,76 (0,27 - 1,08)	380	3,50	2,20	2,20	4,40 (1,10 - 6,30)	4,27	**4,30 A+**	1,03 (0,22 - 1,80)	515	4,75
16 + 20	1,60	2,00	3,60 (1,50 - 4,50)	4,19	**7,10 A++**	0,86 (0,27 - 1,25)	430	4,00	1,95	2,45	4,40 (1,10 - 6,30)	4,44	**4,30 A+**	0,99 (0,22 - 1,78)	495	4,60
16 + 25	1,60	2,50	4,10 (1,50 - 4,70)	4,14	**7,10 A++**	0,99 (0,27 - 1,38)	495	4,60	1,70	2,70	4,40 (1,10 - 6,30)	4,44	**4,30 A+**	0,99 (0,22 - 1,78)	495	4,60
16 + 35	1,30	2,80	4,10 (1,50 - 4,70)	4,14	**7,10 A++**	0,99 (0,27 - 1,38)	495	4,60	1,40	3,00	4,40 (1,10 - 6,30)	4,44	**4,30 A+**	0,99 (0,22 - 1,78)	495	4,60
20 + 20	2,00	2,00	4,00 (1,50 - 4,70)	4,08	**7,10 A++**	0,98 (0,27 - 1,38)	490	4,55	2,20	2,20	4,40 (1,10 - 6,30)	4,49	**4,30 A+**	0,98 (0,22 - 1,76)	490	4,55
20 + 25	1,80	2,30	4,10 (1,50 - 4,70)	4,14	**7,10 A++**	0,99 (0,27 - 1,38)	495	4,60	1,95	2,45	4,40 (1,10 - 6,30)	4,49	**4,30 A+**	0,98 (0,22 - 1,76)	490	4,55
20 + 35	1,50	2,60	4,10 (1,50 - 4,70)	4,14	**7,10 A++**	0,99 (0,27 - 1,38)	495	4,60	1,60	2,80	4,40 (1,10 - 6,30)	4,49	**4,30 A+**	0,98 (0,22 - 1,76)	490	4,55
25 + 25	2,05	2,05	4,10 (1,50 - 4,70)	4,14	**7,10 A++**	0,99 (0,27 - 1,38)	495	4,60	2,20	2,20	4,40 (1,10 - 6,30)	4,49	**4,30 A+**	0,98 (0,22 - 1,76)	490	4,55
25 + 35	1,70	2,40	4,10 (1,50 - 4,70)	4,14	**7,10 A++**	0,99 (0,27 - 1,38)	495	4,60	1,85	2,55	4,40 (1,10 - 6,30)	4,49	**4,30 A+**	0,98 (0,22 - 1,76)	490	4,55

Multi Wall TZ 2x1 CU-2TZ50TBE. Minimum capacity connected: 3,2 kW. Maximum capacity connected: 7,7 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms			EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms			COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	Total (Min - Max)	W/W		kW	kWh	230V	A	B	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																
16	1,60		1,60 (1,10 - 2,30)	3,56		0,45 (0,24 - 0,65)	225	2,15	2,60		2,60 (0,70 - 3,80)	3,42		0,76 (0,18 - 1,24)	380	3,50
20	2,00		2,00 (1,10 - 2,90)	3,51		0,57 (0,24 - 0,83)	285	2,70	3,20		3,20 (0,70 - 4,80)	3,44		0,93 (0,18 - 1,57)	465	4,30
25	2,50		2,50 (1,10 - 3,50)	3,47		0,72 (0,24 - 1,07)	360	3,40	3,60		3,60 (0,70 - 5,50)	3,24		1,11 (0,18 - 1,88)	555	5,15
35	3,50		3,50 (1,10 - 4,00)	3,24		1,08 (0,24 - 1,30)	540	5,05	4,50		4,50 (0,70 - 6,20)	3,36		1,34 (0,18 - 2,00)	670	6,20
42	4,20		4,20 (1,10 - 4,50)	2,90		1,45 (0,24 - 1,60)	725	6,80	5,00		5,00 (1,10 - 6,30)	2,91		1,72 (0,22 - 2,35)	860	7,95
50	5,00		5,00 (1,20 - 5,10)	2,78		1,80 (0,25 - 1,90)	900	8,30	5,30		5,30 (1,10 - 6,30)	2,93		1,81 (0,22 - 2,33)	905	8,35
2 Rooms																
16 + 16	1,60	1,60	3,20 (1,50 - 4,00)	4,21	**7,00 A++**	0,76 (0,27 - 1,08)	380	3,50	2,65	2,65	5,30 (1,10 - 6,30)	4,31	**4,20 A+**	1,23 (0,22 - 1,80)	615	5,65
16 + 20	1,60	2,00	3,60 (1,50 - 4,50)	4,19	**7,00 A++**	0,86 (0,27 - 1,25)	430	4,00	2,45	3,05	5,50 (1,10 - 6,30)	4,30	**4,20 A+**	1,28 (0,22 - 1,78)	640	5,85
16 + 25	1,60	2,50	4,10 (1,50 - 5,20)	4,14	**7,00 A++**	0,99 (0,27 - 1,48)	495	4,60	2,15	3,35	5,50 (1,10 - 6,30)	4,30	**4,20 A+**	1,28 (0,22 - 1,78)	640	5,85
16 + 35	1,55	3,45	5,00 (1,50 - 5,20)	3,85	**7,00 A++**	1,30 (0,27 - 1,48)	650	6,00	1,75	3,75	5,50 (1,10 - 6,30)	4,30	**4,20 A+**	1,28 (0,22 - 1,78)	640	5,85
16 + 42	1,40	3,60	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	1,55	4,15	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
16 + 50	1,20	3,80	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	1,40	4,30	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
20 + 20	2,00	2,00	4,00 (1,50 - 5,00)	4,08	**7,00 A++**	0,98 (0,27 - 1,42)	490	4,55	2,75	2,75	5,50 (1,10 - 6,30)	4,33	**4,20 A+**	1,27 (0,22 - 1,76)	635	5,80
20 + 25	2,00	2,50	4,50 (1,50 - 5,20)	3,95	**7,00 A++**	1,14 (0,27 - 1,48)	570	5,25	2,45	3,05	5,50 (1,10 - 6,30)	4,33	**4,20 A+**	1,27 (0,22 - 1,76)	635	5,80
20 + 35	1,80	3,20	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	2,05	3,65	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
20 + 42	1,60	3,40	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	1,85	3,85	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
20 + 50	1,45	3,55	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	1,65	4,05	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
25 + 25	2,50	2,50	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	2,85	2,85	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
25 + 35	2,10	2,90	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	2,35	3,35	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
25 + 42	1,85	3,15	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	2,15	3,55	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
25 + 50	1,65	3,35	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	1,90	3,80	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
35 + 35	2,50	2,50	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	2,85	2,85	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00
35 + 42	2,25	2,75	5,00 (1,50 - 5,40)	3,85	**7,00 A++**	1,30 (0,27 - 1,62)	650	6,00	2,60	3,10	5,70 (1,10 - 6,40)	4,35	**4,20 A+**	1,31 (0,22 - 1,77)	655	6,00

1) Energy Label Scale from A+++ to D.

Multi Wall TZ combinations table

Multi Wall TZ 3x1 CU-3TZ52TBE. Minimum capacity connected: 4,5 kW. Maximum capacity connected: 9,5 kW • R32

Indoor unit capacity	Cooling capacity (kW). Rooms				EER	SEER [1]	Input power rating	A.E.C.	Current	Heating capacity (kW). Rooms				COP	SCOP [1]	Input power rating	A.E.C.	Current
	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V	A	B	C	Total (Min - Max)	W/W		kW	kWh	230V
1 Room																		
16	1,60			1,60 (1,30 - 2,30)	3,81		0,42 (0,25 - 0,66)	210	2,10	2,60			2,60 (1,20 - 3,20)	4,06		0,64 (0,30 - 1,00)	320	3,10
20	2,00			2,00 (1,80 - 2,90)	3,85		0,52 (0,34 - 0,83)	260	2,60	3,20			3,20 (1,20 - 4,10)	4,10		0,78 (0,30 - 1,27)	390	3,80
25	2,50			2,50 (1,80 - 2,90)	3,85		0,65 (0,34 - 0,83)	325	3,10	3,60			3,60 (1,20 - 4,30)	3,67		0,98 (0,30 - 1,27)	490	4,70
35	3,50			3,50 (1,80 - 3,80)	3,65		0,96 (0,34 - 1,38)	480	4,30	4,50			4,50 (1,20 - 5,80)	3,54		1,27 (0,30 - 2,14)	635	6,00
42	4,20			4,20 (1,80 - 4,30)	3,02		1,39 (0,34 - 2,01)	695	6,20	5,60			5,60 (1,20 - 6,80)	3,18		1,76 (0,30 - 2,97)	880	7,80
50	5,00			5,00 (1,90 - 5,40)	3,07		1,63 (0,34 - 2,15)	815	7,60	6,80			6,80 (1,20 - 6,90)	2,89		2,35 (0,30 - 2,84)	1175	10,80
2 Rooms																		
16 + 16	1,60	1,60		3,20 (1,80 - 6,20)	5,08	**6,10 A+**	0,63 (0,33 - 2,13)	315	3,10	2,60	2,60		5,20 (1,40 - 7,00)	3,88	**3,80 A**	1,34 (0,34 - 2,07)	670	6,10
16 + 20	1,60	2,00		3,60 (1,80 - 6,20)	4,68	**6,10 A+**	0,77 (0,33 - 2,09)	385	3,70	2,58	3,22		5,80 (1,40 - 7,00)	3,82	**3,80 A**	1,52 (0,33 - 2,03)	760	6,90
16 + 25	1,60	2,50		4,10 (1,80 - 6,20)	4,46	**6,10 A+**	0,92 (0,33 - 2,09)	460	4,30	2,42	3,78		6,20 (1,40 - 7,00)	3,76	**3,80 A**	1,65 (0,33 - 2,03)	825	7,50
16 + 35	1,60	3,50		5,10 (1,80 - 6,30)	3,78	**6,10 A+**	1,35 (0,33 - 2,10)	675	6,20	2,13	4,67		6,80 (1,40 - 7,30)	3,72	**3,80 A**	1,83 (0,29 - 2,13)	915	8,30
16 + 42	1,43	3,77		5,20 (1,90 - 6,40)	3,74	**6,10 A+**	1,39 (0,35 - 2,14)	695	6,40	1,88	4,92		6,80 (1,40 - 7,30)	3,80	**3,80 A**	1,79 (0,31 - 2,12)	895	8,10
16 + 50	1,26	3,94		5,20 (1,90 - 6,40)	4,30	**6,50 A+**	1,21 (0,34 - 1,82)	605	5,60	1,65	5,15		6,80 (1,40 - 7,50)	4,15	**4,00 A++**	1,64 (0,27 - 2,00)	820	7,50
20 + 20	2,00	2,00		4,00 (1,80 - 6,20)	4,49	**6,10 A+**	0,89 (0,33 - 2,05)	445	4,20	3,20	3,20		6,40 (1,40 - 7,00)	3,74	**3,80 A**	1,71 (0,32 - 2,03)	855	7,80
20 + 25	2,00	2,50		4,50 (1,80 - 6,20)	4,17	**6,10 A+**	1,08 (0,33 - 2,05)	540	5,00	3,02	3,78		6,80 (1,40 - 7,00)	3,70	**3,80 A**	1,84 (0,29 - 2,03)	920	8,30
20 + 35	1,89	3,31		5,20 (1,80 - 6,30)	3,74	**6,10 A+**	1,39 (0,33 - 2,06)	695	6,40	2,47	4,33		6,80 (1,40 - 7,30)	3,80	**3,80 A**	1,79 (0,28 - 2,12)	895	8,10
20 + 42	1,68	3,52		5,20 (1,90 - 6,40)	3,82	**6,10 A+**	1,36 (0,35 - 2,10)	680	6,20	2,19	4,61		6,80 (1,40 - 7,30)	3,82	**3,80 A**	1,78 (0,30 - 2,08)	890	8,10
20 + 50	1,49	3,71		5,20 (1,90 - 6,40)	4,30	**6,50 A+**	1,21 (0,34 - 1,82)	605	5,60	1,94	4,86		6,80 (1,40 - 7,50)	4,15	**4,00 A++**	1,64 (0,27 - 2,00)	820	7,50
25 + 25	2,50	2,50		5,00 (1,80 - 6,20)	3,79	**6,10 A+**	1,32 (0,33 - 2,05)	660	6,00	3,40	3,40		6,80 (1,40 - 7,00)	3,70	**3,80 A**	1,84 (0,29 - 2,03)	920	8,30
25 + 35	2,17	3,03		5,20 (1,90 - 6,30)	3,74	**6,10 A+**	1,39 (0,35 - 2,06)	695	6,40	2,83	3,97		6,80 (1,40 - 7,30)	3,80	**3,80 A**	1,79 (0,28 - 2,12)	895	8,10
25 + 42	1,94	3,26		5,20 (1,90 - 6,40)	3,82	**6,10 A+**	1,36 (0,35 - 2,10)	680	6,20	2,54	4,26		6,80 (1,40 - 7,30)	3,82	**3,80 A**	1,78 (0,28 - 2,08)	890	8,10
25 + 50	1,73	3,47		5,20 (1,90 - 6,40)	4,30	**6,50 A+**	1,21 (0,34 - 1,82)	605	5,60	2,27	4,53		6,80 (1,40 - 7,50)	4,15	**4,00 A++**	1,64 (0,24 - 2,00)	820	7,50
35 + 35	2,60	2,60		5,20 (1,90 - 6,40)	3,94	**6,10 A+**	1,32 (0,35 - 2,06)	660	6,00	3,40	3,40		6,80 (1,40 - 7,50)	3,84	**3,80 A**	1,77 (0,27 - 2,14)	885	8,00
35 + 42	2,36	2,84		5,20 (1,90 - 6,40)	3,94	**6,10 A+**	1,32 (0,35 - 2,06)	660	6,00	3,09	3,71		6,80 (1,40 - 7,50)	3,84	**3,80 A**	1,77 (0,26 - 2,14)	885	8,00
35 + 50	2,14	3,06		5,20 (1,90 - 6,40)	4,44	**6,50 A+**	1,17 (0,36 - 1,73)	585	5,40	2,80	4,00		6,80 (1,40 - 7,50)	4,20	**4,00 A++**	1,62 (0,24 - 1,97)	810	7,40
42 + 42	2,60	2,60		5,20 (1,90 - 6,40)	3,94	**6,10 A+**	1,32 (0,35 - 2,02)	660	6,00	3,40	3,40		6,80 (1,40 - 7,50)	3,93	**3,80 A**	1,73 (0,26 - 2,13)	865	7,90
42 + 50	2,37	2,83		5,20 (1,90 - 6,40)	4,44	**6,50 A+**	1,17 (0,36 - 1,73)	585	5,40	3,10	3,70		6,80 (1,40 - 7,50)	4,22	**4,00 A++**	1,61 (0,24 - 1,97)	805	7,40
3 Rooms																		
16 + 16 + 16	1,60	1,60	1,60	4,80 (1,80 - 6,60)	4,75	**7,60 A+**	1,01 (0,36 - 1,79)	505	4,70	2,26	2,26	2,26	6,78 (1,50 - 7,50)	4,24	**4,20 A++**	1,60 (0,29 - 1,95)	800	7,30
16 + 16 + 20	1,60	1,60	2,00	5,20 (1,80 - 6,60)	4,52	**7,60 A+**	1,15 (0,36 - 1,80)	575	5,30	2,09	2,09	2,62	6,80 (1,60 - 7,50)	4,28	**4,20 A++**	1,59 (0,32 - 1,94)	795	7,30
16 + 16 + 25	1,46	1,46	2,28	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,80)	575	5,30	1,91	1,91	2,98	6,80 (1,60 - 7,50)	4,28	**4,20 A++**	1,59 (0,32 - 1,94)	795	7,30
16 + 16 + 35	1,24	1,24	2,72	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	1,62	1,62	3,56	6,80 (1,60 - 7,50)	4,33	**4,20 A++**	1,57 (0,34 - 1,92)	785	7,20
16 + 16 + 42	1,12	1,12	2,96	5,20 (1,80 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,71)	575	5,30	1,47	1,47	3,86	6,80 (1,60 - 7,50)	4,33	**4,20 A++**	1,57 (0,31 - 1,91)	785	7,20
16 + 16 + 50	1,01	1,01	3,18	5,20 (1,80 - 6,60)	4,86	**7,60 A+**	1,07 (0,42 - 1,59)	535	4,90	1,33	1,33	4,14	6,80 (1,60 - 7,50)	4,66	**4,20 A++**	1,46 (0,33 - 1,79)	730	6,70
16 + 20 + 20	1,48	1,86	1,86	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	1,94	2,43	2,43	6,80 (1,60 - 7,50)	4,30	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
16 + 20 + 25	1,36	1,70	2,14	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	1,78	2,23	2,79	6,80 (1,60 - 7,50)	4,30	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
16 + 20 + 35	1,17	1,46	2,57	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,71)	575	5,30	1,53	1,92	3,35	6,80 (1,60 - 7,50)	4,33	**4,20 A++**	1,57 (0,34 - 1,91)	785	7,20
16 + 20 + 42	1,07	1,33	2,80	5,20 (1,80 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,71)	575	5,30	1,39	1,74	3,67	6,80 (1,60 - 7,50)	4,36	**4,20 A++**	1,56 (0,31 - 1,90)	780	7,10
16 + 20 + 50	0,97	1,21	3,02	5,20 (1,80 - 6,60)	4,86	**7,60 A+**	1,07 (0,42 - 1,59)	535	4,90	1,27	1,58	3,95	6,80 (1,60 - 7,50)	4,69	**4,20 A++**	1,45 (0,34 - 1,78)	725	6,60
16 + 25 + 25	1,26	1,97	1,97	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	1,64	2,58	2,58	6,80 (1,60 - 7,50)	4,30	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
16 + 25 + 35	1,09	1,71	2,40	5,20 (1,80 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,71)	575	5,30	1,43	2,24	3,13	6,80 (1,60 - 7,50)	4,33	**4,20 A++**	1,57 (0,34 - 1,91)	785	7,20
16 + 25 + 42	1,00	1,57	2,63	5,20 (1,80 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,71)	575	5,30	1,31	2,05	3,44	6,80 (1,60 - 7,50)	4,36	**4,20 A++**	1,56 (0,31 - 1,90)	780	7,10
16 + 25 + 50	0,91	1,43	2,86	5,20 (1,80 - 6,60)	4,86	**7,60 A+**	1,07 (0,42 - 1,59)	535	4,90	1,19	1,87	3,74	6,80 (1,60 - 7,50)	4,69	**4,20 A++**	1,45 (0,34 - 1,78)	725	6,60
16 + 35 + 35	0,96	2,12	2,12	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	1,26	2,77	2,77	6,80 (1,60 - 7,50)	4,39	**4,20 A++**	1,55 (0,32 - 1,89)	775	7,10
16 + 35 + 42	0,89	1,96	2,35	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,67)	555	5,10	1,17	2,56	3,07	6,80 (1,60 - 7,50)	4,42	**4,20 A++**	1,54 (0,32 - 1,88)	770	7,00
20 + 20 + 20	1,73	1,73	1,73	5,19 (1,90 - 6,60)	4,51	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	2,26	2,26	2,26	6,78 (1,60 - 7,50)	4,29	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
20 + 20 + 25	1,60	1,60	2,00	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	2,09	2,09	2,62	6,80 (1,60 - 7,50)	4,30	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
20 + 20 + 35	1,39	1,39	2,42	5,20 (1,90 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	1,81	1,81	3,18	6,80 (1,60 - 7,50)	4,36	**4,20 A++**	1,56 (0,34 - 1,90)	780	7,10
20 + 20 + 42	1,27	1,27	2,66	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	1,66	1,66	3,48	6,80 (1,60 - 7,50)	4,39	**4,20 A++**	1,55 (0,32 - 1,90)	775	7,10
20 + 20 + 50	1,16	1,16	2,88	5,20 (1,80 - 6,60)	4,86	**7,60 A+**	1,07 (0,42 - 1,59)	535	4,90	1,51	1,51	3,78	6,80 (1,60 - 7,50)	4,69	**4,20 A++**	1,45 (0,34 - 1,77)	725	6,60
20 + 25 + 25	1,48	1,86	1,86	5,20 (1,90 - 6,60)	4,52	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	1,94	2,43	2,43	6,80 (1,60 - 7,50)	4,30	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
20 + 25 + 35	1,29	1,63	2,28	5,20 (1,90 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	1,69	2,13	2,98	6,80 (1,60 - 7,50)	4,36	**4,20 A++**	1,56 (0,34 - 1,90)	780	7,10
20 + 25 + 42	1,20	1,49	2,51	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	1,56	1,95	3,29	6,80 (1,60 - 7,50)	4,39	**4,20 A++**	1,55 (0,32 - 1,90)	775	7,10
20 + 25 + 50	1,09	1,37	2,74	5,20 (1,80 - 6,60)	4,86	**7,60 A+**	1,07 (0,42 - 1,59)	535	4,90	1,43	1,79	3,58	6,80 (1,60 - 7,50)	4,69	**4,20 A++**	1,45 (0,34 - 1,77)	725	6,60
20 + 35 + 35	1,16	2,02	2,02	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,67)	555	5,10	1,52	2,64	2,64	6,80 (1,60 - 7,50)	4,42	**4,20 A++**	1,54 (0,32 - 1,88)	770	7,00
25 + 25 + 25	1,73	1,73	1,73	5,19 (1,90 - 6,60)	4,51	**7,60 A+**	1,15 (0,39 - 1,75)	575	5,30	2,26	2,26	2,26	6,78 (1,60 - 7,50)	4,29	**4,20 A++**	1,58 (0,31 - 1,93)	790	7,20
25 + 25 + 35	1,53	1,53	2,14	5,20 (1,90 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	2,00	2,00	2,80	6,80 (1,60 - 7,50)	4,36	**4,20 A++**	1,56 (0,31 - 1,90)	780	7,10
25 + 25 + 42	1,41	1,41	2,38	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,71)	555	5,10	1,85	1,85	3,10	6,80 (1,60 - 7,50)	4,39	**4,20 A++**	1,55 (0,68 - 1,90)	775	7,10
25 + 35 + 35	1,36	1,92	1,92	5,20 (1,80 - 6,60)	4,68	**7,60 A+**	1,11 (0,39 - 1,67)	555	5,10	1,78	2,51	2,51	6,80 (1,60 - 7,50)	4,42	**4,20 A++**	1,54 (0,68 - 1,88)	770	7,00

1) Energy Label Scale from A+++ to D.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PAC i





Panasonic Commercial air to air

Here are some of your new air conditioner's major features.
Panasonic has developed an impressive range of highly efficient Commercial Air Conditioners. This range confirms our commitment to the environment, with our highly efficient inverter compressor technology to optimise performance.

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Highlighted features

PACi: Commercial air to air. The compact and high efficiency solution for shops, restaurants, offices or residential applications.



Great savings and improved comfort. Panasonic has developed an impressive range of highly efficient Commercial air conditioners, with our highly efficient inverter compressor technology to optimise performance.

A wide range for industry, office or residential application. With configuration from 1:1 to 4:1, Panasonic can offer the most comfortable climate with solutions designed for every environment. The diverse array of connectivity and control systems, allows you to manage your units from any various locations. Receive real-time status updates and maintenance alerts, while optimizing costs and energy usage.

Energy saving



R32 refrigerant.
Our heat pumps containing the refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP). An important step to reduce greenhouse gases. R32 is also a component refrigerant, making it easy to recycle.



Econavi.
Intelligent Human Activity Sensor and Sunlight Sensor technologies that can detect and reduce waste energy, by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy.



Exceptional seasonal cooling efficiency based on the ErP regulation.
Higher SEER ratings mean greater efficiency - year-round cooling savings!



Exceptional seasonal heating efficiency based on the ErP regulation.
Higher SCOP ratings mean greater efficiency - year-round heating savings!



Inverter Plus System.
Inverter Plus System classification highlights Panasonic's highest performing systems.



Inverter.
The Inverter range provides greater efficiency and comfort. Provides more precise temperature control, without highs and lows, and keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration levels.



High efficiency compressor.
Compressors that operate with a wider Hz range realize a more efficient operation throughout the year. For Big PACi Series.



Panasonic R2 rotary compressor.
Designed to withstand extreme conditions, it delivers high performance and efficiency.



Better efficiency & value for domestic hot water.
Energy efficiency class up to A+ in a scale from A+ to F. For PRO-HT tank.



Better efficiency & value for low temperature applications.
On an energy efficiency scale from D to A+++, both the PACi water heat exchanger and the PRO-HT provide A++ rated heating.

High performance



Down to -15 °C in cooling mode.
The air conditioner works in cooling mode when the outdoor temperature of -15 °C.



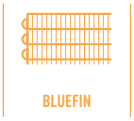
Down to -20 °C in heating mode.
All our commercial systems operate in heating to -15 °C, with models capable of up to -20 °C.



Up to 46 °C in cooling mode.
System works in cooling mode at outdoor temperature up to 46 °C. For PACi with water heat exchanger



nanoe™ X.
Technology with the benefits of hydroxyl radicals has the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise.



Bluefin.
Panasonic has extended the life of its condensers with an original anti-rust coating. For Big PACi Series.



Large fan.
Large fan provides larger airflow rate and very quiet operation at low speed. For Big PACi Series.



DC fan.
Safe and precise.



Filter included.
Adaptive ducted with filter included.



Super Quiet.
With Super Quiet technology our devices are quieter than a library (30 dB(A)).



More comfort with Aerowings.
Direct airflow to the ceiling, creating a shower cooling effect with built-in twin flap.



DHW.
With PRO-HT Tank you can also heat your domestic hot water at a very low cost with the optional hot water cylinder.



High temperature.
With PRO-HT Tank, maximum water outlet temperature up to 65 °C.



R22 renewal.
The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A systems.



R410A/R22 renewal.
The Panasonic renewal system allows good quality existing R410A or R22 pipe work to be re-used whilst installing new high efficiency R32 systems.



5 Years compressor warranty.
We guarantee the outdoor unit compressors in the entire range for five years.

High connectivity



Panasonic AC Smart Cloud.
The AC Smart Cloud from Panasonic allows you to have complete control of all your installations. In a simple click, receive status updates from all your units in real-time, preventing breakdowns and optimizing costs.



Internet control.
A next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone, tablet or PC via the internet.



BMS connectivity.
The communication port can be integrated into the indoor unit and provides easy connection to, building management system, providing control of your Panasonic heat pump.



Domestic integration to P-Link - CZ-CAPRA1.
Can connect RAC range to P-Link. Full control is now possible.



Advanced control.
A touch screen remote controller is included as a standard. Clean design, easy operation and quick access to all menus.

Commercial outdoor units. Energy saving concept

Product quality and safety. All Panasonic air conditioners undergo strict quality and safety tests before sale. This rigorous process includes obtaining all necessary safety approvals, to ensure that all air conditioners we sell are not only built to the highest market standards, but are also completely safe.



Professional air conditioners with R32 refrigerant

Panasonic recommends R32, with lower Global Warming Potential (GWP). Compared to R22 and R410A, R32 has a very low potential impact on global warming.
Panasonic takes action for the environment. In line with the European countries participating in the Montreal Protocol, protecting the ozone layer and preventing global warming, Panasonic is leading the switch to R32.

1 Installation innovation

- Extremely easy to install, practically the same as R410A
- Single substance refrigerant, which makes it easier to recycle and reuse

2 Environmental innovation

- Zero impact on the ozone layer
- 75 % less impact on global warming

3 Economic and energy consumption innovation

- Lower cost and greater savings
- Higher energy efficiency than R410A



PACi NX Elite: Top-tier commercial air conditioning

Outstanding performance at extreme ambient temperatures with very high energy efficiency both in heating and cooling. Fans, fan motors, compressors and heat exchangers engineered for maximum savings result in higher seasonal efficiencies, which ranks as one of the best in the industry, ensuring reduced CO_2 emissions, energy consumption and operating costs.

From 3,6 to 14,0 kW.

- Meeting all necessary safety approvals to ensure quality and safety
- Top class SEER: A+++ / SCOP: A+++ at 3,6 kW (in 90x90 cassette)
- Cooling operation is possible when outdoor temperature as high as 48 °C (for 7,1 kW and higher capacities)
- Precise control with DC inverter technology for even more energy saving
- Cooling operation at -20 °C (10,0 kW to 14,0 kW with 30 m maximum pipe length)
- Heating operation at ambient temperature as low as -20 °C
- Compact outdoor units
- Auto restart after power outage
- Twin, triple and double-twin connections

PACi NX Standard: For economy and value

With high quality design and engineering, the PACi and PACi NX Standard are the perfect solutions for projects which demand quality on a limited budget. In addition, compact and lightweight design makes them ideal for installations with limited space including small commercial and residential applications. The slim and lightweight outdoor unit design enables installation even at very challenging locations.

From 2,5 to 14,0 kW.

- Extended range of outdoor units starting from 2,5 kW
- Good balance of system cost vs performance
- Top class SEER/SCOP in the standard inverter category SEER: A++ / SCOP: A++ up to 7,1 kW (in 90x90 cassette)
- Variety of individual and central controllers which provides full flexibility
- Compact outdoor units, small footprint and lightweight
- Twin connection possible
- Cooling operation down to -10 °C and heating operation down to -15 °C

Big PACi Elite R32

20,0 – 25,0 kW is ideally suited for small and mid retail applications.
In addition to its lightweight, split-able, compact body, the newly designed hide-away unit enables easy installation and pipe work within a narrow void.

Panasonic Big PACi : Environmental friendly, strong and flexible.

- High efficiency with Panasonic compressor as the driving force
- Compact and light indoor body
- Easy pipe work with split-able hide-away indoor design
- Separable indoor unit allows for flexible installation to fit in narrow void
- Water heat exchanger and AHU connection compatibility
- Bluefin anti-corrosion coating of the heat exchanger as standard
- Wide range of controls including Cloud Control compatibility

New PACi NX Series.
The next generation is here

NEW SERIES 2021

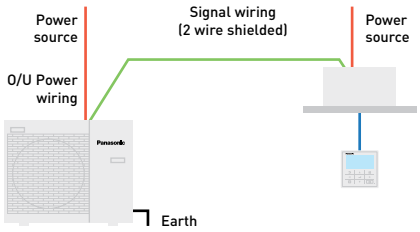
NX Series with R32 refrigerant has been developed to meet the demand of easy refurbishment with 3 wired method.
Also integrated with IoT solutions and includes nanoe™ X function as standard.



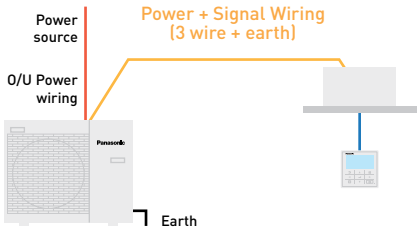
1 PACi NX Series - Standard range, for absolute ease of refurbishment

This new series has been developed with 3 wired method and communication. It makes it simple and easy to replace old systems with 3 wire connections, which is prevalent in many systems.

PACi PZ2/PZH2: 2 wire method.



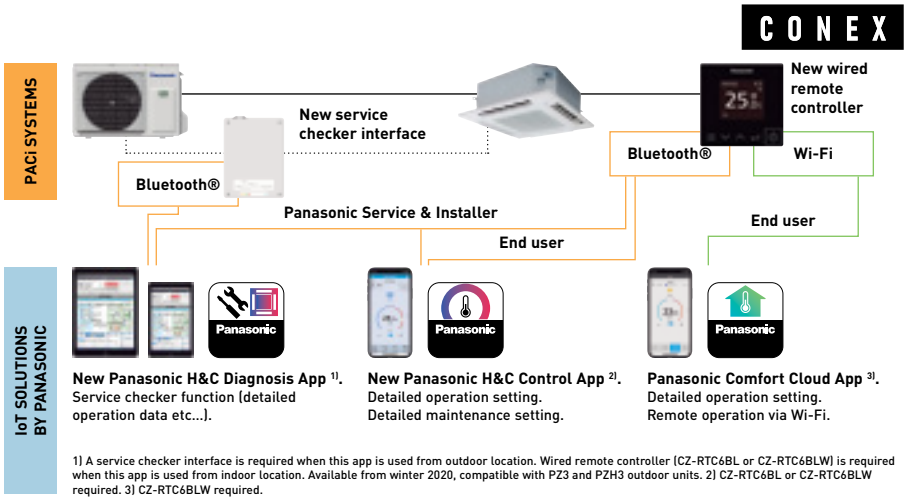
New PACi NX Series: 3 wire method.



2 CONEX with IoT integration

The new wired remote controller series is fully integrated with IoT solutions developed by Panasonic. Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

https://www.youtube.com/watch?v=_USzG_9f6bk&feature=youtu.be



New Panasonic H&C Diagnosis App [1].
Service checker function (detailed operation data etc...).

New Panasonic H&C Control App [2].
Detailed operation setting.
Detailed maintenance setting.

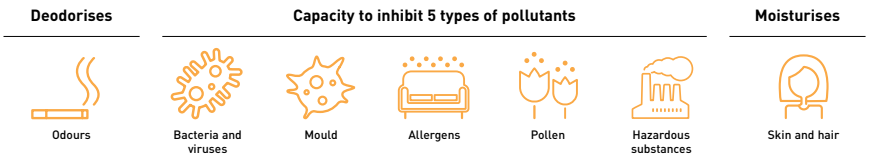
Panasonic Comfort Cloud App [3].
Detailed operation setting.
Remote operation via Wi-Fi.

1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6BL or CZ-RTC6BLW) is required when this app is used from indoor location. Available from winter 2020, compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6BL or CZ-RTC6BLW required. 3) CZ-RTC6BLW required.

3 Let Panasonic take care of indoor air quality

Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances. This unique technology is equipped to provide better air quality whether residential or commercial.

7 effects of nanoe™ X – Panasonic unique technology.



* Refer to https://aircon.panasonic.eu for more details and validation data.

4 Increasing the efficiency

The new PACi NX Series have improved seasonal efficiences in both heating and cooling versus the previous generation.

	4 way cassette - PU3				Adaptive ducted - PF3			
	Elite		Standard		Elite		Standard	
kW	SEER/ηsc	SCOP/ηsh	SEER/ηsc	SCOP/ηsh	SEER/ηsc	SCOP/ηsh	SEER/ηsc	SCOP/ηsh
3,6	A+++	A+++	A++	A++	A++	A+	A+	A+
5,0	A++	A++	A++	A++	A++	A+	A++	A+
6,0	A++	A++	A++	A++	A++	A++	A++	A++
7,1	A++	A++	A++	A++	A++	A++	A++	A+
10,0	A++	A++	A++	A+	A++	A+	A++	A
12,5	304,3 %	186,0 %	267,0 %	157,0 %	281,7 %	170,0 %	257,4 %	142,6 %
14,0	286,6 %	181,2 %	257,0 %	152,2 %	275,9 %	171,0 %	252,2 %	140,6 %

* Energy label scale from A+++ to D for models below 12,0 kW (EU regulation 626/2011).
* ηsc / ηsh values for models above 12,0 kW (EN 14825).

New 4 way 90x90 cassette - PU3

- Always fresh and clean air with nanoe™ X and internal cleaning mode
- A modern flat panel design to blend into any space
- High seasonal efficiency, maximum SEER/SCOP = A+++/A+++
- Advanced comfort and energy saving by Econavi sensor

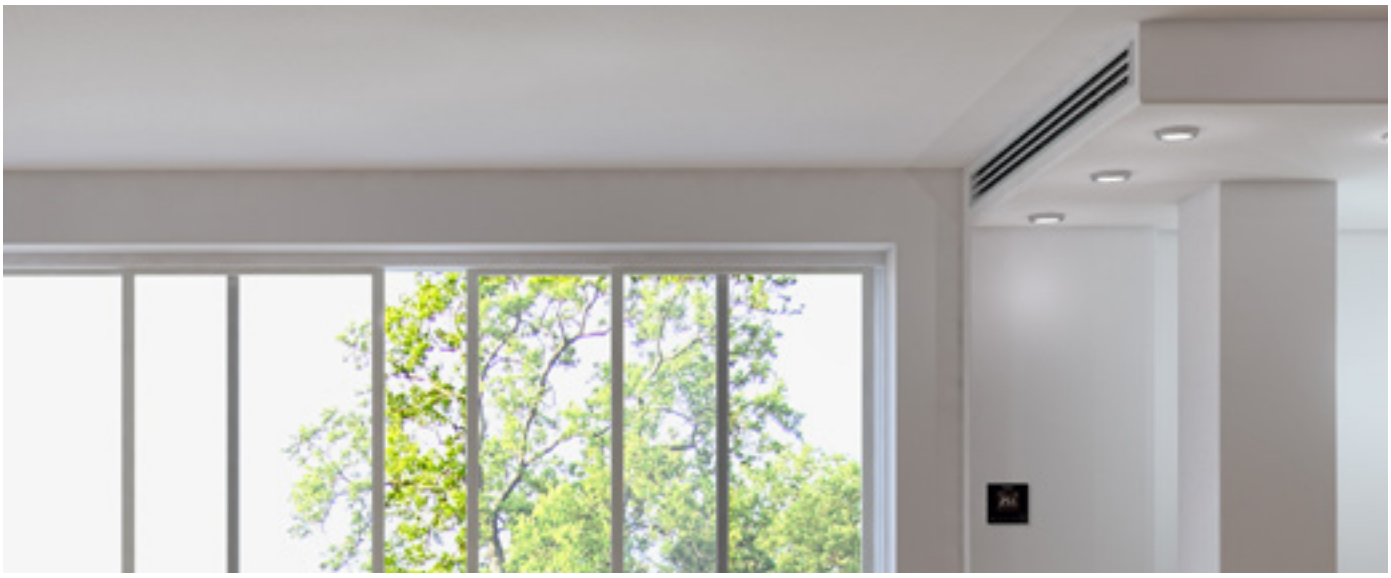
New adaptive ducted - PF3

- Better indoor air quality with nanoe™ X even with long ducts
- High flexibility with a complete new design which allows vertical or horizontal installation
- High seasonal performance in a slim body
- Super quiet operation, minimum 22 dB(A)

CONEX. New devices and apps

CONEX provides comfort and control for varying user needs. Accessible, flexible and scalable with different controllers and apps. Perfectly meeting requirements of modern controls for end user, installer and service. With nanoe™ X function, technology with the benefits of hydroxyl radicals.





1 Intuitive control with stylish design

- Simple operation at a glance
- Clean face with full flat & black LCD display
- Compact body, only 86x86 mm

2 Control comfort with your smartphone

- Flexible control options with IoT integration
- New Panasonic H&C Control App for daily remote control operation
- Panasonic Comfort Cloud App for remote operation 24/7/365

3 Easy maintenance with service support app

- Quick and easy app set-up for system setting
- Panasonic H&C Diagnosis App enables the user to obtain detailed system operation data

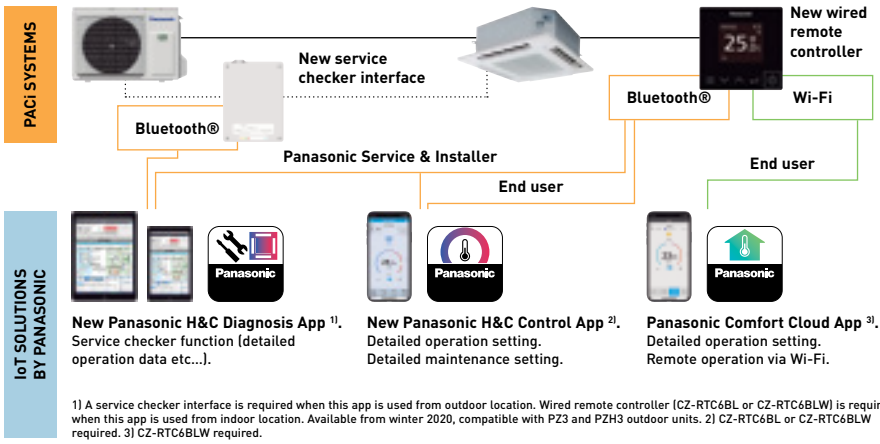
* The use of apps depends on the remote controller model.

CONEX with IoT integration

CONEX

The new wired remote controller series is fully integrated with IoT solutions developed by Panasonic. Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

https://www.youtube.com/watch?v=_USzG_9f6bk&feature=youtu.be



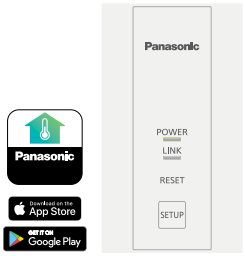
1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6BL or CZ-RTC6BLW) is required when this app is used from indoor location. Available from winter 2020, compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6BL or CZ-RTC6BLW required. 3) CZ-RTC6BLW required.

Model	CZ-RTC6	CZ-RTC6BL	CZ-RTC6BLW
Wired connection compatible with	PACi, PACi NX, ECOi, GHP	PACi, PACi NX, ECOi, GHP	PACi NX only
Wireless functions	No wireless capability	Bluetooth®	Bluetooth® + Wi-Fi
App compatibility			
Panasonic Comfort Cloud App	—	—	✔
Panasonic H&C Control App	—	✔ PACi, PACi NX, ECOi, GHP	✔ PACi NX only
Panasonic H&C Diagnosis App	—	✔ PACi NX only*	✔ PACi NX only*
Outdoor unit settings (remote controller connected to indoor unit)	✔ PACi NX only*	✔ PACi NX only*	✔ PACi NX only*

* When connected to PACi NX indoor and outdoor unit combination.

Commercial Wi-Fi Adaptor

Panasonic CZ-CAPWFC1 interface adaptor, allows connection of one or a group of indoor units to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling and error alerts.





Advanced smartphone control

Control PACi, ECOi and ECO G units with your smartphone from wherever and whenever you are, by using Panasonic Comfort Cloud App and Commercial Wi-Fi Adaptor. This scalable solution is ideal for one system, one site or multiple locations. Coupling the adapter with the already feature rich systems, makes it an ideal solution for residential and commercial applications.

Cloud control is available for all indoor units with P-link

Compatible indoor units type: Model code starting with "S-" (excludes S-80/125MW1E5).
Incompatible indoor units type: Model code starting with "PAW-", "FY-" and S-80/125MW1E5.

1 From 1 to 200 units

User can control up to 10 different sites, with up to 20 units / groups per site. Additionally, one adaptor can be connected to 1 indoor or to a group of maxium 8 indoors.

2 Voice control compatible

When registering the unit to Panasonic Comfort Cloud App it makes compatible with most popular voice assistants.

3 Multi user

The Panasonic Comfort Cloud App allows multi-user access control. Restrict user access to specific units.

4 Easy scheduling

Complex weekly scheduling made simple. Not only for one unit, but across multiple sites and from a smartphone.

5 Energy monitor

See the estimated power consumption and compare with other periods, to see how energy consumption can be reduced even more. Check list of units that provides consumption*.

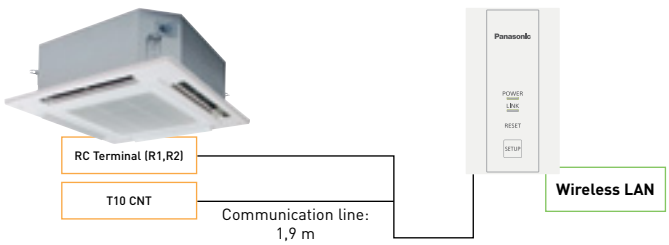
* Function available depending on the model.

6 Error codes

Error code notification through the App, provides early notification and allows for faster repair.

Connection Diagram

Commercial Wi-Fi Adaptor wiring length is 1,9 m and connects to indoor unit thru T10 connector and R1/R2 terminal connectors.



Download free app:



Panasonic Comfort Cloud App.

Other hardware requirements: Router and Internet (purchase and subscribe separately).

Input Voltage	DC 12 V (supplied from T10 connector)
Power Consumption	Maximum 2,4 W
Size (H x W x D)	120 x 70 x 25 mm
Weight	190 g (including communications lines)
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4 GHz band
Operation range	0 ~ 55 °C, 20 ~ 80 RH%
Connectable indoor unit	1 unit
Length of communication line	1,9 m (included in the shipment)

Bringing nature's balance indoors

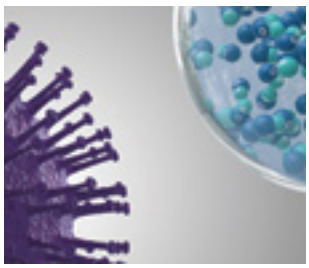
nanoe™ X, technology with the benefits of hydroxyl radicals.

Abundant in nature, hydroxyl radicals (also known as OH radicals) have the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise. nanoe™ X technology can bring these incredible benefits indoors so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and pleasant place to be.

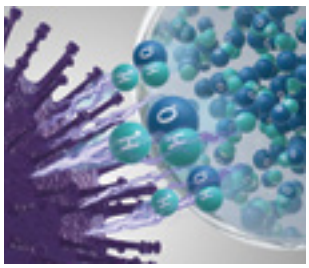


Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment

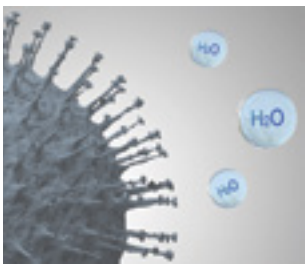
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



1 | nanoe™ X reliably reaches pollutants.



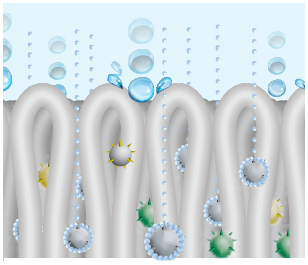
2 | Hydroxyl radicals denature pollutants' proteins.



3 | Pollutants activity is inhibited.

What is unique about nanoe™ X?

Effective on fabrics and surfaces.



1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

Longer lifespan.



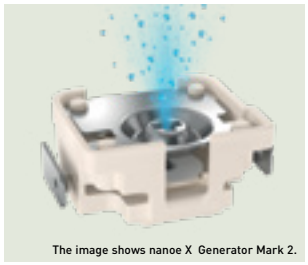
2 | Contained in tiny water particles, nanoe™ X has a longer lifespan to spread easily around the room.

Huge quantity.



3 | nanoe X Generator Mark 2 produces 9,6 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

Maintenance-free.



The image shows nanoe X Generator Mark 2.

4 | No maintenance, no replacement required. nanoe™ X is a filter free solution that does not require maintenance, as its atomisation electrode is enveloped with water during its generation process and it is made with Titatium.

7 effects of nanoe™ X – Panasonic unique technology

Deodorises



Odours

Capacity to inhibit 5 types of pollutants



Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances

Moisturises



Skin and hair

* Refer to https://aircon.panasonic.eu for more details and validation data.

nanoe™ X, internationally-validated technology in testing facilities

The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Malaysia and Japan.

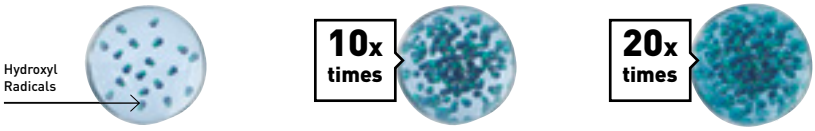
The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

Test results conducted under controlled laboratory conditions. Performance of nanoe™ X might differ in real life environment.

	Tested contents		Result	Capacity	Time	Testing organisation	Report No.
Airborne	Virus	Bacteriophage ΦX174	99,7 % inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1
	Bacteria	Staphylococcus aureus	99,9 % inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	2016_0279
Adhered	Virus	SARS-CoV-2	91,4 % inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3
		SARS-CoV-2	99,9 % inhibited	45 L	2 h	Texcell (France)	1140-01 A1
		Xenotropic murine leukemia virus	99,999 % inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—
		Influenza (H1N1 subtype)	99,9 % inhibited	1 m³	2 h	Kitasato Research Center for Environmental Science	21_0084_1
		Bacteriophage ΦX174	99,80% inhibited	25 m³	8 h	Japan Food Research Laboratories	13001265005-01
	Bacteria	Staphylococcus aureus	99,9 % inhibited	20 m³	8 h	Danish Technological Institute	868988
	Pollen	Ambrosia pollen	99,4 % inhibited	20 m³	8 h	Danish Technological Institute	868988
	Odours	Cigarette smoke odour	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04

First nanoe™ device was developed by Panasonic in 2003

	nanoe™	nanoe™ X	
Generator	2003	**Mark 1** - 2016	**Mark 2** - 2019
	480 billion hydroxyl radicals/sec	4,8 trillion hydroxyl radicals/sec	9,6 trillion hydroxyl radicals/sec
Ion particle structure	Hydroxyl Radicals	**10x** times	**20x** times



nanoe™ X: improving protection 24/7



Acts to clean your air, so that the indoor environment can be a cleaner and pleasant place to be all day long. nanoe™ X works together with heating or cooling function when the during the day and can work independently when the area is not occupied.
Give the air conditioning the strength to increase the protection of your indoor spaces with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.



Cleans the air when you are away.
Leave the nanoe™ mode ON to inhibit certain pollutants and deodorise before you return home.

Improves your environment when you are at home.
Enjoy a cleaner, comfortable space with loved ones.

Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment



Wall-mounted.
Built-in nanoe X Generator Mark 2.



4 Way 90x90 cassette.
Built-in nanoe X Generator Mark 1.



Ceiling.
Built-in nanoe X Generator Mark 2.



Adaptive ducted unit.
Built-in nanoe X Generator Mark 2.

New 4 way 90x90 cassette - PU3

These cassettes offer upgraded nanoe™ X and Econavi technologies to make the room air more comfortable and healthy and to increase the energy efficiency.

nanoe™X

NEW 2021





SEE PRODUCT SPECIFICATIONS

1 Improved indoor air quality with nanoe™ X and fresh air intake

- nanoe™ X technology equipped as standard for improved indoor air quality
- Internal cleaning function for the unit with nanoe™ X
- High external fresh air intake volume with optional kit (CZ-FDU3 + CZ-ATU2)

2 Superior energy efficiency and comfort

- High seasonal efficiency both in heating and cooling, maximum SEER/SCOP = A+++/ A+++
- Econavi: Intelligent sensors to increase energy savings and comfort
- Super quiet operation down to 27 dB(A)

3 Easy installation

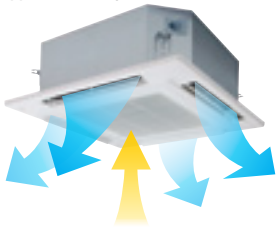
- Light weight, easy piping and integrated drain pump for quick installation
- New wired remote controller CZ-RTC6BL allows easy system setting via Bluetooth®

Always fresh and clean air with nanoe™ X

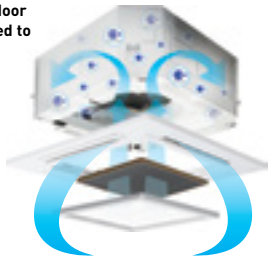
The 4 way 90x90 cassette with nanoe™ X, when tested, has shown to inhibit hazardous substances by 92 %, when compared to natural reduction*.
In addition to the 7 effects of nanoe™ X, the indoor unit can also be cleaned with a short operation of nanoe™ X + dry mode.

* Controllers (CZ-RTC5B or CZ-RTC6/BL/BLW) are required.

After cooling/drying operation, the inside of the indoor unit is automatically dried and nanoe™ X is activated to suppress mould growth and to reduce odour.



Operates the fan to discharge internal humidity.

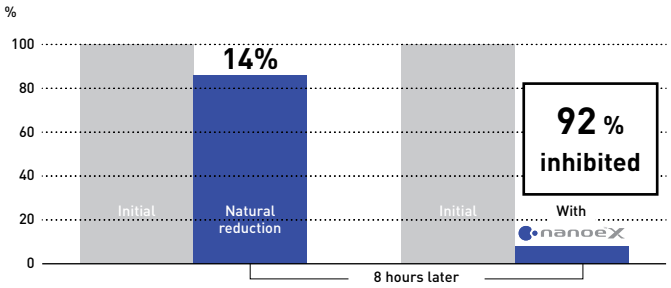


Operate the fan to circulate nanoe™ X internally.

nanoe™ X effect against odour proven in large space

92 % of hexadecane[2] is inhibited after 8-hours exposure in room side 267 m².

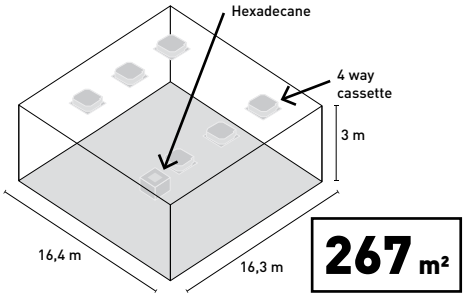
Hexadecane inhabitation ratio.



Test ambient.

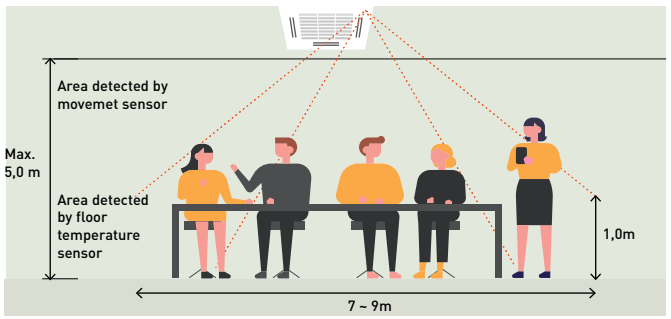
3rd party certification organization SIRIM[3] conducted the performance experiment of 4 way cassette equipped with nanoe X Generator Mark 1 device in inhibiting hexadecane, a chemical contaminant.

2) Hexadecane is a hazardous substance contained in gasoline and diesel exhaust gas, and considered to be one cause of oil odour. 3) SIRIM Berhad (SIRIM),a premier industrial research and technology organization in Malaysia, wholly-owned by the Ministry of Finance Incorporated.



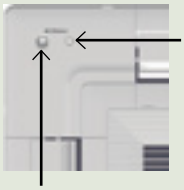
Optional Econavi intelligent sensor

Human activity sensor and floor temperature sensor can reduce waste energy, by optimising air conditioner operation.



Advanced Econavi functions.
2 sensors (movement and floor temperature) can provide a reduction in wasted energy by means of effective control. The floor temperature can be detected with a ceiling height of 5 m.

Econavi exclusive panel. Optional (CZ-KPU3AW)



Floor temperature sensor.
This sensor detects average floor temperature and operates circulation if floor temperature is low.

Movement sensor.
This sensor detects the amount of human activity, and operates effectively.



Wired remote controller CZ-RTC5B or CZ-RTC6/ BL/BLW is required.

New adaptive ducted unit - PF3

New adaptive ducted - PF3 has been completely re-designed to provide better flexibility. The vertical installation is newly available with powerful external static pressure (maximum 150 Pa).

nanoe™X

NEW 2021





https://www.youtube.com/watch?v=LBiRrs0aqXo

SEE PRODUCT SPECIFICATIONS

1 Highly flexible installation

2 installation possibilities (horizontal / vertical).

2 High seasonal performance with slim body

Maximum SEER/SCOP: A++/A++.

3 Comfort operation

Super quiet operation, minimum 22 dB(A)*.

* 3,6 kW model and when operating with external static pressure 50 Pa in low fan mode.

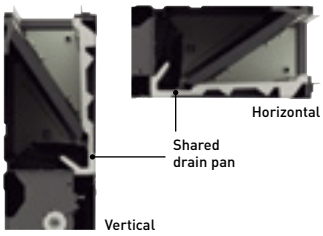
2 installation possibilities (horizontal / vertical)

Vertical installation is newly available.
External static pressure 150 Pa, sufficient for remotely installing units away from the rooms.



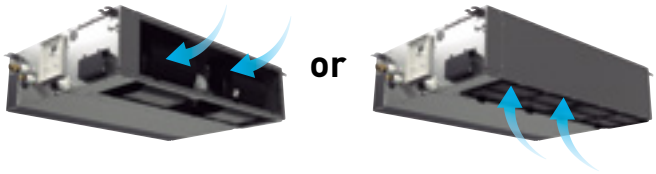
Improved drain pan design

Just one drain pan for both horizontal and vertical installations. No need to modify the unit.



Selectable inlet air position

Inlet air position may be adjusted by means of a removable panel, to allow rear or bottom entry, depending on the duct installation.



Maximum efficiency

	kW	3,6	5,0	6,0	7,1	10,0
Elite	SEER	A++	A++	A++	A++	A++
	SCOP	A+	A+	A++	A++	A+
Standard	SEER	—	—	A++	A++	A++
	SCOP	—	—	A++	A+	A

	12,5	14,0
ηsc	281.7%	275.9%
ηsh	170.0%	171.0%
ηsc	257.4%	252.2%
ηsh	142.6%	140.6%

Compact body

· Only 250 mm high
· Light units from 25 to 39 kg

Conventional model	New adaptive ducted
33 kg	**30 kg**
290 mm	**250 mm**

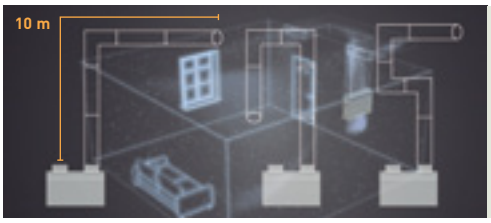
New adaptive ducted



Better indoor air quality with nanoe™ X

The performance of nanoe™ X technology is maintained, even with 10 m long ducts*.
The effect of improved air quality is sufficient to allow for numerous duct shapes to fit the application.

* Panasonic internal survey.

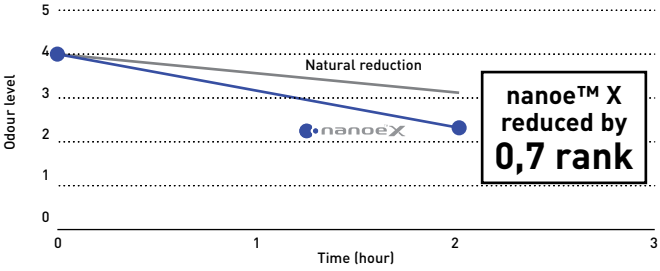


As the experiments demonstrate, up to a duct length of 10 m, effectiveness of nanoe™ X is maintained even if the duct is bended 3 times.

nanoe™ X effect against odour proven in large space

In a room of 139 m², tobacco odour is reduced by a factor of 0,7 when compared to natural reduction over a period of 2 hours.

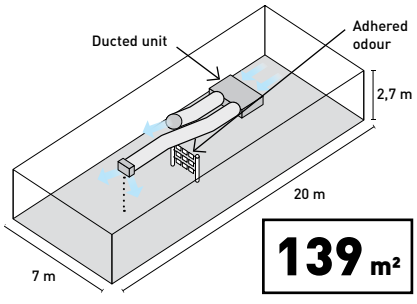
Tobacco deodorisation ratio.



Test ambient.

3rd party international testing institute KAKEN[1] conducted the performance experiment of Adaptive ducted equipped with nanoe X Generator Mark 2 device removing tobacco odour.

1) KAKEN TEST CENTER General Incorporated Foundation in Japan, international testing institute.

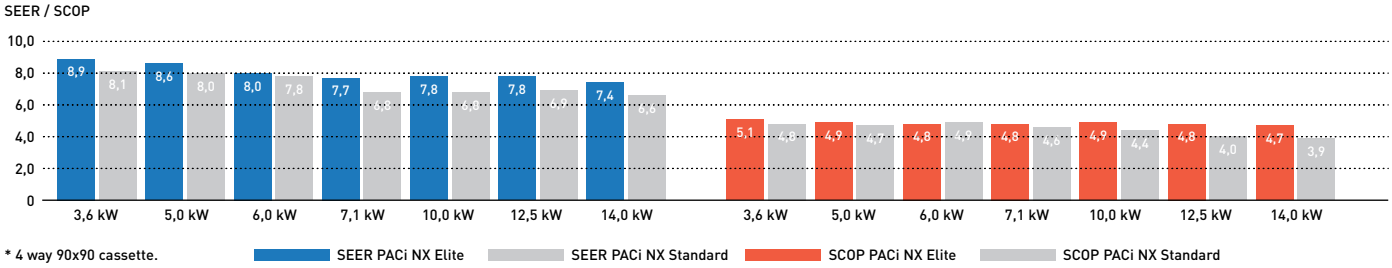


PACi NX: Excellent SEER and SCOP values

High operating efficiency using DC inverter compressor, DC motor and a heat exchanger design.

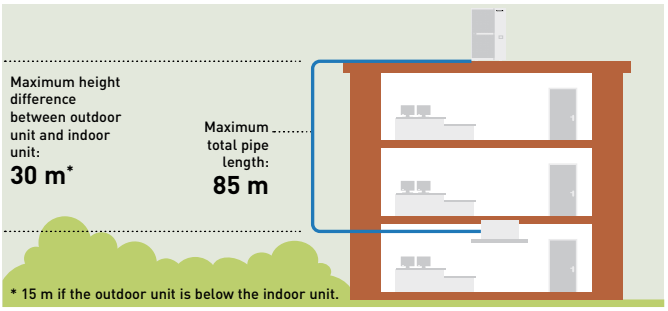


PACi NX R32 seasonal efficiency for daily energy saving



Increased piping length for greater design flexibility

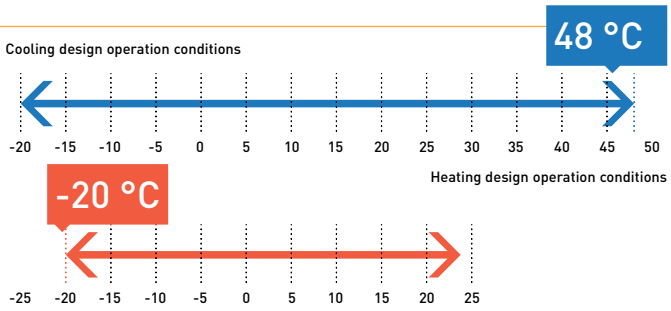
Adaptable to various building types and sizes. Maximum piping length: 85 m (10,0, 12,5, 14,0 kW). 50 m (7,1 kW).



PACi NX Elite design operation conditions

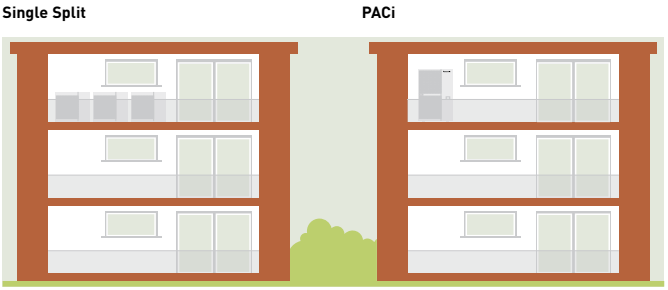
PACi NX elite series are capable of working even in the most difficult ambient conditions. Cooling operation is possible when outdoor temperature is as low as -20 °C[1] or as high as 48 °C[2]. Heating operation can also be utilized at outdoor temperatures down to -20 °C when outdoor temperature is as low as -20 °C.

1) It is possible to operate at -20 °C only computer rooms with the piping length of 30 m or less.
2) Please check technical tables for further details on operating temperature.

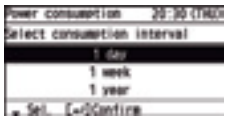


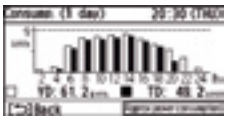
Compact & Flexible-design

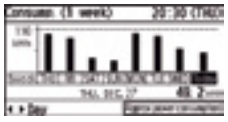
The slim and lightweight design means the PACi outdoor unit can be installed in a number of compact situations. As the unit only weighs 99kg, it is easy to carry and easy to install.

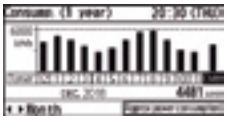


Energy consumption monitoring display with the CZ-RTC5B


Menu selection: 3 types (Day/Week/Year)of display are available.


Daily Energy consumption: Data is shown with Yesterday's record.(Graph starts from 0 o'clock to 24 o'clock only.)


Weekly Energy consumption: Power consumption of each day of the week can be checked.


Annual Energy consumption: Power consumption of each month can be checked.

datanavi

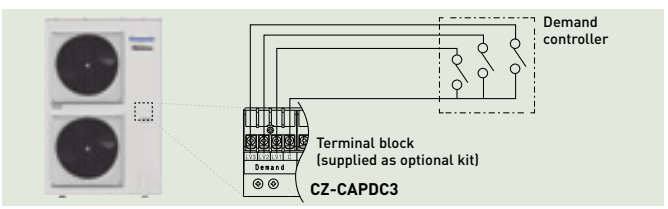
Datanavi, a new way to connect.
Simple and easy support tool with your smartphone.



· Scan & Save AC system info
· Easy access to manual database
· Commissioning, F gas check data history

Demand response compliant (CZ-CAPDC3) as a standard function for 20,0 - 25,0 kW outdoor units

This terminal allows demand control of the outdoor unit.
Several setting levels are available:
· Level-1, 2, 3: 75 / 50 / 0 %
· Level-1, 2 can be set in 40 - 100 % (40, 45, 50...95, 100: each 5 %)
CZ-CAPDC3 also allows for forced stop which can be used for fire-alarm connection on LV3.



Solutions for 24/7/365 applications

High efficiency products for 24/7 applications.
Panasonic has developed a complete range of solutions for server rooms which efficiently protect your servers, keeping them at an appropriate temperature even when the outdoor temperature is below -20 °C.

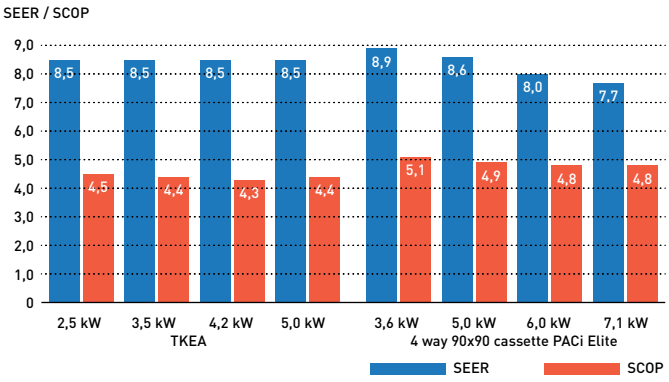
NON STOP OPERATION 24/7 365



High efficiency all the year

Key points:

- From 2,5 to 7,1 kW with TKEA R32 refrigerant units A+++ in cooling
- PACi units from 3,6 to 14,0 kW
- Backup function
- Redundancy function
- Alternative run function
- Error information by Dry Contact
- Operation even at -20 °C outdoor temperature
- High seasonal performance
- Product design for 24/7 operation



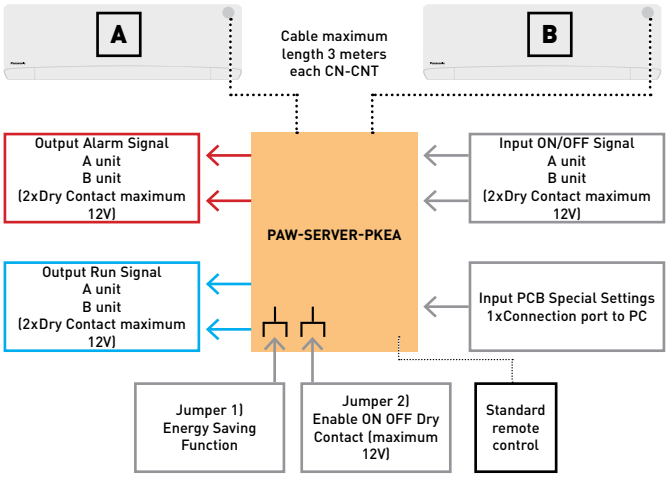
Interface to run 2 TKEA. PAW-SERVER-PKEA

The PAW-SERVER-PKEA server room interface manages redundancy and backup of two TKEA units with two different selectable modes:

- Plug and play by embedded redundancy and backup algorithm (no external signal needed. Further details please refer to operation manual)
- External (third party PLC) redundancy and backup management by Dry Contact

All settings are possible without the need for a computer connection.

A special Energy Saving Mode is selectable by deep switch (available only in plug and play mode). The level of remote control input prohibition can be set when external management is by Dry Contact.



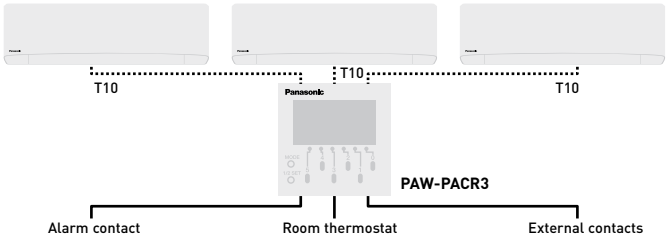
Interfaces to run 2 or 3 PACi and VRF indoor units

PAW-PACR3.

In combination with one PAW-T10 on each indoor unit, allows the redundant operation of 2 (or 3) PACi or VRF indoor units.

All units will be operated sequentially in order to achieve the same operating time (example turn every 8 hours within a 24 hour period).

If the room temperature exceeds a freely set value, the 2nd (or 3rd) unit will be switched ON and an alarm will be activated.



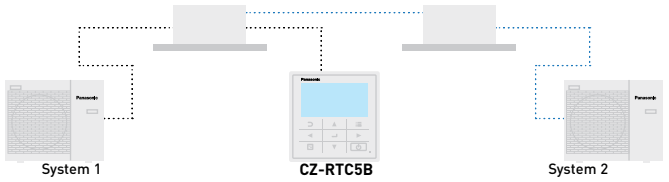
Display and Settings:

- Possible to select next unit manually
- Possible to reset operation
- LED display shows operation status of the 2 or 3 units
- Operation status output
- Alarm LED and alarm output
- Temperature limit can be set
- Temperature hysteresis can be set
- Room temperature is displayed
- Time counter displayed

Backup control by using CZ-RTC5B.

Group wiring of 2 systems of PACi can do auto individual control.

- Rotation operation
- Backup operation
- Support operation

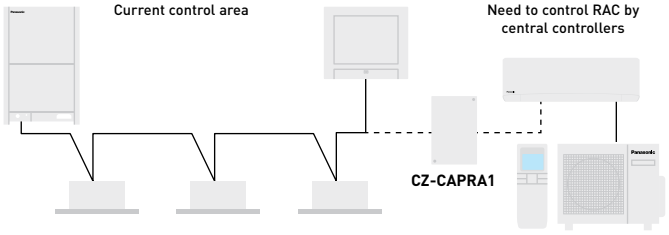


CZ-CAPRA1.

RAC interface adapter for integration into P-Link.

Integrates any unit in big system control:

- TKEA server room integration
- Small offices with domestic indoors
- Tender for refurbishment (old system Domestic and VRF in one installation)



Current system for PACi / VRF. Central controller can connect to P-Link line to control units directly.

RAC units cannot connect directly to P-Link to be managed by Central Controllers.

It's necessary to have interface between P-Link and RAC protocol to cover basic operating items.



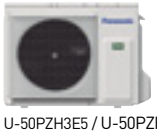
Basic operation items: ON/OFF, Mode select, Temperature setting, Fan speed, Flap setting, Remote control prohibit.
External input: ON/OFF control signal, Abnormal stop signal.
External output for Relay 1): Operation status (ON/OFF), Alarm status output.

1) Because current CN-CNT connector can not provide the power for external output relay, additional Input power for external relay is necessary.

Commercial units range

NEW 2021

Page	Indoor units	2,5 kW	3,6 kW	4,5 kW [1]	5,0 kW	6,0 kW
P. 184	NEW wall-mounted Inverter+ • R32		S-3650PK3E	S-3650PK3E	S-3650PK3E	S-6010PK3E
P. 188	NEW 4 way 60x60 cassette Inverter+ • R32 [2]	 S-25PY3E	 S-36PY3E		 S-50PY3E	 S-60PY3E
P. 190	NEW 4 way 90x90 cassette Inverter+ • R32		 S-3650PU3E	 S-3650PU3E	 S-3650PU3E	 S-6071PU3E
P. 194	NEW ceiling Inverter+ • R32		 S-3650PT3E	 S-3650PT3E	 S-3650PT3E	 S-6071PT3E
P. 198	NEW adaptive ducted Inverter+ • R32		 S-3650PF3E	 S-3650PF3E	 S-3650PF3E	 S-6071PF3E
P. 202	High static pressure hide-away 20-25 kW Inverter+ • R32					
P. 204	4 Way 60x60 cassette Inverter+ • R32		 S-36PY2E5B	 S-45PY2E5B	 S-50PY2E5B	

Outdoor units	2,5 kW	3,6 kW		5,0 kW	6,0 kW
PACi NX Elite • R32		 U-36PZH3E5 / U-36PZH2E5 [3]		 U-50PZH3E5 / U-50PZH2E5 [3]	 U-60PZH3E5
PACi NX Standard • R32	 U-25PZ3E5	 U-36PZ3E5		 U-50PZ3E5	 U-60PZ3E5A

1) The 4,5 kW indoor capacity options are only available only for twin, triple and double-twin combinations. * U-__E5 Single phase / U-__E8 Three phase. 2) Available in Autumn 2021. 3) PZH2 models only for PY2 models.

OPTIONAL UNITS ON VENTILATION SECTION

	7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
	S-6010PK3E	S-6010PK3E				
	 S-6071PU3E	 S-1014PU3E	 S-1014PU3E	 S-1014PU3E		
	 S-6071PT3E	 S-1014PT3E	 S-1014PT3E	 S-1014PT3E		
	 S-6071PF3E	 S-1014PF3E	 S-1014PF3E	 S-1014PF3E		
					 S-200PE3E5B	 S-250PE3E5B

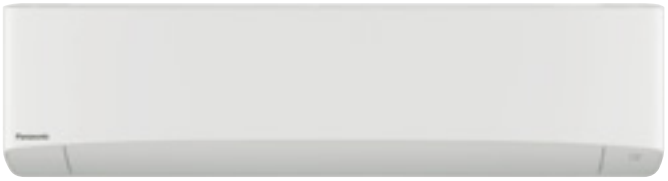
	7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
	 U-71PZH3E5 / U-71PZH3E8	 U-100PZH3E5 / U-100PZH3E8	 U-125PZH3E5 / U-125PZH3E8	 U-140PZH3E5 / U-140PZH3E8	 U-200PZH2E8	 U-250PZH2E8
	 U-71PZ3E5A	 U-100PZ3E5 / U-100PZ3E8	 U-125PZ3E5 / U-125PZ3E8	 U-140PZ3E5 / U-140PZ3E8		

NEW 2021

nanoe™ X as a standard.

NEW PACi NX Series Elite wall-mounted Inverter+ • R32

The wall-mounted units with stylish matt color can be offered for many applications such as studios, gyms, high ceiling areas and even computer server rooms.
The compact design and flat face ensure discreet installation, even in a small space.



			Single phase				
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW
Kit			**KIT-36PK3ZH5**	**KIT-50PK3ZH5**	**KIT-60PK3ZH5**	**KIT-71PK3ZH5**	**KIT-100PK3ZH5**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,1 (1,2 - 7,1)	7,1 (2,2 - 9,0)	9,5 (3,1 - 10,5)
EER [1]		W/W	4,93 (5,45 - 4,49)	4,24 (5,45 - 3,61)	3,86 (5,45 - 3,02)	3,50 (5,79 - 2,69)	3,26 (5,34 - 3,09)
SEER [2]			**8,4 A++**	**8,0 A++**	**7,2 A++**	**6,8 A++**	**6,4 A++**
Pdesign		kW	3,6	5,0	6,1	7,1	9,5
Input power cooling		kW	0,73 (0,22 - 0,89)	1,18 (0,22 - 1,55)	1,58 (0,22 - 2,35)	2,03 (0,38 - 3,35)	2,91 (0,58 - 3,40)
Annual energy consumption [3]		kWh/a	150	219	297	365	520
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	8,0 (2,0 - 9,0)	9,5 (3,1 - 11,5)
COP [1]		W/W	4,82 (5,45 - 4,17)	4,15 (5,45 - 3,55)	4,19 (5,45 - 3,40)	4,00 (5,56 - 3,16)	3,97 (5,54 - 3,43)
SCOP [2]			**4,9 A++**	**4,7 A++**	**4,8 A++**	**4,7 A++**	**4,1 A+**
Pdesign at -10 °C		kW	3,6	4,5	4,6	5,2	8,0
Input power heating		kW	0,83 (0,22 - 1,20)	1,35 (0,22 - 1,83)	1,67 (0,22 - 2,35)	2,00 (0,36 - 2,85)	2,39 (0,56 - 3,35)
Annual energy consumption [3]		kWh/a	1029	1341	1342	1549	2732
Indoor unit			**S-3650PK3E**	**S-3650PK3E**	**S-6010PK3E**	**S-6010PK3E**	**S-6010PK3E**
Air flow	Hi / Med / Lo	m³/min	13,0 / 11,0 / 9,0	16,0 / 13,5 / 11,0	20,0 / 17,5 / 14,5	20,0 / 17,5 / 14,5	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	0,9	1,8	2,0	3,0	4,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	35 / 31 / 27	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	51 / 47 / 43	56 / 52 / 48	63 / 60 / 56	63 / 60 / 56	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	13	13	14	14	14
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH3E5**	**U-100PZH3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,60 - 3,45 - 3,30	5,60 - 5,35 - 5,10	7,40 - 7,10 - 6,80	10,0 - 9,60 - 9,20	14,40 - 13,80 - 13,20
	Heat	A	4,05 - 3,90 - ,3,70	6,40 - 6,10 - 5,85	7,75 - 7,40 - 7,10	9,65 - 9,35 - 8,95	11,70 - 11,30 - 10,80
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	61,0 / 60,0	118,0 / 108,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 940 x 340	1416 x 940 x 340
Net weight		kg	42	42	43	65	98
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 85
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30	30	30
Additional gas amount		g/m	15	15	15	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +48	-20 ~ +48 [9]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

- Modern design with flat face and compact size
- DC fan for better efficiency and control
- Six directional piping outlet
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Closed discharge port

When the unit is turned OFF, the flap closes completely to prevent dust getting into the unit and to keep the equipment clean.

Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

Piping outlet in six directions

Piping outlet is possible in the six directions of right, right rear, right bottom, left, left rear and left bottom, making the installation work easier.


CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW


Optional controller. Infrared remote controller.
CZ-RWS3


Optional Econavi sensor.
CZ-CENSC1

			Three phase	
			7,1 kW	**10,0 kW**
Kit			**KIT-71PK3ZH8**	**KIT-100PK3ZH8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	7,1 (2,2 - 9,0)	9,5 (3,1 - 10,5)
EER [1]		W/W	3,50	3,26
SEER [2]			**6,7 A++**	**6,3 A++**
Pdesign		kW	7,1	9,5
Input power cooling		kW	2,03	2,91
Annual energy consumption [3]		kWh/a	370	526
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	9,5 (3,1 - 11,5)
COP [1]		W/W	4,00	3,97
SCOP [2]			**4,7 A++**	**4,1 A+**
Pdesign at -10 °C		kW	5,2	8,0
Input power heating		kW	2,00	2,39
Annual energy consumption [3]		kWh/a	1549	2732
Indoor unit			**S-6010PK3E**	**S-6010PK3E**
Air flow	Hi / Med / Lo	m³/min	20,0 / 17,5 / 14,5	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	3,0	4,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	47 / 44 / 40	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	63 / 60 / 56	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	14	14
nanoe X Generator			Mark 2	Mark 2
Outdoor unit			**U-71PZH3E8**	**U-100PZH3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	3,40 - 3,25 - 3,15	4,85 - 4,60 - 4,40
	Heat	A	3,30 - 3,15 - 3,05	4,00 - 3,80 - 3,60
Air flow	Cool / Heat	m³/min	61,0 / 60,0	118,0 / 108,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69
Dimension	H x W x D	mm	996 x 940 x 340	1416 x 940 x 340
Net weight		kg	65	98
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 85
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30
Additional gas amount		g/m	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +48	-20 ~ +48 [9]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. 9) For models 100 ~ 140PZH3E5(8), it is possible to operate the lowest -20 °C in the computer rooms with the piping length of 30 m or less. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.



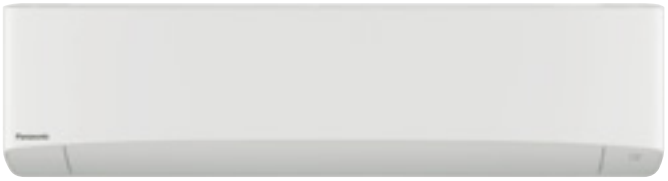
SEER and SCOP: For S-3650PK3E + U-36PZH3E5. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021

nanoe™ X as a standard.

NEW PACi NX Series Standard wall-mounted Inverter+ • R32



The wall-mounted units with stylish matt color can be offered for many applications such as studios, gyms, high ceiling areas and even computer server rooms.
The compact design and flat face ensure discreet installation, even in a small space.

			Single phase				
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW
Kit			**KIT-36PK3Z5**	**KIT-50PK3Z5**	**KIT-60PK3Z5**	**KIT-71PK3Z5**	**KIT-100PK3Z5**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,0)	5,0 (1,5 - 5,6)	6,1 (2,0 - 7,1)	7,1 (2,6 - 7,7)	9,0 (3,0 - 9,7)
EER [1]		W/W	4,14	3,52	3,67	3,16	3,47
SEER [2]			**7,6 A++**	**7,4 A++**	**7,0 A++**	**5,8 A+**	**6,5 A++**
Pdesign		kW	3,6	5,0	6,1	7,1	9,0
Input power cooling		kW	0,87	1,42	1,66	2,25	2,59
Annual energy consumption [3]		kWh/a	166	237	3,05	429	485
Heating capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,1 (1,8 - 7,0)	7,1 (2,1 - 8,1)	9,0 (3,0 - 10,5)
COP [1]		W/W	4,62	4,20	4,39	4,23	3,93
SCOP [2]			**4,5 A+**	**4,4 A+**	**4,7 A++**	**4,4 A+**	**3,9 A**
Pdesign at -10 °C		kW	2,8	4,0	4,6	5,2	9,0
Input power heating		kW	0,78	1,19	1,39	1,68	2,29
Annual energy consumption [3]		kWh/a	872	1273	1370	1653	3231
Indoor unit			**S-3650PK3E**	**S-3650PK3E**	**S-6010PK3E**	**S-6010PK3E**	**S-6010PK3E**
Air flow	Hi / Med / Lo	m³/min	13,0 / 11,0 / 9,0	16,0 / 13,5 / 11,0	20,0 / 17,5 / 14,5	20,0 / 17,5 / 14,5	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	0,9	1,8	2,0	3,0	4,3
Sound pressure [4]	Hi / Med / Lo	dB(A)	35 / 31 / 27	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	51 / 47 / 43	56 / 52 / 48	63 / 60 / 56	63 / 60 / 56	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	13	13	14	14	14
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZ3E5**	**U-50PZ3E5**	**U-60PZ3E5A**	**U-71PZ3E5A**	**U-100PZ3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,05 - 3,85 - 3,70	6,60 - 6,30 - 6,05	7,70 - 7,35 - 7,05	10,4 - 10,00 - 9,55	12,9 - 12,4 - 11,9
	Heat	A	3,65 - 3,50 - 3,35	5,60 - 5,35 - 5,10	6,45 - 6,15 - 5,90	7,80 - 7,45 - 7,15	11,4 - 10,9 - 10,5
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370
Net weight		kg	32	35	42	50	83
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	1/4 (6,35) [5]	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88) [6]	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50
Elevation difference (in/out) [7]		m	15 / 15 [8]	15 / 15 [8]	15 / 30 [8]	20 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	7,5	7,5	30	30	30
Additional gas amount		g/m	10	15	15	17	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,4 / 1,62
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

- Modern design with flat face and compact size
- DC fan for better efficiency and control
- Six directional piping outlet
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Closed discharge port

When the unit is turned OFF, the flap closes completely to prevent dust getting into the unit and to keep the equipment clean.

Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

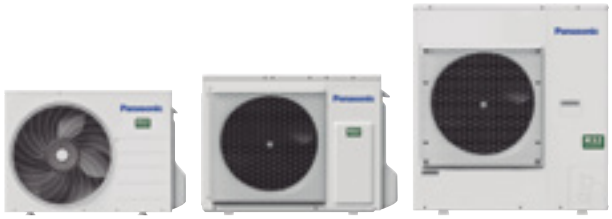
Piping outlet in six directions

Piping outlet is possible in the six directions of right, right rear, right bottom, left, left rear and left bottom, making the installation work easier.



CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION





Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW



Optional controller. Infrared remote controller.
CZ-RWS3



Optional Econavi sensor.
CZ-CENSC1

			Three phase
			10,0 kW
Kit			**KIT-100PK3Z8**
Remote controller			**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	9,0 (3,0 - 9,7)
EER [1]		W/W	3,47
SEER [2]			**6,5 A++**
Pdesign		kW	9,0
Input power cooling		kW	2,59
Annual energy consumption [3]		kWh/a	485
Heating capacity	Nominal (Min - Max)	kW	9,0 (3,0 - 10,5)
COP [1]		W/W	3,93
SCOP [2]			**3,9 A**
Pdesign at -10 °C		kW	9,0
Input power heating		kW	2,29
Annual energy consumption [3]		kWh/a	3231
Indoor unit			**S-6010PK3E**
Air flow	Hi / Med / Lo	m³/min	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	4,3
Sound pressure [4]	Hi / Med / Lo	dB(A)	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236
Net weight		kg	14
nanoe X Generator			Mark 2
Outdoor unit			**U-100PZ3E8**
Power source		V	380 - 400 - 415
Current	Cool	A	4,30 - 4,10 - 3,95
	Heat	A	3,80 - 3,65 - 3,50
Air flow	Cool / Heat	m³/min	73,0 / 73,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70
Dimension	H x W x D	mm	996 x 980 x 370
Net weight		kg	83
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)
Pipe length range		m	5 ~ 50
Elevation difference (in/out) [7]		m	15 / 30 [8]
Pipe length for additional gas		m	30
Additional gas amount		g/m	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,4 / 1,62
Operating range	Cool Min ~ Max	°C	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

R32 | A++ 7,6 SEER | A++ 4,7 SCOP | INVERTER+ | -10°C COOLING MODE | -15°C HEATING MODE | nanoeX | DC FAN | R22/R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER: For S-3650PK3E + U-36PZ3E5. SCOP: For S-6010PK3E + U-60PZ3E5A. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021



nanoe™ X as a standard.

NEW PACi NX Series Elite and Standard 4 way 60x60 cassette Inverter+ • R32

New 4 way 60x60 cassette - PY3.

· From 2,5 to 6,0 kW (4 capacity sizes)
· Chassis dimensions (H x W x D): 230 x 575 x 575 mm
· SEER/SCOP class A++*
· Built-in drain pump

* SCOP class A+ in case of 2,5 / 6,0 kW.

Elite			Single phase		
			3,6 kW	**5,0 kW**	**6,0 kW**
Kit					
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,0 (1,2 - 6,5)
EER [1]		W/W	4,50	3,76	3,43
SEER [2]			**6,8 A++**	**6,7 A++**	**6,7 A++**
Pdesign		kW	3,6	5,0	6,0
Input power cooling		kW	0,80	1,33	1,75
Annual energy consumption [3]		kWh/a			
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 7,5)
COP [1]		W/W	4,12	3,37	3,35
SCOP [2]			**4,7 A++**	**4,6 A++**	**4,3 A+**
Pdesign at -10 °C		kW	3,6	4,5	4,6
Input power heating		kW	0,97	1,66	2,09
Annual energy consumption [3]		kWh/a			
Indoor unit			**S-36PY3E**	**S-50PY3E**	**S-60PY3E**
Air flow	Hi / Med / Lo	m³/min	9,5 / 8,0 / 6,0	12,0 / 9,5 / 6,5	14,0 / 10,5 / 8,0
Moisture removal volume		L/h	1,5	2,3	2,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	34 / 30 / 25	39 / 34 / 27	43 / 37 / 31
Sound power	Hi / Med / Lo	dB(A)	49 / 45 / 40	54 / 49 / 42	58 / 52 / 46
Dimension	Indoor (H x W x D)	mm			
	Panel (H x W x D)	mm			
Net weight	Indoor / Panel	kg			
nanoe X Generator					
Outdoor unit			**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,25 - 3,10 - 3,00	5,50 - 5,25 - 5,05	6,95 - 6,65 - 6,35
	Heat	A	3,60 - 3,45 - 3,30	6,25 - 6,00 - 5,75	8,05 - 7,70 - 7,40
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320
Net weight		kg	42	42	43
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30
Additional gas amount		g/m	15	15	15
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24

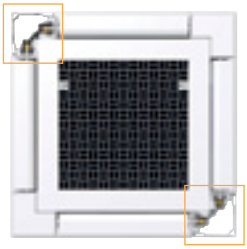
Tentative data

Compact and stylish design

· Ceiling depth is only 243 mm
· Exposed area is only 30 mm

Individual flap control

Better control of the air flow with 2 flap motors.



Industry-leading energy efficiency

Achieved SEER/SCOP class A++*.

* SCOP class A+ in case of 2,5 / 6,0 kW.

R32 | A++ 6,8 SEER | A++ 4,7 SCOP | 28% ECONAVI | INVERTER+ | -15°C COOLING MODE | -20°C HEATING MODE | nanoeX | DC FAN | R22/R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-36PY3E + U-36PZH3E5. ECONAVI and INTERNET CONTROL: Optional.


CZ-RTC5B


Panel.
CZ-KPY4

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION




Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW


Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRY3


Optional Econavi sensor.
CZ-CENSC1

Standard			Single phase			
			2,5 kW	**3,6 kW**	**5,0 kW**	**6,0 kW**
Kit						
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	2,5 (1,5 - 3,9)	3,6 (1,5 - 4,0)	5,0 (1,5 - 5,6)	6,0 (2,0 - 7,0)
EER [1]		W/W	4,46	3,96	3,50	3,39
SEER [2]			**6,3 A++**	**6,7 A++**	**6,6 A++**	**6,6 A++**
Pdesign		kW	2,5	3,6	5,0	6,0
Input power cooling		kW	0,56	0,91	1,43	1,77
Annual energy consumption [3]		kWh/a				
Heating capacity	Nominal (Min - Max)	kW	3,2 (1,5 - 4,6)	3,6 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,0 (1,8 - 7,0)
COP [1]		W/W	4,44	4,29	3,94	3,61
SCOP [2]			**4,4 A+**	**4,3 A+**	**4,2 A+**	**4,1 A+**
Pdesign at -10 °C		kW	2,5	2,8	4,0	4,6
Input power heating		kW	0,72	0,84	1,27	1,66
Annual energy consumption [3]		kWh/a				
Indoor unit			**S-25PY3E**	**S-36PY3E**	**S-50PY3E**	**S-60PY3E**
Air flow	Hi / Med / Lo	m³/min	8,5 / 7,0 / 6,0	9,5 / 8,0 / 6,0	12,0 / 9,5 / 6,5	14,0 / 10,5 / 8,0
Moisture removal volume		L/h	0,7	1,5	2,3	2,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	31 / 28 / 25	34 / 30 / 25	39 / 34 / 27	43 / 37 / 31
Sound power	Hi / Med / Lo	dB(A)	46 / 43 / 40	49 / 45 / 40	54 / 49 / 42	58 / 52 / 46
Dimension	Indoor (H x W x D)	mm				
	Panel (H x W x D)	mm				
Net weight	Indoor / Panel	kg				
nanoe X Generator						
Outdoor unit			**U-25PZ3E5**	**U-36PZ3E5**	**U-50PZ3E5**	**U-60PZ3E5A**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A		4,05 - 3,85 - 3,70	6,60 - 6,30 - 6,05	7,70 - 7,35 - 7,05
	Heat	A		3,65 - 3,50 - 3,35	5,60 - 5,35 - 5,10	6,45 - 6,15 - 5,90
Air flow	Cool / Heat	m³/min		33,6 / 34,0	32,7 / 31,9	42,6 / 41,5
Sound pressure	Cool / Heat (Hi)	dB(A)		46 / 47	46 / 46	47 / 48
Sound power	Cool / Heat (Hi)	dB(A)		64 / 66	64 / 64	64 / 65
Dimension	H x W x D	mm		619 x 824 x 299	619 x 824 x 299	695 x 875 x 320
Net weight		kg		32	35	42
Pipe diameter	Liquid pipe	Inch (mm)		1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]
	Gas pipe	Inch (mm)		1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]
Pipe length range		m		3 ~ 15	3 ~ 20	3 ~ 40
Elevation difference (in/out) [7]		m		15 / 15 [8]	15 / 15 [8]	15 / 30 [8]
Pipe length for additional gas		m		7,5	7,5	7,5
Additional gas amount		g/m		10	15	15
Refrigerant (R32) / CO_2 Eq.		kg / T		0,87 / 0,59	1,14 / 0,77	1,15 / 0,78
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Tentative data

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRY3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. 9) For models 100 ~ 140PZH3E5(8), it is possible to operate the lowest -20 °C in the computer rooms with the piping length of 30 m or less.* Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF. *** Available in Autumn 2021.



SEER: For S-36PY3E + U-36PZ3E5. SCOP: For S-25PY3E + U-25PZ3E5. ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021



nanoe™ X as a standard.

NEW PACi NX Series Elite 4 way 90x90 cassette Inverter+ • R32

New 4 way 90x90 cassette - PU3.
Powerful turbo fan and intelligent Econavi sensor ensure high energy efficiency, and nanoe™ X which is equipped as standard provides an exceptional level of indoor air quality.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PU3ZH5	KIT-50PU3ZH5	KIT-60PU3ZH5	KIT-71PU3ZH5	KIT-100PU3ZH5	KIT-125PU3ZH5	KIT-140PU3ZH5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,0 (1,2 - 7,1)	7,1 (2,2 - 9,0)	10,0 (3,1 - 12,5)	12,5 (3,2 - 14,0)	14,0 (3,3 - 16,0)
EER [1]		W/W	5,45	4,31	4,05	4,06	4,41	3,80	3,41
SEER / ηsc [2]			**8,9 A+++**	**8,6 A+++**	**8,0 A++**	**7,7 A++**	**7,8 A++**	**304,3 %**	**286,6 %**
Pdesign		kW	3,6	5,0	6,0	7,1	10,0	12,5	14,0
Input power cooling		kW	0,66	1,16	1,48	1,75	2,27	3,29	4,11
Annual energy consumption [3]		kWh/a	142	203	263	323	449	—	—
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]		W/W	5,41	4,24	4,02	4,30	5,00	4,61	4,30
SCOP / ηsc [2]			**5,1 A+++**	**4,9 A++**	**4,8 A++**	**4,8 A++**	**4,9 A++**	**186,0 %**	**181,2 %**
Pdesign at -10 °C		kW	3,6	4,5	4,7	5,2	8,0	9,5	10,6
Input power heating		kW	0,74	1,32	1,74	1,86	2,24	3,04	3,72
Annual energy consumption [3]		kWh/a	988	1286	1371	1517	2286	—	—
Indoor unit			**S-3650PU3E**	**S-3650PU3E**	**S-6071PU3E**	**S-6071PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**
Air flow	Hi / Med / Lo	m³/min	14,5 / 13,0 / 11,5	16,5 / 13,5 / 11,5	21,0 / 16,0 / 13,0	22,0 / 16,0 / 13,0	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	0,7	1,6	1,7	2,5	2,7	4,8	6,0
Sound pressure [4]	Hi / Med / Lo	dB(A)	30 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	45 / 43 / 42	47 / 44 / 42	51 / 46 / 43	52 / 46 / 43	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	19 / 5	19 / 5	20 / 5	20 / 5	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit			**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH3E5**	**U-100PZH3E5**	**U-125PZH3E5**	**U-140PZH3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,25 - 3,10 - 3,00	5,50 - 5,25 - 5,05	6,95 - 6,65 - 6,35	8,65 - 8,25 - 7,95	11,20-10,70-10,30	16,10-15,40-14,70	20,10-19,20-18,40
	Heat	A	3,60 - 3,45 - 3,30	6,25 - 6,00 - 5,75	8,05 - 7,70 - 7,40	9,00 - 8,70 - 8,35	10,90-10,60-10,10	14,90-14,20-13,60	18,20-17,40-16,70
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	53 / 53	54 / 54
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	70 / 70	71 / 71
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight		kg	42	42	43	65	98	98	98
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	45	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +48	-20 ~ +48 [9]	-20 ~ +48 [9]	-20 ~ +48 [9]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

- High performance turbo fan, path system for heat exchanger
- Econavi: An optional intelligent sensor to reduce waste of energy
- nanoe™ X (Generator Mark 1= 4,8 trillion hydroxyl radicals/sec) as standard for better indoor air quality, indoor unit internal cleaning with nanoe™ X and dry operation
- Lower noise in slow fan operation
- Light weight, easy piping and integrated drain pump for quick installation
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3+CZ-ATU2)


CZ-RTC5B


Standard panel.
CZ-KPU3W








Optional Econavi panel (CZ-RTC5B is required).
CZ-KPU3AW



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW


Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRU3W

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

			Three phase			
			7,1 kW	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			**KIT-71PU3ZH8**	**KIT-100PU3ZH8**	**KIT-125PU3ZH8**	**KIT-140PU3ZH8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	7,1 (2,2 - 9,0)	10,0 (3,1 - 12,5)	12,5 (3,2 - 14,0)	14,0 (3,3 - 16,0)
EER [1]		W/W	4,06	4,41	3,80	3,41
SEER / ηsc [2]			**7,6 A++**	**7,7 A++**	**303,3 %**	**285,6 %**
Pdesign		kW	7,1	10,0	12,5	14,0
Input power cooling		kW	1,75	2,27	3,29	4,11
Annual energy consumption [3]		kWh/a	327	455	—	—
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]		W/W	4,30	5,00	4,61	4,30
SCOP / ηsc [2]			**4,8 A++**	**4,9 A++**	**186,0 %**	**181,1 %**
Pdesign at -10 °C		kW	5,2	8,0	9,5	10,6
Input power heating		kW	1,86	2,24	3,04	3,72
Annual energy consumption [3]		kWh/a	1517	2286	—	—
Indoor unit			**S-6071PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**
Air flow	Hi / Med / Lo	m³/min	22,0 / 16,0 / 13,0	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	2,5	2,7	4,8	6,0
Sound pressure [4]	Hi / Med / Lo	dB(A)	37 / 31 / 28	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	52 / 46 / 43	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	20 / 5	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit			**U-71PZH3E8**	**U-100PZH3E8**	**U-125PZH3E8**	**U-140PZH3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	2,90 - 2,80 - 2,70	3,80 - 3,60 - 3,45	5,45 - 5,15 - 5,00	6,80 - 6,45 - 6,20
	Heat	A	3,05 - 2,95 - 2,85	3,75 - 3,55 - 3,40	5,10 - 4,80 - 4,65	6,20 - 5,90 - 5,65
Air flow	Cool / Heat	m³/min	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	53 / 53	54 / 54
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	70 / 70	71 / 71
Dimension	H x W x D	mm	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight		kg	65	98	98	98
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30	30
Additional gas amount		g/m	45	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +48	-20 ~ +48 [9]	-20 ~ +48 [9]	-20 ~ +48 [9]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRU3W	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
CZ-KPU3AW	Econavi exclusive panel
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-FDU3+CZ-ATU2	Fresh air-intake kit

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. 9) For models 100 ~ 140PZH3E5(8), it is possible to operate the lowest -20 °C in the computer rooms with the piping length of 30 m or less.* Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.



SEER and SCOP: For S-3650PU3E + U-36PZH3E5. ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021



NEW PACi NX Series Standard 4 way 90x90 cassette Inverter+ • R32

New 4 way 90x90 cassette - PU3.
Powerful turbo fan and intelligent Econavi sensor ensure high energy efficiency, and nanoe™ X which is equipped as standard provides an exceptional level of indoor air quality.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PU3Z5	KIT-50PU3Z5	KIT-60PU3Z5	KIT-71PU3Z5	KIT-100PU3Z5	KIT-125PU3Z5	KIT-140PU3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,0)	5,0 (1,5 - 5,6)	6,0 (2,0 - 7,1)	7,1 (2,6 - 7,7)	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	4,34	3,91	3,73	3,27	3,82 (5,36 - 2,88)	3,58 (5,33 - 2,81)	3,23 (5,32 - 2,73)
SEER / ηsc [2]			**8,1 A++**	**8,0 A++**	**7,8 A++**	**6,8 A++**	**6,8 A++**	**267,0 %**	**257,0 %**
Pdesign		kW	3,6	5,0	6,0	7,1	10,0	12,5	14,0
Input power cooling	Nominal (Min - Max)	kW	0,83	1,28	1,61	2,17	2,62 (0,56 - 4,00)	3,49 (0,60 - 4,80)	4,34 (0,62 - 5,50)
Annual energy consumption [3]		kWh/a	156	219	269	365	515	—	—
Heating capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,0 (1,8 - 7,0)	7,1 (2,1 - 8,1)	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	5,07	4,63	4,48	4,23	4,93 (5,36 - 3,59)	4,43 (5,50 - 3,57)	4,18 (5,48 - 3,33)
SCOP / ηsc [2]			**4,8 A++**	**4,7 A++**	**4,9 A++**	**4,6 A++**	**4,4 A+**	**157,0 %**	**152,2 %**
Pdesign at -10 °C		kW	2,8	4,0	4,6	5,2	10,0	12,5	14,0 (at -7 °C)
Input power heating	Nominal (Min - Max)	kW	0,71	1,08	1,34	1,68	2,03 (0,56 - 3,90)	2,82 (0,60 - 4,20)	3,35 (0,62 - 4,80)
Annual energy consumption [3]		kWh/a	817	1191	1314	1583	3182	—	—
Indoor unit			**S-3650PU3E**	**S-3650PU3E**	**S-6071PU3E**	**S-6071PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**
Air flow	Hi / Med / Lo	m³/min	14,5 / 13,0 / 11,5	16,5 / 13,5 / 11,5	21,0 / 16,0 / 13,0	22,0 / 16,0 / 13,0	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	0,7	1,6	1,7	2,5	2,7	4,8	6,0
Sound pressure [4]	Hi / Med / Lo	dB(A)	30 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	45 / 43 / 42	47 / 44 / 42	51 / 46 / 43	52 / 46 / 43	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	19 / 5	19 / 5	20 / 5	20 / 5	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit			**U-36PZ3E5**	**U-50PZ3E5**	**U-60PZ3E5A**	**U-71PZ3E5A**	**U-100PZ3E5**	**U-125PZ3E5**	**U-140PZ3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,85 - 3,70 - 3,55	5,95 - 5,70 - 5,45	7,45 - 7,15 - 6,85	10,00 - 9,65 - 9,25	13,10 - 12,50 - 12,00	16,90 - 16,10 - 15,40	21,00 - 20,00 - 19,20
	Heat	A	3,35 - 3,20 - 3,05	5,05 - 4,85 - 4,65	6,20 - 5,95 - 5,70	7,80 - 7,45 - 7,15	10,10 - 9,70 - 9,30	13,60 - 13,00 - 12,50	16,20 - 15,50 - 14,80
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out) [7]		m	15 / 15 [8]	15 / 15 [8]	15 / 30 [8]	20 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

- High performance turbo fan, path system for heat exchanger
- Econavi: An optional intelligent sensor to reduce waste of energy
- nanoe™ X (Generator Mark 1= 4,8 trillion hydroxyl radicals/sec) as standard for better indoor air quality, indoor unit internal cleaning with nanoe™ X and dry operation
- Lower noise in slow fan operation
- Light weight, easy piping and integrated drain pump for quick installation
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3+CZ-ATU2)

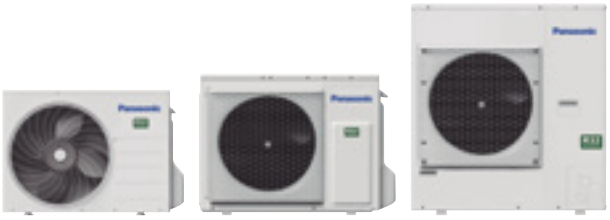


CZ-RTC5B



Standard panel.
CZ-KPU3W

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION





Optional Econavi panel (CZ-RTC5B is required).
CZ-KPU3AW



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW



Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRU3W

			Three phase		
			10,0 kW	**12,5 kW**	**14,0 kW**
Kit			**KIT-100PU3Z8**	**KIT-125PU3Z8**	**KIT-140PU3Z8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,82 (5,36 - 2,88)	3,58 (5,33 - 2,81)	3,23 (5,32 - 2,73)
SEER / ηsc [2]			**6,7 A++**	**265,8 %**	**256,2 %**
Pdesign		kW	10,0	12,5	14,0
Input power cooling	Nominal (Min - Max)	kW	2,62 (0,56 - 4,00)	3,49 (0,60 - 4,80)	4,34 (0,62 - 5,50)
Annual energy consumption [3]		kWh/a	521	—	—
Heating capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,93 (5,36 - 3,59)	4,43 (5,50 - 3,57)	4,18 (5,48 - 3,33)
SCOP / ηsc [2]			**4,4 A+**	**157,0 %**	**152,2 %**
Pdesign at -10 °C		kW	10,0	12,5	14,0 (at -7 °C)
Input power heating	Nominal (Min - Max)	kW	2,03 (0,56 - 3,90)	2,82 (0,60 - 4,20)	3,35 (0,62 - 4,80)
Annual energy consumption [3]		kWh/a	3182	—	—
Indoor unit			**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**
Air flow	Hi / Med / Lo	m³/min	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	2,7	4,8	6,0
Sound pressure [4]	Hi / Med / Lo	dB(A)	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1
Outdoor unit			**U-100PZ3E8**	**U-125PZ3E8**	**U-140PZ3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,35 - 4,15 - 4,00	5,65 - 5,35 - 5,15	7,00 - 6,65 - 6,40
	Heat	A	3,40 - 3,20 - 3,10	4,55 - 4,35 - 4,15	5,40 - 5,15 - 4,95
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRU3W	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
CZ-KPU3AW	Econavi exclusive panel
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-FDU3+CZ-ATU2	Fresh air-intake kit

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.



SEER: For S-3650PU3E + U-36PZ3E5. SCOP: For S-6071PU3E+ U-60PZ3E5A. ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021

nanoe™ X as a standard.



NEW PACi NX Series Elite ceiling Inverter+ • R32

Ceiling mounted units provide large and wide air distribution which is good for big rooms.
The height and depth of all capacities are the same for unified appearance in mixed installations.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PT3ZH5	KIT-50PT3ZH5	KIT-60PT3ZH5	KIT-71PT3ZH5	KIT-100PT3ZH5	KIT-125PT3ZH5	KIT-140PT3ZH5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,5 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,0 (1,2 - 7,1)	6,8 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,1 (3,2 - 14,0)	13,4 (3,3 - 16,0)
EER [1]		W/W	4,86	4,03	3,82	3,91	4,15	3,51	3,21
SEER / ηsc [2]			**7,7 A++**	**7,4 A++**	**7,5 A++**	**7,3 A++**	**7,3 A++**	**278,4 %**	**263,3 %**
Pdesign		kW	3,5	5,0	6,0	6,8	9,5	12,1	13,4
Input power cooling		kW	0,720	1,24	1,57	1,74	2,29	3,45	4,17
Annual energy consumption [3]		kWh/a	160	237	280	326	456	—	—
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]		W/W	5,00	4,03	4,14	3,96	4,09	3,78	3,48
SCOP / ηsc [2]			**4,9 A++**	**4,8 A++**	**4,8 A++**	**4,7 A++**	**4,7 A++**	**181,0 %**	**178,0 %**
Pdesign at -10 °C		kW	3,1	4,0	4,6	4,7	7,8	9,5	10,2
Input power heating		kW	0,80	1,39	1,69	2,02	2,74	3,70	4,60
Annual energy consumption [3]		kWh/a	886	1167	1342	1400	2323	—	—
Indoor unit			**S-3650PT3E**	**S-3650PT3E**	**S-6071PT3E**	**S-6071PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**
Air flow	Hi / Med / Lo	m³/min	14,0 / 12,0 / 10,5	15,0 / 12,5 / 10,5	20,0 / 17,0 / 14,5	21,0 / 18,0 / 15,5	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	0,8	2,0	2,1	2,7	3,6	5,4	6,4
Sound pressure [4]	Hi / Med / Lo	dB(A)	36 / 32 / 28	37 / 33 / 28	38 / 34 / 29	39 / 35 / 30	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	54 / 50 / 46	55 / 51 / 46	56 / 52 / 47	57 / 53 / 48	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 960 x 690	235 x 960 x 690	235 x 1275 x 690	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	26	26	34	34	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH3E5**	**U-100PZH3E5**	**U-125PZH3E5**	**U-140PZH3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,55 - 3,40 - 3,25	5,85 - 5,60 - 5,40	7,35 - 7,05 - 6,75	8,60 - 8,20 - 7,90	11,30-10,80-10,40	16,90-16,10-15,50	20,40-19,50-18,70
	Heat	A	3,90 - 3,75 - ,3,60	6,60 - 6,30 - 6,05	7,85 - 7,50 - 7,20	9,75 - 9,45 - 9,05	13,40-12,90-12,40	18,10-17,30-16,60	22,50-21,50-20,60
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	53 / 53	54 / 54
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	70 / 70	71 / 71
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight		kg	42	42	43	65	98	98	98
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	45	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +48	-20 ~ +48 [9]	-20 ~ +48 [9]	-20 ~ +48 [9]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

- Wide air distribution for large rooms
- Horizontal air flow reaches maximum 9,5 m
- Fresh air connection available on the unit
- Slim design with 235 mm height fits narrow space
- Silent operation
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- Twin, Triple and Double-twin split options
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Further comfort improvement with airflow distribution

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms.
The wide air discharge opening expands the air flow to the left and the right. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, so that the degree of comfort is increased.


CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW


Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRT3


Optional Econavi sensor.
CZ-CENSC1

			Three phase			
			7,1 kW	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			**KIT-71PT3ZH8**	**KIT-100PT3ZH8**	**KIT-125PT3ZH8**	**KIT-140PT3ZH8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	6,8 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,1 (3,2 - 14,0)	13,4 (3,3 - 16,0)
EER [1]		W/W	3,91	4,15	3,51	3,21
SEER / ηsc [2]			**7,2 A++**	**7,2 A++**	**277,3 %**	**262,4 %**
Pdesign		kW	6,8	9,5	12,1	13,4
Input power cooling		kW	1,74	2,29	3,45	4,17
Annual energy consumption [3]		kWh/a	331	462	—	—
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]		W/W	3,96	4,09	3,78	3,48
SCOP / ηsc [2]			**4,7 A++**	**4,7 A++**	**180,9 %**	**178,0 %**
Pdesign at -10 °C		kW	4,7	7,8	9,5	10,2
Input power heating		kW	2,02	2,74	3,7	4,6
Annual energy consumption [3]		kWh/a	1400	2324	—	—
Indoor unit			**S-6071PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**
Air flow	Hi / Med / Lo	m³/min	21,0 / 18,0 / 15,5	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	2,7	3,6	5,4	6,4
Sound pressure [4]	Hi / Med / Lo	dB(A)	39 / 35 / 30	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	57 / 53 / 48	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	34	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-71PZH3E8**	**U-100PZH3E8**	**U-125PZH3E8**	**U-140PZH3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	2,90 - 2,80 - 2,70	3,80 - 3,65 - 3,45	5,70 - 5,40 - 5,20	6,90 - 6,55 - 6,30
	Heat	A	3,35 - 3,20 - 3,10	4,55 - 4,35 - 4,15	6,20 - 5,85 - 5,65	7,70 - 7,30 - 6,95
Air flow	Cool / Heat	m³/min	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	53 / 53	54 / 54
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	70 / 70	71 / 71
Dimension	H x W x D	mm	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight		kg	65	98	98	98
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30	30
Additional gas amount		g/m	45	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +48	-20 ~ +48 [9]	-20 ~ +48 [9]	-20 ~ +48 [9]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRT3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. 9) For models 100 ~ 140PZH3E5(8), it is possible to operate the lowest -20 °C in the computer rooms with the piping length of 30 m or less.* Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.



SEER and SCOP: For S-3650PT3E + U-36PZH3E5. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021



nanoe™ X as a standard.

NEW PACi NX Series Standard ceiling Inverter+ • R32

Ceiling mounted units provide large and wide air distribution which is good for big rooms.
The height and depth of all capacities are the same for unified appearance in mixed installations.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PT3Z5	KIT-50PT3Z5	KIT-60PT3Z5	KIT-71PT3Z5	KIT-100PT3Z5	KIT-125PT3Z5	KIT-140PT3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,5 (1,5 - 4,0)	5,0 (1,5 - 5,2)	6,0 (2,0 - 7,1)	6,8 (2,6 - 7,7)	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]		W/W	4,14	3,03	3,59	3,24	3,64	3,32	2,98
SEER / ηsc [2]			**7,2 A++**	**6,7 A++**	**7,3 A++**	**5,9 A+**	**6,6 A++**	**241,7 %**	**228,8 %**
Pdesign		kW	3,5	5,0	6,0	6,8	10,0	12,5	14,0
Input power cooling		kW	0,85	1,65	1,67	2,10	2,75	3,76	4,70
Annual energy consumption [3]		kWh/a	171	262	288	404	531	—	—
Heating capacity	Nominal (Min - Max)	kW	3,5 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,0 (1,8 - 7,0)	6,8 (2,1 - 8,1)	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]		W/W	4,61	3,73	4,11	4,20	4,24	3,89	3,70
SCOP / ηsc [2]			**4,4 A+**	**4,1 A+**	**4,6 A++**	**4,3 A+**	**4,2 A+**	**147,4 %**	**145,3 %**
Pdesign at -10 °C		kW	2,8	4,0	4,6	4,7	10,0	12,5	13,6
Input power heating		kW	0,76	1,34	1,46	1,62	2,36	3,21	3,78
Annual energy consumption [3]		kWh/a	891	1365	1399	1529	3331	—	—
Indoor unit			**S-3650PT3E**	**S-3650PT3E**	**S-6071PT3E**	**S-6071PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**
Air flow	Hi / Med / Lo	m³/min	14,0 / 12,0 / 10,5	15,0 / 12,5 / 10,5	20,0 / 17,0 / 14,5	21,0 / 18,0 / 15,5	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	0,8	2,0	2,1	2,7	4,1	5,7	6,9
Sound pressure [4]	Hi / Med / Lo	dB(A)	36 / 32 / 28	37 / 33 / 28	38 / 34 / 29	39 / 35 / 30	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	54 / 50 / 46	55 / 51 / 46	56 / 52 / 47	57 / 53 / 48	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 960 x 690	235 x 960 x 690	235 x 1275 x 690	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	26	26	34	34	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZ3E5**	**U-50PZ3E5**	**U-60PZ3E5A**	**U-71PZ3E5A**	**U-100PZ3E5**	**U-125PZ3E5**	**U-140PZ3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,90 - 3,75 - 3,60	7,65 - 7,30 - 7,00	7,75 - 7,40 - 7,10	9,75 - 9,30 - 8,95	13,70-13,10-12,60	18,20-17,40-16,70	22,70-21,70-20,80
	Heat	A	3,55 - 3,40 - 3,25	6,30 - 6,00 - 5,75	6,75 - 6,50 - 6,20	7,50 - 7,20 - 6,90	11,80-11,30-10,80	15,50-14,80-14,20	18,30-17,50-16,80
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out) [7]		m	15 / 15 [8]	15 / 15 [8]	15 / 30 [8]	20 / 30 [8]	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

- Wide air distribution for large rooms
- Horizontal air flow reaches maximum 9,5 m
- Fresh air connection available on the unit
- Slim design with 235 mm height fits narrow space
- Silent operation
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- Single and twin options
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

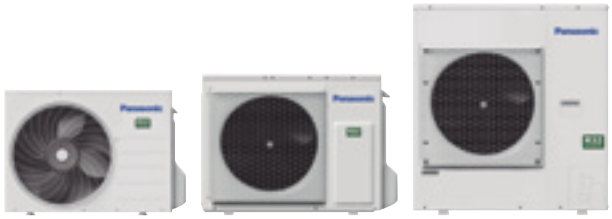
Further comfort improvement with airflow distribution

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms.
The wide air discharge opening expands the air flow to the left and the right. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, so that the degree of comfort is increased.



CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION





Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW



Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRT3



Optional Econavi sensor.
CZ-CENSC1

			Three phase		
			10,0 kW	**12,5 kW**	**14,0 kW**
Kit			**KIT-100PT3Z8**	**KIT-125PT3Z8**	**KIT-140PT3Z8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]		W/W	3,64	3,32	2,98
SEER / ηsc [2]			**6,5 A++**	**240,9 %**	**228,1 %**
Pdesign		kW	10,0	12,5	14,0
Input power cooling		kW	2,75	3,76	4,70
Annual energy consumption [3]		kWh/a	537	—	—
Heating capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]		W/W	4,24	3,89	3,70
SCOP / ηsc [2]			**4,2 A+**	**147,4 %**	**145,3 %**
Pdesign at -10 °C		kW	10,0	12,5	13,6
Input power heating		kW	2,36	3,21	3,78
Annual energy consumption [3]		kWh/a	3331	—	—
Indoor unit			**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**
Air flow	Hi / Med / Lo	m³/min	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	4,1	5,7	6,9
Sound pressure [4]	Hi / Med / Lo	dB(A)	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2
Outdoor unit			**U-100PZ3E8**	**U-125PZ3E8**	**U-140PZ3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,60 - 4,35 - 4,20	6,10 - 5,75 - 5,55	7,60 - 7,20 - 6,95
	Heat	A	3,95 - 3,75 - 3,60	5,20 - 4,95 - 4,75	6,10 - 5,80 - 5,60
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out) [7]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [8]
Pipe length for additional gas		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRT3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor

Accessories	
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) When installing the outdoor unit at a higher position than the indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

R32 | A++ 7,3 SEER | A++ 4,6 SCOP | INVERTER+ | -10°C COOLING MODE | -15°C HEATING MODE | R22 R410A R32 R22/R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-6071PT3E + U-60PZ3E5A. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021

nanoe™ X as a standard.



NEW PACi NX Series Elite adaptive ducted unit Inverter+ • R32

New design duct range PF3.
2 installation possibilities (horizontal / vertical) with high ESP 150Pa allows flexible installation.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PFH3Z5	KIT-50PFH3Z5	KIT-60PFH3Z5	KIT-71PFH3Z5	KIT-100PFH3Z5	KIT-125PFH3Z5	KIT-140PFH3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	5,7 (1,2 - 6,3)	6,8 (2,2 - 7,8)	9,5 (3,1 - 11,4)	12,1 (3,2 - 13,6)	13,4 (3,3 - 15,3)
EER [1]		W/W	4,24	3,42	3,68	3,74	4,17	3,58	3,38
SEER / ηsc [2]			**6,8 A++**	**6,1 A++**	**7,1 A++**	**7,1 A++**	**7,4 A++**	**281,7 %**	**275,9 %**
Pdesign		kW	3,6	5,0	5,7	6,8	9,5	12,1	13,4
Input power cooling		kW	0,850	1,46	1,55	1,82	2,28	3,38	3,96
Annual energy consumption [3]		kWh/a	185	287	281	332	447	—	—
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	7,5 (2,0 - 9,0)	10,8 (3,1 - 13,5)	13,5 (3,2 - 15,4)	15,5 (3,3 - 17,4)
COP [1]		W/W	4,17	3,61	3,74	4,03	3,97	3,46	3,44
SCOP / ηsc [2]			**4,5 A+**	**4,2 A+**	**4,4 A+**	**4,7 A++**	**4,5 A+**	**170,0 %**	**171,0 %**
Pdesign at -10 °C		kW	3,6	4,0	4,7	4,7	7,8	9,3	9,5
Input power heating		kW	0,96	1,55	1,87	1,86	2,72	3,90	4,51
Annual energy consumption [3]		kWh/a	1120	1333	1495	1393	2424	—	—
Indoor unit			**S-3650PF3E**	**S-3650PF3E**	**S-6071PF3E**	**S-6071PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [4]	Nominal (Min - Max)	Pa	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	14,0 / 13,0 / 10,0	16,0 / 15,0 / 12,0	21,0 / 19,0 / 15,0	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	0,9	1,9	1,7	2,7	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	30 / 27 / 22	34 / 30 / 25	30 / 26 / 23	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 50 / 45	57 / 53 / 48	53 / 49 / 46	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	25	25	30	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH3E5**	**U-100PZH3E5**	**U-125PZH3E5**	**U-140PZH3E5**
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,20 - 4,00 - 3,85	6,90 - 6,60 - 6,35	7,25 - 6,95 - 6,65	9,00 - 8,60 - 8,25	11,10-10,80-10,30	16,50-15,80-15,10	19,60-18,70-17,90
	Heat	A	4,70 - 4,50 - 4,30	7,35 - 7,00 - 6,75	8,65 - 8,30 - 7,95	9,00 - 8,60 - 8,35	13,30-12,70-12,20	19,10-18,20-17,50	22,00-21,10-20,20
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	53 / 53	54 / 54
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	70 / 70	71 / 71
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight		kg	42	42	43	65	98	98	98
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [6]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [7]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85
Elevation difference (in/out) [8]		m	15 / 30 [8]	15 / 30 [8]	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]
Pipe length for additional gas		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	45	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +48	-20 ~ +48 [10]	-20 ~ +48 [10]	-20 ~ +48 [10]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

- 2 installation possibilities (horizontal / vertical)
- Maximum external static pressure: 150 Pa
- Selectable inlet air position (rear / bottom entry)
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®

* The performance of nanoe™ X air can be expected even by 10 m long duct by Panasonic internal survey.

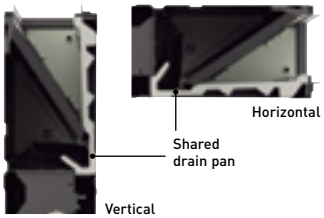
2 installation possibilities (horizontal / vertical)

Vertical installation is newly available. ESP 150Pa, sufficient for remotely installing units away from the rooms.



Improved drain pan design

Drain pan is shared in both cases horizontal and vertical installation.
No need to alternate anymore.




CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW


Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRC3


Optional Econavi sensor.
CZ-CENSC1

					Three phase	
			7,1 kW	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			**KIT-71PFH3Z8**	**KIT-100PFH3Z8**	**KIT-125PFH3Z8**	**KIT-140PFH3Z8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	6,8 (2,2 - 7,8)	9,5 (3,1 - 11,4)	12,1 (3,2 - 13,6)	13,4 (3,3 - 15,3)
EER [1]		W/W	3,74	4,17	3,58	3,38
SEER / ηsc [2]			**7,0 A++**	**7,3 A++**	**281,0 %**	**275,2 %**
Pdesign		kW	6,8	9,5	12,1	13,4
Input power cooling		kW	1,82	2,28	3,38	3,96
Annual energy consumption [3]		kWh/a	338	451	—	—
Heating capacity	Nominal (Min - Max)	kW	7,5 (2,0 - 9,0)	10,8 (3,1 - 13,5)	13,5 (3,2 - 15,4)	15,5 (3,3 - 17,4)
COP [1]		W/W	4,03	3,97	3,46	3,44
SCOP / ηsc [2]			**4,7 A++**	**4,5 A+**	**170,0 %**	**171,0 %**
Pdesign at -10 °C		kW	4,7	7,8	9,3	9,5
Input power heating		kW	1,86	2,72	3,9	4,51
Annual energy consumption [3]		kWh/a	1394	2424	—	—
Indoor unit			**S-6071PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [4]	Nominal (Min - Max)	Pa	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	2,7	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			**U-71PZH3E8**	**U-100PZH3E8**	**U-125PZH3E8**	**U-140PZH3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	3,00 - 2,90 - 2,80	3,80 - 3,60 - 3,50	5,60 - 5,30 - 5,15	6,60 - 6,30 - 6,05
	Heat	A	3,05 - 2,95 - 2,85	4,50 - 4,30 - 4,15	6,45 - 6,10 - 5,90	7,55 - 7,15 - 6,90
Air flow	Cool / Heat	m³/min	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	53 / 53	54 / 54
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	70 / 70	71 / 71
Dimension	H x W x D	mm	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight		kg	65	98	98	98
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85
Elevation difference (in/out) [8]		m	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]
Pipe length for additional gas		m	30	30	30	30
Additional gas amount		g/m	45	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06
Operating range	Cool Min ~ Max	°C	-15 ~ +48	-20 ~ +48 [10]	-20 ~ +48 [10]	-20 ~ +48 [10]
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) Medium external static pressure setting from factory. 5) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 6) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 7) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 8) When installing the outdoor unit at a higher position than the indoor unit. 9) Outdoor unit located lower / outdoor unit located higher. 10) For models 100 ~ 140PZH3E5(8), it is possible to operate the lowest -20 °C in the computer rooms with the piping length of 30 m or less. * Recommended fuse for the indoor 3 A. ** Above values are in the case of standard installation(horizontal installation in the celling, rear side air intake) and nanoe™ X OFF.



SEER and SCOP: For S-6071PF3E + U-71PZH3E5. SUPER QUIET: For S-3650PF3E + U-36PZH3E5. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021

nanoe™ X as a standard.



NEW PACi NX Series Standard adaptive ducted unit Inverter+ • R32

New design duct range PF3.
2 installation possibilities (horizontal / vertical) with high ESP 150Pa allows flexible installation.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PF3Z5	KIT-50PF3Z5	KIT-60PF3Z5	KIT-71PF3Z5	KIT-100PF3Z5	KIT-125PF3Z5	KIT-140PF3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,4 (1,5 - 4,0)	5,0 (1,5 - 5,3)	5,7 (2,0 - 6,3)	6,8 (2,6 - 7,7)	9,5 (3,0 - 11,4)	12,1 (3,2 - 13,5)	13,4 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,78	2,78	3,54	3,18	3,57 (5,08 - 2,36)	3,40 (5,08 - 2,76)	3,16 (5,08 - 2,56)
SEER / ηsc [2]			6,0 A+	6,5 A++	6,4 A++	6,0 A+	6,6 A++	257,4 %	252,2 %
Pdesign		kW	3,4	5,0	5,7	6,8	9,5	12,1	13,4
Input power cooling	Nominal (Min - Max)	kW	0,9	1,8	1,61	2,14	2,66 (0,59 - 4,84)	3,56 (0,63 - 4,90)	4,24 (0,65 - 5,86)
Annual energy consumption [3]		kWh/a	198	267	310	391	502	—	—
Heating capacity	Nominal (Min - Max)	kW	3,4 (1,5 - 4,6)	5,0 (1,5 - 5,9)	5,7 (1,8 - 7,0)	6,8 (2,1 - 8,1)	9,5 (3,0 - 13,5)	12,1 (3,3 - 15,0)	13,4 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,15	3,62	4,04	4,00	4,09 (5,08 - 3,00)	3,56 (5,24 - 3,16)	3,76 (5,23 - 3,03)
SCOP / ηsc [2]			4,0 A+	4,0 A+	4,4 A+	4,1 A+	3,9 A	142,6 %	140,6 %
Pdesign at -10 °C		kW	2,4	3,8	4,4	4,7	7,8	9,3	9,5
Input power heating	Nominal (Min - Max)	kW	0,82	1,38	1,41	1,7	2,32 (0,59 - 4,50)	3,40 (0,63 - 4,74)	3,56 (0,65 - 5,28)
Annual energy consumption [3]		kWh/a	839	1303	1376	1591	2795	—	—
Indoor unit			S-3650PF3E	S-3650PF3E	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E
External static pressure [4]	Nominal (Min - Max)	Pa	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	14,0 / 13,0 / 10,0	16,0 / 15,0 / 12,0	21,0 / 19,0 / 15,0	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	0,9	1,9	1,7	2,7	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	30 / 27 / 22	34 / 30 / 25	30 / 26 / 23	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 50 / 45	57 / 53 / 48	53 / 49 / 46	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	25	25	30	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-125PZ3E5	U-140PZ3E5
Power source		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,15-4,00-3,85	8,35-8,00-7,65	7,45-7,15-6,85	9,95-9,50-9,10	13,30-12,70-12,20	17,20-16,40-15,80	20,50-19,60-18,8
	Heat	A	3,85-3,70-3,50	6,45-6,20-5,95	6,55-6,25-6,00	7,90-7,55-7,25	11,60-11,10-10,60	16,40-15,70-15,00	17,20-16,40-15,80
Air flow	Cool / Heat	m³/min	33,6/34,0	32,7/31,9	42,6/41,5	44,7/45,9	73,0/73,0	82,0/80,0	84,0/82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46/47	46/46	47/48	48/49	52/52	55/55	56/56
Sound power	Cool / Heat (Hi)	dB(A)	64/66	64/64	64/65	66/68	70/70	73/73	74/74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (Ø6,35)	1/4 (Ø6,35)	1/4 (Ø6,35) [6]	1/4 (Ø6,35) [6]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (Ø12,7)	1/2 (Ø12,7)	1/2 (Ø12,7) [7]	5/8 (Ø15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 - 15	3 - 20	3 - 40	3 - 40	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out) [8]		m	15 / 15 [9]	15 / 15 [9]	15 / 30 [9]	20 / 30 [9]	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]
Pipe length for additional gas		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

- 2 installation possibilities (horizontal / vertical)
- Maximum external static pressure: 150 Pa
- Selectable inlet air position (rear / bottom entry)
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®

* The performance of nanoe™ X air can be expected even by 10 m long duct by Panasonic internal survey.

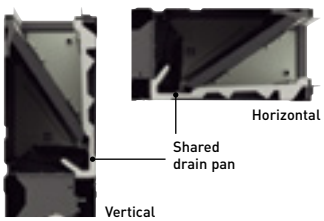
2 installation possibilities (horizontal / vertical)

Vertical installation is newly available. ESP 150Pa, sufficient for remotely installing units away from the rooms.



Improved drain pan design

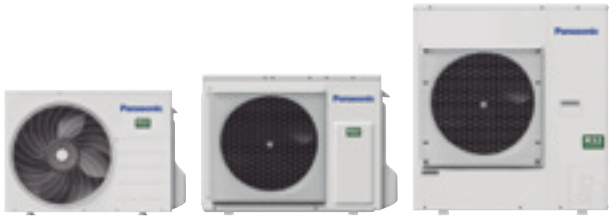
Drain pan is shared in both cases horizontal and vertical installation.
No need to alternate anymore.





CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION





Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL - CZ-RTC6BLW



Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRC3



Optional Econavi sensor.
CZ-CENSC1

			Three phase		
			10,0 kW	**12,5 kW**	**14,0 kW**
Kit			**KIT-100PF3Z8**	**KIT-125PF3Z8**	**KIT-140PF3Z8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	9,5 (3,0 - 11,4)	12,1 (3,2 - 13,5)	13,4 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,57 (5,08 - 2,36)	3,40 (5,08 - 2,76)	3,16 (5,08 - 2,56)
SEER / ηsc [2]			**6,5 A++**	**256,2 %**	**251,4 %**
Pdesign		kW	9,5	12,1	13,4
Input power cooling	Nominal (Min - Max)	kW	2,66 (0,59 - 4,84)	3,56 (0,63 - 4,90)	4,24 (0,65 - 5,86)
Annual energy consumption [3]		kWh/a	508	—	—
Heating capacity	Nominal (Min - Max)	kW	9,5 (3,0 - 13,5)	12,1 (3,3 - 15,0)	13,4 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,09 (5,08 - 3,00)	3,56 (5,24 - 3,16)	3,76 (5,23 - 3,03)
SCOP / ηsc [2]			**3,9 A**	**142,6 %**	**140,6 %**
Pdesign at -10 °C		kW	7,8	9,3	9,5
Input power heating	Nominal (Min - Max)	kW	2,32 (0,59 - 4,50)	3,40 (0,63 - 4,74)	3,56 (0,65 - 5,28)
Annual energy consumption [3]		kWh/a	2795	—	—
Indoor unit			**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
External static pressure [4]	Nominal (Min - Max)	Pa	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2
Outdoor unit			**U-100PZ3E8**	**U-125PZ3E8**	**U-140PZ3E8**
Power source		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,45 - 4,20 - 4,05	5,75 - 5,45 - 5,25	6,85 - 6,50 - 6,30
	Heat	A	3,85 - 3,70 - 3,55	5,50 - 5,20 - 5,05	5,75 - 5,45 - 5,25
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out) [8]		m	15 / 30 [9]	15 / 30 [9]	15 / 30 [9]
Pipe length for additional gas		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) Medium external static pressure setting from factory. 5) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 6) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 7) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 8) When installing the outdoor unit at a higher position than the indoor unit. 9) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of standard installation(horizontal installation in the celling, rear side air intake) and nanoe™ X OFF.



SEER: For S-1014PF3E + U-100PZ3E5. SCOP: For S-6071PF3E + U-60PZ3E5A. SUPER QUIET: For S-3650PF3E + U-36PZ3E5. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Panasonic Big PACi high static pressure hide-away 20,0-25,0 kW Inverter+ • R32



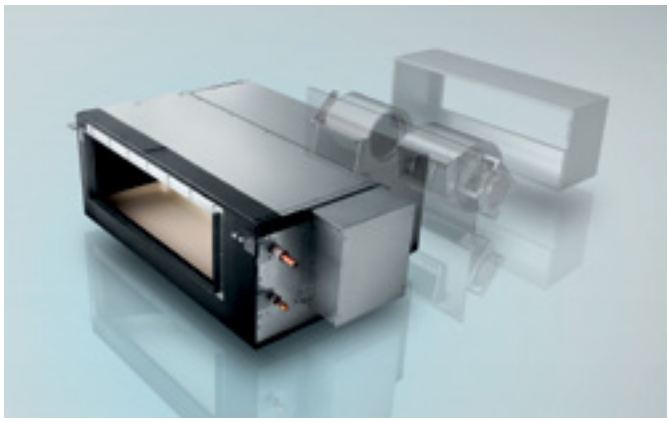
Panasonic Big PACi, not only environmental friendly but also a groundbreaking product.
Big PACi with R32 has been introduced with full renewal of its indoor unit, offering hydronic application by PACi Water heat exchanger.

1 Compact & light indoor body

Compact and light indoor body, keeping the high efficiency, has a split-able design for easy installation within a limited narrow space. Plus ease of maintenance due to the simplified disassembly design.

2 Easy pipe work with split-able hide-away indoor design

Heat exchanger and fan elements (fan + casing) can be separated during installation. The hide-away indoor unit is easily reassembled and will fit through a narrow space.



3 High external static pressure, maximum 200 Pa* setting

A high static pressure enables the use of long ducts for installation in a wide range of spaces.

* S-250PE3E5B.

4 Panasonic Comfort Cloud App control

Ready to control PACi systems with Panasonic Comfort Cloud App in your smartphones.*

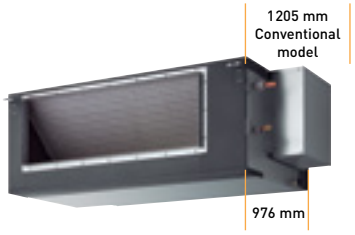
* Panasonic Wi-Fi Adaptor CZ-CAPWFC1 is required.

Compact and light indoor body, keeping high efficiency

15 % lighter weight vs conventional model drastically improves installation work.

	Conventional model	Panasonic model
20,0 kW	100 kg	**86 kg**
25,0 kW	104 kg	**88 kg**

DEPTH WAS REDUCED BY 230 mm



Maximum 200 Pa* static pressure setting

A high static pressure enables the use of long ducts for installation in a wide range of spaces.

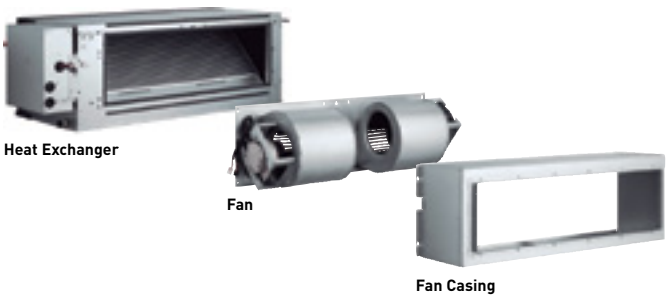
3-step static pressure set up.
Selectable of static pressure modes can change 200 Pa / 130 Pa / 75 Pa for extra installation flexibility.

* In case of S-250PE3E5B.

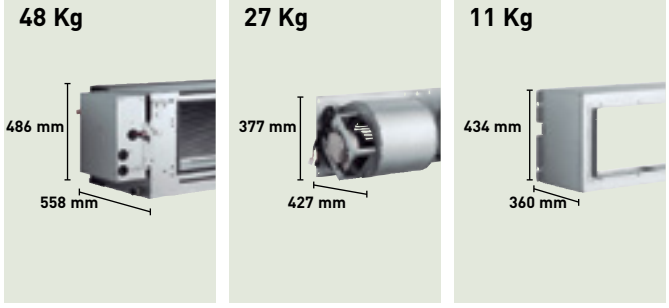


Easy Installation with Light Components

Indoor unit can easily be split into 3 components, the heaviest of which weighs only 48 kg.



Dimensions of Each Component (lightweight design for easy disassembly).



The weight is for S-200PE3E5B model.


CZ-RTC5B



COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL


Optional controller. Infrared remote controller.
CZ-RWS3 + CZ-RWRC3


Optional Econavi sensor.
CZ-CENSC1

			Three phase	
			20,0 kW	**25,0 kW**
Kit			**KIT-200PE3ZH8**	**KIT-250PE3ZH8**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	19,5 (5,7 - 21,0)	23,2 (6,1 - 27,0)
EER [1]		W/W	3,22	3,11
SEER / ηsc [2]			**207,0 %**	**190,6 %**
Pdesign		kW	19,5	23,2
Input power cooling		kW	6,06	7,46
Heating capacity	Nominal (Min - Max)	kW	22,4 (5,0 - 25,0)	28,0 (5,5 - 29,0)
COP [1]		W/W	3,61	3,41
SCOP / ηsc [2]			**141,3 %**	**142,7 %**
Pdesign at -10 °C		kW	17,0	20,0
Input power heating		kW	6,21	8,21
Indoor unit			**S-200PE3E5B**	**S-250PE3E5B**
Power source		V / ph / Hz	220 - 230 - 240 / 1 / 50	220 - 230 - 240 / 1 / 50
External static pressure at shipment (adjustable)		Pa	75 [3] - 120 - 180	75 [3] - 130 - 200
Air flow	Hi / Med / Lo	m³/min	72 / 63 / 53	84 / 72 / 59
Sound pressure [4]	Hi / Med / Lo	dB(A)	46 / 44 / 41	47 / 45 / 42
Dimension	H x W x D	mm	486 x 1456 x 916	486 x 1456 x 916
Net weight		kg	86	88
Outdoor unit			**U-200PZH2E8**	**U-250PZH2E8**
Power source		V / ph / Hz	380 - 400 - 415 / 3 / 50	380 - 400 - 415 / 3 / 50
Recommended fuse		A	30	30
Air flow	Cool / Heat	m³/min	164 / 164	160 / 160
Sound pressure	Cool / Heat (Hi)	dB(A)	59 / 61	59 / 63
Sound power	Cool / Heat (Hi)	dB(A)	77 / 79	78 / 82
Dimension [5]	H x W x D	mm	1500 x 980 x 370	1500 x 980 x 370
Net weight		kg	117	128
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	1/2 (12,70)
	Gas pipe	Inch (mm)	1 (25,40)	1 (25,40)
Pipe length range		m	5 ~ 90	5 ~ 60
Elevation difference (in/out) [6]		m	30	30
Pipe length for additional gas		m	30	30
Additional gas amount		g/m	60	80
Refrigerant (R32) / CO_2 Eq.		kg / T	4,20 / 2,835	5,20 / 3,51
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRC3	Infrared remote controller

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit. * No filter included.

R32 | INVERTER+ | HIGH EFFICIENCY COMPRESSOR | -15°C COOLING MODE | -20°C HEATING MODE | BLUEFIN | LARGE FAN | R22 R410A → R32 R22/R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



PACi Elite and Standard 4 way 60x60 cassette Inverter+ • R32

Small and powerful, ideal for offices and restaurants.
Standard units only for Twin, Triple and Double-twin combinations.



Technical focus

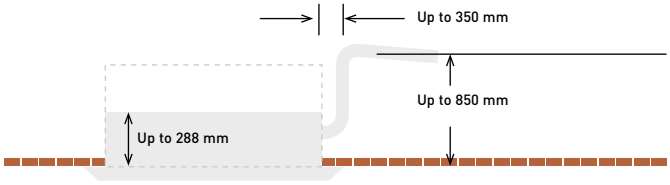
· Fresh air distribution
· Multidirectional air flow
· Integrated drain pump gives 850 mm lift
· 3 speed centrifugal fan
· DC fan for better efficiency and control
· Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Lighter and slimmer, easier installation

Lightweight and very slim which makes installation possible even in narrow ceilings.
Designed to fit exactly into a 600x600 mm ceiling grid without the need to alter the bar configuration.

A drain height of approximately 850 mm from the ceiling surface

The drain height can be increased by approx. 350 mm over the conventional value by using a high-lift drain pump, and long horizontal piping is possible.
Lightweight at 18kg, the unit is also very slim with a height of only 288 mm, making installation possible even in narrow ceilings.



Significant reduction of power consumption by using highly developed DC fan motors with variable speed, special heat exchangers, etc.



CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION





Panel 700 x 700 mm.
CZ-KPY3AW

Panel 625 x 625 mm.
CZ-KPY3BW



Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL



Optional controller. Infrared remote controller.
CZ-RWS3

			Single phase	
			3,6 kW	**5,0 kW**
Kit			**KIT-36PY2ZH5**	**KIT-50PY2ZH5**
Remote controller			**CZ-RTC5B**	**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,0)	5,0 (1,5 - 5,6)
EER [1]		W/W	4,68	3,68
SEER / ηsc [2]			**6,6 A++**	**6,4 A++**
Pdesign		kW	3,6	5,0
Input power cooling		kW	0,77	1,36
Annual energy consumption [3]		kWh/a	191	273
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,5 - 5,0)	5,6 (1,5 - 6,5)
COP [1]		W/W	4,26	3,46
SCOP / ηsc [2]			**4,6 A++**	**4,3 A+**
Pdesign at -10 °C		kW	3,6	4,5
Input power heating		kW	0,94	1,62
Annual energy consumption [3]		kWh/a	1096	1465
Indoor unit			**S-36PY2E5B**	**S-50PY2E5B**
Air flow	Hi / Med / Lo	m³/min	9,7 / 8,0 / 6,0	11,1 / 9,8 / 8,5
Moisture removal volume		L/h	1,5	2,4
Sound pressure [4]	Hi / Med / Lo	dB(A)	36 / 32 / 26	40 / 37 / 33
Sound power	Hi / Med / Lo	dB(A)	51 / 47 / 41	55 / 52 / 48
Dimension (H x W x D) / Net weight	Indoor	mm / kg	288 x 583 x 583 / 18	288 x 583 x 583 / 18
	CZ-KPY3AW Panel	mm / kg	31 x 700 x 700 / 2,4	31 x 700 x 700 / 2,4
	CZ-KPY3BW Panel	mm / kg	31 x 625 x 625 / 2,4	31 x 625 x 625 / 2,4
Outdoor unit			**U-36PZH2E5**	**U-50PZH2E5**
Power source		V	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,65 - 3,50 - 3,35	6,35 - 6,10 - 5,85
	Heat	A	4,50 - 4,30 - 4,15	7,70 - 8,40 - 8,10
Air flow	Cool / Heat	m³/min	40 / 40	40 / 45
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	45 / 48
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 68
Dimension / Net weight	H x W x D	mm / kg	695 x 875 x 320 / 43	695 x 875 x 320 / 43
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)
Pipe length range		m	3 ~ 40	3 ~ 40
Elevation difference (in/out) [5]		m	30	30
Pipe length for additional gas		m	30	30
Additional gas amount		g/m	20	20
Refrigerant (R32) / CO_2 Eq.		kg / T	1,15 / 0,776	1,15 / 0,776
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3	Infrared remote controller
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR3	Interfaces to run 3 units on Backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy savings sensor

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the ηsc / ηsh values is calculated based on EN 14825. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) When installing the outdoor unit at a higher position than the indoor unit.
* Recommended fuse for the indoor 3 A.



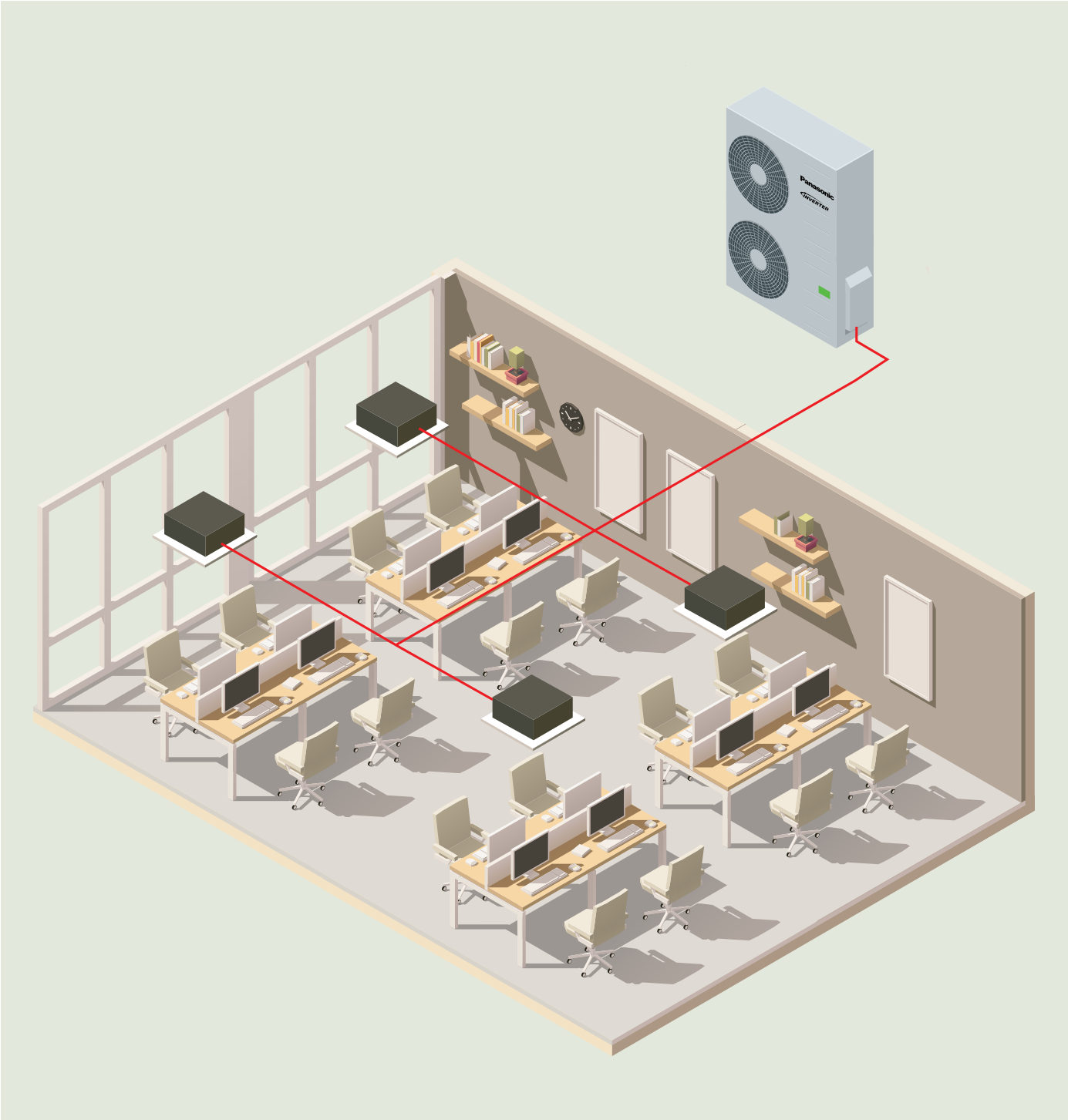
SEER and SCOP: For KIT-36PY2ZH5. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Commercial single, twin, triple and double-twin systems • R32

With this system, a single outdoor unit can split its capacity up to 4 indoor units for better distribution within the space simultaneously. This makes the system particularly apt for common areas. It reduces noise concentration and enables the same temperature to be reached around the room. A mix of indoor units can be installed (wall-mounted, cassette, hide-away, ceiling) in one system.





1 **PACi NX Elite from 7,1 to 14,0 kW**

Up to 4 indoor units can be connected to the same outdoor unit. Panasonic's Elite units 7,1, 10,0, 12,0 and 14,0 can be installed as twin, triple and double-twin systems. The indoor units can be combined as per the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

2 **PACi NX Standard from 10,0 to 14,0 kW**

Up to 2 indoor units connectable on the same outdoor. Panasonic's Standard units can be installed as single and twin systems. The indoor units can be combined following the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

3 **Big PACi Elite from 20,0 to 25,0 kW**

Up to 4 indoor units can be connected to the same outdoor unit. Panasonic's PACi units 20,0 and 25,0 can be installed as twin, triple and double-twin systems. The indoor units can be combined as per the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

PACi NX single, twin, triple and double-twin systems • R32

NEW 2021



NEW PACi NX Elite Outdoor units • R32

			7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
Outdoor unit single phase			**U-71PZH3E5**	**U-100PZH3E5**	**U-125PZH3E5**	**U-140PZH3E5**	—	—
Outdoor unit three phase			**U-71PZH3E8**	**U-100PZH3E8**	**U-125PZH3E8**	**U-140PZH3E8**	**U-200PZH2E8**	**U-250PZH2E8**
Cooling capacity	Nominal (Min - Max)	kW	6,8 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,1 (3,2 - 14,0)	13,4 (3,3 - 16,0)	20,0 (5,7 - 22,4)	25,0 (6,1 - 28,0)
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)	22,4 (5,0 - 25,0)	28,0 (5,5 - 31,5)
Power source	Single phase	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	—	—
	Three phase	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Connection indoor / outdoor		mm²	2x1,5 or 2,5	2x1,5 or 2,5	2x1,5 or 2,5	2x1,5 or 2,5	—	—
Air flow	Cool / Heat	m³/min	61,0 / 60,0	118,0 / 108,0	125,0 / 112,0	129,0 / 116,0	164 / 164	160 / 160
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	53 / 53	54 / 54	59 / 61	59 / 63
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	70 / 70	71 / 71	77 / 79	78 / 82
Dimension	H x W x D	mm	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1500 x 980 x 370	1500 x 980 x 370
Net weight		kg	65	98	98	98	117	128
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	1 (25,40)	1 (25,40)
Pipe length range	Min ~ Max	m	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85	5 ~ 80	5 ~ 60
Elevation difference (in/out)	Max	m	15 / 30 [1]	15 / 30 [1]	15 / 30 [1]	15 / 30 [1]	30	30
Pipe length for additional gas		m	30	30	30	30	30	30
Additional gas amount		g/m	45	45	45	45	60	80
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	3,05 / 2,06	3,05 / 2,06	3,05 / 2,06	4,20 / 2,835	5,20 / 3,51
Operating range	Cool Min ~ Max	°C	-15 ~ 48	-20 ~ +48 [2]	-20 ~ +48 [2]	-20 ~ +48 [2]	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ +24	-20 ~ +24

1) Outdoor unit located lower / outdoor unit located higher. 2) For models 100 ~ 140PZH3E5(8), it is possible to operate the lowest -20 °C in the computer rooms with the piping length of 30 m or less.

NEW 2021



NEW PACi NX Standard Outdoor units • R32

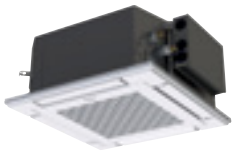
			10,0 kW	12,5 kW	14,0 kW
Outdoor unit single phase			**U-100PZ3E5**	**U-125PZ3E5**	**U-140PZ3E5**
Outdoor unit three phase			**U-100PZ3E8**	**U-125PZ3E8**	**U-140PZ3E8**
Cooling capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
Heating capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
Power source	Single phase	V	220-230-240	220-230-240	220-230-240
	Three phase	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Connection indoor / outdoor		mm²	2x1,5 or 2,5	2x1,5 or 2,5	2x1,5 or 2,5
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range	Min ~ Max	m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in/out)	Max	m	15 / 30 [1]	15 / 30 [1]	15 / 30 [1]
Pipe length for additional gas		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,4 / 1,62	2,8 / 1,89	2,8 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24

1) Outdoor unit located lower / outdoor unit located higher.



NEW 2021

NEW wall-mounted	Indoor	Cooling capacity	Heating capacity	Dimension	Sound pressure	Air flow
				H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	dB(A)	m³/min
3,6 / 4,5 / 5,0 kW	S-3650PK3E	3,6 - 5,0	4,0 - 5,6	302 x 1120 x 236	35 / 31 / 27 [1]	13,0 / 11,0 / 9,0 [1]
6,0 / 7,1 kW	S-6010PK3E	6,1 - 10,0	7,0 - 8,0	302 x 1120 x 236	47 / 44 / 40 [1]	20,0 / 17,5 / 14,5 [1]



NEW 2021

NEW 4 way 60x60 cassette [2]	Indoor (panel CZ-KPY4)	Cooling capacity	Heating capacity	Dimension indoor	Dimension panel	Sound pressure	Air flow
				H x W x D	H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	mm	dB(A)	m³/min
3,6 kW	S-25PY3E						
4,5 kW	S-36PY3E						
5,0 kW	S-50PY3E						
6,0 kW	S-60PY3E						

Tentative data



NEW 2021

NEW 4 way 90x90 cassette	Indoor (panels CZ-KPU3W / CZ-KPU3AW)	Cooling capacity	Heating capacity	Dimension indoor	Dimension panel	Sound pressure	Air flow
				H x W x D	H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	mm	dB(A)	m³/min
3,6 / 4,5 / 5,0 kW	S-3650PU3E	3,6 - 5,0	4,0 - 5,6	256 x 840 x 840	33,5 x 950 x 950	30 / 28 / 27 [1]	14,5 / 13,0 / 11,5 [1]
6,0 / 7,1 kW	S-6071PU3E	6,0 - 7,1	7,0 - 8,0	256 x 840 x 840	33,5 x 950 x 950	36 / 31 / 28 [1]	21,0 / 16,0 / 13,0 [1]
10,0 / 12,5 / 14,0 kW	S-1014PU3E	10,0 - 14,0	11,2 - 16,0	319 x 840 x 840	33,5 x 950 x 950	45 / 38 / 32 [1]	36,0 / 26,0 / 18,0 [1]



NEW 2021

NEW ceiling	Indoor	Cooling capacity	Heating capacity	Dimension	Sound pressure	Air flow
				H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	dB(A)	m³/min
3,6 / 4,5 / 5,0 kW	S-3650PT3E	3,5 - 5,0	4,0 - 5,6	235 x 960 x 690	36 / 32 / 28 [1]	14,0 / 12,0 / 10,5 [1]
6,0 / 7,1 kW	S-6071PT3E	6,0 - 6,8	7,0 - 8,0	235 x 1275 x 690	38 / 34 / 29 [1]	20,0 / 17,0 / 14,5 [1]
10,0 / 12,5 / 14,0 kW	S-1014PT3E	9,5 - 13,4	11,2 - 16,0	235 x 1590 x 690	42 / 37 / 34 [1]	30,0 / 25,0 / 23,0 [1]



NEW 2021

NEW adaptive ducted unit	Indoor	Cooling capacity	Heating capacity	Dimension	External static pressure	Sound pressure	Air flow
				H x W x D	Nominal (Min - Max) Hi / Med / Lo	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	Pa	dB(A)	m³/min
3,6 / 4,5 / 5,0 kW	S-3650PF3E	3,6 - 5,0	4,0 - 5,6	250 x 800 x 730	30 (10 - 150)	30 / 27 / 22 [1]	14,0 / 13,0 / 10,0 [1]
6,0 / 7,1 kW	S-6071PF3E	5,7 - 6,8	7,0 - 7,5	250 x 1000 x 730	30 (10 - 150)	30 / 26 / 23 [1]	21,0 / 19,0 / 15,0 [1]
10,0 / 12,5 / 14,0 kW	S-1014PF3E	9,5 - 13,4	10,8 - 13,5	250 x 1400 x 730	30 (10 - 150)	33 / 29 / 25 [1]	32,0 / 26,0 / 21,0 [1]

1) 36/60/10 types of indoor units value. 2) Available in Autumn 2021.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PACi NX Elite from 7,1 to 14,0 kW Single/Simultaneous operation system combinations • R32

	Outdoor			
Indoor	**7,1 kW**	**10,0 kW**	**12,5 kW**	**14,0 kW**
3,6 kW	Twin U-71 S-36 S-36	Triple U-100 S-36 S-36 S-36	Double-twin U-125 S-36 S-36 S-36 S-36	
4,5 kW			Triple U-125 S-45 S-45 S-45	
5,0 kW		Twin U-100 S-50 S-50		Triple U-140 S-50 S-50 S-50
6,0 kW			Twin	
7,1 kW	Single [1] U-71 S-71			Twin U-140 S-71 S-71
10,0 kW		Single [1] U-100 S-100		
12,5 kW			Single [1] U-125 S-125	
14,0 kW				Single [1] U-140 S-140

PACi NX Standard from 7,1 to 14,0 kW Single/Simultaneous operation system combinations • R32

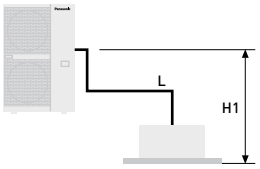
	Outdoor			
Indoor	**7,1 kW**	**10,0 kW**	**12,5 kW**	**14,0 kW**
3,6 kW				
5,0 kW		Twin U-100 S-50 S-50		
6,0 kW			Twin U-125 S-60 S-60	
7,1 kW	Single [1] U-71 S-71			Twin U-140 S-71 S-71
10,0 kW		Single [1] U-100 S-100		
12,5 kW			Single [1] U-125 S-125	
14,0 kW				Single [1] U-140 S-140

PACi Elite from 20,0 to 25,0 kW Single/Simultaneous operation system combinations • R32

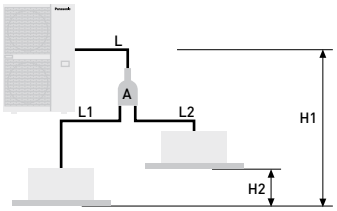
	Outdoor	
Indoor	**20,0 kW**	**25,0 kW**
5,0 kW	Double-twin U-200 S-50 S-50 S-50 S-50	
6,0 kW		Double-twin U-250 S-60 S-60 S-60 S-60
7,1 kW	Triple U-200 S-71 S-71 S-71	
10,0 kW	Twin U-200 S-100 S-100	
12,5 kW		Twin U-250 S-125 S-125
20,0 kW	Single [1] U-200 S-200	
25,0 kW		Single [1] U-250 S-250

1] PACi 1x1 Kit solution.

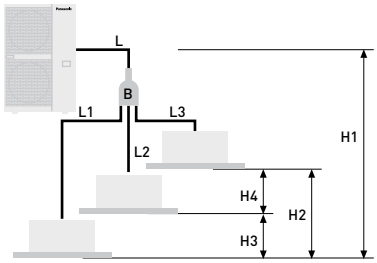
Single



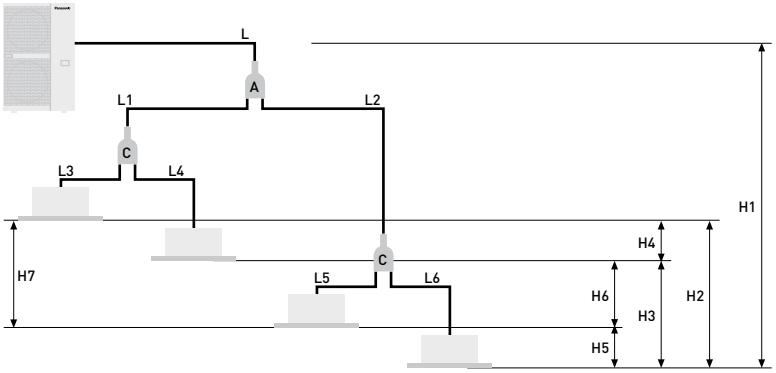
Twin



Triple



Double-twin



PACi Elite twin, triple and double-twin system from 7,1 to 14,0 kW
Joint distribution (sold separately)
A= CZ-P224BK2BM
B= CZ-P3 HPC2BM
C= CZ-P224BK2BM

PACi Standard twin system from 10,0 to 14,0 kW
Joint distribution (sold separately)
A= CZ-P224BK2BM

PACi Elite twin, triple and double-twin system from 20,0 to 25,0 kW
Joint distribution (sold separately)
A= CZ-P680BK2BM
B= CZ-P3 HPC2BM
C= CZ-P224BK2BM

Twin System	PACi Standard single and twin system from 7,1 to 14,0 kW			PACi Elite twin, triple and double-twin system from 7,1 to 25 kW					
	Indoor unit combinations (see examples above)		Equivalent lengths and height differences (m) for outdoor unit sizes...	Indoor unit combinations (see examples above)				Equivalent lengths and height differences (m) for outdoor unit sizes from 7,1 to 14,0 kW	Equivalent lengths and height differences (m) for outdoor unit sizes from 20,0 to 25,0 kW
	Single	Twin		Single	Twin	Triple	Double-Twin		
Total pipe length	L	L + L1 + L2	≤ 50 m	L	L + L1 + L2	L + L1 + L2 + L3	L + L1 + L2 + L3 + L4 + L5 + L6	U-60/U-71: ≤ 50 m U-100/125/140: ≤ 75 m	U-200: ≤ 100 m U-250: ≤ 80 m
Maximum pipe length from outdoor unit to most distant indoor unit	–	–	–	–	L + L1 or L + L2	L + L1 or L + L2 or L + L3	L + L1 + L3 or L + L1 + L4 or L + L2 + L5 or L + L2 + L6	–	U-200: 90 m U-250: 60 m
Maximum branch pipe length	–	L1 L2	≤ 15	–	L1 or L2	L1 or L2 or L3	L1 + L3 or L1 + L4 or L2 + L5 or L2 + L6	≤ 15 m	≤ 20 m
Maximum branch pipe length differences	–	L1 > L2 L1 - L2	≤ 10	–	L1 > L2: L1 - L2	L1 > L2 > L3: L1 - L2 L2 - L3 L1 - L3	L2 + L6 (Max.) L1 + L3 (Min.): (L2 + L6) - (L1 + L3)	≤ 10 m	≤ 10 m
Maximum pipe length differences after first branch (Double-Twin)	–	–	–	–	–	–	L2 > L1: L2 - L1	≤ 10 m	≤ 10 m
Maximum pipe length differences after second branch (Double-Twin)	–	–	–	–	–	–	L4 > L3: L4 - L3 L6 > L5: L6 - L5	≤ 10 m	≤ 10 m
Height difference (outdoor unit located higher)	H1	H1	≤ 30	H1	H1	H1	H1	≤ 30 m	≤ 30 m
Height difference (outdoor unit located lower)	H1	H1	≤ 15	H1	H1	H1	H1	≤ 15 m	≤ 15 m
Height difference between indoor units	–	H2	≤ 0,5	–	H2	H2 or H3 or H4	H2 or H3 or H4 or H5 or H6	≤ 0,5 m	≤ 0,5 m

Twin System	PACi Standard single and twin system from 7,1 to 14,0 kW				PACi Elite twin, triple and double-twin system from 7,1 to 14,0 kW						PACi Elite twin, triple and double-twin system from 20,0 to 25,0 kW				
	Outdoor unit main pipe diameter (L)		Indoor unit connection tube (L1, L2)		Outdoor unit main pipe diameter (L)	Indoor unit connection pipe diameter (L1, L2, L3, L4) (mm)					Outdoor unit main pipe diameter (L) (mm)		Double-Twin distribution pipe (L1, L2) [1]	Indoor unit connection pipe diameter [2]	
Unit type capacity	100	125	50	60	71 - 140	36	45	50	60	71	200	250	100 - 125	50	60 - 125
Liquid pipe (mm)	Ø 9,52	Ø 12,70	Ø 6,35	Ø 9,52	Ø 9,52	Ø 6,35	Ø 6,35	Ø 6,35	Ø 9,52	Ø 9,52	Ø 9,52	Ø 12,70	Ø 9,52	Ø 6,35	Ø 9,52
Gas pipe (mm)	Ø 15,88	Ø 15,88	Ø 12,70	Ø 15,88	Ø 15,88	Ø 12,70	Ø 12,70	Ø 12,70	Ø 15,88	Ø 15,88	Ø 25,40	Ø 25,40	Ø 15,88	Ø 12,70	Ø 15,88
Additional gas amount (g/m)	50	50	20	50	50	20	20	20	50	50	60	80	45	20	45

1) Total capacity of indoor unit connected after the branch. 2) 4 Way Cassette type.

Make additional charges by adding up tube length in an order of main tube (L) → branch tube (L1 → L2 → L3 wide diameter) and then selecting the amount of refrigerant corresponding to the remaining (after charge-less tube length: 30 m) liquid tube diameter and tube length from the above table.

PRO-HT Tank Series for PACi

PRO-HT *TANK*

Enjoy an efficient DHW / heating and cooling tank.
Panasonic commercial PRO-HT Tank solutions meet all needs of your hot water applications providing 65 °C water.



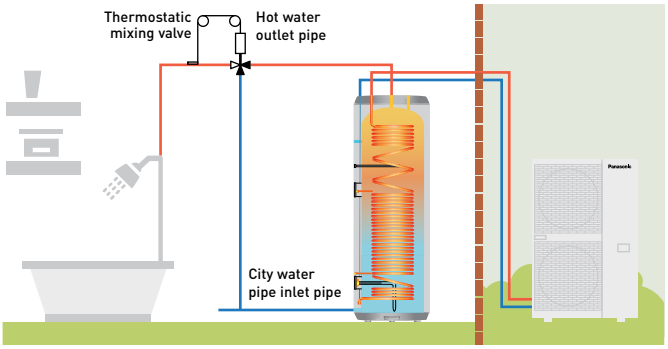
PRO-HT Tank DHW: PAW-VP750DHW and PAW-VP1000LDHW. Big volume and high temperature tank for commercial application.

1 High performance and high saving
- Energy Efficiency Class for energy label: A+ (from A+ to F)
- High temperature hot water without booster
- Save installation time and cost by skipping additional accessories

2 Sufficient hot water production
- Maximum water outlet temperature up to 65 °C
- Big volume tanks with 750 L and 1000 L capacity
- Heat exchanger design inhibits limescale

3 Trusted quality
- Double tube heat exchanger following drinking-water regulation
- Tank and heat exchanger made with stainless steel
- Internal and external pickling

Solution example DHW tank 1000 L + PACi
- Ideal for small hotels and high-end residential
- Hot water temperature up to 65 °C



One by one system compatible list with PACi Elite

Model	Tank type	Product compatibility	Hot water outlet temperature without an electric heater
PAW-VP750LDHW-1	DHW	U-250PE2E8A	65 °C
PAW-VP1000LDHW-1	DHW	U-250PE2E8A	65 °C

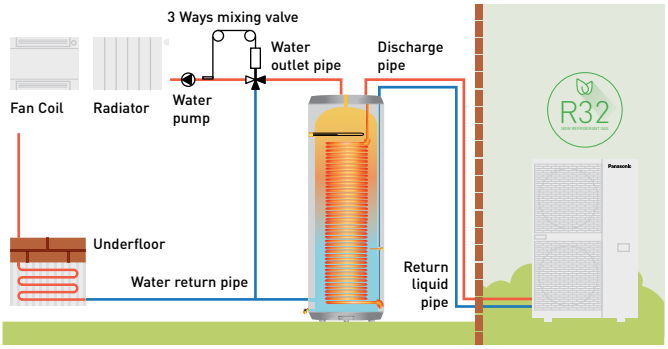
PRO-HT Tank heating and cooling: PAW-VP380L. Waterborne heating and cooling for floor heating, radiators or fan coils

1 High performance and high saving
- A7 COP 3,26, heating water temperature at 45 °C
- Maximum 45 °C water outlet temperature
- Energy efficiency class: A+++ (from A+++ to D)

2 Simple waterborne heating and cooling solution
- High temperature water without any boosters
- Installation cost can be saved without additional boosters and buffer tanks

3 Trusted quality
- Tank and heat exchanger made with stainless steel
- Internal and external pickling

Heating and cooling tank 380L + PACi 20,0 kW
- Ideal offer for small offices
- Cost saving solution with simple waterborne heating and cooling
- Hot water up to 45 °C



One by one system compatible list with PACi Elite

Model	Tank type	Product compatibility	Water outlet temperature range
PAW-VP380L	Heating and cooling	U-200PZH2E8	5 °C ~ 45 °C



PRO-HT *TANK*

PRO-HT Tank DHW

High temperature hot water is efficiently produced without any boosters.
Panasonic commercial PRO-HT Tank solutions can be adapted to adapt various projects from high-end residential to gyms and hotels.

PRO-HT Tank			PAW-VP750LDHW-1	PAW-VP1000LDHW-1
Outdoor unit			**U-250PE2E8A**	**U-250PE2E8A**
Volume (net)		L	726	933
Height	Al x Ø	mm	1855 x 990	2210 x 990
Connections to the water supply network			RP 1¼	RP 1¼
Net weight / with water		kg	179 / 905	191 / 1124
Nominal electrical power		W	6670	6670
Reference tapping cycle			2XL	2XL
Energy consumption by chosen cycle A7 / W10-55		kWh	6	6,36
Energy consumption by chosen cycle A15 / W10-55		kWh	5,12	5,12
COP DHW (A7 / W10-55) EN 16147 [1]			4,1	3,86
COP DHW (A15 / W10-55) EN 16147 [2]			4,79	4,79
Energy Efficiency Class (from A+ to F) [3]			**A+**	**A+**
Standby input power according to EN16147		W	77	80
Sound pressure on 1m		dB(A)	57	57
Operating range - air temperature		°C	-20 ~ +24	-20 ~ +24
Stainless steel 316 L tank			Yes	Yes
Average insulation thickness		mm	100	100
Heat exchanger connection for inlet / outlet		Inch (mm)	1/2 (12,70) – 3/4 (19,05)	1/2 (12,70) – 3/4 (19,05)
Maximum power consumption without heater		W	12900	12900
Maximum power consumption with heater		W	18900	18900
Number of electrical heaters x power		W	1 x 6000	1 x 6000
Voltage / Frequency		V / Hz	400/50	400/50
Electric protection		A	16	16
Moisture protection			IP24	IP24
Heating with heat pump	Min / Max	°C	5/65	5/65
Heating with electrical heater	Max	°C	85	85
Refrigerant (R410A) / CO_2 Eq.		kg / T	6,4/13,363	6,4/13,363

Accessories	
PAW-VP-RTC5B-PAC	Tank controller for PACi system

1) Heating of sanitary water up to 55 °C with inlet air temperature at 7 °C, humidity at 89 % and inlet water temperature at 10 °C. According to EN16147. 2) Heating of sanitary water up to 55 °C with inlet air temperature at 15 °C, humidity at 74 % and inlet water temperature at 10 °C. According to EN16147. 3) Scale from A+ to F following COMMISSION DELEGATED REGULATION (EU) No. 812/2013.

This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

* When connected as pressurised, safety valve is mandatory.

Technical focus

· Water volume 750 L and 1000 L
· Maximum hot water production 65 °C without boosters
· Heating coil 52 m (750 L) and 63 m (1000 L)
· Tank material 3 mm
· ABS external case



PRO-HT *TANK*



PRO-HT Tank heating and cooling

High temperature hot water is efficiently produced without any boosters.
Panasonic commercial PRO-HT Tank solutions can be combined with PACi to adapt various projects from high-end residentials to small offices.

PRO-HT Tank			**PAW-VP380L**
Cooling capacity at 35 °C, water outlet 7 °C		kW	12,80
Heating capacity		kW	25,00
Heating capacity at +7 °C, heating water temperature at 45 °C		kW	23,00
COP at +7 °C with heating water temperature at 45 °C		W/W	3,26
Heating Energy Efficiency class at 35 °C (from A+++ to D)			**A+++**
ηsh (LOT1) [1]		**%**	**193**
Dimension	H x Ø	mm	1820 x 690
Shipping weight		kg	99
Water pipe connector			1¼
Heating water flow (ΔT=5 K. 35 °C)		m³/h	3,9
Outdoor unit			**U-200PZH2E8**
Sound pressure		dB(A)	57
Dimension	H x W x D	mm	1500 x 980 x 370
Net weight		kg	117
Pipe diameter	Liquid pipe	Inch (mm)	1/2 (12,07)
	Gas pipe	Inch (mm)	3/4 (19,05)
Refrigerant (R32) / CO_2 Eq.		kg	4,20 (1,0kg additional gas charge on site)
Pipe length range [2]		m	30
Elevation difference (in/out)		m	30 (OD above) 30 (OD below)
Pipe length for nominal capacity		m	7,5
Pipe length for additional gas		m	> 7,5
Additional gas amount		g/m	Refer to manual
Operation range - outdoor ambient	Heat / Cool	°C	-20 ~ +24 / -15 ~ +46
Water outlet	Heat / Cool	°C	25 ~ 45 / 5 ~ 15

Accessories	
PAW-VP-RTC5B-PAC	Tank controller for PACi system

Accessories	
PAW-IU29/39	Additional heater

1) Seasonal space cooling/heating energy efficiency following COMMISSION REGULATION (EU) 811/2013. 2) The pipe length range is between indoor and outdoor, but does not include additional length for coil.

This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

Performance calculation in agreement with Eurovent. Sound pressure measured at 1 m from the outdoor unit and at 1,5 m height.

* Flow switch and water filter are not equipped.

Technical focus

· Water volume 380L
· Maximum hot water production 45 °C
· Tank and heat exchanger made with stainless steel
· Heating coil 52 m 316L
· Internal and external pickling
· Foam insulation 70 mm
· Tank material 2 mm 316L
· ABS external case

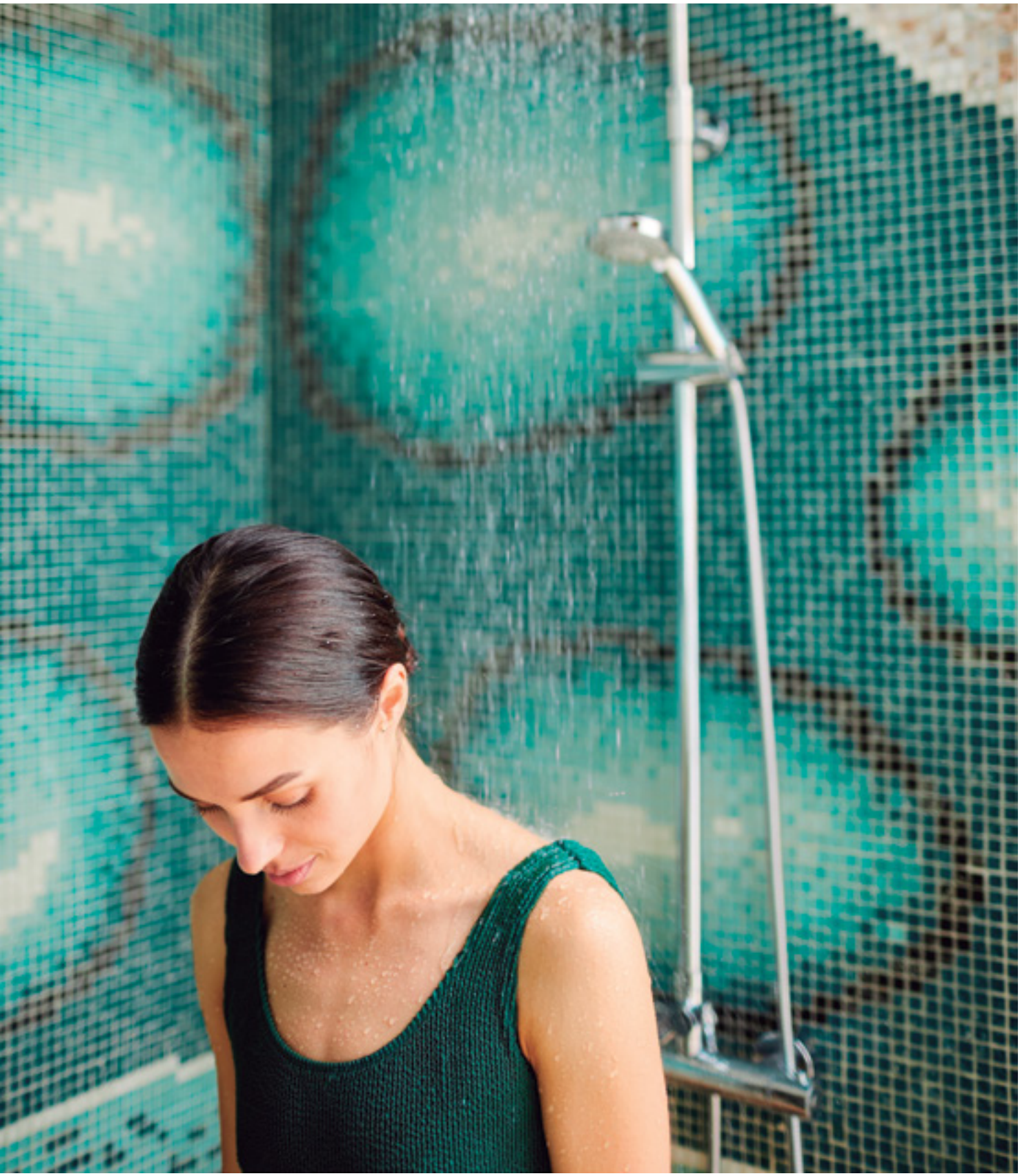
R32 | A+++ ErP 35°C | 45°C OUTPUT WATER | -20°C OPERATION RANGE | 5 YEARS COMPRESSOR WARRANTY

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PACi with water heat exchanger

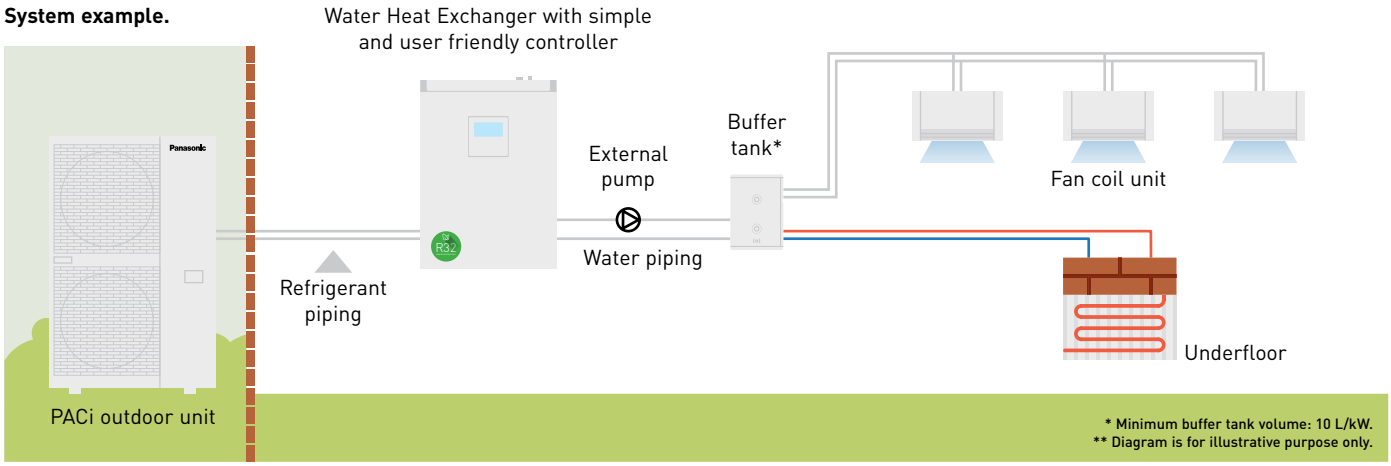
Panasonic introduces highly-efficient water heat exchanger for PACi Series. This ground-breaking product gives further possibilities of PACi solutions by adding hydronic options.

WATER OUTLET TEMPERATURE
Cooling: 5 ~ 15 °C
Heating: 35 ~ 50 °C



Highly-efficient Water Heat Exchanger for PACi Series.

System example.



1 Cost Saving Solution

- A+++ Energy efficiency class (scale from A+++ to D)
- Cost effective water projects thanks to lower cost for PACi compared to VRF

2 Space saving & Flexible positioning

- 2 installation possibilities (wall-mounted / floor-standing)
- Compact, lightweight unit design, only 27 kg

3 Easy Installation, Maintenance

- Quick mounting process
- Flow switch kit is included as a standard
- Direct access to electrical box

Space saving & Flexible positioning

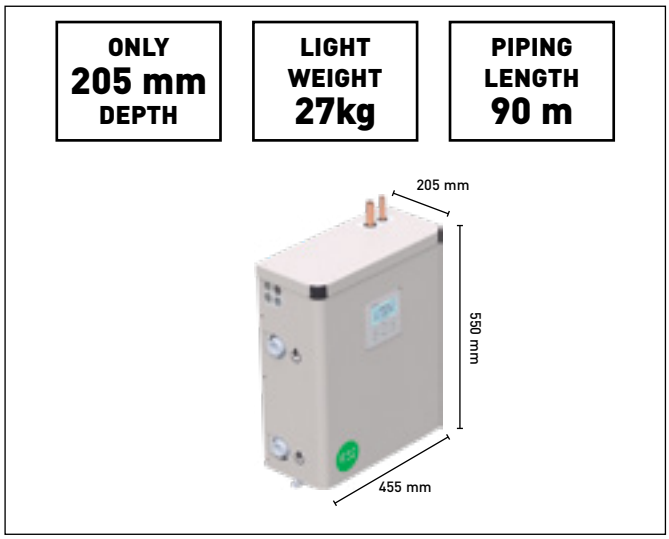
Compact and light unit.

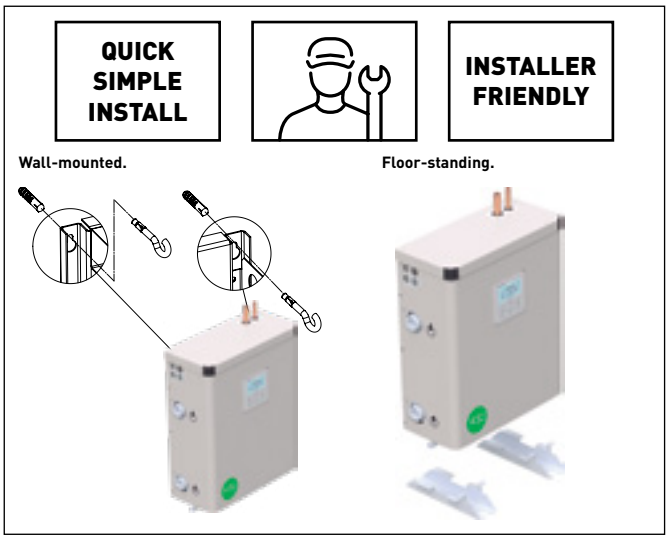
- Only 205 mm depth fits within a limited space
- Lightweight design at only 27kg, makes it easy to maneuver and position
- Maximum total refrigerant piping length: 90 m*

* 90 m for PAW-200W5APAC.

2 installation options.

- Wall-mounted and Floor-standing installation options are available. Free-up floor space by using the Wall-mounted installation
- Quick mounting process with its lightweight compact design
  Make fixing holes > Fix 2 screws > Hang the unit > Finish





Application example

- Fulfilling R32 refrigerant needs to follow environmental perspective, Company policy
- Water solution to substitute existing boiler system
- Hydraulic system to reduce total amount of HFC refrigeration



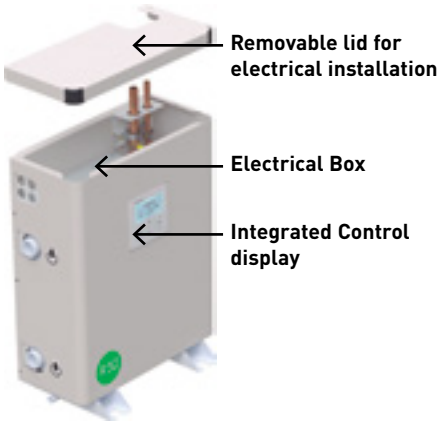
Foodchain.

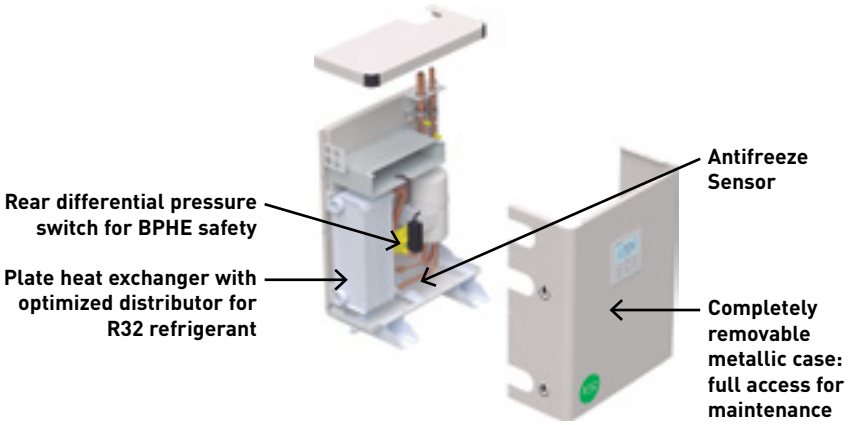


Small office.

PACi Water Heat Exchanger (WHE) is ideal solution for small retails and offices.
This is the first PACi connected WHE system.
The investment costs can be amortised in a short period.

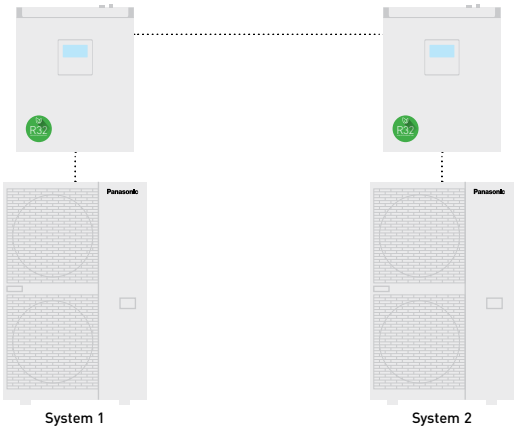
Easy maintenance operation from two points of access

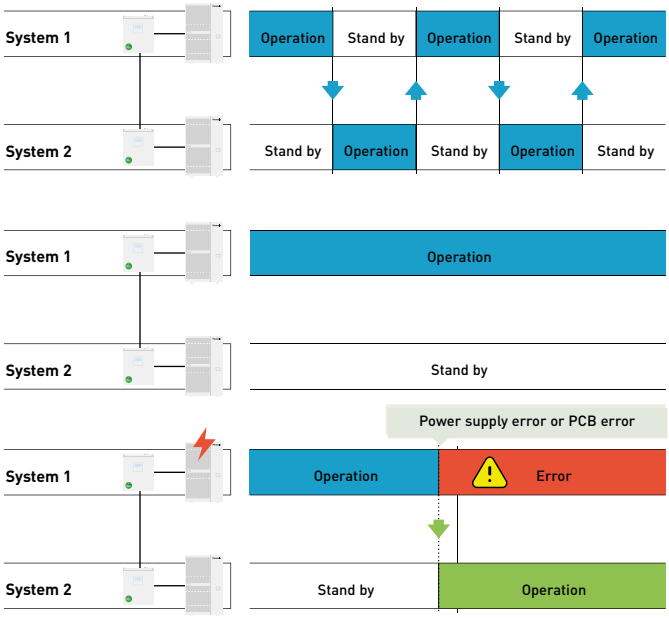




PACi Water Heat Exchanger can be connected as cascade up to 3 groups of 8 units each reaching up to 600 kW

Built-in cascade control for 2 units.
2 refrigerant systems can be connected together in a cascade. This option is included in the standard scope of delivery on the WHE. It is activated using the one of the CZ-RTC5B remote controllers on the units as master. Rotation and Back-up operation modes can be selected.



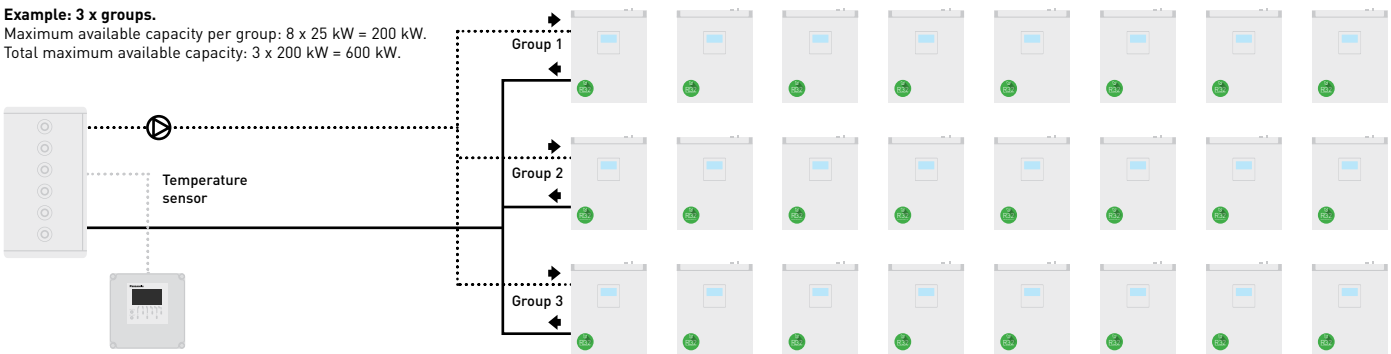


* One of built-in controllers should be deactivated.

Cascade controller PAW-PACR3 allows control from 3 units to 3 groups of 8 units each.
Up to three groups can be combined into a cascade by using optional PAW-PACR3 for failure substitution or temperature assist.

- Maximum 3 groups (up to 8 units per group)
- Rotation
- Failure substitution
- Temperature
- Operation output signal
- Alarm output signal

Example: 3 x groups.
Maximum available capacity per group: 8 x 25 kW = 200 kW.
Total maximum available capacity: 3 x 200 kW = 600 kW.





PACi with water heat exchanger for chilled and hot water production

Short-term investment.
PACi water heat exchanger is ideal for small offices and retails.
The investment costs can be amortised within a very short period.
This solution allows investors and operators to save money.

			PAW-200W5APAC	PAW-250W5APAC
Cooling capacity [1]		kW	20,00	25,00
EER [1]		W/W	3,03	2,89
Heating capacity [2]		kW	23,00	28,00
COP [2]		W/W	2,98	2,95
ηsh (LOT1) [3]		**%**	**178**	**178**
Energy efficiency class (Scale A+++ to D) [4]			**A+++**	**A+++**
Dimension	H x W x D	mm	550 x 455 x 205	550 x 455 x 205
Net weight		kg	27	27
Water pipe connector		Inch	Male Thread 1 ¼	Male Thread 1 ¼
Cooling water flow (ΔT=5 K. 35 °C)		m³/h	3,45	4,30
Heating water flow (ΔT=5 K. 35 °C)		m³/h	4,15	4,85
Flow switch			Included	Included
Water filter			Included	Included
Outdoor unit			**U-200PZH2E8**	**U-250PZH2E8**
Sound pressure	Cool / Heat (Hi)	dB(A)	59 / 61	59 / 63
Dimension	H x W x D	mm	1500 x 980 x 370	1500 x 980 x 370
Net weight		kg	117	128
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	1/2 (12,70)
	Gas pipe	Inch (mm)	1 (25,40)	1 (25,40)
Pipe length range		m	5 ~ 90	5 ~ 60
Elevation difference (in/out)		m	30	30
Pipe length for additional gas		m	30	30
Additional gas amount		g/m	60	80
Water outlet temperature range	Cool Min ~ Max	°C	+5 ~ +15	+5 ~ +15
	Heat Min ~ Max	°C	+35 ~ +50	+35 ~ +50
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24

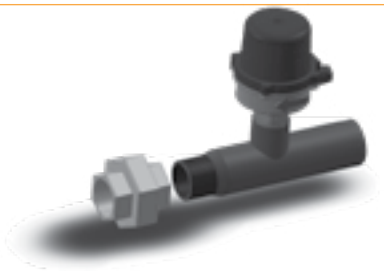
1) Data refers to 7 °C leaving chilled water temperature and 35 °C ambient air temperature, according to EN14511 standard. 2) Data refers to 45 °C leaving warm water temperature and 7 °C ambient air temperature according to EN14511 standard. 3) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 4) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D.

Professional solution

Water heat exchanger is compatible with R32 PACi.
Many air conditioning manufacturers selling R32 systems and it is becoming the standard refrigerant for split type air conditioning systems because R32 has a much lower global warming potential than R410A and can also provide higher efficiency.

Quick installation with pre-assembled flow switch

The flow switches come pre-assembled with pipe fittings for ease of installation.



R32 | A++ ErP 35°C | -20°C HEATING MODE | 46°C COOLING MODE | ADVANCED CONTROL | 5 YEARS COMPRESSOR WARRANTY

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Solutions for server rooms

High efficiency products for 24/7 applications. Panasonic has developed a complete range of solutions for server rooms which efficiently protect your servers, keeping them at an appropriate temperature even when the outdoor temperature is below -20 °C.

NON STOP OPERATION 24/7 365



1 Designed for 24h/7d a week operation

High efficiency all year round. This wall-mounted air conditioner is designed for professional, critical applications such as computer rooms where reliable cooling inside the room is necessary even when the outside temperature is low.

2 High seasonal performance

Highest Energy Rating: A+++ (2,5 to 5,0 kW units).
Highly efficient performance - even at -20 °C outside.
Uses new R32 refrigerant.

3 Server room logic control

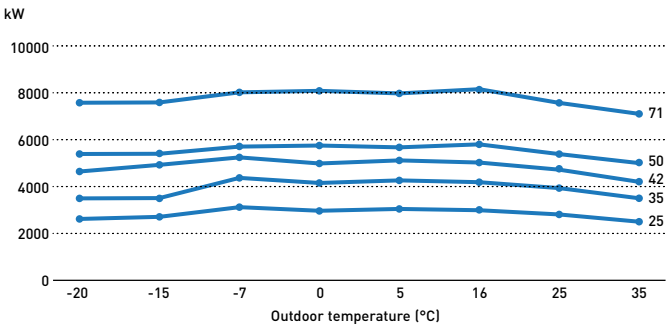
PAW-SERVER-PKEA: Group wiring of 2 TKEA systems ensures auto individual control.
BMS interface: Panasonic offer different interfaces for integrate to Modbus and BACnet.

4 More comfort

Indoor Fan. Cross-Flow-Fan: High durability rolling bearings, large size (φ105 mm) fan. High efficiency blade. Random pitch blade (low sound)
Compressor: DC2P Panasonic original compressor, with high efficiency and reliability.

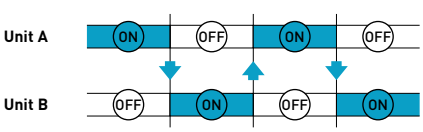
Exceptional efficiency means exceptional savings

TKEA provides high capacity at -20 °C!

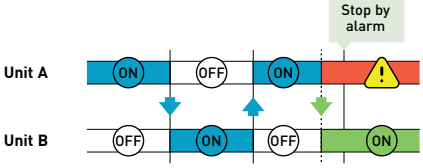


PAW-SERVER-PKEA Logic

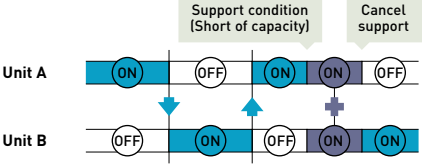
Rotation operation time line.
Every 12 hours units change operation ON/OFF to increase compressor lifecycle.



Backup operation time line.
When unit A has an error, unit B switches on automatically and gives the error output signal.



Support operation time line.
When room temperature rises to than 28 °C, both units work together and automatically give an output error signal.





Wall-mounted Professional Inverter -20 °C • R32

High efficiency all the year.

- From 2,5 to 7,1 kW with TKEA units A+++ in cooling
- Backup function
- Redundancy function
- Alternative run function
- Error information by Dry Contact
- Operation even at -20 °C outdoor temperature
- High seasonal performance
- Product design for 24/7 operation

Kit			KIT-Z25-TKEA	KIT-Z35-TKEA	KIT-Z42-TKEA	KIT-Z50-TKEA	KIT-Z71-TKEA
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,00)	3,50 (0,85 - 4,00)	4,20 (0,98 - 5,00)	5,00 (0,98 - 6,00)	7,10 (0,98 - 8,10)
EER [1]	Nominal (Min - Max)	W/W	4,90 (5,00 - 4,29)	4,07 (5,00 - 3,64)	3,82 (4,90 - 3,25)	3,60 (3,50 - 3,09)	3,17 (2,33 - 3,03)
SEER [2]			**8,5 A+++**	**8,5 A+++**	**8,5 A+++**	**8,5 A+++**	**6,1 A++**
Pdesign		kW	2,50	3,50	4,20	5,00	7,10
Input power cooling	Nominal (Min - Max)	kW	0,51 (0,17 - 0,70)	0,86 (0,17 - 1,10)	1,10 (0,20 - 1,54)	1,39 (0,28 - 1,94)	2,24 (0,42 - 2,67)
Annual energy consumption [3]		kWh/a	103	144	173	206	407
Heating capacity	Nominal (Min - Max)	kW	3,40 (0,85 - 5,40)	4,00 (0,85 - 6,60)	5,40 (0,98 - 7,25)	5,80 (0,98 - 8,00)	8,60 (0,98 - 9,90)
Heating capacity at -7 °C		kW	3,33	4,07	4,30	5,00	6,13
COP [1]	Nominal (Min - Max)	W/W	4,86 (5,15 - 4,12)	4,35 (5,15 - 3,63)	4,00 (4,45 - 3,37)	4,03 (2,88 - 3,20)	3,51 (2,45 - 3,47)
SCOP [2]			**4,5 A+**	**4,4 A+**	**4,3 A+**	**4,4 A+**	**4,0 A+**
Pdesign at -10 °C		kW	2,80	3,60	3,80	4,40	5,50
Input power heating	Nominal (Min - Max)	kW	0,70 (0,17 - 1,31)	0,92 (0,17 - 1,82)	1,35 (0,22 - 2,15)	1,44 (0,34 - 2,50)	2,45 (0,40 - 2,85)
Annual energy consumption [3]		kWh/a	871	1145	1237	1400	1925
Indoor unit			**CS-Z25TKEA**	**CS-Z35TKEA**	**CS-Z42TKEA**	**CS-Z50TKEA**	**CS-Z71TKEA**
Power source		V	230	230	230	230	230
Recommended fuse		A	16	16	16	16	20
Connection indoor / outdoor		mm²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Air flow	Cool / Heat	m³/min	10,4 / 11,7	10,7 / 12,4	18,2 / 20,2	19,2 / 21,3	20,2 / 21,0
Moisture removal volume		L/h	1,5	2,0	2,4	2,8	4,1
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	39 / 25 / 21	42 / 28 / 21	43 / 32 / 29	44 / 37 / 30	47 / 38 / 35
	Heat (Hi / Lo / Q-Lo)	dB(A)	41 / 27 / 22	43 / 30 / 22	44 / 35 / 29	44 / 37 / 30	47 / 38 / 35
Dimension	H x W x D	mm	295 x 919 x 194	295 x 919 x 194	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	9	10	12	12	13
Outdoor unit			**CU-Z25TKEA**	**CU-Z35TKEA**	**CU-Z42TKEA**	**CU-Z50TKEA**	**CU-Z71TKEA**
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	46 / 48	48 / 50	48 / 50	48 / 50	52 / 54
Dimension [5]	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320
Net weight		kg	37	38	38	43	49
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)
Pipe length range		m	3 ~ 20	3 ~ 20	3 ~ 20	3 ~ 30	3 ~ 30
Elevation difference (in/out) [6]		m	15	15	15	15	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5	10
Additional gas amount		g/m	10	10	10	15	25
Refrigerant (R32) / CO_2 Eq.		kg / T	0,96 / 0,648	1,00 / 0,675	1,08 / 0,729	1,15 / 0,776	1,32 / 0,891
Operating range	Cool Min ~ Max	°C	-20 ~ +43	-20 ~ +43	-20 ~ +43	-20 ~ +43	-20 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Accessories	
CZ-TACG1*	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App
CZ-CAPRA1*	RAC interface adapter for integration into P-Link
PAW-SERVER-PKEA*	PCB for installation in server rooms with security

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit.
* Only one of these can be used at a time.

R32 | A+++ 8,5 SEER | A+ 4,5 SCOP | INVERTER | R2 ROTARY COMPRESSOR | 21dB(A) | AEROWINGS | -20°C COOLING MODE | -15°C HEATING MODE | R22 R410A R32 R22/R410A RENEWAL | INTEGRATION TO P-LINK | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For KIT-Z25-TKEA. SUPER QUIET: For KIT-Z25-TKEA. INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

R22 Renewal. Fast, easy to install and cost effective

An important drive to further reduce the potential damage to our ozone.
It is often said that legislation is ruling our lives but sometimes it is there to help save lives. R22 phase out can be described as one of these and from Jan 1st 2010 the use of Virgin (new) R22 refrigerant was banned within the European Union.



Panasonic is doing its part

We at Panasonic are also doing our part – recognising that all finances are under pressure at the moment. Panasonic has developed a clean and cost effective solution to enable this latest legislation to offer less financial impact on your business.
The Panasonic renewal system allows good quality existing R22 or R410A pipe work to be re-used whilst installing new high efficiency R32 systems.
By bringing a simple solution to the problem Panasonic can renew all Split Systems and PACi systems; and depending upon certain restrictions we don't even limit the manufacturer's equipment we are replacing.

By installing a new high efficiency Panasonic R32 system you can benefit from around 30 % running cost saving compared to the R22 system.

Yes...
1. Check the capacity of the system you wish to replace
2. Select from the Panasonic range the best system to replace it with
3. Follow the procedure detailed in the brochure and technical data

Simple...

Why renewal?

Unique R22 Renewal from Panasonic: Fast, easy to install and cost effective.

- Panasonic refrigerant oil doesn't react to the most common oil types used in air-conditioning systems. This ensures the mix of oil does not damage the units. Therefore installations are easier
- All Panasonic PACi units can be installed in R22 pipings, no specific models are available
- Up to 33 Bar! When there is any doubt about the strength of the piping, the maximum working pressure can be reduced to 33 Bar with a setting in the software of the outdoor unit

Reuse of existing piping (renewal design & installation)

Notes on reuse of existing refrigerant piping.
It is possible for each series of PZH and PZ series outdoor unit to reuse the existing refrigerant piping without cleaning when obtained under certain conditions. Make sure that the requirements under the section "Notes on reuse of existing refrigerant piping", "Measurement procedure for renewal" and "Refrigerant piping size and allowable piping length" will be satisfied in order to carry out.
Also, check the items with regard to section "Safety" and "Cleaning".

1. Prerequisite

- If the refrigerant used for the existing unit is other than R22, R407C and R410A / R32, the existing refrigerant piping cannot be used.
- If the existing unit has another use than air conditioning, then existing refrigerant piping cannot be used.

2. Safety

- If there is a hollow, crack or corrosion on the piping, make sure to install new piping.
- If the existing piping is other than capable of reuse of piping as shown in the flowchart, make sure to install new piping.
- In case of multiple operation, use our genuine branch piping for refrigerant R32.

A local supplier shall assume responsibility for the defects and hollows on the reuse of existing piping surface and recognition of reliability of the piping strength. There is no guarantee that we take responsibility for such damages.
The operational pressure of the refrigerant R32 becomes higher compared to R22 or R410A. In the worst case, a lack of compressive strength may lead to piping explosion.

3. Cleaning

- When the refrigerant oil used for the existing unit is other than the listed below, make sure to install new piping or wash it thoroughly before reusing it.
  [Mineral Oil] SUNISO, FIORE S, MS
  [Synthesized oil] alkyl benzene oil (HAB, parallel freeze), ester oil, ether oil (PVE only)

If the existing unit is GHP type, it is necessary to wash the piping thoroughly.

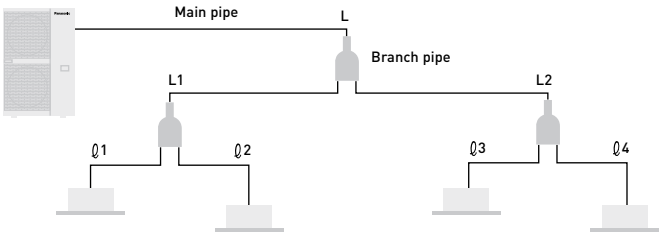
- If the existing pipes in the outdoor and indoor units remain disconnected, make sure to install a new piping or wash it thoroughly before reusing it.
- If the discoloured oil or residue remains in the existing piping, make sure to install a new piping or wash it thoroughly before reusing it. See "Deterioration Criteria for Refrigerant Oil" in table 3.
- If the compressor of the existing air conditioner has a failure history, make sure to install a new piping or wash it through thoroughly before reusing it.

When reusing the existing piping as it is without removing dirt and dust, inadequate piping could result a renewal appliance in failure.



Notes on renewal for simultaneous operation of multiple units

Only main pipe is applicable for using the different diameter size.
In case of different diameter size for the branch pipes, a new installation work for a standard size is necessary.
Be sure to use our genuine branch piping for refrigerant R32.



Notes on renewal for simultaneous operation of multiple units		
Capacity class	**Standard liquid pipe size**	**Standard gas pipe size**
Type 50	Ø 6,35	Ø 12,70
Type from 60 to 140	Ø 9,52	Ø 15,88
Type 200	Ø 9,52	Ø 25,40
Type 250	Ø 12,70	Ø 25,40

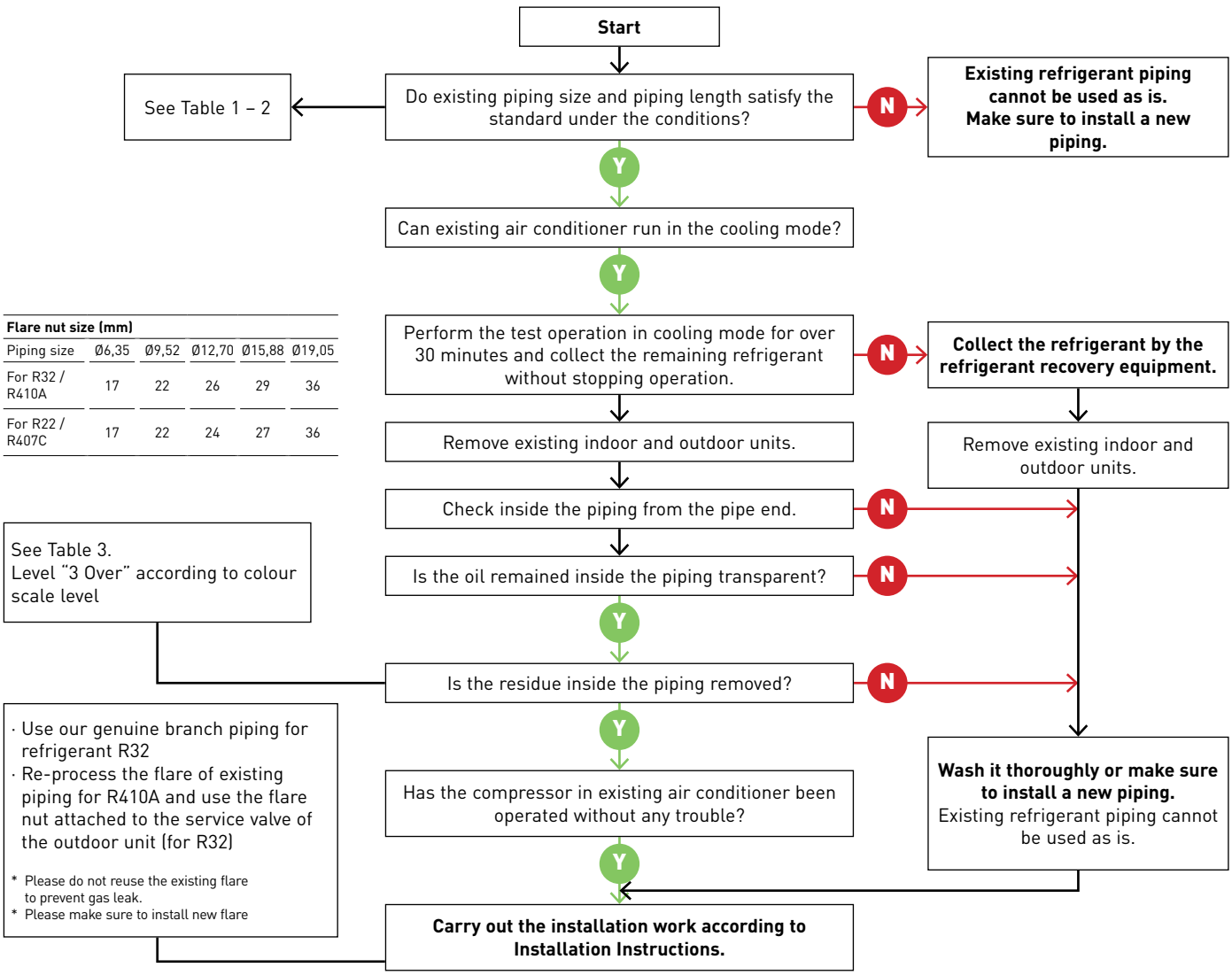
· Only the main pipe L can be used among different diameter's existing piping
· Installation work as a standard size is capable for L1, L2, ℓ1 - ℓ4 piping
· Be sure to use our genuine branch piping for refrigerant R32

1. In case of single unit:
   It is not necessary to charge with additional refrigerant until the chargeless pipe length in the table 2.
   If the pipe length is exceeding the charge less pipe length, charge with additional refrigerant amount per 1 m according to the equivalent length.

2. In case of simultaneous operation of multiple units:
   Calculate the refrigerant charging amount according to the calculating method of the standard piping diameter.
   As to the additional refrigerant charging amount per 1 m, refer to the additional amount in the table 2.

Measurement procedure for Renewal

Observe the following procedure when reusing the existing piping or carrying out renewal installation work.
Flowchart of existing piping measures criteria for PZH and PZ series outdoor unit.



Flare nut size (mm)					
Piping size	Ø6,35	Ø9,52	Ø12,70	Ø15,88	Ø19,05
For R32 / R410A	17	22	26	29	36
For R22 / R407C	17	22	24	27	36

Refrigerant piping size and allowable piping length

Check if reuse of existing refrigerant piping is possible based on the following chart.
The standards other than this one (difference of elevation, etc.) are identical to the requirements of ordinary refrigerant piping.

Table 1 - Reusable existing piping (mm)

Material			O				1/2 H, H*			
External diameter			Ø6,35	Ø9,52	Ø12,70	Ø15,88	Ø19,05	Ø22,22	Ø25,40	Ø28,58
Thickness			0,80	0,80	0,80	1,00	1,00	1,00	1,00	1,00

* It is impossible to reuse the size of Ø19.05, Ø22.22, Ø25.4 and Ø28.58 for material O. Change to material 1/2H or material H.

Table 2 - 1 Refrigerant piping size: 2,5 - 14,0 kW type (mm)

Liquid pipe			Ø6,35			Ø9,52			Ø12,70	
Gas pipe			Ø9,52	Ø12,70	Ø15,88	Ø12,70	Ø15,88	Ø19,05	Ø15,88	Ø19,05
PZH3	Type 36 ~ 60	Additional gas 15 g/m	×	Standard 40 m (30 m)	×	×	×	×	×	×
PZ3	Type 25	Tentative data								
	Type 36	Additional gas 10 g/m	×	Standard 15 m (7,5 m)	×	×	×	×	×	×
	Type 50	Additional gas 15 g/m	×	Standard 20 m (7,5 m)	×	×	×	×	×	×
	Type 60	Additional gas 15 g/m	×	Standard 30 m (7,5 m)	×	×	×	×	×	×
	Type 71	Additional gas 17 g/m	×	×	Standard 40 m (10 m)	×	×	×	×	×

Liquid pipe			Ø6,35			Ø9,52			Ø12,70	
Gas pipe			Ø9,52	Ø12,70	Ø15,88	Ø12,70	Ø15,88	Ø19,05	Ø15,88	Ø19,05
PZH3	Type 71		×	□ 10 m (10 m)	□ 10 m (10 m)	▽ 30 m (30 m)	Standard 50 m (30 m)	×	□ 25 m (15 m)	×
	Type 100 ~ 140		×	×	×	×	Standard 85 m (30 m)	◎ 85 m (30 m)	□ 35 m (15 m)	□ 35 m (15 m)
Additional gas				20 g/m			45 g/m		80 g/m	
PZ3	Type 100 ~ 140		×	×	×	×	Standard 50 m (30 m)	◎ 50 m (30 m)	□ 25 m (15 m)	□ 25 m (15 m)
Additional gas							45 g/m		80 g/m	
PZH2	Type 50		×	Standard 40 m (30 m)	◎ 40 m (30 m)	□ 20 m (15 m)	□ 20 m (15 m)	×	×	×
PZ2	Type 60 ~ 71		×	▽ 10 m (10 m)	□ 10 m (10 m)	▽ 30 m (20 m)	Standard 50 m (20 m)	×	□ 25 m (10 m)	×
Additional refrigerant charging amount per 1 m				20 g/m			40 g/m		80 g/m	
PZH2	Type 60 ~ 71		×	▽ 10 m (10 m)	□ 10 m (10 m)	▽ 30 m (30 m)	Standard 50 m (30 m)	×	□ 25 m (15 m)	×
	Type 100 ~ 140		×	×	×	×	Standard 75 m (30 m)	◎ 75 m (30 m)	□ 35 m (15 m)	□ 35 m (15 m)
PZ2	Type 100 ~ 140		×	×	×	×	Standard 50 m (30 m)	◎ 50 m (30 m)	□ 25 m (15 m)	□ 25 m (15 m)
Additional refrigerant charging amount per 1 m				20 g/m			50 g/m		80 g/m	

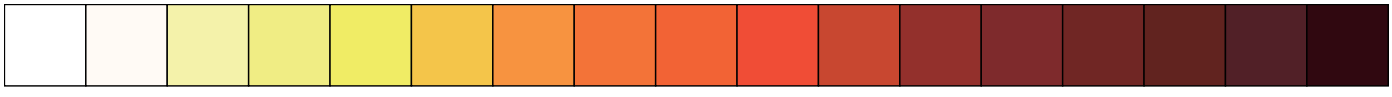
How to see table definition (example):
In case of type 71, standard size is liquid pipe Ø9,52 / gas pipe Ø15,88.
There is a limitation to liquid pipe Ø9,52 / gas pipe Ø12,70 and to liquid pipe Ø12,70 / gas pipe Ø15,88.
However, they are applicable for different diameter's pipes.

Table 2 - 2 Refrigerant piping size: 20,0 - 25,0 kW type (mm)

Liquid pipe		Ø9,52			Ø12,70			Ø15,88		
Gas pipe		Ø22,22	Ø25,40	Ø28,58	Ø22,22	Ø25,40	Ø28,58	Ø22,22	Ø25,40	Ø28,58
PZH	Type 200	▽ 80 m (30 m)	Standard 100 m (30 m)	◎ 100 m (30 m)	▽ 50 m (15 m)	□ 50 m (15 m)	□ 50 m (15 m)	×	×	×
	Type 250	×	×	×	▽ 80 m (30 m)	Standard 100 m (30 m)	◎ 100 m (30 m)	▽ 65 m (20 m)	□ 65 m (20 m)	□ 65 m (20 m)
Additional refrigerant charging amount per 1 m		40 g/m			80 g/m			120 g/m		

◎ Allowable
▽ Cooling capacity down
□ Limited piping length
× Unallowable
50 m Maximum piping length
(50 m) Charge less piping length in a single connection

Table 3 - Deterioration Criteria for Refrigerant Oil



Accessories and control

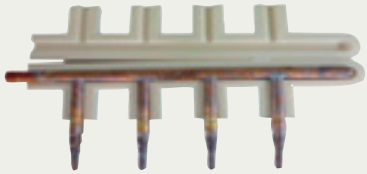
Branch Pipes, Header



Branch pipe.
————
CZ-P224BK2BM

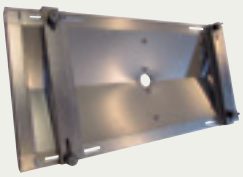


Branch pipe (from 22,4 kW to 68 kW).
————
CZ-P680BK2BM



Header.
————
CZ-P3HPC2BM

Outdoor accessories



Tray for condenser water compatible with outdoor elevation platform.
————
PAW-WTRAY



Outdoor elevation platform.
Dimension (H x W x D): 400 x 900 x 400 mm
————
PAW-GRDSTD40



Outdoor base ground support for noise and vibration absorption.
Dimension (H x W x D): 600 x 95 x 130 mm
Weight: 500 kg
————
PAW-GRDBSE20

Panels



Standard panel for 4 way 90x90 cassette.
————
CZ-KPU3W



Econavi panel for 4 way 90x90 cassette.
————
CZ-KPU3AW



Panel for 60x60 cassette size 700 x 700 mm.
————
CZ-KPY3AW

Panel for 60x60 cassette size 625 x 625 mm.
————
CZ-KPY3BW

Sensors

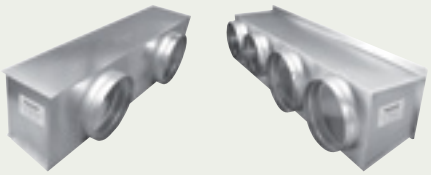


Econavi energy savings sensor.
————
CZ-CENSC1



Remote temperature sensor.
————
CZ-CSRC3

Plenums



Air outlet plenum for S-3650PF3E.
———
CZ-56DAF2

Air outlet plenum for S-6071PF3E.
———
CZ-90DAF2

Air outlet plenum for S-1014PF3E.
———
CZ-160DAF2

Air outlet plenum for S-200PE2E5.
———
CZ-TREMIESPW705

Air outlet plenum for S-250PE2E5.
———
CZ-TREMIESPW706

VRF Smart Connectivity+



Remote controller Panasonic Net Con, RH, No PIR, R1/R2.
———
SER8150R0B1194

Remote controller Panasonic Net Con, RH, PIR, R1/R2.
———
SER8150R5B1194

Wireless ZigBee® Pro module / Green Com card.
———
VCM8000V5094P



Hotel Room Expansion Module 14 indoor units.
———
HRCEP14R

Hotel Room Controller 28 indoor units.
———
HRCPBG28R

Hotel Room Controller w/ Display 42 indoor units.
———
HRCPDG42R



Door / window wireless sensor.
———
SED-WDC-G-5045



Wall / ceiling (motion) wireless sensor.
———
SED-MTH-G-5045



CO_2 sensor.
———
SED-CO2-G-5045

Sensor with room temperature and humidity.
———
SED-TRH-G-5045



Water leakage sensor.
———
SED-WLS-G-5045

Accessories and control



Cover frame. Silver.

———

FAS-00

Cover frame. White.

———

FAS-01

Cover frame. Glossy translucent white.

———

FAS-03

Cover frame. Light tan wood.

———

FAS-05

Cover frame. Dark brown wood.

———

FAS-06

Cover frame. Dark black wood.

———

FAS-07

Cover frame. Brushed steel finish.

———

FAS-10

Controller and touch controllers for hotels with dry contacts



Modbus RS-485 touch room controller with I/O, White.

———

PAW-RE2C4-MOD-WH

Touch display control with 2 digital inputs, White.

———

PAW-RE2D4-WH



Modbus RS-485 touch room controller with I/O, Black.

———

PAW-RE2C4-MOD-BK

Touch display control with 2 digital inputs, Black.

———

PAW-RE2D4-BK

Hotel sensors for dry contacts



Wall motion sensor 24 V.

———

PAW-WMS-DC

Wall motion sensor 240 V AC.

———

PAW-WMS-AC



Ceiling motion sensor 24 V.

———

PAW-CMS-DC

Ceiling motion sensor 240 V AC.

———

PAW-CMS-AC



Power supply 24 V.

———

PAW-24DC



Door or window contact.

———

PAW-DWC

Centralised controls



System controller for 64 indoor units with weekly timer.

———

CZ-64ESMC3



Central ON/OFF controller, up to 16 groups, 64 indoor units.

———

CZ-ANC3



Intelligent controller (touch screen/web server) to control up to 256 indoors with included load distribution ratio (LDR).

———

CZ-256ESMC3

Panasonic AC Smart Cloud



Panasonic AC Smart Cloud. Cloud internet control. Up to 128 groups. Controls 128 units.

————

CZ-CFUSCC1

Accessories interfaces



Modbus RTU & TCP interface for 16 indoors.

————

PAW-AC2-MBS-16P

Modbus RTU & TCP interface for 64 indoors.

————

PAW-AC2-MBS-64P

Modbus RTU & TCP interface for 128 indoors.

————

PAW-AC2-MBS-128P



KNX interface for 16 indoors.

————

PAW-AC2-KNX-16P

KNX interface for 64 indoors.

————

PAW-AC2-KNX-64P



BACnet IP & MSTP interface for 16 indoors.

————

PAW-AC2-BAC-16P

BACnet IP & MSTP interface for 64 indoors.

————

PAW-AC2-BAC-64P

BACnet IP & MSTP interface for 128 indoors.

————

PAW-AC2-BAC-128P



Commercial Wi-Fi Adaptor.

————

CZ-CAPWFC1



KNX interface.

————

PAW-RC2-KNX-1i



Modbus RTU interface.

————

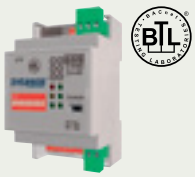
PAW-RC2-MBS-1



Modbus RTU interface to control 4 indoor/groups.

————

PAW-RC2-MBS-4



BACnet IP & MSTP.

————

PAW-RC2-BAC-1



Wi-Fi adapter for smart control via Panasonic Comfort Cloud App (for TKEA units).

————

CZ-TACG1



RAC interface adapter for integration into P-Link, plus external input and alarm/ status output (for TKEA units).

————

CZ-CAPRA1

Accessories and control

Centralised controls. Connection with general equipment connection



Serial parallel device controlling outdoor units, up to 4 units.

————
CZ-CAPDC2*



Adaptor for ON/OFF control of external devices.

————
CZ-CAPC3



Mini series parallel device controlling indoor units, maximum 1 group and 8 indoor unit.

————
CZ-CAPBC2*



Communication Adaptor. Up to 128 groups. Controls 128 units.

————
CZ-CFUNC2

Individual controls



CONEX wired remote controller (non-wireless).

————
CZ-RTC6



CONEX wired remote controller with Bluetooth®.

————
CZ-RTC6BL



CONEX wired remote controller with Wi-Fi and Bluetooth®.

————
CZ-RTC6BLW**



Design wired remote controller with Econavi function and datanavi.

————
CZ-RTC5B



Infrared remote controller for 4 way 90x90 cassette.

————
CZ-RWS3 + CZ-RWRU3W 0000 €



Infrared remote controller for 4 way 60x60 cassette PY3 with panel.

————
CZ-RWS3 + CZ-RWRY3 0000 €



Infrared remote controller for wall-mounted and 4 way 60x60 cassette with panel.

————
CZ-RWS3 0000 €



Infrared remote controller for ceiling.

————
CZ-RWS3 + CZ-RWRT3 0000 €



Infrared remote controller for all indoor units.

————
CZ-RWS3 + CZ-RWRC3 0000 €

Accessories PCB



T10 interface PCB with digital and relay connections.

————

PAW-T10



PCB for server room application, control of 3 PACi units, redundancy, backup, etc.

————

PAW-PACR3



Redundancy of 2 units TKEA.

————

PAW-SERVER-PKEA

Accessories cables



Cable for all the T10 functions.

————

CZ-T10



Cable to operate external EC fan.

————

PAW-FDC



Cable for all option monitoring signals.

————

PAW-OCT

Cable with force thermo OFF/ leakage detection.

————

PAW-EXCT

PRO-HT Tank accessories

Tank controller for PACi system.

————

PAW-VP-RTC5B-PAC

Additional heater.

————

PAW-IU29/39

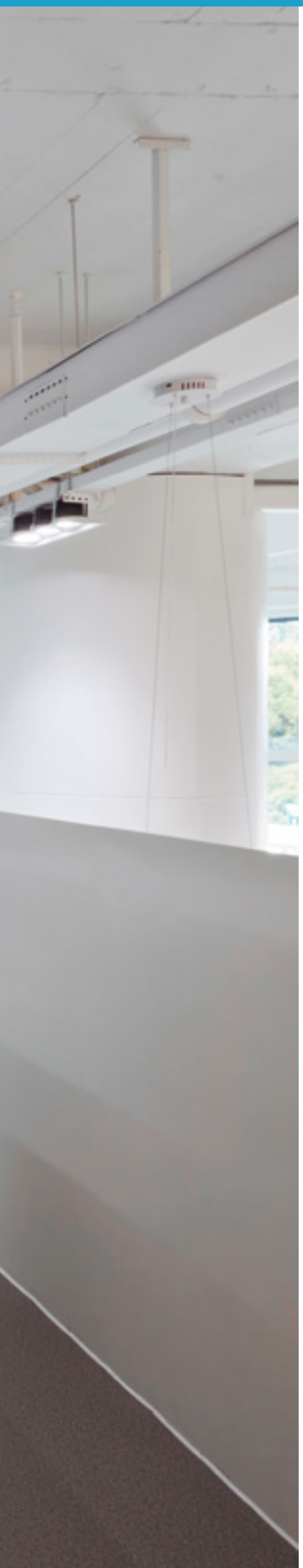
** Only compatible with PACi NX Series.

ECO i EX

ECO i

ECO G





Commercial VRF Systems

Professional solutions for commercial projects.
Panasonic VRF System is specifically designed for energy saving, easy installation and high efficiency performance, with a wide choice of outdoor and indoor unit models and unique features which are designed for the most demanding offices and big buildings.

VRF highlighted features > 234
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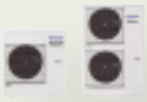
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VRF highlighted features

Panasonic provides an extensive range of solutions for medium-sized and large buildings. Combining the best option to satisfy all needs and site restrictions.



	ECOi. Electrical VRF			ECO G. Gas Powered VRF	
NEW 2-Pipe Mini ECOi LZ2 • R32	2-Pipe Mini ECOi LE2 / LE1 • R410A	2-Pipe ECOi EX	3-Pipe ECOi EX	2-Pipe ECO G GE3	3-Pipe ECO G GF3
					
Capacity range					
4 - 10 HP	4 - 10 HP	8 - 80 HP	8 - 48 HP	16 - 60 HP	16 - 25 HP
Extreme temperatures operation					
-20 °C (heating) / 52 °C (cooling)	-20 °C	-25 °C	-20 °C	-21 °C	-21 °C
Number of indoor units					
15	15	64	52	64	24
Simultaneity ratio					
50 ~ 150 %	50 ~ 130 %	200 %	150 %	50 ~ 200 % [1]	50 ~ 200 %
Indoor units					
All (check restrictions)					
Controls					
All					
Other ranges integration					
PACi full control integration + Domestic integration by accessory					

1) 50 ~ 200 % only when one outdoor unit is installed. In other cases 50 ~ 130 %.

Uniquely, you can choose from both Electrical VRF and Gas-powered VRF systems from Panasonic, delivering best choice that really makes a difference to our customers

Providing a large choice in indoor units, you can also connect water heat exchangers, air handling units and ventilation units with or without a heat exchanger. And all managed from a simple and powerful stand-alone remote control, new centralised controls or cloud connection with 3G embedded.
This cutting edge control technology is called VRF Smart Connectivity, combining the expertise of VRF communication and a leading BEMS company to maximise comfort and efficiency while also reducing installation costs.

Panasonic ECOi is Eurovent certified. Panasonic's VRF systems - ECOi range is now certified by Eurovent*. The Eurovent certification verifies the performance ratings of heating and cooling systems following European standards. Those data provides products efficiency with full transparency for the benefit of customers and professionals.

* Reference website: https://www.eurovent-certification.com/en.

Energy saving

Inverter Plus System. Inverter Plus System classification highlights Panasonic's highest performing systems.

Panasonic R2 rotary compressor. Designed to withstand extreme conditions, it delivers high performance and efficiency.

All inverter compressors. Multiple large-capacity all inverter compressors (more than 14 HP).Two independently controlled inverter compressors achieve high efficiency. Redesigned components in the body provide performance improvement especially in the rated cooling condition and EER performance.

Econavi. Intelligent Human Activity Sensor and Sunlight Sensor technologies that can detect and reduce waste of energy by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy.

High COP. High efficiency models performs higher COP than standard units and standard combinations.

Gas powered. ECO G technology offers the best in energy efficiency. ECO G gas VRF is specially designed for buildings where the electricity is restricted or CO_2 emissions must be reduced.

High performance

Down to -25 °C in heating mode. The ECOi EX system works in heating mode with performance data at outdoor temperature down to -25 °C.

Operation range. The PRO-HT Tanks work with an outdoor temperature is as low as -20 °C.

Cooling with outdoor temperature up to 52 °C. The ECOi EX system works in cooling mode with performance data at outdoor temperature up to 52 °C.

Bluefin. Panasonic has extended the life of its condensers with an original anti-rust coating.

nanoe™ X. Technology with the benefits of hydroxyl radicals has the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise.

Filter included. Hide-away with filter included.

Self-diagnosing function. By using electronic control valves past warnings are stored. This makes it easier to diagnose malfunctions, reducing service labour and therefore costs.

Automatic fan operation. Convenient microprocessor control automatically adjusts fan speed to high, medium or low, corresponding to room sensor and maintains comfortable airflow throughout the room.

Mild Dry. By intermittent control of compressor and indoor unit's fan, "Mild Dry" gives you comfort. It realizes efficient dehumidification according to room temperature.

Comfortable auto-flap control. When the unit is first turned on, flap position is automatically adjusted in accordance with the cooling or heating operation.

Automatic restart. Automatic restart function for power failure. Even when power failure occurs, preset programmed operation can be reactivated once power is resumed.

Air Sweep. The air sweep function moves the flap up and down in the air outlet, directing air in a "sweeping" motion around the room and providing comfort in every corner.

Built-in drain pump. Maximum head 50cm (or 75cm for U type) from the bottom of the unit.

High performance. A7 COP 6,70 for ECOi 3-Pipe in case of heat recovery. For PRO-HT Tank.

DHW. With PRO-HT Tank you can also heat your domestic hot water at a very low cost with the optional hot water cylinder.

High temperature. With PRO-HT Tank, maximum water outlet temperature up to 65 °C.

R22 renewal. The Panasonic renewal system allows good quality existing R22 pipe work to be re-used whilst installing new high efficiency R410A systems.

5 Years Warranty. We guarantee the outdoor unit compressors for five years.

High connectivity

Panasonic AC Smart Cloud. The AC Smart Cloud from Panasonic allows you to have complete control of all your installations. In a simple click, receive status updates from all your units in real-time, preventing breakdowns and optimizing costs.

Internet control. A next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone, tablet or PC via the internet.

BMS connectivity. The communication port can be integrated into the indoor unit and provides easy connection to, building management system, providing control of your Panasonic heat pump.

Panasonic: delivering TOP energy efficiencies for many years



Particularly suitable for retail, hotels and office applications

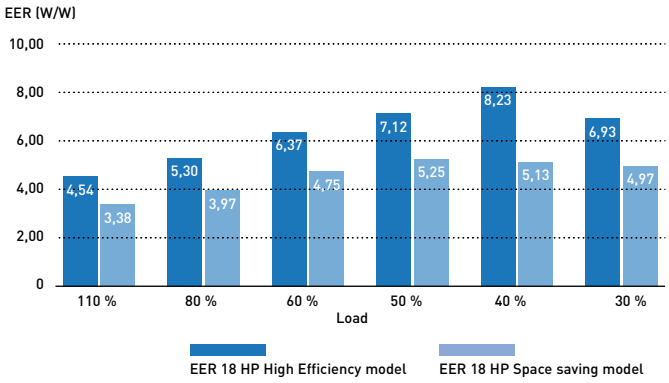
Outstanding efficiency at part load conditions:
Panasonic ECOi EX model covers up to 30 % part load with extremely high efficiency.

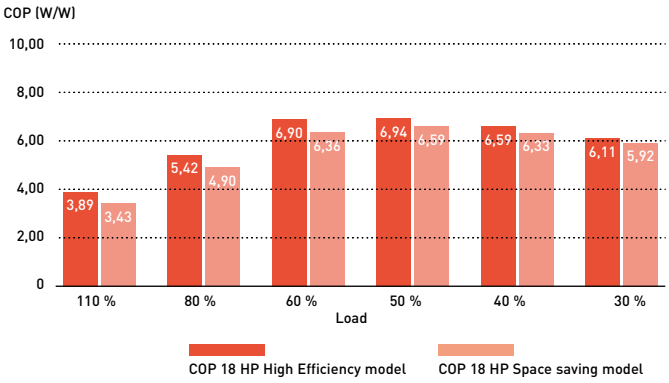
EER comparison of Panasonic ECOi EX 2-Pipe ME2 at different partial load						
Load %	**100 %**	**80 %**	**60 %**	**50 %**	**40 %**	**30 %**
18 HP High Efficiency model	4,54	5,30	6,37	7,12	8,23	6,93
18 HP Space saving model	3,38	3,97	4,75	5,25	5,13	4,97

Conditions: Outdoor temperature 35 °C DB, Room temperature 19 °C WB.

COP comparison of Panasonic ECOi EX 2-Pipe ME2 at different partial load						
Load %	**100 %**	**80 %**	**60 %**	**50 %**	**40 %**	**30 %**
18 HP High Efficiency model	3,89	5,42	6,90	6,94	6,59	6,11
18 HP Space saving model	3,43	4,90	6,36	6,59	6,33	5,92

Conditions: Outdoor temperature 0 °C WB, Room temperature 20 °C DB.





* Data from Panasonic official technical data book.

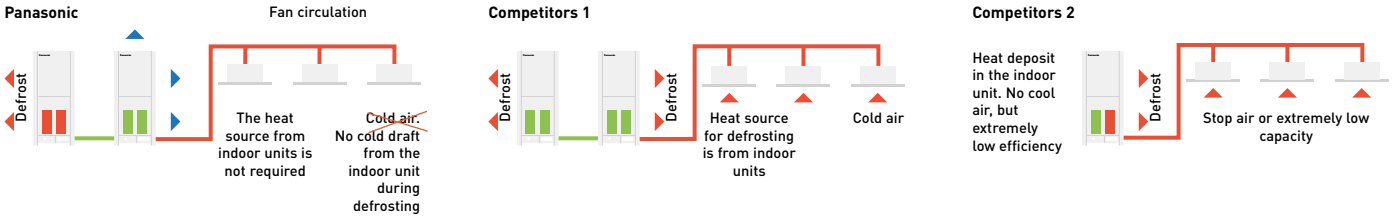
Excellent SEER and SCOP values for VRF 2 and 3-Pipe

Panasonic have a extremely high SEER and SCOP values following LOT21 (seasonal space cooling/heating energy efficiency by COMMISSION REGULATION (EU) 2016/2281).

	Mini ECOi (LE)					2-Pipe							3-Pipe				
	4 HP	5 HP	6 HP	8 HP	10 HP	8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP	8 HP	10 HP	12 HP	14 HP	16 HP
SEER	7,9	7,5	7,3	6,3	6,4	7,58	7,09	6,86	7,36	6,55	7,70	7,16	7,15	7,18	6,51	6,81	6,12
SCOP	4,9	4,4	4,2	4,2	4,3	4,85	4,32	4,78	4,33	4,09	4,34	4,13	4,92	4,30	4,32	4,17	3,84

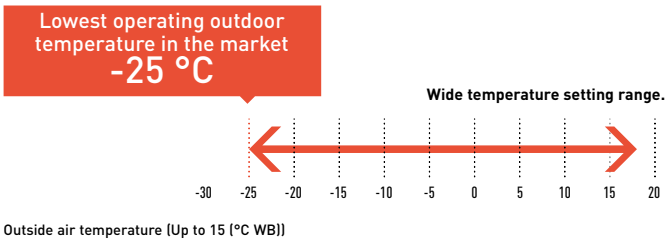
Efficient defrost operation

Panasonic uses the second unit to defrost the first unit. This makes the system more efficient during defrost and does not affect comfort.



Panasonic ECOi operates at as low as -25 °C

This unique feature demonstrate the supremacy of Panasonic ECOi EX Series.
Panasonic use the second unit to defrost the first unit. This makes the system more efficient during defrost and does not affect the comfort.



Bringing nature's balance indoors

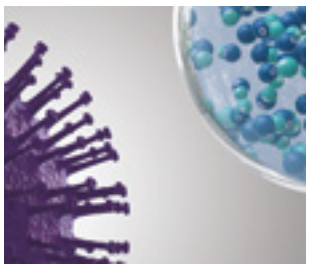
nanoe™ X, technology with the benefits of hydroxyl radicals.

Abundant in nature, hydroxyl radicals (also known as OH radicals) have the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise. nanoe™ X technology can bring these incredible benefits indoors so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and pleasant place to be.

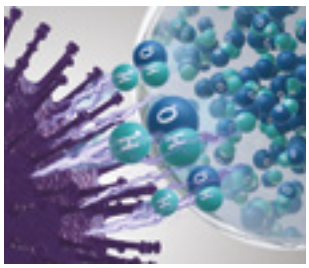


Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment

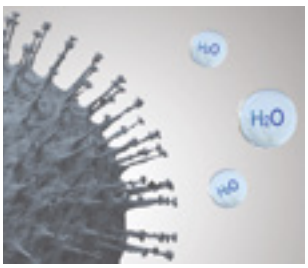
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



1 | nanoe™ X reliably reaches pollutants.



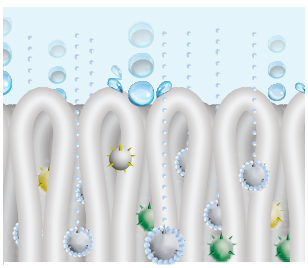
2 | Hydroxyl radicals denature pollutants' proteins.



3 | Pollutants activity is inhibited.

What is unique about nanoe™ X?

Effective on fabrics and surfaces.



1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

Longer lifespan.



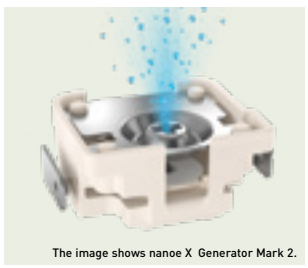
2 | Contained in tiny water particles, nanoe™ X has a longer lifespan to spread easily around the room.

Huge quantity.



3 | nanoe X Generator Mark 2 produces 9,6 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

Maintenance-free.



The image shows nanoe X Generator Mark 2.

4 | No maintenance, no replacement required. nanoe™ X is a filter free solution that does not require maintenance, as its atomisation electrode is enveloped with water during its generation process and it is made with Titatium.

7 effects of nanoe™ X – Panasonic unique technology

Deodorises



Odours

Capacity to inhibit 5 types of pollutants



Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances

Moisturises



Skin and hair

* Refer to https://aircon.panasonic.eu for more details and validation data.

nanoe™ X, internationally-validated technology in testing facilities

The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Malaysia and Japan.

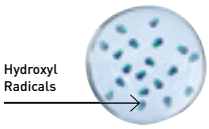
The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

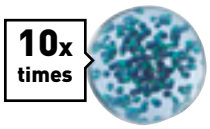
Test results conducted under controlled laboratory conditions. Performance of nanoe™ X might differ in real life environment.

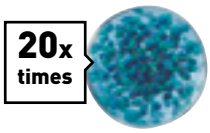
	Tested contents		Result	Capacity	Time	Testing organisation	Report No.
Airborne	Virus	Bacteriophage ΦX174	99,7 % inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1
	Bacteria	Staphylococcus aureus	99,9 % inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	2016_0279
Adhered	Virus	SARS-CoV-2	91,4 % inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3
		SARS-CoV-2	99,9 % inhibited	45 L	2 h	Texcell (France)	1140-01 A1
		Xenotropic murine leukemia virus	99,999 % inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—
		Influenza (H1N1 subtype)	99,9 % inhibited	1 m³	2 h	Kitasato Research Center for Environmental Science	21_0084_1
		Bacteriophage ΦX174	99,80% inhibited	25 m³	8 h	Japan Food Research Laboratories	13001265005-01
	Bacteria	Staphylococcus aureus	99,9 % inhibited	20 m³	8 h	Danish Technological Institute	868988
	Pollen	Ambrosia pollen	99,4 % inhibited	20 m³	8 h	Danish Technological Institute	868988
	Odours	Cigarette smoke odour	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04

First nanoe™ device was developed by Panasonic in 2003

	nanoe™	nanoe™ X	
Generator	2003	**Mark 1** - 2016	**Mark 2** - 2019
	480 billion hydroxyl radicals/sec	4,8 trillion hydroxyl radicals/sec	9,6 trillion hydroxyl radicals/sec
Ion particle structure	Hydroxyl Radicals	10x times	20x times







nanoe™ X: improving protection 24/7



Acts to clean your air, so that the indoor environment can be a cleaner and pleasant place to be all day long. nanoe™ X works together with heating or cooling function when the during the day and can work independently when the area is not occupied.
Give the air conditioning the strength to increase the protection of your indoor spaces with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.



Cleans the air when you are away.
Leave the nanoe™ mode ON to inhibit certain pollutants and deodorise before you return home.

Improves your environment when you are at home.
Enjoy a cleaner, comfortable space with loved ones.

Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment



U2 Type 4 way 90x90 cassette.
Built-in nanoe X Generator Mark 2.



F3 Type adaptive duct.
Built-in nanoe X Generator Mark 2.



Floor console.
Built-in nanoe X Generator Mark 1.

Panasonic VRF: TOP in comfort

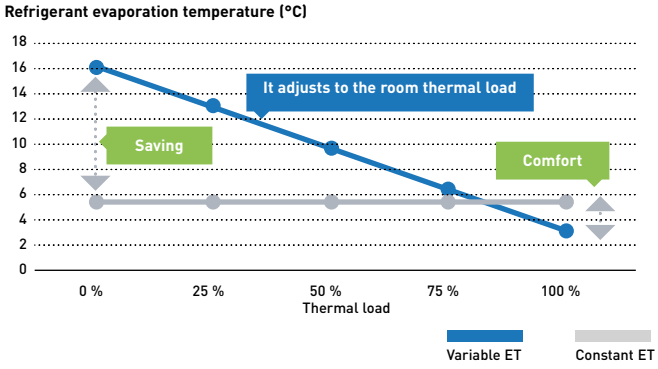
Since 2006, all Panasonic VRF systems have included special VET technology, with variable refrigerant temperature, as standard.

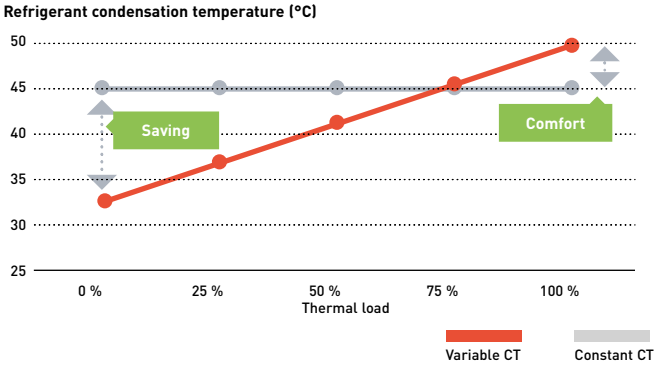


Variable Evaporation and Condensation Temperature

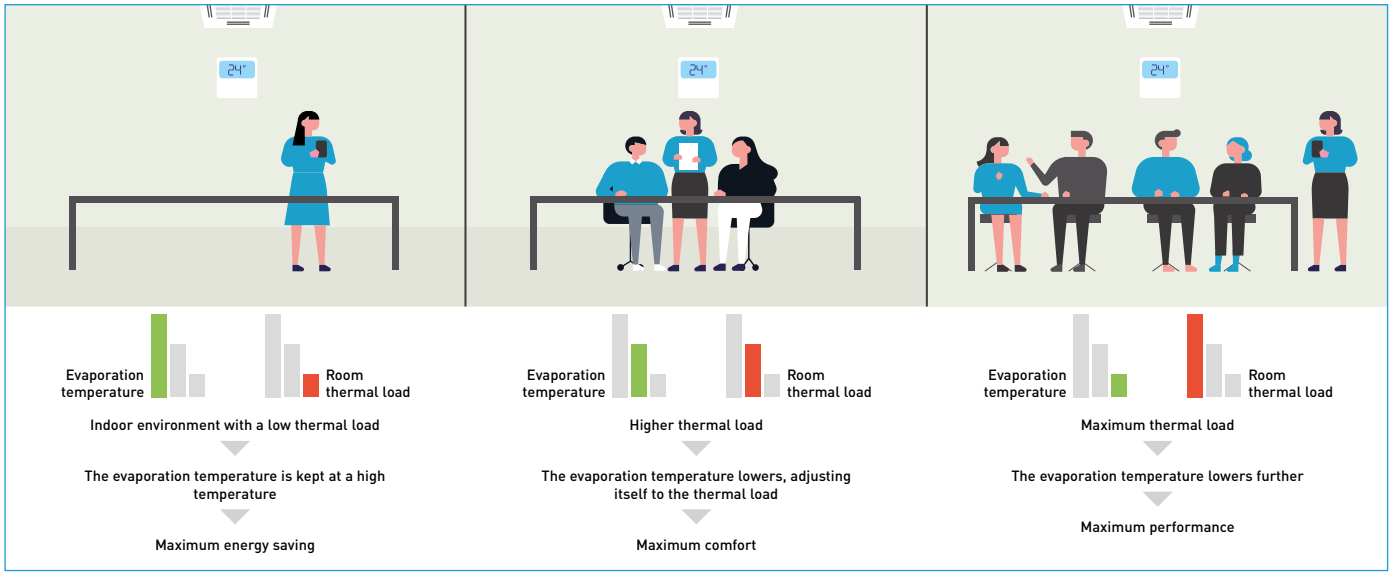
Our 'smart logic' system checks the temperature every 30 seconds, automatically adjusting the refrigerant temperature according to actual demand and outdoor conditions. This ensures better energy performance at all times.

Temperature varies from 16 °C to 3 °C.
Similarly, the condensation temperature is also variable and is adjusted to the room thermal load, within a range of 33 - 55 °C.

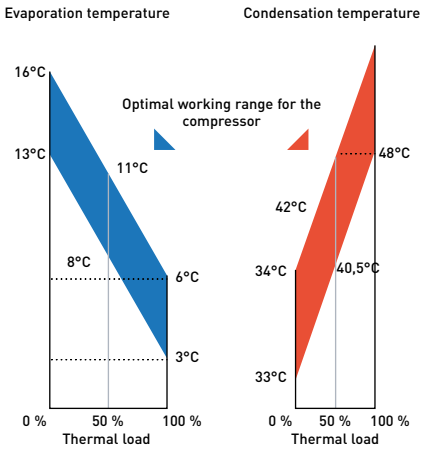




Example of cooling mode (similarly applicable to heating mode).

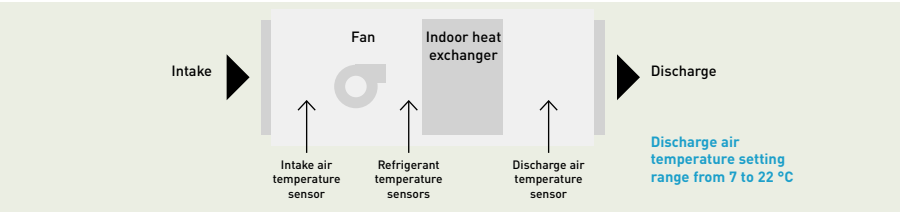


Technical focus on variable temperatures



Control of the discharge temperature

This special function is available in all of Panasonic VRF systems' indoor units to guarantee maximum comfort for the end user.
For example, in cooling mode, if the temperature of the discharged air was below 10 °C, the user may feel discomfort, just as he would do in heating mode if the temperature was far too high.
With the Panasonic control of the discharge air temperature, this can be adjusted within a cooling range of 7 – 22 °C.



Benefits:
- The air will never be too cold or too warm
- Available in cooling and in heating
- Higher comfort
- Energy saving
- It prevents the formation of condensation within ducts and vents, improving levels of hygiene

Solutions for Restaurants

Full heating, cooling and DHW solutions for Restaurants

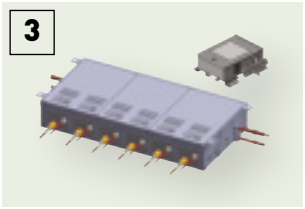
Highly efficient at part load conditions.
Panasonic has solutions for optimising the installation of cooling, heating and DHW production in restaurants. While the kitchen needs cooling, heating is needed for DHW and also for heating the public area, with the advantage of 100 % fresh air that removes odours. Combining all these needs smartly with Panasonic technology results in a simple and flexible system adaptable to any restaurant requests, with lower utility bills. Additionally, Panasonic is the unique offering solution for areas where electric power is limited, using ECO G, VRF units powered mainly by Natural Gas or Propane, bringing comfort and DHW anywhere.

1


ECOi (Electric VRF).
ECOi electrical VRF is specifically designed for the most demanding hotels. High efficiency system. Extended operating range to provide heating at outdoor temperature as low as -20 °C. Suitable for refurbishment projects.

2


TKEA outdoor unit for server room.
Steady cooling, nonstop, even at -20 °C and still with high efficiency. Ready for continuous operation and easy to connect 2 systems to automatically alternate and ensure server rooms are kept cool.

3


3-Pipe control box kit.
New Heat Recovery box to connect multiple indoor units with just one box, 4, 6 and up to 8 indoor units or groups
This is good advantage specially in hotels applications, where space for connecting several boxes is limited.

4

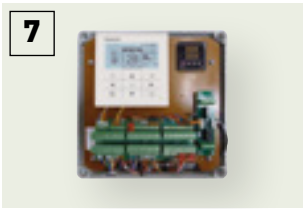

Aquarea T-CAP.
Ideal for heating, cooling and for production of big quantities of hot water at 65 °C, Aquarea have a extremely quick return on investment and a low CO_2 footprint.

5


Control your way.
Wide variety of controls, from simple user control to full system control via remote access functionality. Touch panel and consumption control.

6

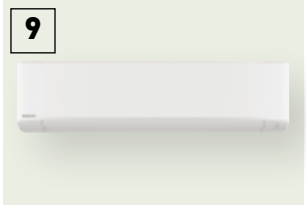

Hydrokit for ECOi. Water at 45 °C.
Producing LT hot water, compatible with both ECOi, heat pump and heat recovery outdoors.

7


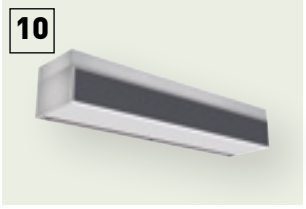
Air handling unit kits for efficient ventilation.
The AHU kit is specially designed to improve the efficiency of the pre-heating or pre-cooling process of the ventilation.

8


Hide-away, for power and efficiency.
Super silent units deliver the ideal air supply. Units available from 1,5 kW providing precise temperature control even in small rooms. Two models available: slim unit for height restricted areas (MM unit only 200 mm deep), another which allows 100 % fresh air (MF).

9


Wall-mounted.
The K2 Type Wall-mounted unit has a stylish smooth panel which not only looks good but is also easy to clean.
The unit is also smaller, lighter and substantially quieter than previous models making it ideal for small offices and other commercial applications.

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Air curtain with DX coil.
The Panasonic range of air curtains is designed for smooth operation and efficient performance.

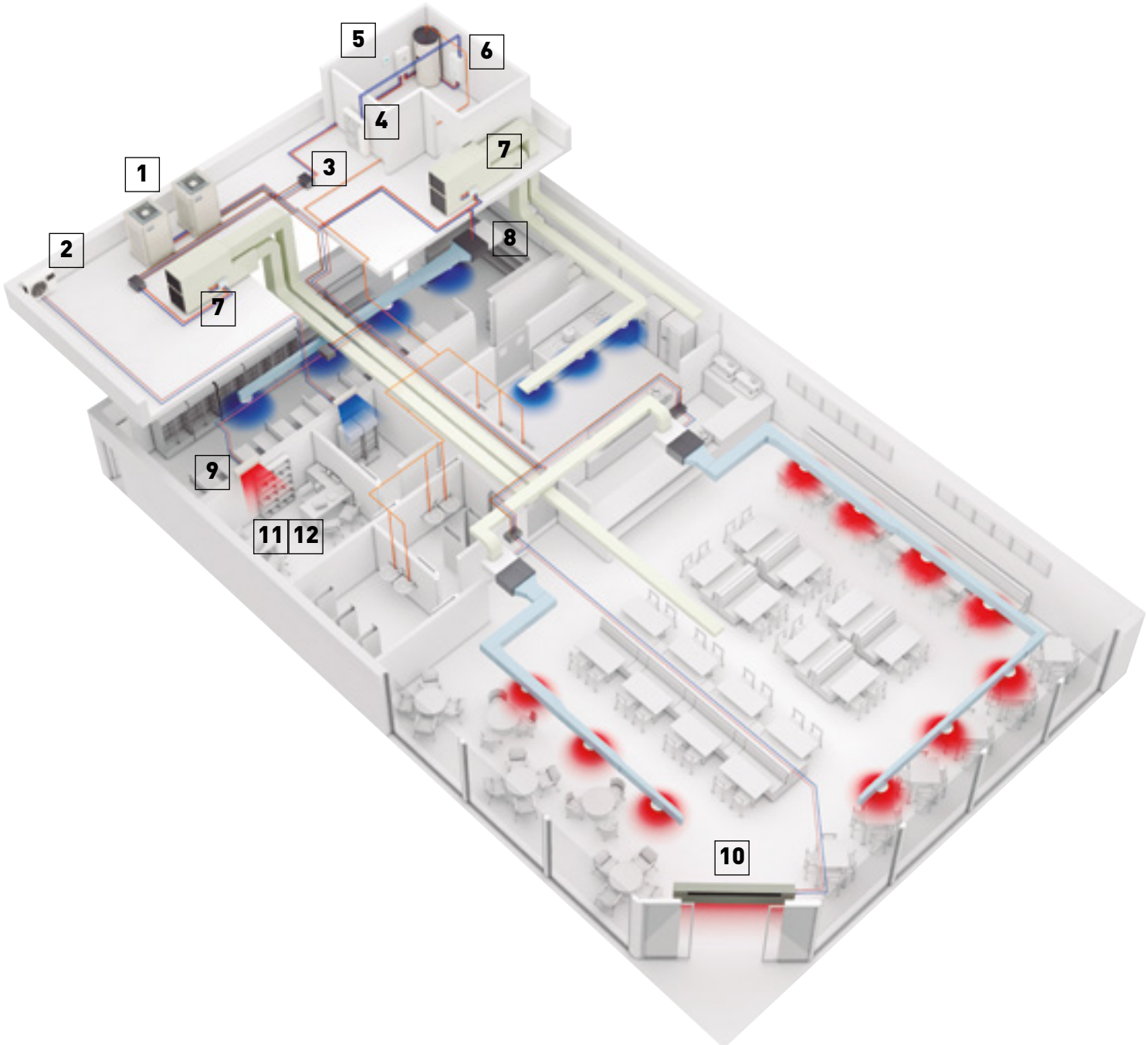
11


Protocol friendly.
Great flexibility for integration into your KNX / Modbus / LonWorks / BACnet projects allows fully bi-directional monitoring and control of all the functioning parameters.
Range of solutions to control locally or remotely the full system in bi-directional mode.

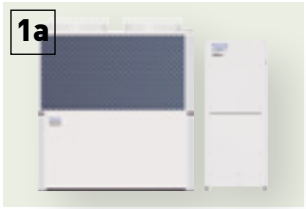
12


Panasonic AC Smart Cloud.
Taking your business under control. New service function makes maintenance works simpler.

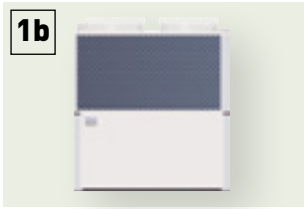



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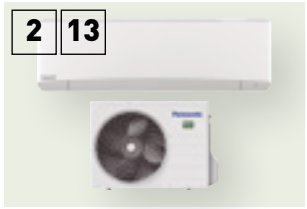
Your entire hotel with superior comfort, control and savings too



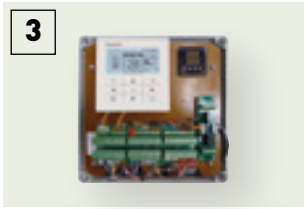
Hybrid system.
Gas + Electricity Hybrid system. Taking advantage of Gas and Electricity to achieve the most efficient performance and maximum energy savings.



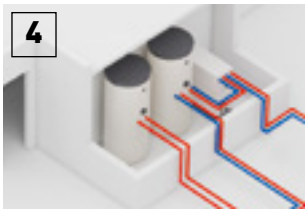
ECO G (Gas heat pump).
ECO G gas VRF is designed for buildings where the electricity is restricted or CO_2 emissions must be reduced. Sanitary hot water is produced for free, all year round.



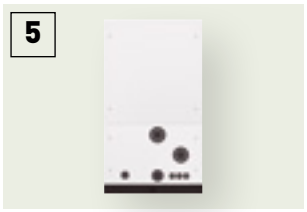
TKEA outdoor unit for server room.
Steady cooling, nonstop, even at -20 °C and still with high efficiency. Ready for continuous operation and easy to connect 2 systems to automatically alternate and ensure server rooms are kept cool.



Air handling unit kits for efficient ventilation.
The AHU kit is specially designed to improve the efficiency of the pre-heating or pre-cooling process of the ventilation.



Domestic Hot Water production and buffer tanks.
Panasonic has developed a wide range of efficient domestic hot water tanks and buffer tanks.



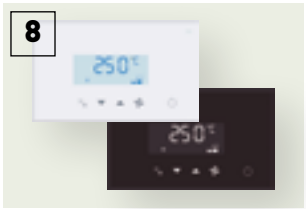
Hydronic units.
For obtaining hot and cold water for heating and refrigeration (Aquarea Air radiators, underfloor heating, radiators...)



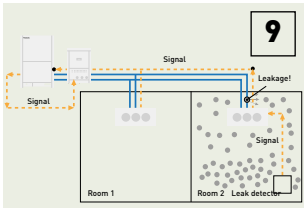
ECOi (Electric VRF).
ECOi electric VRF is specifically designed for the most demanding hotels. High efficiency system. Extended operating range to provide heating at outdoor temperature as low as -20 °C.



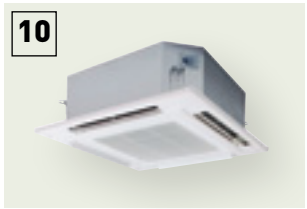
PRO-HT Tank DHW.
DHW tank with maximum outlet temperature 65 °C. Ideal solution for high demand of hot water such as shower, spa, swimming pool.



Control your way.
Wide variety of controls, from simple user control to full system control via remote access functionality. Touch panel, web server, consumption control, smartphone control... everything is possible.



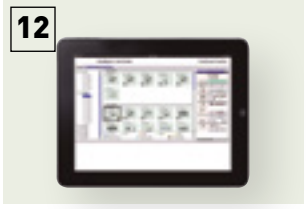
Direct leak detection method for the safety.
Panasonic Pump Down System meets requirements by the Safety of Building Occupant (BS-EN378).
The safest solution for hotel rooms.



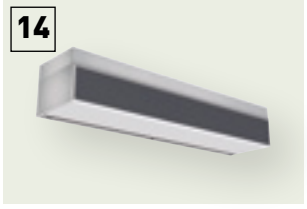
Wide range of indoor units.
Complete range of indoor units that fits any need. All units provided with supply air temperature sensor and low operation sound level to guarantee maximum guests comfort. From 1,5 kW up to 30,0 kW.



Panasonic AC Smart Cloud.
Take control of all your premises around the world from a single device. Centralise control of your business premises, from wherever you are, 24/7.



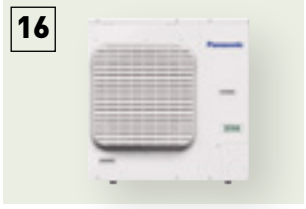
Protocol friendly.
Great flexibility for integration into your KNX / Modbus / LonWorks / BACnet projects allows fully bi-directional monitoring and control of all the functioning parameters.



Air curtain with DX coil.
The Panasonic range of air curtains is designed for smooth operation and efficient performance.

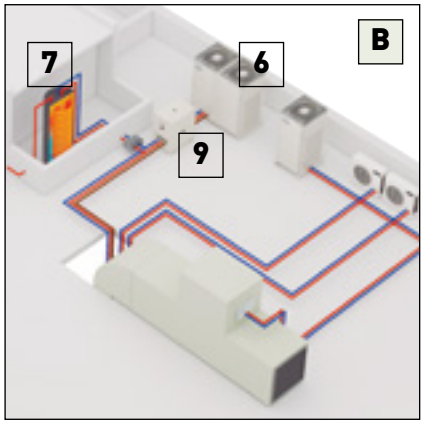


Maximum savings on hot water production.
Hot water for swimming pool, spa and laundry for free thanks to the residual heat generated by the ECO G units.



Condensing unit with natural refrigerant.
Panasonic CO_2 unit is the natural choice for an energy saving and environmentally friendly solution.

Panasonic offers the widest range in HVAC, DHW and ventilation available. That enables us to offer the most suitable solution 24 hours a day, 365 days a year.
Panasonic Solutions ensure not only a higher customer satisfaction but also a lower energy bill.



A

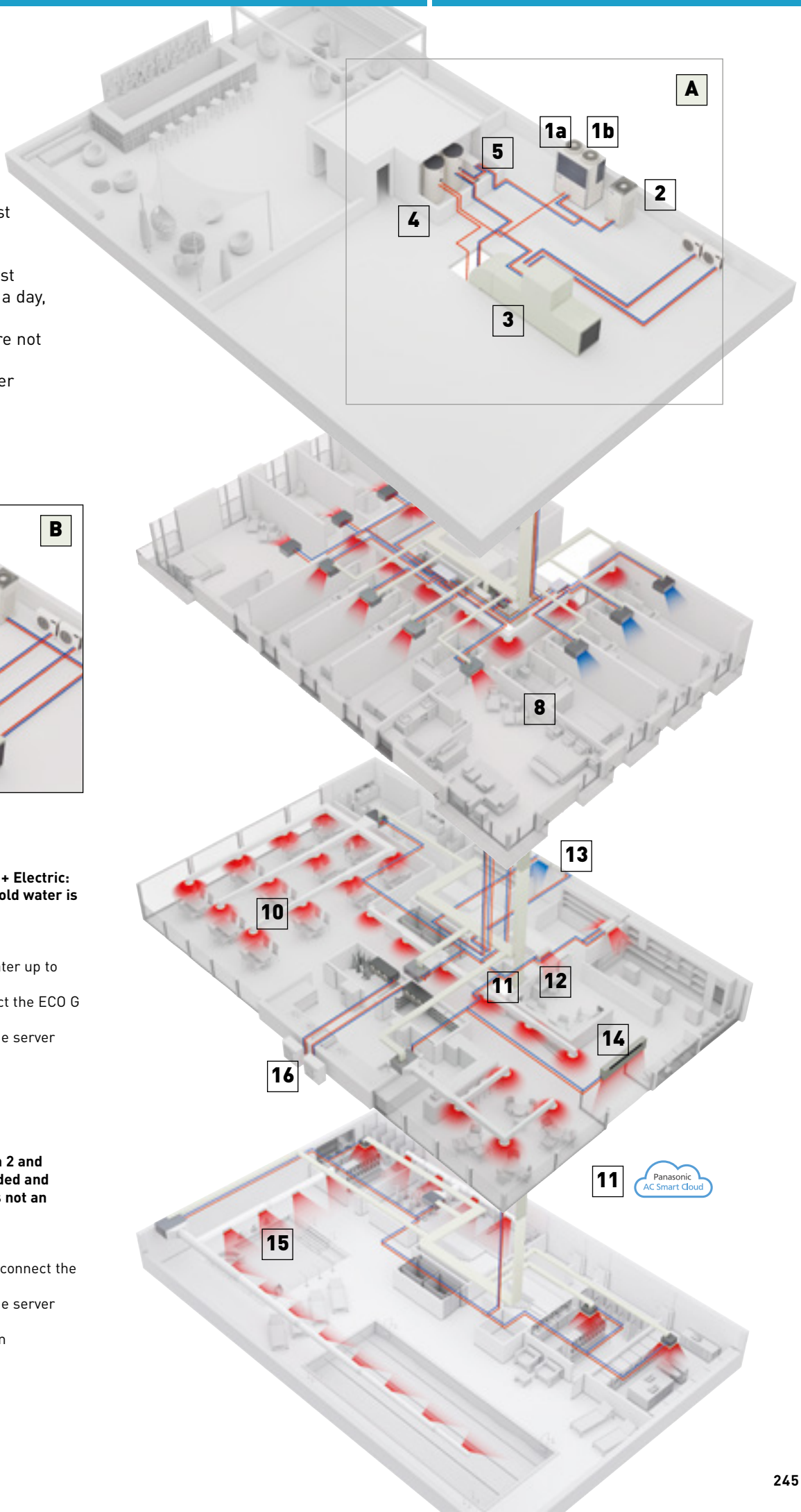
Option A: Hybrid Solution. Gas + Electric: When large quantities of hot/cold water is needed.

- ECO G (Gas heat pump)
- Water heat exchanger
- Aquarea HT to produce hot water up to 65 °C
- Air Handling Unit kit to connect the ECO G to the Air Handling Unit
- TKEA Wall-mounted to cool the server rooms efficiently

B

Option B: Full Electric Solution 2 and 3-Pipe. When flexibility is needed and electricity power availability is not an issue.

- ECOi (Electric VRF)
- Direct expansion indoor units
- Air Handling Unit (AHU) kit to connect the ECOi to the AHU
- TKEA Wall-mounted to cool the server rooms efficiently
- Panasonic Pump Down System



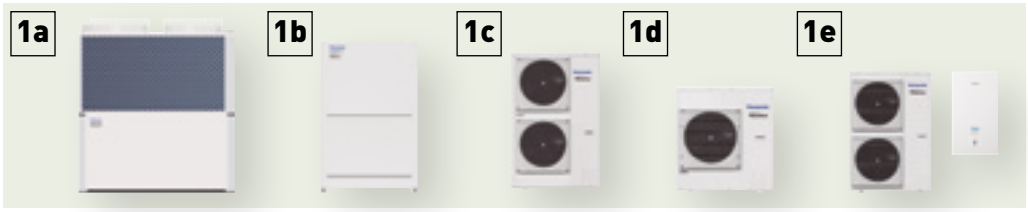
Innovative solutions for retail

Heating and cooling solutions for retail applications

Panasonic has developed solutions for retail applications and office applications where return on investment is a key factor! The comfort inside the shop is key for a good customer experience in the shop.
From local control or from Panasonic new cloud control system, a detail status of the heating and cooling system can be displayed, analysed and optimised in order to improve the efficiency, reduce the running time and increase the life time of the units.

8 reason why Panasonic is the best solution for your retail:

- Complete solution
- Flexibility and adaptation
- Go green retail: low CO_2 emissions
- Comfort - high customer satisfaction
- Future expansion
- Panasonic offers efficient systems meeting expectations over the years
- High quality of service with Panasonic pro-partner installation team
- The system will still operate up to 25 % of the connected indoor units. System will not stop when up to 25 % of indoor units have power supply breakdown when they are on mode



Multi energy solutions, gas or electric.
The Multi energy solution (Gas and Electric) from Panasonic provides the best choice in energy saving and on the flexibility of the installation. Panasonic solutions can be connect to direct expansion systems, water chiller installations and ventilation systems as air handling units.
1a: Gas VRF. ECO G
1b: Electric VRF. ECOi
1c: Electric VRF. Mini ECOi
1d: Electric 1x1. PACi
1e: Electric A2W. Aquarea



TKEA outdoor unit for server room.
Steady cooling, nonstop, even at -20 °C and still with high efficiency. Ready for continuous operation and easy to connect 2 systems to automatically alternate and ensure server rooms are kept cool with maximum operating guaranteed.



Control your way.
Wide variety of controls, from simple user control to full system control via remote access functionality. Touch panel and consumption control.



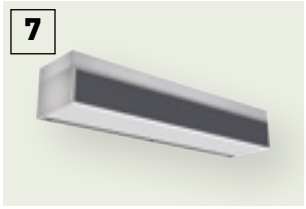
Econavi Sensor.
The Econavi Sensor detects presence in the room, and quietly adapts the PACi or VRF air conditioning system in order to improve comfort and energy savings.



Wide range of indoor units.
Complete range of indoor units that fits any need. All units provided with supply air temperature sensor and low operation sound level to guarantee guests comfort. From 1,5 kW up to 30,0 kW.



Hide-away, for power and efficiency.
Super silent units deliver the ideal air supply. Units available from 1,5 kW providing precise temperature control even in small rooms. Two models available: slim unit for height restricted areas (MM unit only 200 mm deep), another which allows 100 % fresh air (MF).



Air curtain with DX coil.
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Protocol friendly.
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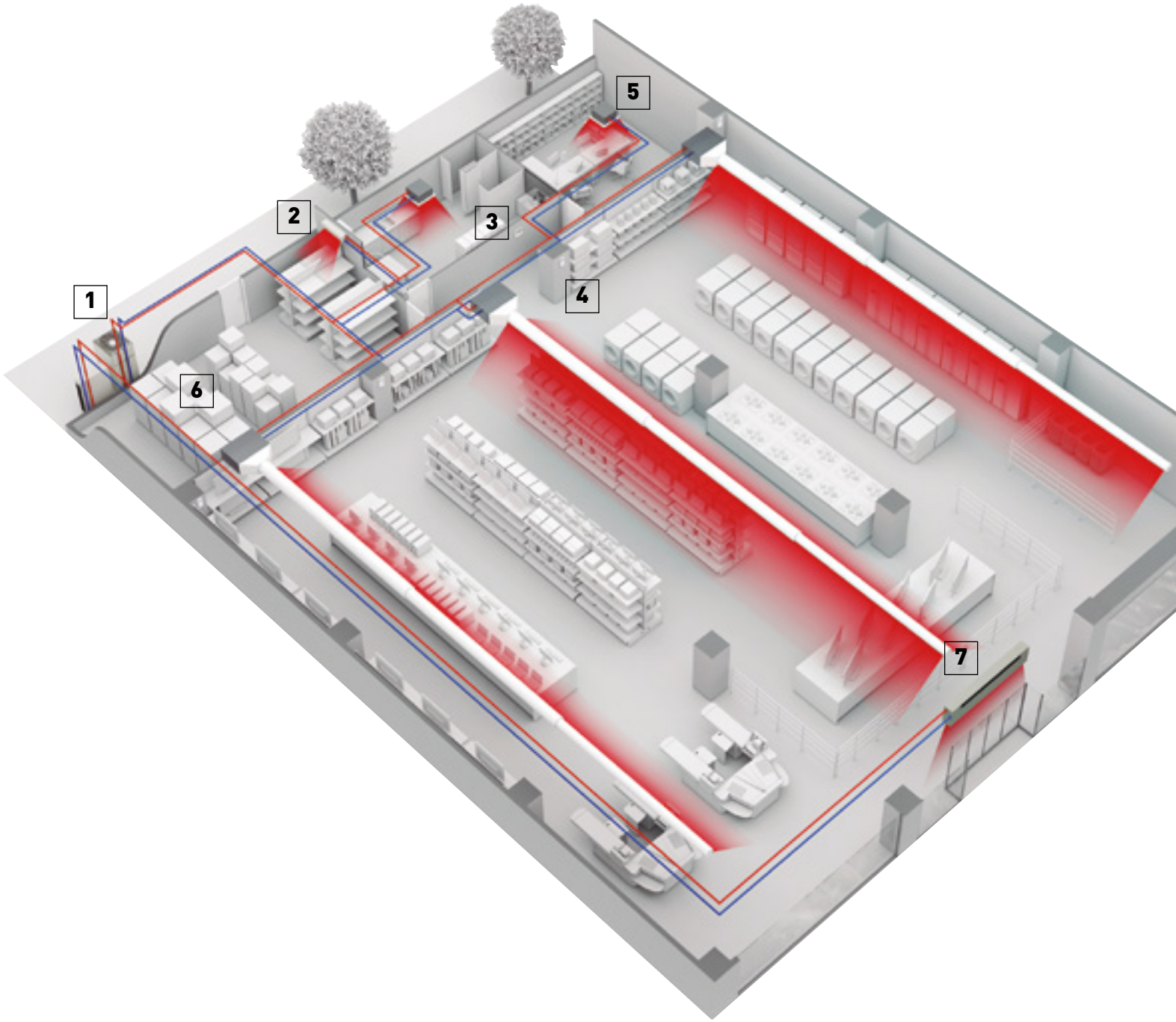


Air handling unit kits for efficient ventilation.
The AHU kit is specially designed to improve the efficiency of the pre-heating or pre-cooling process of the ventilation.



Energy Recovery unit for high efficiency of the system.
Panasonic Energy Recovery Ventilators can reduce the outside air load because they efficiently recover the heat lost by ventilation during the heat recovery process.




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VRF outdoor units range

Page	Outdoor units	4 HP	5 HP	6 HP	8 HP	10 HP	12 HP
P. 252	R32 **NEW** Mini ECOi LZ2 Series • **R32**	 U-4LZ2E5 / U-4LZ2E8	 U-5LZ2E5 / U-5LZ2E8	 U-6LZ2E5 / U-6LZ2E8	 U-8LZ2E8	 U-10LZ2E8	
P. 258	Mini ECOi LE2 / LE1 Series • **R410A**	 U-4LE2E5 / U-4LE2E8	 U-5LE2E5 / U-5LE2E8	 U-6LE2E5 / U-6LE2E8	 U-8LE1E8	 U-10LE1E8	
P. 270	2-Pipe ECOi EX ME2 Series • **R410A**				 U-8ME2E8	 U-10ME2E8	 U-12ME2E8
P. 280	3-Pipe ECOi EX MF3 Series • **R410A**				 U-8MF3E8	 U-10MF3E8	 U-12MF3E8
P. 292	2-Pipe ECO G GE3 Series • **R410A**						
P. 296	3-Pipe ECO G GF3 Series • **R410A**						
P. 298	GHP/EHP Hybrid System • **R410A**						

	14 HP	16 HP	18 HP	20 HP	25 HP	30 HP
	 U-14ME2E8	 U-16ME2E8	 U-18ME2E8	 U-20ME2E8		
	 U-14MF3E8	 U-16MF3E8				
		 U-16GE3E5		 U-20GE3E5	 U-25GE3E5	 U-30GE3E5
		 U-16GF3E5		 U-20GF3E5	 U-25GF3E5	
						 U-20GES3E5 / U-10MES2E8

Best efficiency ECOi Series from Panasonic

The ECOi Series is designed for energy savings, easy installation, and high efficiency. Always continuing to evolve, Panasonic uses advanced technologies to meet the requirements of diverse situations and contribute to the creation of comfortable living spaces.



NEW Mini ECOi LZ2 Series • R32



The new Mini ECOi LZ2 Series utilizes environmentally friendly R32 refrigerant, reducing the total amount of refrigerant by 20 % and more, resulting in lower GWP, reduced by 75 %*.

* As a result of applying R32 while at the same time reducing the total refrigerant amount.

Mini ECOi LE Series • R410A



The 2-Pipe heat pump small VRF system specifically designed for the European market.

2-Pipe ECOi EX ME2 Series • R410A



The VRF system delivering energy-saving performance, powerful operation, reliability and comfort surpassing anything previously possible.

3-Pipe ECOi EX MF3 Series • R410A



The VRF system that offers high-efficiency and performance for simultaneous heating and cooling.

Lower running and life cycle costs.
Panasonic ECOi systems are highly efficient VRF systems on the market, offering COPs in excess of 4,0 at full load conditions. The system is also designed to make sure that we reduce the running cost of each system by using our unique road map control routine to ensure that the efficient combination of compressors are running at any one time. Improved defrost sequencing also reduces running costs by defrosting each outdoor coil in turn when conditions allow.
Up to 64 indoor units can be connected up to a capacity of 200 % indexed indoor unit loads, enabling the system to be used effectively on highly diversified building loads: this large connectability feature makes it an easy-to-design solution for schools, hotels, hospitals and other large buildings. Up to 1000 m in pipe length enables the VRF ECOi Series to be used in very large buildings, with maximum design flexibility. The ECOi system is also easy to control. It has more than 8 types of control from standard wired remote controls to touch screen panels or web access interfaces.

DC-inverter control technology for rapid and powerful cooling & heating. The ever-evolving Panasonic ECOi Series.

ECOi Series benefits

Ease of installation.
R410A has a higher operating pressure with a lower pressure loss than previous refrigerants. This enables smaller pipe sizes to be used and allows reduced refrigerant charges.

Simple to design.
Panasonic recognise that designing, selecting and preparing a professional VRF quotation can be a time consuming and costly process, especially as it is often also a speculative exercise. So we have designed proprietary software which is quick and easy to use and produces a full schematic layout of pipework and controls, as well as a full materials list and performance data.

Easy to control.
A wide variety of control options are available to ensure that the ECOi system provides the user with the degree of control that they desire, from simple room controllers through to state of the art BMS controls.

Simple to commission.
Simple set-up procedure including automatic addressing of connected indoor units. Configuration settings can be made from an outdoor unit or via a remote controller.

Easy to position.
The compact design of the ECOi outdoor units means that sizes 4 HP to 10 HP fit into a standard lift and are easy to handle and position when on site. The small footprint and modular appearance of the units ensure a cohesive appearance to an installation.

Wide selection and connectability.
With 17 indoor model styles available, ECOi systems are the ideal choice for multiple small capacity indoor unit installations, with the ability to connect up to 40 indoor units to systems of 24 HP or greater for 3-Pipe ECOi EX MF3 Series.

Easy to maintain.
Each system allows the use of prognostic and diagnostic controls routines, to manage system operation and identifying faults, all designed to reduce the speed of maintenance calls and unit down time.

Lower running and life cycle costs.
Panasonic ECOi system are also designed to make sure that we reduce the running cost of each system by using our unique road map control routine to ensure that the most efficient combination of compressors are running at any one time. Improved defrost sequencing also reduces running costs by defrosting each outdoor coil in turn when conditions allow.

New Mini ECOi LZ2 Series R32

Outstanding efficiency in a compact body and continuous operation even at extreme ambient temperatures.



INDUSTRY 1ST 8 HP AND 10 HP MINI VRF UNITS WITH R32



R32
NEW REFRIGERANT GAS

1 Low GWP and less refrigerant

The new Mini ECOi LZ2 Series utilizes environmentally friendly R32 refrigerant, reducing the total amount of refrigerant by 20 % and more, resulting in lower GWP, reduced by 75 %*.

* As a result of applying R32 while at the same time reducing the total refrigerant amount.

2 Outstanding efficiency at most challenging ambient conditions

Re-engineered for better performance, the LZ2 series produces extraordinary savings with SEER levels up to 8,50 and SCOP levels up to 5,05 (for 4 HP model). The large range of outdoor units from 12 kW to 28 kW can also work at extreme ambient temperatures, down to -20 °C in heating and up to 52 °C in cooling, providing a very wide range of operating ability.

3 More flexibility for your project

The ECOi LZ2 series provides ease of installation with long piping lengths and small footprints in a lightweight body. A variety of indoor units, supporting Panasonic's optional R32 refrigerant leak detector, increases the flexibility for installers. A wide range of individual and central controllers, the new generation Smart and Service Cloud as well as apps for end users and installers provide a fully customizable monitoring and controlling solution.



Minimum environmental impact

Panasonic has designed the LZ2 series in order to minimize the environmental impact of the system. Low GWP refrigerant R32 and highest efficiency levels, ensure this through the total operational lifetime.

R32
GWP REDUCED BY
75%

VRF with outstanding energy-saving performance and superior SEER and SCOP

New Mini ECOi LZ2 provides the optimal performance in any climatic condition.

WIDE OPERATING RANGE
-20 °C in heating to 52 °C in cooling

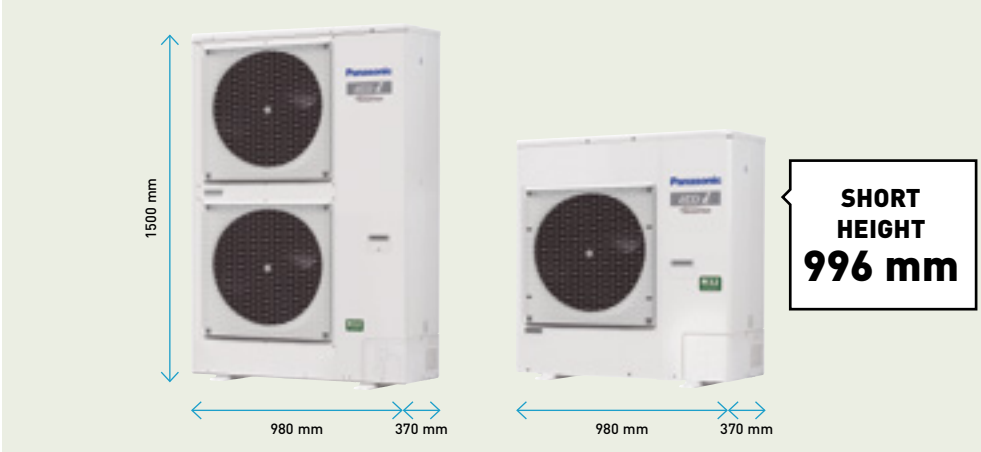
8,50 SEER | 5,05 SCOP
EXTRAORDINARY SAVINGS

ECOi LZ2 mini VRF series from 12 to 28 kW

- Improving protection 24/7. New and unique indoors with nanoe™ X, hydroxyl radicals contained in water.
- SEER levels up to 8,50 and SCOP levels up to 5,05 (for 4 HP model)
- Low GWP and highly reduced refrigerant volume
- Improved connectivity with CONEX remote controllers and app support, Smart and Service Cloud applications and support for communication protocols for BMS integration
- Wide range of connectable units allowing wide range of installations with and without refrigerant mitigation
- Increased indoor/outdoor capacity ratio up to 150 %
- Quiet mode operation with low capacity drop
- Same Panasonic DNA with Panasonic compressors and precise temperature control thanks to discharge temperature sensors in the indoor units
- Continuous operation at extreme ambient temperatures: -20 °C (heating) to 52 °C (cooling)
- Flexible mitigation measures, with R32 refrigerant leak detector/alarm to be installed only when required
- 35 Pa static pressure

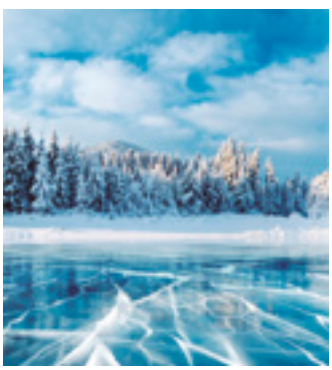
For the most challenging spaces

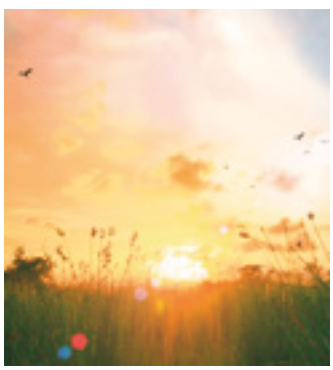
The new Mini ECOi LZ2 R32 VRF system is the ideal solution to fit into any application thanks to its compact design and long piping length support.

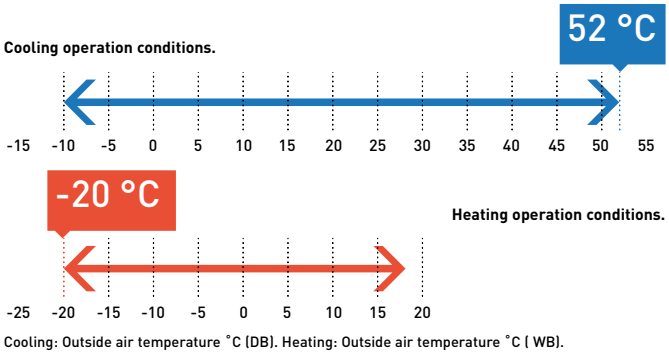


Extended design operation conditions

LZ2 mini VRF is extremely reliable even under the most difficult conditions. The units can operate in cooling mode at extreme temperatures, 52 °C in cooling and -20 °C in heating mode.







Compatible with a large range of indoor units and controls

An expansion of Panasonic VRF line up, the new mini ECOi R32 is compatible with a large range of indoor units and can utilize all Panasonic's scalable control and monitoring solutions.

Wide range of indoor units, either supporting Panasonic's optional R32 refrigerant leak detector alarm or having built-in detectors provide a great flexibility for all types of installation.

	**4 way 90x90 cassette**		**Connects to Panasonic R32 sensor**
	**4 way 60x60 cassette**		**Connects to Panasonic R32 sensor**
	**Variable static pressure adaptive duct**		**Built-in R32 sensors**
	Wall-mounted		**Connects to Panasonic R32 sensor**
	**Slim variable static pressure hide-away**		**Connects to Panasonic R32 sensor**

Scaling your control options from a single zone to geographically distributed facilities

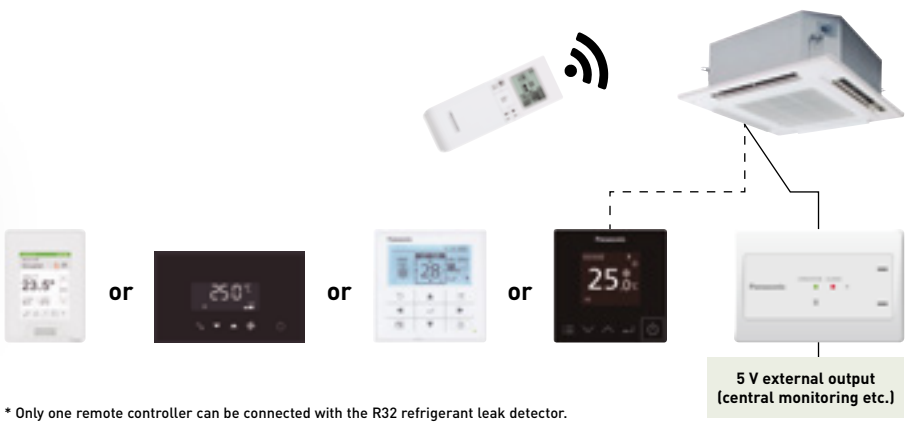
LZ2 series are fully compatible with all control and connectivity solutions from Panasonic. With a wide range of individual controllers, hotel room controllers, optional wireless adapters, VRF Smart Connectivity+, easy BMS connection with P-link and Panasonic AC Smart Cloud compatibility. LZ2 series, the most flexible control and monitoring R32 solution in the market.

Optional R32 refrigerant leak detector alarm from Panasonic

For compatible indoor unit models, Panasonic offers its optional external R32 refrigerant leak detector (CZ-CGLSC1). This enables the customer to decide if a R32 refrigerant leak detector is required to comply with the restrictions, or if the indoor unit may be safely installed in this room without it. This optional leakage detection sensor has an integrated alarm buzzer and can output a signal to a central alarm system in the building. The device is connected to the remote control terminals of the indoor unit and can be used in combination with any of the Panasonic VRF remote controllers, either wired or wireless.

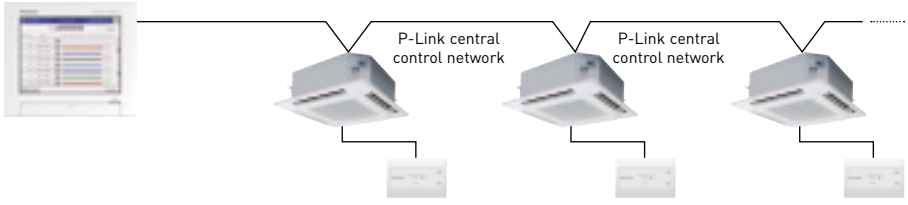


R32 refrigerant leak detector.
CZ-CGLSC1



* Only one remote controller can be connected with the R32 refrigerant leak detector.

The alarm triggered by the R32 refrigerant leak detector will also be transmitted and displayed on any connected centralised controller.



SHORT HEIGHT
996 mm



NEW 2021

NEW Mini ECOi LZ2 Series 4 to 6 HP • R32

Outstanding efficiency in a compact body and continuous operation even at extreme ambient temperatures.

HP			4 HP	5 HP	6 HP	4 HP	5 HP	6 HP
Outdoor units			**U-4LZ2E5**	**U-5LZ2E5**	**U-6LZ2E5**	**U-4LZ2E8**	**U-5LZ2E8**	**U-6LZ2E8**
Power supply	Voltage	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Single phase	Single phase	Single phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Cooling capacity		kW	12,1	14,0	15,5	12,1	14,0	15,5
EER [1]		W/W	4,53	4,12	3,88	4,53	4,12	3,88
Recommended combination			2 x S-60MU2E5B	4 x S-36MU2E5B	2 x S-36MU2E5B + 2 x S-45MU2E5B	2 x S-60MU2E5B	4 x S-36MU2E5B	2 x S-36MU2E5B + 2 x S-45MU2E5B
SEER [2]			**8,50**	**8,12**	**7,71**	**8,50**	**8,12**	**7,71**
$\eta_{s,c}$		**%**	**337,0**	**321,8**	**305,4**	**337,0**	**321,8**	**305,4**
Current cooling		A	13,30 - 12,80 - 12,20	16,90 - 16,20 - 15,50	19,60 - 18,70 - 18,00	4,37 - 4,15 - 4,00	5,50 - 5,23 - 5,04	6,44 - 6,12 - 5,89
Input power cooling		kW	2,67	3,40	4,00	2,67	3,40	4,00
Heating capacity		kW	12,5	16,0	16,5	12,5	16,0	16,5
COP [1]		W/W	5,27	4,71	4,42	5,27	4,71	4,42
SCOP [2]			**5,05**	**4,61**	**4,59**	**5,05**	**4,61**	**4,59**
$\eta_{s,h}$		**%**	**199,0**	**181,4**	**180,6**	**199,0**	**181,4**	**180,6**
Current heating		A	12,00 - 11,40 - 11,00	16,90 - 16,20 - 15,50	18,50 - 17,70 - 17,00	3,91 - 3,71 - 3,58	5,50 - 5,22 - 5,03	6,02 - 5,72 - 5,51
Input power heating		kW	2,37	3,40	3,73	2,37	3,40	3,73
Starting current		A	1,0	1,0	1,0	1,0	1,0	1,0
Maximum current		A	19,6	23,7	26,5	7,2	9,2	9,9
Maximum input power		kW	3,92 - 4,10 - 4,28	4,76 - 4,98 - 5,19	5,41 - 5,66 - 5,90	4,40 - 4,63 - 4,80	5,69 - 5,99 - 6,22	6,15 - 6,47 - 6,72
Maximum number of connectable indoor units [3]			7 (10)	8 (12)	9 (12)	7 (10)	8 (12)	9 (12)
External static pressure		Pa	0 ~ 35	0 ~ 35	0 ~ 35	0 ~ 35	0 ~ 35	0 ~ 35
Air flow		m^3/min	69	72	74	69	72	74
Sound pressure	Cool	dB(A)	52	53	54	52	53	54
	Cool (Silent 1/2/3/4)	dB(A)	49/47/45/45	50/48/46/45	51/49/47/45	49/47/45/45	50/48/46/45	51/49/47/45
	Heat	dB(A)	54	56	56	54	56	56
Sound power	Cool / Heat	dB(A)	69/72	70/74	72/75	69/72	70/74	72/75
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	94	94	94	94	94	94
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Maximum piping length (total)		m	90 (180)	90 (180)	90 (180)	90 (180)	90 (180)	90 (180)
Elevation difference (in/out)		m	50 (OD above)/ 40 (OD below)	50 (OD above)/ 40 (OD below)	50 (OD above)/ 40 (OD below)	50 (OD above)/ 40 (OD below)	50 (OD above)/ 40 (OD below)	50 (OD above)/ 40 (OD below)
Refrigerant (R32)		kg	2,7	2,7	2,7	2,7	2,7	2,7
Maximum allowable indoor / outdoor capacity ratio [4]		%	50 ~ 150 (130)	50 ~ 150 (130)	50 ~ 150 (130)	50 ~ 150 (130)	50 ~ 150 (130)	50 ~ 150 (130)
Operating range	Cool Min ~ Max	°C	-10 ~ 52	-10 ~ 52	-10 ~ 52	-10 ~ 52	-10 ~ 52	-10 ~ 52
	Heat Min ~ Max	°C	-20 ~ 18	-20 ~ 18	-20 ~ 18	-20 ~ 18	-20 ~ 18	-20 ~ 18

1) EER and COP calculation is based on EN 14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) The number in parenthesis indicates maximum number of connectable indoor unit in case of 1,5kW indoor units connection. 4) The number in parenthesis indicates maximum allowed indoor/outdoor capacity ratio in case of 1,5 kW indoor units connection.

Minimum environmental impact

Panasonic has designed the LZ2 series in order to minimize the environmental impact of the system. Low GWP refrigerant R32 and highest efficiency levels ensure this through the total operational lifetime.

For the most challenging spaces

The new Mini ECOi LZ2 R32 VRF system is the ideal solution to fit into any application thanks to its compact design and long piping lengths.

Technical focus

- SEER levels up to 8,50 and SCOP levels up to 5,05 (for 4 HP model)
- Continuous operation at extreme ambient temperatures: -20 °C (heating) to 52 °C (cooling)
- Wide range of connectable units
- New and unique indoors with nanoe™ X, hydroxyl radicals contained in water
- Allowing wide range of installations with and without mitigation measures
- Flexible mitigation measures, with R32 refrigerant leak detector/alarm to be installed only when required

R32 | INVERTER+ | R2 ROTARY COMPRESSOR | BLUEFIN | -10°C COOLING MODE | -20°C HEATING MODE | AUTOMATIC RESTART | PANASONIC AC SMART CLOUD | OPTIONAL WI-FI | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.



NEW 2021

INDUSTRY 1ST 8 HP AND 10 HP MINI VRF UNITS WITH R32

NEW Mini ECOi LZ2 Series 8 and 10 HP • R32

Introducing widest range of R32 Mini VRF.

HP			8 HP	10 HP
Outdoor units			**U-8LZ2E8**	**U-10LZ2E8**
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase
	Frequency	Hz	50	50
Cooling capacity		kW	22,4	28,0
EER [1]		W/W	3,84	3,47
Recommended combination			4 x S-56MU2E5B	4 x S-73MU2E5B
SEER [2]			**7,56**	**7,08**
$\eta_{s,c}$		**%**	**293,3**	**274,7**
Current cooling		A	9,73 - 9,25 - 8,91	13,2 - 12,5 - 12,1
Input power cooling		kW	5,83	8,07
Heating capacity		kW	25,0	28,0
COP [1]		W/W	4,30	4,47
SCOP [2]			**4,59**	**4,60**
$\eta_{s,h}$		**%**	**170,3**	**178,5**
Current heating		A	9,81 - 9,32 - 8,98	10,5 - 9,93 - 9,57
Input power heating		kW	5,81	6,26
Starting current		A	1,0	1,0
Maximum current		A	13,7	19,5
Maximum input power		kW	8,21 - 8,64 - 8,96	11,9 - 12,6 - 13,0
Maximum number of connectable indoor units [3]			16	16
External static pressure		Pa	0 ~ 35	0 ~ 35
Air flow		m^3/min	158	167
Sound pressure	Cool	dB(A)	59,0	60,0
	Cool (Silent 1/2/3/4)	dB(A)	56/54/52/50	57/55/53/50
Sound power	Cool	dB(A)	72	74
Dimension	H x W x D	mm	1500 x 980 x 370	1500 x 980 x 370
Net weight		kg	125	126
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	3/4 (19,05)	7/8 (22,22)
Maximum piping length (total)		m	100 (300)	100 (300)
Elevation difference (in/out)		m	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)
Refrigerant (R32)		kg	4,9	5,1
Maximum allowable indoor / outdoor capacity ratio [4]		%	50 ~ 150 (130)	50 ~ 150 (130)
Operating range	Cool Min ~ Max	°C	-10 ~ 52	-10 ~ 52
	Heat Min ~ Max	°C	-20 ~ 18	-20 ~ 18

1) EER and COP calculation is based on EN 14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) The number in parenthesis indicates maximum number of connectable indoor unit in case of 1,5kW indoor units connection. 4) The number in parenthesis indicates maximum allowed indoor/outdoor capacity ratio in case of 1,5 kW indoor units connection.

Perfect fit for small to medium size projects

8 and 10 HP LZ2 Mini VRF units bring in the total benefits of a VRF system in a smaller application. You can enjoy advanced individual and central VRF control options including the revolutionary Panasonic AC Smart Cloud and AC Service Cloud.

For the most difficult conditions

New ECOi LZ2 series are able to operate at the hardest conditions from -20 °C up to +52 °C providing continuous and efficient, heating and cooling for your space all year long.

Technical focus

- SEER levels up to 7,56 and SCOP levels up to 4,59 (for 8 HP model)
- Continuous operation at extreme ambient temperatures: -20 °C (heating) to 52 °C (cooling)
- Widest range of connectable units in R32 VRF
- New and unique indoors with nanoe™ X, hydroxyl radicals contained in water
- Allowing wide range of installations with and without refrigerant mitigation
- Flexible mitigation measures, with R32 refrigerant leak detector/alarm to be installed only when required

R32 | INVERTER+ | R2 ROTARY COMPRESSOR | BLUEFIN | -10°C COOLING MODE | -20°C HEATING MODE | AUTOMATIC RESTART | PANASONIC AC SMART CLOUD | OPTIONAL WI-FI | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Mini ECOi LE Series for light commercial and residential use

Mini ECOi with extraordinary energy-saving performance and high external static pressure (35Pa).

COMPACT DESIGN



ECO i



7,9 SEER | 4,9* SCOP
INDUSTRY LEADING EFFICIENCY



6,4* SEER
4,3 SCOP

Advantages of Mini ECOi LE Series used for medium sized buildings.

1 Efficiency energy control
Upgraded outdoor units deliver high efficiency rating and reduced energy costs.

2 Space saving
Ideal for commercial locations with limited space such as banks and shops.
Compact units integrate easily and discreetly into building design.

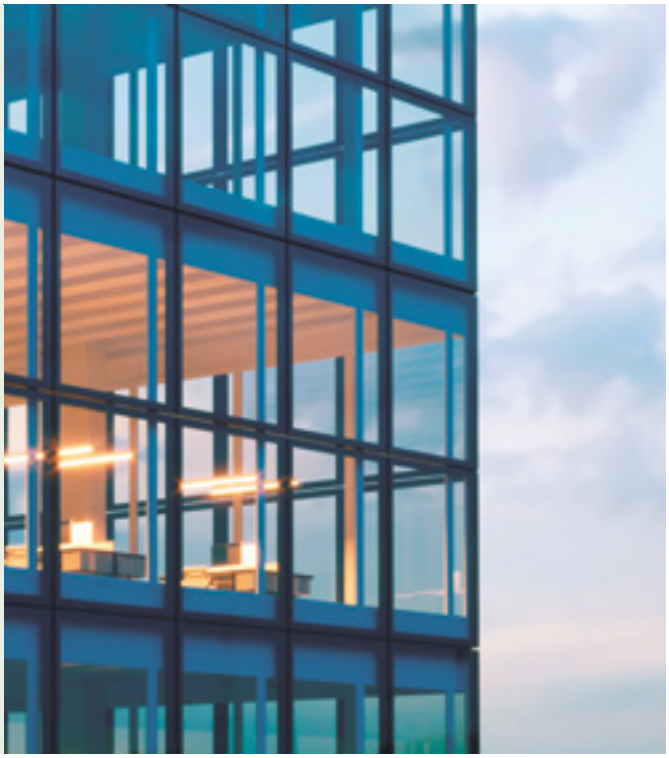
3 Flexible installation
Reduced installation time thanks to compact units and extra long piping without additional refrigeration charge. High external static pressure 35Pa and small chassis increase installation options.

Compact design: LE2 Series - 4 / 5 / 6 HP
- Extraordinary energy saving: 7,9 SEER and 4,9 SCOP (4 HP)*
- 50 m piping length without additional refrigerant charge
- Quiet operation mode with 4 levels
- High COP mode option

* SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF.

LE1 Series - 8 / 10 HP
- 60 % smaller than ECOi ME2 8 / 10 HP with vertical flow type
- Flexible piping length (Total: 300 m, Furthest: 150 m)
- Maximum number of connectable indoor units: 15

Key features for LE2 / LE1.
- **High external static pressure 35 Pa**
- **Full range of ECOi indoor units and controllers**
- **Variable evaporation temperature control as standard**
- **Connectable maximum indoor / outdoor capacity ratio up to 130 %**
- **Auto restart from outdoor units**
- **Demand response (Peak cut) by optional parts**
- **Suitable for R22 renewable projects**



Installation flexible, easy and hassle-free

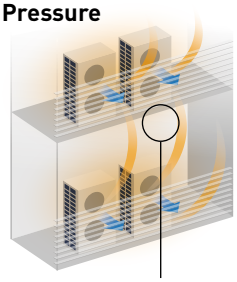
· Compact space-saving design
· High external static pressure 35 Pa
· Long piping length for flexible installation
· No refrigeration charge up to 50 m
· 130 % ratio for connectable indoor capacity units

High external static pressure 35 Pa

· High air pressure
· New blade shape
· Good for high class condominiums

When unit is installed on a narrow balcony and exposed to the sun, the barrier at the front side would restrict hot air from being discharged. Heat accumulated in an enclosure can cause over-heating. This could potentially result in damage or shorten the product's life span. A high external static pressure sends the air further away from the outdoor unit and through the barrier. This provides better air circulation and distribution.
And a high air pressure of 35Pa discharges the hot air a sufficient distance.

Previous Model - Low Pressure

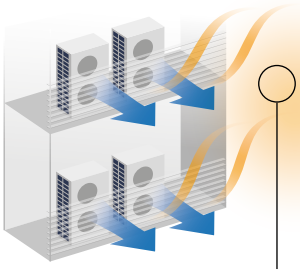


Heat Accumulated.
When the pressure is low, hot air will accumulate in the unit thus affecting its work performance and that of unit above it as well.



Previous fan

LE Series - High Pressure



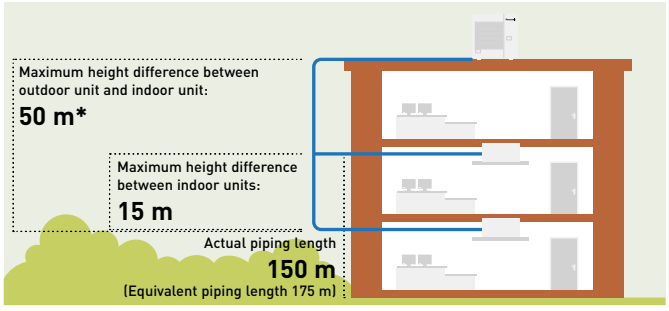
Heat Discharged.
But with a high pressure of 35Pa, hot air is sent further away preventing overheating inside the outdoor unit enclosure.



New LE2's fan

Long piping design length for greater design flexibility

LE1: Maximum total piping length: 300 m.
LE2: Maximum total piping length: 180 m.

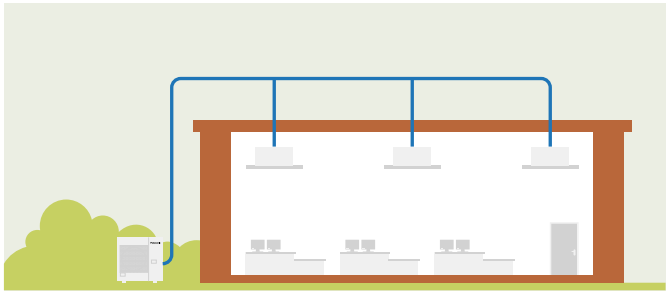


* 40 m if the outdoor unit is below the indoor unit.

Plug and Play concept

· 50 m piping length free of charge
· A 50 m pipe length is sufficient for most residential and small business buildings

FREE OF CHARGE 50 m



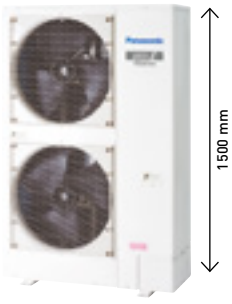
Up to 15 indoor units connectable

An expansion from Panasonic VRF line up, the mini ECOi is compatible with the same indoor units and controls as the rest of the ECOi range.

Compact design

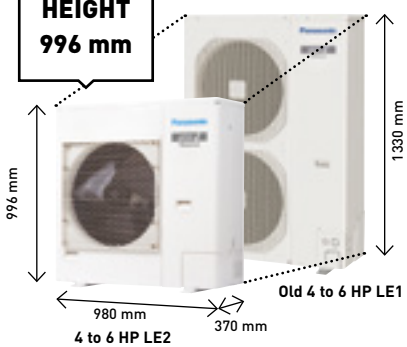
Mini ECOi LE Series is a single unit.
Perfect for installations with limited space and easy to hide within a modern building. Flexible space-saving options compared to single split system.

LE2 short height of 996 mm.
New LE2 Series is 25 % smaller in height than conventional model.



8 and 10 HP LE1

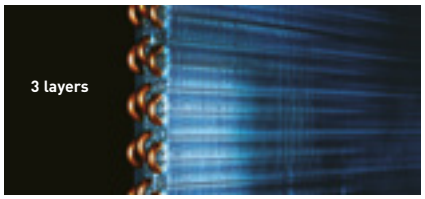
SHORT HEIGHT 996 mm



Old 4 to 6 HP LE1
4 to 6 HP LE2

Energy control and reliability

The Mini ECOi system delivering energy-saving performance, powerful operation, reliability and comfort surpassing anything previously possible.



Powerful heat exchanger.
3 layers of heat exchanger for all LE Series. LE Series features the same heat exchange volume as conventional model even though it is 15 % smaller in size.

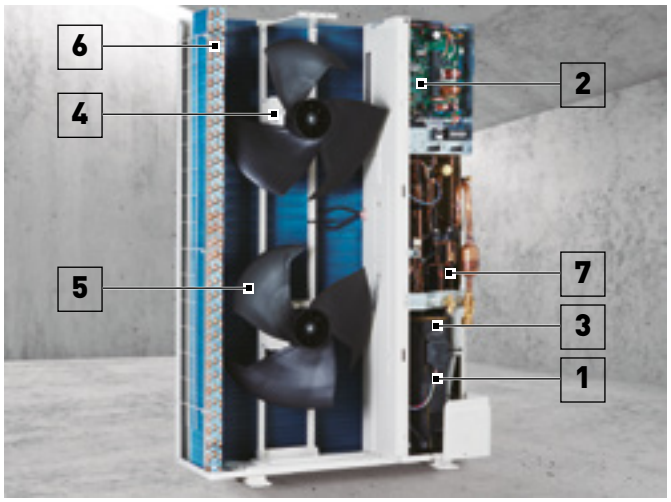


Panasonic twin Rotary compressor.
A large capacity inverter compressor has been adopted. This new compressor features wider and 0,1 Hz step inverter control.



New design fan.
Fan braves have been redesigned to inhibit air resistance and to increase efficiency. The larger fan increases air volume while maintaining low noise levels.

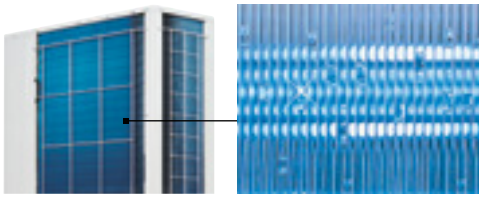
Energy savings design



1 | **Panasonic Inverter compressor.** A large-capacity inverter compressor has been adopted. The inverter compressor is superior in performance with improved partial-load capacity.
2 | **Printed circuit board.** The number of PCB is 2 pieces for making maintenance easier.
3 | **Accumulator.** A large accumulator has been adopted to maintain compressor reliability because of the increased refrigerant quantity, which allows an extended maximum piping length.
4 | **DC fan motor.** Checking load and outside temperature, the DC motor is controlled for optimum air volume.
5 | **Newly designed fan.** The newly designed fan blades have been developed to inhibit air turbulence and to increase efficiency. As fan diameter has been increased its size, the air volume has been increased whilst maintaining a same sound level.
6 | **Heat exchanger and copper tubes.** The heat exchanger size and the copper tube sizes in the heat exchanger have been redesigned to increase efficiency.
7 | **Oil separator.** A centrifugal separator has been adopted to improve oil separation efficiency and reduce refrigerant pressure loss.

Bluefin condenser: high durability outdoor unit

The anti-corrosion Bluefin treatment of the heat exchanger provides greater resistance against corrosion. All models are equipped with Bluefin condenser and corrosion-resistance treated for high resistance to rust and salty air to assure long-lasting performance.



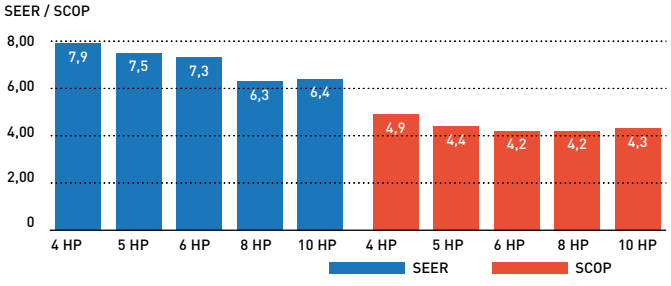
Heat exchanger (Bluefin condenser)

Maximum comfort with quiet operation mode

· Quiet operation mode reduces outdoor unit operating sound by 7dB(A)
· 4-step set point is available
· Silent mode 1 maintains rated cooling capacity

* Timer setting of quiet operation mode is available in High-spec remote controller.

Silent mode options	Sound pressure level
Silent mode 1	-1,5dB(A)
Silent mode 2	-3dB(A)
Silent mode 3	-5dB(A)
Silent mode 4	-7dB(A)



Superior seasonal energy efficiency (SEER/SCOP follows LOT21*)

The operation efficiency has been improved using highly efficient R410A refrigerant, a DC Inverter compressor, DC motor and a heat exchanger design.

* SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF.

Mini ECOi LE2 Series High Efficiency 4 to 6 HP • R410A

Panasonic Mini ECOi. Extraordinary energy-saving.
The most compact ECOi system ever.



HP			4 HP	5 HP	6 HP	4 HP	5 HP	6 HP
Outdoor units			**U-4LE2E5**	**U-5LE2E5**	**U-6LE2E5**	**U-4LE2E8**	**U-5LE2E8**	**U-6LE2E8**
Power supply	Voltage	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Single phase	Single phase	Single phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Cooling capacity		kW	12,1	14,0	15,5	12,1	14,0	15,5
EER [1]		W/W	4,50	4,06	3,73	4,50	4,06	3,73
Recommended combination			3 x S-28MF2E5A + 1 x S-36MF2E5A	4 x S-36MF2E5A	2 x S-36MF2E5A + 2 x S-45MF2E5A	3 x S-28MF2E5A + 1 x S-36MF2E5A	4 x S-36MF2E5A	2 x S-36MF2E5A + 2 x S-45MF2E5A
SEER [2]			**7,9**	**7,5**	**7,3**	**7,9**	**7,5**	**7,3**
$\eta_{s,c}$		**%**	**311,0**	**296,2**	**286,8**	**311,0**	**296,2**	**286,8**
Current cooling		A	13,30 - 12,70 - 12,20	16,30 - 15,60 - 17,00	20,30 - 19,40 - 18,60	4,39 - 4,17 - 4,02	5,58 - 5,30 - 5,11	6,71 - 6,37 - 6,14
Input power cooling		kW	2,69	3,45	4,15	2,69	3,45	4,15
Heating capacity		kW	12,5	16,0	16,5	12,5	16,0	16,5
COP [1]		W/W	5,19	4,60	4,27	5,19	4,60	4,27
SCOP [2]			**4,9**	**4,4**	**4,2**	**4,9**	**4,4**	**4,2**
$\eta_{s,h}$		**%**	**191,8**	**172,9**	**166,7**	**191,8**	**172,9**	**166,7**
Current heating		A	12,20 - 11,60 - 11,20	17,60 - 16,80 - 16,10	19,10 - 18,20 - 17,50	3,98 - 3,78 - 3,64	5,62 - 5,34 - 5,14	6,24 - 5,93 - 5,71
Input power heating		kW	2,41	3,48	3,86	2,41	3,48	3,86
Starting current		A	1,00	1,00	1,00	1,00	1,00	1,00
Maximum current		A	17,30	24,30	27,40	7,90	10,10	10,70
Maximum input power		kW	3,50 - 3,66 - 3,82	4,92 - 5,14 - 5,37	5,61 - 5,86 - 6,12	4,34 - 5,09 - 5,28	6,25 - 6,55 - 6,82	6,62 - 6,97 - 7,23
Maximum number of connectable indoor units [3]			7 (10)	8 (10)	9 (12)	7 (10)	8 (10)	9 (12)
External static pressure		Pa	0 ~ 35	0 ~ 35	0 ~ 35	0 ~ 35	0 ~ 35	0 ~ 35
Air flow		m^3/min	69	72	74	69	72	74
Sound pressure	Cool	dB(A)	52	53	54	52	53	53
	Cool (Silent 1/2/3/4)	dB(A)	50,5/49/47/45	51,5/50/48/46	52,5/51/48/46	50,5/49/49/47	48,5/50/48/46	48,5/50/48/46
	Heat	dB(A)	54	56	56	54	56	56
Sound power	Cool / Heat	dB(A)	69/72	71/75	73/75	69/72	71/75	73/75
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	106	106	106	106	106	106
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Maximum piping length (total)		m	150 (180)	150 (180)	150 (180)	150 (180)	150 (180)	150 (180)
Elevation difference (in/out)		m	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)
Refrigerant (R410A) / CO_2 Eq.		kg / T	6,70 (14,40) / 13,9896	6,70 (14,40) / 13,9896	6,70 (14,40) / 13,9896	6,70 (14,40) / 13,9896	6,70 (14,40) / 13,9896	6,70 (14,40) / 13,9896
Maximum allowable indoor / outdoor capacity ratio		%	50 ~ 130	50 ~ 130	50 ~ 130	50 ~ 130	50 ~ 130	50 ~ 130
Operating range	Cool Min ~ Max	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
	Heat Min ~ Max	°C	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18

1) EER and COP calculation is based in accordance to EN14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) In case of 1,5 kW indoor units connection, able to connect maximum 12 indoor units.

For light commercial use

Mini ECOi allows easier installation in condominiums and medium sized buildings with limited spaces. Utilising R410A and DC inverter technology, Panasonic offers VRF to a new and growing market.

Reduced height of 996 mm

In addition to raising efficiency, the outdoor unit has been designed to be as compact as possible. It can now be installed in places that were previously too small.

Technical focus

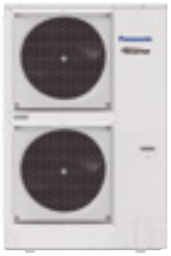
- Outstanding SEER and SCOP
- Better efficiency even compared to 2 fan outdoor units
- 50 m piping length free of refrigeration charge
- High static pressure 35Pa
- High COP mode selectable with maintenance remote controller
- Selectable silent mode

INVERTER+ | R2 ROTARY COMPRESSOR | BLUEFIN | -10°C COOLING MODE | -20°C HEATING MODE | AUTOMATIC RESTART | R22 R410A R22 RENEWAL | PANASONIC AC SMART CLOUD | OPTIONAL WI-FI | 5 YEARS COMPRESSOR WARRANTY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

INTERNET CONTROL: Optional.

Mini ECOi LE1 Series High Efficiency 8 and 10 HP • R410A



Prepare to be blown away by Panasonic's Mini VRF system.
The Mini VRF compact system is the ideal solution for minimum outdoor space. Panasonic extends the Mini VRF range by 8 and 10 HP units.

HP			8 HP	10 HP
Outdoor units			**U-8LE1E8**	**U-10LE1E8**
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase
	Frequency	Hz	50	50
Cooling capacity		kW	22,4	28,0
EER [1]		W/W	3,80	3,11
Recommended combination			4 x S-56MF2E5A	4 x S-73MF2E5A
SEER [2]			**6,3**	**6,4**
$\eta_{s,c}$		**%**	**247,9**	**251,8**
Current cooling		A	9,60 - 9,15 - 8,80	14,70 - 14,00 - 13,50
Input power cooling		kW	5,89	9,00
Heating capacity		kW	25,0	28,0
COP [1]		W/W	4,02	3,93
SCOP [2]			**4,2**	**4,3**
$\eta_{s,h}$		**%**	**166,4**	**169,5**
Current heating		A	10,20 - 9,65 - 9,30	11,60 - 11,10 - 10,70
Input power heating		kW	6,22	7,13
Starting current		A	1,00	1,00
Maximum current		A	13,70	19,60
Maximum input power		kW	9,16	13,10
Maximum number of connectable indoor units [3]			15	15
External static pressure		Pa	0 ~ 35	0 ~ 35
Air flow		m^3/min	150	160
Sound pressure	Cool	dB(A)	60	63
	Cool (Silent 1 / 2 / 3)	dB(A)	57 / 55 / 53	60 / 58 / 56
	Heat	dB(A)	64	65
Sound power	Cool / Heat	dB(A)	81 / 85	84 / 86
Dimension	H x W x D	mm	1500 x 980 x 370	1500 x 980 x 370
Net weight		kg	132	133
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52) [4] / 1/2 (12,70) [5]	3/8 (9,52) [4] / 1/2 (12,70) [5]
	Gas pipe	Inch (mm)	3/4 (19,05) [4] / 7/8 (22,22) [5]	7/8 (22,22) [4] / 1 (25,40) [5]
Maximum piping length (total)		m	7,5 ~ 150 (7,5 ~ 300)	7,5 ~ 150 (7,5 ~ 300)
Elevation difference (in/out)		m	50 (Outdoor unit upper) / 40 (Outdoor unit lower)	50 (Outdoor unit upper) / 40 (Outdoor unit lower)
Refrigerant (R410A) / CO_2 Eq.		kg / T	6,30 (24,00) / 13,1544	6,60 (24,00) / 13,7808
Maximum allowable indoor / outdoor capacity ratio		%	50 ~ 130	50 ~ 130
Operating range	Cool Min ~ Max	°C	-10 ~ +46	-10 ~ +46
	Heat Min ~ Max	°C	-20 ~ +18	-20 ~ +18

1) EER and COP calculation is based in accordance to EN14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) If the heating utilized, it is necessary to increase 1 size with respect to the main liquid pipe, depending on the combination of the indoor unit. 4) Under 90 m for ultimate indoor unit. 5) Over 90 m for ultimate indoor unit. If the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas and liquid pipes.

Increase external static pressure

When unit is installed on a narrow balcony, the fence at front side will be the obstacle. High external static pressure will overcome this obstacle and maintain operation capacity.

High ambient temperature performance

Cooling operation range up to 46 °C. The system can maintain the rated (100 %) capacity up to 40 °C by 8 HP model & up to 37 °C by 10 HP model.

Technical focus

- Piping flexibility with 150 m maximum length
- High efficiency
- 15 indoor units connectable
- Quiet operation mode (one of the lowest in the market)
- High ambient temp performance
- High static pressure 35Pa

INVERTER+ | R2 ROTARY COMPRESSOR | BLUEFIN | -10°C COOLING MODE | -20°C HEATING MODE | AUTOMATIC RESTART | R22 → R410A R22 RENEWAL | PANASONIC AC SMART CLOUD | OPTIONAL WI-FI | 5 YEARS COMPRESSOR WARRANTY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

ECOi EX. The Game Changer

VRF with outstanding energy-saving performance and powerful operation SEER 7,70 (2-Pipe 18 HP model).



A game-changing VRF system delivering energy-saving performance, powerful operation, reliability and comfort surpassing anything previously possible.
It represents a true paradigm shift in air conditioning solutions. Taking quality to the extreme — that's the Panasonic challenge.

1 High performance at extreme conditions

ECOi EX is highly reliable, with strong cooling and heating power, even when operating at extreme ambient temperatures. The units can operate at 100 % of capacity at 43 °C, reaching a great cooling operation up to 52 °C and in heating -25 °C*.
Also, the ECOi EX features include Bluefin in newly designed heat exchanger improving efficiency as well in marine ambient. A silicone coated PCB (Printed Circuit Board) protects the unit from being damaged by environmental factors such as moisture and dust.

2 Outstanding efficiency and comfort

The new ECOi EX system is designed to increase energy efficiency by delivering high SEER rating, as well as high efficiency for part-load operations.
The system has reduced energy costs thanks to "All-Inverter Compressors", with independent control to deliver highly flexible performance. Also, the ECOi EX features an enlarged heat exchanger with triple surfaces that allow for improved heat transfer and a newly designed curved air discharge bell-mouth for better aerodynamics. The three-stage oil recovery design makes it able to minimise the frequency of forced oil recovery, leading to reduced energy costs and sustained comfort.

3 Superior flexibility

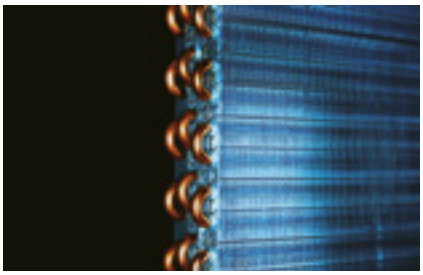
With its up to 1000* meters of pipeline, its maximum 30 meters height difference between indoor units and maximum 90 meters between outdoor unit and indoor unit, the design possibilities have grown exponentially making the new ECOi EX the ideal air conditioning option for expansive buildings, such as train stations, airports, schools or hospitals. These advantages are enhanced with the wide range of indoor unit models and capacities facilitating the perfect adaptation to all kind of projects. The careful selection of controls and peripherals such as the Pump Down, the AHU and/or the chiller, enables an optimum system use.
Maximum allowable indoor / outdoor connected capacity ratio of up to 200 %*.

* Conditions of 2-Pipe ECOi EX ME2 Series.



TOP efficiency and comfort

Remarkable improvement on key components: extraordinary energy-saving performance and redesigned for smooth and better air discharge.



Enlarged heat exchanger surface area with triple surface.

* For 8 and 10 HP unit, the heat exchanger is 2 row design.



Multiple large-capacity all inverter compressors (more than 14 HP).



Newly designed curved air discharge bell mouth for better aerodynamics.

Improvements on refrigerant circuit

Compressor.
Redesigned components in the body provide performance improvement especially in the rated cooling condition and AEER performance.

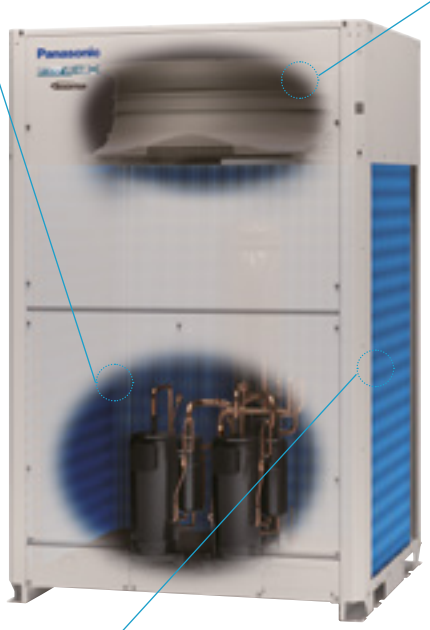


Accumulator.
New oil returning circuit with control valve makes efficient oil recovery to compressor.

Oil separator.
Modified tank design makes efficient oil separation with less pressure drop.

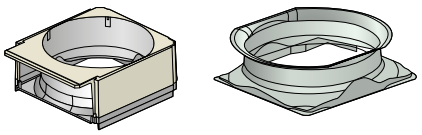


Receiver tank less design
Improved refrigerant control program recovers the remaining refrigerant gas in the system back to the accumulator tank effectively.

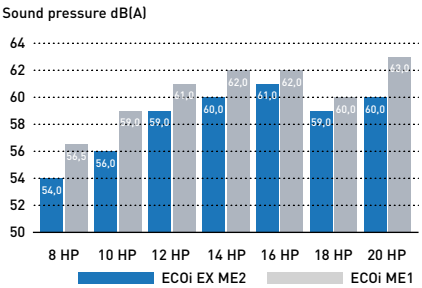


Smooth exhaust flow by new bell-mouth

The new curved shape with integrated top and bottom assure smooth exhaust flow.
This gives more air-volume with same sound level, less input power at same air volume.



Conventional model (ME1) New model (ME2)



Combined 3 surface heat exchanger

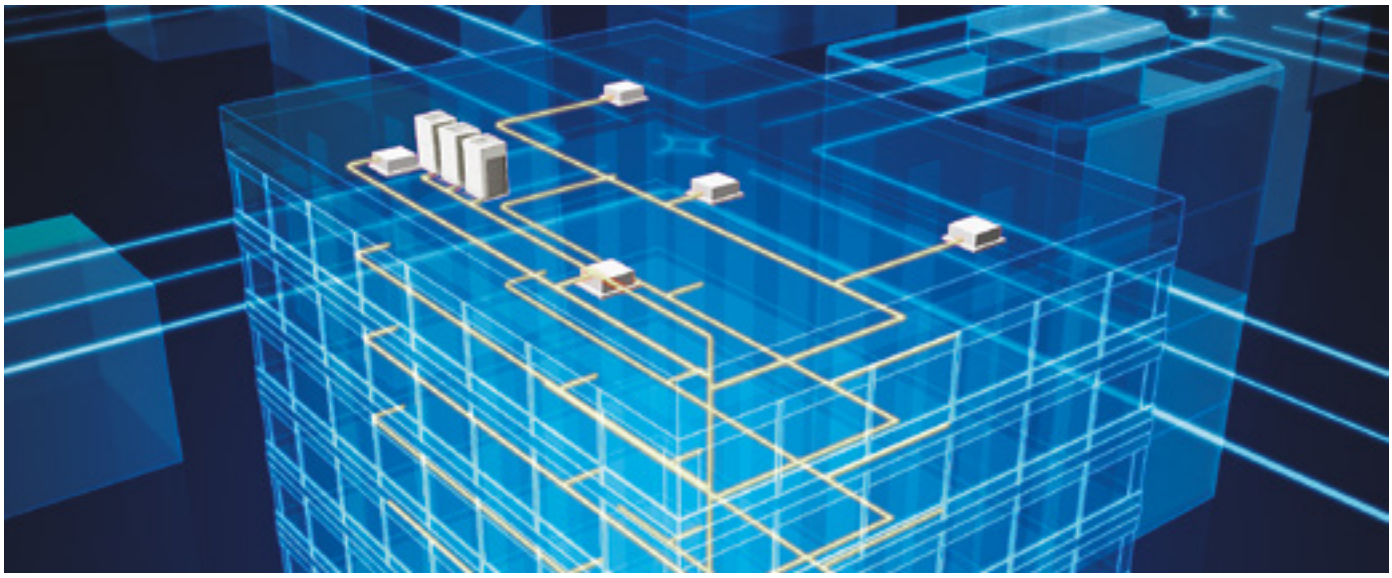
The highly efficient piping pattern increases heat exchange performance by 5 %.
The new heat exchanger features a 3 surface construction.
Compared to the divided dual-surface construction in current models, there is no divided space and the face area of heat exchanger becomes larger.



Conventional model (ME1) New model (ME2)

Oil recovery intelligent control

Oil recovery intelligent control advantages:
1. Higher efficiency
2. Durability
3. Comfort: continuous operation, low noise and low vibration



Intelligent 3-stage oil management system

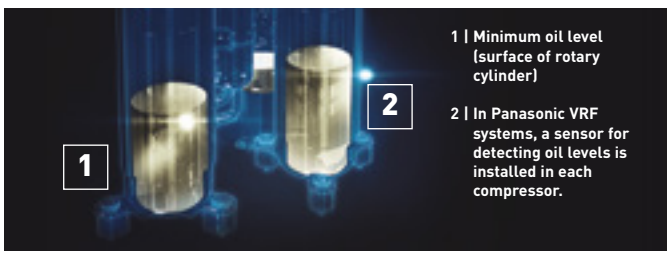
In a VRF system, where lengthy piping and a large number of indoor units need to be controlled collectively, the key to maintaining the system's reliability is to ensure an appropriate amount of oil is secured in the compressors. In order to avoid oil shortage in the compressor, maximum operation is normally forcibly conducted at regular intervals to recover oil from indoor units. This method, typically employed in a standard VRF, causes the system to overheat or overcool and thus waste energy.
In Panasonic VRF systems, a sensor for detecting oil levels is mounted in each compressor. In installations with multiple outdoor units, a shortage of oil in one compressor can be compensated for by recovering oil either from another compressor in the same unit, from a compressor in an adjacent outdoor unit, or from a connected indoor unit. Panasonic VRF systems provide users with a comfortable environment whilst saving energy.

The Panasonic system efficiently manages oil recovery in three stages; minimising the frequency of forced oil recovery while reducing energy cost and maintaining comfort.

STAGE-1: Panasonic compressors are equipped with sensors which monitor oil levels precisely at all times. If oil levels fall, oil can be transferred from other compressors within the same outdoor unit.
STAGE-2: If oil levels in all compressors within the outdoor unit fall, oil can be replenished from adjacent outdoor units.
STAGE-3: Forced oil recovery is implemented only if oil levels become insufficient in spite of above measures. The Panasonic system's design concept is radically different from conventional oil systems.

Features of oil recovery design

Oil sensors installed in each compressor.
Oil sensors installed in each Panasonic compressor precisely monitor oil levels, eliminating unnecessary oil recovery.



Highly functional oil separator.
Thanks to extended separate piping, oil recovery efficiency reaches 90 %, minimising the oil to be discharged from the compressor.



Twin rotary Inverter compressor

New twin rotary inverter compressor

Two independently controlled inverter compressors achieve high efficiency. Redesigned components in the body provide performance improvement especially in the rated cooling condition and EER performance.

· Wider and flexible control on Inverter compressor
· Better oil lubrication
· Smooth start up



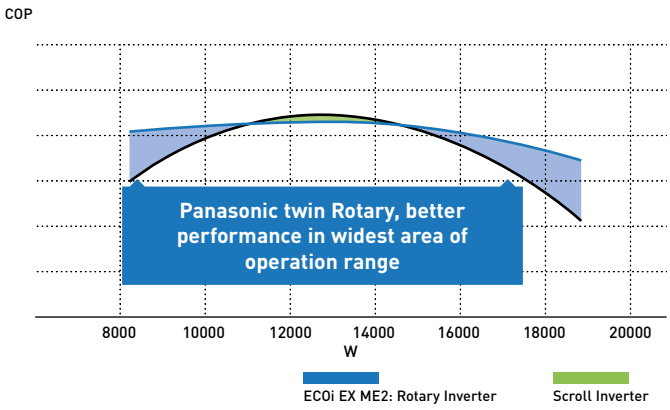
Extraordinary energy-saving performance

Designed for Actual Operation Performance. Panasonic builds air conditioning systems not only with a high EER for rated operation, but also with Seasonal-EER appropriate to the customer's actual environment of use. For instance, with rated operation, outdoor temperature is constant at 35 °C, but in reality the outdoor temperature is continuously changing. Consequently, required air conditioning performance also changes. That's why Panasonic implements the following kind of proprietary control.

1 | Set temperature is rapidly attained; full-load operating time is kept to a minimum.
2 | The frequency of forced oil recovery is minimised. The volume of oil within the compressors is monitored precisely by sensors, so forced oil recovery under full-load operation is conducted only when necessary. Since this suppresses noise due to oil recovery, comfort is maintained.
3 | Panasonic pursues a high EER, of course, as well as high EER in part load, for energy saving performance under a broad range of loads.

Panasonic's design concept contributes to substantial energy cost reductions.

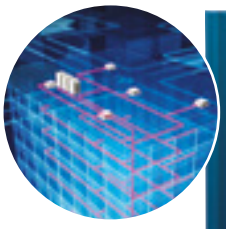
Compressor efficiency electric system VRF.

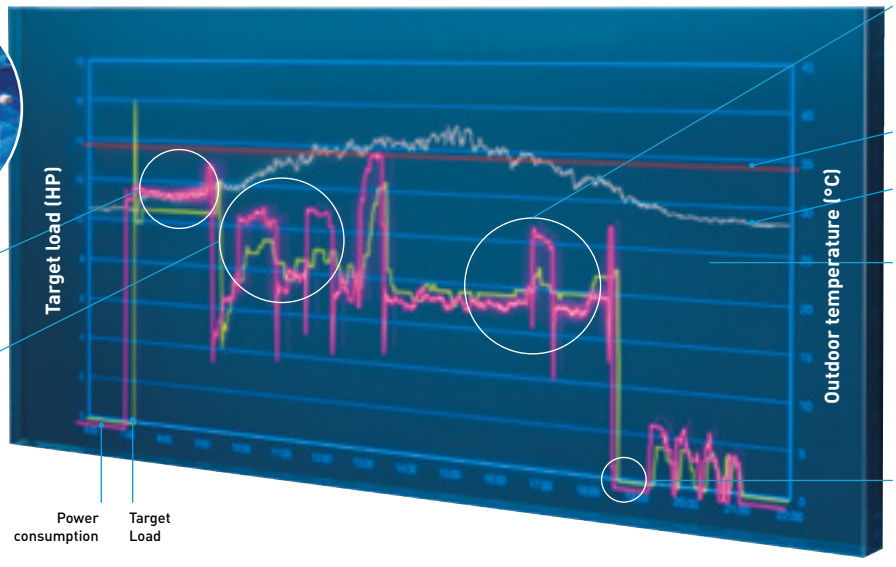


Number of Inverter compressors.

	2-Pipe ECOi EX ME2							3-Pipe ECOi EX MF3				
Size	**Small**		**Medium**			**Large**		**Medium**				
HP	8	10	12	14	16	18	20	8	10	12	14	16
Number	1 pc.		1 pc.	2 pcs.		2 pcs.		1 pc.			2 pcs.	

Actual operation data graph of Panasonic VRF





Rapidly reaches set temperature full-load operation duration minimised

Load increased as required for a given outdoor temperature increase to maintain the set temperature

Actual performance data of Panasonic VRF installed in Asia. Simulated conditions. Location: Panasonic building in Malaysia. System: One 16 HP outdoor unit, 4 Cassette-type indoor units.

Set temperature maintained with minimum load operation

Rated outdoor condition

Actual outdoor temperature

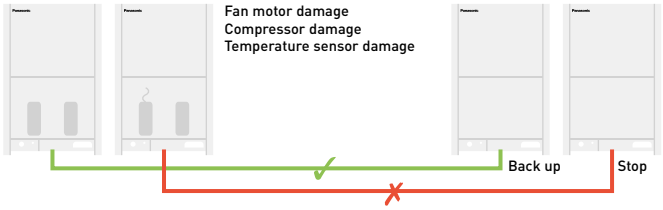
Thanks to superior oil management, oil recovery is minimised, contributing to reduced energy use and costs

When outdoor temperature drops, operation is immediately stopped

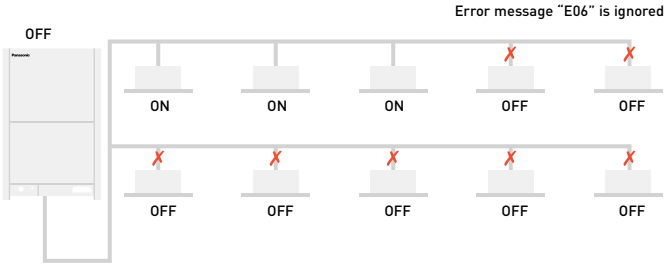
Superior quality, reliability and durability

High safety operation in case of breakdown!

Automatic Back-Up operation. Ensures heating and cooling.
It is possible for the system to keep working, even if the compressors, fan motor and the temperature sensor are damaged (even when a compressor fails in single unit with 2 compressors inside).



The system will still operate up to 25 % of the connected indoor units.
System will not stop when up to 25 % of indoor units have power supply breakdown when they are ON Mode.

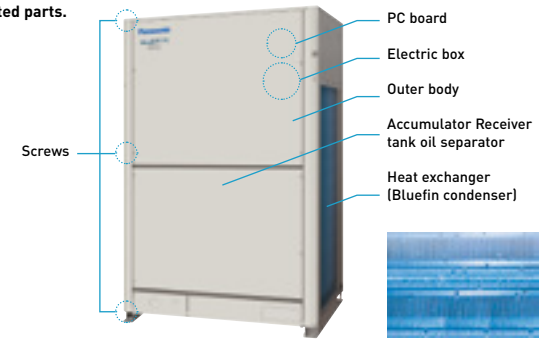


Hi-durability outdoor unit

Treated for high resistance to corrosion (rust and salty air) to ensure long-lasting performance.

Note: Selecting this unit does not completely eliminate the possibility of rust developing. For details concerning unit installation and maintenance, please consult an authorised dealer.

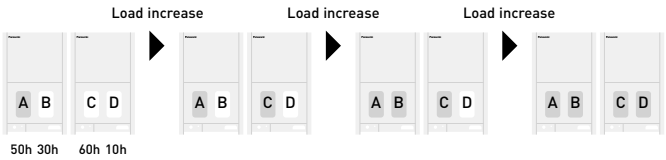
Specially protected parts.



Extended compressor life by uniform compressor operation time

The total run-time of compressors are monitored by a built-in microcomputer, which ensures that operation times of all compressors within the same refrigerant circuit are balanced.
Compressors with histories showing shorter run times are selected first, ensuring equal wear and tear across all units and extending the working life of the system.

System example.
A,C: DC inverter compressor
B,D: Constant speed compressor



* Depend on accumulation operation time of each compressors.
* Compressor priority has possibility to be changed.
(e.g) Case 1: A→C→B→D, Case 2: C→A→D→B, Case 3: A→C→D→B, Case 4: C→A→B→D
* Also other cases available.

A large number of indoor unit models can be connected



2-Pipe ECOi EX ME2 Series extraordinary partial load and SEER/SCOP

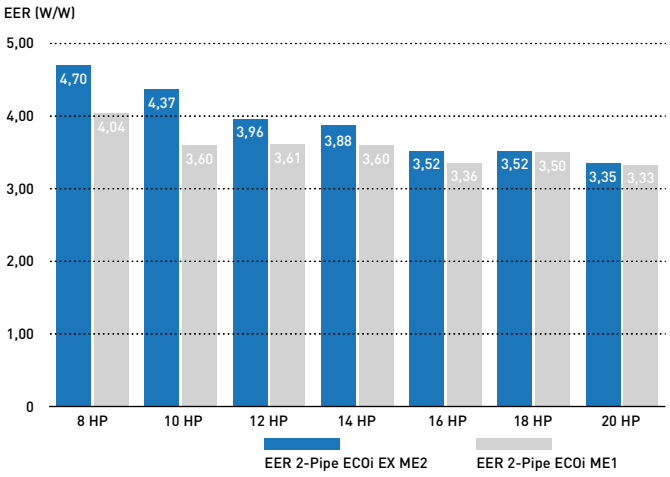
Efficiency in VRF systems

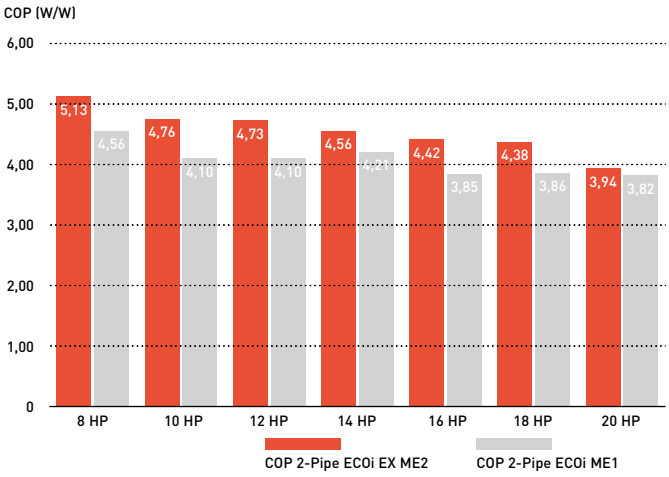
The only way to compare so far, was the nominal efficiency at outdoor ambient temperature of 35 °C (EER) in Cooling and at 7 °C in heating (COP). With new EN-14825 seasonal efficiency will be shown, the result will be SEER and SCOP. New ECOi EX is reaching excellent performance without using any additional saving functions.

The highest EER/COP rating in most capacities

Compared to conventional model ECOi (ME1)

The ECOi EX marks a revolutionary step forward in VRF efficiency. A look at the incredible EER/COP value clearly indicates that. What's more, this high EER/COP value is achieved even during part load operation. This shows the extraordinary energy-saving performance the ECOi EX is capable of providing.



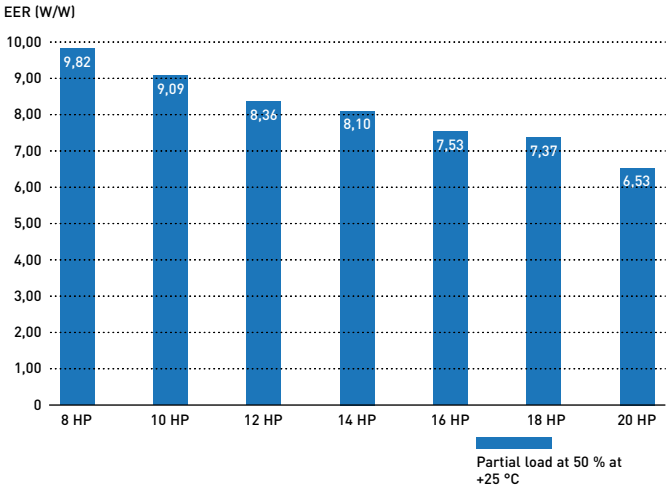


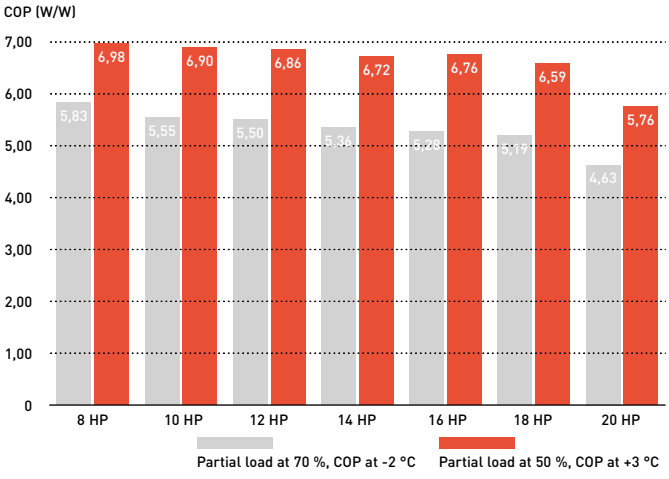
Partial load for seasonal and real system efficiency

VRF units are designed to adapt to the heating and cooling demand, adapting its performance to different outdoor conditions. When compressor runs at lower than 100 % capacity, the system is working at partial load. A wider compressor operating range results in better system performance both at full load and partial load conditions. Panasonic ECOi EX partial load is excellent, reaching a minimum of 15 % of compressor capacity.

Excellent efficiency at any condition and partial load

In both heating and cooling mode, Panasonic ECOi EX is reaching exceptional levels of efficiency.



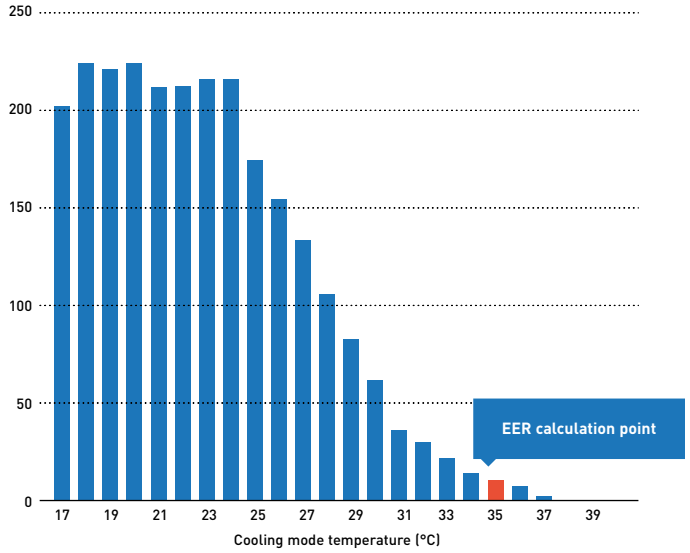


SEER and SCOP following to EN-14825

When better partial load, better efficiency is achieved in real operation. New EN-14825 is showing the way to calculate considering full year operation hours at different conditions. New Panasonic ECOi EX is designed to save energy in any partial load conditions. Most of operation hours system is under partial load conditions, 80 % of total operation hours is less than 70 % of full load.
In below graphs is the example for average ambient conditions, this uses Strasbourg ambient conditions for calculation.

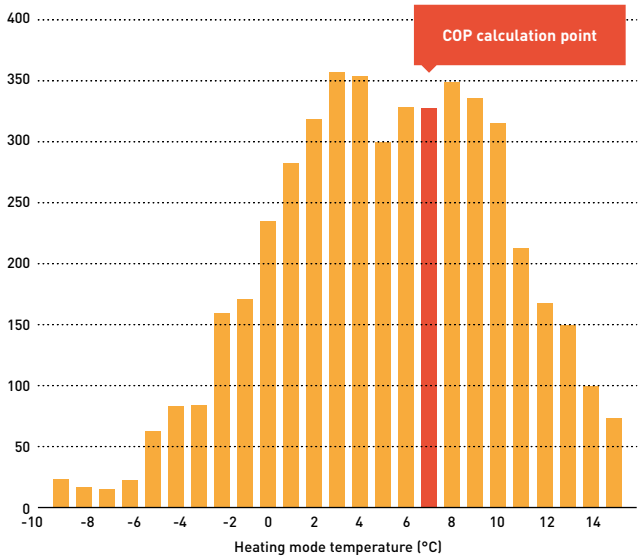
Outside temperature distribution

Time distribution (hours / year)



Outside temperature distribution

Time distribution (hours / year)



In the characteristics EER and COP only a single temperature for the assessment of the efficiency is taken as a basis in each case. Data calculated under EN-14825 conditions, not additional saving function considered for this calculation.
Compressor frequency according to ambient temperature and building design.

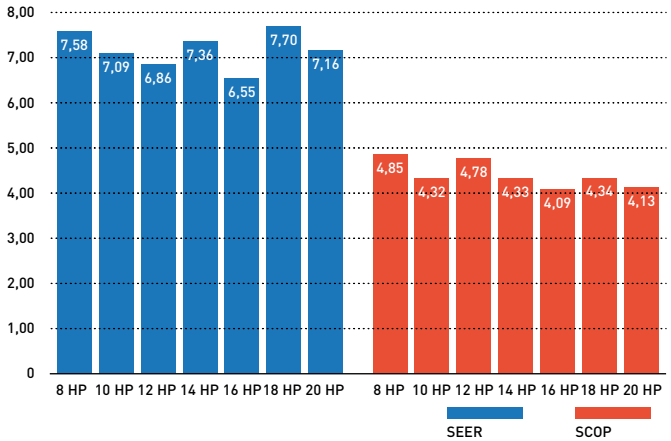
SEER and SCOP values

ECOi EX models have superior seasonal space cooling/ heating efficiency following not only EN 14825 but also COMMISSION REGULATION (EU) 2016/2281. This regulation requires to use "η" values in the technical documents from January 2018.

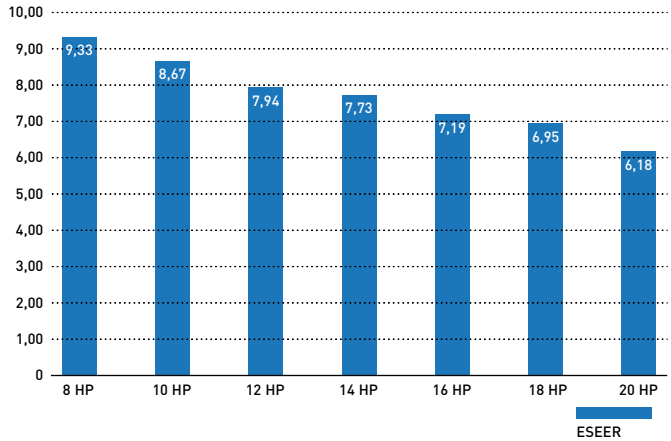
Please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

However, if it was necessary by setting on commissioning Panasonic, can increase efficiency additionally by "20 %" increasing evaporation refrigerant temperature range, for a higher efficiency and lower energy consumption.

SEER / SCOP



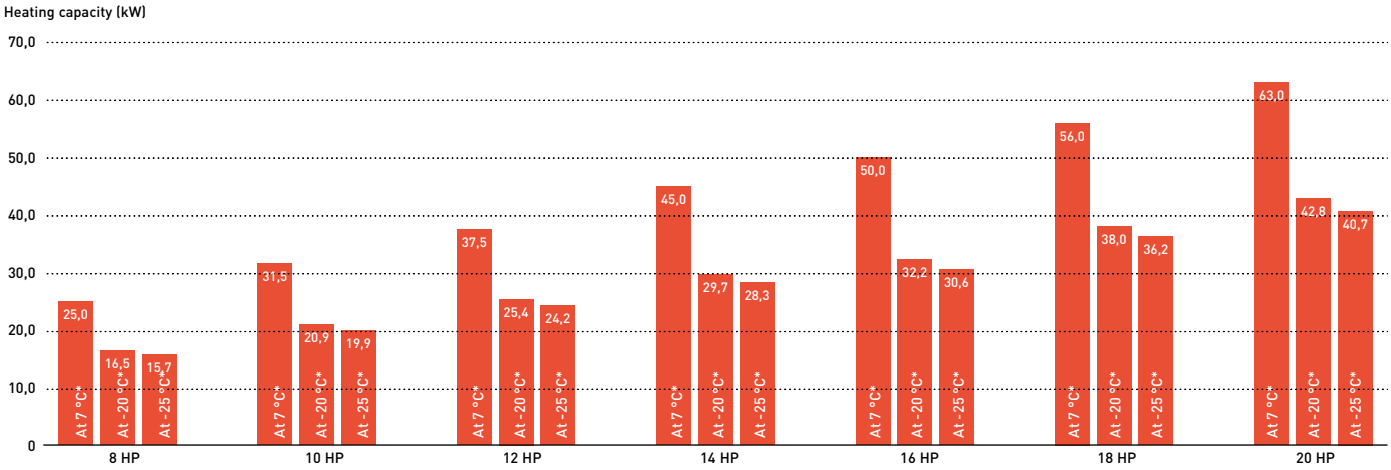
ESEER (W/W)



2-Pipe ECOi EX ME2 Series high performance at extreme conditions

The ECOi EX can still operate at 100 % capacity when the outside temperature is as high as 43 °C. This high power capability enables reliable operation even under extremely high temperature conditions.

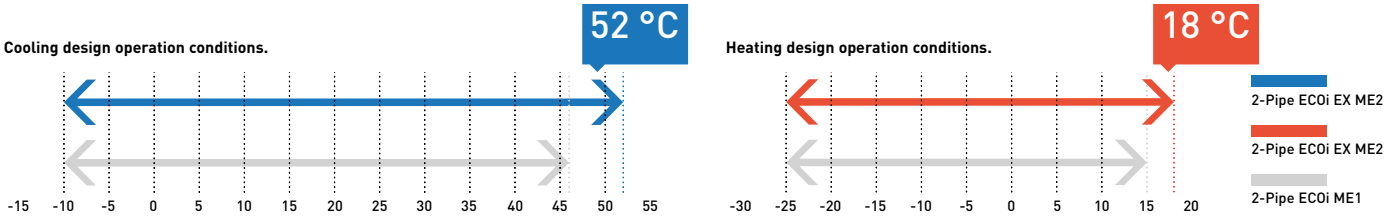
Extremely high capacity at -20 °C and unique heating capacity at -25 °C



* Outdoor air temperature (°C WB).

Trusted reliability even under high and low temperature conditions

Designed to be durable enough to withstand extreme heat, 2-Pipe ECOi EX ME2 Series ensures reliable cooling operation over an extended operation range up to 52 °C, and heating operation also at minus -25 °C.



Cooling: Outside air temperature ˚C (DB). Heating: Outside air temperature ˚C (WB).



2-Pipe ECOi EX ME2 Series superior flexibility

Connectable maximum allowable indoor / outdoor capacity ratio up to 200 %*

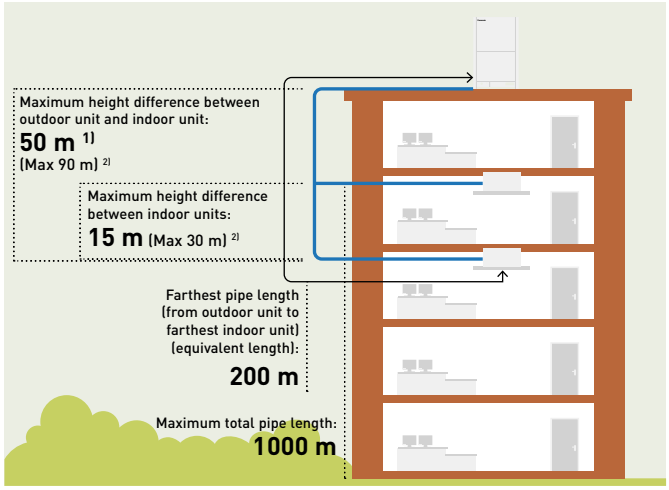
ECOi EX attain maximum indoor unit connection capacity of up to 130 % of the unit's connection range. This limit can be overpassed and reach up to 200 % if some conditions are satisfied. With this feature, ECOi EX provides an ideal air conditioning solution for locations where full cooling/heating are not always required in all spaces at same time.

System (HP)	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
Connectable indoor units: 130 %	13	16	19	23	26	29	33	36	40	43	46	50	53	56	59	64																					
Connectable indoor units: 200 %	20	25	30	35	40	45	50	55	60	64																											

Note: If more than 100 % indoor units are operated with a high load, the units may not perform at the rated capacity. For the details, please consult with an authorised Panasonic dealer. * If the following conditions are satisfied, the effective range is above 130 % up to 200 %. Obey the limited number of connectable indoor units. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). Simultaneous operation is limited to less than 130 % of connectable indoor units. 1,5 kW capacity of Indoor Units are included.

Increased piping lengths and design flexibility

Adaptable to various building types and sizes. Actual piping length: 200 m. Maximum piping length: 1000 m.

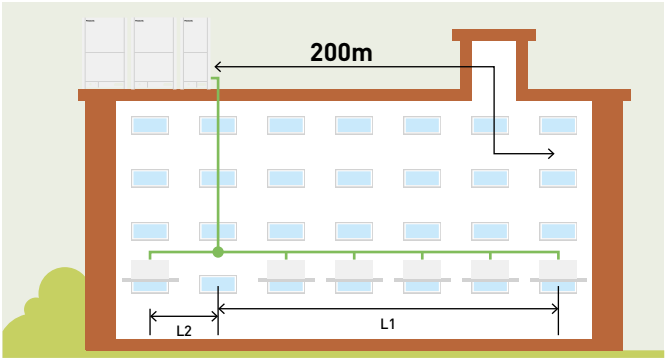


1) 40 m if the outdoor unit is below the indoor unit.
2) For height differences between outdoor unit and indoor unit > 50 m, as well as for height differences between indoor units > 15 m, contact an authorized Panasonic dealer.

Up to 50 m length difference between the longest and the shortest piping from the first branch

Flexible piping layout makes it easier to design systems for locations such as train stations, airports, schools and hospitals.

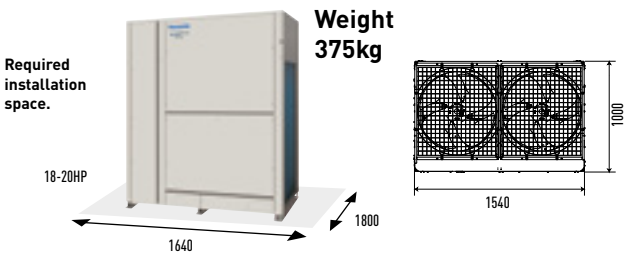
- Up to 64 units can be connected to one system
- Difference between maximum and minimum pipe runs after first branch can be a maximum of 50 m
- Larger pipe runs can be up to 200 m

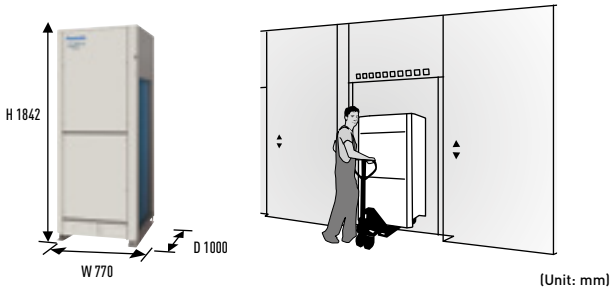


L1 = Longest pipe run. L2 = Shortest pipe run. L1 - L2 = Maximum 50 m.

Compact design

The ME2 Series has reduced the installation space required with up to 20 HP available in a single chassis. 8 - 10 HP are able to fit inside a lift for easy handling on site.

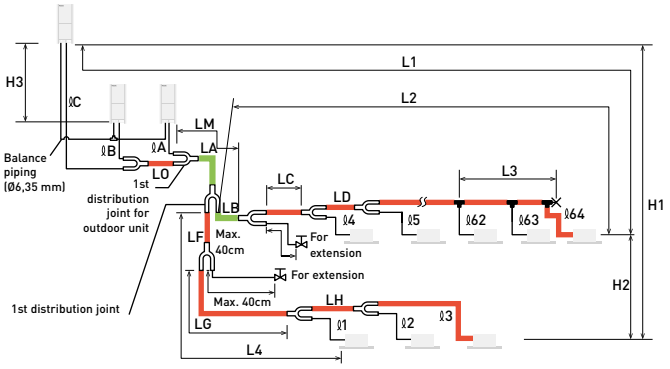




(Unit: mm)

2-Pipe ECOi EX ME2 Series piping design

Select installation locations so that the lengths and sizes of refrigerant piping are within the allowable ranges shown in the figure below.



Main piping length (maximum piping size) LM= LA + LB ...

Main distribution tubes LC – LH are selected according to the capacity after the distribution joint.

Sizes of indoor unit connection piping ℓ1 – ℓ64 are determined by the connection piping sizes on the indoor units.

Distribution joint (CZ: optional parts).

T-joint (field supply).

Ball valve (field supply).

Solidly welded shut (pinch weld).

The outdoor connection main piping (LO portion) is determined by the total capacity of the outdoor units that are connected to the tube ends.
Note: Be sure to use special R410A distribution joints (CZ: optional parts) for outdoor unit connections and piping branches.

R410A distribution joint.
CZ-P680PH2BM (for outdoor unit)
CZ-P1350PH2BM (for outdoor unit)
CZ-224BK2BM (for indoor unit)
CZ-P680BK2BM (for indoor unit)
CZ-P1350BK2BM (for indoor unit)

Ranges that apply to refrigerant piping lengths and to differences in installation heights

Items	Mark	Contents		Length (m)
Allowable piping length	L1	Maximum piping length	Actual length	≤200[1]
			Equivalent length	≤210[1]
	Δ L (L2-L4)	Difference between maximum length and minimum length from the 1st distribution joint		≤50[2]
	LM	Maximum length of main piping (at maximum size) *** Even after 1st distribution joint, LM is allowed if at maximum piping length.**		—[3]
	ℓ1, ℓ2~ ℓ64	Maximum length of each distribution tube		≤50[4]
	L1+ ℓ1+ ℓ2~ ℓ63+ ℓA+ℓB+LF+LG+LH	Total maximum piping length including length of each distribution tube (only liquid piping)		≤1000
	ℓA, ℓB+LO, ℓC+LO	Maximum piping length from outdoor's 1st distribution joint to each outdoor unit		≤10
Allowable elevation difference	H1	When outdoor unit is installed higher than indoor unit		≤50
		When outdoor unit is installed lower than indoor unit		≤40
	H2	Maximum difference between indoor units		≤15
	H3	Maximum difference between outdoor units		≤4
Allowable length of joint piping	L3	T-joint piping (field-supply); Maximum piping length between the first T-joint and solidly welded-shut end point		≤2

L = Length, H = Height

1) If the longest piping length (L1) exceeds 90 m (equivalent length), increase the sizes of the main tubes (LM) by 1 rank for gas tubes and liquid tubes. Use a field supply reducer. Select the tube size from the table of main piping sizes (Table 3) and from the table of refrigerant piping sizes (Table 8). 2) When the piping length exceeds 40 m, increase a longer liquid or gas piping by 1 rank. Refer to the Technical Data for the details. 3) If the longest main piping length (LM) exceeds 50 m, increase the main piping size at the portion before 50 m by 1 rank for the gas tubes. Use a field supply reducer. Determine the length less than the limitation of allowable maximum piping length. For the portion that exceeds 50 m, set based on the main piping size (LA) listed in Table 3. 4) If any of the piping length exceeds 30 m, increase the size of the liquid and gas tubes by 1 rank. 5) If the total distribution piping length exceeds 500 m, maximum allowable elevation difference (H2) between the indoor units is calculated by the following formula. Make sure the indoor unit's actual elevation difference should fall within the figure calculated as follows. Unit of account (meter): 15 x (2 - total piping length (m) ÷ 500).
* The outdoor connection main piping (LO portion) is determined by the total capacity of the outdoor units that are connected to the tube ends. If the size of the existing piping is already larger than the standard piping size, it is not necessary to further increase the size. ** If the existing piping is used, and the amount of on-site refrigerant charge exceeds the value listed below, then change the size of the piping to reduce the amount of refrigerant. Total amount of refrigerant for the system with 1 outdoor unit: 50kg. Total amount of refrigerant for the system with 2 outdoor units: 80kg. Total amount of refrigerant for the system with 3 outdoor units or 4 outdoor units: 105kg.

Necessary amount of additional refrigerant charge per outdoor unit.

U-8ME2E8	U-10ME2E8	U-12ME2E8	U-14ME2E8	U-16ME2E8
5,5kg	5,5kg	7,0kg	7,0kg	7,0kg

System limitations.

Maximum number allowable connected outdoor units	4 [1]
Maximum capacity allowable connected outdoor units	224 kW (80 HP)
Maximum connectable indoor units	64 [2]
Maximum allowable indoor / outdoor capacity ratio	50-130 %[3]

1) Up to 4 units can be connected if the system has been extended.
2) In the case of 38 HP or smaller units, the number is limited by the total capacity of the connected indoor units.
3) If the following conditions are satisfied, the effective range is above 130 % and below 200 %.
A) Obey the limited number of connectable indoor units. B) The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C) Simultaneous operation is limited to less than 130 % of connectable indoor units.

Additional refrigerant charge.

Liquid piping size Inch (mm)	Amount of refrigerant charge/m (g/m)
1/4 (6,35)	26
3/8 (9,52)	56
1/2 (12,70)	128
5/8 (15,88)	185
3/4 (19,05)	259
7/8 (22,22)	366
1 (25,40)	490

Refrigerant piping (existing piping can be used).

Piping size (mm)													
Material Temper - O						**Material Temper - 1/2 H, H**							
Ø6,35	t 0,8	Ø12,70	t 0,8	Ø19,05	t 1,2	Ø22,22	t 1,0	Ø28,58	t 1,0	Ø38,10	over t 1,35	Ø44,45	over t1,55
Ø9,52	t 0,8	Ø15,88	t 1,0			Ø25,40	t 1,0	Ø31,75	t 1,1	Ø41,28	over t 1,45	Ø44,45	over t1,55

* When bending the tubes, use a bending radius that is at least 4 times the outer diameter of the tubes. In addition, take sufficient care to avoid crushing or damaging the tubes when bending them.



2-Pipe ECOi EX ME2 Series

A VRF system delivering energy-saving performance, powerful operation, reliability and comfort surpassing anything previously possible. It represents a true paradigm shift in air conditioning solutions.
VRF with outstanding energy-saving performance and powerful operation SEER 7,70 (18 HP model).

			8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP
Outdoor units			**U-8ME2E8**	**U-10ME2E8**	**U-12ME2E8**	**U-14ME2E8**	**U-16ME2E8**	**U-18ME2E8**	**U-20ME2E8**
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50
Cooling capacity		kW	22,4	28,0	33,5	40,0	45,0	50,0	56,0
EER [1]		W/W	4,70	4,37	3,96	3,88	3,52	3,52	3,35
ESEER		W/W	9,33	8,67	7,94	7,73	7,19	6,95	6,18
Recommended combination			4 x S-56MF2E5A	4 x S-73MF2E5A	6 x S-56MF2E5A	2 x S-60MF2E5A	6 x S-73MF2E5A	6 x S-60MF2E5A	8 x S-73MF2E5A
SEER [2]			**7,58**	**7,09**	**6,86**	**7,36**	**6,55**	**7,70**	**7,16**
$\eta_{s,c}$		**%**	**294,3**	**275,4**	**266,6**	**286,0**	**254,3**	**299,2**	**278,2**
Current cooling		A	7,79 - 7,40 - 7,14	10,70 - 10,20 - 9,80	13,70 - 13,00 - 12,50	17,40 - 16,50 - 15,90	21,10 - 20,10 - 19,40	23,20 - 22,00 - 21,20	26,70 - 25,40 - 24,50
Input power cooling		kW	4,77	6,41	8,47	10,30	12,80	14,20	16,70
Heating capacity		kW	25,0	31,5	37,5	45,0	50,0	56,0	63,0
COP [1]		W/W	5,13	4,76	4,73	4,56	4,42	4,38	3,94
SCOP [2]			**4,85**	**4,32**	**4,78**	**4,33**	**4,09**	**4,34**	**4,13**
$\eta_{s,h}$		**%**	**188,4**	**167,6**	**185,8**	**168,2**	**159,0**	**168,7**	**160,4**
Current heating		A	7,96 - 7,56 - 7,29	11,10 - 10,50 - 10,10	12,90 - 12,30 - 11,80	16,60 - 15,80 - 15,20	18,90 - 17,90 - 17,30	21,10 - 20,10 - 19,40	25,90 - 24,60 - 23,70
Input power heating		kW	4,87	6,62	7,92	9,86	11,30	12,80	16,00
Starting current		A	1,00	1,00	1,00	2,00	2,00	2,00	2,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80
Air flow		m^3/min	224	224	232	232	232	405	405
Sound pressure	Normal mode	dB(A)	54	56	59	60	61	59	60
	Silent mode	dB(A)	51	53	56	57	58	56	57
Sound power	Normal mode	dB(A)	75	77	80	81	82	80	81
Dimension	H x W x D	mm	1842 x 770 x 1000	1842 x 770 x 1000	1842 x 1180 x 1000	1842 x 1180 x 1000	1842 x 1180 x 1000	1842 x 1540 x 1000	1842 x 1540 x 1000
Net weight		kg	210	210	270	315	315	375	375
Pipe diameter [3]	Liquid pipe	Inch (mm)	3/8 (9,52) / 1/2 (12,70)	3/8 (9,52) / 1/2 (12,70)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)
	Gas pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	7/8 (22,22) / 1 (25,40)	1 (25,40) / 1-1/8 (28,58)	1 (25,40) / 1-1/8 (28,58)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq		kg / T	5,60 / 11,6928	5,60 / 11,6928	8,30 / 17,3304	8,30 / 17,3304	8,30 / 17,3304	9,50 / 19,836	9,50 / 19,836
Maximum allowable indoor / outdoor capacity ratio % [4]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

1) EER and COP calculation is based in accordance to EN14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 4) If the following conditions are satisfied, the effective range is above 130 % and below 200 %: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130 % of connectable indoor units.

Technical focus

- New twin rotary inverter compressor
- High performance at extreme conditions
- Outstanding efficiency and comfort
- Extraordinary partial load and SEER/SCOP
- SEER and SCOP following to EN-14825
- Oil recovery intelligent control
- Top comfort
- Superior flexibility
- Bluefin full line up EX
- Extremely high capacity at -20 °C and unique heating capacity at -25 °C
- Smooth exhaust flow by new bell-mouth



Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

2-Pipe ECOi EX ME2 Series High Efficiency model combination from 18 to 28 HP

Model name			18 HP	20 HP	22 HP	24 HP	26 HP	28 HP
			U-8ME2E8	U-10ME2E8	U-10ME2E8	U-12ME2E8	U-10ME2E8	U-12ME2E8
			U-10ME2E8	U-10ME2E8	U-12ME2E8	U-12ME2E8	U-16ME2E8	U-16ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Cooling capacity		kW	50,0	56,0	61,5	68,0	73,0	78,5
EER [1]		W/W	4,55	4,38	4,13	3,93	3,80	3,69
Current cooling		A	18,20 - 17,30 - 16,60	21,40 - 20,30 - 19,60	24,30 - 23,10 - 22,30	28,00 - 26,60 - 25,60	31,70 - 30,10 - 29,00	34,80 - 33,10 - 31,90
Input power cooling		kW	11,00	12,80	14,90	17,30	19,20	21,30
Heating capacity		kW	56,0	63,0	69,0	76,5	81,5	87,5
COP [1]		W/W	4,96	4,77	4,76	4,69	4,55	4,56
Current heating		A	18,70 - 17,70 - 17,10	22,00 - 20,90 - 20,20	23,90 - 22,70 - 21,90	26,60 - 25,30 - 24,40	29,90 - 28,40 - 27,40	31,70 - 30,10 - 29,00
Input power heating		kW	11,30	13,20	14,50	16,30	17,90	19,20
Starting current		A	2,00	2,00	2,00	2,00	3,00	3,00
External static pressure (Max)		Pa	80	80	80	80	80	80
Air flow		m³/min	448	448	456	464	456	464
Sound pressure	Normal	dB(A)	58,50	59,00	61,00	62,00	62,50	63,50
	Silent mode	dB(A)	55,50	56,00	58,00	59,00	59,50	60,50
Sound power	Normal mode	dB(A)	79,50	80,00	82,00	83,00	83,50	84,50
Dimension / Net weight	H x W x D	mm / kg	1842 x 1600 x 1000 / 420	1842 x 1600 x 1000 / 420	1842 x 2010 x 1000 / 480	1842 x 2420 x 1000 / 540	1842 x 2010 x 1000 / 535	1842 x 2420 x 1000 / 585
Pipe diameter [2]	Liquid pipe	Inch (mm)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	11,20 / 23,3856	11,20 / 23,3856	13,90 / 29,0232	16,60 / 34,6608	13,90 / 29,0232	16,60 / 34,6608
Maximum allowable indoor / outdoor capacity ratio % [3]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

2-Pipe ECOi EX ME2 Series High Efficiency model combination from 30 to 40 HP

Model name			30 HP	32 HP	34 HP	36 HP	38 HP	40 HP
			U-14ME2E8	U-16ME2E8	U-10ME2E8	U-12ME2E8	U-10ME2E8	U-12ME2E8
			U-16ME2E8	U-16ME2E8	U-12ME2E8	U-12ME2E8	U-12ME2E8	U-12ME2E8
					U-12ME2E8	U-12ME2E8	U-16ME2E8	U-16ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Cooling capacity		kW	85,0	90,0	96,0	101,0	107,0	113,0
EER [1]		W/W	3,68	3,52	4,05	3,95	3,84	3,75
Current cooling		A	38,60 - 36,60 - 35,30	42,30 - 40,20 - 38,70	38,70 - 36,80 - 35,50	41,40 - 39,30 - 37,90	46,10 - 43,80 - 42,20	49,20 - 46,70 - 45,00
Input power cooling		kW	23,10	25,60	23,70	25,60	27,90	30,10
Heating capacity		kW	95,0	100,0	108,0	113,0	119,0	127,0
COP [1]		W/W	4,48	4,42	4,72	4,73	4,61	4,57
Current heating		A	35,40 - 33,60 - 32,40	37,70 - 35,80 - 34,60	37,80 - 35,90 - 34,60	39,00 - 37,10 - 35,80	42,60 - 40,50 - 39,00	45,90 - 43,60 - 42,00
Input power heating		kW	21,20	22,60	22,90	23,90	25,80	27,80
Starting current		A	4,00	4,00	3,00	3,00	4,00	4,00
External static pressure (Max)		Pa	80	80	80	80	80	80
Air flow		m³/min	464	464	688	696	688	696
Sound pressure	Normal	dB(A)	63,50	64,00	63,00	64,00	64,00	64,50
	Silent mode	dB(A)	60,50	61,00	60,00	61,00	61,00	61,50
Sound power	Normal mode	dB(A)	84,50	85,00	84,00	85,00	85,00	85,50
Dimension / Net weight	H x W x D	mm / kg	1842 x 2420 x 1000 / 630	1842 x 2420 x 1000 / 630	1842 x 3250 x 1000 / 750	1842 x 3660 x 1000 / 810	1842 x 3250 x 1000 / 795	1842 x 3660 x 1000 / 855
Pipe diameter [2]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	16,60 / 34,6608	16,60 / 34,6608	22,20 / 46,3536	24,90 / 51,9912	22,20 / 46,3536	24,90 / 46,3536
Maximum allowable indoor / outdoor capacity ratio % [3]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

Data is for reference. 1) EER and COP calculation is based in accordance to EN14511. 2) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 3) If the following conditions are satisfied, the effective range is above 130 % and below 200 %: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130 % of connectable indoor units.

2-Pipe ECOi EX ME2 Series High Efficiency model combination from 42 to 52 HP

Model name			42 HP	44 HP	46 HP	48 HP	50 HP	52 HP
			U-10ME2E8	U-12ME2E8	U-14ME2E8	U-16ME2E8	U-10ME2E8	U-12ME2E8
			U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-12ME2E8	U-12ME2E8
			U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-12ME2E8	U-12ME2E8
							U-16ME2E8	U-16ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Cooling capacity		kW	118,0	124,0	130,0	135,0	140,0	145,0
EER [1]		W/W	3,69	3,62	3,62	3,52	3,87	3,82
Current cooling		A	52,80 - 50,20 - 48,40	56,00 - 53,20 - 51,30	59,90 - 56,90 - 54,90	63,40 - 60,20 - 58,10	59,10 - 56,20 - 54,20	62,10 - 59,00 - 56,80
Input power cooling		kW	32,00	34,30	35,90	38,40	36,20	38,00
Heating capacity		kW	132,0	138,0	145,0	150,0	155,0	160,0
COP [1]		W/W	4,49	4,50	4,46	4,42	4,65	4,66
Current heating		A	49,10 - 46,60 - 44,90	50,70 - 48,20 - 46,40	54,30 - 51,50 - 49,70	56,60 - 53,80 - 51,80	55,00 - 52,20 - 50,40	56,60 - 53,80 - 51,90
Input power heating		kW	29,40	30,70	32,50	33,90	33,30	34,30
Starting current		A	5,00	5,00	6,00	6,00	5,00	5,00
External static pressure (Max)		Pa	80	80	80	80	80	80
Air flow		m³/min	688	696	696	696	920	928
Sound pressure	Normal	dB(A)	65,00	65,50	65,50	66,00	65,50	66,00
	Silent mode	dB(A)	62,00	62,50	62,50	63,00	62,50	63,00
Sound power	Normal mode	dB(A)	86,00	86,50	86,50	87,00	86,50	87,00
Dimension / Net weight	H x W x D	mm / kg	1842 x 3250 x 1000 / 840	1842 x 3660 x 1000 / 900	1842 x 3660 x 1000 / 945	1842 x 3660 x 1000 / 945	1842 x 4490 x 1000 / 1065	1842 x 4900 x 1000 / 1125
Pipe diameter [2]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	22,20 / 51,9912	24,90 / 51,9912	24,90 / 51,9912	24,90 / 51,9912	30,50 / 63,6840	33,20 / 69,3216
Maximum allowable indoor / outdoor capacity ratio % [3]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

2-Pipe ECOi EX ME2 Series High Efficiency model combination from 54 to 64 HP

Model name			54 HP	56 HP	58 HP	60 HP	62 HP	64 HP
			U-10ME2E8	U-12ME2E8	U-10ME2E8	U-12ME2E8	U-14ME2E8	U-16ME2E8
			U-12ME2E8	U-12ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8
			U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8
			U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Cooling capacity		kW	151,0	156,0	162,0	168,0	174,0	180,0
EER [1]		W/W	3,75	3,71	3,65	3,60	3,60	3,52
Current cooling		A	66,60 - 63,20 - 60,90	68,80 - 65,30 - 63,00	73,30 - 69,70 - 67,10	77,10 - 73,30 - 70,60	79,80 - 75,80 - 73,00	84,60 - 80,30 - 77,40
Input power cooling		kW	40,30	42,10	44,40	46,70	48,30	51,20
Heating capacity		kW	169,0	175,0	182,0	189,0	195,0	201,0
COP [1]		W/W	4,56	4,56	4,47	4,47	4,45	4,42
Current heating		A	61,90 - 58,80 - 56,70	63,40 - 60,20 - 58,10	68,00 - 64,60 - 62,20	70,60 - 67,10 - 64,70	73,10 - 69,50 - 67,00	76,00 - 72,20 - 69,60
Input power heating		kW	37,10	38,40	40,70	42,30	43,80	45,50
Starting current		A	6,00	6,00	7,00	7,00	8,00	8,00
External static pressure (Max)		Pa	80	80	80	80	80	80
Air flow		m³/min	920	928	920	928	928	928
Sound pressure	Normal	dB(A)	66,00	66,50	66,50	67,00	67,00	67,00
	Silent mode	dB(A)	63,00	63,50	63,50	64,00	64,00	64,00
Sound power	Normal mode	dB(A)	87,00	87,50	87,50	88,00	88,00	88,00
Dimension / Net weight	H x W x D	mm / kg	1842 x 4490 x 1000 / 1110	1842 x 4900 x 1000 / 1170	1842 x 4490 x 1000 / 1155	1842 x 4900 x 1000 / 1215	1842 x 4900 x 1000 / 1260	1842 x 4900 x 1000 / 1260
Pipe diameter [2]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-5/8 (41,28) / 1-3/4 (44,45)	1-5/8 (41,28) / 1-3/4 (44,45)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	30,50 / 63,6840	33,20 / 69,3216	30,50 / 63,6840	33,20 / 69,3216	33,20 / 69,3216	33,20 / 69,3216
Maximum allowable indoor / outdoor capacity ratio % [3]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

Data is for reference. 1) EER and COP calculation is based in accordance to EN14511. 2) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 3) If the following conditions are satisfied, the effective range is above 130 % and below 200 %: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130 % of connectable indoor units.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

2-Pipe ECOi EX ME2 Series Space Saving Model Combination from 22 to 34 HP

Model name			22 HP	24 HP	26 HP	28 HP	30 HP	32 HP	34 HP
			U-10ME2E8	U-12ME2E8	U-10ME2E8	U-12ME2E8	U-14ME2E8	U-16ME2E8	U-14ME2E8
			U-12ME2E8	U-12ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-20ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50
Cooling capacity		kW	61,5	68,0	73,0	78,5	85,0	90,0	96,0
EER [1]		W/W	4,13	3,93	3,80	3,69	3,68	3,52	3,56
SEER [2]			**6,90**	**6,86**	**6,62**	**6,60**	**6,88**	**6,55**	**7,21**
Current cooling		A	24,30-23,10-22,30	28,00-26,60-25,60	31,70-30,10-29,00	34,80-33,10-31,90	38,60-36,60-35,30	42,30-40,20-38,70	44,10-41,90-40,40
Input power cooling		kW	14,90	17,30	19,20	21,30	23,10	25,60	27,00
Heating capacity		kW	69,0	76,5	81,5	87,5	95,0	100,0	108,0
COP [1]		W/W	4,76	4,69	4,55	4,56	4,48	4,42	4,17
SCOP [2]			**4,53**	**4,78**	**4,16**	**4,29**	**4,13**	**4,09**	**4,14**
Current heating		A	23,90-22,70-21,90	26,60-25,30-24,40	29,90-28,40-27,40	31,70-30,10-29,00	35,40-33,60-32,40	37,70-35,80-34,60	42,80-40,60-39,20
Input power heating		kW	14,50	16,30	17,90	19,20	21,20	22,60	25,90
Starting current		A	2,00	2,00	3,00	3,00	4,00	4,00	4,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80
Air flow		m³/min	456	464	456	464	464	464	637
Sound pressure	Normal / Silent mode	dB(A)	61,00 / 58,00	62,00 / 59,00	62,50 / 59,50	63,50 / 60,50	63,50 / 60,50	64,00 / 61,00	63,00 / 60,00
Sound power	Normal mode	dB(A)	82,00	83,00	83,50	84,50	84,50	85,00	84,00
Dimension / Net weight	H x W x D	mm / kg	1842 x 2010 x 1000 / 480	1842 x 2420 x 1000 / 540	1842 x 2010 x 1000 / 525	1842 x 2420 x 1000 / 585	1842 x 2420 x 1000 / 630	1842 x 2420 x 1000 / 630	1842 x 2780 x 1000 / 690
Pipe diameter [3]	Liquid pipe	Inch (mm)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	13,90 / 23,3856	16,60 / 34,6608	13,90 / 29,0232	16,60 / 34,6608	16,60 / 34,6608	16,60 / 34,6608	17,80 / 37,1664
Maximum allowable indoor / outdoor capacity ratio % [4]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

2-Pipe ECOi EX ME2 Series Space Saving Model Combination from 36 to 48 HP

Model name			36 HP	38 HP	40 HP	42 HP	44 HP	46 HP	48 HP
			U-16ME2E8	U-18ME2E8	U-20ME2E8	U-10ME2E8	U-12ME2E8	U-14ME2E8	U-16ME2E8
			U-20ME2E8	U-20ME2E8	U-20ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8
						U-16ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50
Cooling capacity		kW	101,0	107,0	113,0	118,0	124,0	130,0	135,0
EER [1]		W/W	3,42	3,42	3,34	3,69	3,62	3,62	3,52
SEER [2]			**6,86**	**7,32**	**7,16**	**6,57**	**6,6**	**6,7**	**6,55**
Current cooling		A	47,70-45,30-43,70	50,60-48,10-46,30	54,10-51,40-49,50	52,80-50,20-48,40	56,00-53,20-51,30	59,90-56,90-54,90	63,40-60,20-58,10
Input power cooling		kW	25,9	31,3	33,8	32,0	34,3	35,9	38,4
Heating capacity		kW	113,0	119,0	127,0	132,0	138,0	145,0	150,0
COP [1]		W/W	4,14	4,13	3,92	4,49	4,50	4,46	4,42
SCOP [2]			**4,06**	**4,14**	**4,13**	**4,11**	**4,21**	**4,12**	**4,09**
Current heating		A	44,60-42,40-40,80	47,10-44,70-43,10	52,40-49,80-48,00	49,10-46,60-44,90	50,70-48,20-46,40	54,30-51,50-49,7	56,60-53,80-51,8
Input power heating		kW	27,30	28,80	32,40	29,40	30,70	32,50	33,90
Starting current		A	4,00	4,00	4,00	5,00	5,00	6,00	6,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80
Air flow		m³/min	637	810	810	688	696	696	696
Sound pressure	Normal / Silent mode	dB(A)	63,50 / 60,50	62,50 / 59,50	63,00 / 60,00	65,00 / 62,00	65,50 / 62,50	65,50 / 62,50	66,00 / 63,00
Sound power	Normal mode	dB(A)	84,50	83,50	84,00	86,00	86,50	86,50	87,00
Dimension / Net weight	H x W x D	mm / kg	1842 x 2780 x 1000 / 690	1842 x 3140 x 1000 / 750	1842 x 3140 x 1000 / 750	1842 x 3250 x 1000 / 840	1842 x 3660 x 1000 / 900	1842 x 3660 x 1000 / 945	1842 x 3660 x 1000 / 945
Pipe diameter [3]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	17,80 / 37,1664	19,00 / 39,672	19,00 / 39,672	22,20 / 46,3536	24,90 / 51,9912	24,90 / 51,9912	24,90 / 51,9912
Maximum allowable indoor / outdoor capacity ratio % [4]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

1) EER and COP calculation is based in accordance to EN14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 4) If the following conditions are satisfied, the effective range is above 130 % and below 200 %: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130 % of connectable indoor units.

2-Pipe ECOi EX ME2 Series Space Saving Model Combination from 50 to 64 HP

Model name			50 HP	52 HP	54 HP	56 HP	58 HP	60 HP	62 HP	64 HP
			U-14ME2E8	U-16ME2E8	U-14ME2E8	U-16ME2E8	U-18ME2E8	U-20ME2E8	U-14ME2E8	U-16ME2E8
			U-16ME2E8	U-16ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-16ME2E8	U-16ME2E8
			U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-16ME2E8	U-16ME2E8
									U-16ME2E8	U-16ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	140,0	145,0	151,0	156,0	162,0	168,0	174,0	180,0
EER [1]		W/W	3,55	3,46	3,49	3,41	3,40	3,35	3,60	3,52
SEER [2]			**6,96**	**6,72**	**7,16**	**6,92**	**7,3**	**7,16**	**6,68**	**6,55**
Current cooling		A	64,40-61,10-58,90	68,50-65,00-62,70	70,00-66,50-64,10	74,00-70,30-67,80	76,90-73,10-70,40	80,10-76,10-73,40	79,80-75,80-73,00	84,60-80,30-77,40
Input power cooling		kW	39,40	41,90	43,30	45,80	47,60	50,10	48,30	51,20
Heating capacity		kW	155,0	160,0	169,0	175,0	182,0	189,0	195,0	201,0
COP [1]		W/W	4,29	4,27	4,11	4,08	4,06	3,94	4,45	4,42
SCOP [2]			**4,08**	**4,05**	**4,13**	**4,07**	**4,13**	**4,13**	**4,11**	**4,09**
Current heating		A	59,60-56,60-54,60	61,90-58,80-56,70	67,10-63,80-61,50	70,10-66,60-64,20	73,20-69,50-67,00	77,60-73,70-71,00	73,10-69,50-67,00	76,00-72,20-69,6
Input power heating		kW	36,10	37,50	41,10	42,90	44,80	48,00	43,80	45,50
Starting current		A	6,00	6,00	6,00	6,00	6,00	6,00	8,00	8,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m³/min	869	869	1042	1042	1215	1215	928	928
Sound pressure	Normal / Silent mode	dB(A)	65,50 / 62,50	65,50 / 62,50	65,00 / 62,00	65,50 / 62,50	64,50 / 61,50	65,00 / 62,00	67,00 / 64,00	67,00 / 64,00
Sound power	Normal mode	dB(A)	86,50	86,50	86,00	86,50	85,50	86,00	88,00	88,00
Dimension / Net weight	H x W x D	mm / kg	1842 x 4020 x 1000 / 1005	1842 x 4020 x 1000 / 1005	1842 x 4380 x 1000 / 1065	1842 x 4380 x 1000 / 1065	1842 x 4740 x 1000 / 1125	1842 x 4740 x 1000 / 1125	1842 x 4900 x 1000 / 1260	1842 x 4900 x 1000 / 1260
Pipe diameter [3]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-5/8 (41,28) / 1-3/4 (44,45)	1-5/8 (41,28) / 1-3/4 (44,45)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	26,10/54,4968	26,10/54,4968	27,30/57,0024	27,30/57,0024	28,50 / 59,508	28,50 / 59,508	33,20/69,3216	33,20/69,3216
Maximum allowable indoor / outdoor capacity ratio % [4]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

2-Pipe ECOi EX ME2 Series Space Saving Model Combination from 66 to 80 HP

Model name			66 HP	68 HP	70 HP	72 HP	74 HP	76 HP	78 HP	80 HP
			U-10ME2E8	U-12ME2E8	U-10ME2E8	U-16ME2E8	U-16ME2E8	U-16ME2E8	U-18ME2E8	U-20ME2E8
			U-16ME2E8	U-16ME2E8	U-20ME2E8	U-16ME2E8	U-18ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8
			U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8
			U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8	U-20ME2E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	185,0	190,0	196,0	202,0	208,0	213,0	219,0	224,0
EER [1]		W/W	3,52	3,49	3,47	3,42	3,42	3,39	3,38	3,35
SEER [2]			**6,92**	**6,91**	**7,09**	**6,86**	**7,03**	**7,01**	**7,18**	**7,16**
Current cooling		A	85,00-80,80-77,80	88,10-83,70-80,70	91,30-86,80-83,60	95,40-90,60-87,30	98,30-93,40-90,00	101,70-96,60-93,10	103,50-98,30-94,70	106,80-101,50-97,80
Input power cooling		kW	52,60	54,50	56,50	59,00	60,80	62,90	64,70	66,80
Heating capacity		kW	207,0	213,0	219,0	226,0	233,0	239,0	245,0	252,0
COP [1]		W/W	4,16	4,18	4,05	4,14	4,12	4,03	4,03	3,94
SCOP [2]			**4,11**	**4,17**	**4,13**	**4,06**	**4,12**	**4,07**	**4,13**	**4,13**
Current heating		A	81,20-77,10-74,30	83,30-79,20-76,30	87,40-83,10-80,10	89,20-84,70-81,70	92,30-87,70-84,50	96,90-92,00-88,70	98,30-93,40-90,00	103,40-98,30-94,70
Input power heating		kW	49,70	51,00	54,10	54,60	56,50	59,30	60,80	64,00
Starting current		A	7,00	7,00	7,00	8,00	8,00	8,00	8,00	8,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m³/min	1266	1274	1439	1274	1447	1447	1620	1620
Sound pressure	Normal / Silent mode	dB(A)	66,00 / 63,00	66,50 / 63,50	65,50 / 62,50	66,50 / 63,50	66,50 / 63,50	66,50 / 63,50	66,00 / 63,00	66,00 / 63,00
Sound power	Normal mode	dB(A)	87,00	87,50	86,50	87,50	87,50	87,50	87,00	87,00
Dimension / Net weight	H x W x D	mm / kg	1842 x 5210 x 1000 / 1275	1842 x 5620 x 1000 / 1335	1842 x 5570 x 1000 / 1335	1842 x 5620 x 1000 / 1380	1842 x 5980 x 1000 / 1440	1842 x 5980 x 1000 / 1440	1842 x 6340 x 1000 / 1500	1842 x 6340 x 1000 / 1500
Pipe diameter [3]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	7/8 (22,22) / 1 (25,04)	7/8 (22,22) / 1 (25,04)	7/8 (22,22) / 1 (25,04)	7/8 (22,22) / 1 (25,04)	7/8 (22,22) / 1 (25,04)	7/8 (22,22) / 1 (25,04)	7/8 (22,22) / 1 (25,04)
	Gas pipe	Inch (mm)	1-5/8 (41,28) / 1-3/4 (44,45)	1-5/8 (41,28) / 1-3/4 (44,45)	1-5/8 (41,28) / 1-3/4 (44,45)	1-3/4 (44,45) / 2 (50,80)	1-3/4 (44,45) / 2 (50,80)	1-3/4 (44,45) / 2 (50,80)	1-3/4 (44,45) / 2 (50,80)	1-3/4 (44,45) / 2 (50,80)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	32,90/68,6952	35,60/74,3328	34,10 / 19,836	35,80/68,6952	36,80/76,8384	36,80/76,8384	38,00 / 79,344	38,00 / 79,344
Maximum allowable indoor / outdoor capacity ratio % [4]			50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18	-25 ~ +18

1) EER and COP calculation is based in accordance to EN14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 4) If the following conditions are satisfied, the effective range is above 130 % and below 200 %: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130 % of connectable indoor units.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

3-Pipe ECOi EX MF3 Series

Simultaneous heating and cooling VRF system. The 3-Pipe ECOi EX MF3 Series offers the solution for the most demanding customers.

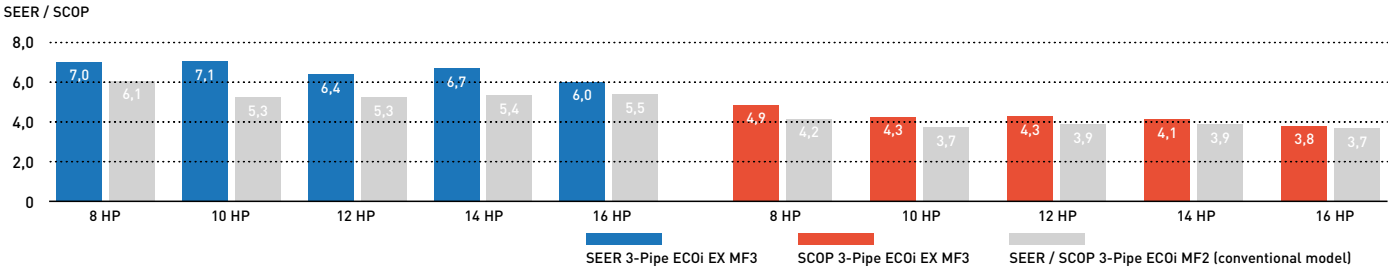
Simultaneous heating and cooling VRF System

The Panasonic 3-Pipe ECOi EX MF3 Series offers the ideal solution to meet customer's demand.

Upgraded energy efficiency utilized ECOi EX technology.
· SEER / SCOP improved in full capacities from 8 to 16 HP
· SEER / SCOP follows LOT21 from started from January 2018
· EER / COP is certified in Eurovent

Design flexibility.
· High reliability even under tough temperature condition
· Maximum 52 indoor units connectable
· Slim heat recovery box with just 200 mm height
· Farthest piping length between indoor units and outdoor units: 200 m

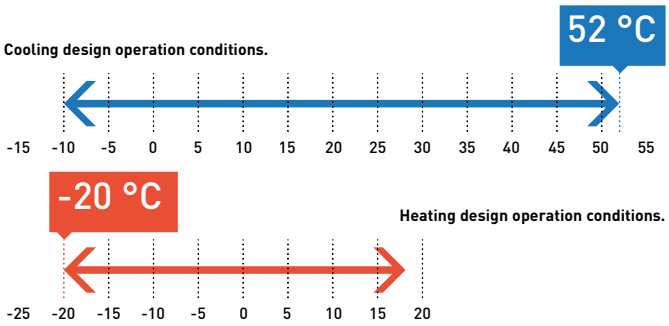
Excellent seasonal energy saving.



Extended design operation conditions

Cooling design operation conditions: The cooling operation range has been extended to -10 °C ~ 52 °C by changing the outdoor fan to an Inverter type.
Heating design operation conditions: Stable heating operation even with an outside air temperature of -20 °C. The heating operation range has been extended to -20 °C by use of a compressor with a high-pressure vessel.

Wide temperature setting range
Wired remote control heating temperature setting range is 16 to 30 °C.



Cooling: Outside air temperature °C (DB). Heating: Outside air temperature °C (WB).

Increased maximum number of connectable indoor units

Maximum 48 HP with 52 indoor units can be set up according to user needs.
Connectable indoor/outdoor unit capacity ratio up to 150 %.

System (HP)	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Connectable indoor units*: 150 %	19	24	29	34	39	43	48	52				52									

*Depending on indoor units types. Please check service manuals.

Power suppression control for energy saving (Demand control) [1]

The 3-Pipe ECOi EX MF3 Series has a built-in demand function which uses the inverter characteristics. With this demand function, the power consumption can be set in three steps, and operation [2] at optimum performance is performed according to the setting and the power consumption. This function is useful to reduce the annual power consumption and to save electricity costs while maintaining comfort.

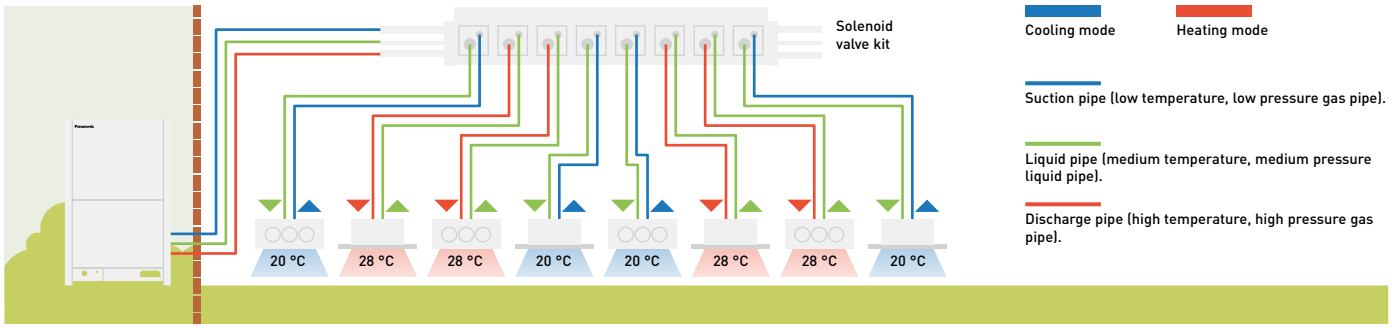
1) An outdoor Seri-Para I/O unit is required for demand input.
2) Setting is possible as 0 % or in the range from 40 to 100 % (in steps of 5 %). At the time of shipping, setting has been done to the three steps of 0 %, 70 %, and 100 %.

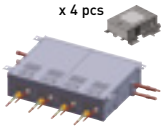
Slim 3-Pipe control box kit / Multiple connection type

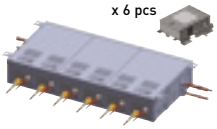
Heat recovery Box to connect multiple indoor units with just one box, 4, 6 and up to 8 indoor units or groups.
The height is only 200 mm. This is good advantage specially in hotel applications, where space for connecting several boxes is limited.

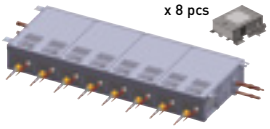
Individual control of multiple indoor units with solenoid valve kits.
· Any design and layout can be used in a single system.
· Cooling operation is possible up to an outdoor temperature of -10 °C.

System structure.



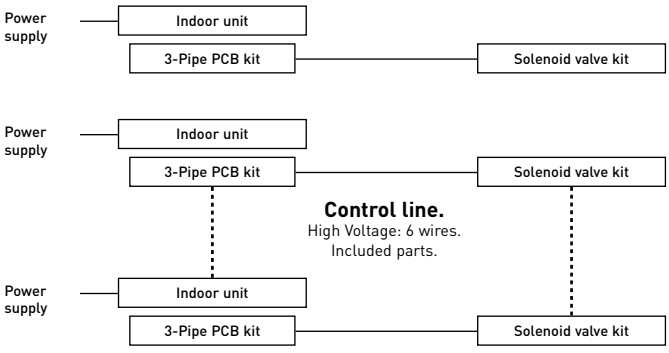




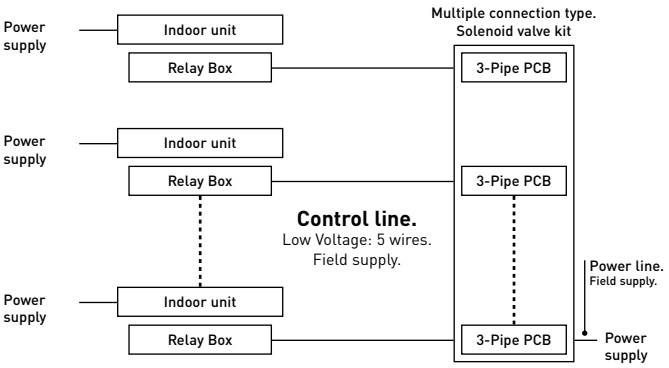
	1 port	4 port	6 port	8 port
56 type	CZ-P56HR3	CZ-P456HR3	CZ-P656HR3	CZ-P856HR3
160 type	CZ-P160HR3	CZ-P4160HR3	—	—

Solenoid valve kit / wiring work

Current model / single connection type.



New model / multiple connection type.



3-Pipe PCB kit.
Separately purchased.



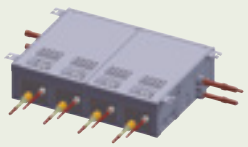
Parts included in HR3 kit.



Signal Relay Box.
Included accessory.



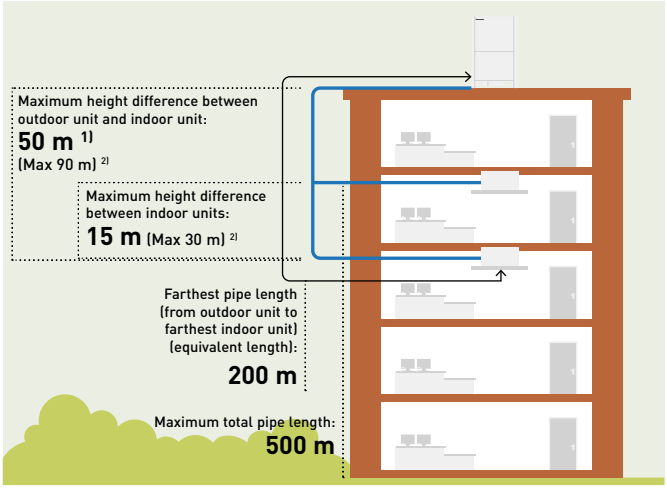
Parts included in HR3 kit.



3-Pipe ECOi EX MF3 Series superior flexibility

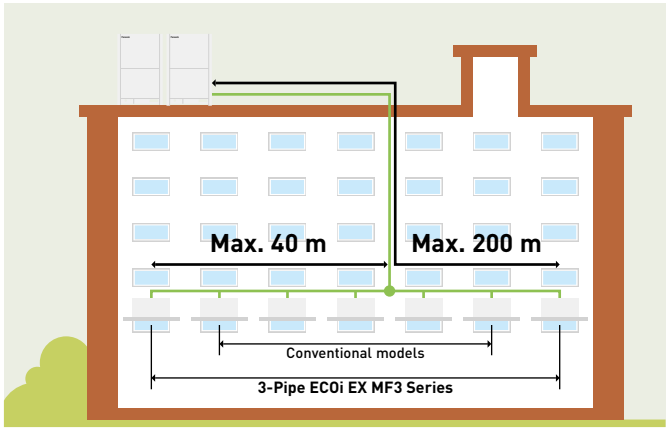
Increased piping lengths and design flexibility

Adaptable to various building types and sizes. Actual piping length: 200 m. Maximum piping length: 500 m.



Up to 40 m piping after first branch

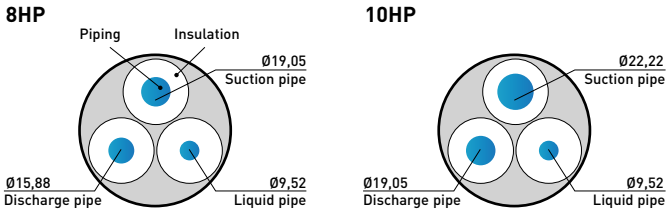
Up to 52 units can be connected to one system. Flexible piping layout makes it easier to design systems for locations such as train stations, airports, schools and hospitals.



1) 40 m if the outdoor unit is below the indoor unit.
2) For height differences between outdoor unit and indoor unit > 50 m, as well as for height differences between indoor units > 15 m, contact an authorized Panasonic dealer.

Excellent cost saving and smaller piping size

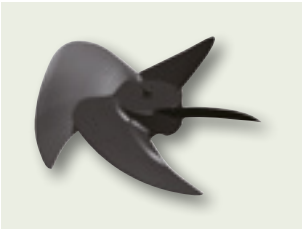
By using R410A with low pressure loss, pipe sizes for discharge, suction and liquid are all reduced.
This makes it possible to aim for reduced piping space, improved workability at the site, and reduction of the piping material costs.



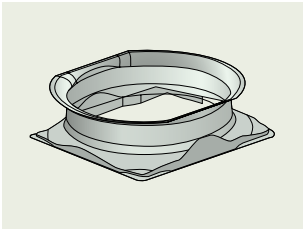
High external static pressure on condensers

With a newly designed fan, fan guard, motor, and casing, new models can be custom-installed on-site to provide up to 80 Pa of external static pressure.

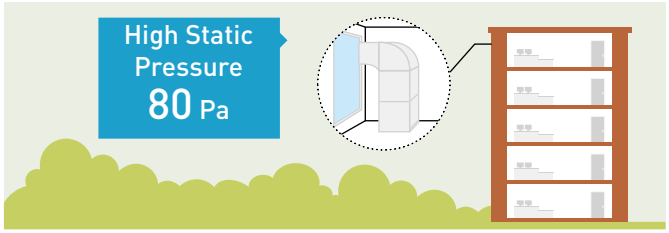
An air discharge duct prevents shortages of air circulation, allowing outdoor units to be installed on every floor of a building.



Fan.



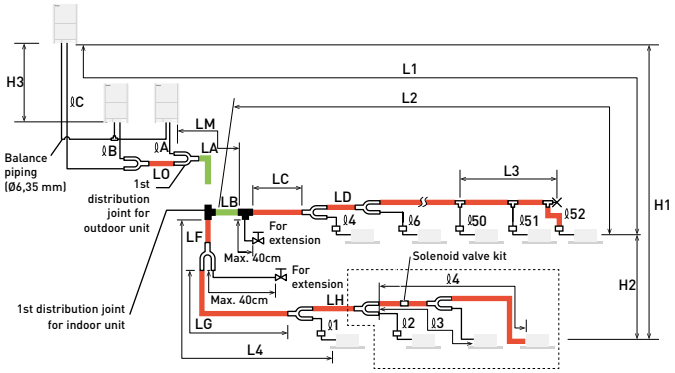
Fan motor and casing.





3-Pipe ECOi EX MF3 Series piping design

Select the installation location so that the length and size of refrigerant tubing are within the allowable range shown in the figure below.



Main piping length (maximum piping size) LM= LA + LB ...

Main distribution tubes LC – LH are selected according to the capacity after the distribution joint.

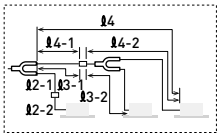
Sizes of indoor unit connection piping ℓ1 – ℓ52 are determined by the connection piping sizes on the indoor units.

Distribution joint (CZ: optional parts).

T-joint (field supply).

Ball valve (field supply).

Solidly welded shut (pinch weld).



The outdoor connection main piping (LO portion) is determined by the total capacity of the outdoor units that are connected to the tube ends.
Note: Be sure to use special R410A distribution joints (CZ: optional parts) for outdoor unit connections and piping branches.

R410A distribution joint.
CZ-P680PJ2BM (for outdoor unit)
CZ-P1350PJ2BM (for outdoor unit)
CZ-P224BH2BM (for indoor unit)
CZ-P680BH2BM (for indoor unit)
CZ-P1350BH2BM (for indoor unit)

Ranges that apply to refrigerant piping lengths and to differences in installation heights

Items	Mark	Contents		Length (m)
Allowable piping length	L1	Maximum piping length	Actual length	≤200[1]
			Equivalent length	≤210[1]
	Δ L (L2-L4)	Difference between maximum length and minimum length from the 1st distribution joint		≤50[2]
	LM	Maximum length of main piping (at maximum size) *** Even after 1st distribution joint, LM is allowed if at maximum piping length.**		—[3]
	ℓ1, ℓ2~ ℓ52	Maximum length of each distribution tube		≤50[4]
	L1+ ℓ1+ ℓ2~ ℓ51+ ℓA+ℓB+LF+LG+LH	Total maximum piping length including length of each distribution tube (only liquid piping)		≤500
	ℓA, ℓB+LO, ℓC+LO	Maximum piping length from outdoor's 1st distribution joint to each outdoor unit		≤10
	ℓ1-2, ℓ2-2 ~ ℓ52-2	Maximum length between solenoid valve kit and indoor unit		≤30
Allowable elevation difference	H1	When outdoor unit is installed higher than indoor unit		≤50
		When outdoor unit is installed lower than indoor unit		≤40
	H2	Maximum difference between indoor units		≤15[5]
	H3	Maximum difference between outdoor units		≤4
Allowable length of joint piping	L3	T-joint piping (field-supply); Maximum piping length between the first T-joint and solidly welded-shut end point		≤2

L = Length, H = Height

1) If the longest piping length (L1) exceeds 90 m (equivalent length), increase the sizes of the main pipes (LM) by 1 rank for suction pipes, discharge pipes and liquid pipes. Use a field supply reducer. Select the pipe size from the table of main piping sizes (Table 3) and from the table of refrigerant piping sizes (Table 8). 2) If the longest main piping length (LM) exceeds 50 m, increase the main piping size at the portion before 50 m by 1 rank for the suction pipes and discharge pipes. Use a field supply reducer. Determine the length less than the limitation of allowable maximum piping length. For the portion that exceeds 50 m, set based on the main piping size (LA) listed in Table 3. 3) If the piping length marksd "L" (L2-L4) exceeds 40 m, increase the piping size at the portion after the 1st distribution joint by 1 rank for the liquid pipe, suction pipe and discharge pipe. Refer to the Technical Data for the details. 4) If any of the piping length exceeds 30 m, increase the size of the suction pipes,discharge pipes and liquid pipes by 1rank.
* The outdoor connection main piping (LO portion) is determined by the total capacity of the outdoor units that are connected to the pipe ends.

System limitations.

Maximum number allowable connected outdoor units	3
Maximum capacity allowable connected outdoor units	135 kW (48 HP)
Maximum connectable indoor units	52
Maximum allowable indoor / outdoor capacity ratio	50-150 %

1) In the case of 24 HP (type 68 kW) or smaller units, the number is limited by the total capacity of the connected indoor units.
2) Up to 3 units can be connected if the system has been extended.
3) It is strongly recommended that you choose the unit so the load can become between 50 and 130 %.

Additional refrigerant charge.

Liquid piping size Inch (mm)	Amount of refrigerant charge/m (g/m)
1/4 (6,35)	26
3/8 (9,52)	56
1/2 (12,70)	128
5/8 (15,88)	185
3/4 (19,05)	259
7/8 (22,22)	366

Necessary amount of additional refrigerant charge per meter, according to discharge piping size.

Discharge piping size	Inch (mm)	1/2 (12,70)	5/8 (15,88)	3/4 (19,05)	7/8 (22,22)	1 (25,40)	1-1/8 (28,58)	1-1/4 (31,75)	1-1/2 (38,10)
Additional amount	g/m	12	21	31	41	55	71	89	126

Refrigerant piping.

Piping size (mm)											
Material Temper - O						Material Temper - 1/2 H, H					
Ø6,35	t 0,8	Ø12,70	t 0,8	Ø19,05	t 1,2	Ø22,22	t 1,0	Ø28,58	t 1,0	Ø38,10	t 1,15
Ø9,52	t 0,8	Ø15,88	t 1,0			Ø25,40	t 1,0	Ø31,75	t 1,1	Ø41,28	t 1,20

* When bending the tubes, use a bending radius that is at least 4 times the outer diameter of the tubes. In addition, take sufficient care to avoid crushing or damaging the tubes when bending them.



4,92 SCOP

3-Pipe ECOi EX MF3 Series

Simultaneous heating and cooling operation with heat recovery type.

The 3-Pipe ECOi EX MF3 Series is one of the most advanced VRF systems.
Not only high-efficient performance for simultaneous heating and cooling, but also sophisticated installation and maintenance available.

			8 HP	10 HP	12 HP	14 HP	16 HP
Outdoor units			**U-8MF3E8**	**U-10MF3E8**	**U-12MF3E8**	**U-14MF3E8**	**U-16MF3E8**
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity		kW	22,4	28,0	33,5	40,0	45,0
EER [1]		W/W	5,11	4,72	3,91	3,70	3,49
Recommended combination			4 x S-56MF2E5A	4 x S-73MF2E5A	6 x S-56MF2E5A	2 x S-60MF2E5A + 4 x S-73MF2E5A	6 x S-73MF2E5A
SEER [2]			**7,15**	**7,18**	**6,51**	**6,81**	**6,12**
$\eta_{s,c}$		**%**	**277,7**	**278,9**	**252,7**	**264,4**	**237,7**
Current cooling		A	7,16/6,80/6,55	9,90/9,41/9,07	3,19/13,20/12,70	18,20/17,30/16,70	21,30/20,20/19,50
Input power cooling		kW	4,38	5,93	8,57	10,80	12,90
Heating capacity		kW	25,0	31,5	37,5	45,0	50,0
COP [1]		W/W	5,25	5,17	4,51	4,21	4,17
SCOP [2]			**4,92**	**4,30**	**4,32**	**4,17**	**3,84**
$\eta_{s,h}$		**%**	**190,9**	**166,8**	**167,8**	**162,1**	**149,3**
Current heating		A	7,78/7,39/7,12	10,20/9,66/9,31	13,40/12,80/12,30	18,10/17,20/16,50	20,00/19,00/18,30
Input power heating		kW	4,76	6,09	8,32	10,70	12,00
Starting current		A	1,00	1,00	1,00	2,00	2,00
External static pressure (Max)		Pa	80	80	80	80	80
Air flow		m³/min	210	220	232	232	232
Sound pressure	Normal mode	dB(A)	54,00	57,00	60,00	61,00	62,00
	Silent mode 1 / 2	dB(A)	51,00/49,00	54,00/52,00	57,00/55,00	58,00/56,00	59,00/57,00
Sound power	Normal mode	dB(A)	76,00	78,00	81,00	82,00	82,00
Dimension	H x W x D	mm	1842 x 1180 x 1000	1842 x 1180 x 1000	1842 x 1180 x 1000	1842 x 1180 x 1000	1842 x 1180 x 1000
Net weight		kg	261	262	286	334	334
Pipe diameter [3]	Liquid pipe	Inch (mm)	3/8 (9,52) / 1/2 (12,70)	3/8 (9,52) / 1/2 (12,70)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)
	Discharge pipe	Inch (mm)	5/8 (15,88) / 3/4 (19,05)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	7/8 (22,22) / 1 (25,40)	7/8 (22,22) / 1 (25,40)
	Suction pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	7/8 (22,22) / 1 (25,40)	1 (25,40) / 1-1/8 (28,58)	1 (25,40) / 1-1/8 (28,58)	1-1/8(28,58)/1-1/4(31,75)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	6,80 / 14,1984	6,80 / 14,1984	8,30 / 17,3304	8,30 / 17,3304	8,30 / 17,3304
Maximum allowable indoor / outdoor capacity ratio %			50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18
	Simultaneous op.	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

Solenoid valve kit		
KIT-P56HR3	**KIT-P56HR3**	3-Pipe control Solenoid valve kit (up to 5,6 kW)
	CZ-P56HR3	Solenoid valve kit (up to 5,6 kW)
	CZ-CAPE2	3-Pipe control PCB
KIT-P160HR3	**KIT-P160HR3**	3-Pipe control Solenoid valve kit (from 5,6 to 16,0 kW)
	CZ-P160HR3	Solenoid valve kit (from 5,6 kW to 16,0 kW)
	CZ-CAPE2	3-Pipe control PCB
CZ-CAPEK2 [4]		3-Pipe control PCB for wall-mounted

3-Pipe control box kit	
CZ-P456HR3	4 ports 3 pipe box (up to 5,6 kW per port)
CZ-P656HR3	6 ports 3 pipe box (up to 5,6 kW per port)
CZ-P856HR3	8 ports 3 pipe box (up to 5,6 kW per port)
CZ-P4160HR3	4 ports 3 pipe box (up to 16,0 kW per port)

1) EER and COP calculation is based in accordance to EN14511. 2) SEER/SCOP is calculated based on the seasonal space cooling/heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 4) Available for S-45/56/73/106MK2E5B.

- Achieving SCOP 4,92 as the top class in the industry (LOT21 Seasonal heating efficiency value for 8 HP outdoor unit)
- Simultaneous cooling and heating operation with up to 39 indoor units
- Slim heat recovery boxes with just 200 mm height fit with the ceiling space limited in hotel applications
- Rotation operation function and back-up operation function provided



Technical focus

- High SEER/SCOP at full Load capacity (follows LOT21)
- EER, COP: Eurovent certified
- Standardisation of outdoor unit to one compact casing size
- The constant-speed compressor adopts a high-performance internal high-pressure scroll
- Up to 52 indoor units connectable
- High external static pressure 80 Pa with a newly designed fan, fan guard, motor, and casing
- Silent outdoor unit operation: Minimum 54 dB(A) for 8 HP
- Bluefin condenser outdoor unit

3-Pipe ECOi EX MF3 Series Combination from 18 to 32 HP

HP			18 HP	20 HP	22 HP	24 HP	26 HP	28 HP	30 HP	32 HP
Model name			U-8MF3E8	U-8MF3E8	U-10MF3E8	U-12MF3E8	U-10MF3E8	U-12MF3E8	U-14MF3E8	U-16MF3E8
			U-10MF3E8	U-12MF3E8	U-12MF3E8	U-12MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	50,0	56,0	61,5	68,0	73,0	78,5	85,0	90,0
EER [1]		W/W	4,90	4,31	4,24	3,89	3,88	3,65	3,59	3,49
Current cooling		A	16,8/16,0/15,4	21,0/20,0/19,2	23,7/22,5/21,7	28,3/26,9/25,9	31,0/29,5/28,4	35,1/33,4/32,2	39,6/37,6/36,2	42,6/40,5/39,0
Input power cooling		kW	10,20	13,00	14,50	17,50	18,80	21,50	23,70	25,8
Heating capacity		kW	56,0	63,0	69,0	76,5	81,5	87,5	95,0	100,0
COP [1]		W/W	5,23	4,77	4,79	4,47	4,50	4,31	4,19	4,17
Current heating		A	17,7/16,8/16,2	21,3/20,3/19,5	23,5/22,3/21,5	27,6/26,3/25,3	30,2/28,7/27,7	33,5/31,8/30,7	37,9/36,0/34,7	40,1/38,1/36,7
Input power heating		kW	10,70	13,20	14,40	17,10	18,10	20,30	22,70	24,00
Starting current		A	2,00	2,00	2,00	2,00	3,00	3,00	4,00	4,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m³/min	430	442	452	464	452	464	464	464
Sound pressure	Normal mode	dB(A)	59,00	61,00	62,00	63,00	63,50	64,50	64,50	65,00
	Silent mode 1 / 2	dB(A)	56,00/54,00	58,00/56,00	59,00/57,00	60,00/58,00	60,50/58,50	61,50/59,50	61,50/59,50	62,00/60,00
Sound power	Normal mode	dB(A)	81,50	84,00	84,50	86,00	84,50	86,00	86,00	86,00
Dimension	H x W x D	mm	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000	1842 x 2360 (+60) x 1000
Net weight		kg	523	547	548	574	596	620	668	668
Pipe diameter [2]	Liquid pipe	Inch (mm)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Discharge pipe	Inch (mm)	7/8 (22,22) / 1 (25,40)	7/8 (22,22) / 1 (25,40)	1 (25,40) / 1-1/8 (28,58)	1 (25,40) / 1-1/8 (28,58)	1 (25,40) / 1-1/8 (28,58)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)
	Suction pipe	Inch (mm)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	13,60/28,3968	15,10/31,5288	15,10/31,5288	16,60/34,6608	15,10/31,5288	16,60/34,6608	16,60/34,6608	16,60/34,6608
Maximum allowable indoor / outdoor capacity ratio %			50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18
	Simultaneous op.	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

3-Pipe ECOi EX MF3 Series Combination from 34 to 48 HP

HP			34 HP	36 HP	38 HP	40 HP	42 HP	44 HP	46 HP	48 HP
Model name			U-8MF3E8	U-8MF3E8	U-10MF3E8	U-8MF3E8	U-10MF3E8	U-12MF3E8	U-14MF3E8	U-16MF3E8
			U-10MF3E8	U-12MF3E8	U-12MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8
			U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8	U-16MF3E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	96,0	101,0	107,0	113,0	118,0	124,0	130,0	135,0
EER [1]		W/W	4,10	3,90	3,88	3,72	3,72	3,58	3,55	3,49
Current cooling		A	38,6/36,7/35,4	42,3/40,2/38,7	45,6/43,3/41,7	50,2/47,7/46,0	52,4/49,7/47,9	56,5/53,7/51,8	61,1/58,1/56,0	63,9/60,7/58,5
Input power cooling		kW	23,40	25,90	27,60	30,40	31,70	34,60	36,60	38,70
Heating capacity		kW	108,0	113,0	119,0	127,0	132,0	138,0	145,0	150,0
COP [1]		W/W	4,64	4,48	4,51	4,31	4,36	4,25	4,18	4,17
Current heating		A	38,9/37,0/35,6	41,6/39,5/38,1	43,6/41,4/39,9	49,3/46,8/45,1	50,6/48,1/46,3	53,7/51,0/49,1	57,9/55,0/53,0	60,1/57,1/55,0
Input power heating		kW	23,30	25,20	26,40	29,50	30,30	32,50	34,70	36,00
Starting current		A	4,00	4,00	4,00	5,00	5,00	5,00	6,00	6,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m³/min	662	674	684	674	684	696	696	696
Sound pressure	Normal mode	dB(A)	64,00	64,50	65,00	65,50	66,00	66,50	66,50	67,00
	Silent mode 1 / 2	dB(A)	61,00/59,00	61,50/59,50	62,00/60,00	62,50/60,50	63,00/61,00	63,50/61,50	63,50/61,50	64,00/62,00
Sound power	Normal mode	dB(A)	84,50	85,50	85,50	85,50	86,00	86,50	87,00	87,00
Dimension	H x W x D	mm	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000	1842 x 3540 (+120) x 1000
Net weight		kg	857	881	882	929	930	954	1002	1002
Pipe diameter [2]	Liquid pipe	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)
	Discharge pipe	Inch (mm)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/8 (28,58) / 1-1/4 (31,75)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/4 (31,75) / 1-1/2 (38,10)
	Suction pipe	Inch (mm)	1-1/4 (31,75) / 1-1/2 (38,10)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)	1-1/2 (38,10) / 1-5/8 (41,28)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R410A) / CO_2 Eq.		kg / T	21,90/45,72719	23,40/48,85919	23,40/48,85919	23,40/48,85919	23,40/48,85919	24,90/46,3536	24,90/51,9912	24,90/51,9912
Maximum allowable indoor / outdoor capacity ratio %			50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150	50 ~ 150
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18	-20 ~ +18
	Simultaneous op.	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) Pipe diameter under 90 m for ultimate indoor unit / over 90 m for ultimate indoor unit (if the longest piping equivalent length exceeds 90 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes).

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Eurovent certified technical data

Panasonic's VRF systems - ECOi range is now certified by Eurovent*. The Eurovent certification verifies the performance ratings of heating and cooling systems following European standards. Those data provides products efficiency with full transparency for the benefit of customers and professionals.

Eurovent certified technical data: Mini ECOi LZ2 Series 4 to 10 HP • R32

HP			4 HP		5 HP		6 HP		8 HP	10 HP
Outdoor units			U-4LZ2E5	U-4LZ2E8	U-5LZ2E5	U-5LZ2E8	U-6LZ2E5	U-6LZ2E8	U-8LZ2E8	U-10LZ2E8
Indoor units combination			MU2	MU2	MU2	MU2	MU2	MU2	MU2	MU2
Cooling	Pc out [1]	kW	12,1	12,1	14,0	14,0	15,5	15,5	22,4	28,0
	Pec out [2]	kW	2,95	2,95	3,68	3,68	4,43	4,43	6,79	9,66
	EERout		4,1	4,1	3,8	3,8	3,5	3,5	3,3	2,9
Seasonal Cooling	SEER		8,5	8,5	8,1	8,1	7,7	7,7	7,6	7,1
	$\eta_{s,c}$	%	337	337	322	322	305	305	299	280
Cooling PL Condition B	PcB	kW	8,9	8,9	10,3	10,3	11,4	11,4	16,5	20,6
	EERB		6,5	6,5	5,9	5,9	5,4	5,4	5,2	4,6
Cooling PL Condition C	PcC	kW	5,7	5,7	6,6	6,6	7,3	7,3	10,6	13,2
	EERC		11,3	11,3	10,8	10,8	10,2	10,2	9,6	8,7
Cooling PL Condition D	PcD	kW	5,4	5,4	5,6	5,6	5,8	5,8	9,0	9,5
	EERD		15,6	15,6	15,2	15,2	15,0	15,0	16,6	18,0
Seasonal Heating	Pdesignh	kW	10,0	10,0	11,2	11,2	11,6	11,6	17,5	19,6
	SCOP		5,1	5,1	4,6	4,6	4,6	4,6	4,6	4,6
	$\eta_{s,h}$	%	199,0	199,0	181,4	181,4	180,6	180,6	180,6	181,0
Heating PL Condition A	PhA	kW	8,8	8,8	9,9	9,9	10,3	10,3	15,4	17,3
	COPA		3,1	3,1	2,9	2,9	2,9	2,9	2,9	2,8
Heating PL Condition B	PhB	kW	5,4	5,4	6,0	6,0	6,2	6,2	9,4	10,5
	COPB		4,8	4,8	4,1	4,1	4,1	4,1	4,2	4,2
Heating PL Condition C	PhC	kW	3,5	3,5	3,9	3,9	4,0	4,0	6,2	6,7
	COPC		7,2	7,2	7,2	7,2	7,1	7,1	6,9	7,1
Heating PL Condition D	PhD	kW	4,0	4,0	4,0	4,0	4,0	4,0	6,7	6,9
	COPD		9,1	9,1	9,3	9,3	9,3	9,3	8,7	9,2
T bivalent	Tbiv	°C	-10	-10	-7	-7	-7	-7	-7	-7
	PhTbiv	kW	10	10	10	10	10	10	15	17
	COPTbiv		2,5	2,5	2,9	2,9	2,9	2,9	2,9	2,8
Psbc		W	14	14	14	14	14	14	18	18
Psbh		W	18	18	18	18	18	18	26	26
Poffc		W	14	14	14	14	14	14	18	18
Poffh		W	18	18	18	18	18	18	26	26
Ptoc		W	14	14	14	14	14	14	18	18
Ptoh		W	18	18	18	18	18	18	26	26
Pckc		W	14	14	14	14	14	14	18	18
Pckh		W	18	18	18	18	18	18	26	26
Sound power level		dB(A)	69	69	70	70	72	72	72	74
Sound power level in heating		dB(A)	72	72	74	74	75	75	74	75

Eurovent certified technical data: Mini ECOi LE Series 4 to 10 HP

HP			4 HP				5 HP				6 HP				8 HP		10 HP	
Outdoor units			U-4LE2E5		U-4LE2E8		U-5LE2E5		U-5LE2E8		U-6LE2E5		U-6LE2E8		U-8LE1E8		U-10LE1E8	
Indoor units combination			MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2
Cooling	Pc out [1]	kW	12,1	12,1	12,1	12,1	14	14	14	14	15,5	15,5	15,5	15,5	22,4	22,4	28	28
	Pec out [2]	kW	2,88	2,88	2,88	2,88	3,68	3,68	3,68	3,68	4,56	4,56	4,56	4,56	7,23	7,23	10,77	10,77
	EERout		4,2	4,2	4,2	4,2	3,8	3,8	3,8	3,8	3,4	3,4	3,4	3,4	3,1	3,1	2,6	2,6
Seasonal Cooling	SEER		7,8	7,8	7,8	7,8	7,5	7,5	7,5	7,5	7,2	7,2	7,2	7,2	6,3	6,3	6,4	6,4
	ηsc	%	311	311	311	311	296,2	296,2	296,2	296,2	286,8	286,8	286,8	286,8	247,9	247,9	251,8	251,8
Cooling PL Condition B	PcB	kW	8,9	8,9	8,9	8,9	10,3	10,3	10,3	10,3	11,4	11,4	11,4	11,4	16,5	16,5	20,6	20,6
	EERB		6,7	6,7	6,7	6,7	5,9	5,9	5,9	5,9	5,4	5,4	5,4	5,4	4,8	4,8	4,4	4,4
Cooling PL Condition C	PcC	kW	5,7	5,7	5,7	5,7	6,6	6,6	6,6	6,6	7,3	7,3	7,3	7,3	10,6	10,6	13,2	13,2
	EERC		12,1	12,1	12,1	12,1	11	11	11	11	10,2	10,2	10,2	10,2	7,8	7,8	8,2	8,2
Cooling PL Condition D	PcD	kW	2,7	2,7	2,7	2,7	2,9	2,9	2,9	2,9	3,4	3,4	3,4	3,4	8	8	9	9
	EERD		9,6	9,6	9,6	9,6	10,3	10,3	10,3	10,3	11,7	11,7	11,7	11,7	12,8	12,8	15,4	15,4
Seasonal Heating	Pdesignh	kW	10	10	10	10	12,5	12,5	12,5	12,5	13	13	13	13	17,5	17,5	19,6	19,6
	SCOP		4,9	4,9	4,9	4,9	4,4	4,4	4,4	4,4	4,2	4,2	4,2	4,2	4,2	4,2	4,3	4,3
	$\eta_{s,h}$	%	191,8	191,8	191,8	191,8	172,9	172,9	172,9	172,9	166,7	166,7	166,7	166,7	166,4	166,4	169,5	169,5
Heating PL Condition A	PhA	kW	8,8	8,8	8,8	8,8	11	11	11	11	11,5	11,5	11,5	11,5	15,4	15,4	17,3	17,3
	COPA		3,5	3,5	3,5	3,5	2,8	2,8	2,8	2,8	2,6	2,6	2,6	2,6	2,7	2,7	2,6	2,6
Heating PL Condition B	PhB	kW	5,3	5,3	5,3	5,3	6,7	6,7	6,7	6,7	7	7	7	7	9,4	9,4	10,5	10,5
	COPB		4,1	4,1	4,1	4,1	3,7	3,7	3,7	3,7	3,6	3,6	3,6	3,6	3,8	3,8	3,9	3,9
Heating PL Condition C	PhC	kW	3,4	3,4	3,4	3,4	4,3	4,3	4,3	4,3	4,5	4,5	4,5	4,5	6	6	6,7	6,7
	COPC		7,7	7,7	7,7	7,7	7,5	7,5	7,5	7,5	7,4	7,4	7,4	7,4	6,6	6,6	6,8	6,8
Heating PL Condition D	PhD	kW	4,4	4,4	4,4	4,4	4,4	4,4	4,4	4,4	4,4	4,4	4,4	4,4	6,4	6,4	6,6	6,6
	COPD		9,8	9,8	9,8	9,8	9,8	9,8	9,8	9,8	9,8	9,8	9,8	9,8	8,1	8,1	8,9	8,9
T bivalent	Tbiv	°C	-10	-10	-10	-10	-9	-9	-9	-9	-7	-7	-7	-7	-7	-7	-7	-7
	PhTbiv	kW	10	10	10	10	12	12	12	12	11,5	11,5	11,5	11,5	15,4	15,4	17,3	17,3
	COPTbiv		2,9	2,9	2,9	2,9	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,7	2,7	2,6	2,6
Psbc		W	9	9	9	9	9	9	9	9	9	9	9	9	18	18	18	18
Psbh		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
Poffc		W	9	9	9	9	9	9	9	9	9	9	9	9	18	18	18	18
Poffh		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
Ptoc		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
Ptoh		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
Pckc		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
Pckh		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
PSB		W	33	33	33	33	33	33	33	33	33	33	33	33	48	48	48	48
Sound power level		dB(A)	69	69	69	69	71	71	71	71	73	73	73	73	79	79	83	83
Sound power level in heating		dB(A)	72	72	72	72	75	75	75	75	75	75	75	75	83	83	84	84

Eurovent certified technical data: 2-Pipe ECOi EX ME2 Series 8 to 20 HP

HP			8 HP		10 HP		12 HP		14 HP		16 HP		18 HP		20 HP	
Outdoor units			U-8ME2E8		U-10ME2E8		U-12ME2E8		U-14ME2E8		U-16ME2E8		U-18ME2E8		U-20ME2E8	
Indoor units combination			MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2
Cooling	Pc out [1]	kW	19,7	19,7	24,6	24,6	33,5	33,5	40	40	45	45	50	50	56	56
	Pec out [2]	kW	5,79	5,79	8,79	8,79	11,55	11,55	13,33	13,33	18,75	18,75	17,86	17,86	23,33	23,33
	EERout		3,4	3,4	2,8	2,8	2,9	2,9	3	3	2,4	2,4	2,8	2,8	2,4	2,4
Seasonal Cooling	SEER		7,4	7,4	7	7	6,7	6,7	7,2	7,2	6,4	6,4	7,6	7,6	7	7
	ηsc	%	294,3	294,3	275,4	275,4	266,6	266,6	286	286	254,3	254,3	299,2	299,2	278,2	277
Cooling PL Condition B	PcB	kW	14,5	14,5	18,1	18,1	24,6	24,6	29,4	29,4	33,1	33,1	36,8	36,8	41,2	41,2
	EERB		5,7	5,7	4,8	4,8	4,6	4,6	4,9	4,9	4,2	4,2	5	5	4,6	4,6
Cooling PL Condition C	PcC	kW	9,3	9,3	11,6	11,6	15,8	15,8	18,9	18,9	21,3	21,3	23,6	23,6	26,5	26,5
	EERC		11,8	11,8	9,6	9,6	8,1	8,1	9,4	9,4	8,2	8,2	9,8	9,8	9	9
Cooling PL Condition D	PcD	kW	8,2	8,2	9,3	9,3	8,2	8,2	8,4	8,4	9,4	9,4	10,5	10,5	11,7	11,7
	EERD		13,7	13,7	18,9	18,9	18,4	18,4	22,6	22,6	22,1	22,1	25,2	25,2	24,6	24,6
Seasonal Heating	Pdesignh	kW	17,5	17,5	22	22	26,2	26,2	31,5	31,5	35	35	39,2	39,2	44,1	44,1
	SCOP		4,8	4,8	4,3	4,3	4,7	4,7	4,3	4,3	4,1	4,1	4,3	4,3	4,1	4,1
	$\eta_{s,h}$	%	188,4	188,4	167,6	167,6	185,8	185,8	168,2	168,2	159	159	168,7	168,7	160,4	161
Heating PL Condition A	PhA	kW	15,4	15,4	19,4	19,4	23,1	23,1	27,8	27,8	30,9	30,9	34,6	34,6	39	39
	COPA		2,8	2,8	2,6	2,6	2,8	2,8	2,5	2,5	2,3	2,3	2,6	2,6	2,4	2,4
Heating PL Condition B	PhB	kW	9,4	9,4	11,8	11,8	14,1	14,1	16,9	16,9	18,8	18,8	21,1	21,1	23,7	23,7
	COPB		4,5	4,5	3,6	3,6	4,2	4,2	3,7	3,7	3,6	3,6	3,7	3,7	3,5	3,5
Heating PL Condition C	PhC	kW	6	6	7,6	7,6	9	9	10,9	10,9	12,1	12,1	13,5	13,5	15,2	15,2
	COPC		7,2	7,2	7,7	7,7	7,7	7,7	7,4	7,4	6,6	6,6	7,1	7,1	6,9	6,9
Heating PL Condition D	PhD	kW	7,1	7,1	7	7	7,2	7,2	6,7	6,7	6,6	6,6	7,4	7,4	7,4	7,4
	COPD		8,9	8,9	9,6	9,6	9,3	9,3	10,2	10,2	10	10	10,3	10,3	10,3	10,3
T bivalent	Tbiv	°C	-9	-9	-7	-7	-9	-9	-7	-7	-7	-7	-7	-7	-7	-7
	PhTbiv	kW	16,8	16,8	19,4	19,4	25,1	25,1	27,8	27,8	30,9	30,9	34,6	34,6	39	39
	COPTbiv		2,6	2,6	2,6	2,6	2,6	2,6	2,5	2,5	2,3	2,3	2,6	2,6	2,4	2,4
Psbc		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Psbh		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Poffc		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Poffh		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Ptoc		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Ptoh		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Pckc		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Pckh		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
PSB		W	48	48	48	48	48	48	88	88	88	88	88	88	88	88
Sound power level		dB(A)	80	80	81	81	85	85	86	86	87	87	86	86	86	86
Sound power level in heating		dB(A)	81	81	84	84	85	85	85	85	89	89	89	89	89	89

Eurovent certified technical data: 3-Pipe ECOi EX MF3 Series 8 to 16 HP

HP			8 HP		10 HP		12 HP		14 HP		16 HP	
Outdoor units			U-8MF3E8		U-10MF3E8		U-12MF3E8		U-14MF3E8		U-16MF3E8	
Indoor units combination			MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2	MF2	MU2
Cooling	Pc out [1]	kW	22,4	22,4	28	28	33,5	33,5	40	40	45	45
	Pec out [2]	kW	7,23	7,23	10,77	10,77	12,88	12,88	15,38	15,38	19,57	19,57
	EERout		3,1	3,1	2,6	2,6	2,6	2,6	2,6	2,6	2,3	2,3
Seasonal Cooling	SEER		7	7	7	7	6,4	6,4	6,7	6,7	6	6
	ηsc	%	277	277,7	278,9	278,9	252,7	252,7	264,4	264,4	237,7	237,7
Cooling PL Condition B	PcB	kW	16,5	16,5	20,6	20,6	24,6	24,6	29,4	29,4	33,1	33,1
	EERB		4,9	4,9	4,6	4,6	4,3	4,3	4,4	4,4	3,9	3,9
Cooling PL Condition C	PcC	kW	10,6	10,6	13,2	13,2	15,8	15,8	18,9	18,9	21,3	21,3
	EERC		9,1	9,1	9,3	9,3	7,7	7,7	8,3	8,3	7,4	7,4
Cooling PL Condition D	PcD	kW	7,2	7,2	8,5	8,5	7,1	7,1	8,5	8,5	9,4	9,4
	EERD		16,5	16,5	19,7	19,7	15,7	15,7	19,7	19,7	17,4	17,4
Seasonal Heating	Pdesignh	kW	17,5	17,5	22	22	26,2	26,2	31,5	31,5	35	35
	SCOP		4,8	4,8	4,2	4,2	4,3	4,3	4,1	4,1	3,8	3,8
	$\eta_{s,h}$	%	189	190,9	166,8	166,8	167,8	167,8	162,1	162,1	149,3	149,3
Heating PL Condition A	PhA	kW	15,4	15,4	19,4	19,4	23,1	23,1	27,8	27,8	30,9	30,9
	COPA		2,9	2,9	2,5	2,5	2,7	2,7	2,4	2,4	2,2	2,2
Heating PL Condition B	PhB	kW	9,4	9,4	11,8	11,8	14,1	14,1	16,9	16,9	18,8	18,8
	COPB		4,6	4,6	3,7	3,7	3,7	3,7	3,6	3,6	3,3	3,3
Heating PL Condition C	PhC	kW	6	6	7,6	7,6	9	9	10,9	10,9	12,1	12,1
	COPC		7,1	7,1	7,4	7,4	6,9	6,9	7,1	7,1	6,5	6,5
Heating PL Condition D	PhD	kW	6,7	6,7	6,9	6,9	6,5	6,5	6,6	6,6	6,6	6,6
	COPD		8,7	8,7	9,4	9,4	9	9	9,6	9,6	9,6	9,6
T bivalent	Tbiv	°C	-9	-9	-7	-7	-9	-9	-7	-7	-7	-7
	PhTbiv	kW	16,8	16,8	19,4	19,4	25,1	25,1	27,8	27,8	30,9	30,9
	COPTbiv		2,6	2,6	2,5	2,5	2,3	2,3	2,4	2,4	2,2	2,2
Psbc		W	17	17	17	17	17	17	25	25	25	25
Psbh		W	50	50	50	50	50	50	91	91	91	91
Poffc		W	17	17	17	17	17	17	25	25	25	25
Poffh		W	50	50	50	50	50	50	91	91	91	91
Ptoc		W	17	17	17	17	17	17	25	25	25	25
Ptoh		W	50	50	50	50	50	50	91	91	91	91
Pckc		W	50	50	50	50	50	50	91	91	91	91
Pckh		W	50	50	50	50	50	50	91	91	91	91
PSB		W	50	50	50	50	50	50	91	91	91	91
Sound power level		dB(A)	79	79	80	80	84	84	86	86	86	86
Sound power level in heating		dB(A)	77	77	82	82	86	86	86	86	88	88

1) Pc out= Capacity. 2) Pec out= Input power. * Please refer an official website (https://www.eurovent-certification.com/en) for each test condition.

ECO G, the gas driven VRF

ECO G

The advanced Gas Driven VRF system offers increased efficiency and performance across the range.
Improvements include increased part load performance, reduced gas consumption with a Miller-cycle engine and reduced electrical consumption by using DC-Fan motors.



1 Limited electric supply

Electric consumption of ECO G is only 9 % compared to ECOi because gas engine is utilized for the compressor driving source.

2 High demand of DHW with heating and cooling cogeneration

DHW is produced effectively thanks to heat from engine exhaust during heating and cooling.

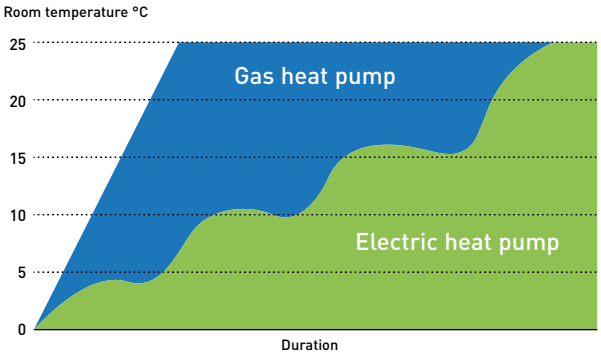
3 Open and flexible design

ECO G system is designed to connect various Indoor units and controllers which is available for ECOi system. With new GE3 Series, Pump Down system has been implemented to answer commercial needs.

4 Quick start up in heating at low ambient temperature

Gas heat pump systems make your building comfortably warm with a quick start by using waste heat from engine.
Heating mode works from -21 °C of ambient temperature.

Comparison of heating capacity.







2-Pipe ECO G GE3 Series

Designed for better energy efficiency. SEER has been increased by maximum 120 %.

3-Pipe ECO G GF3 Series

Domestic hot water can be supplied by effectively using waste heat generated by heating and cooling.

GE3/GF3 connectable indoor units

Type	Model number reference	2-Pipe ECO G GE3 Series	3-Pipe ECO G GF3 Series
Standard A2A indoor units	—	Yes [1]	Yes [1]
Water heat exchanger	PAW-250/500W(P)5G	Yes [2]	No
High static pressure hide-away	S-ME2E5	Yes	No
Heat recovery with DX coil	PAW-ZDX3N	Yes	Yes
Air curtain with DX coil	PAW-EAIRC-HS/LS	Yes	Yes [3]
AHU connection kit	PAW-MAH2/M/L	Yes	Yes [3]

1) Except for 1,5 kW capacity. 2) Allowed 1:1 and also mixed. If mixed, not operate at the same time WHE + DX only operate separately. 3) Smaller capacity than 16 kW only.

ECO G, the gas driven VRF

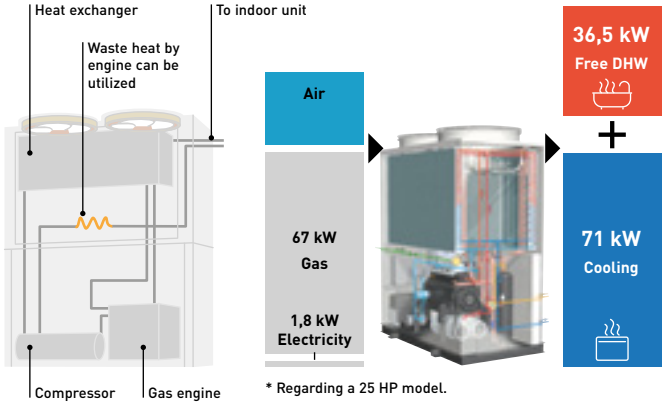
ECO G satisfies special requirement for your application and environmentally friendly solution by Panasonic professional technology. Reliable quality by long development history since 1985.

200.000
GHP outdoor units were sold in all over the world

Our ECO G VRF range of commercial systems is leading the industry in the development of efficient and flexible systems.



1985
Introduces first GHP (Gas Heat Pump) VRF air conditioner.



* Regarding a 25 HP model.

What is GHP? The Gas Heat Pump (GHP)

Panasonic Gas Heat Pump is a direct expansion system with compressor as same as VRF system. Gas engine is used as driving source of compressor instead of electric motor. This gas engine compressor drive has 2 advantages:

1 | Waste heat from the gas engine available.
2 | No need for motor power consumption thanks to gas engine.

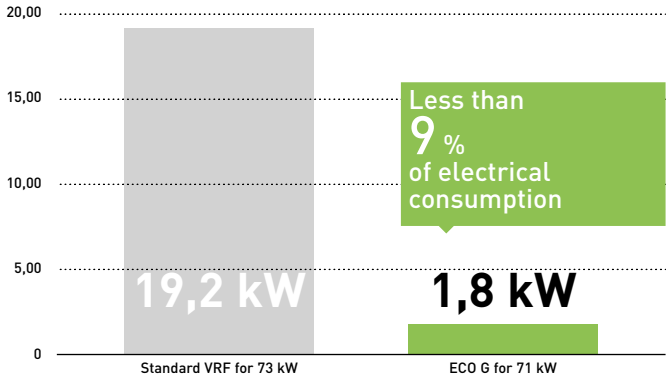
GHP is the natural choice for commercial projects, especially for those projects where power restrictions apply.

Power supply problems?

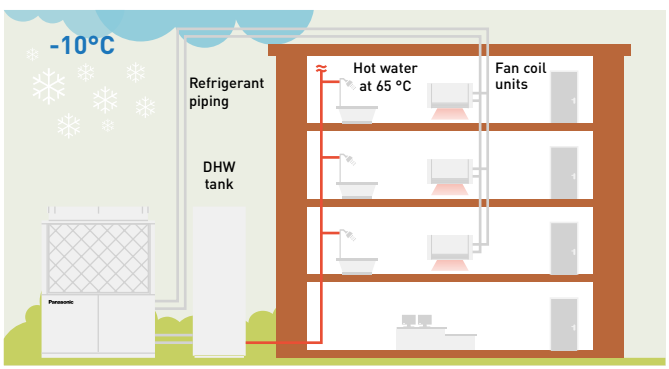
If you are short of electric power, our ECO G is a perfect solution.

- Runs on natural gas or LPG and just needs single phase supply
- Enables the building's electrical power supply to be used for other critical electrical demands
- Reduces capital cost to upgrade power substations to run heating and cooling systems
- Reduces power loadings within a building especially during peak periods
- Electricity supply freed up for other uses such as IT servers, commercial refrigeration, manufacturing, lighting, etc...

Limited electricity area.
Comparison of electrical consumption on a 71 kW outdoor unit.



Application example: Hotel.



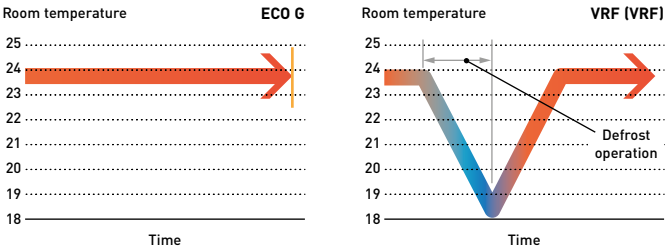
No need additional electric heaters. * This scheme is also valid with WHE.

High demand of Domestic Hot Water in heating and cooling

The rejected heat from the engine is available for DHW production and can supply up to 46 kW of hot water at 65 °C. DHW at 65 °C is also ready to use in heating without additional electric heaters.

Quick start up and great heating capacity at low ambient temperature

Waste heat from gas engine is utilized to raise temperature quicker then electric VRF system.
This contributes great heating capacity at extremely low ambient temperature.



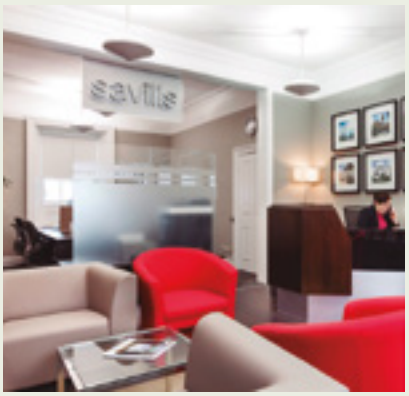
Lowest nitrogen oxide emissions.
The ECO G VRF systems have low nitrogen oxide emissions. In a pioneering development, the Panasonic ECO G features a brand new lean-burn combustion system that utilizes air fuel ratio feedback control to reduce NOx emissions to an all time low.

Water chiller option.
Our ECO G system is also available with a water chiller option, which can be combined with individual outdoor units or as part of a DX chilled water mix of indoor units. The system can be operated via a BMS system or a Panasonic supplied control panel, with chilled water set points from
-15 °C ~ +15 °C and heating set points 35 °C ~ +55 °C.

Application

Application	Condition	ECO G	
Hotel	High DHW demand	✔	Energy recovery of ECO G system can fulfill different requirement
Hotel	Needs to warm up swimming pool		
Office	Quick start up is necessary	✔	Speed of start up is quicker than VRF system
Winery	1) Outlet water demand at specific temperature 2) Needs high amount of power temporary (not every month)	✔	1) Chiller application with hydro module (ECO G + WHE) can make this special process 2) Running cost can be saved since fixed Gas tariff per month is cheaper than fixed electric tariff.
Any building	In a city with power restriction	✔	- No need an additional power transformer - Space and cost can be saved
	At extremely low ambient condition	✔	Heating capacity is kept up to -20 °C without defrost process

Project case studies



Savills HQ Dublin and Google Block R. Ireland.
ECO G 3-way units with a 243 kW load.
The project has been such a success that it has recently been awarded a Panasonic PRO Award for Best Contribution of efficient projects within Europe.



Thomas Cook's Sunprime Atlantic View resort.
A holiday resort in the Canaries. Spain.
229 rooms plus full spa and swimming pool facility.



CAPITA call centre. UK.
11 ECO G 3-way units.
Over 150 indoor units in meeting rooms and open-plan areas.
Intelligent touch screen controller, the CZ-256ESMC2.



French winery Gennevilliers, France.
ECO G 3-way units. One of the best solution utilized our ECO G solution for wine production process.

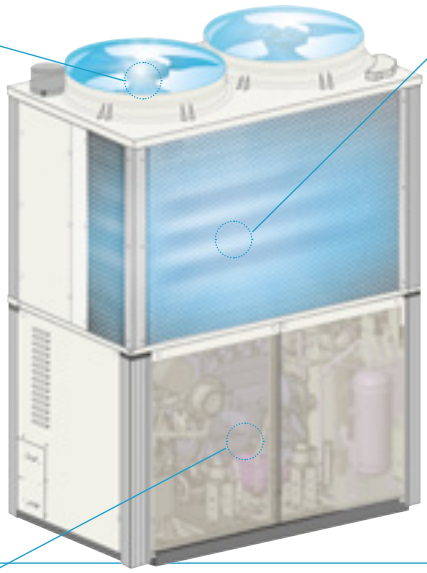
ECO G 3 Series

Introducing new ECO G 3 Series.
Optimized energy saving with reliable Panasonic technologies.

Improvement in blast efficiency

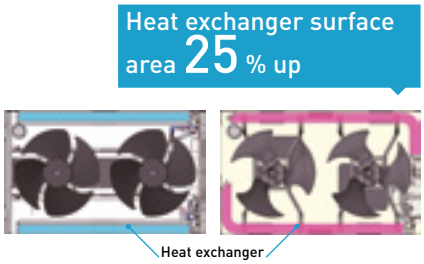
3-blades fan.
Propeller shape with 3 blades is more efficient
Max. 30 % of fan electrical consumption is saved compared to conventional fan.





"L" type heat exchanger

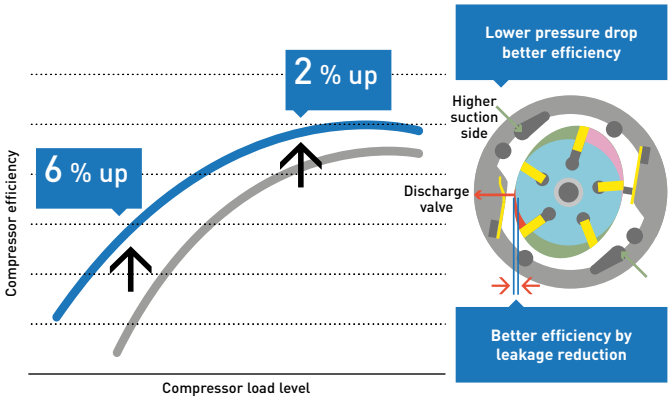
Heat exchanger surface area is included by 25 % compared to conventional model to optimize efficiency.



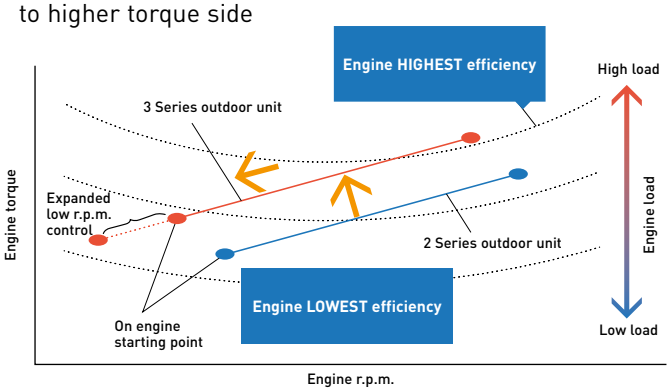
Better partial load control

Reduce start / stop loss has reduced by expanding the are where continuous operation is possible. Annual operation efficiency has further improved by better efficiency at lower partial load.

Compressor.
- Amount of internal leakage has reduced by the reduction of clearance, the compressor efficiency in the low load and low rotation region has been greatly improved. Moreover, efficiency of high speed and high load is also improved by reduction of suction pressure loss due to expansion of suction path
- Optimize compressor capacity



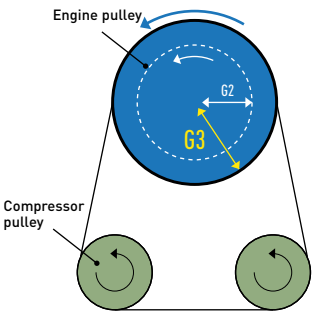
Engine.
- Continuous operation area has expanded at lower partial load by expanding operation area of lower speed
- Engine efficiency has improved by shifting output points to higher torque side





Engine pulley.
- Bigger diameter of engine pulley contributes the optimization of the compressor rotation speed ratio with engine speed

Higher engine pulley diameter giving better performance at partial load and reducing ON/OFF operation.



Line up of GE3 2-Pipe W-Multi

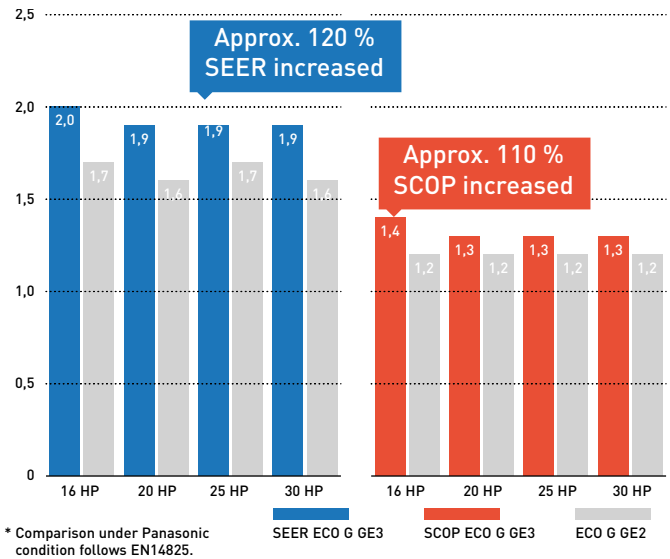
- For new or renewal
- Available for water heat exchanger
- Maximum 60 HP combination

The highest seasonal performance in all capacity ranges

High power efficiency of W-Multi system.
ECO G 3 Series system offers seasonal efficiency which has been drastically improved with new heat exchanger design, blast efficiency, partial load control.

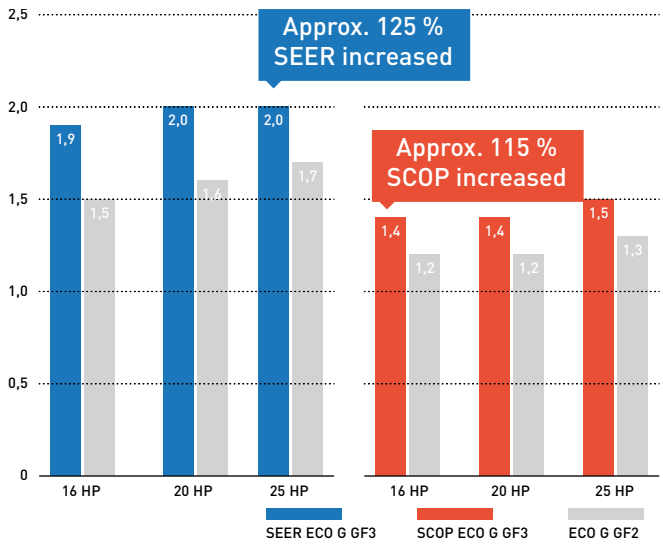
Compared to conventional model ECO G 2 Series.
All models are newly developed and have maximum 25 % of SEER, 15 % of SCOP better than conventional model.

2-Pipe ECO G GE3 Series. SEER / SCOP



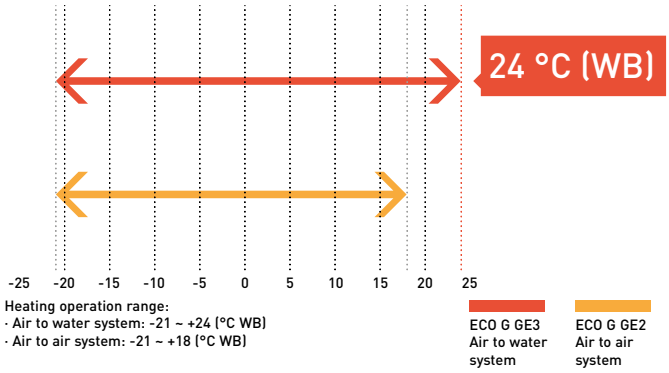
* Comparison under Panasonic condition follows EN14825.

3-Pipe ECO G GF3 Series. SEER / SCOP



Heating design operation conditions (GE3)

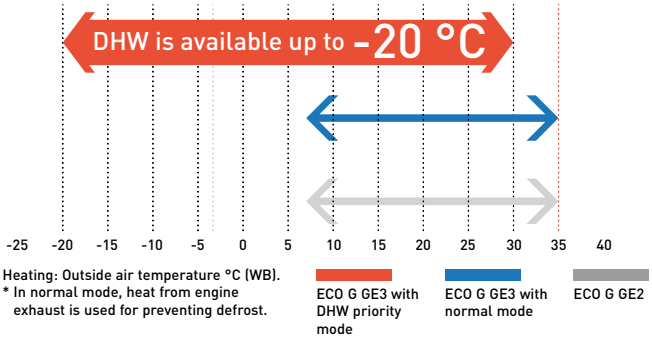
Operating range in heating has been expanded up to 24 °C (WB) for air to water system to meet the demand of swimming pool application.



Heating operation range:
· Air to water system: -21 ~ +24 (°C WB)
· Air to air system: -21 ~ +18 (°C WB)

DHW priority mode setting in heating (GE3)

Ambient temperature range for DHW production is expandable by setting depending on DHW needs. Hot water at 65 °C is available in heating without additional electric heaters.



Heating: Outside air temperature °C (WB).
* In normal mode, heat from engine exhaust is used for preventing defrost.

No defrost requirement (GE3 / GF3)

No defrost mode is selectable to get higher capacity under low ambient temperature.

Flexible design with wide line up of indoor units

The advanced GE3 Series can connect up to 64 indoor units.

Series	16 HP	20 HP	25 HP	30 HP	32 HP	36 HP	40 HP	45 HP	50 HP	55 HP	60 HP
2-Pipe ECO G GE3 Series	26	33	41	50	52	59	64	64	64	64	64
3-Pipe ECO G GF3 Series	24	24	24	—	—	—	—	—	—	—	—



2-Pipe ECO G GE3 Series

The GE3 Series has a top level of seasonal efficiency in this category. In addition, this product fits with special needs for commercial application thanks to DHW priority setting and auto pump down functions.

HP			16 HP	20 HP	25 HP	30 HP
Model			**U-16GE3E5**	**U-20GE3E5**	**U-25GE3E5**	**U-30GE3E5**
Power supply	Voltage	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
	Phase		Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50
Cooling capacity		kW	45,0	56,0	71,0	85,0
Refrigeration load Pdesign		kW	45,0	56,0	71,0	85,0
ηsc (LOT21)		**%**	**220,60**	**219,30**	**240,10**	**229,30**
Input power cooling		kW	1,17	1,12	1,80	1,80
Hot water in cooling mode (at 65 °C outlet)		kW	23,60	29,10	36,40	46,00
Max COP in hot water		W/W	1,55	1,55	1,49	1,47
Gas consumption cooling		kW	41,10	52,10	67,20	84,10
Heating capacity	Standard	kW	50,0	63,0	80,0	95,0
	Low temperature	kW	53,0	67,0	78,0	90,0
Refrigeration load Pdesign		kW	37,0	53,0	60,0	65,0
ηsh (LOT21)		**%**	**150,60**	**143,70**	**146,90**	**151,30**
Input power heating		kW	0,56	1,05	0,91	1,75
Gas consumption heating	Standard	kW	38,00	51,10	68,60	75,30
	Low temperature	kW	45,40	62,70	60,70	73,90
Starter amperes		A	30	30	30	30
External static pressure		Pa	10	10	10	10
Air flow		m^3/min	370	420	460	460
Sound power	Normal	dB(A)	80	80	84	84
	Silent mode	dB(A)	77	77	81	81
Dimension	H x W x D	mm	2255 x 1650 x 1000	2255 x 1650 x 1000	2255 x 2026 x 1000	2255 x 2026 x 1000
Net weight		kg	765	765	870	880
Pipe diameter	Liquid pipe	Inch (mm)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	3/4 (19,05)
	Gas pipe	Inch (mm)	1-1/8 (28,58)	1-1/8 (28,58)	1-1/8 (28,58)	1-1/4 (31,75)
	Fuel gas	Inch (mm)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)
	Exhaust drain port	mm	25	25	25	25
	Hot water supply in/out		Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)
Elevation difference (in/out)			50	50	50	50
Refrigerant (R410A) / CO_2 Eq.		kg / T	11,50 / 24,00	11,50 / 24,00	11,50 / 24,00	11,50 / 24,00
Maximum number of connectable indoor units			26	33	41	50
Operating range	Cool Min ~ Max	°C (DB)	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C (WB)	-21 ~ +18	-21 ~ +18	-21 ~ +18	-21 ~ +18

Hot water take out function added, EU safety regulation standard cleared. 25 HP chassis enlarged due to specification improvement. Pre-coat corrosion fin. Auto pump down function.

Technical focus

- Superior seasonal energy efficiency, maximum 240,1 %
- DHW priority setting
- Operating range in heating down to -21 °C and up to +24 °C for air to water system
- No defrost cycle
- Capacity ratio 50 ~ 200 % [1)]
- Option of DX or chilled water for indoor heat exchange
- Maximum total piping length: 780 m

1) 50 ~ 200 % only when one outdoor unit is installed. In other cases 50 ~ 130 %.

GAS POWERED ECO G | 5 YEARS COMPRESSOR WARRANTY



2-Pipe ECO G GE3 Series combination from 32 to 60 HP

The GE3 Series has a top level of seasonal efficiency in this category. In addition, this product fits with special needs for commercial application thanks to DHW priority setting and Auto pump down functions.

HP			32 HP	36 HP	40 HP	45 HP	50 HP	55 HP	60 HP
Model			U-16GE3E5	U-16GE3E5	U-20GE3E5	U-20GE3E5	U-25GE3E5	U-25GE3E5	U-30GE3E5
			U-16GE3E5	U-20GE3E5	U-20GE3E5	U-25GE3E5	U-25GE3E5	U-30GE3E5	U-30GE3E5
Power supply	Voltage	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50	50	50	50
Cooling capacity		kW	90,0	101,0	112,0	127,0	142,0	156,0	170,0
Input power cooling		kW	2,34	2,29	2,24	2,92	3,60	3,60	3,60
Hot water in cooling mode (at 65 °C outlet)		kW	47,20	52,70	58,20	65,50	72,80	82,40	92,00
Max COP in hot water		W/W	1,55	1,55	1,55	1,52	1,49	1,48	1,47
Gas consumption cooling		kW	82,20	93,20	104,20	119,30	134,40	151,30	168,20
Heating capacity	Standard	kW	100,0	113,0	126,0	143,0	160,0	175,0	190,0
	Low temperature	kW	106,0	120,0	134,0	145,0	156,0	168,0	180,0
Input power heating		kW	1,12	1,61	2,10	1,96	1,82	2,66	3,50
Gas consumption heating	Standard	kW	76,00	89,10	102,20	119,70	137,20	143,90	150,60
	Low temperature	kW	90,80	108,10	125,40	123,40	121,40	134,60	147,80
Starter amperes		A	30	30	30	30	30	30	30
External static pressure		Pa	10	10	10	10	10	10	10
Air flow		m³/min	370/370	370/420	420/420	420/460	460/460	460/460	460/460
Sound power	Normal	dB(A)	83	83	83	86	87	87	87
	Silent mode	dB(A)	80	80	80	83	84	84	84
Dimension	Height	mm	2255	2255	2255	2255	2255	2255	2255
	Width	mm	1650 + 100 + 1650	1650 + 100 + 1650	1650 + 100 + 1650	1650 + 100 + 2026	2026 + 100 + 2026	2026 + 100 + 2026	2026 + 100 + 2026
	Depth	mm	1000	1000	1000	1000	1000	1000	1000
Net weight		kg	1530 (765 + 765)	1530 (765 + 765)	1530 (765 + 765)	1635 (765 + 870)	1740 (870 + 870)	1750 (870 + 880)	1760 (880 + 880)
Pipe diameter	Liquid pipe	Inch (mm)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)	7/8 (22,22)	7/8 (22,22)
	Gas pipe	Inch (mm)	1-1/4 (31,75)	1-1/4 (31,75)	1-1/2 (38,10)	1-1/2 (38,10)	1-1/2 (38,10)	1-1/2 (38,10)	1-1/2 (38,10)
	Fuel gas	Inch (mm)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)
	Exhaust drain port	mm	25	25	25	25	25	25	25
	Hot water supply in/out		Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)
Elevation difference (in/out)			50	50	50	50	50	50	50
Refrigerant (R410A) / CO_2 Eq.		kg / T	2x 11,50 / 24,00	2x 11,50 / 24,00	2x 11,50 / 24,00	2x 11,50 / 24,00	2x 11,50 / 24,00	2x 11,50 / 24,00	2x 11,50 / 24,00
Maximum number of connectable indoor units			52	59	64	64	64	64	64
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-21 ~ +18	-21 ~ +18	-21 ~ +18	-21 ~ +18	-21 ~ +18	-21 ~ +18	-21 ~ +18

Data is for reference. Hot water take out function added, EU safety regulation standard cleared. 25 HP chassis enlarged due to specification improvement. Pre-coat corrosion fin. Auto pump down function.

Technical focus

- Maximum 60 HP combination
- Superior seasonal energy efficiency, maximum 240,1 %
- DHW priority setting
- Operating range in heating down to -21 °C and up to +24 °C for air to water system
- No defrost cycle
- Option of DX or chilled water for indoor heat exchange
- Maximum total piping length: 780 m

GAS POWERED ECO G | 5 YEARS COMPRESSOR WARRANTY

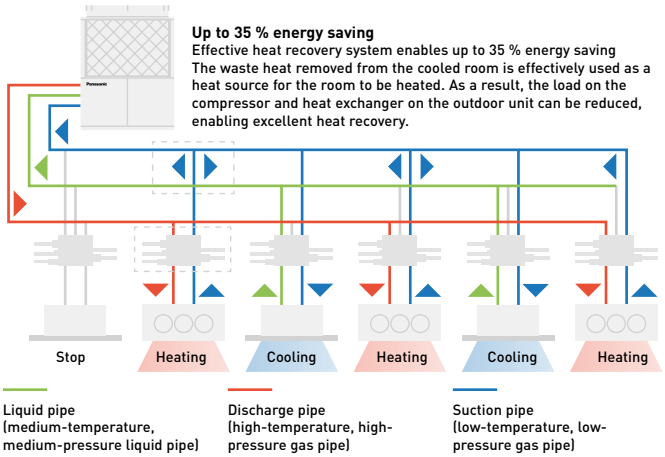
Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

3-Pipe ECO G GF3 Series

Excellent performance and free Domestic Hot Water

Panasonic 3-Pipe Multi system is capable of simultaneous heating/cooling and individual operation of each indoor unit by only one outdoor unit. As a result, efficient individual air conditioning is possible in buildings having diverse room temperatures.
In addition, Domestic Hot Water is created for free in cooling mode without additional boilers or electric heaters.

System example.
Improved maintenance intervals. The unit only needs to be serviced every 10000 hours. This is the best in the industry.





3-Pipe control Solenoid valve kit.

KIT-P56HR3
(CZ-P56HR3 + CZ-CAPE2).

KIT-P160HR3
(CZ-P160HR3 + CZ-CAPE2).

CZ-P56HR3
Up to 5,6 kW.

CZ-P160HR3
Up to 16,0 kW.



3-Pipe control PCB.

CZ-CAPE2*

* For Wall-mounted. Must be added to the CZ-P56HR3 or CZ-P160HR3.

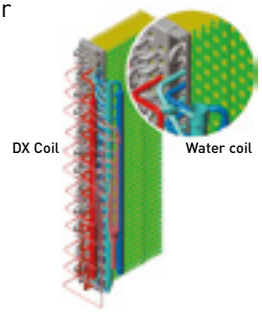
Solenoid valve kit

To be fitted on all 'zones' to allow simultaneous heating and cooling. Up to 24 indoor units are capable of simultaneous heating/cooling operation. Oil-recovery operation to gives more stable comfort air-conditioning control.

Power supply problems?

If you are short of electrical power, our gas heat pump could be the perfect solution:
- Runs on natural gas or LPG and just needs Single Phase supply
- Enables the building's electrical power supply to be used for other critical electrical demands
- Reduces capital cost to upgrade power substations to run heating and cooling systems
- Reduces power loadings within a building especially during peak periods
- Electricity supply freed up for other uses such as IT servers, commercial refrigeration, manufacturing, lighting etc.

ECO G outdoor Heat Exchanger.
- Integrated DX and hot water coil
- No defrost required
- Faster reaction to demand for heating



DHW production in heating and cooling

Free DHW is available 365 days a year, in all seasons. Hot water is produced effectively from waste heat from engine. Perfect solution for hotel projects required high demand of hot water.

HP	16 HP	20 HP	25 HP
Free DHW (in cooling mode)	23,6 kW	27,1 kW	40,5 kW





3-Pipe ECO G GF3 Series

DHW available in all seasons.
Domestic hot water can be taken out from waste heat of engine effectively in heating & cooling - all year round.

HP			16 HP	20 HP	25 HP
Model			**U-16GF3E5**	**U-20GF3E5**	**U-25GF3E5**
Power supply	Voltage	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
	Phase		Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50
Cooling capacity		kW	45,0	56,0	71,0
Refrigeration load Pdesign		kW	45,0	56,0	71,0
ηsc (LOT21)		**%**	**185,20**	**198,80**	**204,90**
Input power cooling		kW	1,17	1,40	1,80
Hot water in cooling mode (at 65 °C outlet)		kW	23,60	27,10	40,50
Gas consumption cooling		kW	45,80	54,80	73,70
Heating capacity	Standard	kW	50,0	63,0	80,0
	Low temperature	kW	53,0	67,0	78,0
Refrigeration load Pdesign		kW	38,0	52,0	60,0
ηsh (LOT21)		**%**	**139,20**	**140,20**	**150,90**
Input power heating		kW	0,56	1,05	0,91
Gas consumption heating	Standard	kW	42,20	51,10	68,60
Starter amperes		A	30	30	30
Air flow		m^3/min	370	400	460
Sound power	Normal	dB(A)	80	81	84
	Silent mode	dB(A)	77	78	81
Dimension	H x W x D	mm	2255 x 1650 x 1000	2255 x 1650 x 1000	2255 x 2026 x 1000
Net weight		kg	775	775	880
Pipe diameter	Liquid pipe	Inch (mm)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)
	Gas pipe	Inch (mm)	1 1/8 (28,58)	1 1/8 (28,58)	1 1/8 (28,58)
	Discharge	Inch (mm)	7/8 (22,22)	1 (25,40)	1 (25,40)
	Fuel gas	Inch (mm)	19,05 (R3/4)	19,05 (R3/4)	19,05 (R3/4)
	Exhaust drain port	mm	25	25	25
	Hot water supply in/out		Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)	Rp3/4 (Nut, thread)
Elevation difference (in/out)		m	50	50	50
Refrigerant (R410A) / CO_2 Eq.		kg / T	11,50 / 24,00	11,50 / 24,00	11,50 / 24,00
Maximum number of connectable indoor units			24	24	24
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-21 ~ +18	-21 ~ +18	-21 ~ +18

Solenoid valve kit		
KIT-P56HR3	**KIT-P56HR3**	3-Pipe control Solenoid valve kit (up to 5,6 kW)
	CZ-P56HR3	Solenoid valve kit (up to 5,6 kW)
	CZ-CAPE2	3-Pipe control PCB
KIT-P160HR3	**KIT-P160HR3**	3-Pipe control Solenoid valve kit (from 5,6 to 16,0 kW)
	CZ-P160HR3	Solenoid valve kit (from 5,6 kW to 16,0 kW)
	CZ-CAPE2	3-Pipe control PCB
CZ-CAPEK2 [2)]		3-Pipe control PCB for wall-mounted

3-Pipe control box kit	
CZ-P456HR3	4 ports 3 pipe box (up to 5,6 kW per port)
CZ-P656HR3	6 ports 3 pipe box (up to 5,6 kW per port)
CZ-P856HR3	8 ports 3 pipe box (up to 5,6 kW per port)
CZ-P4160HR3	4 ports 3 pipe box (up to 16,0 kW per port)

Hot water take out function added, EU safety regulation standard cleared. 25 HP chassis enlarged due to specification improvement. Pre-coat corrosion fin. Auto pump down function.

Outstanding seasonal energy efficiency, maximum 204,9 %

· Capacity ratio 50 ~ 200 %
· No defrost cycle
· Maximum total piping length: 780 m

Flexible installation

· Full heating capacity down to -21 °C (WB)
· DHW production for all the year
· Maximum 24 indoor units connectable

GAS POWERED ECO G | 5 YEARS COMPRESSOR WARRANTY

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
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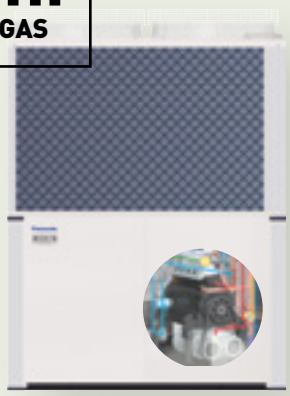
Panasonic GHP/EHP Hybrid System. First intelligent technology

Taking advantage of Gas and Electricity to achieve better energy saving ever.

GHP + EHP
HYBRID
VRF SYSTEM

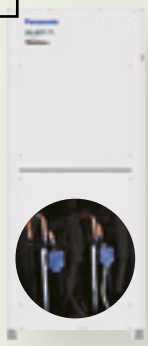


GHP
GAS



U-20GES3E5 (20 HP)

EHP
ELECTRIC



U-10MES2E8 (10 HP)



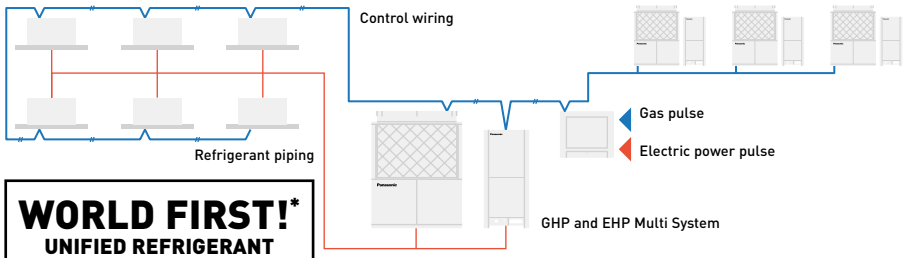
Intelligent controller CZ-256ESMC3

Master unit GHP
- Load calculation of GHP and EHP
- Operation in accordance with the upper limit setting.
- Individual capacity control
- Device control
- Special control (Defrost, Oil recovery, 4 Way-valve matching / Abnormality processing)

Slave Unit EHP

Intelligent controller
- Demand monitoring
- Indoor/Total load calculation
- Operation Ratio Indication upper limit setting of MAP according to:
  - Energy unit price
  - Electric power demand
  - Air conditionin g load

Schematic of GHP/EHP Hybrid System.



WORLD FIRST!*
UNIFIED REFRIGERANT CYCLE IN GHP AND EHP

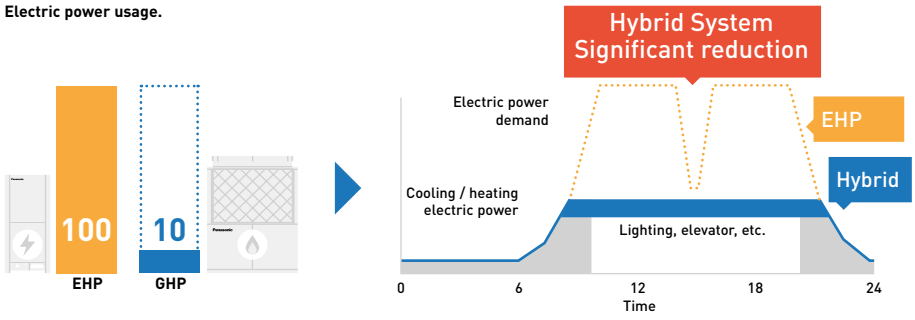
* Introduced as a world first technology by Panasonic in April 2016.

1 Peak cut of electricity consumption

Electrical peak demand is significantly reduced thanks to GHP system consuming less than 10 % of electricity of EHP system.

* Image of Hotel project.

Electric power usage.

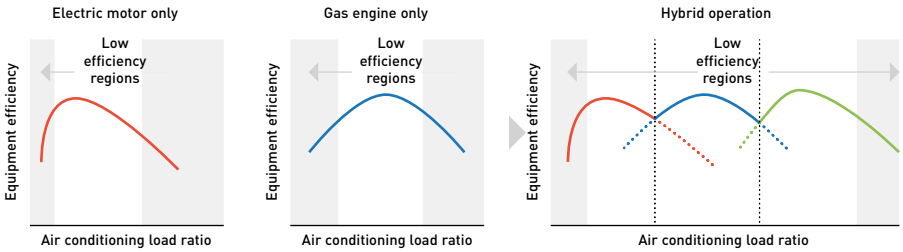


2 Optimal control to maximize energy saving

Switching the operation between GHP and EHP system on the basis of usage, energy demand, part load.

* Specification is tentative.

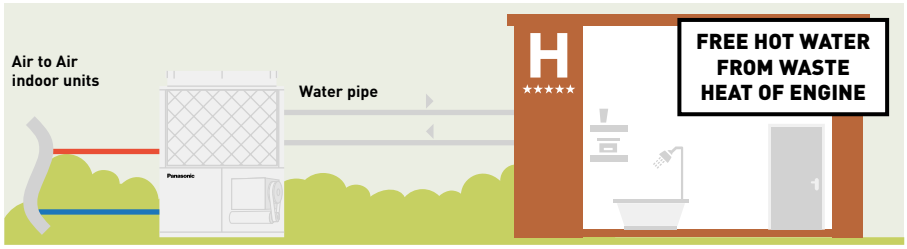
Optional control method.



3 Free Hot Water production by GHP system

Hot water is effectively produced from waste heat of engine.

* Specification is tentative.



GHP/EHP Hybrid System

It is time to save energy utilising the advantages from gas and electricity by Panasonic reliable ECO G / ECOi technology

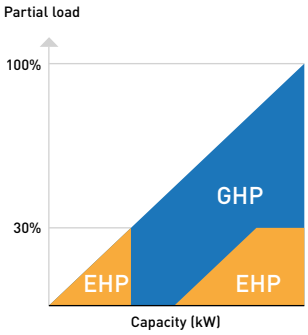
New hybrid system can offer intelligent operation logic for better economy and efficiency by taking the best of ECO G and ECOi. This is like a hybrid car in heating and cooling system.



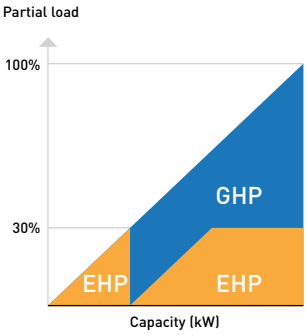
How smartly operate GHP and EHP system depending on your needs?

4 different mode settings are available with the intelligent controller. Switch the operation between GHP and EHP or operating both units together to maximize the effect for different requirement such as economy and efficiency.

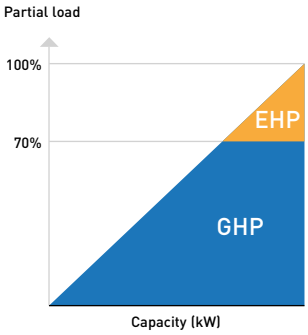
Economy mode



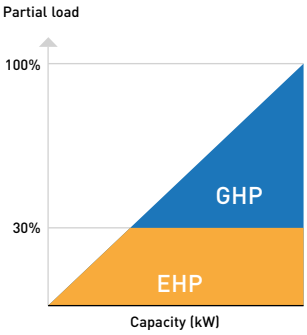
Efficiency mode



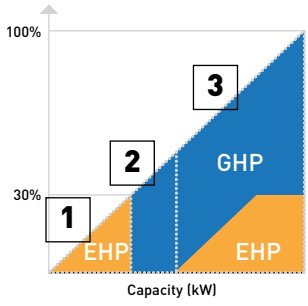
GHP first mode



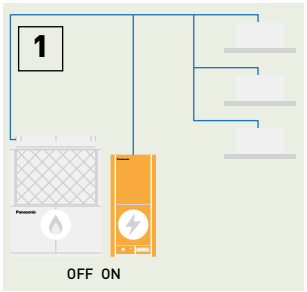
EHP first mode



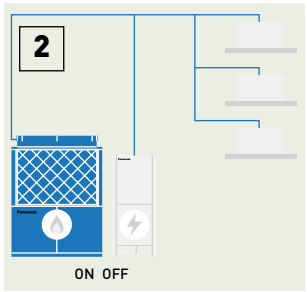
Optimal control example: Economy mode



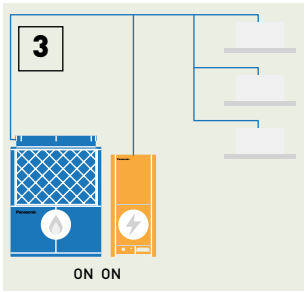
Only EHP



Only GHP



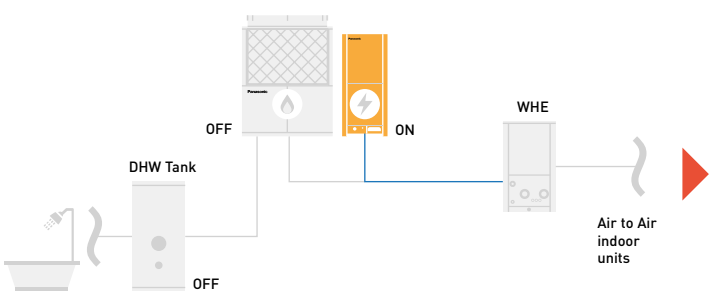
Balanced operation



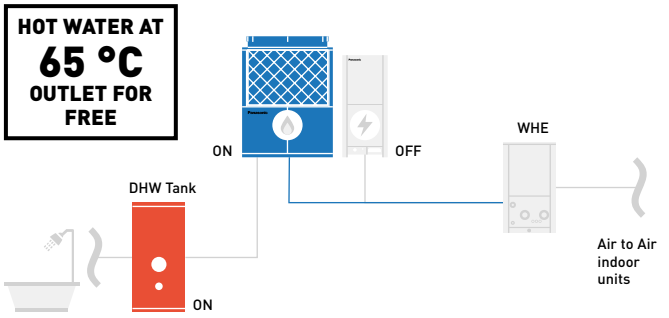
DHW priority mode in Hybryd + WHE System

When DHW is demanded during cooling operation by EHP, EHP is automatically turned “OFF” and GHP is turned “ON” to produce DHW for free.

High efficiency mode



DHW priority mode





2-Pipe Hybrid GHP/EHP

- Extended lifespan with intelligent energy management. The goal is for the EHP and GHP to work at optimal speeds
- Low energy cost
- Low emissions

			Hybrid GHP	Hybrid EHP
HP			**20 HP**	**10 HP**
Outdoor units			**U-20GES3E5**	**U-10MES2E8**
Power supply	Voltage	V	220 - 230 - 240	380 - 400 - 415
	Phase		Single phase	Three phase
	Frequency	Hz	50	50
Cooling capacity		kW	56,0	28,0
ηsh (LOT21)		**%**	**211,80**	**275,40**
Current cooling		A	5,18	10,70 / 10,20 / 9,80
Input power cooling		kW	1,12	6,41
Hot water in cooling mode (at 65 °C outlet)		kW	26,20	—
Gas consumption cooling		kW	52,10	—
Heating capacity		kW	63,0	31,5
ηsh (LOT21)		**%**	**143,20**	**167,60**
Current heating		A	4,79	11,10 / 10,50 / 10,10
Input power heating		kW	1,05	6,62
Gas consumption heating	Standard	kW	51,10	—
Starting current		A	30	1
Air flow		m^3/min	420	224
Sound pressure	Normal mode	dB(A)	58	56
Sound power	Normal mode	dB(A)	80	77
Dimension	H x W x D	mm	2255 x 1650 x 1000	1842 x 770 x 1000
Net weight		kg	765	210
Pipe diameter [1]	Liquid pipe	Inch (mm)	5/8 (15,88)	3/8 (9,52)
	Gas pipe	Inch (mm)	1 1/8 (28,58)	7/8 (22,22)
	Balance pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)
Drain heater		W	40	—
Refrigerant (R410A) / CO_2 Eq.		kg / T	11,05 / 23,0724	5,60 / 11,6928
Maximum allowable indoor / outdoor capacity ratio %			50 ~ 130	50 ~ 130
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-21 ~ +18	-21 ~ +18

1) Please refer service manual when the maximum piping length exceeds 90 meters (equivalent length).

Technical focus

- 4 different setting (Economy, Efficiency, GHP first mode, EHP first mode)
- DHW energy recovery 26,2 kW (at 65 °C) by waste heat of engine
- Unified refrigerant cycle in GHP and EHP for easy installation
- DHW priority mode with WHE system
- Up to 48 indoor units connectable

HIGH COP | GAS POWERED ECO G | 5 YEARS COMPRESSOR WARRANTY

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Water heat exchanger for hydronic applications

When a top London restaurant opened, it needed large volumes of fresh air to ensure the optimum dining environment. ECO G units connected to the cooling coils within the air handling equipment ensured the air was introduced in the right condition in both summer and winter.



Chiller replacement. Chilled water supply to fan coils

Chiller replacement.
When some old chillers needed replacing at the end of their operational lifetime, ECO Gs with Water Heat Exchangers enabled the project to be carried out in stages whilst still utilising the existing water pipe work and fan coils. This enabled the project to be delivered on time, to a restricted budget and avoided all issues regarding refrigerant in confined spaces.

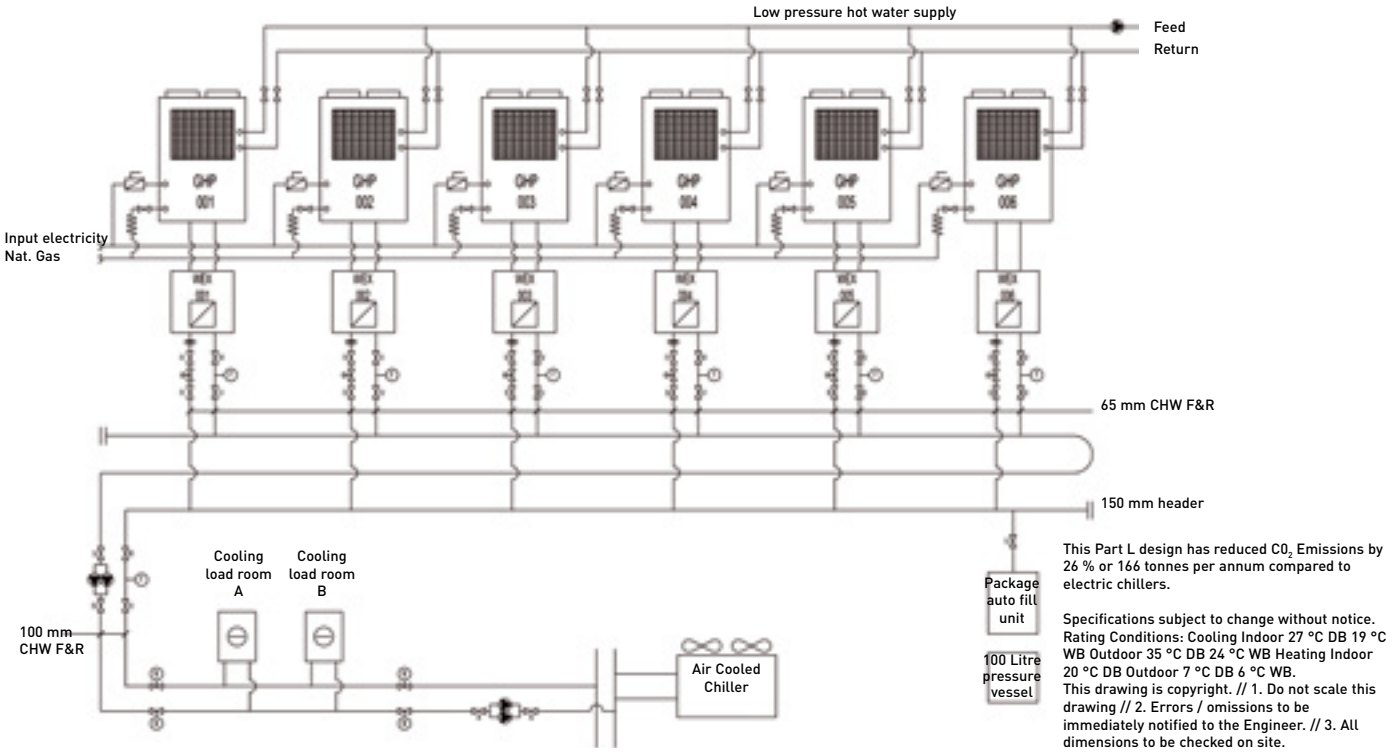




Connection to 'close control' computer equipment

Computer room applications.

When all available electrical power needed to be utilised for the IT equipment for a leading international bank, the cooling load of over 450 kW had to be powered by gas. The outdoor units were connected via Water Heat Exchangers to cooling coils inside the 'close control' units thereby maintaining a conditioned environment for temperature and humidity. By utilising the hot water function over 100 kW of hot water are supplied to the building and therefore the additional benefit of considerable CO_2 savings is ensured.

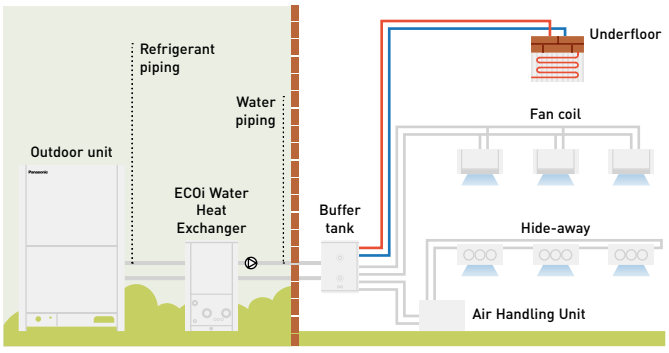


ECOi water heat exchanger

Electrical VRF with Water Heat Exchanger

· With this easy to install Water Heat Exchanger unit, you can now cover projects up to 51 kW hot water demand or 44 kW on chilled application on a efficient way and cost effective

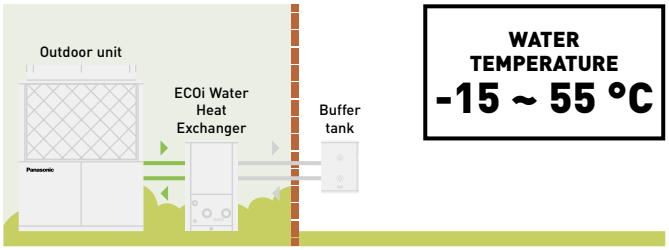
System example.



A buffer tank of minimum 280l for 28 kW and 500l for 50 kW is always needed.

Example of Hotel renewal of existing chiller and boiler system with Panasonic ECO G and Aquarea mixed solution

ECO G and Aquarea are the smart solution for renewal Chiller/Boiler applications with annual running cost savings around 13600€.





ECOi 2-Pipe with water heat exchanger for chilled and hot water production

Water heat exchanger (WHE) for hydronic applications.
WHE for ECOi system controlled by a timer remote control CZ-RTC5B.
Energy-efficient capacity control with superior external static pressure is now ready.

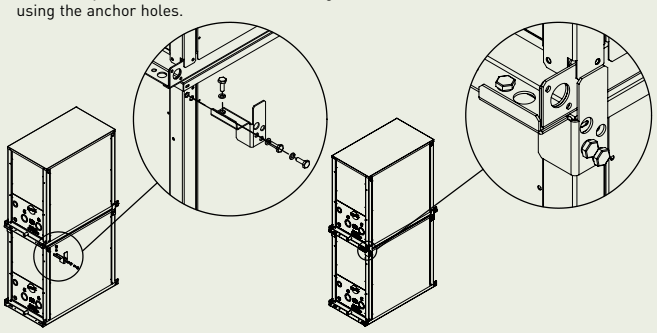
Hydrokit with A class water pump			**PAW-250WP5G1**	**PAW-500WP5G1**
Hydrokit without pump			**PAW-250W5G1**	**PAW-500W5G1**
Cooling capacity at 35 °C, water outlet 7 °C		kW	25,0	50,0
Heating capacity		kW	28,0	56,0
Heating capacity at +7 °C, heating water temperature at 45 °C		kW	28,0	56,0
COP at +7 °C with heating water temperature at 45 °C		W/W	2,97	3,10
Heating Energy Efficiency class at 35 °C [1]			**A++**	**A++**
ηsh (LOT1) [2]		**%**	**152,00**	**152,00**
Dimension	H x W x D	mm	1000 x 575 x 1110	1000 x 575 x 1110
Net weight		kg	135 (140 with pump)	155 (165 with pump)
Water pipe connector			Rp2 Female Thread (50A)	Rp2 Female Thread (50A)
Heating water flow (ΔT=5 K. 35 °C)		m^3/h	5,16	10,32
Capacity of integrated electric heater		kW	Not equipped	Not equipped
Flow switch			Equipped	Equipped
Water filter			Equipped	Equipped
Input power with A class water pump / without pump		kW	0,329 / 0,024	0,574 / 0,024
Maximum current with A class water pump / without pump		A	1,43 / 0,10	2,50 / 0,10
Outdoor unit			**U-10ME2E8**	**U-20ME2E8**
Sound pressure		dB(A)	56	60
Dimension	H x W x D	mm	1842 x 770 x 1000	1842 x 1540 x 1000
Net weight		kg	210	375
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	5/8 (15,88)
	Gas pipe	Inch (mm)	7/8 (22,22)	1-1/8 (28,58)
Refrigerant (R410A) / CO_2 Eq.		kg	5,6 *Need Additional gas amount at site	9,5 *Need Additional gas amount at site
Pipe length range / Elevation difference (in/out)		m	170 / 50 (OD above) 35 (OD below)	170 / 50 (OD above) 35 (OD below)
Pipe length for nominal capacity		m	7,5	7,5
Pipe length for additional gas / Additional gas amount (R410A)		m / g/m	0 < / Refer to manual	0 < / Refer to manual
Operation range	Heat Min ~ Max	°C	-11 ~ +15 [3]	-11 ~ +15 [3]
Water outlet temperature range	Cool Min ~ Max	°C	+5 ~ +15	+5 ~ +15
	Heat Min ~ Max	°C	+35 ~ +45	+35 ~ +45

Accessories	
PAW-3WSK	Stacking kit for vertically stacking up to 3 WHE (4 pieces per Kit)

1) Unit efficiency energy level: Scale from A+++ to D. 2) Seasonal space cooling/heating energy efficiency following COMMISSION REGULATION (EU) 813/2013. 3) With accessory low temperature kit -25 ~ +15 °C. Available only as a spare part.

Performance calculation in agreement with Eurovent. Sound pressure measured at 1 m from the outdoor unit and at 1,5 m height.

Stacking kit PAW-3WSK.
It is possible to stack up to 3 units. When stacking units, always anchor the bottom unit to the ground using the anchor holes.



Availability of easy vertical stacking allows installations in a limited space (up to 3 units)*.
Stainless steel plate heat exchanger with anti-freeze protection control.
Change over between heating and cooling operation.

* Stacking kit (PAW-3WSK) is necessary.

Technical focus

Heating, cooling and DHW — A class water pump included (only in P model) — Flexible modularity from 25 kW — Better partial load vs standard chiller system — Compatible with all centralized controllers — Maximum distance between outdoor unit and WHE: 170 m — Maximum hot water outlet temperature: 45 °C — Minimum chilled water outlet temperature: 5 °C — Outdoor temperature range in heating mode: -11 °C to +15 °C (with low temperature kit -25 °C*)

* Available as a spare part.

INVERTER+ | 5 YEARS COMPRESSOR WARRANTY



ECO G with water heat exchanger for chilled and hot water production

Water heat exchanger (WHE) for hydronic applications.
WHE for ECO G system controlled by a timer remote control CZ-RTC5B.
Energy-efficient capacity control with superior external static pressure is now ready.

Hydrokit with A class water pump			**PAW-500WP5G1**	**PAW-710WP5G1**
Hydrokit without pump			**PAW-500W5G1**	**PAW-710W5G1**
Heating capacity		kW	60,0	80,0
Heating capacity at +7 °C, heating water temperature at 35 °C		kW	60,9	81,2
COP at +7 °C with heating water temperature at 35 °C		W/W	1,15	1,18
Heating capacity at +7 °C, heating water temperature at 45 °C		kW	60,0	80,0
COP at +7 °C with heating water temperature at 45 °C		W/W	1,02	1,04
Heating capacity at -7 °C, heating water temperature at 35 °C		kW	48,2	50,8
COP at -7 °C, heating water temperature at 35 °C		W/W	0,80	0,80
Heating capacity at -15 °C, heating water temperature at 35 °C		kW	46,3	50,0
COP at -15 °C with heating water temperature at 35 °C		W/W	0,80	0,80
Refrigeration load Pdesign		kW	48,0	—
Heating Energy Efficiency class at 35 °C [1]			**A+**	**—**
ηsh (LOT1) [2]		**%**	**130,00**	**128,00**
Cooling capacity		kW	—	—
Cooling capacity at +35 °C, outlet temperature 7 °C, inlet temperature 12 °C		kW	50,0	67,0
EER at +35 °C, outlet temperature 7 °C, inlet temperature 12 °C		W/W	0,78	0,89
Dimension	H x W x D	mm	1000 x 575 x 1110	1000 x 575 x 1110
Net weight		kg	155 (165 with pump)	160 (175 with pump)
Water pipe connector			Rp2 Female Thread (50A)	Rp2 Female Thread (50A)
Heating water flow (ΔT=5 K. 35 °C)		m^3/h	10,32	13,76
Capacity of integrated electric heater		kW	Not equipped	Not equipped
Flow switch			Equipped	Equipped
Water filter			Equipped	Equipped
Input power with A class water pump / without pump		kW	0,574 / 0,024	0,824 / 0,024
Maximum current with A class water pump / without pump		A	2,50 / 0,10	3,60 / 0,10
Outdoor unit			**U-20GE3E5**	**U-30GE3E5**
Sound power	Normal / Silent	dB(A)	80 / 77	84 / 81
Dimension	H x W x D	mm	2255 x 1650 x 1000	2255 x 2026 x 1000
Net weight		kg	765	880
Pipe diameter	Liquid pipe	Inch (mm)	5/8 (15,88)	3/4 (19,05)
	Gas pipe	Inch (mm)	1-1/8 (28,58)	1-1/4 (31,75)
Pipe length / Pipe length for nominal capacity		m	7 / 170	7 / 170
Elevation difference (in/out)		m	50 (OD above) 35 (OD below)	50 (OD above) 35 (OD below)
Operation range	Heat Min ~ Max	°C	-21 ~ +24 (until outlet temperature 45)	-21 ~ +24 (until outlet temperature 45)
Water outlet temperature range	Cool Min ~ Max	°C	-15 ~ +15	-15 ~ +15
	Heat Min ~ Max	°C	+35 ~ +55	+35 ~ +55

Accessories	
PAW-3WSK	Stacking kit for vertically stacking up to 3 WHE (4 pieces per Kit)

1) Unit efficiency energy level: Scale from A+++ to D. 2) Seasonal space cooling/heating energy efficiency following COMMISSION REGULATION (EU) 813/2013.

Performance calculation in agreement with Eurovent. Sound pressure measured at 1 m from the outdoor unit and at 1,5 m height.

Availability of easy vertical stacking allows installations in a limited space (up to 3 units)*.
Stainless steel plate heat exchanger with anti-freeze protection control.
Change over between heating and cooling operation.

* Stacking kit (PAW-3WSK) is necessary.

GAS POWERED ECO G | 5 YEARS COMPRESSOR WARRANTY

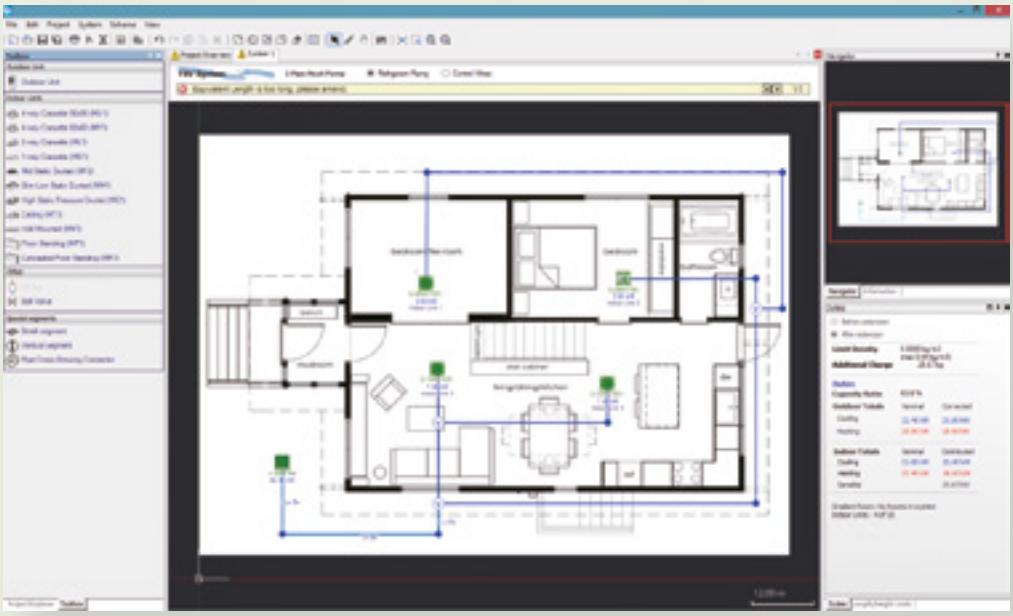
Technical focus

Heating, cooling and DHW — A class water pump included (only in P model) — No cascade installation up to 80 kW — Free DHW from waste heat of engine — Compatible with all centralized controllers — Maximum distance between outdoor unit and WHE: 170 m — Hot water outlet temperatures from 35 °C to 55 °C — Chilled water outlet temperatures from -15 °C to +15 °C — Minimum outdoor temperature in heating mode: -21 °C

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Design support software for VRF

Features the unique Mounting Scheme function providing more thorough spec-in and tender quotation support for easier, faster completion of work.



The Panasonic VRF Designer software can be used for all Panasonic VRF ME2, LE and MF3.
Panasonic has identified the importance of ever-increasing demands for fast and accurate responses to customer requests in our industry. More and more emphasis is being placed upon energy-efficiency in our marketplace. The ability to calculate cooling/heating loads and produce information of actual design conditions is a major advantage to any architect, consultant, contractor or end user.
Panasonic understands the time-poor and demanding industry we are in and we are pleased to announce the launch of the next generation of our system design software program.
The Panasonic VRF Designer software has been customised to make the selection and design process as quick and easy as possible.
The design package utilises system wizards and import tools to enable both simple and complex systems to be created. In addition, the system will allow outdoor and indoor units to be dragged on an interactive desktop. This allows users to create everything from realistic floor plans with detailed piping and wiring schematics to send out with quotations, through to installation guidance drawings.

Features include:

- Mounting scheme. Design selection from building floor drawing
- Any kind of drawing format. (dxf, jpg, png..etc.)
- Conventional principal scheme
- Easy to use system wizards
- Auto piping and wiring features
- Converted duties for conditions and pipework
- Auto(CAD) (dxf), Excel and PDF export
- Detailed wiring and pipework diagrams
- Automatic price quotation
- Automatic tender document assist
- SEER, SCOP
- ESEER

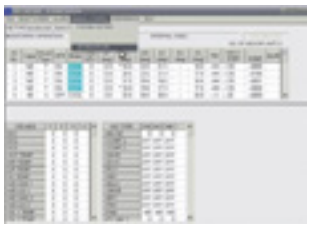
Panasonic's Advanced VRF software with AutoCAD® compatibility makes design easier than ever

Panasonic provides bespoke software helping system designers, installers and dealers to very quickly design and size systems, create wiring diagrams and issue bills of quantities at the push of a button.



Panasonic VRF Service Checker

Panasonic will make available to installers and commissioning companies the VRF Service Checker as a communication interface to Panasonic VRF systems. This easy to manage tool checks all parameters of the system.







Interface Box

The VRF Service Checker allows:

- On ECOi and Mini ECOi connect anywhere on the P-Link
- Search the P-Link to validate systems that are connected
- Monitor all indoor and outdoor units simultaneously on 1 screen
- Monitor all Temperature data, Pressure data, Valve position, and alarm status on 1 screen
- Data can be viewed in Graph or number format
- Controlling the indoor unit ON/OFF, MODE, SET POINT, FAN, and TEST mode
- Switching between various systems on same communication P-Link (ECOi only)
- Monitor and record at a set interval time
- Record and review the data at a later date
- Update software as ROM flash writer

This Panasonic VRF Service Checker is available from your service partner.

R22 Renewal



Panasonic's advanced technology enables the system to work with previously installed pipe work by managing the working pressure within the system down to R22 (33 bar) levels, this ensures the system works safely and efficiently without loss of capacity.
The new equipment can offer increased COP/EER by using state of the art inverter compressor and heat exchanger technology.
Having contacted your Panasonic supplier regarding pipe work restrictions and gained approval to use the Panasonic Renewal System there are three main tests that have to be carried out to ensure that the system can be used effectively. Firstly a thorough inspection of the pipe work must be carried out and any damage must be repaired. Secondly an oil test has to be carried out to ensure that the system has not been subject to a compressor burnout during its lifetime. Lastly a VRF Renewal Kit (CZ-SLK2) has to be installed within the pipe work to ensure that the system is cleaned of any remnants of oil.



VRF Systems indoor units





ECOi and ECO G systems indoor units range

Page		1,5 kW	2,2 kW	2,8 kW	3,0 kW	3,6 kW	4,0 kW	4,5 kW
P. 313	NEW U2 Type 4 way 90x90 cassette • R32/ R410A		 S-22MU2E5B	 S-28MU2E5B		 S-36MU2E5B		 S-45MU2E5B
P. 314	NEW Y2 Type 4 way 60x60 cassette • R32/ R410A	 S-15MY2E5B	 S-22MY2E5B	 S-28MY2E5B		 S-36MY2E5B		 S-45MY2E5B
P. 315	L1 Type 2 way cassette • R410A		 S-22ML1E5	 S-28ML1E5		 S-36ML1E5		 S-45ML1E5
P. 316	D1 Type 1 way cassette • R410A			 S-28MD1E5		 S-36MD1E5		 S-45MD1E5
P. 317	NEW F3 Type variable static pressure adaptive duct • R32	 S-15MF3E5B	 S-22MF3E5B	 S-28MF3E5B		 S-36MF3E5B		 S-45MF3E5B
P. 317	NEW F3 Type variable static pressure adaptive duct • R410A	 S-15MF3E5A	 S-22MF3E5A	 S-28MF3E5A		 S-36MF3E5A		 S-45MF3E5A
P. 318	F2 Type variable static pressure hide-away • R410A	 S-15MF2E5A	 S-22MF2E5A	 S-28MF2E5A		 S-36MF2E5A		 S-45MF2E5A
P. 319	NEW M1 Type slim variable static pressure hide-away • R32/R410A	 S-15MM1E5B	 S-22MM1E5B	 S-28MM1E5B		 S-36MM1E5B		 S-45MM1E5B
P. 320	E2 Type high static pressure hide-away • R410A							
P. 321	Heat recovery with DX coil • R410A				 PAW-500ZDX3N		 PAW-800ZDX3N	 PAW-01KZDX3N
P. 322	T2 Type ceiling • R410A					 S-36MT2E5A		S-45MT2E5A
P. 323	NEW K2 Type wall-mounted • R32/R410A	S-15MK2E5B	S-22MK2E5B	S-28MK2E5B		S-36MK2E5B		S-45MK2E5B
P. 324	G1 Type floor console • R410A		S-22MG1E5N	S-28MG1E5N		S-36MG1E5N		S-45MG1E5N
P. 325	P1 Type floor-standing • R410A		S-22MP1E5	S-28MP1E5		S-36MP1E5		S-45MP1E5
P. 326	R1 Type concealed floor-standing • R410A		S-22MR1E5	S-28MR1E5		S-36MR1E5		S-45MR1E5
P. 327	Hydrokit for ECOi, water at 45 °C • R410A							

OPTIONAL UNITS ON VENTILATION SECTION

5,6 kW	6,0 kW	7,3 kW	9,0 kW	10,6 kW	14,0 kW	16,0 kW	22,4 kW	28,0 kW
 S-56MU2E5B	 S-60MU2E5B	 S-73MU2E5B	 S-90MU2E5B	 S-106MU2E5B	 S-140MU2E5B	 S-160MU2E5B		
 S-56MY2E5B								
 S- 56ML1E5		 S-73ML1E5						
 S-56MD1E5		 S-73MD1E5						
 S-56MF3E5B	 S-60MF3E5B	 S-73MF3E5B	 S-90MF3E5B	 S-106MF3E5B	 S-140MF3E5B	 S-160MF3E5B		
 S-56MF3E5A	 S-60MF3E5A	 S-73MF3E5A	 S-90MF3E5A	 S-106MF3E5A	 S-140MF3E5A	 S-160MF3E5A		
 S-56MF2E5A	 S-60MF2E5A	 S-73MF2E5A	 S-90MF2E5A	 S-106MF2E5A	 S-140MF2E5A	 S-160MF2E5A		
 S-56MM1E5B								
							 S-224ME2E5	 S-280ME2E5
 S-56MT2E5A		 S-73MT2E5A		 S-106MT2E5A	 S-140MT2E5A			
S-56MK2E5B		S-73MK2E5B		S-106MK2E5B				
S-56MG1E5N								
S-56MP1E5		S-71MP1E5						
S-56MR1E5		S-71MR1E5						
			S-80MW1E5		S-125MW1E5			

New 4 way 90x90 cassette with nanoe™ X

Large capacity VRF. Trusted power and high efficiency. These Cassettes offer upgraded Econavi and nanoe™ X technology as accessories for making application space more comfortable and efficient.

Thanks to advances in design and technology such as the new high performance turbo fan which is more efficient and silent, and nanoe™ X technology and the floor temperature and humidity sensor to more control, the U2 Panasonic 4 way 90x90 cassette offers comfort.

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

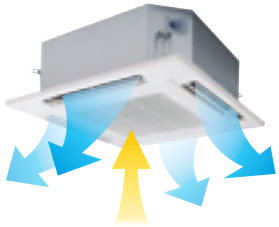


Always fresh and clean air with nanoe™ X

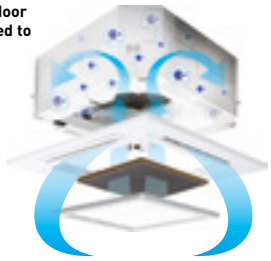
The 4 way 90x90 cassette with nanoe™ X, when tested, has shown to inhibit hazardous substances by 92 %, when compared to natural reduction*.
In addition to the 7 effects of nanoe™ X, the indoor unit can also be cleaned with a short operation of nanoe™ X + dry mode.

* Controllers (CZ-RTC5B or CZ-RTC6/BL/BLW) are required.

After cooling/drying operation, the inside of the indoor unit is automatically dried and nanoe™ X is activated to suppress mould growth and to reduce odour.



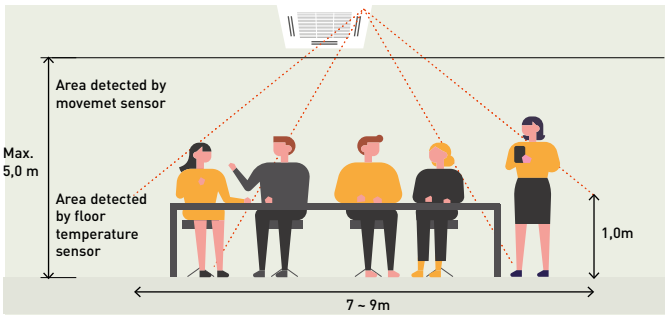
Operates the fan to discharge internal humidity.



Operate the fan to circulate nanoe™ X internally.

Optional Econavi intelligent sensor

Human activity sensor and floor temperature sensor can reduce waste energy, by optimising air conditioner operation.



Advanced Econavi functions.

2 sensors (movement and floor temperature) can provide a reduction in wasted energy by means of effective control. The floor temperature can be detected with a ceiling height of 5 m.

Econavi exclusive panel. Optional (CZ-KPU3AW)



Floor temperature sensor.
This sensor detects average floor temperature and operates circulation if floor temperature is low.

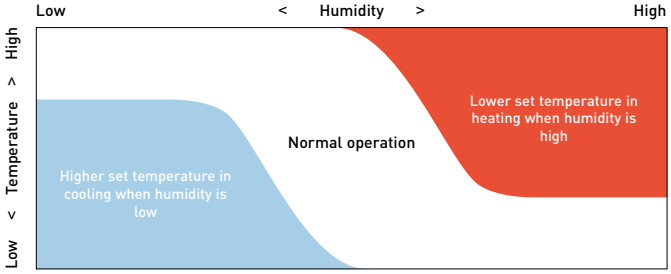
Movement sensor.
This sensor detects the amount of human activity, and operates effectively.



Wired remote controller CZ-RTC5B or CZ-RTC6/BL is required.

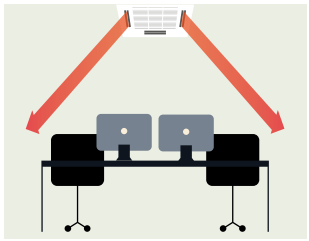
Humidity sensor.

A humidity sensor positioned in the air inlet provides comfort and saves energy based on temperature and humidity.

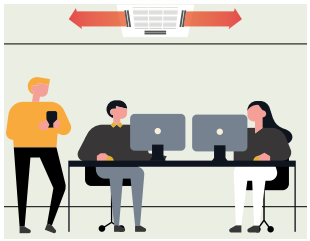


Group control, circulation function.

Circulating operation is activated when a room is unoccupied to evenly distribute air and minimize thermal stratification in both heating and cooling operation.



Circulation by detecting no movement (10 min.)



Indirect air flow by detecting movement.

NEW 2021



nanoe™ X as a standard.

NEW U2 Type 4 way 90x90 cassette • R32/R410A

The 4 way 90x90 cassettes with integrated nanoe X Generator Mark 2 and new panel design.
Panasonic introduces a modern flat panel design to blend into any space. These cassettes have been developed to satisfy today's customer needs such as high energy saving, comfort and better indoor air quality.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model		S..MU2E5B	22	28	36	45	56	60	73	90	106	140	160
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	6,0	7,3	9,0	10,6	14,0	16,0
Input power cooling		W	20,00	20,00	20,00	20,00	25,00	35,00	40,00	40,00	90,00	95,00	105,00
Current (cool)		A	0,21	0,21	0,21	0,21	0,23	0,33	0,36	0,38	0,71	0,74	0,82
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	7,1	8,0	10,0	11,4	16,0	18,0
Input power heating		W	20,00	20,00	20,00	20,00	25,00	35,00	40,00	40,00	85,00	90,00	100,00
Current (heat)		A	0,20	0,20	0,20	0,20	0,22	0,32	0,35	0,37	0,69	0,72	0,80
Fan type			Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan	Turbo fan
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Air flow	Hi/Med/Lo	m³/min	14,50/13,00/11,50	14,50/13,00/11,50	14,50/13,00/11,50	15,50/13,00/11,50	16,50/13,50/11,50	21,00/16,00/13,00	22,50/16,00/13,00	23,00/18,50/14,00	34,00/25,00/19,00	36,00/26,00/20,00	37,00/28,00/24,00
Sound pressure	Hi/Med/Lo	dB(A)	30/29/28	30/29/28	30/29/28	31/29/28	32/30/28	36/32/29	37/32/29	38/35/32	44/38/34	45/39/35	46/40/38
Sound power	Hi/Med/Lo	dB(A)	45/44/43	45/44/43	45/44/43	46/44/43	47/45/43	51/47/44	52/47/44	53/50/47	59/53/49	60/54/50	61/55/53
Dimension (H x W x D)	Indoor	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight (Panel)		kg	19 (5)	19 (5)	19 (5)	19 (5)	19 (5)	20 (5)	20 (5)	20 (5)	25 (5)	25 (5)	25 (5)
Pipe diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52) [1]	3/8 (9,52) [1]	3/8 (9,52) [1]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88) [1]	5/8 (15,88) [1]	5/8 (15,88) [1]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRU3W	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black

Accessories	
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-KPU3W	Standard panel
CZ-KPU3AW	Econavi exclusive panel
CZ-CENSC1	Econavi energy savings sensor
CZ-FDU3+CZ-ATU2	Fresh air-intake kit
CZ-CGLSC1	R32 refrigerant leak detector

1) When the pipe diameter is (Liquid) Ø6,35(1/4) - (Gas) Ø12,7(1/2), connect the liquid socket tube (Ø6,35 - Ø9,52) to the liquid tubing side indoor unit and connect the gas socket tube (Ø12,7 - Ø15,88) to the gas tubing side indoor unit. * Above values are in the case of nanoe™ X OFF.

Technical focus

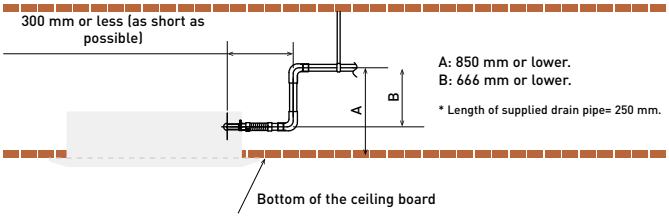
- High performance turbo fan, new path system for heat exchanger
- Lower noise in slow fan operation
- Ceiling height up to 5,0 m
- Industry top light weight, easy piping
- Econavi: Floor temperature and humidity sensor added. Activity amount detection and new circulator
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality, indoor unit internal cleaning with nanoe™ X and dry operation
- Powerful drain pump gives 850 mm lift
- Fresh air knockout
- Branch duct connection
- High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3+CZ-ATU2)

Panel design

Flat design, well-matched with interior.
Position of 4 air wings can be set individually.

The drain pipe can be raised to a maximum height of 850 mm from the bottom of the ceiling

Integrated drain pump allows a drain height of 850 mm making the installation much easier.



28% ECONAVI | nanoeX | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL MILD DRY | AUTO-FLAP CONTROL | AUTOMATIC RESTART | AIR SWEEP | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

NEW 2021



NEW Y2 Type 4 way 60x60 cassette • R32/R410A

Designed to fit exactly into a 600 x 600 mm ceiling grid without the need to alter the bar configuration.
The Y2 is ideal for small commercial and retrofit applications. In addition, the improvements to efficiency make this one of the most advanced units in the industry.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-15MY2E5B	S-22MY2E5B	S-28MY2E5B	S-36MY2E5B	S-45MY2E5B	S-56MY2E5B
Cooling capacity		kW	1,5	2,2	2,8	3,6	4,5	5,6
Input power cooling		W	35,00	35,00	35,00	40,00	40,00	45,00
Operating current cooling		A	0,30	0,30	0,30	0,30	0,32	0,35
Heating capacity		kW	1,7	2,5	3,2	4,2	5,0	6,3
Input power heating		W	30,00	30,00	30,00	35,00	35,00	40,00
Operating current heating		A	0,25	0,25	0,30	0,30	0,30	0,30
Fan type			Centrifugal fan	Centrifugal fan	Centrifugal fan	Centrifugal fan	Centrifugal fan	Centrifugal fan
Air flow (Hi / Med / Lo)	Cool	m³/min	8,90/8,20/5,60	9,10/8,20/5,60	9,30/8,40/5,60	9,70/8,70/6,00	10,00/9,30/8,20	10,40/9,80/8,50
	Heat	m³/min	9,10/8,40/5,60	9,30/8,40/5,60	9,60/8,70/5,60	9,90/9,10/6,00	10,30/9,60/8,20	11,10/9,80/8,70
Sound pressure	Hi / Med / Lo	dB(A)	34/31/25	35/31/25	35/31/25	36/32/26	38/34/28	40/37/34
Sound power	Hi / Med / Lo	dB(A)	49/46/40	50/46/40	50/46/40	51/47/41	53/49/43	55/52/49
Dimension (H x W x D)	Indoor	mm	288 x 583 x 583	288 x 583 x 583	288 x 583 x 583	288 x 583 x 583	288 x 583 x 583	288 x 583 x 583
	Panel AW	mm	31 x 700 x 700	31 x 700 x 700	31 x 700 x 700	31 x 700 x 700	31 x 700 x 700	31 x 700 x 700
	Panel BW	mm	31 x 625 x 625	31 x 625 x 625	31 x 625 x 625	31 x 625 x 625	31 x 625 x 625	31 x 625 x 625
Net weight		kg	20,4 (18 + 2,4)	20,4 (18 + 2,4)	20,4 (18 + 2,4)	20,4 (18 + 2,4)	20,4 (18 + 2,4)	20,4 (18 + 2,4)
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White

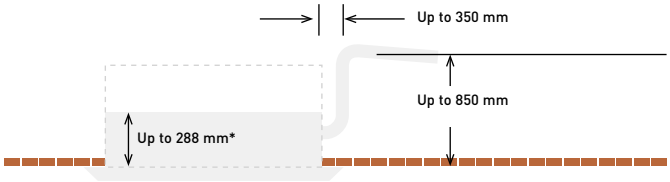
Accessories	
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-KPY3AW	Panel 700 x 700 mm
CZ-KPY3BW	Panel 625 x 625 mm
CZ-CENSC1	Econavi energy savings sensor
CZ-CGLSC1	R32 refrigerant leak detector

Technical focus

- Mini cassette fits into a 600 x 600 mm ceiling grid
- Optimized air distribution
- Multidirectional air flow
- Powerful drain pump gives 750 mm lift
- Variable speed DC fan motors and optimized heat exchanger to maximize efficiency

A drain height of approximately 850 mm from the ceiling surface

The drain height can be increased by approximately 350 mm over the conventional value by using a high-lift drain pump, and long horizontal piping is possible.
A lightweight unit at 18,4 kg the unit is also very slim with a height of only 288 mm, making installation possible even in narrow ceilings.



28% ECONAVI | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTO-FLAP CONTROL | AUTOMATIC RESTART | AIR SWEEP | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.



L1 Type 2 way cassette • R410A

Slim, compact and lightweight units.
Remarkable size and weight reductions have been achieved by improvement of the design around the fan, the weight of all models now being 30 kg.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-22ML1E5	S-28ML1E5	S-36ML1E5	S-45ML1E5	S-56ML1E5	S-73ML1E5
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,3
Input power cooling		W	90,00	92,00	93,00	97,00	97,00	145,00
Operating current cooling		A	0,45	0,45	0,45	0,45	0,45	0,65
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0
Input power heating		W	58,00	60,00	61,00	65,00	65,00	109,00
Operating current heating		A	0,29	0,29	0,29	0,29	0,29	0,48
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air flow	Hi / Med / Lo	m^3/min	8,00/7,00/6,00	9,00/8,00/7,00	9,70/8,70/7,70	11,00/9,00/8,00	11,00/9,00/8,00	19,00/16,00/14,00
Sound pressure	Hi / Med / Lo	dB(A)	30/27/24	33/29/26	34/31/28	35/33/29	35/33/29	38/35/33
Dimension (H x W x D)	Indoor	mm	350 x 840 x 600	350 x 840 x 600	350 x 840 x 600	350 x 840 x 600	350 x 840 x 600	350 x 1140 x 600
	Panel	mm	8 x 1060 x 680	8 x 1060 x 680	8 x 1060 x 680	8 x 1060 x 680	8 x 1060 x 680	8 x 1360 x 680
Net weight (Panel)		kg	26,0 (8,0)	26,0 (8,0)	26,0 (8,0)	26,0 (8,0)	26,0 (8,0)	26,0 (8,0)
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRL3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-02KPL2	Panel for S-22 to S-56 models
CZ-03KPL2	Panel for S-73 model

Technical focus

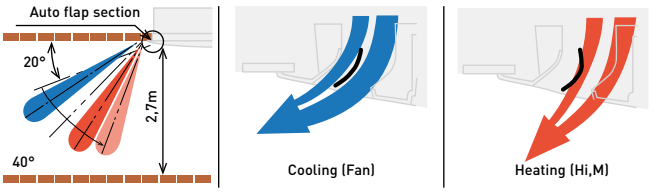
· Air flow and distribution is automatically altered depending on the operational mode of the unit
· Drain up is possible up to 500 mm from the drain port
· Simple maintenance

Simple maintenance

The drain pan is equipped with site wiring and can be removed. The fan case has a split construction, and the fan motor can be removed easily when the lower case is removed.

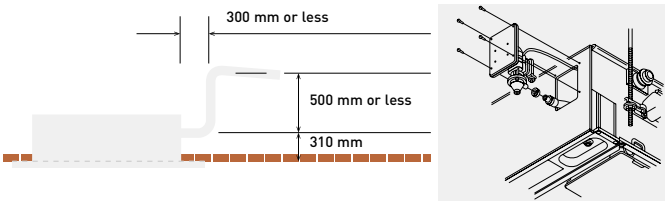
Auto flap control

Air flow and distribution is automatically altered depending on the operational mode of the unit.



Drain up is possible up to 500 mm from the drain port

Maintenance of the drain pump is possible from two sides, from the left side (piping side) and from the inside of the unit.



SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTO-FLAP CONTROL | AUTOMATIC RESTART | AIR SWEEP | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



D1 Type 1 way cassette • R410A

Designed for installation within the ceiling void, the D1 range of slimline 1 way blow cassettes feature powerful yet quiet fans for up to 4,2 m.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-28MD1E5	S-36MD1E5	S-45MD1E5	S-56MD1E5	S-73MD1E5
Cooling capacity		kW	2,8	3,6	4,5	5,6	7,3
Input power cooling		W	51,00	51,00	51,00	60,00	87,00
Operating current cooling		A	0,39	0,39	0,39	0,46	0,70
Heating capacity		kW	3,2	4,2	5,0	6,3	8,0
Input power heating		W	40,00	40,00	40,00	48,00	76,00
Operating current heating		A	0,35	0,35	0,35	0,41	0,65
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air flow	Hi / Med / Lo	m³/min	12,00/10,00/9,00	12,00/10,00/9,00	12,00/11,00/10,00	13,00/11,50/10,00	18,00/15,00/13,00
Sound pressure	Hi / Med / Lo	dB(A)	36/34/33	36/34/33	36/35/34	38/36/34	45/40/36
Dimension (H x W x D)	Indoor	mm	200 x 1000 x 710	200 x 1000 x 710	200 x 1000 x 710	200 x 1000 x 710	200 x 1000 x 710
	Panel	mm	20 x 1230 x 800	20 x 1230 x 800	20 x 1230 x 800	20 x 1230 x 800	20 x 1230 x 800
Net weight (Panel)		kg	23,5 (7,5)	23,5 (7,5)	23,5 (7,5)	23,5 (7,5)	24,5 (7,5)
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)

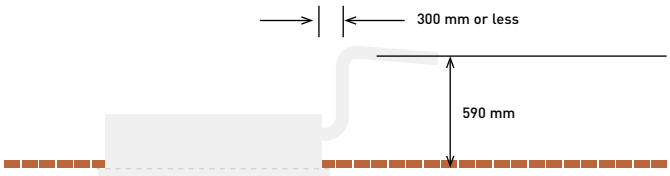
Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRD3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-KPD2	Panel

Technical focus

· Ultra-Slim
· Suitable for standard and high ceilings
· Built-in drain pump provides 590 mm lift
· Easy to install and maintain
· Hanging height can be easily adjusted
· Uses a DC fan motor to improve energy-efficiency

Drain height



With 3 types of air-blow systems, the units can be used in various ways



1. One-direction "down-blow" system.
Powerful one-direction "down-blow" system reaches the floor even from high ceilings (up to 4,2 m).



2. Two-direction ceiling-mounted system.
"Down-blow" and "front-blow" systems are combined in a ceiling-mounted unit to blow air over a wide area.



3. One-direction ceiling-mounted system.
This powerful ceiling-mounted "front-blow" system efficiently air-conditions the space in front of the unit. (Additional accessories required).

SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTO-FLAP CONTROL | AUTOMATIC RESTART | AIR SWEEP | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

INTERNET CONTROL: Optional.



nanoe™ X as a standard.

NEW 2021

NEW F3 Type variable static pressure adaptive duct
• R32/R410A

New design adaptive ducted F3 range.
2 installation possibilities (horizontal / vertical) with high ESP 150 Pa allows flexible installation.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

R32 model*		S . .MF3E5B	15	22	28	36	45	56	60	73	90	106	140	160
R410A model		S . .MF3E5A	15	22	28	36	45	56	60	73	90	106	140	160
Cooling capacity		kW	1,5	2,2	2,8	3,6	4,5	5,6	6,0	7,3	9,0	10,6	14,0	16,0
Input power cooling		W	60,00	60,00	60,00	60,00	60,00	89,00	79,00	79,00	136,00	146,00	265,00	330,00
Current (cool)		A	0,45	0,45	0,45	0,45	0,45	0,63	0,52	0,52	0,90	1,00	1,76	2,14
Heating capacity		kW	1,7	2,5	3,2	4,2	5,0	6,3	7,1	8,0	10,0	11,4	16,0	18,0
Input power heating		W	60,00	60,00	60,00	60,00	60,00	89,00	79,00	79,00	136,00	146,00	265,00	330,00
Current (heat)		A	0,45	0,45	0,45	0,45	0,45	0,63	0,52	0,52	0,90	1,00	1,76	2,14
R32 leakage sensors			2	2	2	2	2	2	2	2	2	2	2	2
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Air flow [1]	Hi/Med/Lo	m³/min	14/12/8	14/12/8	14/12/8	14/12/8	14/12/8	16/14/10	21/18/15	21/18/15	25/23/16	32/26/21	37/32/26	40/34/28
External static pressure		Pa	30 (10-150)	30 (10-150)	30 (10-150)	30 (10-150)	30 (10-150)	30 (10-150)	30 (10-150)	30 (10-150)	40 (10-150)	40 (10-150)	50 (10-150)	50 (10-150)
Sound pressure	Hi/Med/Lo	dB(A)	31/28/20	31/28/20	31/28/20	31/28/20	31/28/20	35/32/24	31/28/23	31/28/23	35/33/25	36/32/27	41/36/32	43/37/33
Sound power	Hi/Med/Lo	dB(A)	54/51/43	54/51/43	54/51/43	54/51/43	54/51/43	58/55/47	54/51/46	54/51/46	58/56/48	59/55/50	64/59/55	66/60/56
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 800 x 730	250 x 800 x 730	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	26	26	26	26	26	26	31	31	31	40	40	40
Pipe diameter R32 model	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe diameter R410A model	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor

1) Value referred to standard settings at shipment (H curve 8, M curve 5, L curve 1). * Available in summer 2021.

Technical focus

- 4 installation possibilities with horizontal and vertical mounting and selectable rear or bottom air inlet
- Industry leading low noise with super quiet operation, minimum 20 dB(A)
- Only 250 mm height and lightweight unit from 26 to 42 kg
- Integrated R32 refrigerant leak detectors
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included [1]
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard, effective even at duct connections up to 10 m and 3 bends [2]

1) For use with horizontal installation only
2) Panasonic internal survey.

Vertical Installation

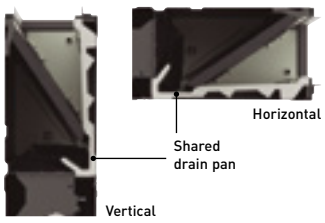
New vertical installation option. Variable external static pressure to support ducted installations with bends.

* Vertical installation requires additional settings on field, please check the installation manual.



Improved drain pan design

Drain pan is shared in both cases horizontal and vertical installation.
No need to alternate anymore.



28% ECONAVI | nanoe™X | FILTER INCLUDED | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



F2 Type variable static pressure hide-away • R410A

The F2 type is designed specifically for applications requiring fixed square ducting.
The internal filter is equipped as standard.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model		S . .MF2E5A	15	22	28	36	45	56	60	73	90	106	140	160
Cooling capacity		kW	1,5	2,2	2,8	3,6	4,5	5,6	6,0	7,3	9,0	10,6	14,0	16,0
Input power cooling		W	70,00	70,00	70,00	70,00	70,00	100,00	120,00	120,00	135,00	195,00	215,00	225,00
Current (cool)		A	0,57	0,57	0,57	0,57	0,57	0,74	0,89	0,89	0,97	1,30	1,44	1,50
Heating capacity		kW	1,7	2,5	3,2	4,2	5,0	6,3	7,1	8,0	10,0	11,4	16,0	18,0
Input power heating		W	70,00	70,00	70,00	70,00	70,00	100,00	120,00	120,00	135,00	200,00	210,00	225,00
Current (heat)		A	0,57	0,57	0,57	0,57	0,57	0,74	0,89	0,89	0,97	1,34	1,42	1,50
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air volume [1]	Hi/Med/Lo	m³/min	14,00/13,00/9,00	14,00/13,00/9,00	14,00/13,00/9,00	14,00/13,00/9,00	14,00/13,00/10,00	16,00/15,00/12,00	21,00/19,00/15,00	21,00/19,00/15,00	25,00/23,00/19,00	32,00/26,00/21,00	34,00/29,00/23,00	36,00/32,00/25,00
External static pressure		Pa	70(10-150)	70(10-150)	70(10-150)	70(10-150)	70(10-150)	70(10-150)	70(10-150)	70(10-150)	70(10-150)	100(10-150)	100(10-150)	100(10-150)
Sound pressure / power	Hi/Med/Lo	dB(A)	33/29/22 55/51/44	33/29/22 55/51/44	33/29/22 55/51/44	33/29/22 55/51/44	34/32/25 56/54/47	34/32/25 56/54/47	35/32/26 57/54/48	35/32/26 57/54/48	37/34/28 59/56/50	38/34/31 60/56/53	39/35/32 61/57/54	40/36/33 62/58/55
Dimension	H x W x D	mm	290 x 800 x 700	290 x 800 x 700	290 x 800 x 700	290 x 800 x 700	290 x 800 x 700	290 x 800 x 700	290 x 1000 x 700	290 x 1000 x 700	290 x 1000 x 700	290 x 1400 x 700	290 x 1400 x 700	290 x 1400 x 700
Net weight		kg	29	29	29	29	29	29	34	34	34	46	46	46
Piping connections	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor

1) Value referred to standard settings at shipment (H curve 8, M curve 5, L curve 1).

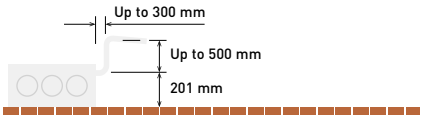
Technical focus

· Industry-leading low sound levels from 25 dB(A)
· Built-in drain pump provides 785 mm lift
· Easy to install and maintain
· Air OFF sensor avoids cold air dumping
· Configurable air temperature control

Air inlet plenum	Dampers diameters	Model
15, 22, 28, 36, 45 & 56	2 x Ø200	CZ-DUMPA56MF2
60, 73 & 90	3 x Ø200	CZ-DUMPA90MF2
106, 140 & 160	4 x Ø200	CZ-DUMPA160MF2

More powerful drain pump

Using a high-lift drain pump, drain piping can be elevated up to 785 mm from the base of the unit.



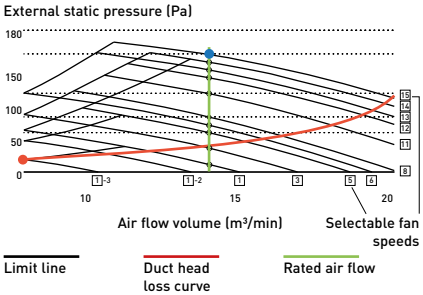
F2 Advantages

Automatic learning function for the required static pressure, to be activated easily by the standard wired timer remote controller.
Possible to increase the sensible cooling capacity by adjusting the air volume flow in order to almost completely eliminate latent losses. This is possible due to the outstanding big heat exchanger surface in combination with increasing the air volume flow by a manual selection of higher fan speed curves through the standard wired remote controller when commissioning the system together with the default active off-coil temperature control and the room load based variable evaporation temperature control.



ECONAVI and INTERNET CONTROL: Optional.

Diagram 1 S-22MF2E5A



NEW 2021



NEW M1 Type slim variable static pressure hide-away concealed duct • R32/R410A

The ultra slim M1 type is one of the leading products of its type in the industry.
With a depth of only 200 mm it provides greater flexibility and can be used in far more applications.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-15MM1E5B	S-22MM1E5B	S-28MM1E5B	S-36MM1E5B	S-45MM1E5B	S-56MM1E5B
Cooling capacity		kW	1,5	2,2	2,8	3,6	4,5	5,6
Input power cooling		W	36,00	36,00	40,00	42,00	49,00	64,00
Operating current cooling		A	0,26	0,26	0,30	0,31	0,37	0,48
Heating capacity		kW	1,7	2,5	3,2	4,2	5,0	6,3
Input power heating		W	26,00	26,00	30,00	32,00	39,00	54,00
Operating current heating		A	0,23	0,23	0,27	0,28	0,34	0,45
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air flow	Hi / Med / Lo	m³/min	8,00/7,00/6,00	8,00/7,00/6,00	8,50/7,50/6,50	9,00/8,00/7,00	10,50/9,50/8,00	12,50/11,50/10,00
External static pressure		Pa	10 (30)	10 (30)	15 (30)	15 (40)	15 (40)	15 (40)
Sound pressure	Hi / Med / Lo [1]	dB(A)	28/27/25 (30/29/27)	28/27/25 (30/29/27)	30/29/27 (32/31/29)	32/30/28 (34/32/30)	34/32/30 (36/34/32)	35/33/31 (37/35/32)
Sound power	Hi / Med / Lo	dB(A)	43/42/40	43/42/40	45/44/42	47/45/43	49/47/45	50/48/46
Dimension	H x W x D	mm	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640	200 x 750 x 640
Net weight		kg	19	19	19	19	19	19
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

1) By DIP switches or by RC setting.

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor
CZ-CGLSC1	R32 refrigerant leak detector

Technical focus

· Ultra-slim profile: 200 mm for all models
· DC fan motor greatly reduces power consumption
· Ideal for hotel application with very narrow false ceilings
· Easy maintenance and service by external electrical box
· 40 Pa static pressure enables ductwork to be fitted
· Includes drain pump

In addition, its high-efficiency and extremely quiet sound levels make it very popular with many users, including hotels and small offices.

Air outlet & inlet plenum

	Diameters	Air outlet plenum	Diameters	Air inlet plenum
22 , 28 & 36	2 x Ø200	CZ-DUMPA22MMS2	2 x Ø200	CZ-DUMPA22MMR2
45 & 56	3 x Ø160	CZ-DUMPA45MMS3	2 x Ø200	CZ-DUMPA45MMR3

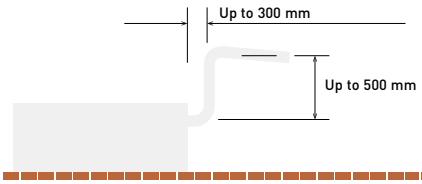
* Plenums installed with an R32 Mini ECOi system may only be used when no refrigerant R32 refrigerant leak detector is required. Please refer to technical data manual for refrigerant installation requirements.

Ultra-slim profile for all models

200 mm

Drain pump with increased power!

By adoption of a high-lift drain pump, the drain piping rise height can be increased to 785 mm from the lower surface of the body.



28% ECONAVI | FILTER INCLUDED | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

E2 Type high static pressure hide-away • R410A



High pressure duct and 100 % Fresh air duct function.
The E2 range of ducted units offers improved design flexibility for extended duct layouts as a result of their increased external static pressures and reduces energy consumption

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			100 % Fresh air duct function (by using Kit for 100 % fresh air)				High pressure duct			
			S-224ME2E5		S-280ME2E5		S-224ME2E5		S-280ME2E5	
			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	22,4	21,2	28,0	26,5	22,4	25,0	28,0	31,5
Input power		W	290,00	290,00	350,00	350,00	440,00	440,00	715,00	715,00
Operating current		A	1,85	1,85	2,20	2,20	2,45	2,45	3,95	3,95
Air flow	Hi / Med / Lo	m³/min	28,30 / — / —		35,00 / — / —		56,00 / 51,00 / 44,00		72,00 / 63,00 / 53,00	
External static pressure		Pa	200		200		140 (60 - 270) [1]		140 (72 - 270) [1]	
Sound pressure [2]	Hi / Med / Lo	dB(A)	43 / — / —		44 / — / —		45 / 43 / 41		49 / 47 / 43	
Sound power	Hi / Med / Lo	dB(A)	75 / — / —		76 / — / —		77 / 75 / 73		81 / 79 / 75	
Dimension	H x W x D	mm	479 x 1453 x 1205		479 x 1453 x 1205		479 x 1453 x 1205		479 x 1453 x 1205	
Net weight		kg	102		106		102		106	
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)		3/8 (9,52)		3/8 (9,52)		3/8 (9,52)	
	Gas pipe	Inch (mm)	3/4 (19,05)		7/8 (22,22)		3/4 (19,05)		7/8 (22,22)	

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor

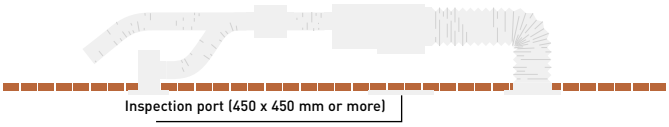
Rating Conditions for 100 % Fresh air duct function: Cooling Outdoor 33 °C DB / 28 °C WB. Heating Outdoor 0 °C DB / -2,9 °C WB.
1) Available to select the setting by initial setup. 2) Values with 140 Pa setting. * No filter included. ** No compatible with 3-Pipe ECO G GF3.

Technical focus

- No need of rap valve
- 100 % fresh air duct function
- DC fan motor for more savings
- Complete flexibility for ductwork design
- Can be located into a weatherproof housing for external sitting
- Air OFF sensor avoids cold air dumping
- Configurable air temperature control

System example

An inspection port (450 x 450 mm or more) is required at the lower side of the indoor unit body (field supply).



100 % fresh air duct function

The E2 duct with 100 % fresh air duct function have exceptional discharge temperature.

	Discharge Range		
	Min	**Max**	**Default**
Cooling	15 °C	24 °C	18 °C
Heating	17 °C	**45 °C**	40 °C

Plenums

Air outlet plenum (suitable for rigid + flexible duct)		
	Number of exits with diameters	Model
S-224ME2E5 / S-280ME2E5	1 x 500 mm	CZ-TREMIESPW706

Kit for 100 % Fresh air function

Kit for 100 % fresh air function for 2 Way systems	
2x CZ-P160RVK2	Rap valve kit
2x CZ-CAPE2	3 Way control PCB
CZ-P680BK2BM	Distribution Joint kit
	1x Remote controller

Kit for 100 % fresh air function for 3 Way systems	
2x CZ-P160HR3	3 way valve Kit
2x CZ-CAPE2	3 Way control PCB
CZ-P680BH2BM	Distribution Joint kit
	1x Remote controller

28% ECONAVI | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

Heat recovery with DX coil • R410A



Motorised heat recovery by-pass device automatically controlled by unit control to use fresh air free-cooling when convenient.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			PAW-500ZDX3N		PAW-800ZDX3N		PAW-01KZDX3N	
Power source	Voltage	V	230		230		230	
	Phase		Single phase		Single phase		Single phase	
	Frequency	Hz	50		50		50	
Air flow		m³/min	8,33		13,33		16,67	
External static pressure [1]		Pa	90		120		115	
Maximum current	Total full load	A	0,6		1,4		2,1	
Input power		W	150		320		390	
Sound pressure [2]		dB(A)	39		42		43	
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)		1/4 (6,35)		1/4 (6,35)	
	Gas pipe	Inch (mm)	1/2 (12,70)		1/2 (12,70)		1/2 (12,70)	
Heat recovery			**Cooling**	**Heating**	**Cooling**	**Heating**	**Cooling**	**Heating**
Temperature efficiency		%	76	76	76	76	76	76
Enthalpy efficiency		%	63	67	63	65	60	62
Saved power summer mode or winter mode*		kW	1,70	4,30 (4,80)	2,50	6,50 (7,30)	3,20	8,20 (9,00)
DX coil								
Total / Sensible cooling capacity		kW	3,00 / 2,10	2,50 / 2,70	5,10 / 3,50	4,40 / 4,80	5,80 / 4,10	5,20 / 6,70
OFF temperature		°C	15,9	28,0 (27,3)	15,5	29,6 (29,0)	16,2	28,5 (27,8)
OFF relative humidity		%	90	16 (15)	90	14 (13)	89	15 (14)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

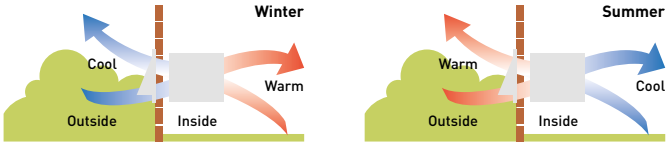
Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black

Nominal summer conditions: Outside air: 32 °C DB, RH 50 %. Ambient air: 26 °C DB, RH 50 %. Nominal winter conditions: Outside air: -5 °C DB, RH 80 %. Ambient air: 20 °C DB, RH 50 %. Cooling mode air inlet condition: 28,5 °C DB, RH 50 %; evaporating temperature 7 °C. Heating mode air inlet condition: 13 °C DB, RH 40 % (11 °C DB, RH 45 %); condensating temperature 40 °C. DB: Dry Bulb; RH: Relative Humidity. 1) Referred to the nominal air flow after filter and plate heat exchanger. 2) Sound pressure level calculated at 1 m far from: ducted supply exhaust air ducted return - first air intake / service side, at normal condition. * Tentative data.

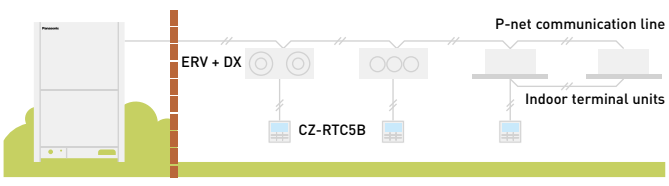
Technical focus

- Galvanized steel self-supporting panels, internally and externally insulated
- High efficiency enthalpic heat recover, static cross flow type, made by membrane with high moisture permeability, good air tightness, excellent tear resistance, and aging resistance, it is structures with flat plates and corrugated plates. Total heat exchange with temperature efficiency up to 76 % and enthalpy efficiency up to 67 %, also at high level during summer season
- ISO16890 ePm2,5 95 % (F9 EN 779) efficiency class filter with synthetic cleanable media and COARSE 50 % (G3 EN 779) pre-filter ON fresh air, COARSE 50 % filter on return air intake
- Removable side panel to access filters and heat recovery in the event of scheduled maintenance
- Low consumption, high efficiency & low noise direct driven fans
- Supply section complete with DX coil (R410A) fitted with solenoid control valve, freon filter, contact temperature sensors on liquid and gas line, NTC sensors upstream and downstream air flow
- Built-in electric box equipped with PCB to control internal fan speed and to interconnect outdoor/indoor units
- Duct connection by circular plastic collars

Balanced ventilation



Interconnection to outdoor/indoor units



SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



T2 Type ceiling • R410A

The T2 Type ceiling mounted units feature a DC fan motor for increased efficiency and reduced operating sound levels.
All the units are the same height and depth for a uniform appearance in mixed installations and feature a fresh air knockout for improved air quality.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-36MT2E5A	S-45MT2E5A	S-56MT2E5A	S-73MT2E5A	S-106MT2E5A	S-140MT2E5A
Cooling capacity		kW	3,6	4,5	5,6	7,3	10,6	14,0
Input power cooling		W	35,00	40,00	40,00	55,00	80,00	100,00
Operating current cooling		A	0,36	0,38	0,38	0,44	0,67	0,79
Heating capacity		kW	4,2	5,0	6,3	8,0	11,4	16,0
Input power heating		W	35,00	40,00	40,00	55,00	80,00	100,00
Operating current heating		A	0,36	0,38	0,38	0,44	0,67	0,79
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air flow	Hi / Med / Lo	m³/min	14,00/12,00/10,50	15,00/12,50/10,50	15,00/12,50/10,50	21,00/18,00/15,50	30,00/25,00/23,00	32,00/28,00/24,00
Sound pressure	Hi / Med / Lo	dB(A)	36/32/30	37/33/30	37/33/30	39/35/33	42/37/36	46/40/37
Sound power	Hi / Med / Lo	dB(A)	54/50/48	55/51/48	55/51/48	57/53/51	60/55/54	62/58/55
Dimension	H x W x D	mm	235 x 960 x 690	235 x 960 x 690	235 x 960 x 690	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	27	27	27	33	40	40
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)

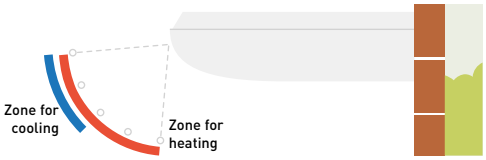
Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRT3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor

Technical focus

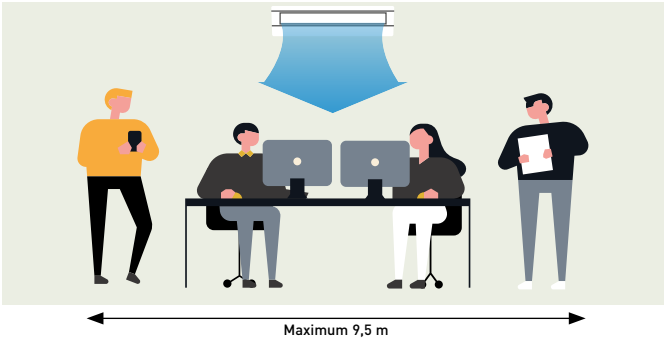
· Low sound levels
· New design, all units just 235 mm high
· Large and wide air distribution
· Easy to install and maintain
· Fresh air knockout

Air distribution is altered depending on the operational mode



Further comfort improvement with air flow distribution

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms.
The wide air discharge opening expands the air flow to the left and the right. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, so that the degree of comfort is increased.



28% ECONAVI | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTO-FLAP CONTROL | AUTOMATIC RESTART | AIR SWEEP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

NEW 2021



NEW K2 Type wall-mounted • R32/R410A

The wall-mounted unit has a stylish smooth panel that looks good and easy to clean.
The unit is also smaller, lighter and substantially quieter than previous models making it ideal for small offices and other commercial applications.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-15MK2E5B	S-22MK2E5B	S-28MK2E5B	S-36MK2E5B	S-45MK2E5B	S-56MK2E5B	S-73MK2E5B	S-106MK2E5B
Cooling capacity		kW	1,5	2,2	2,8	3,6	4,5	5,6	7,3	10,6
Input power cooling		W	25,00	25,00	25,00	30,00	30,00	35,00	55,00	80,00
Operating current cooling		A	0,20	0,21	0,23	0,25	0,32	0,35	0,51	0,70
Heating capacity		kW	1,7	2,5	3,2	4,2	5,0	6,3	8,0	11,4
Input power heating		W	25,00	25,00	25,00	30,00	30,00	35,00	55,00	80,00
Operating current heating		A	0,20	0,21	0,23	0,25	0,32	0,35	0,51	0,70
Fan type			Cross flow	Cross flow	Cross flow	Cross flow	Cross flow	Cross flow	Cross flow	Cross flow
Air flow	Cool (Hi / Med / Lo)	m³/min	7,90/7,40/6,50	9,00/7,50/6,50	9,50/8,30/6,50	10,90/9,00/6,50	14,50/12,50/10,00	16,00/14,00/12,00	19,50/17,00/14,00	21,50/18,50/15,00
	Heat (Hi / Med / Lo)	m³/min	9,00/7,70/6,80	9,20/8,30/6,80	9,70/8,50/6,80	11,20/9,50/6,80	14,50/12,50/10,00	16,00/14,00/12,00	19,50/17,00/14,00	21,50/18,50/15,00
Sound pressure	Hi / Med / Lo	dB(A)	34/32/29	36/33/29	37/34/29	40/36/29	38/35/33	40/37/35	47/44/40	49/46/42
Sound power	Hi / Med / Lo	dB(A)	49/47/44	51/48/44	52/49/44	55/51/44	53/50/48	55/52/50	62/59/55	64/61/57
Dimension	H x W x D	mm	290 x 870 x 214	290 x 870 x 214	290 x 870 x 214	290 x 870 x 214	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	9	9	9	9	13	13	14	14
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52) [1]	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88) [1]	5/8 (15,88)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3	Infrared remote controller
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White

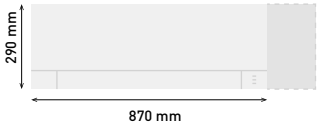
Accessories	
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor
CZ-P56SVK2	External valve for model sizes 15 to 56
CZ-P160SVK2	External valve for model sizes 73 to 106
CZ-CGLSC1	R32 refrigerant leak detector

1) When the pipe diameter is (Liquid) Ø6,35(1/4) - (Gas) Ø12,7(1/2), connect the liquid socket tube (Ø6,35 - Ø9,52) to the liquid tubing side indoor unit and connect the gas socket tube (Ø12,7 - Ø15,88) to the gas tubing side indoor unit.

Technical focus

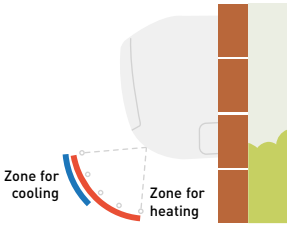
· Light and small units make the installation easy
· Quiet operation
· Smooth and durable design
· Piping outlet in six directions
· Air distribution is automatically altered depending on the operational mode

Lighter and smaller units



Light and small units make the installation easy. When the unit is turned OFF, the flap closes completely to prevent entry of dust into the unit and to keep the equipment clean.

Air distribution is automatically altered depending on the operational mode of the unit



Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

Piping outlet in six directions



Piping outlet is possible in the six directions of right, right rear, right bottom, left, left rear and left bottom, making the installation work easier.

External valve (optional)



CZ-P56SVK2 (model sizes 15 to 56)
CZ-P160SVK2 (model sizes 73 [1] to 106)

1) When the pipe diameter is liquid 1/4 (6,35) and gas 1/2 (12,70), use CZ-P56SVK2

28% ECONAVI · SELF-DIAGNOSING · AUTOMATIC FAN · HUMIDITY CONTROL DRY · AUTO-FLAP CONTROL · AUTOMATIC RESTART · AIR SWEEP · OPTIONAL WI-FI · BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



nanoe™ X as a standard.

G1 Type floor console • R410A

The stylish and compact unit profile, also used for residential market range, is easy to integrate into any design of building.
Compact and versatile, this system is capable of being installed in an area with limited space. It is a perfect solution for retrofit, replacing existing radiator panels.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-22MG1E5N	S-28MG1E5N	S-36MG1E5N	S-45MG1E5N	S-56MG1E5N
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6
Input power cooling		W	20,00	20,00	22,00	28,00	31,00
Operating current cooling		A	0,20	0,20	0,23	0,25	0,28
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3
Input power heating		W	21,00	21,00	23,00	29,00	32,00
Operating current heating		A	0,20	0,20	0,24	0,26	0,28
Fan type			Cross flow	Cross flow	Cross flow	Cross flow	Cross flow
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1	Mark 1
Air flow	Cool (Hi / Med / Lo)	m³/min	9,20/7,50/6,00	9,20/7,50/6,00	9,70/8,20/6,00	10,50/9,00/6,50	12,00/9,50/6,50
	Heat (Hi / Med / Lo)	m³/min	9,70/8,00/6,50	9,70/8,00/6,50	10,20/8,70/6,50	11,00/9,50/7,00	12,50/10,00/7,00
Sound pressure	Hi / Med / Lo	dB(A)	38/34/29	38/34/29	39/35/29	42/37/30	44/38/30
Dimension	H x W x D	mm	600 x 750 x 207	600 x 750 x 207	600 x 750 x 207	600 x 750 x 207	600 x 750 x 207
Net weight		kg	14	14	14	14	14
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3*	Infrared remote controller
PAW-RE2C4-M0D-WH	Modbus RS-485 touch room controller with I/O, White

Accessories	
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-M0D-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black
CZ-CENSC1	Econavi energy savings sensor

* Infrared remote controller (CZ-RWS3) doesn't need receiver as an optional. Receiver is included in the unit shipment.

1 nanoe™ X: Bringing nature's balance indoors

Panasonic's nanoe™ X technology brings nature's detergent – hydroxyl radicals – indoors to help improve protection 24/7 against several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen or hazardous substances.

2 Stylish and simple

- Clean and modern European design with slim depth
- Modern matt white color panel
- Washable air filter

The stylish and compact unit profile, also used for residential market range, is easy to integrate into any design of building.



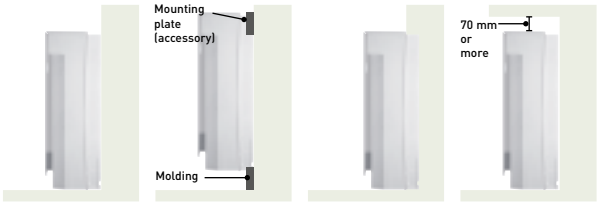
Dimension:
W x H x D = 750 x 600 x 207 mm

Weight:
14kg

3 Flexible easy installation

Four different mounting styles possible:
- Exposed (floor or wall)
- Semi-recessed
- Recessed

Flexible installation with 4 different options.



4 Functions for comfort

- Double Air Flow direction to maximize comfort
- Self-cleaning function
- Compatible with Commercial Wi-Fi Adaptor for cloud control

Self-cleaning function.
- Self cleaning function can be pre-scheduled with remote controller, up to a maximum of 90 minutes following cooling/dry operation
- Air flow will not blow directly at occupants during self-cleaning

28% ECONAVI | nanoeX | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.



P1 Type floor-standing • R410A

The compact Floor-standing P1 units are the ideal solution for providing perimeter air conditioning.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-22MP1E5	S-28MP1E5	S-36MP1E5	S-45MP1E5	S-56MP1E5	S-71MP1E5
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,1
Input power cooling		W	56,00	56,00	85,00	126,00	126,00	160,00
Operating current cooling		A	0,25	0,25	0,38	0,56	0,56	0,72
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0
Input power heating		W	40,00	40,00	70,00	91,00	91,00	120,00
Operating current heating		A	0,18	0,18	0,31	0,41	0,41	0,54
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air volume	Hi / Med / Lo	m³/min	7,00 / 6,00 / 5,00	7,00 / 6,00 / 5,00	9,00 / 7,00 / 6,00	12,00 / 9,00 / 8,00	15,00 / 13,00 / 11,00	17,00 / 14,00 / 12,00
External static pressure		Pa	15	15	15	15	15	15
Sound pressure	Hi / Med / Lo	dB(A)	33 / 30 / 28	33 / 30 / 28	39 / 35 / 29	38 / 35 / 31	39 / 36 / 31	41 / 38 / 35
Dimensions	H x W x D	mm	615 x 1065 x 230	615 x 1065 x 230	615 x 1065 x 230	615 x 1380 x 230	615 x 1380 x 230	615 x 1380 x 230
Net weight		kg	29	29	29	39	39	39
Piping connections	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)

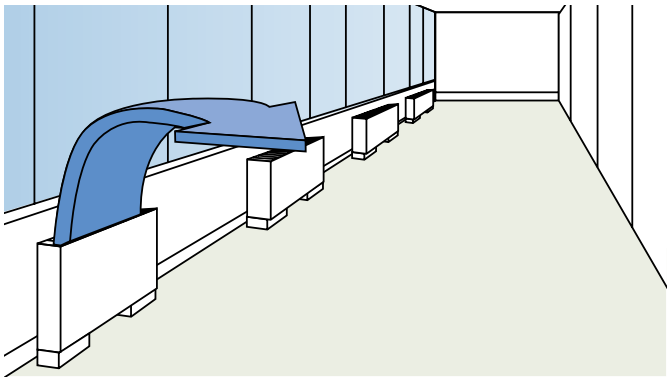
Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller

Accessories	
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black

Technical focus

· Pipes can be connected to either side of the unit from the bottom or rear
· Easy to install
· Front panel opens fully for easy maintenance
· Removable air discharge grille gives flexible airflow
· Room for condensate pump

Effective perimeter handling



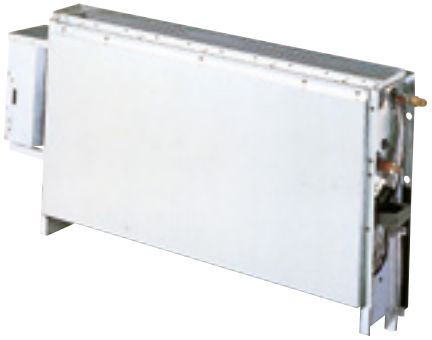
Effective perimeter handling



SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | OPTIONAL WI-FI | BMS CONNECTIVITY

INTERNET CONTROL: Optional.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



R1 Type concealed floor-standing • R410A

At just 229 mm deep, the R1 unit can be easily concealed in perimeter areas to provide powerful and effective air conditioning.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			S-22MR1E5	S-28MR1E5	S-36MR1E5	S-45MR1E5	S-56MR1E5	S-71MR1E5
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,1
Input power cooling		W	56,00	56,00	85,00	126,00	126,00	160,00
Operating current cooling		A	0,25	0,25	0,38	0,56	0,56	0,72
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0
Input power heating		W	40,00	40,00	70,00	91,00	91,00	120,00
Operating current heating		A	0,18	0,18	0,31	0,41	0,41	0,54
Fan type			Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan	Sirocco fan
Air volume	Hi / Med / Lo	m³/min	7,00/6,00/5,00	7,00/6,00/5,00	9,00/7,00/6,00	12,00/9,00/8,00	15,00/13,00/11,00	17,00/14,00/12,00
External static pressure		Pa	15	15	15	15	15	15
Sound pressure	Hi / Med / Lo	dB(A)	33/30/28	33/30/28	39/35/29	38/35/31	39/36/31	41/38/35
Dimensions	H x W x D	mm	616 x 904 x 229	616 x 904 x 229	616 x 904 x 229	616 x 1219 x 229	616 x 1219 x 229	616 x 1219 x 229
Net weight		kg	21	21	21	28	28	28
Piping connections	Liquid pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)
	Gas pipe	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)

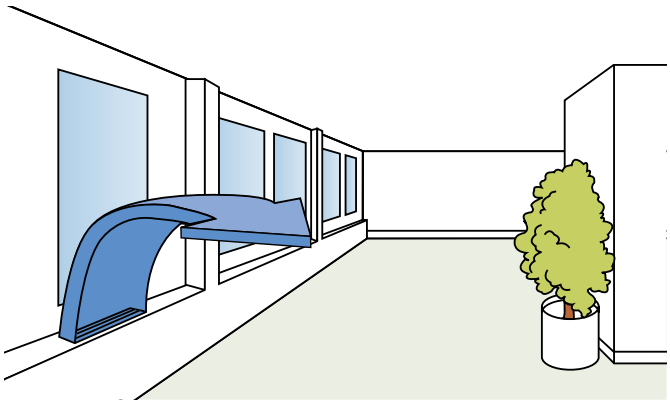
Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller

Accessories	
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black

Technical focus

- Chassis unit for discreet installation
- Complete with removable filters
- Pipes can be connected to either side of the unit from the bottom or rear
- Easy to install

Perimeter air conditioning with high interior quality



SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | OPTIONAL WI-FI | BMS CONNECTIVITY

INTERNET CONTROL: Optional.



Hydrokit for ECOi, water at 45 °C • R410A

Connect the Hydrokit to your VRF system, together with other indoor units.
Total system performs high energy efficiency by this heat recovering operation, and it gives an advantage for sustainability related assessment methods, such as BREEAM in UK.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model				S-80MW1E5	S-125MW1E5
Power source				230 V / Single phase / 50 Hz	230 V / Single phase / 50 Hz
Cooling capacity			kW	8,0	12,5
Heating capacity			kW	9,0	14,0
Maximum temperature			°C	~45 / ~65 [1]	~45 / ~65 [1]
Dimension	H x W x D		mm	892 x 502 x 353	892 x 502 x 353
Water pipe connector			Inch	R 1 ¼	R 1 ¼
Water pump (built-in)				DC motor (A class)	DC motor (A class)
Water flow rate	Cool		L/min	22,90	35,80
	Heat		L/min	25,80	40,10
Pipe diameter	Liquid pipe		Inch (mm)	3/8 (9,52)	3/8 (9,52)
	Gas pipe		Inch (mm)	5/8 (15,88)	5/8 (15,88)
	Drain piping			15 ~ 17 mm (inner size)	15 ~ 17 mm (inner size)
Operation range	Cool	Ambient	°C	+10 ~ +43	+10 ~ +43
		Water	°C	+5 ~ +20	+5 ~ +20
	Heat	Ambient	°C	-20 ~ +43	-20 ~ +43
		Water	°C	+25 ~ +45	+25 ~ +45
Connectable system				3-Pipe (heat recovery type) VRF System (system capable up to 48 HP)	
Maximum Indoor ratio (connectable hydrokit module capacity ratio)				Total indoor unit + Hydrokit capacity: up to 130 % (** ~ **% vs total outdoor unit capacity)	

Accessories	
CZ-RTC5B	Wired remote controller with Econavi function
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, White
PAW-RE2D4-WH	Touch display control with 2 digital inputs, White

Accessories	
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, Black
PAW-RE2D4-BK	Touch display control with 2 digital inputs, Black

1) Maximum 45 °C by refrigerant circuit (heat pump cycle), over 45 °C is provided by electric heater operation.

Basic principle & advantage.

Hydrokit module provides hot water by using waste heat that is recovered from standard air-conditioning indoor unit in cooling mode.

Technical focus

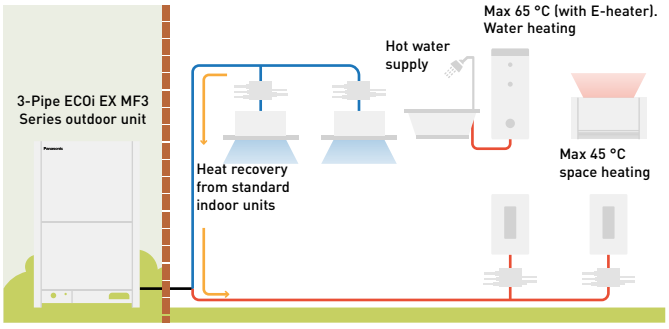
- Only with 3-Pipe ECOi EX MF3 Series outdoor units
- Remote controller CZ-RTC5B common use with DX coil indoor units ECOi and PACi

Hydrokit control function / CZ-RTC5B

- CZ-RTC5B is updated version from CZ-RTC3. It can be used for hydrokit and also normal indoor unit. CZ-RTC5B checks the type of connected unit and switch hydrokit or air conditioner style of display automatically
- Operating mode on hydrokit style to be set at initial setting of the system from following modes: tank mode or air conditioning mode

Overview: hydromodule in VRF system

- Multiple hydromodule connection in same circuit is available
- Each module can be set different operation mode either hot water supply mode or space heating mode (both operation modes are not able to set at 1 hydromodule)
- 3-Pipe control solenoid valve kit is necessary for each indoor unit and hydromodule



* Cold water also available.

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PRO-HT Tank Series for ECOi

PRO-HT Tank DHW. Big volume and high temperature tank for commercial application.

MAXIMUM 65 °C WATER OUTLET TEMPERATURE



1 High performance and high saving

- A7 COP maximum 5,29 and 6,70 for ECOi 3-Pipe in case of heat recovery
- Efficient hot water production by heat recovery
- High temperature hot water without booster
- Save installation time and cost by skipping additional accessories

2 Hot water production with simultaneous heating and cooling

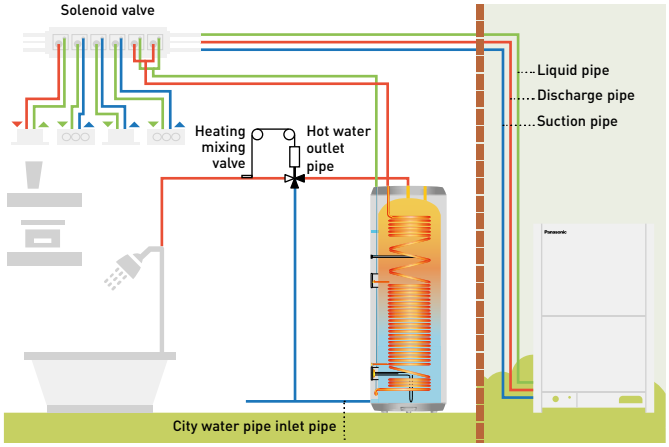
- Maximum water outlet temperature up to 65 °C without an electric heater
- Big volume tank from 750L to 1000L capacity
- Heat exchanger design inhibits limescale

3 Trusted quality

- Double tube heat exchanger following drinking-water regulation
- Tank and heat exchanger made with stainless steel
- Internal and external pickling

Solution example DHW tank 1000L + ECOi 3-Pipe mixed system

- Ideal offer for hotel projects
- DHW production under spontaneous heating and cooling
- Hot water up to 65 °C is efficiently produced by heat recovery
- A7 COP 6,70 considering heat recovery



One by one system compatible list with ECOi

Model	Tank type	Product compatibility	Hot water outlet temperature
PAW-VP750LDHW-1	DHW	U-16MF3 (3-Pipe)	65 °C
PAW-VP1000LDHW-1	DHW	U-16MF3 (3-Pipe)	65 °C



PRO-HT *TANK*

PRO-HT Tank DHW

Enjoy an efficient DHW and heating and cooling tank.
Panasonic commercial PRO-HT Tank solutions meet all needs of your hot water applications providing maximum water temperature 65 °C.

High temperature hot water is efficiently produced without any boosters.
Can be combined with ECOi 3-Pipe to adapt various projects from high-end residentials to offices and hotels.

PRO-HT Tank			**PAW-VP750LDHW-1**	**PAW-VP1000LDHW-1**
Outdoor unit			**U-16MF3E8**	**U-16MF3E8**
Volume		L	726	933
Height	H x W	mm	1855 x 990	2210 x 990
Connections to the water supply network			1 1/4"	1 1/4"
Net weight / with water		kg	179 / 929	191 / 1121
Nominal electrical power		kW	5,12	6,14
Reference tapping cycle			2XL	2XL
Energy consumption by chosen cycle A7 / W10-55		kWh	4,14	5,10
Energy consumption by chosen cycle A15 / W10-55		kWh	3,50	4,61
COP DHW (A7 / W10-55) EN 16147 [1]			5,29	4,81
COP DHW (A15 / W10-55) EN 16147 [2]			7,01	5,32
Standby input power according to EN16147		W/h	77	80
Sound pressure at 1 m		dB(A)	52	52
Average insulation thickness		mm	100	100
Heat exchanger connection for inlet / outlet		Inch (mm)	1/2 (12,70) / 3/4 (19,05)	1/2 (12,70) / 3/4 (19,05)
Maximum power consumption without heater		kWh	20,4	20,4
Maximum power consumption with heater		kWh	26,4	26,4
Number of electrical heaters x power		W	1 x 6000	1 x 6000
Voltage / Frequency		V / Hz	400 / 50	400 / 50
Electrical fuse rating		A	16	16
Moisture protection			IP 24	IP 24
Maximum pipe length		m	50	50
Elevation difference (in/out)		m	30/30	30/30
Operating range - outdoor temperature		°C	-20 ~ +35	-20 ~ +35
Maximum water temperature (heat pump)		°C	65	65
Maximum water temperature (electrical heater)		°C	85	85
Refrigerant (R410A) / CO_2 Eq.		kg / T	8,3 /17,1	8,3 /17,1

Accessories	
PAW-VP-RTC5B-VRF	Tank Controller for ECOi system
PAW-VP-VALV-280	Expansion valve kit 28 kW

1) Heating of sanitary water up to 55 °C with inlet air temperature at 7 °C, humidity at 89 % and inlet water temperature at 10 °C. According to EN16147. 2) Heating of sanitary water up to 55 °C with inlet air temperature at 15 °C, humidity at 74 % and inlet water temperature at 10 °C. According to EN16147.
This product is designed to meet the European Drinking Directive 98/83/EC amended by 2015/1787/EU. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.
* When connected as pressurised, safety valve is mandatory.

Technical focus

· Water volume 750 L and 1000 L
· Maximum hot water production 65 °C without boosters
· Heating coil 52 m (750 L) and 63 m (1000 L)
· Tank material 3 mm
· ABS external case

6,70 COP HIGH PERFORMANCE | DHW | 65°C OUTPUT WATER HIGH TEMPERATURE | -20°C OPERATION RANGE | 5 YEARS COMPRESSOR WARRANTY

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Fan coils highlighted features

MORE FAN COIL OPTIONS IN CHILLERS SECTION

Presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location.



1 Innovation for an optimum comfort

Range of fan coil for heating and cooling with capacities from 0,2 to 9,6 kW in cooling and from 0,2 to 13,6 kW in heating. Bring full year comfort with water based systems.

2 Energy efficient and low noise fan

Dynamically balanced and specially designed fans, reinforced acoustic insulation and optimized fan speed staging for lower noise levels.
Improved efficiency with optional EC fan motor.

3 Quality and efficient coil

Constructed from staggered copper tubes, mechanically expanded into aluminium fins, providing maximum heat transfer efficiency, durability and hygiene.

4 Flexible installation

Various types of unit to fit your needs with flexible installation options. A choice of service side for hydraulic connections, piping configuration and horizontal or vertical installation for ducted units.

Offering a great range of capacities and performance, presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location. Whether the requirements are for cooling only, or for both heating and cooling, there is a fan coil to suit. With a variety of piping and fan configuration, the range is capable of meeting the most stringent of requirement. Line up available in AC and EC fans, it is possible to achieve both powerful performance, but with sustainability in mind.

Controllers with sophisticated designs, provide a user friendly interface while enabling an easy and low cost integration to building management systems.



PAW-FC-RC1
Optional wired remote controller for AC fan, 2-pipe and 4-pipe application.



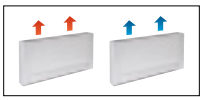
PAW-FC-TC903
Optional wired remote controller for AC fan 2-pipe application.



PAW-FC-907TC
Optional wired remote controller for EC fan, 2-pipe and 4-pipe application.

Smart fan coils







Built-in advanced thermostat.

			PAW-AAIR-200-2	PAW-AAIR-700-2	PAW-AAIR-900-2
Total cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,6	0,8/1,0/1,2	1,2/1,5/1,7
Sensible cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,5	0,6/0,9/1,1	1,1/1,4/1,6
Water flow	Lo/Med/Hi	kg/h	40,0/59,0/95,0	129,0/178,0/207,0	198,0/261,0/300,0
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	1,0/2,0/2,0	6,0/9,0/12,0
Inlet water temperature		°C	10	10	10
Outlet water temperature		°C	15	15	15
Inlet air temperature		°C	27,0	27,0	27,0
Outlet air temperature	Lo/Med/Hi	°C	15,0/17,0/18,0	14,0/16,0/17,0	16,0/17,0/18,0
Relative humidity of inlet air		%	47	47	47
Total heating capacity	Lo/Med/Hi	kW	0,2/0,5/0,6	0,7/1,0/1,2	0,9/1,4/1,7
Water flow	Lo/Med/Hi	kg/h	37,3/80,8/98,0	121,8/177,5/204,3	152,4/244,2/292,9
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	0,3/0,8/1,0	0,5/1,6/2,2
Inlet water temperature		°C	35	35	35
Outlet water temperature		°C	30	30	30
Inlet air temperature		°C	19,0	19,0	19,0
Outlet air temperature	Lo/Med/Hi	°C	38,9/32,0/30,0	33,3/31,8/30,6	30,2/31,1/30,6
Air flow	Lo/Med/Hi	m³/min	0,9/1,9/2,7	2,6/4,2/5,3	4,1/6,1/7,7
Maximum input power	Lo/Med/Hi	W	7,0/9,0/13,0	14,0/18,0/22,0	16,0/20,0/24,0
Sound pressure	Lo/Med/Hi	dB(A)	23/33/40	24/36/42	25/36/44
Dimension (H x W x D)		mm	735 x 579 x 129	935 x 579 x 129	1135 x 579 x 129
Net weight		kg	17	20	23
3 Ways valve included			Yes	Yes	Yes
Touch screen thermostat			Yes	Yes	Yes

Accessories	
PAW-AAIR-LEGS-1	Kits of 2 legs to protect the water pipings

Accessories	
PAW-AAIR-RHCABLE	Motor connection cable for units with hydraulic connections on the right

* Smart fan coils is produced by Innova.

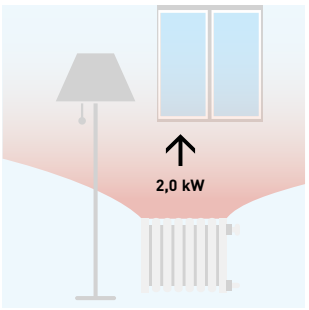
Stylish floor-standing fan coils with advanced controller

The slimline of Smart fan coils delivers high efficiency climate control.

With a depth of just under 13 cm they are at the cutting edge of the market. Blending easily into the home, Smart fan coil's elegant design and product refinements are clear to see in every detail.

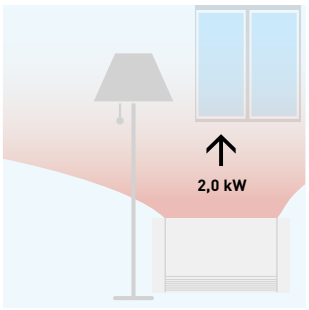
Exceptional ventilation efficiency means the motor uses considerably less energy (low wattage). The fan speed is continuously modulated by the temperature controller with proportional integral logic, with undoubted advantages for regulating the temperature and humidity in summer mode.

With standard cast radiators.



Water at 65 °C needed.

With Smart fan coil.



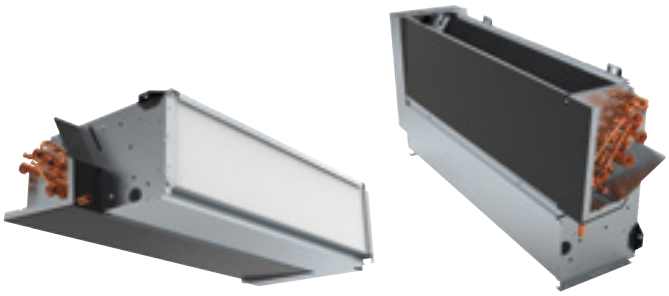
Water at 35 °C needed.

Technical focus

- 4 operation modes (auto, silent, night-time and maximum ventilation speed)
- Exclusive design
- Extremely compact (only 12,9 cm deep)
- Cooling and dehumidification functions possible (drain is needed)
- 3-way valve included (no overflow valve needed on the installation if more than 3 units installed)
- Touch screen thermostat

All temperature curves and capacity are available on www.panasonicproclub.com

Fan coils - ducted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

	Left connection (PAW-)		FC2A-D010L	FC2A-D020L	FC2A-D030L	FC2A-D040L	FC2A-D050L	FC2A-D060L	FC2A-D070L	FC2A-D080L
	Right connection (PAW-)		FC2A-D010R	FC2A-D020R	FC2A-D030R	FC2A-D040R	FC2A-D050R	FC2A-D060R	FC2A-D070R	FC2A-D080R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
Sound levels										
Global sound power	Lo / Med / Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo / Med / Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Maximum external pressure		Pa	55	55	65	85	85	115	125	70
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Dimensions and weight										
Dimension	H x W x D	mm	430 x 220 x 570	430 x 220 x570	430x 220 x 730	430 x 220 x 938	430 x 220 x 1122	430 x 220 x 1307	530 x 220 x 1121	530 x 220 x 1316
Weight		kg	13	13	15	20	22	26	27	38

Accessories	
PAW-FC-RC1	Advanced wired remote controller for fan coil
PAW-FC-903TC	Wired remote controller for fan coil
PAW-FC-2WY-11/55-1	2 way valve + drain pan for models 010-060

Accessories	
PAW-FC-2WY-65/90-1	2 way valve + drain pan for models 070-080
PAW-FC-3WY-11/55-1	3 way valve + drain pan for models 010-060
PAW-FC-3WY-65/90-1	3 way valve + drain pan for models 070-080

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual. ** Fan coil units are produced by Systemair.

Technical focus

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - wall-mounted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1



Infrared remote supplied with IR versions.
IR Controller

2-pipe			PAW-FC2A-K007	PAW-FC2A-K009	PAW-FC2A-K018	PAW-FC2A-K022
			PAW-FC2A-K007IR	PAW-FC2A-K009IR	PAW-FC2A-K018IR	PAW-FC2A-K022IR
Total cooling capacity [1]	Lo/Med/Hi	kW	1,0/1,3/1,7	1,6/1,7/2,4	2,8/3,0/3,5	2,9/3,1/3,9
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,2	1,2/1,3/1,9	2,1/2,3/2,7	2,3/2,5/3,1
Water flow	Lo/Med/Hi	l/h	172/231/287	270/291/418	483/508/609	502/535/669
Water pressure drop	Lo/Med/Hi	kPa	18,6/24,9/30,9	18,5/27,0/40,0	34,6/41,3/55,6	37,2/33,7/45,2
Heating capacity [2]	Lo/Med/Hi	kW	1,4/1,7/2,0	1,7/2,0/2,7	2,9/3,2/4,0	3,1/3,7/4,4
Sound levels						
Sound power	Lo/Med/Hi	dB(A)	45/49/51	47/52/57	49/53/56	53/57/63
Sound pressure [3]	Lo/Med/Hi	dB(A)	30/33/35	32/36/40	39/41/43	39/43/48
Fan						
Number			1	1	1	1
Air flow	Lo/Med/Hi	m³/h	282/321/360	367/413/551	532/592/680	617/709/850
Filter			G1	G1	G1	G1
Electrical data						
Power supply	Voltage	V	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50
Fuse rating		A	3	3	3	3
Power consumption	Lo/Med/Hi	W	39/42/62	30/47/59	44/50/55	50/55/70
Water connections						
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2
Dimensions and weight						
Dimension	H x W x D	mm	275 x 180 x 845	275 x 180 x 845	298 x 200 x 940	298 x 200 x 940
Weight		kg	11	11	13	13

Accessories	
PAW-FC-RC1	Advanced wired remote controller for fan coil
PAW-FC-903TC	Wired remote controller for fan coil

Accessories	
PAW-FC2-2WY-K007	2 way valve
PAW-FC2-3WY-K007	3 way valve

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in/out: 45 °C / 40 °C. 3) Sound pressure considering a local of 100 m³ a reverberation time of 0,5 seconds and a distance of 1 m.

Technical focus

- 4 sizes
- Cooling capacity from 1,0 to 3,9 kW
- Heating capacity from 1,4 to 4,1 kW
- Version: 2-pipes, AC fan

Main features and accessories

- 2 way or 3 way valve ON/OFF
- 3-speed AC fan motor
- Silent unit for optimum customer comfort
- Aesthetic design suitable for residential and hotel applications
- Compatible with IR controller (supplied with IR versions)
- Coil with hydrophilic fins to improve the condensate flow

Operating limits	
Entering water temperature	From 5 to 60 °C
Indoor air temperature	From 6 to 40 °C

ErP

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

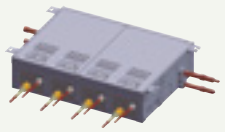
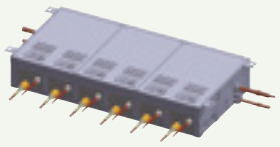
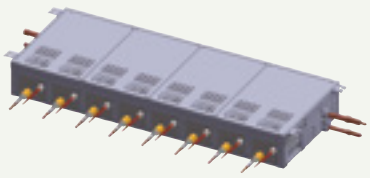
Accessories and control

Distribution joint kits

2-Pipe ME2 and Mini ECOi for indoor units (22,4 kW or less*). ———— CZ-224BK2BM	**2-Pipe ME2 for outdoor units (68,0 kW or less).** ———— CZ-P680PH2BM	**2-Pipe ME2 for outdoor units (more than 68,0 kW).** ———— CZ-P1350PH2BM	**2-Pipe ME2 for indoor units (22,4 kW or less*).** ———— CZ-P224BK2BM
2-Pipe ME2 for indoor units (68,0 kW or less*). ———— CZ-P680BK2BM	**2-Pipe ME2 for indoor units (more than 68,0 kW*).** ———— CZ-P1350BK2BM	**3-Pipe MF3 for outdoor units (68,0 kW or less).** ———— CZ-P680PJ2BM	
3-Pipe MF3 for outdoor units (greater than 68,0 kW and no more than 135,0 kW). ———— CZ-P1350PJ2BM	**3-Pipe MF3 for indoor units (22,4 kW or less).** ———— CZ-P224BH2BM	**3-Pipe MF3 for indoor units (greater than 22,4 kW and no more than 68,0 kW).** ———— CZ-P680BH2BM	
3-Pipe MF3 for indoor units (greater than 68,0 kW and no more than 135,0 kW). ———— CZ-P1350BH2BM	**2-Pipe ME2 header pipe.** ———— CZ-P4HP4C2BM	**3-Pipe MF3 header pipe.** ———— CZ-P4HP3C2BM	

* In case the total capacity of indoor units connected after distribution exceeds the total capacity of the outdoor units, select the distribution piping size for the total capacity of the outdoor units.

Heat recovery box

		
Box recovery kit (up to 5,6 kW). CZ-P56HR3 + CZ-CAPE2. ———— KIT-P56HR3	**Heat recovery box (up to 5,6 kW).** ———— CZ-P56HR3	**Heat recovery PCB.** ———— CZ-CAPE2
Box recovery kit (from 5,6 kW to 16,0 kW). CZ-P160HR3 + CZ-CAPE2. ———— KIT-P160HR3	**Solenoid valve kit (from 5,6 kW to 16,0 kW).** ———— CZ-P160HR3	**3-Pipe control PCB for wall-mounted.** ———— CZ-CAPEK2
		
4 ports 3 pipe box (up to 5,6 kW per port). ———— CZ-P456HR3 **4 ports 3 pipe box (up to 16,0 kW per port).** ———— CZ-P4160HR3	**6 ports 3 pipe box (up to 5,6 kW per port).** ———— CZ-P656HR3	**8 ports 3 pipe box (up to 5,6 kW per port).** ———— CZ-P856HR3

Panels

			
Standard panel for 4 way 90x90 cassette. ———— CZ-KPU3W	**Econavi panel for 4 way 90x90 cassette.** ———— CZ-KPU3AW	**Panel for 60x60 cassette size 700 x 700 mm.** ———— CZ-KPY3AW	**Panel for 60x60 cassette size 625 x 625 mm.** ———— CZ-KPY3BW



Panel for 2 way cassette (for S-22 to S-56 models).

————

CZ-02KPL2



Panel for 2 way cassette (for S-73 model).

————

CZ-03KPL2



Panel for 1 way cassette.

————

CZ-KPD2



nanoe X Generator Mark 1 kit for 4 way 90x90 cassette U2 type (S-*MU2E5A).**

————

CZ-CNEXU1

Sensors



R32 refrigerant leak detector for MU2, MY2, MK2 and MM1 models.

————

CZ-CGLSC1



Econavi energy savings sensor.

————

CZ-CENSC1

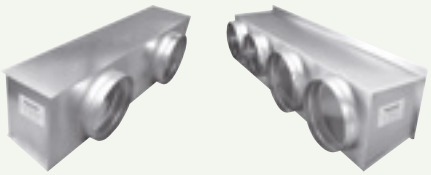


Remote temperature sensor.

————

CZ-CSRC3

Plenums



Air inlet plenum for S . .MF3E5B, S . .MF3E5A and S . .MF2E5A 15, 22, 28, 36, 45 and 56.

————

CZ-DUMPA56MF2

Air inlet plenum for S . .MF3E5B, S . .MF3E5A and S . .MF2E5A 60, 73 and 90.

————

CZ-DUMPA90MF2

Air inlet plenum for S . .MF3E5B, S . .MF3E5A and S . .MF2E5A 106, 140 and 160.

————

CZ-DUMPA160MF2

Air inlet plenum for S . .MM1E5B 22, 28 and 36.

————

CZ-DUMPA22MMR2

Air inlet plenum for S . .MM1E5B 45 and 56.

————

CZ-DUMPA45MMR3

Air outlet plenum for S . .MM1E5B 22, 28 and 36.

————

CZ-DUMPA22MMS2

Air outlet plenum for S . .MM1E5B 45 and 56.

————

CZ-DUMPA45MMS3

Air outlet plenum for S-224ME1E5A / S-280ME1E5.

————

CZ-TREMIESPW706

* Plenums installed with an R32 Mini ECOi system may only be used when no R32 refrigerant leak detector is required. Please refer to technical data manual for refrigerant installation requirements.

Valves

E2 Type high static pressure hide-away rap valve kit for 100 % Fresh air function.

————

CZ-P160RVK2



Wall-mounted external valve for model sizes 15 to 56.

————

CZ-P56SVK2



Wall-mounted external valve for model sizes 73 to 106.

————

CZ-P160SVK2

Accessories and control

VRF Smart Connectivity+



Remote controller Panasonic Net Con, RH, No PIR, R1/R2.

————

SER8150R0B1194

Remote controller Panasonic Net Con, RH, PIR, R1/R2.

————

SER8150R5B1194

Wireless ZigBee® Pro module / Green Com card.

————

VCM8000V5094P



Hotel Room Expansion Module 14 indoor units.

————

HRCEP14R

Hotel Room Controller 28 indoor units.

————

HRCPBG28R

Hotel Room Controller w/ Display 42 indoor units.

————

HRCPDG42R



Door / window wireless sensor.

————

SED-WDC-G-5045



Wall / ceiling (motion) wireless sensor.

————

SED-MTH-G-5045



CO_2 sensor.

————

SED-CO2-G-5045

Sensor with room temperature and humidity.

————

SED-TRH-G-5045



Water leakage sensor.

————

SED-WLS-G-5045



Cover frame. Silver.

————

FAS-00

Cover frame. White.

————

FAS-01

Cover frame. Glossy translucent white.

————

FAS-03

Cover frame. Light tan wood.

————

FAS-05

Cover frame. Dark brown wood.

————

FAS-06

Cover frame. Dark black wood.

————

FAS-07

Cover frame. Brushed steel finish.

————

FAS-10

Controller and touch controllers for hotels with dry contacts



Modbus RS-485 touch room controller with I/O, White.

PAW-RE2C4-MOD-WH

Touch display control with 2 digital inputs, White.

PAW-RE2D4-WH



Modbus RS-485 touch room controller with I/O, Black.

PAW-RE2C4-MOD-BK

Touch display control with 2 digital inputs, Black.

PAW-RE2D4-BK

Hotel sensors for dry contacts



Wall motion sensor 24 V.

PAW-WMS-DC

Wall motion sensor 240 V AC.

PAW-WMS-AC



Ceiling motion sensor 24 V.

PAW-CMS-DC

Ceiling motion sensor 240 V AC.

PAW-CMS-AC



Power supply 24 V.

PAW-24DC



Door or window contact.

PAW-DWC

Centralised controls



System controller for 64 indoor units with weekly timer.

CZ-64ESMC3



Central ON/OFF controller, up to 16 groups, 64 indoor units.

CZ-ANC3



Intelligent controller (touch screen/web server) to control up to 256 indoors with included load distribution ratio (LDR).

CZ-256ESMC3

Centralised controls. BMS system. PC base



P-AIMS core software: Centralised software to control up to 1024 indoor units.

CZ-CSWKC2

P-AIMS communication adaptor.

CZ-CFUNC2

P-AIMS consumption calculation extension.

CZ-CSWAC2

P-AIMS BACnet extension.

CZ-CSWBC2

P-AIMS layout display extension.

CZ-CSWGC2

P-AIMS web application extension.

CZ-CSWWC2

Accessories and control

Panasonic AC Smart Cloud



Panasonic AC Smart Cloud. Cloud internet control. Up to 128 groups. Controls 128 units.

————

CZ-CFUSCC1

Accessories interfaces



Modbus RTU & TCP interface for 16 indoors.

————

PAW-AC2-MBS-16P

Modbus RTU & TCP interface for 64 indoors.

————

PAW-AC2-MBS-64P

Modbus RTU & TCP interface for 128 indoors.

————

PAW-AC2-MBS-128P



KNX interface for 16 indoors.

————

PAW-AC2-KNX-16P

KNX interface for 64 indoors.

————

PAW-AC2-KNX-64P



BACnet IP & MSTP interface for 16 indoors.

————

PAW-AC2-BAC-16P

BACnet IP & MSTP interface for 64 indoors.

————

PAW-AC2-BAC-64P

BACnet IP & MSTP interface for 128 indoors.

————

PAW-AC2-BAC-128P



Commercial Wi-Fi Adaptor.

————

CZ-CAPWFC1



KNX interface.

————

PAW-RC2-KNX-1i



Modbus RTU interface.

————

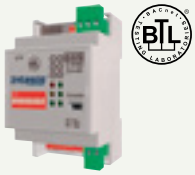
PAW-RC2-MBS-1



Modbus RTU interface to control 4 indoor/groups.

————

PAW-RC2-MBS-4



BACnet IP & MSTP.

————

PAW-RC2-BAC-1



RAC interface adapter for integration into P-Link, plus external input and alarm/ status output.

————

CZ-CAPRA1



LonWorks® Interface controls up to 16 groups and 64 indoor units.

————

CZ-CLNC2

Centralised controls. Connection with general equipment connection



Serial parallel device controlling outdoor units, up to 4 units.

———

CZ-CAPDC2



Adaptor for ON/OFF control of external devices.

———

CZ-CAPC3



Mini series parallel device controlling indoor units, maximum 1 group and 8 indoor unit.

———

CZ-CAPBC2



Communication Adaptor. Up to 128 groups. Controls 128 units.

———

CZ-CFUNC2

Individual controls



CONEX wired remote controller (non-wireless).

———

CZ-RTC6



CONEX wired remote controller with Bluetooth®.

———

CZ-RTC6BL



Design wired remote controller with Econavi function.

———

CZ-RTC5B



Infrared remote controller for 4 way 90x90 cassette.

———

CZ-RWS3 + CZ-RWRU3W



Infrared remote controller for wall-mounted 4 Way 60x60 with panel and floor console.

———

CZ-RWS3



Infrared remote controller for 2 way cassette.

———

CZ-RWS3 + CZ-RWRL3



Infrared remote controller for 1 way cassette.

———

CZ-RWS3 + CZ-RWRD3



Infrared remote controller for ceiling.

———

CZ-RWS3 + CZ-RWRT3



Infrared remote controller for all indoor units.

———

CZ-RWS3 + CZ-RWRC3

Accessories and control

Accessories PCB



T10 interface PCB with digital and relay connections.

————

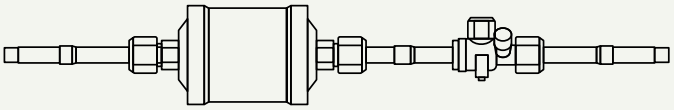
PAW-T10

PCB for fan speed control of external EC Fan.

————

PAW-ECF

R-22 Replacement Kit

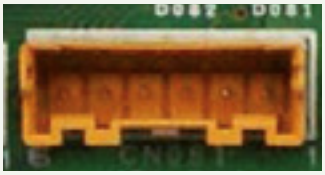


Replacement kit for R-22.

————

CZ-SLK2

Accessories cables



Cable for all the T10 functions.

————

CZ-T10



Cable to operate external EC fan.

————

PAW-FDC



Cable for all option monitoring signals.

————

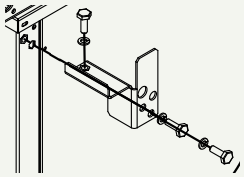
PAW-OCT

Cable with force thermo OFF/ leakage detection.

————

PAW-EXCT

Water heat exchanger accessories



Stacking kit for vertically stacking up to 3 WHE (4 pieces per Kit).

————

PAW-3WSK

PRO-HT Tank accessories

Tank Controller for ECOi system.

————

PAW-VP-RTC5B-VRF

Expansion valve kit 28 kW.

————

PAW-VP-VALV-280

Smart fan coil accessories

Kits of 2 legs to protect the water pipings. ———— PAW-AAIR-LEGS-1	**Motor connection cable for units with hydraulic connections on the right.** ———— PAW-AAIR-RHCABLE

Fan coil accessories

 **Wired remote controller for fan coil.** ———— PAW-FC-903TC	 **Advanced wired remote controller for fan coil.** ———— PAW-FC-RC1	 **Infrared remote supplied with IR versions.** ———— IR Controller
2 way valve + drain pan for ducted models 010-060. ———— PAW-FC-2WY-11/55-1	**2 way valve + drain pan for ducted models 070-080.** ———— PAW-FC-2WY-65/90-1	**2 way valve for wall-mounted.** ———— PAW-FC2-2WY-K007
3 way valve + drain pan for ducted models 010-060. ———— PAW-FC-3WY-11/55-1	**3 way valve + drain pan for ducted models 070-080.** ———— PAW-FC-3WY-65/90-1	**3 way valve for wall-mounted.** ———— PAW-FC2-3WY-K007

Dimensions and tube sizes of branches and headers for ECOi 2-Pipe Systems

Optional distribution joint kits

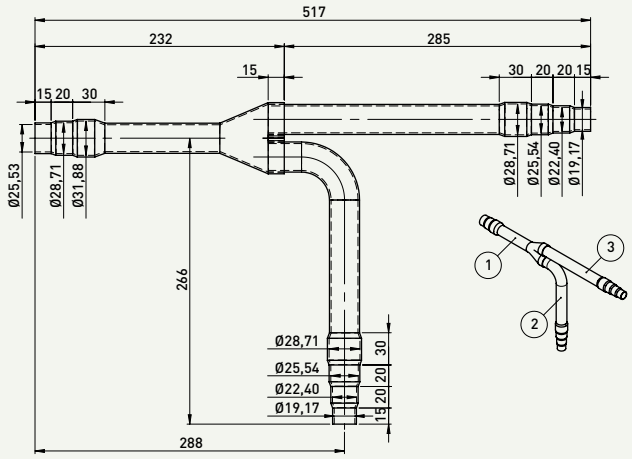
See the installation instructions packaged with the distribution joint kit for the installation procedure.

Model name	Cooling capacity after distribution	Remarks
1. CZ-P680PH2BM	68,0 kW or less	For outdoor unit
2. CZ-P1350PH2BM	From 68,0 kW to 168,0 kW	For outdoor unit
3. CZ-P224BK2BM	22,4 kW or less	For indoor unit
4. CZ-P680BK2BM	From 22,4 kW to 68,0 kW	For indoor unit
5. CZ-P1350BK2BM	From 68,0 kW to 168,0 kW	For indoor unit

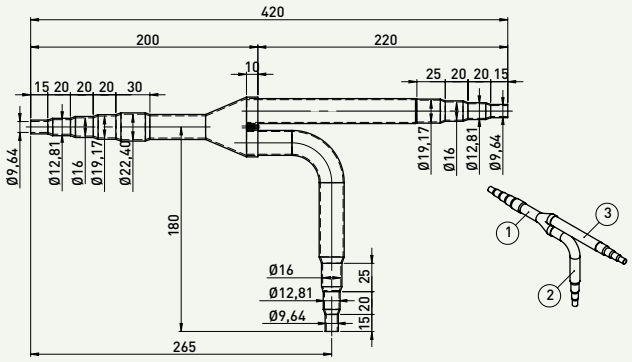
Tubing size (with thermal insulation)

1. CZ-P680PH2BM: For outdoor unit side (Capacity after distribution joint is 68,0 kW or less).

Gas tubing



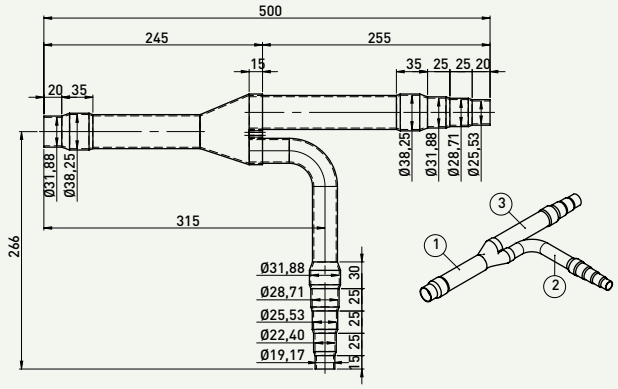
Liquid tubing



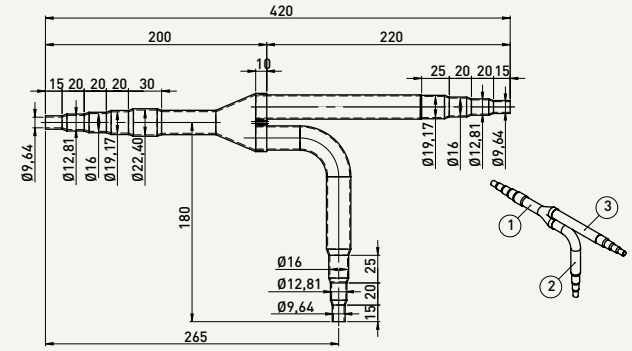
Unit: mm

2. CZ-P1350PH2BM: For outdoor unit side (Capacity after distribution joint is greater than 68,0 kW and no more than 168,0 kW).

Gas tubing



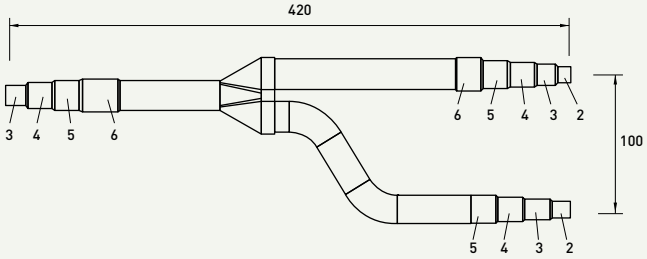
Liquid tubing



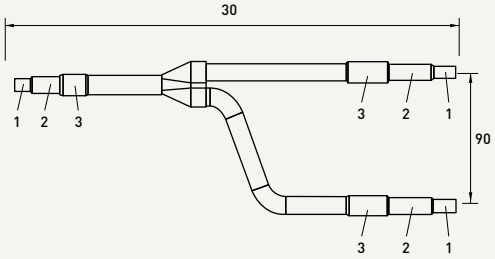
Unit: mm

3. CZ-P224BK2BM: For indoor unit side (Capacity after distribution joint is 22,4 kW or less).

Gas tubing



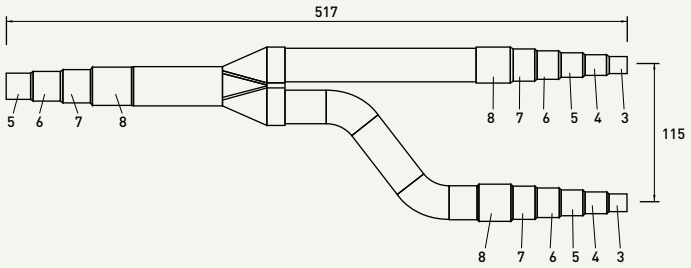
Liquid tubing



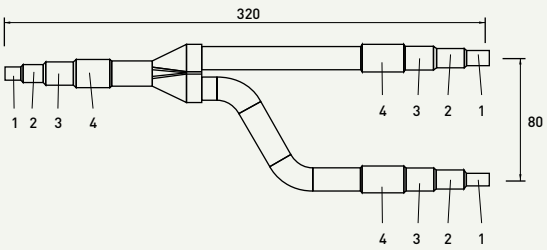
Unit: mm

4. CZ-P680BK2BM: For indoor unit side (Capacity after distribution joint is greater than 22,4 kW and no more than 68,0 kW).

Gas tubing



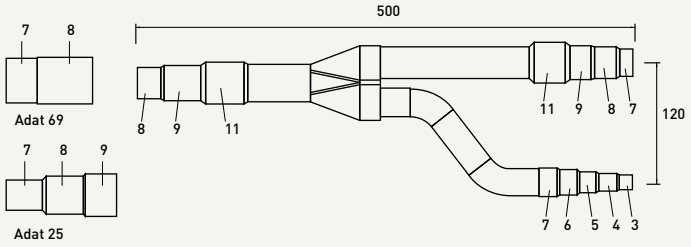
Liquid tubing



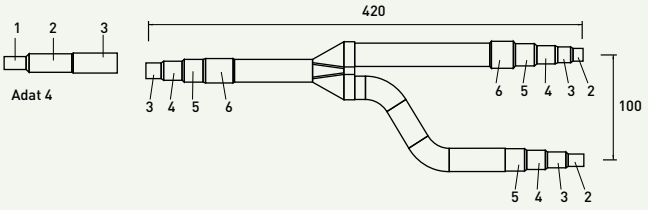
Unit: mm

5. CZ-P1350BK2BM: For indoor unit side (Capacity after distribution joint is greater than 68,0 kW and no more than 168,0 kW).

Gas tubing



Liquid tubing

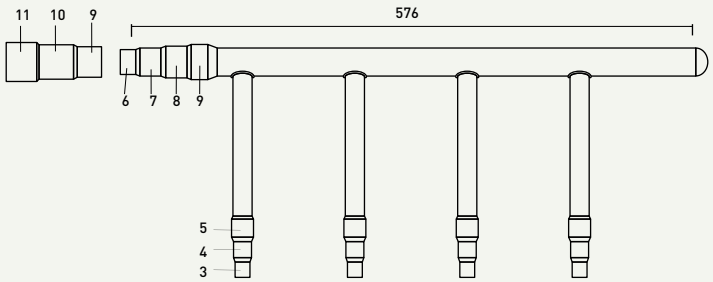


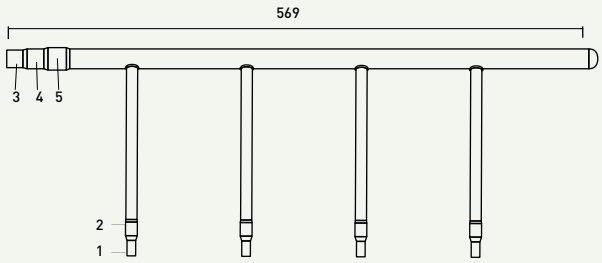
Unit: mm

Diameters		Diameters		Diameters	
1	6,35 mm 1/4"	6	22,40 mm 7/8"	11	38,10 mm 1"1/2
2	9,52 mm 3/8"	7	25,40 mm 1"	12	41,28 mm 1"5/8
3	12,70 mm 1/2"	8	28,57 mm 1" 1/8	13	44,45 mm 1"3/4
4	15,88 mm 5/8"	9	31,75 mm 1" 1/4	14	50,80 mm 2"
5	19,05 mm 3/4"	10	34,92 mm 1"3/8		

Header pipe set for ECOi 2-Pipe system

CZ-P4HP4C2BM: Header pipe models for 2-Pipe systems.





Diameters		Diameters		Diameters	
1	6,35 mm 1/4"	5	19,05 mm 3/4"	9	31,75 mm 1" 1/4
2	9,52 mm 3/8"	6	22,40 mm 7/8"	10	34,92 mm 1"3/8
3	12,70 mm 1/2"	7	25,40 mm 1"	11	38,10 mm 1"1/2
4	15,88 mm 5/8"	8	28,57 mm 1" 1/8		

Branches and headers for 3-Pipe ECOi and Mini ECOi

Optional distribution joint kits for 3-Pipe ECOi EX MF3 Series

See the installation instructions packaged with the distribution joint kit for the installation procedure.

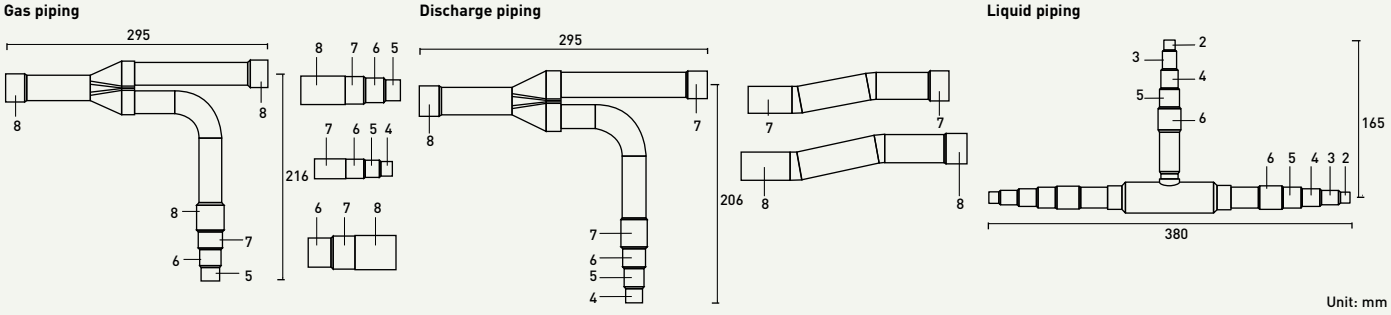
* In case the total capacity of indoor units connected after distribution exceeds the total capacity of the outdoor units, select the distribution piping size for the total capacity of the outdoor units.

Model name	Cooling capacity after distribution	Remarks
1. CZ-P680PJ2BM	68,0 kW or less	For outdoor unit
2. CZ-P1350PJ2BM	Greater than 68,0 kW and no more than 135,0 kW	For outdoor unit
3. CZ-P224BH2BM	22,4 kW or less	For indoor unit
4. CZ-P680BH2BM	Greater than 22,4 kW and no more than 68,0 kW	For indoor unit
5. CZ-P1350BH2BM	Greater than 68,0 kW and no more than 135,0 kW	For indoor unit

Piping size for 3-Pipe ECOi EX MF3 Series

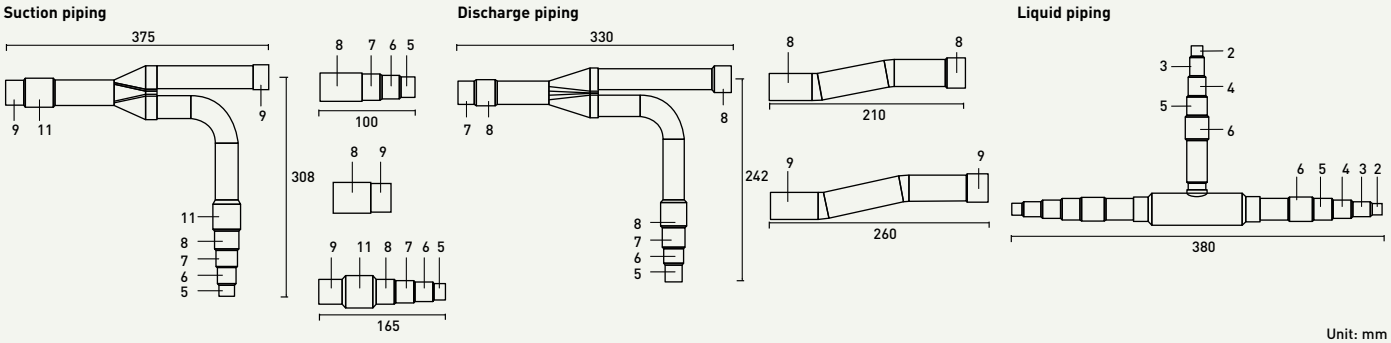
1. CZ-P680PJ2BM

For outdoor unit side (capacity after distribution joint is 68,0 kW or less).



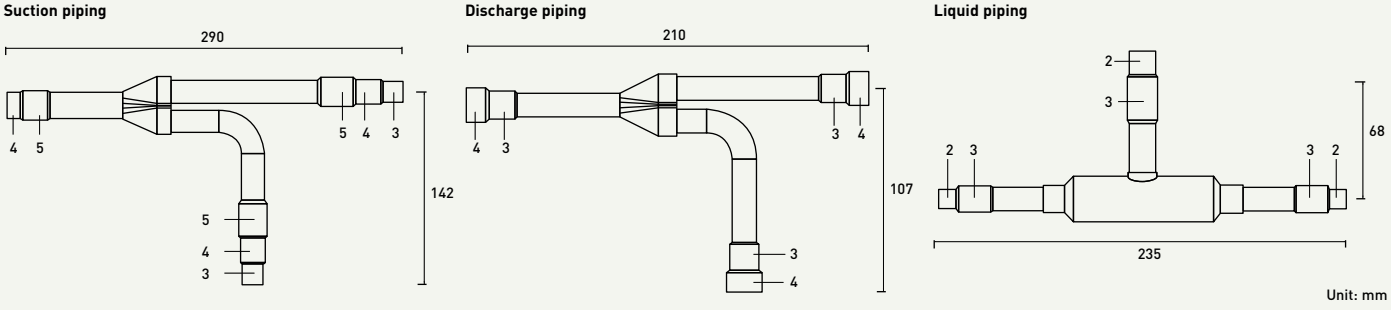
2. CZ-P1350PJ2BM

For outdoor unit side (capacity after distribution joint is greater than 68,0 kW and no more than 135,0 kW).



3. CZ-P224BH2BM

For indoor unit side (capacity after distribution joint is 22,4 kW or less).



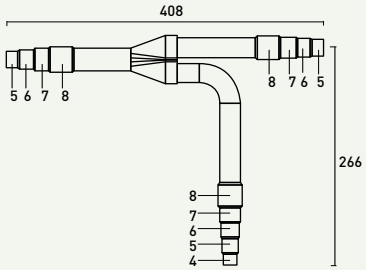
Size of connection point on each part (shown are inside diameters of piping)

Size		Part 1	Part 2	Part 3	Part 4	Part 5	Part 6	Part 7	Part 8	Part 9	Part 10	Part 11	Part 12	Part 13	Part 14
Dimension	mm	6,35	9,52	12,70	15,88	19,05	22,40	25,40	28,57	31,75	34,92	38,10	41,28	44,45	50,80
	Inches	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	13/8	11/2	15/8	13/4	2

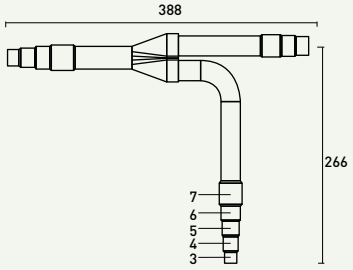
4. CZ-P680BH2BM

For indoor unit side (capacity after distribution joint is greater than 22,4 kW and no more than 68,0 kW).

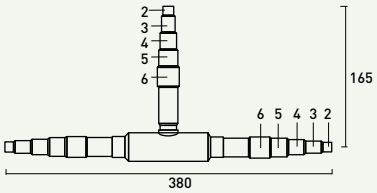
Suction piping



Discharge piping



Liquid piping

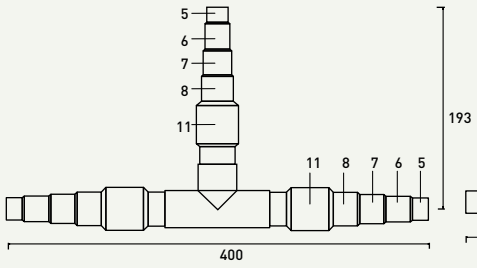


Unit: mm

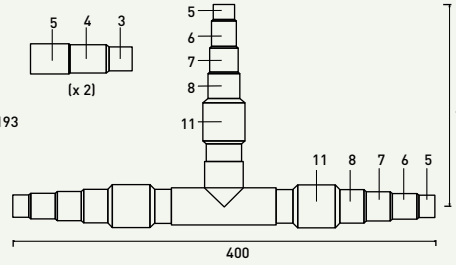
5. CZ-P1350BH2BM

For indoor unit side (capacity after distribution joint is greater than 68,0 kW and no more than 135,0 kW).

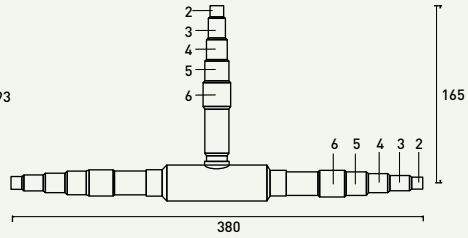
Suction piping



Discharge piping



Liquid piping

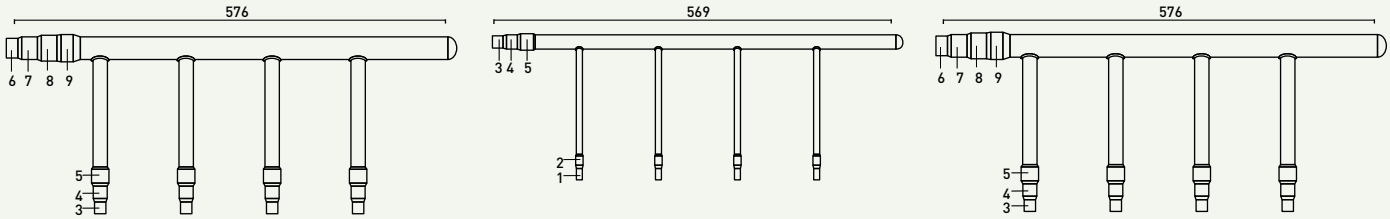


Unit: mm

Header pipe set for 3-Pipe ECOi EX MF3 Series

CZ-P4HP3C2BM

Header pipe model for 3-Pipe systems.



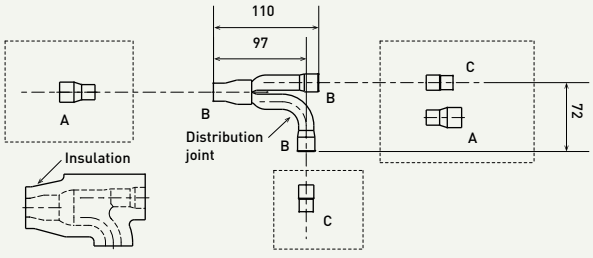
Size of connection point on each part (shown are inside diameters of piping)											
Size		Part 1	Part 2	Part 3	Part 4	Part 5	Part 6	Part 7	Part 8	Part 9	Part 10	Part 11
Dimension	mm	6,35	9,52	12,70	15,88	19,05	22,40	25,40	28,57	31,75	34,92	38,10
	Inches	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	13/8	11/2

Distribution joint Kits for Mini ECOi LE Series

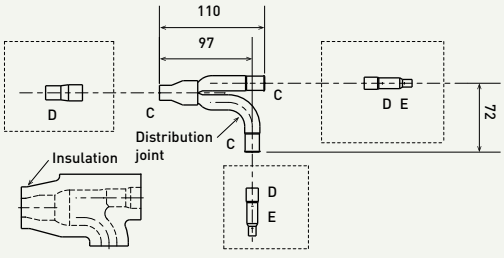
CZ-224BK2BM

For indoor unit (capacity after distribution joint is 22,4 kW or less).

Gas piping



Liquid piping



Unit: mm

Size of connection point on each part (shown are inside diameters of piping)						
Size		Part A	Part B	Part C	Part D	Part E
Dimension	mm	19,05	15,88	12,70	9,52	6,35
	Inches	3/4	5/8	1/2	3/8	1/4





Panasonic ventilation solutions

Panasonic ventilation solutions for maximum savings and easy integration.

Air handling unit kit	> 348
AHU connection kit 3,6 to 25,0 kW for PACi NX and PACi	> 350
AHU connection kit 16,0 to 56,0 kW for ECOi and ECO G	> 352
Energy recovery ventilation	> 354
Heat recovery with DX coil	> 358
Electric air curtains	> 360
Air curtain with DX coil, connected to PACi systems	> 362
Air curtain with DX coil, connected to VRF systems	> 363
High pressure duct and 100 % fresh air duct function for all ECOi and ECO G systems	> 364

Air handling unit kit

AHU connection kit connects outdoor units to air handling units system.
Combines air conditioning and fresh air in just one solution.
Application: Hotels, offices, server rooms or all large buildings where air quality control such as humidity control and fresh air and is needed.









1 New AHU connection kit 3,6 to 14,0 kW for PACi NX

2 AHU connection kit 3,6 to 25,0 kW for PACi [1)]

3 AHU connection kit 16, 28 and 56 kW for ECOi and ECO G

The Panasonic AHU connection kits offer a wealth of connectivity possibilities so can be easily integrated into many systems.
Besides the advantages in terms of indoor air quality, air conditioning offers also an energy saving potential. For example, while uncontrolled ventilation through open windows leads to large amounts of heat being lost to the outside during the heating season or gained from the outside during the cooling season, air conditioning systems provide possibilities to utilize the extra "free" energy in heat recovery modules so that overall operating costs will be reduced. The larger area of the comfort range, the better the energy saving opportunities.

AHU connection kits connect ECOi systems to air handling unit systems, using the same refrigerant circuit as the VRF system. Large connectivity possibilities mean the Panasonic AHU connection kit can be easily integrated.

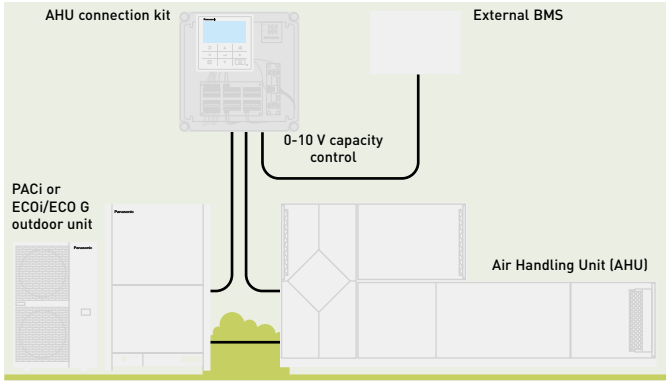
1) Compatible with R32 models. Special setting is required.

Panasonic AHU connection kit connected to outdoor unit

PACi: 3,6 to 25,0 kW.
The Air handling unit kit has been developed to better meet customer demand: IP 65 Box in order to be installed outside, 0-10 V demand control* and easy control by BMS.

* Only available with PACi Elite, from 3,6 to 25,0 kW.

ECOi and ECO G: 16, 28 and 56 kW.
PCB, transformer, solenoid control valve, thermistor x 4 pcs, terminal base and electrical component box.

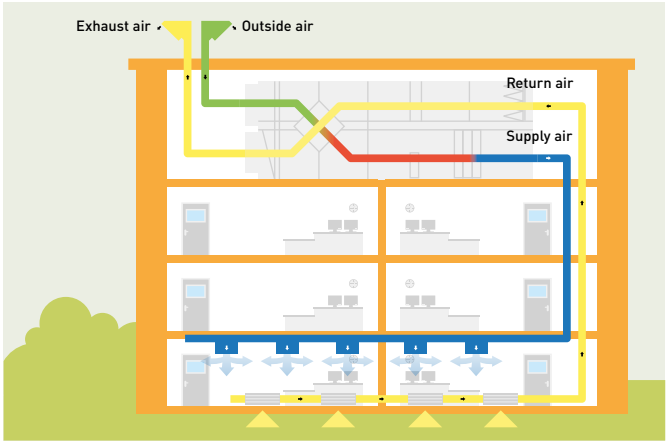


Demand control on the outdoor unit managed by external 0-10 V signal.

- AHU connection kit contains: IP65 box with PCBs and terminal connections mounted inside, expansion valve and sensors.
- Heat exchanger, fan & fan motor to be mounted in the AHU itself shall be provided in the field.

Main components of mechanical ventilation systems

The main components of a mechanical ventilation system are the following: Air Handling Unit (AHU), air ducts and air distribution elements.



Optional parts: Following functions are available by using different control accessories:

Timer remote controller.
CZ-RTC5B.



DC 12 V outlet. Option terminal.
PAW-OCT.



Mini seri-para I/O unit.
CZ-CAPBC2
Advanced version only.



PCB to connect to T10 connector.
CZ-T10
terminal /
PAW-T10 PCB



AHU connection kit 3,6 to 25,0 kW for PACi NX and PACi

Compatible with R32 or R410A outdoor units.



3 types of AHU connection kit: Advanced, Medium and Light

Model Code	IP 65	0-10 V demand control*	Outdoor temperature shift compensation. Cold draft prevention
NEW PAW-280PAH3M	Yes	Yes	No
PAW-280PAH2	Yes	Yes	Yes
PAW-280PAH2M	Yes	Yes	No
PAW-280PAH2L	Yes	No	No

* With CZ-CAPBC2.

Control options

Control option 1: Advanced, Medium and Light.
- The system's control is simple: control of actual suction temperature vs. set point
- Control works in the same way as that of any indoor unit
- Fan signal issued by the PCB (OFF while defrosting, for instance)

Control option 2: Advanced.
- System control by probe located at air intake. Sensor works as a 0-10 V control thermostat which manages the set point temperature. Additional probe on the air outlet helps to prevent cold drought
- All signals as per standard

Control option 3: Advanced.
- System control by external environment probe. Sensor works as a 0-10 V control thermostat which manages the set point temperature. Enhances efficiency by adjusting capacity to the ambient temperature and enhances comfort as well
- All signals as per standard

Control option 4: Advanced and Medium.
- System control by a 0-10 V control working from an external BMS that manages the set point for the temperature or the capacity. Enhances efficiency by adjusting capacity and enhances comfort as well
- All signals as per standard

0-10 V control

With the 0-10 V demand control the capacity of the outdoor unit can be controlled by 20 steps.

Input voltage* (V)	0	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5	7,0	7,5	8,0	8,5	9,0	9,5
Demand (% of nominal current)	No cut [1]	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	No limit / Full capacity [2]
Indoor unit start / stop	Stop [1]	Start																	

1) No cut/Stop: AHU system / indoor unit is completely switched OFF.
2) No Limit: No restrictions applied by BMS to AHU system / indoor unit performance (equivalent to "full-load operation" of AHU system / indoor unit).



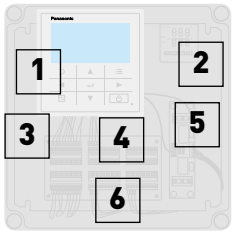
NEW 2021



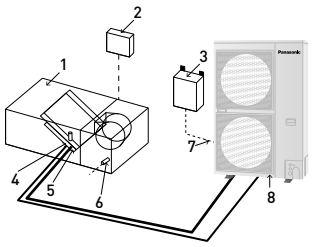
AHU PACi Elite	Cooling capacity	Heating capacity	Dimensions	Piping length	Elevation difference (in/out)
	Nominal	Nominal	H x W x D	Min / Max	Max
	kW	kW	mm	m	m
NEW PAW-280PAH3M	3,6 / 28,0	3,6 / 28,0	500 x 400 x 150	5 ~ 90 (U-200) / 5 ~ 60 (U-250)*	30
PAW-280PAH2	6,0 / 25,0	7,0 / 28,0	278 x 278 x 180	5 ~ 90 (U-200) / 5 ~ 60 (U-250)*	30
PAW-280PAH2+PAW-280PAH2	50,0	56,0	278 x 278 x 180	5 ~ 90 (U-200) / 5 ~ 60 (U-250)*	30

* For U-200PZH2E8 and U-250PZH2E8.

AHU connection kit / System combination		Air flow	Dimensions	Pipe diameter	
		Min / Max	H x W x D	Liquid pipe	Gas pipe
Outdoor unit capacity	AHU	m³/min	mm	Inch (mm)	Inch (mm)
3,6 kW	PAW-280PAH3M	6,0 / 14,5	500 x 400 x 150	1/4 (6,35)	1/2 (12,70)
5,0 kW	PAW-280PAH3M	8,5 / 16,5	500 x 400 x 150	1/4 (6,35)	1/2 (12,70)
6,0 kW	PAW-280PAH3M	13,0 / 22,0	500 x 400 x 150	3/8 (9,62)	5/8 (15,88)
7,5 kW	PAW-280PAH3M	13,0 / 22,0	500 x 400 x 150	3/8 (9,62)	5/8 (15,88)
10,0 kW	PAW-280PAH3M	15,0 / 36,0	500 x 400 x 150	3/8 (9,62)	5/8 (15,88)
12,5 kW	PAW-280PAH3M	19,0 / 38,0	500 x 400 x 150	3/8 (9,62)	5/8 (15,88)
14,0 kW	PAW-280PAH3M	20,0 / 40,0	500 x 400 x 150	3/8 (9,62)	5/8 (15,88)
20,0 kW	PAW-280PAH2	36,0 / 72,0	278 x 278 x 180	3/8 (9,62)	1 (25,40)
25,0 kW	PAW-280PAH2	38,0 / 84,0	278 x 278 x 180	1/2 (12,70)	1 (25,40)



1 | Remote control CZ-RTC5B (CZ-RTC6 for PAW-280PAH3M model)
2 | Intelligent thermostat for:
· Cold draft prevention
· Outdoor temperature shift compensation
3 | Plastic IP 65 Box
4 | Terminal base for sensors and power supply
5 | PAW-T10 PCB for Dry Contact
6 | 0-10 V demand control PCB



System and regulations. System overview
1 | AHU connection kit equipment (field supplied)
2 | AHU connection kit system controller (field supplied)
3 | AHU connection kit controller box (with control PCB)
4 | Thermistor for gas pipe (E2)
5 | Thermistor for liquid pipe (E1)
6 | Thermistor for suction air
7 | Inter-unit wiring
8 | Outdoor unit

AHU connection kit.



PCB, Power trans, Terminal block



Thermistor x2 (Refrigerant: E1, E2)



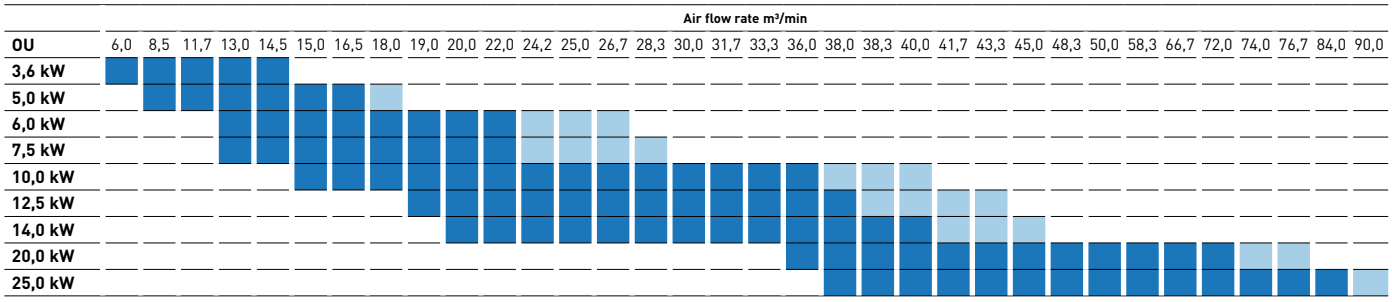
Thermistor (Air: TA; 1 sensor)



Wired remote controller.
CZ-RTC5B



Wired remote controller (for PACi NX model).
CZ-RTC6



Standard range of air flow rate under standard conditions (air intake temperature in cooling mode from 18 to 32 °C DB).

Extended range of air flow rate under special conditions (air intake temperature in cooling mode from 18 to 30 °C DB).

AHU connection kit 16,0 to 56,0 kW for ECOi and ECO G



3 types of AHU connection kit: Advanced, Medium and Light

Model Code	IP 65	0-10 V demand control*	Outdoor temperature shift compensation. Cold draft prevention
PAW-160MAH2 / PAW-280MAH2 / PAW-560MAH2	Yes	Yes	Yes
PAW-160MAH2M / PAW-280MAH2M / PAW-560MAH2M	Yes	Yes	No
PAW-160MAH2L / PAW-280MAH2L / PAW-560MAH2L	Yes	No	No

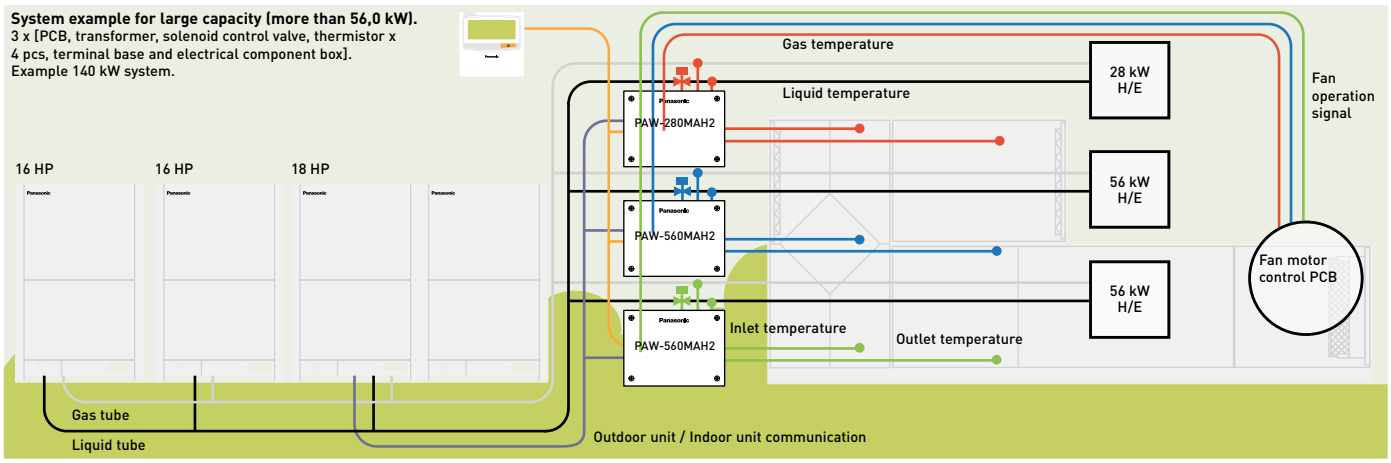
* With CZ-CAPBC2.

With ECOi outdoor units

ECOi outdoor units shall be used for AHU connection kit. 3 models for VRF system: 5 HP (PAW-160MAH2/M/L), 10 HP (PAW-280MAH2/M/L) and 20 HP (PAW-560MAH2/M/L).

With ECO G outdoor units

- One AHU connection kit may be used for one ECO G unit. Multiple AHU connection kits cannot be used
- Mixed with standard indoor units is not allowed
- Power specifications are single phase 220 V to 240 V





Models		PAW-	5 HP 160MAH2/M/L	10 HP 280MAH2/M/L	20 HP 560MAH2/M/L	30 HP 280MAH2/M/L 560MAH2/M/L	40 HP 560MAH2/M/L 560MAH2/M/L	50 HP 560MAH2/M/L 560MAH2/M/L 280MAH2/M/L	60 HP 560MAH2/M/L 560MAH2/M/L 560MAH2/M/L
Cooling capacity @ 50Hz		kW	14,00	28,0	56,0	84,0	112,0	140,0	168,0
Heating capacity @ 50Hz		kW	16,00	31,5	63,0	95,0	127,0	155,0	189,0
Air flow	Cool (Hi / Lo)	m³/h	2600/1140	5000/3500	10000/7000	15000/10500	20000/14000	25000/17500	30000/21000
Bypass factor recommended			0,9	0,9	0,9	0,9	0,9	0,9	0,9
Dimensions	H x W x D	mm	278 x 278 x 180	278 x 278 x 180	278 x 278 x 180	278 x 278 x 180	278 x 278 x 180	278 x 278 x 180	278 x 278 x 180
Weight		kg	3,2	6,3	6,3	6,3	6,3	6,3	6,3
Piping length	Min / Max	m	10/100	10/100	10/100	10/100	10/100	10/100	10/100
Elevation difference (in/out)	Max	m	10	10	10	10	10	10	10
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	5/8 (15,88)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)
	Gas pipe	Inch (mm)	5/8 (15,88)	7/8 (22,22)	1 1/8 (28,58)	1 1/4 (31,75)	1 1/2 (38,15)	1 1/2 (38,15)	1 1/2 (38,15)
Intake temperature of AHU connection kit	Cool Min ~ Max	°C DB	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32
	Cool Min ~ Max	°C WB	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23
	Heat Min ~ Max	°C	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30
Ambient temperature of outdoor unit	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15

AHU connection kit / System combination

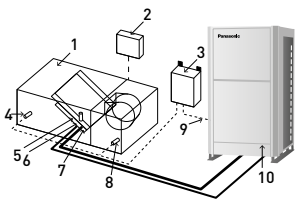
Capacity		Outdoor unit combination			AHU connection kit combination		
5 HP	16 kW	All ECOi outdoor units			PAW-160MAH2(M/L)	—	—
10 HP	28 kW	U-10ME2E8	—	—	PAW-280MAH2(M/L)	—	—
20 HP	56 kW	U-20ME2E8	—	—	PAW-560MAH2(M/L)	—	—
30 HP	84 kW	U-16ME2E8	U-14ME2E8	—	PAW-560MAH2(M/L)	PAW-280MAH2(M/L)	—
40 HP	112 kW	U-20ME2E8	U-20ME2E8	—	PAW-560MAH2(M/L)	PAW-560MAH2(M/L)	—
50 HP	140 kW	U-18ME2E8	U-16ME2E8	U-16ME2E8	PAW-560MAH2(M/L)	PAW-560MAH2(M/L)	PAW-280MAH2(M/L)
60 HP	168 kW	U-20ME2E8	U-20ME2E8	U-20ME2E8	PAW-560MAH2(M/L)	PAW-560MAH2(M/L)	PAW-560MAH2(M/L)

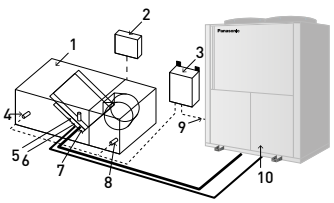
5 HP	16 kW	All ECO G outdoor units	PAW-160MAH2(M/L)
10 HP	28 kW	All ECO G outdoor units	PAW-280MAH2(M/L)
20 HP	56 kW	U-20GE3E5	PAW-560MAH2(M/L)

Technical focus

- Maximum capacity/system: 60 HP (168 kW)
- Maximum piping length: 100 m (120 m equivalent)
- Elevation difference (indoor unit / indoor unit): 4 m
- In/out capacity ratio: 50~100 %
- Maximum indoor unit number: 3 units*
- Outdoor temperature range in heating: -20 ~ +15 °C
- Available temperature range for the suction air at AHU connection kit: cool: +18 ~ +32 °C / heat: +16 ~ +30 °C
- The systems is controlled by the suction air (or room return air) temperature (same as standard indoor unit)
- The discharge air temperature is also controlled to prevent too-low air discharge in cooling or too-high air discharge in heating (in case of VRF)
- Demand control (forcible thermostat-OFF control by operating current)
- Defrost operation signal, Thermo-ON/OFF states output
- Drain pump control (drain-pump and the float switch to be supplied in local)
- External target temperature setting via indoor/outdoor signal interface is available with CZ-CAPBC2 (Ex. 0-10 V)
- Demand control 40 % to 120 % (5 % steps) by 0-10 V input signal
- Connectable with P-Link system. Special care for electrical noise may be necessary depending on the on-side system
- Fan control signal from the PCB can be used for control the air flow (high / mid / low and LL for Th-OFF). Need to change the fan control circuit wiring at field

*** To be simultaneous operation controlled by one remote controller sensor.**





System and regulations. System overview.
1 | AHU Unit equipment (field supplied)
2 | AHU Unit system controller field supplied)
3 | AHU connection kit controller box (with control PCB)
4 | Thermistor for discharge air
5 | Electronic expansion valve
6 | Thermistor for gas pipe (E3)
7 | Thermistor for liquid pipe (E1)
8 | Thermistor for suction air
9 | Inter-unit wiring
10 | Outdoor unit

Energy recovery ventilation

Panasonic energy recovery ventilators help you with your comfort and energy-saving plan.

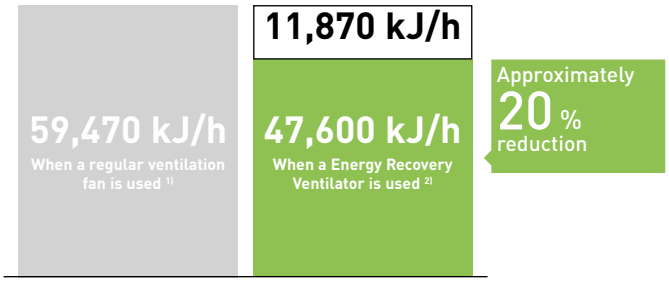




Panasonic energy recovery ventilators can reduce the outside air load because they efficiently recover the heat lost by ventilation during the heat recovery process

This results in energy-saving ventilation and lower running costs for air-conditioning and heating equipment. Furthermore, by designing our current models with an counter-flow heat-exchange element, we achieved products with slim body shapes and quiet operation that create a comfortable and pleasant air-conditioned environment while saving energy.

- Dramatic energy savings achieved through adoption of a high-efficiency counter-flow heat-exchange element
- Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape
- All maintenance can be performed through a single inspection hole
- Straight air supply / exhaust system used for easier installation



1) Two FY-27FPK7 units. 2) One FY-500ZDY8R unit.

Energy efficiency and ecology

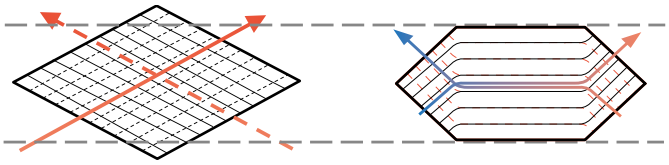
Energy consumption is dramatically reduced by using a counter-flow heat-exchange element. Air conditioning load is reduced by approximately 20 %, resulting in significant energy savings.

More comfort

Quiet operation.
Low noise operation results in noticeably quieter units. All models with capacities below 500 m³/h run at noise levels below 32 dB (high setting) and even our largest 1000 m³/h-capacity model runs at only 37,5 dB (high setting).

Comparison of former and current elements

With the cross-flow element, air moves in a straight line across the element; with the counter-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.



Former (cross-flow element) New (counter-flow element)

Heat exchange ventilation and normal ventilation

Energy-saving ventilation can be achieved through the proper use of heat-exchange ventilation and normal ventilation.

Heat exchange ventilation.
When a room is cooled or heated, the exhausted cooling / heating energy is recovered by heat-exchange ventilation.

Normal ventilation.
This is used in the spring and autumn, when rooms are not cooled or heated, that is, when there is little difference between the indoor and outdoor air conditions. In addition, at night during the hot season, when the outside air temperature drops the outside air is drawn inside without heat exchange, alleviating the load on the air conditioning equipment.
The heat exchanger is made up of a membrane manufactured from a special material covered in resin for optimal heat transmission. The nylon/polyester fibre filter offers high dust retention capacity. We have also redesigned the air ducts to obtain a long-lasting heat exchange system which does not need periodic cleaning.

Heat exchanger

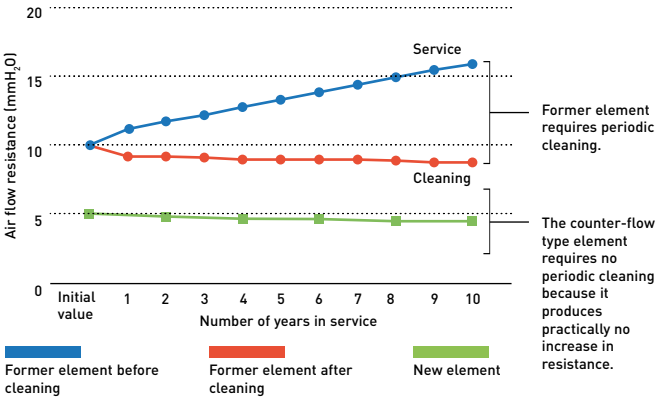
With the cross-flow element, air moves in a straight line across the element. With the counter-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.

Suppresses indoor temperature changes while providing fresh air. Recovers up to 77 % of the heat in the outgoing air, for an ecological and energy efficient building.

Long service life of heat-exchange element

We used a nonwoven cloth filter with a high dust collection efficiency and redesigned the air flow passages to achieve a durable heat-exchange element that requires no periodic cleaning.

Changes in air flow resistance based on number of years in service.

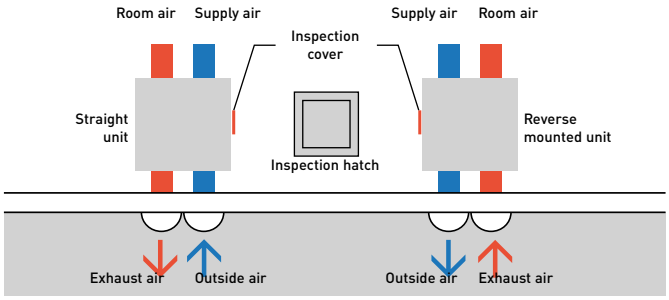


Easy installation and maintenance

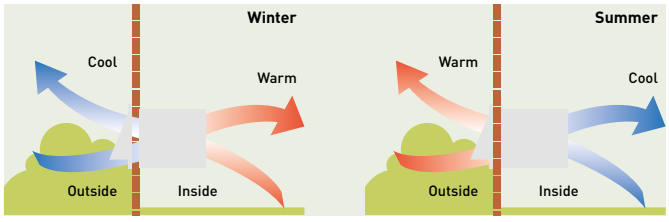
Slim shape and easier installation.
Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.
270 mm Height: FY-250ZDY8R // FY-350ZDY8R // FY-500ZDY8R
388 mm Height: FY-800ZDY8R // FY-01KZDY8R

Reverse mountable direct air supply / exhaust system.
Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.

Since each unit can be mounted in reverse position, only one inspection hole is needed for two units: Two units can share one inspection hole so duct work is easier and more flexible.



Balanced ventilation



A intuitive and stylish control

· Included as a standard control
· Compact and flat panel
· Filter cleaning support
  - Signal alert for clearing
  - Filer usage condition by 1/2/3/4 months
· Size (W x H x D) 116 x 120 x 40 mm



FY-250ZDY8R



FY-350ZDY8R



FY-500ZDY8R



FY-800ZDY8R



FY-01KZDY8R



Rated flow rate			250 m³/h			350 m³/h			500 m³/h			800 m³/h			1000 m³/h		
Models			FY-250ZDY8R			FY-350ZDY8R			FY-500ZDY8R			FY-800ZDY8R			FY-01KZDY8R		
Power source			220 V / 240 V / 50 Hz			220 V / 240 V / 50 Hz			220 V / 240 V / 50 Hz			220 V / 240 V / 50 Hz			220 V / 240 V / 50 Hz		
			E-high	High	Low	E-high	High	Low	E-high	High	Low	E-high	High	Low	E-high	High	Low
Input power		W	112,0/ 128,0	108,0/ 123,0	87,0/ 96,0	182,0/ 190,0	178,0/ 185,0	175,0/ 168,0	263,0/ 289,0	204,0/ 225,0	165,0/ 185,0	387,0/ 418,0	360,0/ 378,0	293,0/ 295,0	437,0/ 464,0	416,0/ 432,0	301,0/ 311,0
Air flow		m³/h	250	250	190	350	350	240	500	500	440	800	800	630	1000	1000	700
External static pressure		Pa	105	95	45	140	60	45	120	60	35	140	110	55	105	80	75
Sound power	Heat exchange	dB(A)	30,0/ 31,5	29,5/ 30,5	23,5/ 26,5	32,5/ 33,0	30,5/ 31,0	22,5/ 25,5	36,5/ 37,5	34,5/ 35,5	31,0/ 32,5	37,0/ 37,5	36,5/ 37,0	33,5/ 34,5	37,5/ 38,5	37,0/ 37,5	33,5/ 34,5
	Normal	dB(A)	30,0/ 31,5	29,5/ 30,5	23,5/ 26,5	32,5/ 33,0	30,5/ 31,0	22,5/ 25,5	37,5/ 38,5	37,0/ 38,0	31,0/ 32,5	37,0/ 37,5	36,5/ 37,0	33,5/ 34,5	39,5/ 40,5	39,0/ 39,5	35,5/ 36,5
Temperature exchange efficiency	Heat exchange	%	75	75	77	75	75	78	75	75	76	75	75	76	75	75	79
	Normal	%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dimension	H x W x D	mm	270 x 882 x 599			317 x 1050 x 804			317 x 1090 x 904			388 x 1322 x 884			388 x 1322 x 1134		
Net weight		kg	29			49			57			71			83		

This noise of the product is the value which was measured at the acoustic room. Actually, in the established condition, that undergo influence by the echoing of the room and so that become bigger than the display numerical value. The input, the current and the exchange efficiency are values at the time of the mentioned air flow. The noise level shall be measured 1,5 m below the centre of the unit. The temperature exchange efficiency averages that of when cooling and when heating.

Features

Energy efficiency and ecology.

- Up to 20 % energy saving in the installation
- Recovers up to 77 % of the heat in the outgoing air

Comfort.

- Cleaning reduced due to the revolutionary structure (every 6 months)
- Ideal for indoor spaces without windows

Easy installation and maintenance.

- 5 models for easier selection
- Reduced system height (270 mm and 388 mm)
- Side opening for cleaning (inspection of filter, motor and other parts)
- Installation can be reversed to share an inspection opening between 2 machines
- Easy connection to the air conditioning unit (without additional elements)
- Installation in false ceilings
- Units operate at 220 - 240 V
- High static pressure for easier installation
- High energy saving, up to 20 %
- Counter Cross Flow technology for better efficiency
- Long life element core
- Easy installation and 20 % less thickness
- Easy connection to air conditioning units
- Silent units

Technical focus

Heat recovery with DX coil for VRF

Panasonic launches an heat recovery solution for greater energy efficiency. Panasonic's heat recovery solution performs well in extreme weather conditions and can achieve up to 77 % efficiency (63 % in enthalpy efficiency).



The counter-flow heat exchanger reduces the air conditioning load, enabling customers – typically owners of hotels, restaurants and other large commercial buildings – to reduce their energy consumption and save on the cost of maintaining comfortable room temperatures.

Energy efficiency

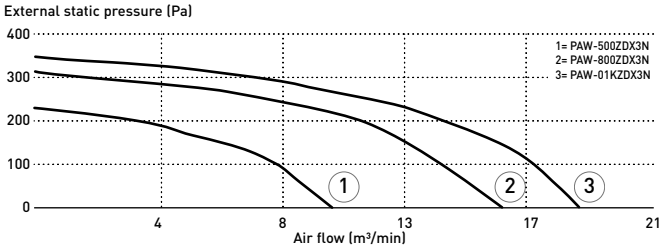
As the latest example of Panasonic's continued commitment to developing unbeatable, energy-efficient air conditioning technologies for commercial applications, the company has introduced a heat recovery device.
The unit features a DX coil designed to recover up to 77 % of the heat from outgoing air, and a air purifying system which helps to improve air quality.
In even the most demanding commercial applications, business owners will benefit from the unit's ability to by-pass the heat exchange process when the outside air temperature is cool enough for fresh air to be drawn directly inside (free cooling).
This alleviates the load on the air conditioning equipment and consequently reduces energy bills.

Supply section complete

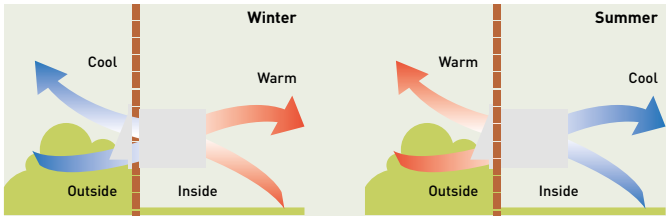
The supply section comes complete with the DX coil (using R410A refrigerant) – fitted with a solenoid control valve, freon filter, contact temperature sensors on the liquid and gas line, and NTC sensors on the upstream and downstream air flows. The built-in electric box is equipped with a PCB to control the internal fan speed and to interconnect the outdoor and indoor units, and the ducts are connected by circular plastic collars.

Characteristic curves

The following curves show the unit external static pressure at maximum fan speed for each model.



Balanced Ventilation







Optional controller. CONEX wired remote controller.
CZ-RTC6 - CZ-RTC6BL



Optional Controller. Control for hotel application.
PAW-RE2C4



Optional Controller. Wired remote controller.
CZ-RTC5B

Model			PAW-500ZDX3N		PAW-800ZDX3N		PAW-01KZDX3N	
Power source	Voltage	V	230		230		230	
	Phase		Single phase		Single phase		Single phase	
	Frequency	Hz	50		50		50	
Air flow		m³/min	8,33		13,33		16,67	
External static pressure [1]		Pa	90		120		115	
Maximum current	Total full load	A	0,6		1,4		2,1	
Input power		W	150		320		390	
Sound pressure [2]		dB(A)	39		42		43	
Pipe diameter	Liquid pipe	Inch (mm)	1/4 (6,35)		1/4 (6,35)		1/4 (6,35)	
	Gas pipe	Inch (mm)	1/2 (12,70)		1/2 (12,70)		1/2 (12,70)	
Heat recovery			**Cooling**	**Heating**	**Cooling**	**Heating**	**Cooling**	**Heating**
Temperature efficiency		%	76	76	76	76	76	76
Enthalpy efficiency		%	63	67	63	65	60	62
Saved power summer mode or winter mode*		kW	1,70	4,30 (4,80)	2,50	6,50 (7,30)	3,20	8,20 (9,00)
DX coil								
Total / Sensible cooling capacity		kW	3,00/2,10	2,50/2,70	5,10/3,50	4,40/4,80	5,80/4,10	5,20/6,70
OFF temperature		°C	15,9	28,0 (27,3)	15,5	29,6 (29,0)	16,2	28,5 (27,8)
OFF relative humidity		%	90	16 (15)	90	14 (13)	89	15 (14)

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®

Accessories	
CZ-RTC5B	Wired remote controller with Econavi function
PAW-RE2C4	Wired remote controller for hotel application

Nominal summer conditions: Outside air: 32 °C DB, RH 50 %. Ambient air: 26 °C DB, RH 50 %. Nominal winter conditions: Outside air: -5 °C DB, RH 80 %. Ambient air: 20 °C DB, RH 50 %. Cooling mode air inlet condition: 28,5 °C DB, RH 50 %; evaporating temperature 7 °C. Heating mode air inlet condition: 13 °C DB, RH 40 % (11 °C DB, RH 45 %); condensating temperature 40 °C. DB: Dry Bulb; RH: Relative Humidity. 1) Referred to the nominal air flow after filter and plate heat exchanger. 2) Sound pressure level calculated at 1 m far from: ducted supply exhaust air ducted return - first air intake / service side, at normal condition. * Tentative data.

Interconnection

This ventilation unit is connected to an ECOi indoor unit (3,0 kW, 4,0 kW or 4,5 kW) and can be controlled by the easy-to-use ECOi remote controller CZ-RTC5B.
This capability makes the system an excellent choice for hotels, offices (large and small), educational settings and other buildings requiring different temperatures in multiple rooms. The system also integrates easily with building management systems.

Technical focus

- Motorised heat recovery by-pass device automatically controlled by unit control to use fresh air free-cooling when convenient

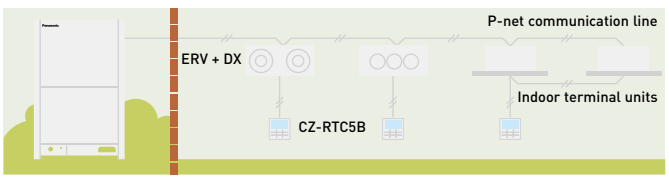
General characteristics

- Galvanized steel self-supporting panels, internally and externally insulated
- High efficiency enthalpic heat recover, static cross flow type, made by membrane with high moisture permeability, good air tightness, excellent tear resistance, and aging resistance, it is structures with flat plates and corrugated plates. Total heat exchange with temperature efficiency up to 76 % and enthalpy efficiency up to 67 %, also at high level during summer season
- ISO16890 $ePm_{2,5}$ 95 % (F9 EN 779) efficiency class filter with synthetic cleanable media and COARSE 50 % (G3 EN 779) pre-filter ON fresh air, COARSE 50 % filter on return air intake
- Removable side panel to access filters and heat recovery in the event of scheduled maintenance
- Low consumption, high efficiency & low noise direct driven fans
- Supply section complete with DX coil (R410A) fitted with solenoid control valve, freon filter, contact temperature sensors on liquid and gas line, NTC sensors upstream and downstream air flow
- Built-in electric box equipped with PCB to control internal fan speed and to interconnect outdoor/indoor units
- Duct connection by circular plastic collars
- CZ-RTC5B Timer remote controller (option)



INTERNET CONTROL: Optional.

Interconnection to outdoor/indoor units



Electric air curtains

The Panasonic range of air curtains is designed for smooth operation and efficient performance. Air curtains produce a continuous stream of air blown from the top to the bottom of an open doorway and create a barrier that people and products can flow across, but air can't.



Electric air curtain

1 **Newly designed to maximize performance**

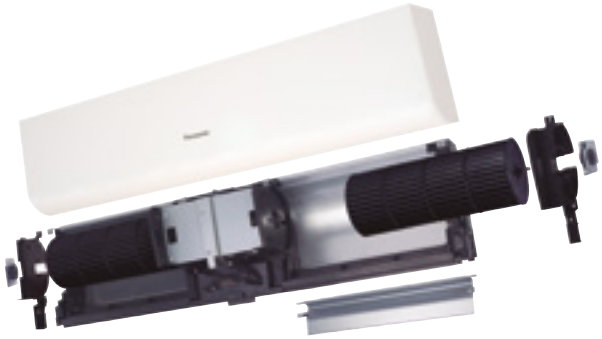
High air flow upgraded 145 % compared to conventional model (in the case of FY-3009U1).

2 **Comprehensive product line up**

1,5 m wide model added in the line up.

3 **Easier installation and maintenance**

Simple structure for easy installation and maintenance.





			FY-3009U1	FY-3012U1	FY-3015U1
Width		mm	900	1200	1500
Voltage		V	220	220	220
Air flow	Hi / Lo	m³/h	1100/920	1400/1270	2000/1800
Consumption	Hi / Lo	W	76/70	94/85	131/110
Current	Hi / Lo	A	0,35/0,32	0,43/0,40	0,59/0,50
Air speed	Hi / Lo	m/s	10,50/8,50	9,50/8,00	10,50/9,50
Sound pressure		dB(A)	48,5/45,0	48,5/44,5	51,5/48,0
Dimension / Net weight	H x W x D	mm / kg	900 x 231,5 x 212/12,0	1200 x 231,5 x 212/14,5	1500 x 231,5 x 212/18,0

Electric air curtain with DX coil

Designed to improve energy efficiency, minimise heat loss from a building, and to allow retailers to keep doors open to encourage customers, our air curtains are suitable for connection to both VRF and PACi Systems.

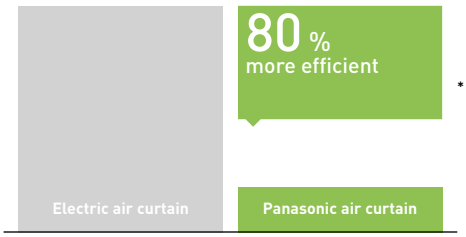


Highly efficient heating effect

The combined air stream, which has a desirable low air current induction factor (mixing factor), can carry the selected initial temperature effect over long distances, and will reach the floor area while still at room temperature. This is necessary to avoid cooling down the interior spaces.
Available in different lengths to suit requirements between 1 and 2,5 m, both air curtains have outlet grilles that can be adjusted to five different positions. The HS model can be installed up to a height of 3,0 m with the LS model up to 2,7 m. The outlet grilles can be easily adjusted into five positions to suit different installation requirements and the air filter can be accessed without the need for specialist tools.

· High performance with EC fan motor (40 % lower running costs compared to a standard AC fan motor)
· Easy Cleaning and Servicing
· Can be connected to either Panasonic VRF or PACi systems

Heating capacity comparison: Electrical air curtain / Panasonic air curtain.



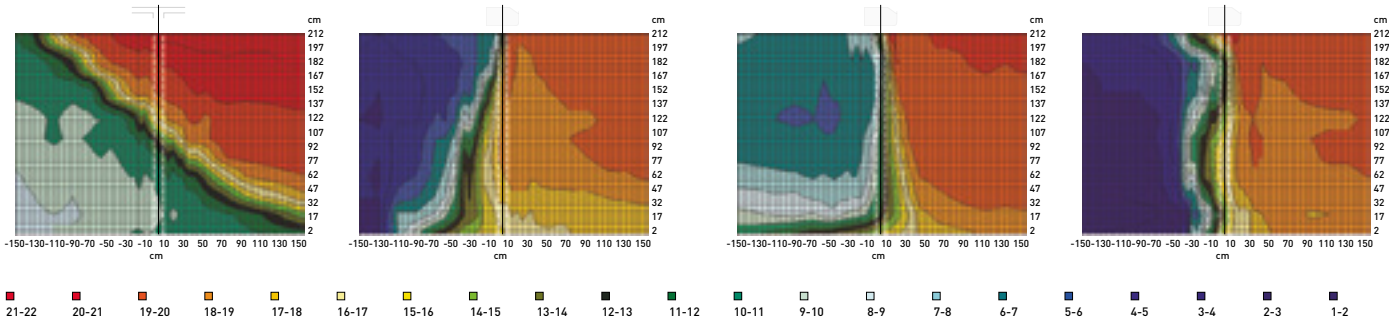
* With the U-100PZH2E5 on the PAW-20PAIRC-LS. Calculation method: Taking as consideration SCOP of the Panasonic combination of 6,0. If 100 is the energy needed for a air curtain, Panasonic air curtain will need 1/(1-6)*100=20.

· Built-in drain for cooling operation
· HS and LS models can be controlled via Panasonic's range of remote internet controls

The HS and LS models are ideal for connection to a ECOi or PACi system. With simple "plug and play" installation, both are fitted with an EC fan motor for a smooth operation and efficient performance. This fan guarantees 40 % lower running cost than with a standard AC fan motor. Air curtains run approximately 12 hours per day at shops, and efficient performance contributes to energy savings.

Optimised air flow velocity

1. Energy losses, no air curtain installed
2. Too low velocity air curtain – air curtain not efficient
3. Optimum results with the Frico air curtain connected to Panasonic VRF
4. Too high velocity air curtain – considerable turbulence, energy lost to the outside, air curtain not efficient



Opening without air curtain.
In an unprotected opening the cold air flows out and the cold storage room becomes much too warm.

Opening with air curtain, wrong angle.
If the angle is too small the hot air is blown into the cold storage room.

Opening with air curtain, too high speed.
Excessive speed creates turbulence, which causes energy loss and increases the cold storage temperature.

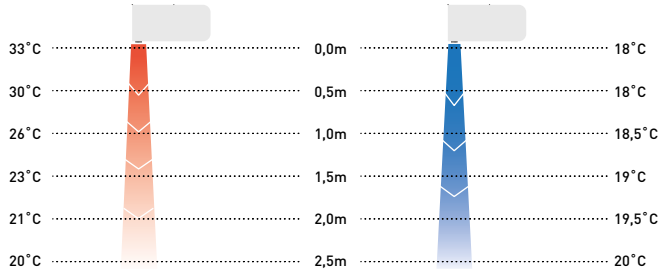
Opening with correctly adjusted air curtain.
With a correctly set air curtain unit there is a sharp separation between the different temperature zones.

Intelligent operation

Our air curtains combine air flow and heating / cooling technology to ensure optimum comfort and energy efficiency whilst also creating an effective barrier between indoor and outdoor environments. Design and installation is key to achieving the correct height / temperature settings to achieve optimum performance. Our air curtains are designed to answer the demands of the retail, commercial and industrial markets.

Heating mode.
Indoor temperature 20 °C.

Cooling mode.
Indoor temperature 27 °C.





Air curtain with DX coil, connected to PACi systems (compatible with R32 or R410A outdoor units)

Comfort: Easy redirection of air flow by means of manual deflector.

Ease of use: Speed selector (high and low) on the unit itself.

Easy installation and maintenance: Easy installation / Compact dimensions improve installation and positioning / Easy cleaning of grid without opening of the unit.

Outdoor unit			**7,1 kW**	**10,0 kW**	**14,0 kW**	**20,0 kW**
Air outlet height 2,7 m			**PAW-10PAIRC-LS**	**PAW-15PAIRC-LS**	**PAW-20PAIRC-LS**	**PAW-25PAIRC-LS**
Cooling capacity [1]	Max	kW	6,1	9,7	13,0	17,0
Heating capacity [2]	Max	kW	7,9	12,0	15,0	19,0
Air flow	High	m³/h	1800	2700	3600	4500
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,03
Electric consumption fan	230 V / 50 Hz	kW	0,30	0,50	0,60	0,80
Current	230 V / 50 Hz	A	2,10	3,10	4,10	5,10
Sound pressure [3]	Max	dB(A)	65	66	67	69
Air outlet height 3,0 m			**PAW-10PAIRC-HS**	**PAW-15PAIRC-HS**	**PAW-20PAIRC-HS**	**PAW-25PAIRC-HS**
Cooling capacity [1]	Max	kW	9,1	13,0	19,5	23,7
Heating capacity [2]	Max	kW	11,8	15,8	23,6	27,6
Air flow	High	m³/h	2700	3600	5400	6300
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,12
Electric consumption fan	230 V / 50 Hz	kW	0,75	1,00	1,50	1,75
Current	230 V / 50 Hz	A	4,10	5,50	8,20	9,60
Sound pressure [3]	Max	dB(A)	66	67	68	68
Common data						
Dimension [4]	H x W x D	mm	260 (+140) x 1000 x 460	260 (+140) x 1500 x 460	260 (+140) x 2000 x 460	260 (+140) x 2500 x 460
Net weight	Air outlet height 2,7 m	kg	50	65	80	95
	Air outlet height 3,0 m	kg	55	65	85	110
Fan type			EC	EC	EC	EC
Pipe diameter	Liquid pipe / Gas pipe	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 3/4 (19,05)	3/8 (9,52) / 7/8 (22,22)	3/8 (9,52) / 7/8 (22,22)
Door width		m	1,0	1,5	2,0	2,5
Refrigerant			R32	R32	R32	R32

Accessories	
PAW-AIR1-DP	Optional drain pump

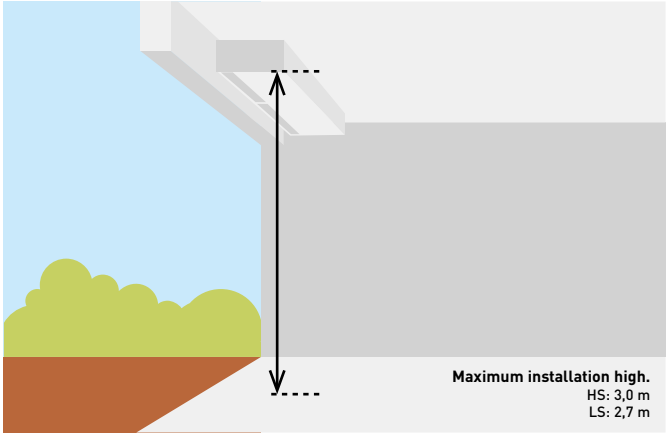
1) Cooling capacity DX coil, air temperature in/out +27/+18 °C, R32 and R410. 2) Heating capacity condenser, air temperature in/out +20/+33 °C, R32 and R410. In the case of lower outdoor temperatures, an outdoor model with higher capacity may be necessary. 3) Measured in distance up to 5,0 m, direction factor 2, absorbing surfaces 200 m², Min / Max air flow. 4) 140 mm is the height of an electrical box if it is installed on the top.

Technical focus

- Save up to 40 % energy costs by use of the integrated EC fan technology (higher efficiency than conventional AC fan, soft start and longer motor duration)
- 4 length of air curtain LS and HS are available 1,0, 1,5, 2,0 and 2,5 m
- Installation height up to 3,0 m
- Outlet grilles can be adjusted in five positions, to suite different indoor and installation requirements
- Control with Panasonic remote control systems (optional)
- Direct integration to BMS by optional Panasonic interfaces
- Trip dray included in all DX air curtain steps

How does it work?

Stale air from the room is taken in and ejected near the door. This creates a 'roll of air' that shields the door area, mixing with the colder incoming air. It then turns away from the door, back into the room and toward the intake screen, where it is partly drawn in again. This flow of air helps to create a barrier for heat loss yet at the same time refreshes room air





Air curtain with DX coil, connected to VRF systems

Comfort: Easy redirection of air flow by means of manual deflector.

Ease of use: Speed selector (high and low) on the unit itself.

Easy installation and maintenance: Easy installation / Compact dimensions improve installation and positioning / Easy cleaning of grid without opening of the unit.

Outdoor unit			**4 HP**	**4 HP**	**5 HP**	**8 HP**
Air outlet height 2,7 m			**PAW-10EAIRC-LS**	**PAW-15EAIRC-LS**	**PAW-20EAIRC-LS**	**PAW-25EAIRC-LS**
Cooling capacity [1]	Max	kW	6,1	9,7	13,0	17,0
Heating capacity [2]	Max	kW	7,9	12,0	15,0	19,0
Air flow	High	m³/h	1800	2700	3600	4500
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,03
Electric consumption fan	230 V / 50 Hz	kW	0,30	0,50	0,60	0,80
Current	230 V / 50 Hz	A	2,10	3,10	4,10	5,10
Sound pressure [3]	Max	dB(A)	65	66	67	69
Air outlet height 3,0 m			**PAW-10EAIRC-HS**	**PAW-15EAIRC-HS**	**PAW-20EAIRC-HS**	**PAW-25EAIRC-HS**
Cooling capacity [1]	Max	kW	9,1	13,0	19,5	23,7
Heating capacity [2]	Max	kW	11,8	15,8	23,6	27,6
Air flow	High	m³/h	2700	3600	5400	6300
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,12
Electric consumption fan	230 V / 50 Hz	kW	0,75	1,00	1,50	1,75
Current	230 V / 50 Hz	A	4,10	5,50	8,20	9,60
Sound pressure [3]	Max	dB(A)	66	67	68	68
Common data						
Dimension [4]	H x W x D	mm	260 (+140) x 1000 x 460	260 (+140) x 1500 x 460	260 (+140) x 2000 x 460	260 (+140) x 2500 x 460
Net weight	Air outlet height 2,7 m	kg	50	65	80	95
	Air outlet height 3,0 m	kg	55	65	85	110
Fan type			EC	EC	EC	EC
Pipe diameter	Liquid pipe / Gas pipe	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 3/4 (19,05)	3/8 (9,52) / 7/8 (22,22)	3/8 (9,52) / 7/8 (22,22)
Door width		m	1,0	1,5	2,0	2,5
Refrigerant			R32 / R410A	R32 / R410A	R32 / R410A	R32 / R410A

Accessories	
PAW-AIR1-DP	Optional drain pump

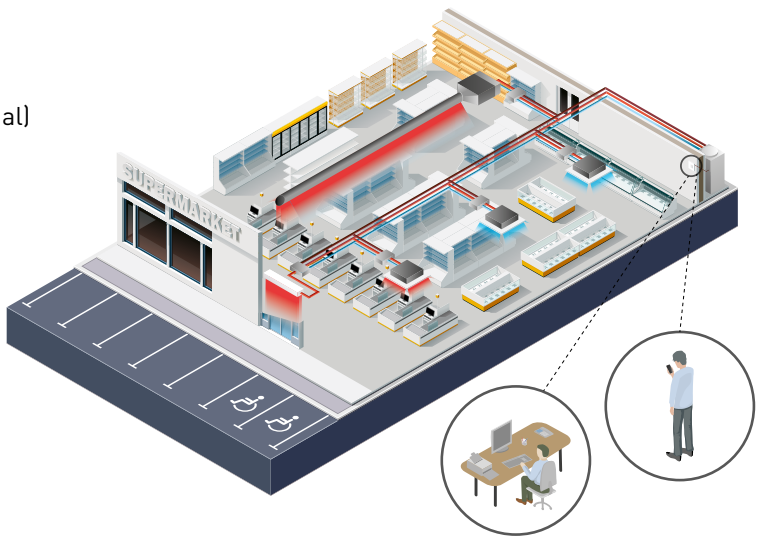
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Technical focus

- Save up to 40 % energy costs by use of the integrated EC fan technology (higher efficiency than conventional AC fan, soft start and longer motor duration)
- 4 length of air curtain LS and HS are available 1,0, 1,5, 2,0 and 2,5 m
- Installation height up to 3,0 m
- Outlet grilles can be adjusted in five positions, to suite different indoor and installation requirements
- Control with Panasonic remote control systems (optional)
- Direct integration to BMS by optional Panasonic interfaces
- Trip dray included in all DX air curtain steps

Internet control

An app added to your tablet or smartphone or via the Internet allows you to control and manage the system remotely. There is also the option to integrate into existing BMS systems by using other Panasonic interfaces.



BMS CONNECTIVITY

Rating Conditions: Cooling Outdoor +35 °C DB Indoor +27 °C DB / +19 °C WB, Discharge temperature 16 °C. All combinations under rated conditions: Heating Outdoor +7 °C DB/+6 °C WB Indoor +20 °C DB. In case of lower outdoor temperatures a higher capacity outdoor unit model may be necessary. Specifications subject to change without notice. For detailed information about ErP, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

High pressure duct and 100 % fresh air duct function for all ECOi and ECO G systems

The E2 range of ducted units offers improved design flexibility for extended duct layouts as a result of their increased external static pressures and reduces energy consumption while providing fresh air to larger spaces.



E2 Type high static pressure hide-away • R410A

High pressure duct and 100 % fresh air duct function.



COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Model			100 % Fresh air duct function (by using Kit for 100 % fresh air)			
			S-224ME2E5		S-280ME2E5	
			Cooling	Heating	Cooling	Heating
Capacity		kW	22,4	21,2	28,0	26,5
Input power		W	290,00	290,00	350,00	350,00
Operating current		A	1,85	1,85	2,20	2,20
Air flow	Hi / Med / Lo	m³/min	28,30 / — / —		35,00 / — / —	
External static pressure		Pa	200		200	
Sound pressure [2]	Hi / Med / Lo	dB(A)	43 / — / —		44 / — / —	
Sound power	Hi / Med / Lo	dB(A)	75 / — / —		76 / — / —	
Dimension	H x W x D	mm	479 x 1453 x 1205		479 x 1453 x 1205	
Net weight		kg	102		106	
Pipe diameter	Liquid pipe	Inch (mm)	3/8 (9,52)		3/8 (9,52)	
	Gas pipe	Inch (mm)	3/4 (19,05)		7/8 (22,22)	

Accessories	
CZ-RTC6	CONEX wired remote controller (non-wireless)
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®
CZ-RTC5B	Wired remote controller with Econavi function

Accessories	
CZ-RWS3 + CZ-RWRC3	Infrared remote controller
PAW-RE2C4	Wired remote controller for hotel application
CZ-CENSC1	Econavi energy savings sensor

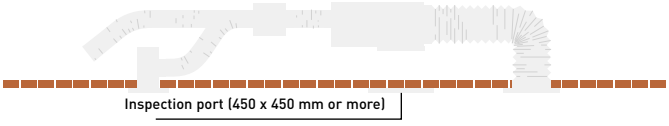
Rating Conditions for 100 % Fresh air duct function: Cooling Outdoor 33 °C DB / 28 °C WB. Heating Outdoor 0 °C DB / -2,9 °C WB.
1) Available to select the setting by initial setup. 2) Values with 140 Pa setting. * No filter included. ** No compatible with 3-Pipe ECO G GF3.

Technical focus

- 100 % fresh air duct function
- DC fan motor for more savings
- Complete flexibility for ductwork design
- Can be located into a weatherproof housing for external sitting
- Air OFF sensor avoids cold air dumping
- Configurable air temperature control

System example

An inspection port (450 x 450 mm or more) is required at the lower side of the indoor unit body (field supply).



100 % fresh air duct function

The E2 duct with 100 % fresh air duct function have exceptional discharge temperature.

	Discharge Range		
	Min	**Max**	**Default**
Cooling	15 °C	24 °C	18 °C
Heating	17 °C	**45 °C**	40 °C

Plenums

Air outlet plenum (suitable for rigid + flexible duct)		
	Number of exits with diameters	Model
S-224ME2E5 / S-280ME2E5	1 x 500 mm	CZ-TREMIESPW706

Kit for 100 % fresh air function

Kit for 100 % fresh air function for 2 way systems	
2x CZ-P160RVK2	Rap valve kit
2x CZ-CAPE2	3 way control PCB
CZ-P680BK2BM	Distribution joint kit
	1x remote controller

Kit for 100 % fresh air function for 3 way systems	
2x CZ-P160HR3	3 way valve Kit
2x CZ-CAPE2	3 way control PCB
CZ-P680BH2BM	Distribution joint kit
	1x remote controller

28% ECONAVI | SELF-DIAGNOSING | AUTOMATIC FAN | HUMIDITY CONTROL DRY | AUTOMATIC RESTART | BUILT-IN DRAIN PUMP | OPTIONAL WI-FI | BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.





Control and connectivity

Panasonic has developed the largest range of control systems to offer the best option for commercial needs.
From the individual remote controller for the residential single units up to the newest technology capable of controlling your building anywhere in the world. The simple to use cloud software can even be used from a portable device.

VRF Smart Connectivity+	> 368
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VRF Smart Connectivity+

Through thorough energy management, Panasonic's VRF Smart Connectivity+ is a completely new, state-of-the-art solution providing energy saving and comfort as well as simple installation, operation and running.



VRF Smart Connectivity+ offers efficient energy management and a new air conditioning control solution with high IAQ (indoor air quality).

Energy management system for rooms	Each room is monitored by high-precision sensors, making it possible to make every room's temperature comfortable without wasting energy.
Management system for the entire building	A Building Energy Management System (BEMS) can also be connected for Plug & Play centralised control of the building's entire energy consumption.

Advantages

Dramatic reduction of OpEx with outstanding IAQ.
- 3 Built-in sensors: Temperature, RH and occupancy
- ZigBee wireless sensors: CO_2 / temperature / RH%, window / door, ceiling / wall / water leakage
- Relay Pack, Hotel Room Controller

User-/owner-friendly.
- Colour touch screen
- Simple and easy to use
- 22 languages
- Easy-to-understand error description

Ultimate customisation.
- Customisable colour background
- Custom display/icons, messages
- Programmable logic (also stand alone)
- Various controls and various external connection devices

Easy design and Plug & Play to reduce CapEx.
- Simple Plug & Play VRF connection to Building Energy Management System (BEMS)
- Stand alone or BEMS connected
- Easy installation of ZigBee sensors

VRF Smart Connectivity+: New SE8000.

1 Quality air control

Optimum IAQ is realized using the CO_2 and humidity sensors. The interior environment remains comfortable, while heating and cooling costs are minimized.
The CO_2 sensor can control ventilation systems, which contribute to improving the room's air quality.

2 Easy installation and integration

A remote controller is all that's required for occupancy control and optimum automatic indoor air quality (IAQ) control. Simple operation with a rented interface further contributes to increased energy efficiency and productivity for reduced capital expenditure (CapEx) and operating expense (OpEx).

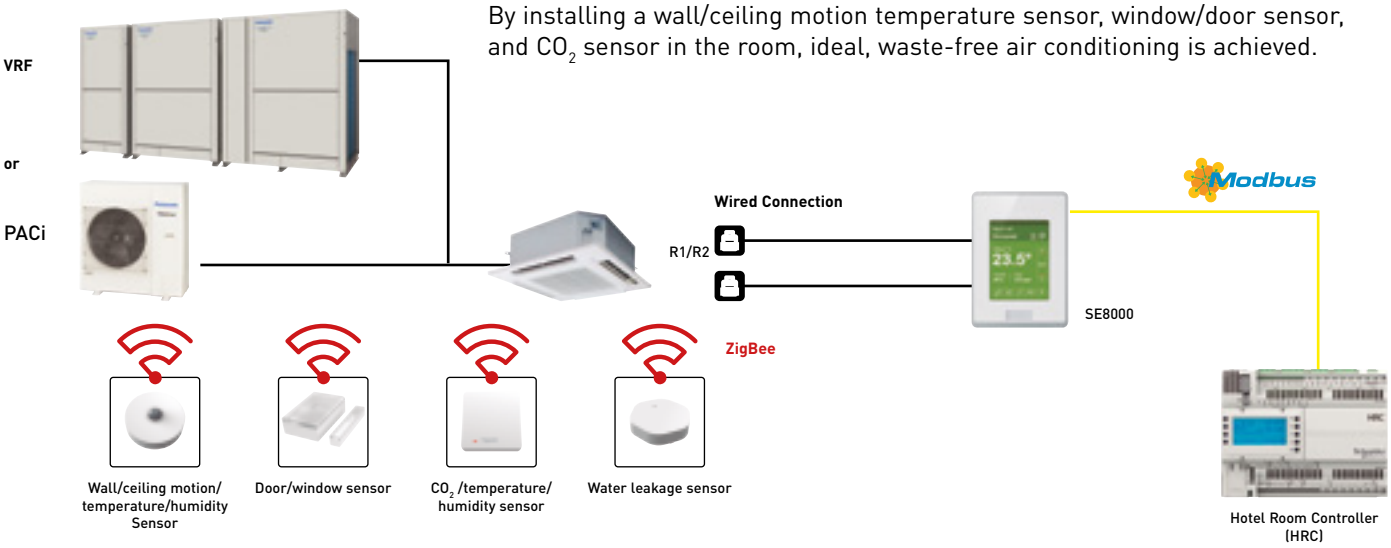
3 Other equipment control

One room controller manages various devices including lighting and the blinds.
A ventilation system and other external connection devices control is possible with this BEMS.



Energy management system for rooms

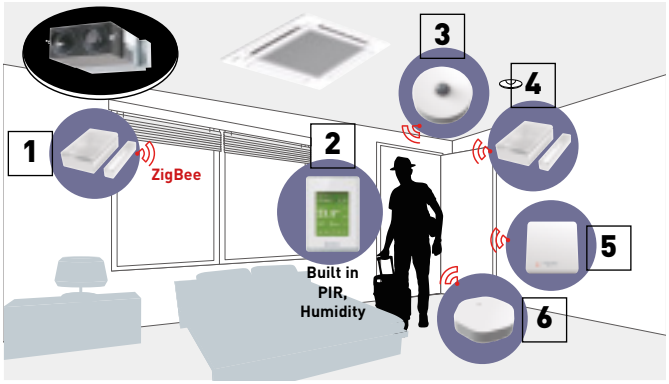
By installing a wall/ceiling motion temperature sensor, window/door sensor, and CO_2 sensor in the room, ideal, waste-free air conditioning is achieved.



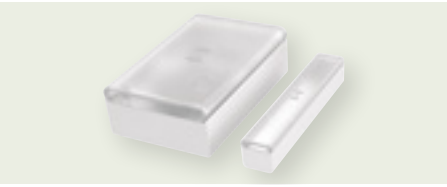
Sensing & Control technology

Using sensors from Schneider Electric, high-quality occupancy control and automatic IAQ control are realised. The sensors detect the presence or absence of occupants, and the opening and closing of doors and windows to achieve the most efficient energy management for exceptional air-conditioned comfort.
Flexible installation is possible to match different applications and building features such as walls, ceilings and proximity to doors and windows. No wiring means extra installation versatility.

Batteries last for up to five years (10-year battery for CO_2 sensor) and are easy to install and replace.



1 | Window sensor (option).
2 | Room controller.
3 | Ceiling motion sensor (option).
4 | Door sensor (option).
5 | CO_2 sensor (option).
6 | Water leakage sensor (option).



Door/window sensor.
Door and window contact detection sensor to monitor opening and closing.



Wall/ceiling motion/temperature/humidity sensor.
Wall and ceiling sensor to detect the presence or absence of occupants.



CO_2 /temperature/humidity sensor.
Monitor indoor air quality, review data on interfacing devices, and control fresh air inside customisable zones.



Water leakage sensor.
Two sensing pads under the body activate when water is present between the two pads. Detecting the water, the sensor reports the event to the controller (and BEMS).



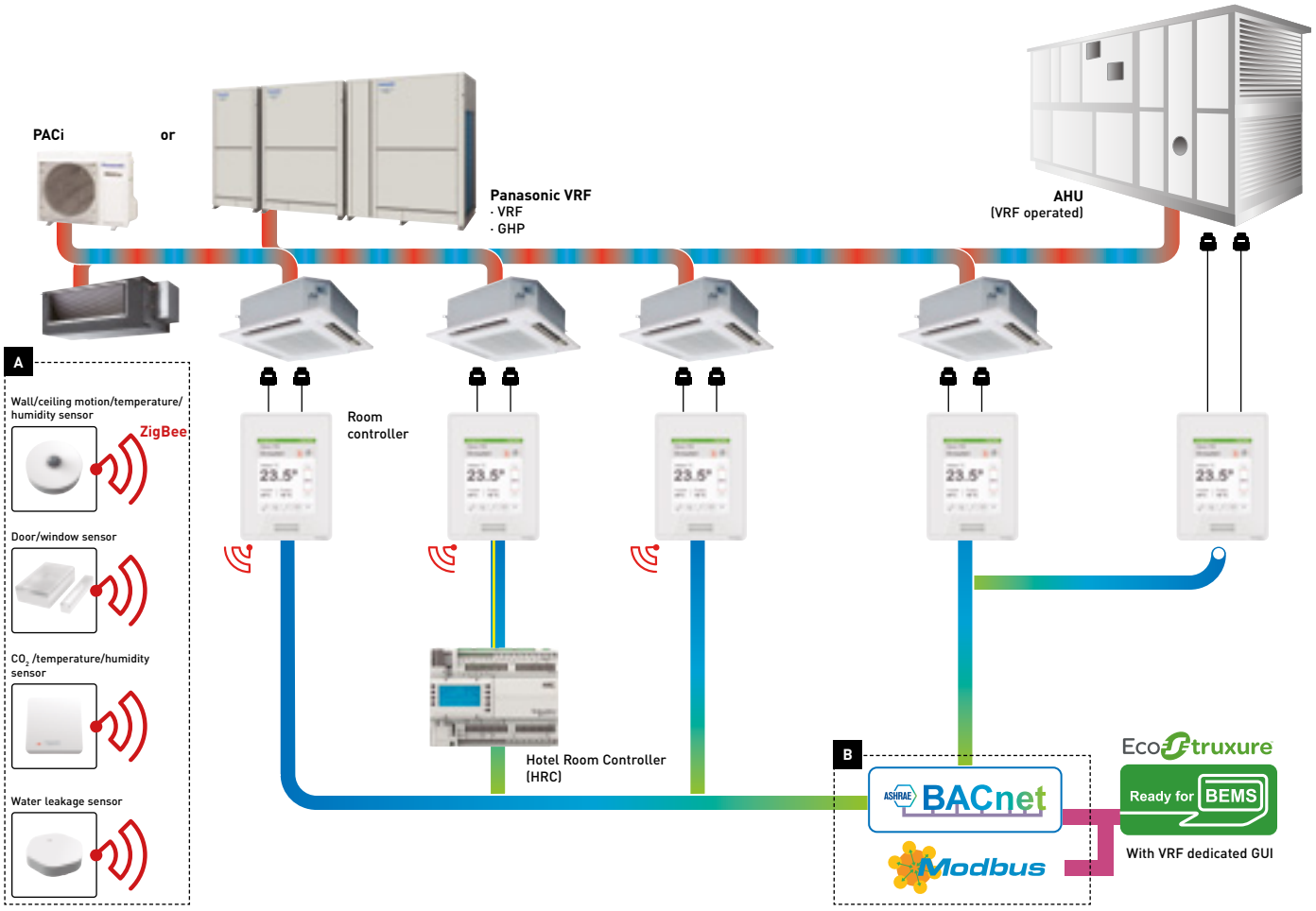
Hotel Room Controller (HRC).
The Hotel Room Controller controls connected guest room devices and aggregates data, making it visible to guest room and property management systems.

Management system for the entire building

The smarter solution to simplify energy management, optimise building efficiency and drive savings.

Plug & Play BEMS connection

With the SE8000, connection to BEMS is extremely easy. Better still, a remote controller is all that's needed to enable use as a stand alone system. In addition to dramatically reducing the burden on system integrators, this cuts costs.



A SE8000 smart controller with direct hub to ZigBee® Pro sensors.
Great occupancy and IAQ control.
Ex: Hotel room occupancy check by PIR sensor, IAQ by CO_2 sensor, door / window contacts.

B BACnet MS/TP and Modbus RTU are embedded.

C For Schneider Electric BEMS connection, Panasonic VRF widgets enable easy Plug & Play.
Better understanding for VRF as a chiller system.

C

Schneider Electric **BEMS Widget** (Exclusive)



* Graphic shows combination of products from Panasonic, Schneider Electric and others. Please consult authorised dealer for more details.

Reference	Description
SER8150R0B1194	Pana Net Con, RH, No PIR, SE Brand, R1R2
SER8150R5B1194	Pana Net Con, RH, PIR, SE Brand, R1R2
VCM8000V5094P	Wireless ZigBee® Pro communication card
HRC*	
HRCEP14R	Hotel room expansion module 14 indoor units
HRCPBG28R	Hotel room controller 28 indoor units
HRCPDG42R	Hotel room controller w/display 42 indoor units
ZigBee Sensors	
SED-CO2-G-5045	Sensor with room CO_2, temperature and humidity
SED-TRH-G-5045	Sensor with room temperature and humidity
SED-WDC-G-5045	Door/window sensor
SED-MTH-G-5045	Wall/ceiling motion/temperature/humidity sensor
SED-WLS-G-5045	Water leakage sensor

Reference	Description
FAS-00	Cover frame. Silver
FAS-01	White
FAS-03	Glossy translucent white
FAS-05	Light tan wood
FAS-06	Dark brown wood
FAS-07	Dark black wood
FAS-10	Brushed steel finish

* Those accessories require system integrator support on site.

Smart management solutions

1 Hotels

Room key card or key cardless solutions for hotels.
The SE8000 and ZigBee sensor automatic detection function offer optimal air conditioning regardless of whether there is a hotel room key or not. Sensors detect the presence or absence of occupants and the opening and closing of doors and windows for the optimum air-conditioned environment guests expect. Automatic control ensures the most efficient operation when guests are away or when windows are open. This contributes to an appreciable reduction in operation costs.



2 Small and medium offices

CO_2 sensors (option) and humidity sensors.
CO_2 sensors (option) take measurements in units of ppm, and humidity sensors enable fine air quality control. This creates the most comfortable space for occupants while contributing to improved employee satisfaction.



3 Super markets

Humidity sensors.
Humidity sensors enable automatic dehumidification for the optimum IAQ regardless of climatic conditions. This creates an even more comfortable environment for customers, employees, and products themselves.



Innovative and unrivalled advantages



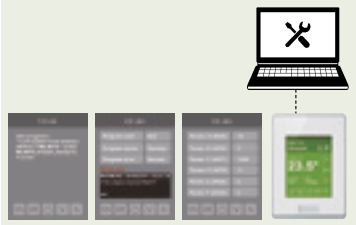
Colour and design to match office interiors.
Colour combinations and design can be set to match different facilities.



Easy-to-understand error description.
Error description during an emergency is easy to understand, enabling staff to respond quickly.

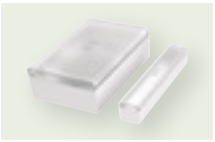


Customisation in 22 languages possible.
The display can be customised to match the native languages of guests to enable smooth, stress-free communication for hospitality at its finest.



Programmable logic.
Full customisation of remote controller logic possible, and updating to match conditions.

Smart connectivity devices



SED-WDC-G-5045
Door/window sensor.



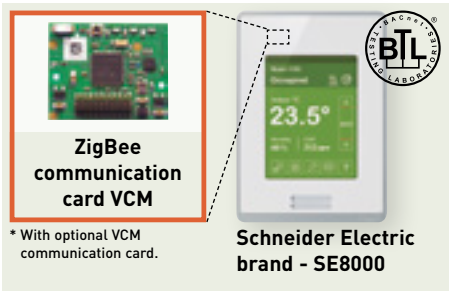
SED-CO2-G-5045
CO_2 temperature/ humidity sensor.



SED-MTH-G-5045
Wall/ceiling motion/ temperature/humidity sensor.



SED-WLS-G-5045
Water leakage sensor.



* With optional VCM communication card.

Schneider Electric brand - SE8000

Features

- Up to 5 year battery life (batteries included)
- Battery life of CO_2 sensor up to 10 years.
- Battery level data point
- Sensor points visible when SE8000 is integrated via BACnet MS/TP
- Sensor status and battery level visible when SE8150 is integrated via ZigBee® Pro
- Integration to BMS only recommended when each MPM is connected to Ethernet and set as a ZigBee® coordinator node



Panasonic AC Smart Cloud

The most advanced multi-site control that helps to reduce the operational cost while improving the customers health and comfort.



Flexible and scalable solution

· Energy saving
· Zero downtime
· Site(s) management

Centralise control of your business premises, from wherever you are, 24/7/365. It doesn't matter how many sites you have, or where they are! The AC Smart Cloud system from Panasonic allows you to have complete control of all your installations from your tablet or from your computer. In a simple click, all your units from several locations, receive status updates in real-time of all your installations, reducing potential breakdowns and optimizing costs.

Flexible solution for your business

Every time | **Everywhere** | **Multiplatform** | **Internet browser**

Scalable solution for your business

Small to large | **1 to multi sites** | **Upgrade features*** | **PACi / ECOi / ECO G**

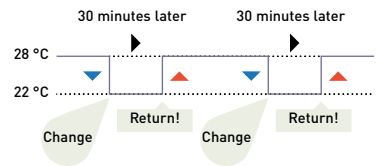
* Customized to meet user demand / Continuous upgrades: new functions and product introductions / IT smart management.

Panasonic AC Smart Cloud offers continuous improvement always thinking about users

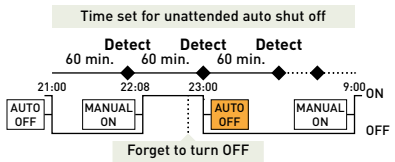
e-CUT function

e-CUT functions are newly available in Panasonic AC Smart Cloud.
5 energy saving settings reduces automatically its energy consumption.

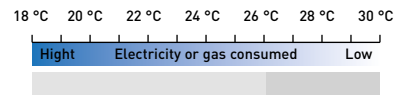
1. Set temperature auto return.
When you want to return to the set temperature after a certain time even if the temperature is changed.



2. Unattendted auto shut off.
When you want to operate outside of a schedule but to monitor and stop automatically.



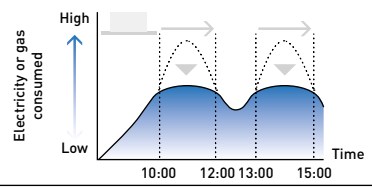
3. Set temperature range limit.
When you want to limit the temperatures that can be set.



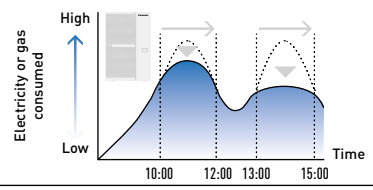
Reduced consumption of electricity or gas by over cooling.

Set temperature restricted to the range **between 26 °C and 30 °C.**

4. Energy saving timer / efficient operation setting.
Specify time slots when you want operation capacity reduced.



5. Demand / peak shaving settings/ peak cut settings.
Specify time slots when you want operation capacity of the outdoor units reduced.



Key functions and uniqueness

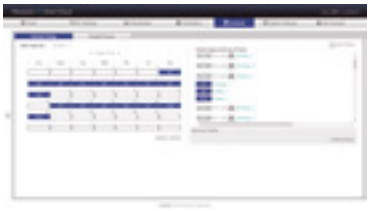
Multi site monitoring.
· It doesn't matter how many sites you have, easy to manage, operate, compare sites, locations, rooms.



Powerful statistics for energy savings.
· Power consumption, capacity, efficiency level can be compared with different parameters (Yearly / monthly / weekly / daily bases)



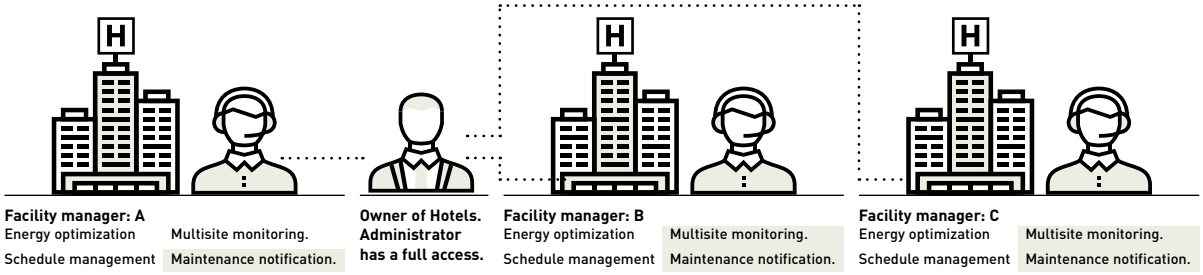
Schedule setting.
· Yearly / weekly / holiday timer setting as you want



Maintenance notification.
· Error notification by email and with floor layout
· Maintenance notification of ECOi / ECO G outdoor units
· Remote service checker function



User customization [1].
Site administrator can create users as desired and assign customized profiles.



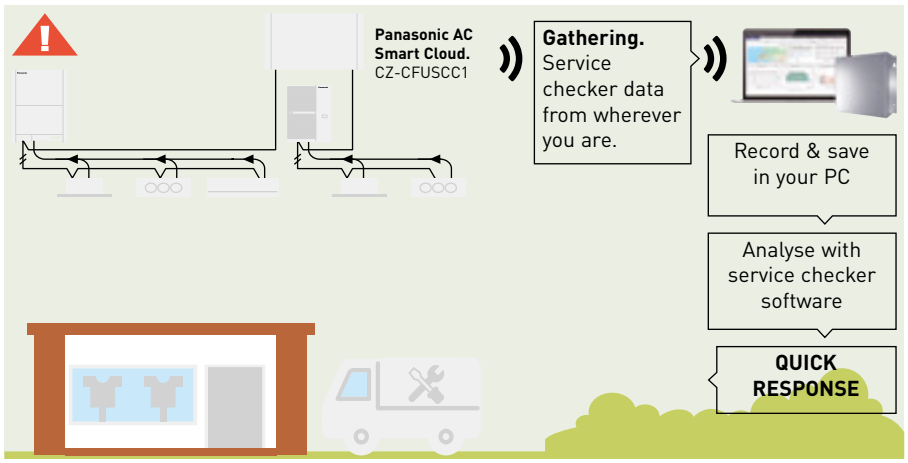
Main functions per user type

Function / Main Tab	Sub-Tab	Basic type (Eg.: Owners, facility managers)	Professional type (Eg.: Installers, maintenance companies)
AC setting	I_U / O_U operation details	✔	✔
	Cloud adapter (CZ-CFUSCC1) details	✔	✔
	AC maintenance		✔
	Map view	✔	✔
Energy saving function	e-CUT	✔	✔
Schedule	Yearly, weekly schedule setting / view	✔	✔
Powerful statistics	Power consumption	✔	
	Capacity	✔	
	Efficiency ranking	✔	
Maintenance function	Notification overview / details	✔	✔
	Maintenance settings	✔	✔
	Map view	✔	✔
	Remote service checker		✔
User account [1]	New / update user registration	✔	
System setting	Distribution group overview / details	✔	
	Cut OFF request	✔	
	Map editor		✔

Panasonic AC Service Cloud

When connecting Panasonic AC Smart Cloud your site can benefit from Panasonic AC Service Cloud, opening a secure way to manage your maintenance and increasing the continuous operation of your installation.

Panasonic
AC Service Cloud



Panasonic AC Service Cloud

New solution for service and maintenance companies.

Panasonic
AC Service Cloud

NEW
2021



Panasonic AC Service Cloud provides to maintenance company a unique tool to deliver advanced maintenance to increase response time, reduce sites visits and allocate better the resources. This advance and unique tool is available for service and maintenance companies.

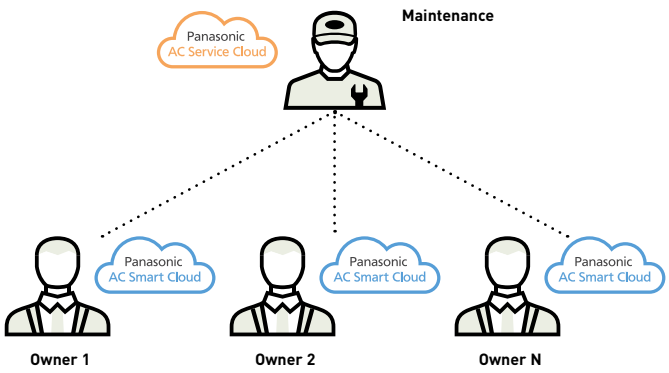
Increase service level agreement with your customer whilst optimising your resources usage.

1 Time Response and zero down time

Providing remotely technical information about abnormalities and checker functions enable AC installer and maintainer to identify and fix issue much quicker even though before it occurs.

2 Reduce unnecessary trips

It reduces the cost of unnecessary trips at least for 1 trip, and reduces the CO_2 emissions related to the transport.



3 Maintenance planning

Identify easily the potential issues classified from less to more critical and jump with simple click to see more details of the site and the potential issue. It allows to plan better your sites visits and assign the right engineer for the work.

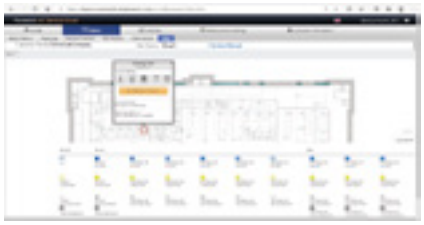
4 All at a glance and scalability

View remotely the various site you take care of maintenance service with Panasonic HVAC. The cloud solution allows to increase the number of contracts and installations without software updates, taking advantage of future features of Panasonic AC Service Cloud.

Owners can manage different maintenance companies for each site enabling or disabling access with just one click.
Maintenance companies can have access to all sites where different owners gave permissions.



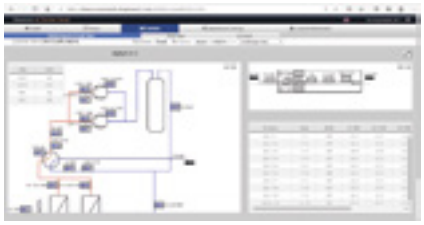
All sites at a glance.



Floor map view.



Topology.



Refrigerant circuit view.



Alarm status.

Panasonic AC Smart Cloud and Panasonic AC Service Cloud packages

The selection of the right Panasonic AC Smart Cloud package depends on the size of the installation. There are 2 options for subscription the Classic and the Full Subscription. For Panasonic AC Service Cloud it is required Panasonic AC Smart Cloud.

1 | Classic
Get the cloud base kit (CZ-CFUSCC1 + start up) and register to one of the subscription periods (1, 3 or 5 years).

or

2 | Full Subscription
Yearly full subscription that includes CZ-CFUSCC1, start up and subscription.

* For modem router connectivity solutions, please contact with your local sales representative.

	Options	Items	Reference	Description
Up to 32 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE32	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART32	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y32	Subscription for 1 year
			SR-ACSC3Y32	Subscription for 3 years
			SR-ACSC5Y32	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y32FULL	Yearly subscription including base kit
Up to 64 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE64	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART64	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y64	Subscription for 1 year
			SR-ACSC3Y64	Subscription for 3 years
			SR-ACSC5Y64	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y64FULL	Yearly subscription including base kit
Up to 128 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE128	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART128	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y128	Subscription for 1 year
			SR-ACSC3Y128	Subscription for 3 years
			SR-ACSC5Y128	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y128FULL	Yearly subscription including base kit
Up to 192 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE192	2x CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART192	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y192	Subscription for 1 year
			SR-ACSC3Y192	Subscription for 3 years
			SR-ACSC5Y192	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y192FULL	Yearly subscription including base kit
Up to 256 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE256	2x CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART256	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y256	Subscription for 1 year
			SR-ACSC3Y256	Subscription for 3 years
			SR-ACSC5Y256	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y256FULL	Yearly subscription including base kit
Up to 320 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE320	3x CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART3200	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y320	Subscription for 1 year
			SR-ACSC3Y320	Subscription for 3 years
			SR-ACSC5Y320	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y320FULL	Yearly subscription including base kit
Up to 512 indoor units	Classic. Select subscription frequency	Cloud base kit KIT-ACSCBASE512	4x CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART512	Panasonic AC Smart Cloud start up
		AC Smart Cloud subscription [2]	SR-ACSC1Y512	Subscription for 1 year
			SR-ACSC3Y512	Subscription for 3 years
			SR-ACSC5Y512	Subscription for 5 years
	Full Subscription [3]		KIT-ACSC1Y512FULL	Yearly subscription including base kit

1) Only together with start up 2) Includes first 2 years of Panasonic AC Service Cloud. 3) Requires minimum 4 years of service.

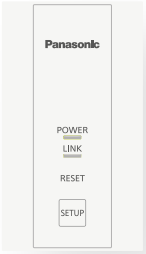
Additional optional services.

Panasonic AC Service Cloud	SR-ACSC1Y32M	Panasonic AC Service Cloud 1 year fee
Floor map [4]	SR-ACSC1FLRUP	Upload 1 floor map or maximum 32 units
Floor map [4]	SR-ACSC1FLRCR	Create 1 floor map or maximum 32 units
Indoor assign [4]	SR-ACSC32ASSIGN	Assign indoors up to 32 units
Power package	Power package	Power package

4) Floor map and indoor assignments can be done by customer without additional charge.

Commercial Wi-Fi Adaptor

Panasonic CZ-CAPWFC1 interface adaptor, allows connection of one or a group of indoor units to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling and error alerts.





Advanced smartphone control

Control PACi, ECOi and ECO G units with your smartphone from wherever and whenever you are, by using Panasonic Comfort Cloud App and Commercial Wi-Fi Adaptor. This scalable solution is ideal for one system, one site or multiple locations. Coupling the adapter with the already feature rich systems, makes it an ideal solution for residential and commercial applications.

1 From 1 to 200 units

User can control up to 10 different sites, with up to 20 units / groups per site. Additionally, one adaptor can be connected to 1 indoor or to a group of maxium 8 indoors.

2 Voice control compatible

When registering the unit to Panasonic Comfort Cloud App it makes compatible with most popular voice assistants.

3 Multi user

The Panasonic Comfort Cloud App allows multi-user access control. Restrict user access to specific units.

4 Easy scheduling

Complex weekly scheduling made simple. Not only for one unit, but across multiple sites and from a smartphone.

5 Energy monitor

See the estimated power consumption and compare with other periods, to see how energy consumption can be reduced even more. Check list of units that provides consumption*.

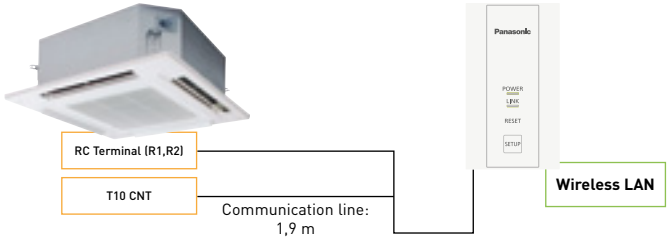
* Function available depending on the model.

6 Error codes

Error code notification through the App, provides early notification and allows for faster repair.

Connection Diagram

Commercial Wi-Fi Adaptor wiring length is 1,9 m and connects to indoor unit thru T10 connector and R1/R2 terminal connectors.



Download free app:



Panasonic Comfort Cloud App.

Other hardware requirements: Router and Internet (purchase and subscribe separately).

Input Voltage	DC 12 V (supplied from T10 connector)
Power Consumption	Maximum 2,4 W
Size (H x W x D)	120 x 70 x 25 mm
Weight	190 g (including communications lines)
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4 GHz band
Operation range	0 ~ 55 °C, 20 ~ 80 RH%
Connectable indoor unit	1 unit
Length of communication line	1,9 m (included in the shipment)

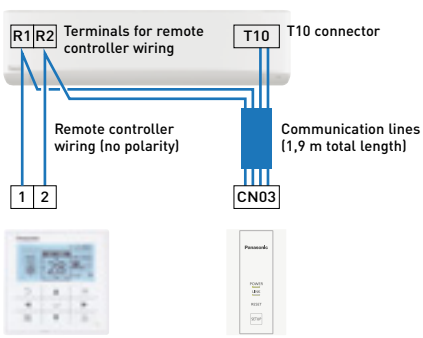
Cloud control is available for all indoor units with P-link

Compatible indoor units type: Model code starting with "S-" (excludes S-80/125MW1E5).
Incompatible indoor units type: Model code starting with "PAW-", "FY-" and S-80/125MW1E5.

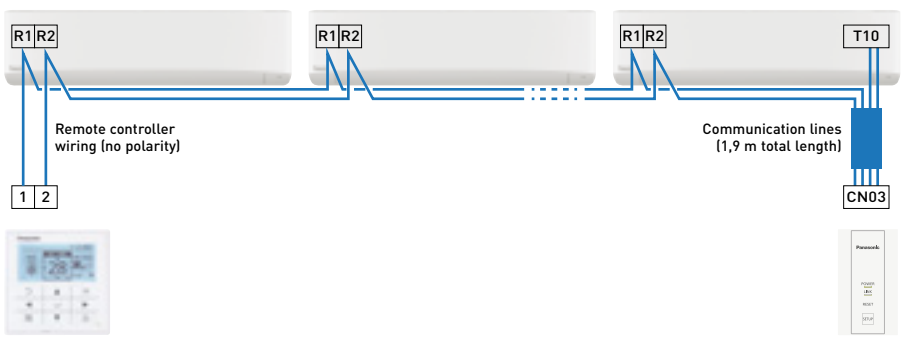
Basic wiring diagram

If there is one indoor unit or if there are multiple indoor units, connect one Wi-Fi adaptor and one remote controller. A remote controller must be connected and it should be set as the "main unit" in the main-sub remote controller settings.

Example when there is 1 indoor unit.



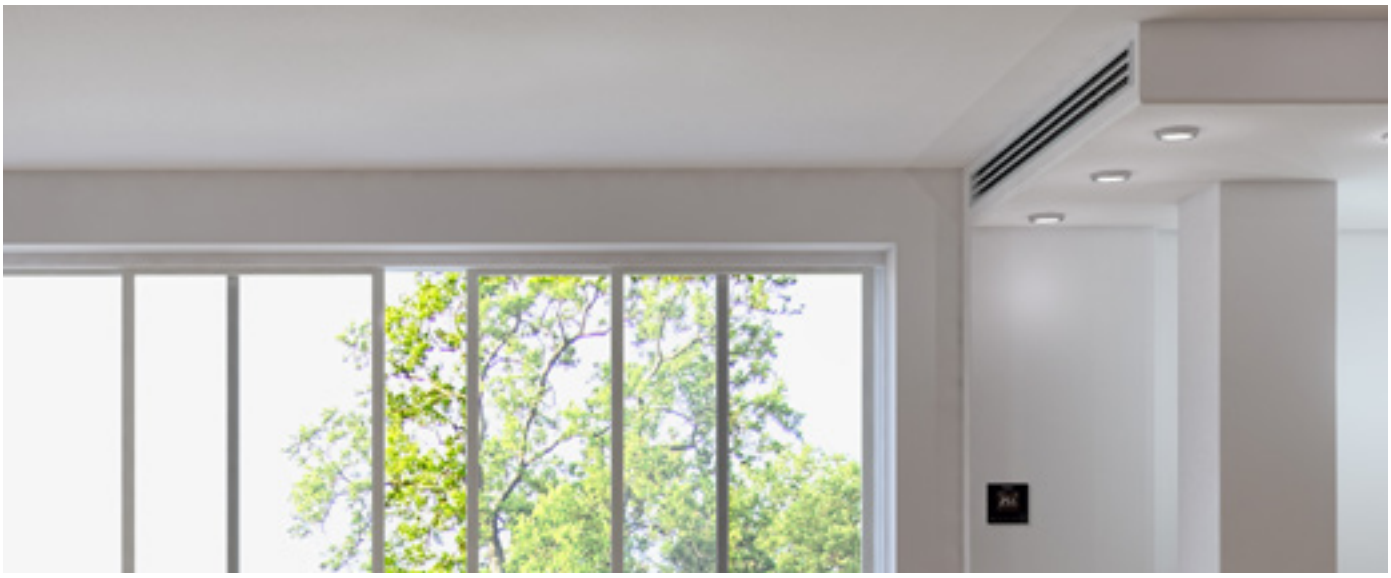
Example when there are multiple indoor units.



CONEX. New devices and apps

CONEX provides comfort and control for varying user needs. Accessible, flexible and scalable with different controllers and apps. Perfectly meeting requirements of modern controls for end user, installer and service. With nanoe™ X function, technology with the benefits of hydroxyl radicals.





1 Intuitive control with stylish design

- Simple operation at a glance
- Clean face with full flat & black LCD display
- Compact body, only 86x86 mm

2 Control comfort with your smartphone

- Flexible control options with IoT integration
- New Panasonic H&C Control App for daily remote control operation
- Panasonic Comfort Cloud App for remote operation 24/7/365

3 Easy maintenance with service support app

- Quick and easy app set-up for system setting
- Panasonic H&C Diagnosis App enables the user to obtain detailed system operation data

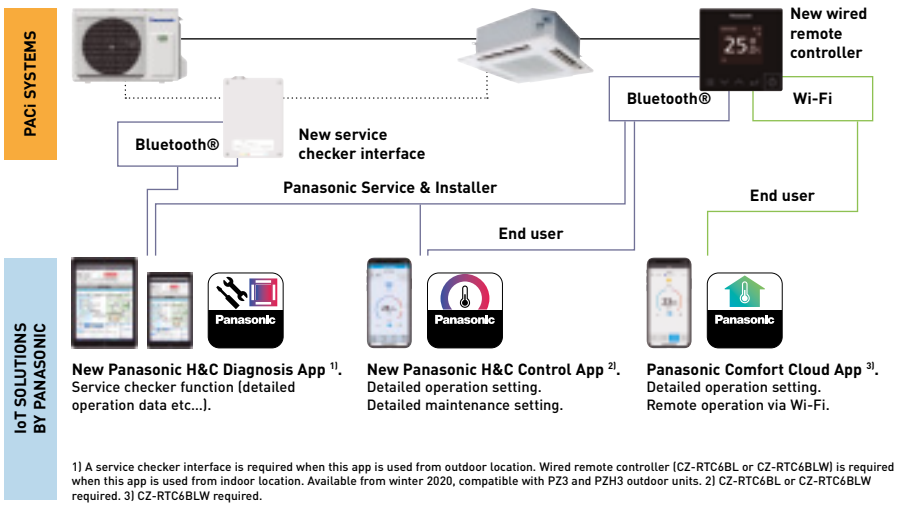
* The use of apps depends on the remote controller model.

CONEX with IoT integration

CONEX

The new wired remote controller series is fully integrated with IoT solutions developed by Panasonic. Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

https://www.youtube.com/watch?v=_USzG_9f6bk&feature=youtu.be



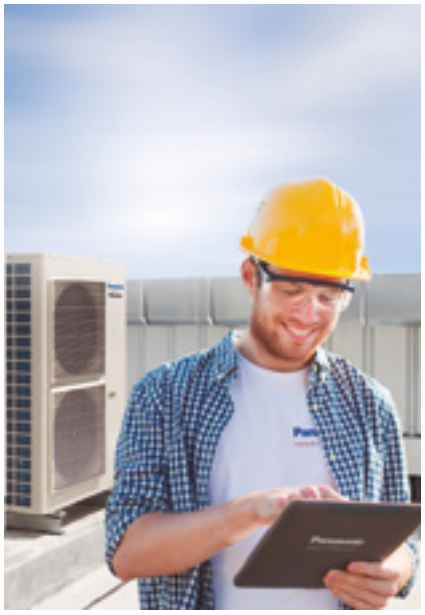
1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6BL or CZ-RTC6BLW) is required when this app is used from indoor location. Available from winter 2020, compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6BL or CZ-RTC6BLW required. 3) CZ-RTC6BLW required.

Flexible control options with IoT integration. 3 different apps for individual usage.

Service and installer

Panasonic H&C Diagnosis App.

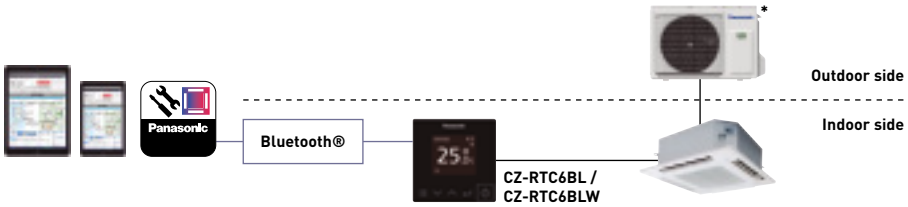
· Tool for diagnosis and troubleshooting



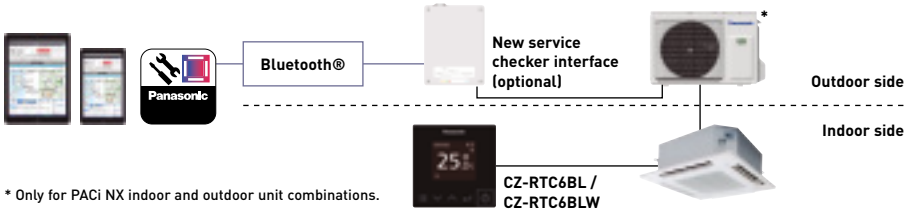
Available functions:

· AC control
  - System view
  - Refrigerant circuit view
· Real-time data
  - Indoor unit
  - Outdoor unit
· Refrigerant cycle diagram and graph
· Data recording
· History data
· Error code tables

Option 1: indoor side. Service and installer.



Option 2: outdoor side. Panasonic service and installer.



* Only for PACi NX indoor and outdoor unit combinations.

End user, service and installer

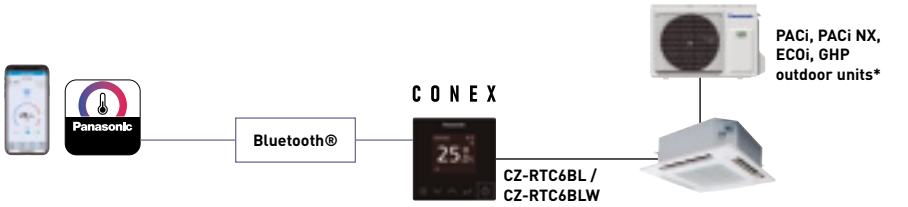
Panasonic H&C Control App.

· Detailed operation setting
· Detailed maintenance setting



Available functions:

· ON/OFF, mode, temperature, airflow volume, airflow direction
· Weekly timer
· All energy saving functions
· Alarm display and history
· Filter sign
· Test run
· Sensor value monitor
· Simple setting mode
· Detailed setting mode
· Key lock
· Ventilation fan control
· Display contrast adjustment
· Rotation, redundancy
· Quiet mode
· nanoe™ X
· Power consumption
· Unit naming



* Only PACi NX in combination with CZ-RTC6BLW.

End user

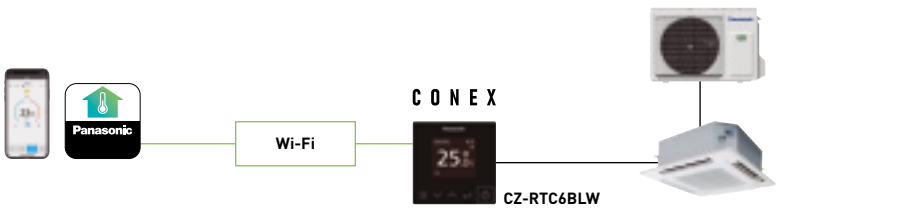
Panasonic Comfort Cloud App.

· Remote operation via Wi-Fi



Available functions:

· ON/OFF
· Mode
· Temperature
· Airflow volume
· Airflow direction
· Weekly timer
· Temperature setting range limitation
· Energy monitoring
· Alarm display
· nanoe™ X



CONEX. New devices and apps



1 | Mode Heat/Cool/Dry/ Fan/Auto
2 | Fan speed (5levels)
3 | Air flow direction
4 | nanoe™ X / Econavi setting
5 | Menu
6 | Down
7 | Up
8 | Enter
9 | ON/OFF

Intuitive operation with simple & modern design panel

Sophisticated design with black flat panel and compact body. From residential to commercial, the wired remote controller series perfectly matches with all kinds of modern building.
It enables user to recognize each function with a simple glance.

* Available functions can be referred in "Basic function list" below.

Wired remote controller line-up

		Wi-Fi	Bluetooth®
CZ-RTC6	Non-wireless	—	—
CZ-RTC6BL	Bluetooth®	—	✔
CZ-RTC6BLW*	Wi-Fi & Bluetooth®	✔	✔

* Compatible with PACi NX Series.

Basic specification

Model			**CZ-RTC6 (Non-wireless)**	**CZ-RTC6BL (Bluetooth®)**
Input voltage		V DC	16 (supplied from indoor unit)	
Power consumption			TBC	
Size (H x W x D)		mm	86 x 86 x 25	
Weight		kg	0,1	
Operation range - Temperature / Humidity			0 ~ 40 °C / 20 ~ 80 %	
Temperature setting interval		°C	0,5	
Connectable indoor units			Maximum 8 units (within remote control group)	
Clock	Precision		—	± 30 seconds/month (at normal temperature 25 °C)
	Holding time		—	24 hours
For Bluetooth® Apps			—	iOS: 10.0 or later / Android™: 6.0 or later
Bluetooth®			—	Version 4.2 or later

New Panasonic H&C Control App

Panasonic H&C Control App for daily remote control operation and quick system setting via Bluetooth®.

* User interface image may be updated without notification.



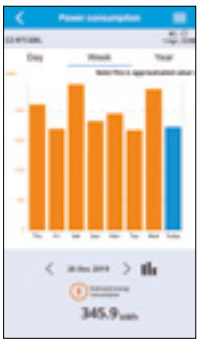
Home screen



Basic settings



Statistics



Weekly timer



Advanced settings



New service checker interface

The new service checker interface provides easy access to service parameters and service checker data via Bluetooth®.
· A new service checker interface* for PACi NX Series
· Bluetooth® connection
· Panasonic H&C Diagnosis App

* Available as a spare part, compatible with PACi NX Series.

Input voltage	220-240 V ~ 50-60 Hz (supplied from outdoor unit)
Power consumption	Maximum 2,4 W (including outdoor units)
Size (H x W x D)	175 x 125 x 50 mm
Weight	—
Interface	Bluetooth® 4.2 or later
Frequency range	2,4 GHz band
Operation range - Temperature / Humidity	0 ~ 40 °C / 20 ~ 80 % (no condensation)



* Frequency band in which the radio equipment operates; 2402 - 2480 MHz.
* Maximum radio-frequency power transmitted in the frequency bands in which the radio equipment operates; +0 dBm.

Connectivity matrix

			
Model	**CZ-RTC6**	**CZ-RTC6BL**	**CZ-RTC6BLW**
Wired connection compatible with	PACi, PACi NX, ECOi, GHP	PACi, PACi NX, ECOi, GHP	PACi NX only
Wireless functions	No wireless capability	Bluetooth®	Bluetooth® + Wi-Fi
App compatibility			
Panasonic Comfort Cloud App	—	—	✔
Panasonic H&C Control App	—	✔ PACi, PACi NX, ECOi, GHP	✔ Only PACi NX
Panasonic H&C Diagnosis App	—	✔ Only PACi NX*	✔ Only PACi NX*
Outdoor unit settings (remote controller connected to indoor unit)	✔ Only PACi NX*	✔ Only PACi NX*	✔ Only PACi NX*

* When connected to PACi NX indoor and outdoor unit combination.

Function comparison

This shows the functions provided: a) by the remote controllers b) by the apps		**Remote controller functionalities**		**Panasonic H&C Control App**	**Panasonic Comfort Cloud App**	
						
		CZ-RTC5B	**CZ-RTC6**	**CZ-RTC6BL(W) + app**	**CZ-CAPWFC1 + app**	**CZ-RTC6BLW + app**
Basic operation	ON/OFF, mode, temperature, airflow volume, airflow direction	✔	✔	✔	✔	✔
Timer functions	Time display	✔	—	✔	✔	✔
	Easy ON/OFF timer	✔	—	✔	—	—
	Weekly program timer	✔	—	✔	✔	✔
Energy saving	Outing function	✔	✔	✔	—	—
	Temperature auto return	✔	—	✔	—	—
	Temperature setting range limitation	✔	—	✔	✔	✔
	OFF reminder	✔	—	✔	—	—
	Energy saving mode	✔	—	✔	—	—
	Schedule demand control	✔	—	✔	—	—
	Energy monitoring	✔	—	✔	✔	✔
	Econavi	✔	✔	✔	✔	✔
Maintenance	System failure information (alarm history)	✔	✔	✔	—	—
	Alarm display	✔	✔	✔	✔	✔
	Service contact registration	✔	—	✔	—	—
	Filter sign	✔	✔	✔	—	—
	Test run	✔	✔	✔	—	—
	Sensor value monitor	✔	✔	✔	—	—
	Simple setting mode	✔	✔	✔	—	—
	Detailed setting mode	✔	✔	✔	—	—
Others	Key lock	✔	✔	✔	—	—
	Ventilation fan control	✔	—	✔	—	—
	Display contrast adjustment	✔	✔	✔	—	—
	Rotation	✔	—	✔	—	—
	Quiet operation mode	✔	—	✔	—	—
	nanoe™ X	✔	✔	✔	✔	✔

Remote controller with Econavi

Easy to use, attractive, clear design, with new demand control functions and energy consumption display! This useful feature makes this remote controller unique!





Design

The CZ-RTC5B wired remote controller is ideal for integration into the most demanding interior architectures.
The touch panel features a very sleek and easy to use display, which with its compact display is only 120 x 120 x 16 mm.

Key functions

· Easy setup of the timer and settings of the indoor unit
· Energy consumption display (for all R32 PACi line-up)
· Limitation of the energy consumption (Demand control) by timer.

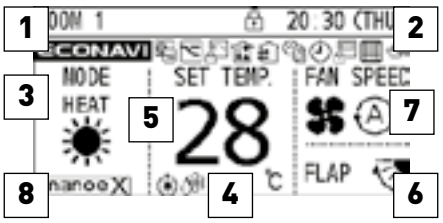
Display of information

The information is mainly based on pictograms to ensure easy understanding. The minimal amount of text is available in 6 languages (English / German / French / Spanish / Italian / Polish).
The screen is back lit to enable reading even during the night.

Easy access to the menus.
With the new pictograms, the navigation, the selection and the settings are simple and easy to follow.

Basic function (operation display & indication)

All functions are easily available on the remote controller.
· OFF/ON timer · Weekly timer · Quiet operation · Remote controller sensor · Operation prohibit · Filter sign · Energy saving · Centralized control indication · Mode change prohibit · Automatic temperature return · Temperature range limitation · OFF remind · Schedule demand control · Ventilation · Out Function



1 | Name of the room (Max. 16 characters)
2 | Time & Day of the week
3 | Mode: Hot / Cool / Dry / Fan Auto
4 | Status: Heating stand-by / Defrost operation / Stand-by (GHP system)
5 | Set temperature
6 | Flap setting
7 | Fan speed: L-H / Auto
8 | nanoe™ X setting

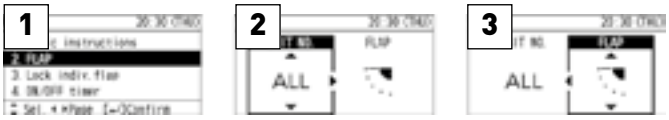
Easy operation and quick access to all menus

1 | Set temperature will be selected, when any arrow button is touched
2 | Select the item (Mode or Fan speed) by left/right ◂▸ key
3 | Change the setting by up/down ▴▾ key



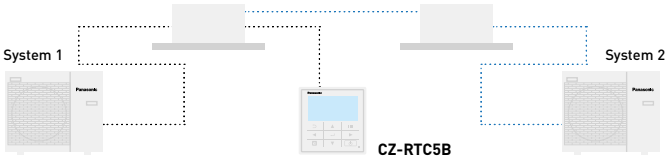
Example of easy access to the functions: air direction setting

1 | Select "Air direction" and press "Enter" key
2 | Select the unit number by up/down ▴▾ key
3 | Select the flap position by up/down ▴▾ key
4 | Press "Return" key to go back the Menu display



Backup control by using CZ-RTC5B

Group wiring of 2 systems of PACi can do auto individual control: Rotation operation, backup operation and support operation.



Functions available on the CZ-RTC5B

Control item	Controllability	Indoor units	
		PACi	VRF
Basic operation	Operation, Mode, Temperature setting, Air flow volume, Air flow direction	✔	✔
Timer function	Time display	✔	✔
	Easy ON/OFF timer	✔	✔
	Weekly program timer	✔	✔
Energy saving	Outing function	✔	✔
	Temperature auto return	✔	✔
	Temperature setting range limitation	✔	✔
	OFF remind	✔	✔
	Energy saving mode	✔	✔
	Schedule demand control	✔ [1]	✔
	Energy monitoring - R32	✔	—

Control item	Controllability	Indoor units	
		PACi	VRF
Maintenance	System failure information	✔	✔
	Service contact registration	✔	✔
	Filter sign (rest time display) & Reset	✔	✔
	Auto-address, Test run	✔	✔
	Sensor value monitor	✔	✔
	Simple / Detail setting mode	✔	✔
Others	Key lock	✔	✔
	Ventilation fan control	✔	✔
	Display contrast adjustment	✔	✔
	Remote controller sensor	✔	✔
	Quiet operation mode	✔ [1]	—
	Prohibit setting control from central controller	✔	✔

All specifications subject to change without notice. 1) Not available with PACi Standard R410A line up.

Datanavi

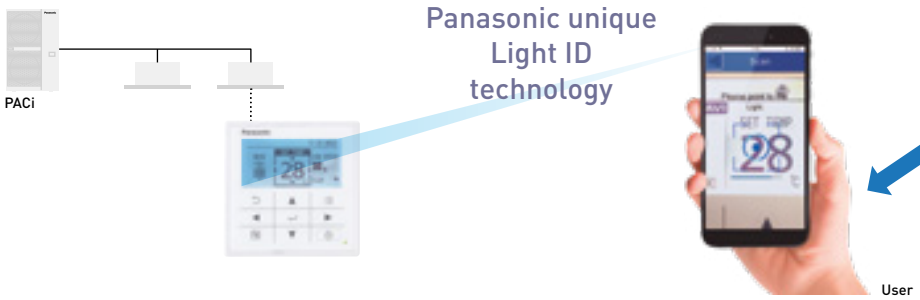
Datanavi, a new way to connect.
Simple and easy support tool with your smartphone.

datanavi



Overview of datanavi system

Just holding up your smartphone to the LED display on a remote controller (CZ-RTC5B) to receive useful AC system information super fast by Panasonic Light ID Technology. Datanavi also connects to Panasonic Cloud Server for the quick view of manuals, saving data received by Light ID.



FAST AND INTUITIVE

EASY ACCESS TO MANUAL DATABASE

ACCURATE SERVICE DATA ON YOUR SMARTPHONE

Key functions

- Scan & Save AC system info
- Easy access to manual database
- Commissioning, F-Gas check data history

What is the Light ID technology developed by Panasonic?
Visible light transmission technology, which enables to transmit information by high-speed and invisible flashing of an LED light source.

User / administrator (person in charge of AC) functions

- **Fast and intuitive.** Regular operation data, energy consumption data display
- **Easy access to data base.** Getting manuals related on demand
- **No idea what to do when an error happens?** You can share error information and contact service easily

Installer / service company functions

- **Getting technical data depends on your need**
  Service manual. Q & A list. Test run information
- **Acurate error information**

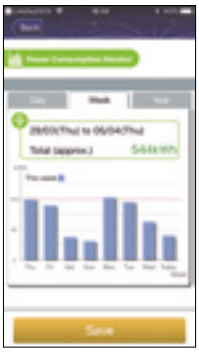




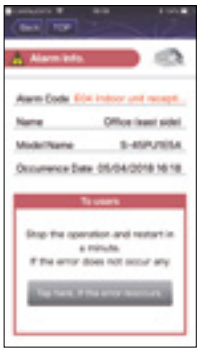
Regular operation



Energy management



Malfunction notice



Operating manual



Test run info



Service data



* User interface image may be updated without notification.

- Simple F-gas regulation check list
- Repair speed check list

Download free apps, try datanavi! 2 free apps are necessary to use datanavi.

Panasonic + App Store + Google Play

LinkRay + App Store + Google Play

Intelligent controller

This controller is the smart solution for your advanced requirement in buildings.





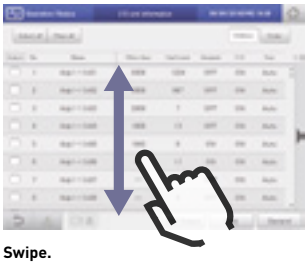
Intuitive operation

The screens used for operations all follow a common pattern, with the screens being easy to read and easy to use.
· Enlarged screen (10,4 inch) with colour LCD
· Smartphone-like gestures (flick, swipe, touch)

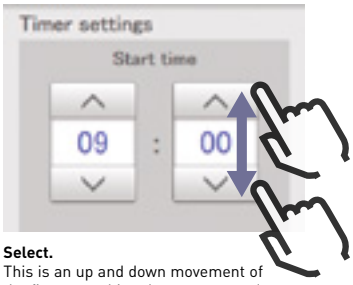
Large screen display. Enlarged by 60 %.



Easy swipe or flick operation.



Swipe.
This is an operation where the finger is slid in a direction (up or down) on the touch panel. This is used to scroll slowly.



Select.
This is an up and down movement of the finger touching the screen, used to pick settings in elements such as spin boxes.

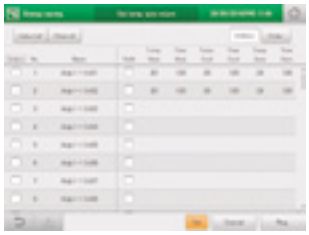


Pull out.
This is an operation where the finger on the touch panel is flicked in a direction (up or down). This is used to scroll quickly.

Enhanced functions for energy saving as standards

· Set temperature auto return settings, Auto shut OFF, set temperature range limit settings
· Demand control function

Screen of set temperature auto return setting.



Auto shut OFF.



Screen of outdoor demand control.



· Outdoor demand input and timer settings possible
· Indoor can be set at ±1 °C/ ±2 °C or thermostat OFF
· Indoor units controlled in sequence at 10-minute intervals

Energy visualization

· Energy saving plans are supported with graph display function
· Displays electricity & gas usage distribution

Screen of graph display.





Useful parameters are shown for your better energy saving.
Ex.) Bar graph:

Indoor unit:	Total operating time, thermostat ON operation time (Min.) Amount used (electricity, gas) Electricity or gas charges
Outdoor unit:	Outdoor unit operation cycles (# cycles) Engine time in operation (Hrs.) Cumulative Inverter power output Cumulative PV power output

Pulse value selection per different data intervals 1 hour/1 day/ 1 month compared with last year.

Main function

Gesture function (flick, swipe, touch)	✔
Graph display (trends, comparisons)	✔
Web functions (Max. 64 users)	✔
Recipient setting for warning email	✔ (Maximum 8)
Automatic return to setting temperature	✔
Limitation of setting temperature range	✔
Left-on prevention	✔
Quiet operation of outdoor unit	✔
Occupant sensor linkage	✔
Demand function	✔
Charge calculation	✔
Log display	✔ Warning 10000 items. Status change 50000 items
Linked control (event definition 50 events, input: 32, output: 32)	✔
Under maintenance (under inspection registration)	✔

Econavi Sensor

The Econavi sensor detects presence in the room, and quietly adapts the PACi or VRF air conditioning system in order to improve comfort and energy savings.





· Detects human activity and adjusts temperature by 2 degrees (up or down) to optimize comfort and efficiency
· If there is no activity detected for a set time period, the Econavi will stop the unit or move to a new temperature previously set
· The Econavi device is installed independently of the indoor unit, and is located in the area best suited for detection

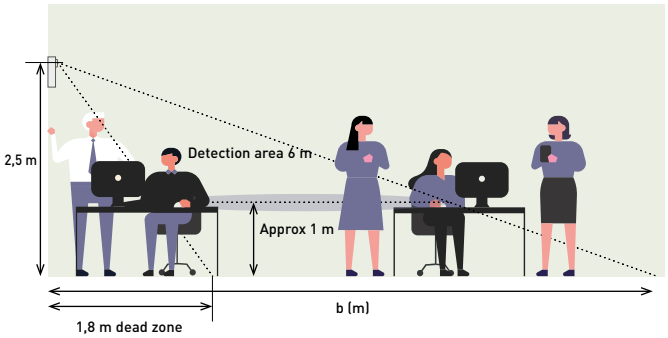
Applications

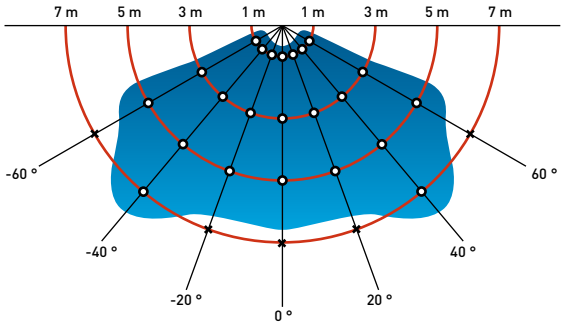
Saving energy for offices: If the air conditioning is left on after the last employee leaves the office, Econavi will automatically react, reducing or stopping the system. Increased comfort in hotel rooms: When presence is detected in the room, the temperature is automatically adjusted to achieve best comfort.

Key points

· Compatible with Cassette, Wall Mounted, Hide Away and Ceiling units
· Improves efficiency
· Better comfort
· Can be installed in the best location within the room for detection purposes

Sensor location image





Human detection area (2,5 m height angle 30°)

Providing outstanding energy saving performance, Panasonic's Inverter system can be connected to Econavi to detect when energy is being wasted. Econavi senses the presence or absence of people and the level of activity in each area of an office. When unnecessary heating or cooling is detected, indoor units are individually controlled to match office conditions for energy saving operation.

Detection of the level of activity enables precise power saving.
Presence or absence of people at their desks and the level of activity in the office are detected in real time. Set temperature is automatically adjusted to optimise the lower power consumption.

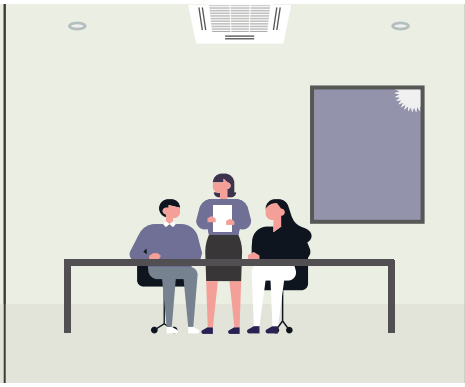
Remote Econavi sensor allows optimum energy operation.
Pillars, walls, cabinets and other fittings obstruct the sensor, reducing the area of detection and lowering the energy saving effect. Taking into consideration blind spots, Panasonic enables the optimum layout for sensors in any office.



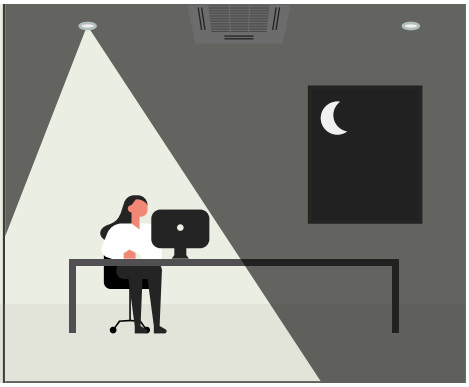
Econavi sensor: CZ-CENSC1



In the morning.
Thorough cooling when there is a high level of activity



In the afternoon.
Reduced cooling when there are fewer people

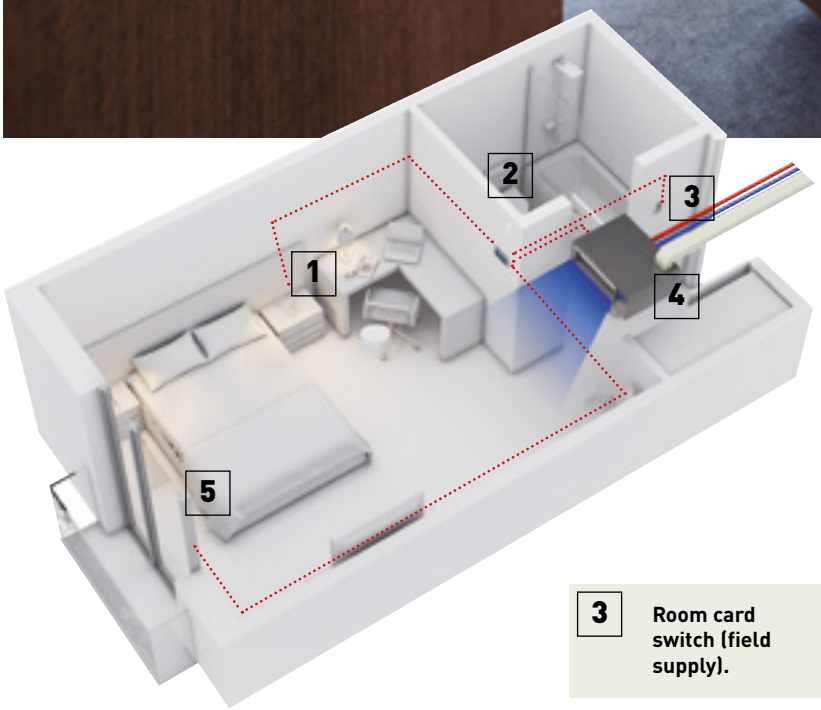


At night.
Automatic Thermo OFF depending on conditions at the end of the day

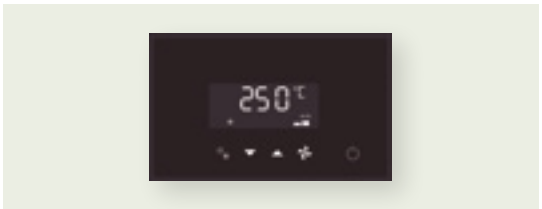
Controller for hotel application

Innovative line up of room controllers specially designed for hotel applications. With a modern cosmetic that match room interiors and simple operation for hotel guests.





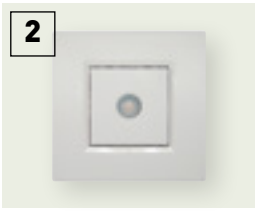
3 **Room card switch (field supply).**



Controller to integrate all room hotel needs in one device.
Card switch. Heating and cooling control. Light control. Window control. Possible to connect to Modbus.



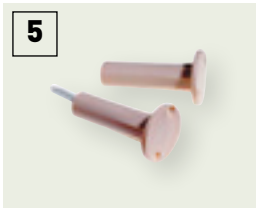
Lighting control.



Wall sensor PAW-WMS-AC (-DC).



Indoor unit. Variable static pressure hide away.



Window contact PAW-DWC.



Ceiling motion sensor PAW-CMS-AC (-DC).

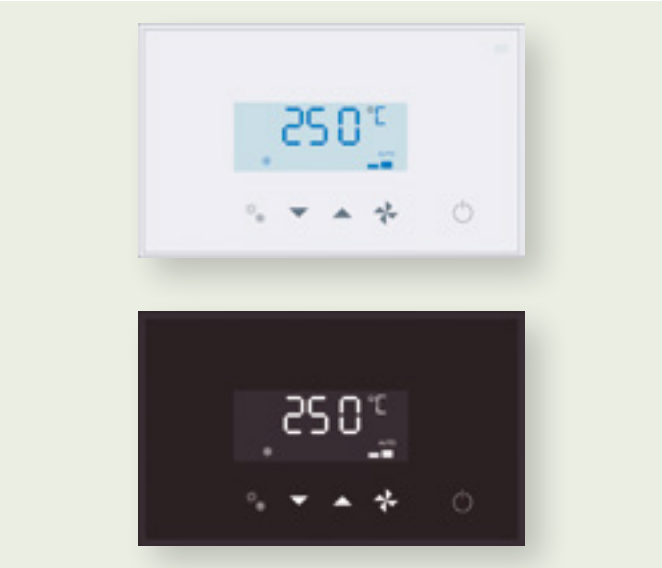
· Easy to install
· Cost effective installation as all electrical cable are centralized on this remote: The lighting, card contact, motion detector, window contact and the air conditioning are controlled
· Architect inspired attractive design with 2 colors: black or white
· Stand alone and Modbus
· Bespoke finish as special order

Energy saving functions included on the device.
Turns OFF air conditioning and lighting when room is unoccupied. Disables air conditioning when window is open. Maximum/minimum setpoint temperature configurable.

Easy remote controller.
The hotel guest will have access to limited functions to control the air conditioning: ON/OFF, Temperature and Fan speed.

Easy set up.
Stand alone model with easy configuration menu to access all parameters. A pre-define scenario can be uploaded on the remote controller connected to a computer to make installation on site Plug & Play (only on the Modbus models).

New NFC fast set up.
With the new touch display control and touch room controller setting are quicker than ever. Just touching smartphone with NFC capability the settings will be saved. This function is also possible even when the control is not wired. Giving flexibility to save the setting even before installation.

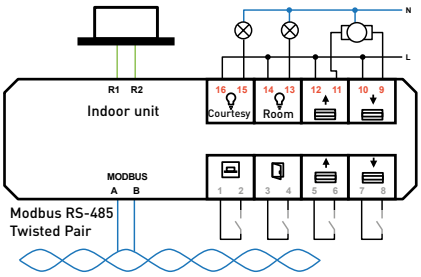


Type	Model	Colors	Digital inputs	Digital output	BMS	Inst. set up	T. sensor
Touch display controller	PAW-RE2D4-WH	White	2			NFC	Built-in
	PAW-RE2D4-BK	Black	2			NFC	Built-in
Touch room controller	PAW-RE2C4-MOD-WH	White	4	4	Modbus	NFC	Built-in
	PAW-RE2C4-MOD-BK	Black	4	4	Modbus	NFC	Built-in

Room controller: 4 digital inputs & 4 digital output

Room controller offers flexibility and easy installation thanks to 4 preconfigured options. This is available in Modbus type.
Modbus references: PAW-RE2C4-MOD-WH, PAW-RE2C4-MOD-BK.

Wiring configuration example for option 2 in Modbus type.

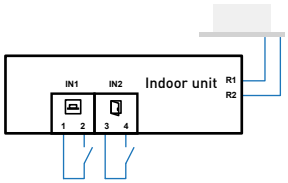


Configurations	4 options available I/O configurations: Inputs				Available I/O Configurations: Outputs			
	Digital	Digital	Digital	Analog	Relay	Relay	Relay	Relay
	1-2	3-4	5-6	7-8	15-16	13-14	11-12	9-10
Option 1	Card	Window	Lighting	Temperature	Courtesy	Lighting	Not used	Valve actuator
Option 2	Card	Window	Blinds up	Blinds down	Courtesy	Lighting	Blinds up	Blinds down
Option 3	Motion sensor	Window	Door contact	Temperature	Courtesy	Lighting	Not used	Valve actuator
Option 4	Lighting	Window	Blinds up	Blinds down	Not used	Lighting	Blinds up	Blinds down

Display: 2 digital inputs

Display control allows to handle 2 inputs to perform most common operation in room hotels.
References: PAW-RE2D4-WH, PAW-RE2D4-BK.

Wiring example for display controller.



Configurations	3 options available: Inputs	
	IN1 (1-2)	IN2 (3-4)
Option 1	Card	Window
Option 2	Motion sensor	Window
Option 3	Motion sensor	Door contact

Hotel room controller	
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, white
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, black
PAW-RE2D4-WH	Touch display control with 2 digital inputs, white
PAW-RE2D4-BK	Touch display control with 2 digital inputs, black

Accessories sensors	
PAW-WMS-DC	Wall silent motion sensor 24 V
PAW-WMS-AC	Wall silent motion sensor 240 V AC
PAW-CMS-DC	Ceiling silent motion sensor 24 V
PAW-CMS-AC	Ceiling silent motion sensor 240 V AC
PAW-24DC	Power supply 24 V
PAW-DWC	Door or window contact

BMS interface with P-Link

BMS interface with Panasonic communication bus helps you to get significant savings.
In addition to reducing the time of configuration and installation, the potential mistakes can be avoided.
Easy to use and reliable interfaces for a straightforward integration.





KNX Modbus® Home automation BACnet™

1 Direct connection to P-Communication bus

- No need for additional gateway (CZ-CFUNC2)
- Significant 50 % cost saving for BMS interface*
- Avoid mistakes and reduce configuration time.

* In the case of PAW-AC2-BAC-16P by Panasonic calculation.

2 Easy configuration

- Single configuration tool for all models (Intesis MAPS)
- Firmware updates with new improvements and features
- Scan: Automatic identification of the units presents in the VRF system
- Front cover LED indicators to provide easy to check communication status.

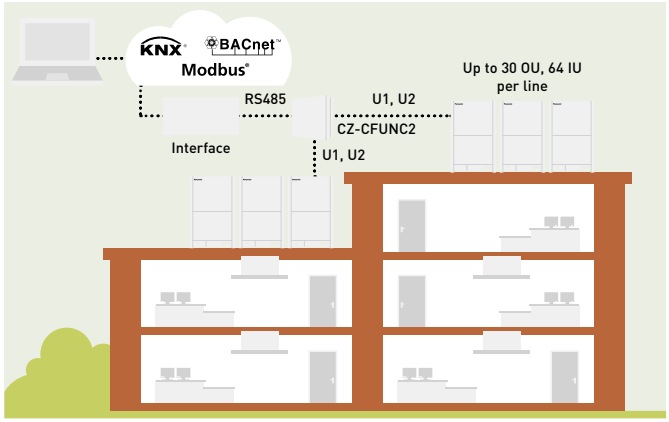
3 Upgraded specifications

- Outdoor unit's signal available for the integration
- BACnet: Version 14 and BTL Certified
- Datalogging through external USB port (for service)

Direct connection to P-Communication bus

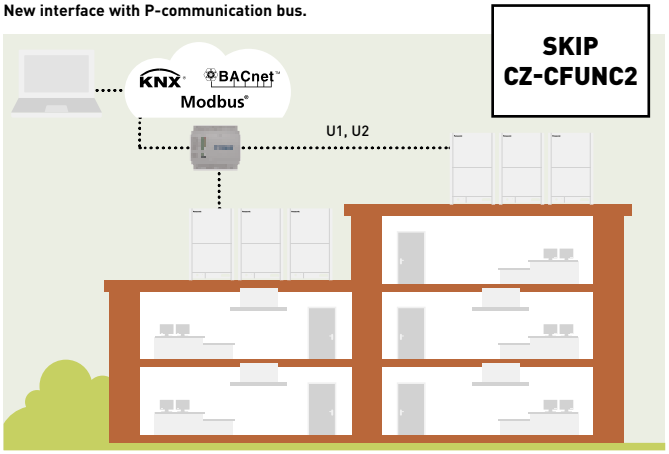
The interface can provide faster, cheaper, easier solution in your projects!

Old interface.



Maximum 128 indoor units can be connected. Panasonic Gateway, CZ-CFUNC2 is required.

New interface with P-communication bus.



U1U2 link is connected directly to IntesisBox. Support from 16 to 128 per each box.

New! Home automation compatibility for Smart Home systems for PAW-AC2-MBS

Drivers available for:

- AMX
- Control4
- eedomus
- Elan
- Fibaro
- iRidium
- Eedom
- RTI
- Savant

Soon available: Creston, Kuju, Vera.



Model for BACnet	Maximum number of indoor units connected
PAW-AC2-BAC-16P	16 indoor units
PAW-AC2-BAC-64P	64 indoor units
PAW-AC2-BAC-128P	128 indoor units
Model for Modbus	**Maximum number of indoor units connected**
PAW-AC2-MBS-16P	16 indoor units
PAW-AC2-MBS-64P	64 indoor units
PAW-AC2-MBS-128P	128 indoor units
Model for KNX	**Maximum number of indoor units connected**
PAW-AC2-KNX-16P	16 indoor units
PAW-AC2-KNX-64P	64 indoor units

Version	Connectable indoor units	Connectable outdoor units	Nr. of P- Communication bus port
16	1-16	1-16	1
64	1-64	1-30	1
128	128 (1-64 / P- Communication bus port)	60 (1-30 / P- Communication bus port)	2

Control and connectivity

A wide variety of control options to meet the requirements of different applications.

Centralized control systems

Centralised control.



P-AIMS core software.
Up to 1024 indoor units.
CZ-CSWKC2

Intelligent controller.



Intelligent controller.
Up to 256 indoor units touch screen with web server.
CZ-256ESMC3

Connection with general equipment.



Seri-Para I/O unit for outdoor unit.
Up to 4 outdoor units.
CZ-CAPDC2



ON/OFF control for external devices such as ERV.
Controls 1 unit.
CZ-CAPC3



Mini Seri-Para I/O Unit 0 - 10 V.
Controls 1 indoor unit or a group of 8 indoor units.
CZ-CAPBC2



Communication Adaptor.
Up to 128 groups.
Controls 128 units.
CZ-CFUNC2

Panasonic AC Smart Cloud.

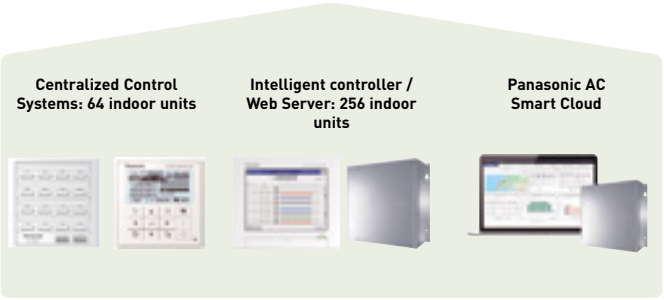


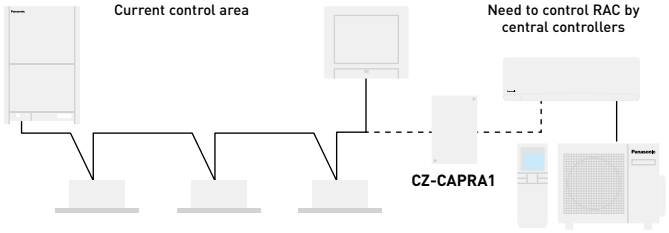
Cloud internet control.
Up to 128 groups. Controls 128 units.
CZ-CFUSCC1

Domestic integration to P-Link - CZ-CAPRA1

Can connect RAC range to P-Link. Full control is now possible.

Integrates any unit in big system control.
· TKEA server room integration
· Small offices with domestic indoors
· Tender for refurbishment (old system Domestic and VRF in one installation)





Current system for PACi / VRF. Central controller can connect to P-Link line to control units directly.

RAC units cannot connect directly to P-Link to be managed by Central Controllers.

It's necessary to have interface between P-Link and RAC protocol to cover basic operating items.

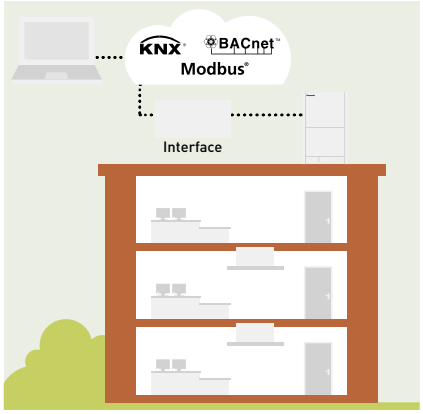
Basic operation items: ON/OFF, Mode select, Temperature setting, Fan speed, Flap setting, Remote control prohibit.
External input: ON/OFF control signal, Abnormal stop signal.
External output for Relay [1]**:** Operation status (ON/OFF), Alarm status output.

1) Because current CN-CNT connector can not provide the power for external output relay, additional Input power for external relay is necessary.

Easy connection to KNX, Modbus, LonWorks and BACnet

Great flexibility for integration into your KNX / Modbus / LonWorks / BACnet projects allows fully bi-directional monitoring and control of all the functioning parameters.

For more information, contact Panasonic.





			Econavi control	Built-in thermostat	Indoor units which can be controlled	Use limitations	Function ON/OFF	Mode setting	Fan speed setting	Temperature setting	Air flow direction	Permit/Prohibit switching	Weekly program	BMS protocol
Individual controllers														
Touch room controller for hotel with Dry Contacts		PAW-RE2C4-MOD-WH PAW-RE2C4-MOD-BK WH: White, BK: Black. Bespoke finish available on request.	—	✔	1 indoor unit	—	✔	✔	✔	✔	—	✔	—	Modbus + 4 digital I/O signals
Touch display control for hotel with Dry Contacts		PAW-RE2D4-WH PAW-RE2D4-BK WH: White, BK: Black. Bespoke finish available on request.	—	✔	1 indoor unit	—	✔	✔	✔	✔	—	✔	—	Stand Alone + 2 digital inputs
Design wired remote controller		CZ-RTC5B	✔	✔	1 group, 8 units	· Up to 2 controllers can be connected per group	✔	✔	✔	✔	✔	—	✔	—
Wired remote controller		CZ-RTC6 Non-wireless	✔	✔	1 group, 8 units	· Up to 2 controllers can be connected per group	✔	✔	✔	✔	✔	—	—	—
		CZ-RTC6BL With Bluetooth®	✔	✔	1 group, 8 units	· Up to 1 controller can be connected per group	✔	✔	✔	✔	✔	—	✔	—
Infrared remote controller		CZ-RWS3 + CZ-RWRU3W CZ-RWS3 + CZ-RWRY3 CZ-RWS3 CZ-RWS3 + CZ-RWRL3 CZ-RWS3 + CZ-RWRD3 CZ-RWS3 + CZ-RWRT3 CZ-RWS3 + CZ-RWRC3	✔	—	1 group, 8 units	· Up to 2 controllers can be connected per group	✔	✔	✔	✔	✔ [1]	—	—	—
Centralized controllers														
System controller with weekly timer		CZ-64ESMC3	✔	—	64 groups, maximum 64 units	· Up to 10 controllers, can be connected to one system · Main unit/sub unit (1 main unit + 1 sub unit) connection is possible · Use without remote controller is possible	✔	✔	✔	✔	✔ [1]	✔	✔	—
Central ON/ OFF controller		CZ-ANC3	—	—	16 groups, maximum 64 units	· Up to 8 controllers (4 main units + 4 sub units) can be connected to one system · Use without remote controller is impossible	✔	—	—	—	—	✔	—	—
Intelligent controller (touch screen/ web server)		CZ-256ESMC3	✔	—	Main unit: 128. Up to 256 units can be expanded	· Communication adaptor CZ-CFUNC2 is necessary for connection with more than 128 units	✔	✔	✔	✔	✔ [1]	✔	✔	—

1. Setting is not possible when a remote controller unit is present (use the remote controller for setting). * All specifications subject to change without notice.

Individual controllers wired

CONEX wired remote controller



nanoe™X
ECONAVI

CZ-RTC6 // CZ-RTC6BL // CZ-RTC6BLW [1]
- 3 line-up. CZ-RTC6: Non-wireless, CZ-RTC6BL: Bluetooth®, CZ-RTC6BL: Wi-Fi & Bluetooth®
- Intuitive control with stylish design profile
- Clean face with full flat & black LCD display
- Dimension (H x W x D): 86 x 86 x 25 mm

Panasonic H&C Control App [2].
- Daily remote control operation via Bluetooth®
- Quick and easy App set-up for system setting

Panasonic H&C Diagnosis App [3].
- Easy access to service parameters and service checker data via Bluetooth®

Basic operation.
- Mode setting: Heat / Cool / Dry / Fan / Auto
- Temperature setting
- Fan speed: 5 levels
- Air flow direction
- nanoe™ X & Econavi setting
- Weekly program [4]

1) Available from Autumn 2020, compatible with new PACi NX Series.
2) CZ-RTC6BL or CZ-RTC6BLW required.
3) A service checker interface is required and available from Autumn 2020. Compatible with new PACi NX Series.
4) Can be set from Panasonic H&C Control App.

Room controller for hotel rooms



PAW-RE2C4-MOD-WH // PAW-RE2C4-MOD-BK
- Easy to install
- Cost effective installation as all electrical cables are centralised on this remote
- Architect inspired attractive design
- Direct connection to the Indoor unit with all primary functions of indoor unit available
- 2 options available: Stand alone and Modbus communication
- Colours: WH: White. BK: Black
- Room controller: 4 digital inputs and 4 digital outputs

From this remote controller.
The lighting, card contact, motion detector, window contact and the air conditioning are controlled.

Energy saving functions included on the device.
- Turns OFF air conditioning and lighting when room is unoccupied
- Disables air conditioning when window is open
- Maximum/minimum setpoint temperature configurable

Fast and simple set up.
Set up is simple and easy for room controllers. But it is extremely easy and quick with touch models, which can be set up by using smartphone with NFC technology, even when control is not yet installed / powered.

Display control for hotel rooms



PAW-RE2D4-WH // PAW-RE2D4-BK
- Easy to install
- Cost effective installation as all electrical cables are centralised on this remote
- Architect inspired attractive design
- Direct connection to the Indoor unit with all primary functions of indoor unit available
- Stand alone communication
- Colours: WH: White. BK: Black
- Basic hotel function: 2 digital inputs

From this remote controller.
The card contact, motion detector, window contact and the air conditioning are controlled.

Energy saving functions included on the device.
- Disables air conditioning when window is open
- Maximum/minimum setpoint temperature configurable

Fast and simple set up.
Set up with smartphone with NFC technology, even when control is not yet installed/powered.

Individual controllers wireless

Design wired remote controller



datanavi
nanoeX
ECONAVI

CZ-RTC5B
· Power consumption monitor (only for PACi)
· Flat face design & touch sensor switch for stylish design and operating usability
· New functions such as for energy saving & monitoring and for service use are available on the full dot LCD (3,5" display)
· Improved illumination
· White LED backlit
· Blink when alarm occurs

Datanavi
· Scan & save AC system info
· Easy access to manual database
· Commissioning, F-Gas check data history

* Panasonic App is required on your smartphone.

Basic Operation.
· Operation
· Mode
· Temperature setting
· Air flow volume
· Air flow direction

Timer function.
· Outing function
· Weekly program timer
· Easy ON/OFF timer
· Time display

Energy saving.
· Outing function
· Temperature setting range limitation
· Temperature auto return
· OFF remind
· Schedule demand control
· Energy saving mode
· Energy monitoring

Others.
· Key lock
· Ventilation fan control
· Display contrast adjustment
· Remote controller sensor
· Quiet operation mode
· Prohibit setting control from central controller
· Rotation / backup control

* Power consumption monitoring is available for all PACi systems except R410A PACi Standard.
* Rotation and backup control with CZ-RTC5B is available for all PACi systems.

Individual controllers wireless

Infrared remote controller

CZ-RWS3 + CZ-RWRU3W //
CZ-RWS3 + CZ-RWRY3 //
CZ-RWS3 //
CZ-RWS3 + CZ-RWRL3 //
CZ-RWS3 + CZ-RWRD3 //
CZ-RWS3 + CZ-RWRT3 //
CZ-RWS3 + CZ-RWRC3

- Easy installation for the 4 Way Cassette type simply by replacing the corner part
- 24 hour timer function
- Remote controller by main remote controller and sub controller is possible (Max. 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit)
- When CZ-RWS3 is used, infrared control becomes possible for all indoor units (1: when a separate receiver is set up in a different room, control from that room also becomes possible. 2: automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted)
- Operation of separate energy recovery ventilators (when commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote controller (interlocked operation with the indoor unit or independent ventilation ON/OFF)



CZ-RWS3 + CZ-RWRU3W
For 4 way 90x90 cassette.



CZ-RWS3 + CZ-RWRY3
For 4 Way 60x60 cassette PY3 (with a panel).



CZ-RWS3
For wall-mounted and 4 way 60x60 cassette (with a panel) and floor console.



CZ-RWS3 + CZ-RWRL3
For 2 way cassette.



CZ-RWS3 + CZ-RWRD3
For 1 way cassette.



CZ-RWS3 + CZ-RWRT3
For ceiling.



CZ-RWS3 + CZ-RWRC3
For all indoor units.

Remote sensor



CZ-CSRC3

- This remote sensor can be connected to any PACi or VRF unit. Use it to detect the room temperature when no remote controller sensor or body sensor is used (connection to a system without a remote controller is possible)
- For joint use with a remote controller switch, use the remote controller switch as main remote controller
- Batch group control for up to 8 indoor units
- Appearance design based on simplified remote controller chassis
- Dimensions (H x W x D): 120 x 70 x 17 mm
- Weight: 70 g
- Temperature/Humidity range: 0 °C to 40 °C / 20 % to 80 % (no condensation) (indoor use only)
- Power source: 16 V DC (supplied from indoor unit)
- Maximum number of connectable indoor units: Up to 8 units

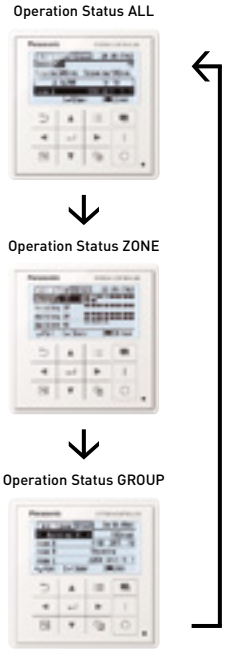
Control contents		Part name, model No.	Quantity
Standard control	· Control of the various operations of the indoor unit by wired or infrared remote controller · Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller · Switching between remote controller sensor and body sensor is possible	High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6 // CZ-RTC6BL // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3	1 unit each
(1) Group control	· Up to 8 units can be connected to 1 remote controller · Operation of all indoor units in the same mode	High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6 // CZ-RTC6BL // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3	8 units
(2) Main/ sub. remote controller	· Maximum 2 remote controllers per indoor unit · The button pressed last has priority · Timer setting is possible even with the sub remote controller	Main or sub.: High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6 // CZ-RTC6BL // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3	As required

Centralised controllers

System controller with schedule timer



Sample display image / Operation status display



CZ-64ESMC3
Operation with various functions from central station.
Panasonic unveils state-of-the-art digital controller.
Panasonic's innovative and easy to use interface that offers full functionality with an integrated schedule timer and system controller, making managing heating and cooling systems easier than ever before. The CZ-64ESMC3 includes Panasonic's popular schedule timer, which gives users full flexibility over when they want their property heated or cooled. Users can adjust the system for holidays, pausing operations for long periods of time so that energy isn't wasted heating or cooling an empty home or office. The controller also allows six operations per day to be programmed.

Mix of current 2 controllers: System controller + schedule timer.
System controller will be designed by taking priority on these 2 operations with following technical key points:
· Same operation feeling as wired remote controller by touch-key panel
· High visibility and usability by full-dot LCD
· Based on high wired remote controller
· Maximum 64 group of indoor units, individual control for 64 units
· 4 zone control; 1 zone = maximum 16 groups
· Several energy saving function (based on CZ-RTC5B)
· 6 timer program per day for 1 week (7 days) operation (total 6 x 7= 42 programs)
· Basic setting items (Temperature, Mode, Fan speed, Flap position) can be set by same manner as CZ-RTC5B

Function list:
Central control functions:
· Central control / individual setting
  - Start-stop prohibition for remote controller
  - Start-stop / Mode change / Temperature setting prohibition for remote controller
  - Mode change / Temperature setting prohibition for remote controller
  - Mode change prohibition for remote controller
  - Select items for prohibition
· Filter information
  - Filter sign
  - Filter sign reset
· Ventilation setting

Timer functions and external I/O:
· Weekly timer
  - Timer setting enable / disable
  - Copy of timer setting
· Maintenance
  - External signal (Start / Stop) (Demand control)
  - Centralized control master-slave setting
  - Alarm history
· Initial setting
  - Clock

Energy saving, maintenance and operating functions:
· Energy saving control
  - Econavi ON/OFF
· Filter information
  - Filter sign and hour counter display
· Maintenance
  - Service contact
· Initial setting
  - Clock display setting
  - Name Setting
  - Operation lock setting
  - Operation sound setting
  - LCD contrast setting
  - LCD backlight setting
  - Select displayed language (EN/FR/IT/ES/DE)
  - Administrator password
· Setting information list

ON/OFF controller



CZ-ANC3
Only ON/OFF operation from central station.
· 16 groups of indoor units can be controlled
· Collective control and individual group (unit) control can also be performed
· Up to 8 ON/OFF controller (4 main, 4 sub) can be installed in one link system
· The operation status can be determined immediately
· Dimensions (H x W x D): 121 x 122 x 14 + 52 mm (embedding dimension)

Power supply: 220 to 240 V AC.
I/O part: Remote input (effective voltage: within 24 V DC): All ON/OFF.
Remote output (allowable voltage: within 30 V DC): ON, Alarm.

Note: As operation mode and temperature settings are not possible with the ON/OFF controller, it must be used together with a remote controller, a system controller etc.

Centralised controllers

Intelligent controller (touch screen panel)



ECONAVI

CZ-256ESMC3
Simplified load distribution ratio (LDR) for each tenant.
Dimensions (H x W x D): 240 x 280 x 20 (+60) mm.
Power supply: Single Phase 100-240 V ~ 50/60 Hz.
Maximum number of connectable indoor units: 256 units (maximum per link: 64 units).
Maximum number of connectable outdoor units: 120 units (maximum per link: 30 units).
· Central control device: Up to 10 units
Enlarged display screen: 10,4 inch touch-panel colour LCD. Pursuing visibility, ease of use.
Retrieve data from USB memory: Place the USB port inside the panel (USB memory available in stores). Communication adaptor: CZ-CFUNC2*.

* CZ-CFUNC2 is required to connect more than 128 indoor units.

Functions:
· Graph display (trends, comparisons)
· Econavi ON/OFF
· Outdoor unit quiet operation ON/OFF
· Energy saving functions: Set temperature auto return settings, Auto shut OFF, Set temperature range limit settings, Energy saving for PAC current value,etc.
· Event control (such as equipment linkage)
· Performs closing at end of any period

Operation and status.
You can check to operational status (ON/OFF, operating mode, alarms, etc.) of all indoor units and outdoor units in real time.
You can also select indoor units to change their settings.

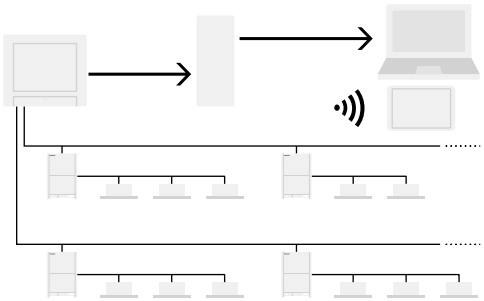
Operation scheduling.
You can register daily operation schedules (ON/OFF time, operating modes, set temperatures, etc.) for individual indoor units or groups of indoor units.
Operations can be schedule for up to 2 years in advance.

Load distribution calculation for each tenant.
· Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m^3, kWh)
· Calculated data is stored as a CSV type file
· Data from the last 365 days is stored

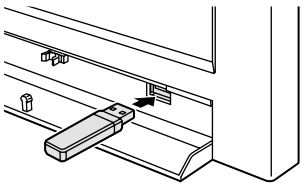
Web application. Web access & control from remote station.
· Accessing from remote PC
· You can monitor/operate system by using web browser

Remote controller.
The LAN terminal on this unit enables you connect it to a network. Connecting to Internet will enable you to operate the unit and check the status using a PC from a remote location*.

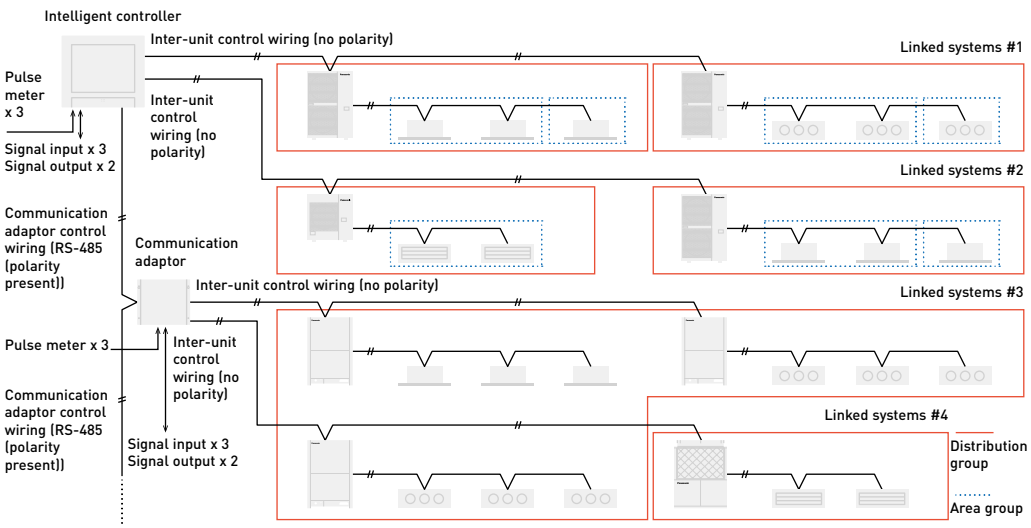
* Remote access rights and additional IT infrastructure / programming may be required.



Backup tool to save your commissioning time.
Various data such as distribution, setting, log history etc. can be saved by CSV file.
Setting data of CSV file is available to edit and import to the controller again.
You can save time for commissioning and change setting flexibly and easily by your PC.
· Customize data
· Data recovery
Data can be imported again by general USB.



System configuration example.



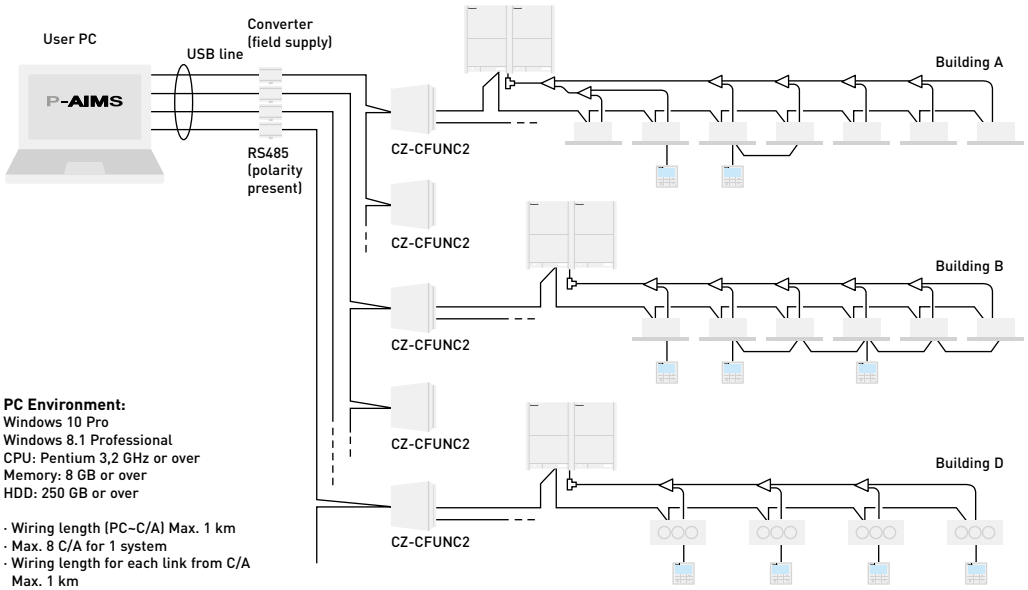
P-AIMS core software



CZ-CSWKC2 / P-AIMS core software.
Centralised software to control up to 1024 indoor units.

Functions of basic software.
· Standard remote controller for all indoor units.
· Many timer schedule programs can be set on the calender.
· Detailed information display for alarms.
· CSV file output with alarm history, operating status.
· Automatic data backup to HDD.

P-AIMS is suitable for large shopping centers and universities with many areas/ buildings. 1 "P-AIMS" PC can have 4 independent systems at once.
Each system can have maximum 8 C/A units, and control maximum 512 units. In total, 1024 indoor units can be controlled by 1 "P-AIMS" PC.



PC Environment:
Windows 10 Pro
Windows 8.1 Professional
CPU: Pentium 3,2 GHz or over
Memory: 8 GB or over
HDD: 250 GB or over

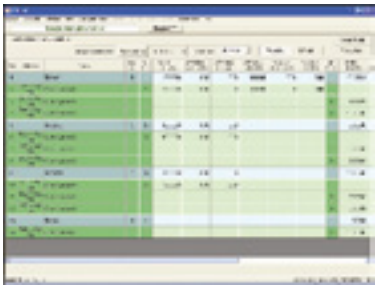
· Wiring length (PC–C/A) Max. 1 km
· Max. 8 C/A for 1 system
· Wiring length for each link from C/A Max. 1 km

P-AIMS optional software CZ-CSWAC2 / P-AIMS consumption calculation extension.
· Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m^3, kWh)
· Calculated data is stored as a CSV type file
· Data from the last 365 days is stored

P-AIMS optional software CZ-CSWWC2 / P-AIMS web application extension.
· Accessing P-AIMS software from remote PC
· You can monitor/operate ECOi System by using web browser (Internet Explorer)

P-AIMS optional software CZ-CSWGC2 / P-AIMS layout display extension.
· Operating status monitor is available on the layout display
· Object's layout and indoor unit's location can be checked at once
· Each unit can be controlled by virtual remote controller on the display
· Max. 4 layout screens are shown at once

P-AIMS optional software CZ-CSWBC2 / P-AIMS BACnet extension.
· Can communicate with other equipment by BACnet protocol
· ECOi System can be controlled by both BMS and P-AIMS
· Maximum 255 indoor units can be connected to 1 PC (that has P-AIMS basic & BACnet software).



With 4 upgrade packages the basic software can be upgraded to suit individual requirements.

Centralised controllers

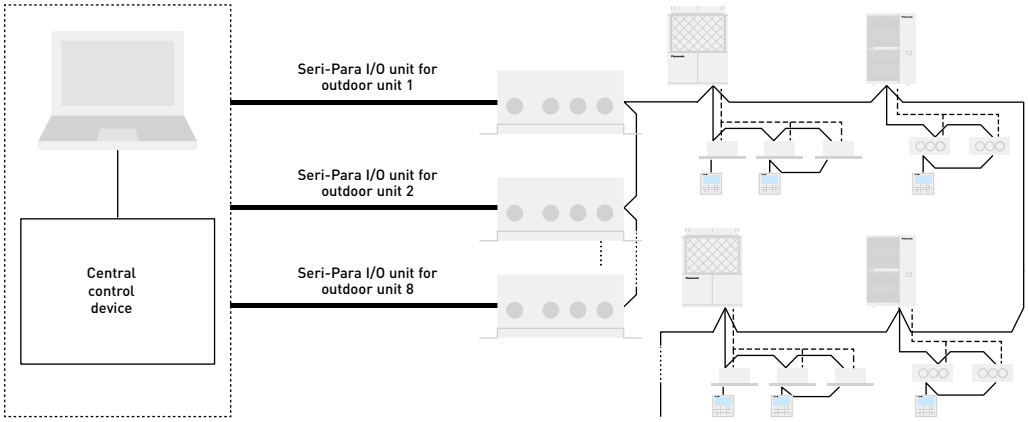
Seri-Para I/O unit for outdoor unit



CZ-CAPDC2 for ECOi / CZ-CAPDC3 for Mini ECOi and PACi.
Connection with general equipment.
· This unit can control up to 4 outdoor units
· From the central control device, mode changing and batch operation/batch stop are possible
· Required for demand control

Dimensions (H x W x D): 80 x 290 x 260 mm.
Power supply: Single phase 100/200 V (50/60 Hz), 18 W.

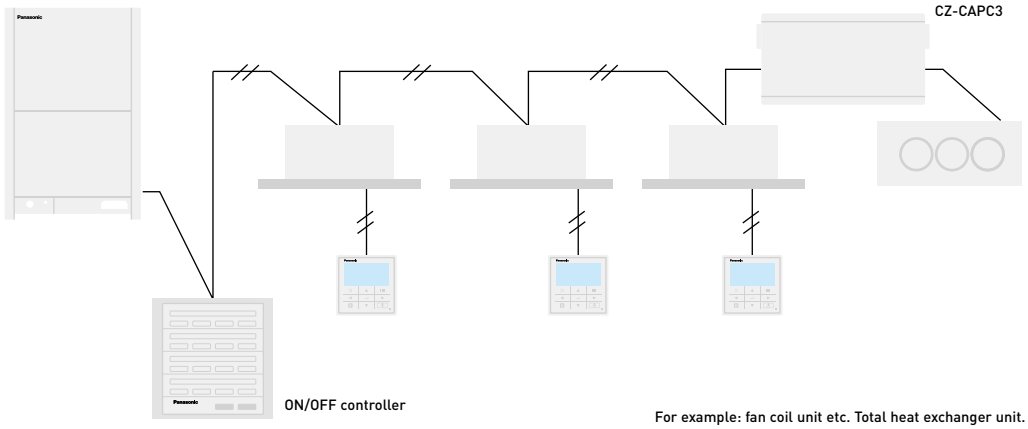
Input: Batch operation/Batch stop (non-voltage contact/24 V DC, pulse signal). Cooling/Heating (non-voltage contact/static signal). Demand 1/2 (non-voltage contact/static signal) (local stop by switching).
Output: Operation output (non-voltage contact). Alarm output (non-voltage contact).
Wiring length: Indoor/outdoor operation lines: Total length 1km. Digital signal: 100 m or shorter.



Local adaptor for ON/OFF control



CZ-CAPC3
Connection with general equipment.
· Control and status monitoring is possible for individual indoor unit (or any external electrical device up to 250 V AC, 10 A) by contact signal



For example: fan coil unit etc. Total heat exchanger unit.

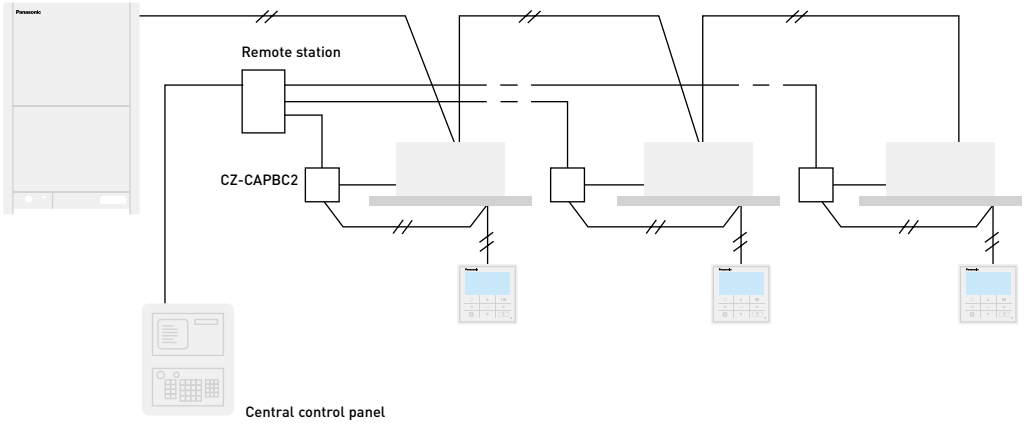
Mini Seri-Para I/O Unit 0 -10 V



CZ-CAPBC2
Connection with general equipment.

- Control and status monitoring is possible for individual indoor unit (1 group)
- In addition to operation and stop, there is a digital input function for air speed and operation mode
- Temperature setting and measuring of the indoor suction temperature can be performed from central monitoring
- Power is supplied from the T10 terminal of the indoor units
- The analog input for demand of the outdoor capacity by 20 steps (from 40 % to 120 %) by 0-10 V
- The analog input for temperature setting is 0 to 10 V, or 0 to 140 Ohm
- Separate power supply also is possible (in case of suction temperature measuring)

* Ask to your distributor.



Communication adaptor for VRF connectivity



CZ-CFUNC2
This communication interface is required to connect a ECOi and GHP systems to a BMS. An additional interface is needed to convert the information into KNX / Modbus / BACnet language. CZ-CFUNC2 is very easy to operate and to connect to the Panasonic P-Link, which is the ECOi bus. From the CZ-CFUNC2, all the indoor and outdoor units of the installation can be easily control. Two linked wiring systems can be connected to one CZ-CFUNC2.
Dimensions (H x W x D): 260 x 200 x 68 mm

* As this is not a splash-proof design, it must be installed indoors or in the control panel, etc.

PACi and VRF connectivity

Controls and connectivities are the key to offer better comfort and price. Panasonic offers its customers cutting-edge technology, specially designed to ensure our air conditioning systems deliver optimal performance.

BMS CONNECTIVITY



PACi, ECOi and ECO G connectivity

The interface has been designed specifically for Panasonic and provides complete monitoring, control and full functionality of the line-up from IntesisHome, KNX, Modbus, BACnet and LonWorks installations.
This connectivity solution with "PAW" model names is made by a third party company, please contact Panasonic for more information.

	Room controller	Interface	BMS Type	Maximum number of indoor units connected
ECOi / PACi indoor units	SER8150R0B1194 / SER8150R5B1194		Modbus / BACnet	1 Unit/group
		PAW-RC2-KNX-1i	KNX	1 (1 Group of indoor units)
		PAW-RC2-MBS-1	Modbus RTU [1]	1 (1 Group of indoor units)
		PAW-RC2-MBS-4	Modbus	4 Indoor/groups
		PA-RC2-WIFI-1	IntesisHome	1 (1 Group of indoor units)
		PAW-RC2-BAC-1	BACnet	1
PACi / ECOi / ECO G P-Link		PAW-AC2-KNX-16P	KNX	16
		PAW-AC2-KNX-64P	KNX	64
		PAW-AC2-MBS-16P	Modbus	16
		PAW-AC2-MBS-64P	Modbus	64
		PAW-AC2-MBS-128P	Modbus	128
		PAW-TM-MBS-RTU-64	Modbus RTU [2]	64
		PAW-TM-MBS-TCP-128	Modbus TCP [2]	128
		PAW-AC2-BAC-16P	BACnet	16
		PAW-AC2-BAC-64P	BACnet	64
		PAW-AC2-BAC-128P	BACnet	128
		CZ-CLNC2	LonWorks	16 Groups of maximum 8 indoor units, in total maximum 64 indoor units

1) Interface Modbus RTU/TCP is needed in case if Modbus TCP connection. PAW-MBS-TCP2RTU (ModBus RTU Slave devices). 2) Interface CZ-CFUNC2 needed.

Airzone. Control of the Hide Aways

Airzone has developed interfaces to easily connect to Panasonic Commercial Hide Away units. Ensuring optimum performance, comfort and energy savings, the new system is efficient and easy to install.

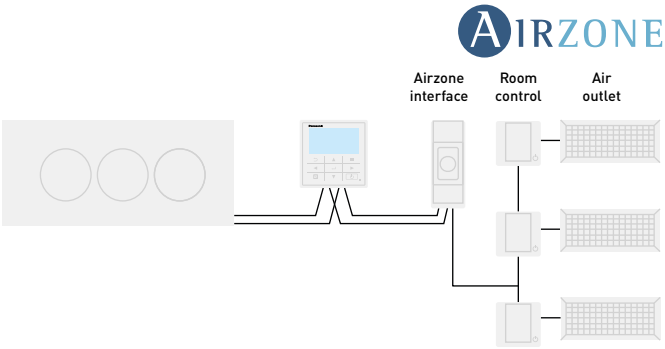
Airzone full range of accessories for any duct project.


Different type of outlets


Also plenum automatic doors



Full range of remote controls (wired / Infrared, ...)





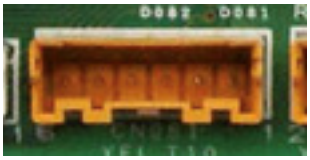
ECOi, ECO G and PACi connectivity indoor units

PCB's and cables for ECOi, ECO G and PACi indoor units.

Name of the cables	Function	Comment
CZ-T10	All T10 functions	Requires field supplied accessory
PAW-FDC	Operate external fan	Requires field supplied accessory
PAW-OCT	All option monitoring signals	Requires field supplied accessory
CZ-CAPE2	3-Pipe control PCB	Requires additional wires from spare part supply
PAW-EXCT	Forced Thermo OFF/Leakage D.	Requires field supplied accessory

Name of the PBC	Function	Comment
PAW-T10	All T10 functions	Allows easy connection "Plug & Play"
PAW-PACR3	Redundancy of 2 or 3 systems; for ECOi and PACi	Redundancy of 2 or 3 ECOi or PACi systems including temperature monitoring, error indication, backup, alternative run

T10 connector (CN061)

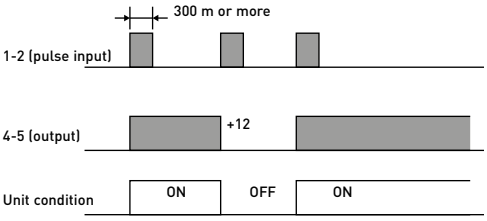


CZ-T10
Panasonic has developed an optional accessory (consisting of plug + wires) called CZ-T10 to enable an easy connection to this T10 connector.

Connecting an ECOi indoor unit to an external device is easy. The T10 terminal featured in the electronic circuit board of all indoor units enables digital connection to external devices.

T10 terminal Specification (T10: CN015 at indoor unit PCB).

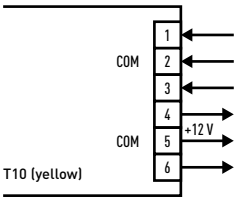
· Control items: 1. Start/stop input
2. Remote controller prohibit input
3. Start signal output
4. Alarm signal output



NOTE: The wire length from indoor unit to the relay must be within 2,0 m. Pulse signal changeable to static by cutting jumper JP001.

· Condition
1. 1-2 (Pulse input): Unit ON/OFF condition switching with a pulse signal. (1 pulse signal: shortage status more than 300 msec. or more)
2. 2-3 (Static input): Open / Operation with remote is permitted (Normal condition) Close / Remote controller is prohibited
3. 4-5 (Static output): 12 V output during the unit ON / No output at OFF
4. 5-6 (Static output): 12 V output when some errors occur / No output at normal

· Example of wiring

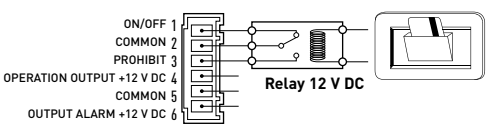


Usage example.
Forced OFF control.

Term 1 & 2: Free contact for ON/OFF signal (cut *JP1* for static signal) when the hotel card is it connected the contact must be close (the unit can be used).

Term 2 & 3: Free contact to prohibit all function in the remote controller install in the room when the hotel card is it removed the contact must be closed (the unit can not work).

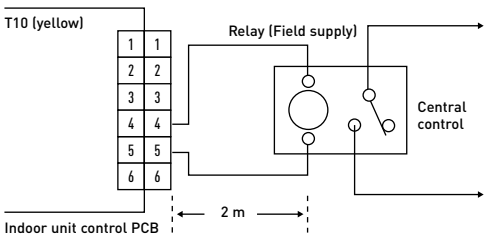
Terminal = T10



Operation ON/OFF signal output.

· Condition:
4-5 (Static output): 12 V output during the unit ON / No output at OFF

· Example of wiring



Note: The wire length from indoor unit to the Relay must be within 2,0 m.
Pulse signal changeable to static by cutting jumper JP001.
* PACi-NX series is not compatible.

Fan drive connector (CN032)

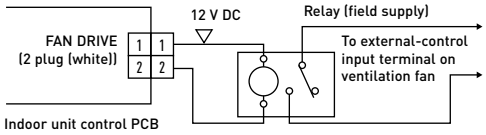


PAW-FDC
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-FDC to enable an easy connection to this fan drive connector (CN032).

Operating the ventilation fan from the remote controller
· Start / stop of external ventilation and total heat exchanger fans
· Works even if indoor unit is stopped
· In case of group control ➔ all fans will operate; no individual control

External fan ON/OFF





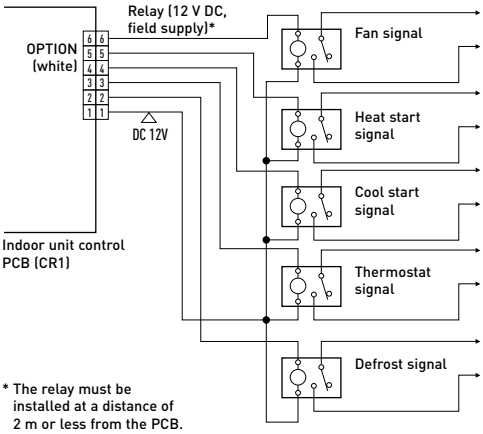
Option connector (CN060) output external signals



PAW-OCT
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-OCT to enable an easy connection to this Option Connector (CN060).

With the combination of the T10 and the option CN060 an external control of the indoor units is possible!

6P (white): Outputs external signals as shown in the figure below



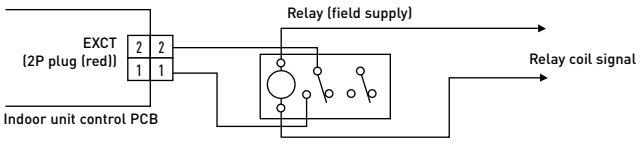
EXCT connector (CN009)

PAW-EXCT
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-EXCT to enable an easy connection to this EXCT Connector (CN009).

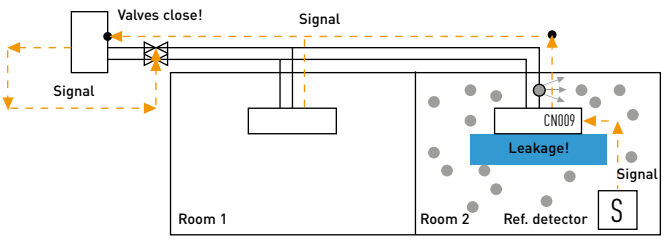
A) With static input.
➔ STATIC INPUT ➔ THERMO OFF ➔ ENERGY SAVING
2P plug (red): Can be used for demand control. When input is present, forces the unit to operate with the thermostat OFF.

Note: The length of the wiring from the indoor unit control PCB to the relay must be 2 m or less.

· Examples of wiring:



B) Example: In connection with a refrigerant sensor.
· Signal from leakage detector: non voltage, static.
· Indoor unit setting: Code 0b ➔ 1
· Connector for leak detector: EXCT
· Outdoor unit setting:
Code C1 ➔ 1 power output if alarm from O2 connector 230 V
Code C1 ➔ 2 power output if alarm from O2 connector 0 V
· Displayed alarm message P14



ECO i - W





Discover a new era of ECOi, the ECOi-W. Heat pumps and cooling only chillers

Panasonic introduces the new ECOi-W heat pumps and cooling only chiller series.
These new series provides a wide variety of HVAC system solutions, to meet all of your residential, commercial and industrial needs.

ECOi-W meets the customer's needs	> 412
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ECOi-W meets the customer's needs, with these fully customisable heat pumps and cooling only chillers

Unrivaled reliability and quality.
Panasonic solutions can be enjoyed for years to come, even in the most extreme climates. Panasonic does not compromise on product quality, safety or durability, in order to provide the ultimate comfort when you need it most.



There is a reason to choose Panasonic as your partner.

ECOi-W

Panasonic does not compromise on product quality, always strives for 100 % quality.
ECOi-W series offers smart technology meeting your needs at home and business.

Energy saving

HIGH SEER 4,68

High seasonal efficiency in cooling mode.
SEER follows COMMISSION REGULATION (EU) No 2016/2281.

HIGH SCOP 3,55

High seasonal efficiency in heating mode.
SCOP follows COMMISSION REGULATION (EU) No 813/2013.

EC MOTOR GREEN VENTILATION

EC motor green ventilation.
Range of fan coil with improved efficiency with optional EC fan motor.

High performance and comfortability

SUPER QUIET

Super quiet.
Extra quiet operation is available as standard (with sizes 20 – 40, 140 - 210).

BLUEFIN

Bluefin.
Bluefin coil comes as standard on all heat pump models. The life time of coils have been extended thanks to the hydrophilic coating.

ULTIMATE CUSTOMISATION

Ultimate customisation.
Various pump, hydraulic, ambient options offered, plus many more.
Ultimate customization for your needs and environment.

AUTOMATIC FAN

Automatic fan operation.
The microprocessor control automatically adjusts the fan speed as a function of the operating conditions.

-17°C HEATING MODE

Down to -17 °C in heating mode.
The ECOi-W system works in heating mode at outdoor temperature down to -17 °C.

50°C COOLING MODE

Up to 50 °C in cooling mode.
The ECOi-W system works in cooling mode at outdoor temperature up to 50 °C.

DEFROST LIMITING

Defrost limiting cycle (140 – 210).
Each pair of coils can be defrosted wisely while the other pair of coils are running in heating mode.
This alternated defrost cycle ensures stable hot water even at low ambient conditions.

High connectivity

BMS CONNECTIVITY

BMS connectivity.
The communication port can be integrated into the ECOi-W system and provides easy connection and control.
Modbus RTU is equipped as standard. Modbus TCP/IP, BACnet IP and BACnet MSTP as optional availability.

Reliable quality

100% QUALITY
QUALITY CERTIFIED BY PANASONIC

Quality certified by Panasonic.
Panasonic does not compromise on product quality, safety, durability in order to provide the ultimate comfort when you need it most.

EUROVENT CERTIFIED PERFORMANCE

Eurovent certified performance.
The performance of ECOi-W Series has been certified by Eurovent to prove the high quality and high performance by Panasonic.
https://www.eurovent-certification.com/

ErP

ECOi-W Series are compliant with ErP regulation.
SEER follows COMMISSION REGULATION (EU) No 2016/2281.
SCOP follows COMMISSION REGULATION (EU) No 813/2013.

Support materials for customers

AutoCAD 2D files and BIM models for ECOi-W full range is readily available at Panasonic PROClub.
https://www.panasonicproclub.com

ECOi-W, the solution for hotels, offices and industry

ECOi-W provides the optimal performance in any climatic condition.



1 High energy saving and comfort

· High SEER/SCOP
· Quiet operation
· Integration with ECOi VRF systems via BMS control

2 High flexibility

· Capacity range from 20 kW to 210 kW
· Customisable design
· Operating range: -17 °C (heating) to 50 °C (cooling)
· Wide range of hydraulic options
· Wide range of communication protocols

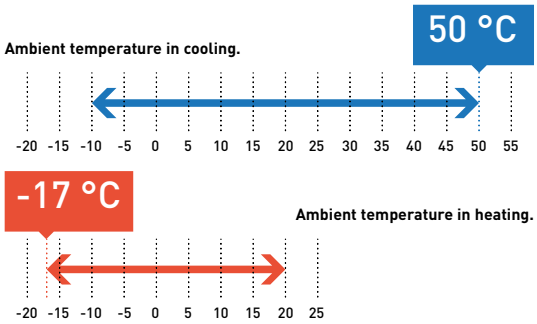
3 High quality

· Defrost limiting coil design (140 to 210)
· Optimized design for service and maintenance
· Compact footprint

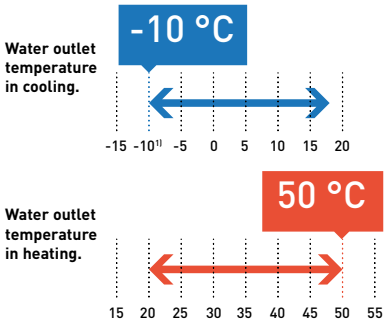
Operating conditions

Panasonic ECOi-W provides a wide operation range from -17 °C in heating to 50 °C in cooling.

Water outlet temperature in cooling: A uniqueness of ECOi-W, is the water outlet temperature down to -10 °C in cooling. It can ensure the operation temperature of the process equipment in factories.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).



* With glycol 45 %, 5 °C without glycol.
Special conditions apply. Please contact your local representative.

ECOi-W line-up

	ECOi-W size	20	25	30	35	40	45	55	65	75	90	105	125	140	150	170	190	210
Heat pump range	Cooling capacities (kW)	18,7	23,7	26,4	35,8	38,1	44,3	50,9	64,1	71,0	88,7	100,8	119,3	128,3	142,1	163,9	177,5	207,9
	Heating capacities (kW)	19,5	26,9	29,7	37,3	41,6	48,5	58,2	67,2	75,9	88,1	101,0	119,1	144,0	154,0	170,0	195,0	218,0
	SEER [1]	4,68	4,31	4,28	4,25	4,33	4,20	4,41	4,51	4,63	4,40	4,44	4,49	4,39	4,36	4,31	4,23	4,28
	SCOP [1]	3,50	3,38	3,45	3,50	3,50	3,38	3,38	3,55	3,53	3,40	3,43	3,43	3,30	3,33	3,30	3,28	3,23
	Energy efficiency class (heating) [1] [2]	A+	A+	A+	A+	A+	A+	A+	A+	—	—	—	—	—	—	—	—	—
Cooling only range	ECOi-W size	20	25	30	35	40	45	55	65	75	90	105	125	140	150	170	190	210
	Cooling capacities (kW)	19,2	24,3	27,1	36,7	39,0	45,3	52,0	66,1	73,1	90,7	104,0	123,0	132,0	146,0	164,0	181,0	208,8
	SEER	4,78	4,38	4,43	4,43	4,48	4,40	4,53	4,53	4,68	4,45	4,50	4,55	4,40	4,45	4,38	4,40	4,25
	Dimensions (H x W x D)	1983x1000x1000			1983x1000x1000		1986x2180x1160		1986x2180x1160		2286x2180x1160			2295x2856x2210		2321x2856x2210		

1) Those are the data with variable flow pump. For the data with fixed flow pump, please contact an authorised Panasonic dealer. 2) According to Eurovent and COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019.

Panasonic Certified Quality

Panasonic does not compromise on product quality, safety or durability, in order to provide the ultimate comfort when you need it most.





Class A pump

Units can be equipped with an efficient pump. A wide range of single and double pump, plus pump drive option is available.

Axial AC/EC fan

The microprocessor control automatically adjusts the fan speed as a function of the operating conditions.

SWEP BP heat exchanger

Very compact & long durability of SWEP Braze Plate Heat Exchanger.
Unique design for the size 140 - 210 improving frost protection and efficiency.



Model type supplied may vary.

Energy recovery

The "Desuperheater" option consists of a stainless-steel brazed plate heat exchanger which is mounted in series between the compressors and the air-cooled condenser. It can supply hot water up to 50°C free-of-charge while operating in the cooling mode, thanks to the partial recovery of condensation heat that would otherwise be rejected to the external heat source.
The unit's efficiency is increased as condensing pressure can be reduced due to air cooled condenser becoming oversized.

* Optional. Available in 45-125.

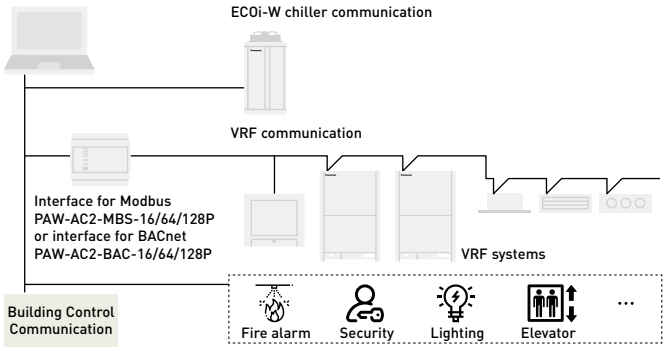
Simple user friendly control



In addition to basic control functions...
- Intelligent logic control for inlet water temperature
- Night setback operation to reduce electrical consumption and noise
- Automatic test operation at the push of a button

BMS integration

Modbus RTU as standard.
Modbus TCP/IP, BACnet IP and BACnet MSTP as optional availability.
Integrated systems with ECOi-W Chiller, VRF and BMS control can be offered.





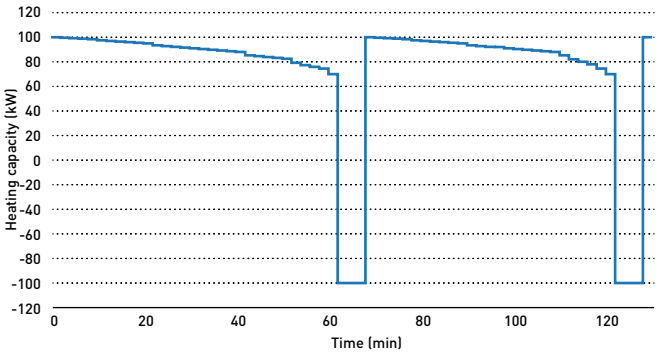
Defrost limiting coil design



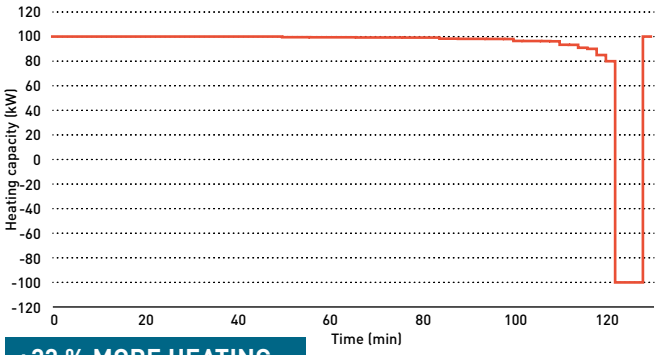
- Fin space increased to prevent the coil freezing
- Number of rows increased to maintain the same capacity in standard conditions
- Designed to decrease freezing frequency as soon as outdoor air temperature goes below 7 °C

* Available in heat pump range size 140-210.

Standard coil: 2 defrost cycles every 130 min.



Special coil design: 1 defrost cycle every 130 min.



+22 % MORE HEATING
+15 % HIGHER COP
SCOP IMPROVED

Victaulic grooved connection

Victaulic Installation-Ready™ couplings assure proper piping installation. Optimized design to reduce installation effects, including noise and vibration attenuation.

* Available in 140-210.
** Threaded Victaulic connection kit (PAW-SYSVICTH) is optional.



Model type supplied may vary.

Bluefin for more durability

Bluefin hygrophillic coating improves defrost performance and reduces damage for a longer life time.

* Available in heat pump range.



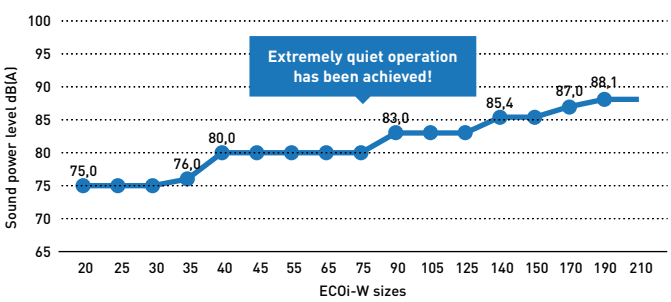
Low noise

ECOi-W series is equipped with the compressor phonic insulation box as a standard.

* Standard in 20-40, 140-210. Optional in 45-125.



ECOi-W quiet operation in full range.



* Performance with standard fans. In the range 45-125, noise performance without low noise option.

Range of ECOi-W outdoor units

Page	Outdoor units	20 kW	25 kW	30 kW	35 kW	40 kW	45 kW	55 kW	65 kW	75 kW
	ECOi-W 20 to 40									
P. 420	Heat pump	U-020CWNB U-020CWBS	U-025CWNB U-025CWBS	U-030CWNB U-030CWBS	U-035CWNB U-035CWBS	U-040CWNB U-040CWBS				
P. 430	Cooling only	U-020CVNB U-020CVBS	U-025CVNB U-025CVBS	U-030CVNB U-030CVBS	U-035CVNB U-035CVBS	U-040CVNB U-040CVBS				
	ECOi-W 45 to 75									
P. 422	Heat pump						U-045CWNB U-045CWBM	U-055CWNB U-055CWBM	U-065CWNB U-065CWBM	U-075CWNB U-075CWBM
P. 432	Cooling only						U-045CVNB U-045CVBM	U-055CVNB U-055CVBM	U-065CVNB U-065CVBM	U-075CVNB U-075CVBM
	ECOi-W 90 to 125									
P. 424	Heat pump									
P. 434	Cooling only									
	ECOi-W 140 to 210									
P. 426	Heat pump									
P. 436	Cooling only									

	90 kW	105 kW	125 kW	140 kW	150 kW	170 kW	190 kW	210 kW



U - 020/025/030/035/040 CW

Cooling capacity: 19,4 to 37,4 kW
Heating capacity: 19,5 to 41,6 kW

Compact and powerful heat pump chiller series with Panasonic quality verification.
ECOi-W Series guarantees quiet operation.

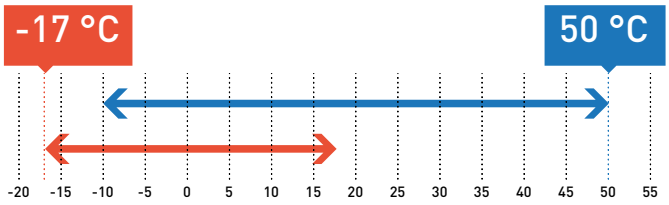


- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Super quiet operation
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

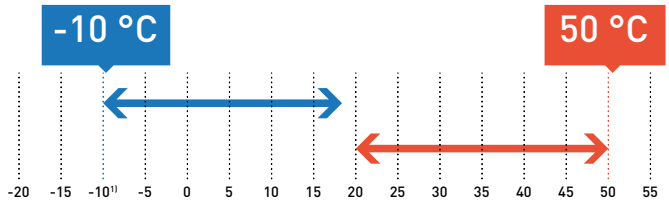
- Optional Desuperheater for free hot water up to 50 °C*
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

* Available on special order only, please contact your local Panasonic sales representative.

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).
* With glycol 45 % maximum, 5 °C without glycol.

Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): axial fan (1)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating
- Optional hydraulic kit

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed[1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
	Variable twin speed[2]	Water isolation valves	Rubber pads	Power supply w/o neutral
	Variable capacity		Spring damper	Modbus TCP/IP
	Constant outlet pressure		All seasons	BACnet MSTP
	Constant differential pressure		Nordic pack	BACnet IP
			High pressure fan[3]	Remote LAN connection
				Desuperheater [3]

1) Available as standard on models 35 - 40 when pump is selected. 2) Available as standard on models 20 - 30 when pump is selected. 3) Available on models 25 - 40. 4) Available on special order only, please contact your local Panasonic sales representative.

SEE MORE OPTIONS FOR HEAT PUMP OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT



Optional Shut off valves kit for model 20 - 40.
PAW-SYSSOV1

Model			**20**	**25**	**30**	**35**	**40**
Standard without buffer tank			**U-020CWNB**	**U-025CWNB**	**U-030CWNB**	**U-035CWNB**	**U-040CWNB**
With buffer tank			**U-020CWBS**	**U-025CWBS**	**U-030CWBS**	**U-035CWBS**	**U-040CWBS**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	18,7	23,7	26,4	35,8	38,1
Input power cooling [1]		kW	5,9	7,7	9,4	12,3	13,1
Total EER 100 % [1]			3,15	3,07	2,81	2,92	2,91
SEER [2] [3]			**4,68**	**4,31**	**4,28**	**4,25**	**4,33**
ηsc [2] [3]		%	184	169	168	167	170
Heating capacity [4]		kW	19,5	26,9	29,7	37,3	41,6
Input power heating [4]		kW	6,1	9,3	9,9	13,2	13,5
SCOP [3] [5]			**3,50**	**3,38**	**3,45**	**3,50**	**3,50**
ηsh [3] [5]		%	137	132	135	137	137
Energy efficiency class (Scale A+++ to D) [6]			A+	A+	A+	A+	A+
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	17,7	22,2	24,3	31,8	33,8
Startup current w/o softstarter / w softstarter		A	53/20	64/35	77/41	118/53	119/54
Sound power (w standard fans)		dB(A)	75,0	75,0	75,0	76,0	76,0
Sound pressure (w standard fans) [7]		dB(A)	42,8	42,8	42,8	43,8	43,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000
Dimension (w standard fans) w buffer tank	H x W x D	mm	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507
Weight (w 1 pump) w/o buffer tank		kg	280	290	320	330	335
Weight (w 1 pump) w buffer tank		kg	345	355	385	395	400
Refrigerant (R410A)		kg	8,4	8,4	8,4	9,1	9,2
Number of refrigerant circuit			1	1	1	1	1
Compressors							
Number			2	2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/50/100	0/50/100	0/50/100	0/50/100
Crankcase heater		W	2 x 40	2 x 40	2 x 49	2 x 49	2 x 49
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	3,35	4,36	4,64	6,16	6,44
Water pressure drop (cooling)		kPa	23	37	22	37	40
Water volume		l	1,78	1,78	2,55	2,55	2,55
Antifreeze heater		W	30	30	30	30	30
Coils							
Number			1	1	1	1	1
Frontal surface		m²	2,4	2,4	2,4	2,8	2,8
Number of rows			2	2	2	2	2
Fans standard							
Number			1	1	1	1	1
Air flow		m³/h	9000	13000	13000	16000	16000
Rotation speed		r.p.m.	900	900	900	650	650
Power input (each fan)		W	620	940	940	930	930
Water connections							
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Outlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSSOV1	Shut off valves kit for model 20 - 40

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. For the data with fixed flow, please contact an authorised Panasonic dealer. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 7) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

HIGH SEER 4,68 | HIGH SCOP 3,50 | ErP | SUPER QUIET | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17°C HEATING MODE | 50°C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.





U - 045/055/065/075 CW

Cooling capacity: 46,8 to 71,6 kW
Heating capacity: 48,5 to 75,9 kW

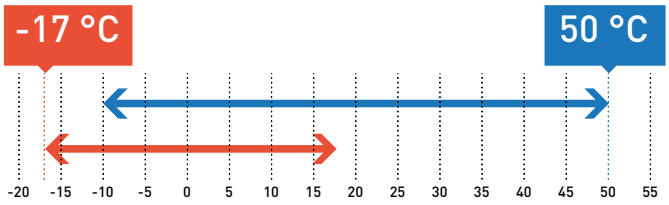
High seasonal efficiency in cooling, maximum SEER 4,63 in this range. ECOi-W Series offers a variety of options to meet your needs.



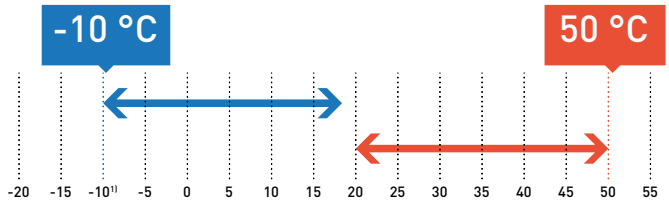
- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Optional extra-low noise kit available
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

- Bluefin anti-corrosion coating
- Optional hydraulic kit
- Optional Desuperheater for free hot water up to 50 °C
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).
* With glycol 45 % maximum, 5 °C without glycol.

Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): axial fan (1 for 45/55, 2 for 65/75)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Variable capacity	Electrical heater low power (only with buffer tank)	Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure	Electrical heater high power (only with buffer tank)	All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge
				Desuperheater

SEE MORE OPTIONS FOR HEAT PUMP OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT



Optional Shut off valves kit for model 45 - 75.
PAW-SYSSOV2

Model			**45**	**55**	**65**	**75**
Standard without buffer tank			**U-045CWNB**	**U-055CWNB**	**U-065CWNB**	**U-075CWNB**
With buffer tank			**U-045CWBM**	**U-055CWBM**	**U-065CWBM**	**U-075CWBM**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	44,3	50,9	64,1	71,0
Input power cooling [1]		kW	15,9	18,0	21,8	24,0
Total EER 100 % [1]			2,78	2,83	2,95	2,96
SEER [2] [3]			**4,20**	**4,41**	**4,51**	**4,63**
ηsc [2] [3]		%	165	174	177	182
Heating capacity [4]		kW	48,5	58,2	67,2	75,9
Input power heating [4]		kW	17,3	20,3	22,5	24,3
SCOP [3] [5]			**3,38**	**3,38**	**3,55**	**3,53**
ηsh [3] [5]		%	132	132	139	138
Energy efficiency class (Scale A+++ to D) [6]			A+	A+	A+	—
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	40,2	44,2	59,4	64,4
Startup current w/o softstarter / w softstarter		A	133/66	140/73	201/101	206/106
Sound power (w standard fans)		dB(A)	80,0	80,0	80,0	80,0
Sound pressure (w standard fans) [7]		dB(A)	47,8	47,8	47,8	47,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	540	550	610	620
Weight (w 1 pump) w buffer tank		kg	700	710	770	780
Refrigerant (R410A)		kg	14,5	14,9	18,9	19,0
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/43/57/100	0/40/60/100	0/45/55/100
Crankcase heater		W	2 x 66	2 x 66	2 x 66	2 x 66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	8,06	9,18	11,30	12,31
Water pressure drop (cooling)		kPa	30	35	28	37
Water volume		l	4,10	4,10	6,10	6,10
Antifreeze heater		W	30	30	2 x 30	2 x 30
Coils						
Number			1	1	2	2
Frontal surface		m²	4,20	4,20	5,55	5,55
Number of rows			2	2	2	2
Fans standard						
Number			1	1	2	2
Air flow		m³/h	22500	22500	30000	30000
Rotation speed		r.p.m.	790	790	650	650
Power input (each fan)		W	1650	1650	930	930
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2	2	2	2
Outlet - diameter		Inch	2	2	2	2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSSOV2	Shut off valves kit for model 45 - 75

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. For the data with fixed flow, please contact an authorised Panasonic dealer. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 7) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

HIGH SEER 4,63 | HIGH SCOP 3,55 | ErP | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17°C HEATING MODE | 50°C COOLING MODE | BMS CONNECTIVITY

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U - 090/105/125 CW

Cooling capacity: 91,4 to 121,9 kW
Heating capacity: 88,1 to 119,1 kW

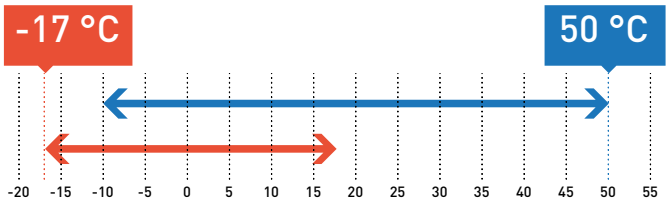
Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.



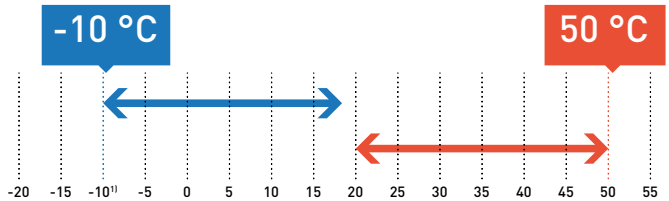
- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Optional extra-low noise kit available
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

- Optional hydraulic kit
- Optional Desuperheater for free hot water up to 50 °C
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).
* With glycol 45 % maximum, 5 °C without glycol.

Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): axial fan (2)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Variable capacity	Electrical heater low power (only with buffer tank)	Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure	Electrical heater high power (only with buffer tank)	All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge
				Desuperheater

SEE MORE OPTIONS FOR HEAT PUMP OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT



Optional Shut off valves kit for model 90 - 125.
PAW-SYSSOV3

Model			**90**	**105**	**125**
Standard without buffer tank			**U-090CWNB**	**U-105CWNB**	**U-125CWNB**
With buffer tank			**U-090CWBM**	**U-105CWBM**	**U-125CWBM**
Power supply	Voltage	V	400	400	400
	Phase		Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50
Cooling capacity [1]		kW	88,7	100,8	119,3
Input power cooling [1]		kW	30,6	34,8	40,4
Total EER 100 % [1]			2,90	2,89	2,96
SEER [2] [3]			**4,40**	**4,44**	**4,49**
ηsc [2] [3]		%	173	175	177
Heating capacity [4]		kW	88,1	101,0	119,1
Input power heating [4]		kW	33,8	38,4	45,5
SCOP [3] [5]			**3,40**	**3,43**	**3,43**
ηsh [3] [5]		%	133	134	134
Startup type			Direct	Direct	Direct
Maximum operating current		A	77,9	86,0	102,0
Startup current w/o softstarter / w softstarter		A	265/127	312/146	345/183
Sound power (w standard fans)		dB(A)	83,0	83,0	83,0
Sound pressure (w standard fans) [6]		dB(A)	50,8	50,8	50,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	790	900	920
Weight (w 1 pump) w buffer tank		kg	950	1060	1080
Refrigerant (R410A)		kg	22,0	27,0	28,5
Number of refrigerant circuit			1	1	1
Compressors					
Number			2	2	2
Type			Scroll	Scroll	Scroll
Part load step		%	0/45/55/100	0/38/62/100	0/33/67/100
Crankcase heater		W	66/82	66/95	66/95
Evaporator					
Number			1	1	1
Type			Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	15,73	18,25	20,95
Water pressure drop (cooling)		kPa	26	34	45
Water volume		l	10,80	10,80	10,80
Antifreeze heater		W	2 x 30	2 x 30	2 x 30
Coils					
Number			2	2	2
Frontal surface		m²	6,4	6,4	6,4
Number of rows			2	3	3
Fans standard					
Number			2	2	2
Air flow		m³/h	42000	42000	42000
Rotation speed		r.p.m.	790	790	790
Power input (each fan)		W	1650	1650	1650
Water connections					
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSSOV3	Shut off valves kit for model 90 - 125

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. For the data with fixed flow, please contact an authorised Panasonic dealer. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape. * w: with, w/o: without.

HIGH SEER 4,49 | HIGH SCOP 3,43 | ErP ✔ | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17°C HEATING MODE | 50°C COOLING MODE | BMS CONNECTIVITY

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U - 140/150/170/190/210 CW

Cooling capacity: 125,4 to 195,4 kW
Heating capacity: 143,7 to 217,6 kW

Heat pump chiller series with powerful operation by 4 scroll compressors. Maximum water outlet temperature in heating is up to 55 °C [1]. Defrost limiting design ensures to provide stable hot water even at low ambient conditions.



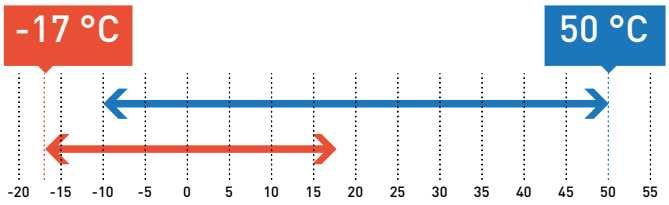
- Smart defrost: Defrost limiting design to ensure a constant water outlet temperature even at very low temperatures
- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Super quiet operation
- Victaulic water connections
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Modbus TCP/IP as standard
- Bluefin anti-corrosion coating
- Optional hydraulic kit
- Optional finned coil treatment
- Optional gauges hydraulic and refrigerant
- Optional BACnet
- Remote LAN connection as standard

1) Special condition apply. Please contact an authorized Panasonic dealer in the case of condition >50 °C.

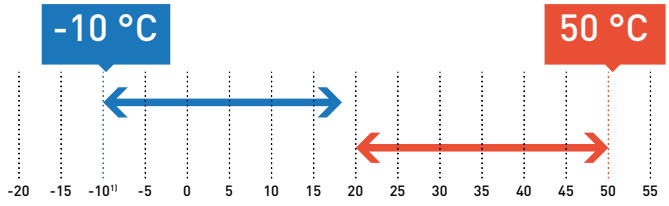
Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (4)
- Refrigerant type: R410A
- Refrigerant circuit: 2
- Fan type (number of fans): axial fan (4)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).
* With glycol 45 % maximum, 5 °C without glycol.

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump low pressure	Fixed speed	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Single pump high pressure	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
Double pump low pressure	Variable capacity	Hydraulic gauges	Rubber pads	Modbus TCP/IP
Double pump high pressure	Constant outlet pressure		Spring damper	BACnet IP
	Constant differential pressure		All seasons fan control	Refrigerant gauge
			Nordic pack	Container transport
			High pressure fan	

1 DEFROST CYCLE EVERY 130 MINUTES.
Heating Capacity: +22 %
Integrated COP: +15 %
Improved SCOP Class

SEE MORE OPTIONS FOR HEAT PUMP OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT

Model			**140**	**150**	**170**	**190**	**210**
Standard without buffer tank			**U-140CWNB**	**U-150CWNB**	**U-170CWNB**	**U-190CWNB**	**U-210CWNB**
With buffer tank			**U-140CWBL**	**U-150CWBL**	**U-170CWBL**	**U-190CWBL**	**U-210CWBL**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	128,3	142,1	163,9	177,5	207,9
Input power cooling [1]		kW	43,2	47,7	54,7	61,3	69,7
Total EER 100 % [1]			2,97	2,98	2,99	2,90	2,98
SEER [2] [3]			**4,39**	**4,36**	**4,31**	**4,23**	**4,28**
ηsc [2] [3]		%	173	171	169	166	168
Heating capacity [4]		kW	144,0	154,0	170,0	195,0	218,0
Input power heating [4]		kW	45,7	50,3	55,5	67,4	78,3
SCOP [3] [5]			**3,30**	**3,33**	**3,30**	**3,28**	**3,23**
ηsh [3] [5]		%	129	130	129	128	126
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	108,0	119,0	136,0	153,0	170,0
Startup current w/o softstarter / w softstarter		A	251 / 130	262 / 141	324 / 161	341 / 178	396 / 201
Sound power (w standard fans)		dB(A)	85,4	85,4	87,0	88,1	88,1
Sound pressure (w standard fans) [6]		dB(A)	53,4	53,4	55,0	56,1	56,1
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210
Dimension (w standard fans) w buffer tank	H x W x D	mm	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210
Weight (w 1 low Pa pump) w/o buffer tank		kg	1570	1580	1680	1750	2020
Weight (w 1 low Pa pump) w buffer tank		kg	1700	1710	1810	1880	2150
Refrigerant (R410A)		kg	2 x 24,7	2 x 24,7	24,7/33,3	2 x 33,3	2 x 33,3
Number of refrigerant circuit			2	2	2	2	2
Compressors							
Number			4	4	4	4	4
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0 / 24 / 26 / 48 / 50 / 52 / 74 / 76 / 100	0 / 23 / 27 / 46 / 50 / 54 / 73 / 77 / 100	0 / 20 / 24 / 44 / 45 / 55 / 69 / 80 / 100	0 / 22 / 28 / 44 / 50 / 56 / 72 / 78 / 100	0 / 19 / 31 / 38 / 50 / 62 / 69 / 81 / 100
Crankcase heater		W	4 x 66	4 x 66	3 x 66 / 82	2 x 82 / 2 x 66	2 x 95 / 2 x 66
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	21,56	23,65	25,95	30,24	33,62
Water pressure drop (cooling)		kPa	33	39	24	32	40
Water volume		l	8,49	8,49	12,21	12,21	12,21
Antifreeze heater		W	60	60	120	120	120
Coils							
Number			4	4	4	4	4
Frontal surface		m²	11,88	11,88	11,88	11,88	11,88
Number of rows			2+2	2+2	2+3	3+3	3+3
Fans standard							
Number			4	4	4	4	4
Air flow		m³/h	56000	56000	71000	86000	83000
Rotation speed		r.p.m.	900	900	900	900	900
Power input (each fan)		W	940	940	940 - 1650	1650	1650
Water connections							
Type			Victaulic	Victaulic	Victaulic	Victaulic	Victaulic
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSVICTH	Victaulic connection kit for model 140 - 210

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. For the data with fixed flow, please contact an authorised Panasonic dealer. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape. * w: with, w/o: without.

HIGH SEER 4,39 | HIGH SCOP 3,33 | ErP | SUPER QUIET | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17°C HEATING MODE | 50°C COOLING MODE | DEFROST LIMITING | BMS CONNECTIVITY

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Options for heat pump outdoor units

Options table 20 - 125

Option	Type	Ref.	Description	Model											
1	Capacity			20	25	30	35	40	45	55	65	75	90	105	125
2	Refrigerant & compressor type	W	R410A, fixed speed, heat pump	•	•	•	•	•	•	•	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
		BS	Buffer tank (small)	•	•	•	•	•							
		BM	Buffer tank (medium)						•	•	•	•	•	•	•
4	Pump option		No pump	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Single pump	•	•	•	•	•	•	•	•	•	•	•	•
			Double pump						•	•	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed [1]				Std	Std	Std	Std	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	Std	Std	Std	•	•	•	•	•	•	•	•	•
			Pump drive - variable twin speed (double pump) [1]						•	•	•	•	•	•	•
			Pump drive - variable speed capacity (single pump)	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - variable speed capacity (double pump)						•	•	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)						•	•	•	•	•	•	•
			Pump drive - constant differential pressure (single pump) [2]	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
6	Hydraulic options		No hydraulic options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Low water pressure sensor	•	•	•	•	•	•	•	•	•	•	•	•
			Water isolation valves	•	•	•	•	•	•	•	•	•	•	•	•
			Electric heater - low power (buffer tank required)						•	•	•	•	•	•	•
			Electric heater - high power (buffer tank required)						•	•	•	•	•	•	•
7	Ambient options		No ambient options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•	•	•	•	•	•	•	•
			Outdoor coil protection grid	•	•	•	•	•	•	•	•	•	•	•	•
			Rubber pads	•	•	•	•	•	•	•	•	•	•	•	•
			Spring damper	•	•	•	•	•	•	•	•	•	•	•	•
			Fan speed control (FSC)	•	•	•	•	•	•	•	•	•	•	•	•
			Nordic pack [3]	•	•	•	•	•							
			Low noise	Std	Std	Std	Std	Std	•	•	•	•	•	•	•
			High pressure fan [4]	SO	•	•	•	•	•	•	•	•	•	•	•
8	Miscellaneous options		No miscellaneous options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Soft starter	•	•	•	•	•	•	•	•	•	•	•	•
			Power supply w/o neutral [5]	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
			Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•	•	•	•	•	•	•	•
			BACnet MSTP	•	•	•	•	•	•	•	•	•	•	•	•
			BACnet IP	•	•	•	•	•	•	•	•	•	•	•	•
			Remote LAN connection	•	•	•	•	•	•	•	•	•	•	•	•
			Container transport						•	•	•	•	•	•	•
			Refrigerant gauge						•	•	•	•	•	•	•
			Desuperheater [6]	SO	SO	SO	SO	SO	•	•	•	•	•	•	•

1) Fixed speed pump drive is supplied as standard when selecting a pump (models 20-25-30 excluded). Please select an alternative pump drive if alternate operation is required.
2) Constant differential pump drive option is only available on a special order and requires additional production time. Please contact your local sales representative.
3) The Nordic pack is not required on models 45 - 125 due to model design.
4) High pressure fan is not available on model 20 due to body design.
5) Power supply without Neutral is only available on a special order basis, and requires additional production time. Please contact your local sales representative.
6) Inclusion of desuperheater will extend standard production time, please contact your local Panasonic sales representative for details.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

Options table 140 - 210

Option	Type	Ref.	Description	Model				
1	Capacity			140	150	170	190	210
2	Refrigerant & compressor type	W	R410A, fixed speed, heat pump	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		BL	Buffer tank (large)	•	•	•	•	•
4	Pump option		No pump	Std	Std	Std	Std	Std
			Single pump low pressure	•	•	•	•	•
			Single pump high pressure	•	•	•	•	•
			Double pump low pressure	•	•	•	•	•
			Double pump high pressure	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed [1]	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	•	•	•	•	•
			Pump drive - variable twin speed (double pump)	•	•	•	•	•
			Pump drive - variable speed capacity (single pump)	•	•	•	•	•
			Pump drive - variable speed capacity (double pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)	•	•	•	•	•
			Pump drive - constant differential pressure (single pump) [2]	SO	SO	SO	SO	SO
			Pump drive - constant differential pressure (double pump) [2]	SO	SO	SO	SO	SO
6	Hydraulic options		No hydraulic options	Std	Std	Std	Std	Std
			Low water pressure sensor	•	•	•	•	•
			Water isolation valves	•	•	•	•	•
			Hydraulic gauges	•	•	•	•	•
7	Ambient options		No ambient options	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
			Outdoor coil protection grid [3]	•	•	•	•	•
			Rubber pads	•	•	•	•	•
			Spring damper	•	•	•	•	•
			Fan speed control (FSC)	•	•	•	•	•
			Nordic pack	•	•	•	•	•
			Low noise	Std	Std	Std	Std	Std
8	Miscellaneous options		No miscellaneous options	Std	Std	Std	Std	Std
			Soft starter	•	•	•	•	•
			Power supply w/o neutral	•	•	•	•	•
			Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Remote LAN connection	Std	Std	Std	Std	Std
			Container Transport	•	•	•	•	•
			Refrigerant gauge	•	•	•	•	•

1) Fixed speed pump drive is standard when selecting a pump. Please select an alternative pump drive if required.
2) Constant differential pump drive options are only available on a special order and requires additional production time. Please contact your local sales representative.
3) Not available when using Nordic pack.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.



U - 020/025/030/035/040 CV

Cooling capacity: 19,3 to 40,9 kW

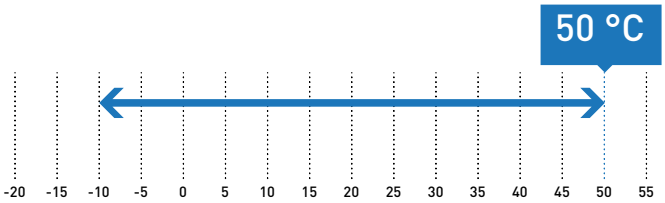
Compact and highly efficient chiller series, with SEER up to 4,59.



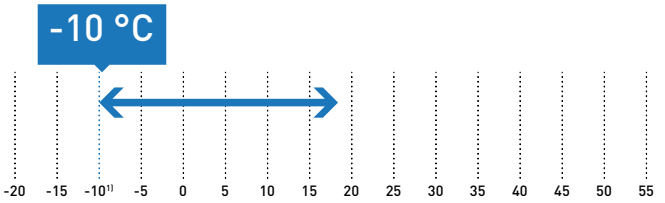
- High seasonal efficiency
- Ambient temperature operation range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Super quiet operation
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

* Available on special order only, please contact your local Panasonic sales representative.

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)).
* With glycol 45 % maximum, 5 °C without glycol.

Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): axial fan (1)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Optional hydraulic kit
- Optional Desuperheater for free hot water up to 50 °C*
- Optional finned coil treatment

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump (as standard)	Fixed speed[1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
	Variable twin speed	Water isolation valves	Rubber pads	Power supply w/o neutral
	Variable capacity		Spring damper	Modbus TCP/IP
	Constant outlet pressure		All seasons	BACnet MSTP
	Constant differential pressure		High pressure fan[2]	BACnet IP
				Remote LAN connection
				Desuperheater [3]

1) Available for non-EU installation. 2) Available on models 25 - 40. 3) Available on special order only, please contact your local Panasonic sales representative.

SEE MORE OPTIONS FOR COOLING ONLY OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT



Optional Shut off valves kit for model 45 - 75.
PAW-SYSSOV2

Model			**20**	**25**	**30**	**35**	**40**
Standard without buffer tank			**U-020CVNB**	**U-025CVNB**	**U-030CVNB**	**U-035CVNB**	**U-040CVNB**
With buffer tank			**U-020CVBS**	**U-025CVBS**	**U-030CVBS**	**U-035CVBS**	**U-040CVBS**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	19,2	24,3	27,1	36,7	39,0
Input power cooling [1]		kW	5,9	7,7	9,3	12,2	13,0
Total EER 100 % [1]			3,25	3,17	2,90	3,01	3,00
SEER [2]			**4,78**	**4,38**	**4,43**	**4,43**	**4,48**
ηsc [2]		%	188	172	174	174	176
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	17,7	22,2	24,3	31,8	33,8
Startup current w/o softstarter / w softstarter		A	53/28	64/35	77/49	118/53	119/54
Sound power (w standard fans)		dB(A)	75,0	75,0	75,0	76,0	76,0
Sound pressure (w standard fans) [3]		dB(A)	42,8	42,8	42,8	43,8	43,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000
Dimension (w standard fans) w buffer tank	H x W x D	mm	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507
Weight (w 1 pump) w/o buffer tank		kg	265	275	305	315	320
Weight (w 1 pump) w buffer tank		kg	330	340	370	380	385
Refrigerant (R410A)		kg	6,5	8,4	8,4	9,1	9,2
Number of refrigerant circuit			1	1	1	1	1
Compressors							
Number			2	2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/50/100	0/50/100	0/50/100	0/50/100
Crankcase heater		W	2 x 40	2 x 40	2 x 49	2 x 49	2 x 49
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	3,35	4,36	4,64	6,16	6,44
Water pressure drop (cooling)		kPa	23	37	22	37	40
Water volume		l	1,78	1,78	2,55	2,55	2,55
Antifreeze heater		W	30	30	30	30	30
Coils							
Number			1	1	1	1	1
Frontal surface		m²	2,4	2,4	2,4	2,8	2,8
Number of rows			2	2	2	2	2
Fans standard							
Number			1	1	1	1	1
Air flow		m³/h	9000	13000	13000	16000	16000
Rotation speed		r.p.m.	900	900	900	650	650
Power input (each fan)		W	620	940	940	930	930
Water connections							
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Outlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSSOV1	Shut off valves kit for model 20 - 40

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

HIGH SEER 4,78 | ErP | SUPER QUIET | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | 50°C COOLING MODE | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.





U - 045/055/065/075 CV

Cooling capacity: 49,8 to 75,8 kW

High seasonal efficiency and wide range options to meet the exact requirements of your project.

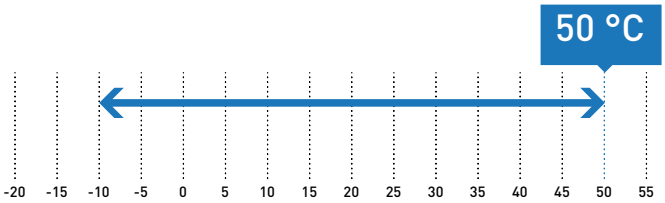


- High seasonal efficiency
- Ambient temperature operation range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Optional extra-low noise kit available
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

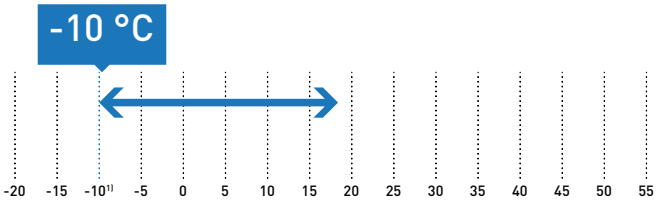
Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): axial fan (1 for 45/55, 2 for 65/75)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Optional hydraulic kit
- Optional Desuperheater for free hot water up to 50 °C

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)).
* With glycol 45 % maximum, 5 °C without glycol.

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Variable capacity		Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure		All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge
				Desuperheater

1) Available for non-EU installation.

SEE MORE OPTIONS FOR COOLING ONLY OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT



Optional Shut off valves kit for model 45 - 75.
PAW-SYSSOV2

Model			**45**	**55**	**65**	**75**
Standard without buffer tank			**U-045CVNB**	**U-055CVNB**	**U-065CVNB**	**U-075CVNB**
With buffer tank			**U-045CVBM**	**U-055CVBM**	**U-065CVBM**	**U-075CVBM**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	45,3	52,0	66,1	73,1
Input power cooling [1]		kW	15,4	17,6	21,7	24,0
Total EER 100 % [1]			2,95	2,96	3,05	3,05
SEER [2]			**4,40**	**4,53**	**4,53**	**4,68**
ηsc [2]		%	173	178	178	184
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	40,2	44,2	58,4	64,4
Startup current w/o softstarter / w softstarter		A	133,2/65,8	140,2/72,8	201,4/101,0	206,4/106,0
Sound power (w standard fans)		dB(A)	80,0	80,0	80,0	80,0
Sound pressure (w standard fans) [3]		dB(A)	47,8	47,8	47,8	47,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	515	520	580	590
Weight (w 1 pump) w buffer tank		kg	675	680	740	750
Refrigerant (R410A)		kg	14,5	14,9	18,9	19,0
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/43/57/100	0/40/60/100	0/45/55/100
Crankcase heater		W	2 x 66	2 x 66	2 x 66	2 x 66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	8,06	9,18	11,30	12,31
Water pressure drop (cooling)		kPa	30	35	28	37
Water volume		l	4,10	4,10	6,10	6,10
Antifreeze heater		W	30	30	2 x 30	2 x 30
Coils						
Number			1	1	2	2
Frontal surface		m²	4,20	4,20	5,55	5,55
Number of rows			2	2	2	2
Fans standard						
Number			1	1	2	2
Air flow		m³/h	22500	22500	30000	30000
Rotation speed		r.p.m.	790	790	650	650
Power input (each fan)		W	1650	1650	930	930
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2	2	2	2
Outlet - diameter		Inch	2	2	2	2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSSOV2	Shut off valves kit for model 45 - 75

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

HIGH SEER 4,68 | ErP | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | 50°C COOLING MODE | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.



U - 090/105/125 CV

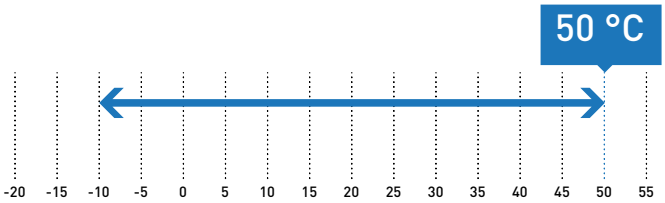
Cooling capacity: 97,0 to 129,8 kW

Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

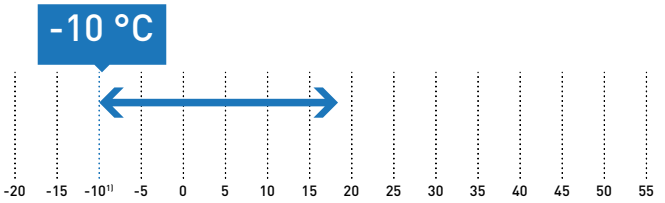


- High seasonal efficiency
- Ambient temperature operation range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Optional extra-low noise kit available
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)).
* With glycol 45 % maximum, 5 °C without glycol.

Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): axial fan (2)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Optional hydraulic kit
- Optional Desuperheater for free hot water up to 50 °C

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Variable capacity		Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure		All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge
				Desuperheater

1) Available for non-EU installation.

SEE MORE OPTIONS FOR COOLING ONLY OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT



Optional Shut off valves kit for model 90 - 125.
PAW-SYSSOV3

Model			**90**	**105**	**125**
Standard without buffer tank			**U-090CVNB**	**U-105CVNB**	**U-125CVNB**
With buffer tank			**U-090CVBM**	**U-105CVBM**	**U-125CVBM**
Power supply	Voltage	V	400	400	400
	Phase		Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50
Cooling capacity [1]		kW	90,7	104,0	123,0
Input power cooling [1]		kW	30,6	34,9	40,6
Total EER 100 % [1]			2,96	2,98	3,03
SEER [2]			**4,45**	**4,50**	**4,55**
ηsc [2]		%	175	177	179
Startup type			Direct	Direct	Direct
Maximum operating current		A	77,9	86,0	102,0
Startup current w/o softstarter / w softstarter		A	264,9 / 127,3	312,0 / 145,8	350,0 / 182,6
Sound power (w standard fans)		dB(A)	83,0	83,0	83,0
Sound pressure (w standard fans) [3]		dB(A)	50,8	50,8	50,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	750	855	875
Weight (w 1 pump) w buffer tank		kg	910	1015	1035
Refrigerant (R410A)		kg	22,0	27,0	28,5
Number of refrigerant circuit			1	1	1
Compressors					
Number			2	2	2
Type			Scroll	Scroll	Scroll
Part load step		%	0 / 45 / 55 / 100	0 / 38 / 62 / 100	0 / 33 / 67 / 100
Crankcase heater		W	66 / 82	66 / 95	66 / 95
Evaporator					
Number			1	1	1
Type			Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	15,73	18,25	20,95
Water pressure drop (cooling)		kPa	26	34	45
Water volume		l	10,80	10,80	10,80
Antifreeze heater		W	2 x 30	2 x 30	2 x 30
Coils					
Number			2	2	2
Frontal surface		m²	6,4	6,4	6,4
Number of rows			2	3	3
Fans standard					
Number			2	2	2
Air flow		m³/h	42000	42000	42000
Rotation speed		r.p.m.	790	790	790
Power input (each fan)		W	1650	1650	1650
Water connections					
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSSOV3	Shut off valves kit for model 90 - 125

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

HIGH SEER 4,55 | ErP | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | 50°C COOLING MODE | BMS CONNECTIVITY

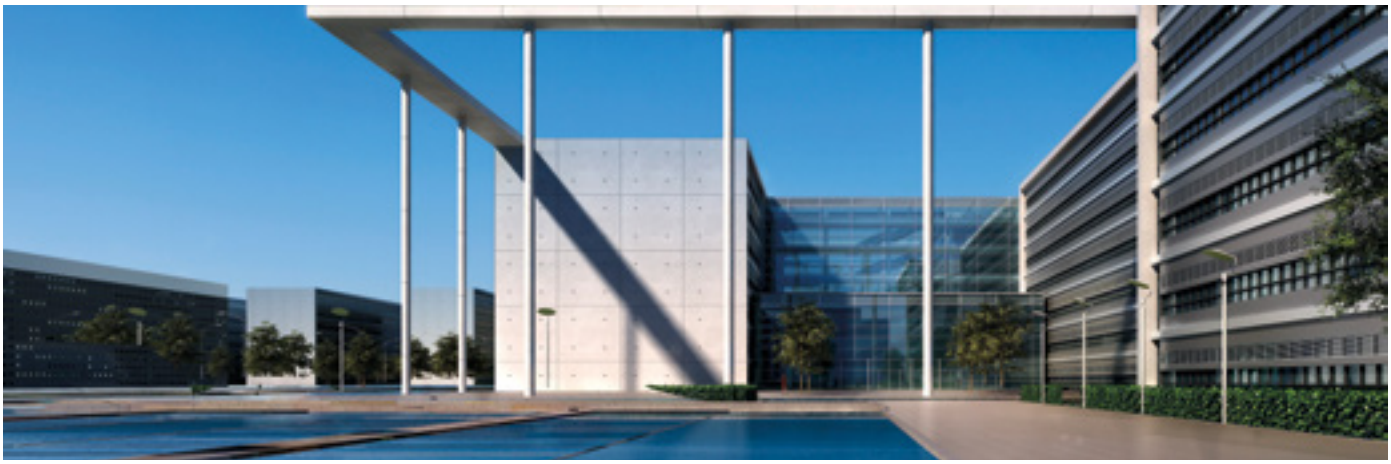
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U - 140/150/170/190/210 CV

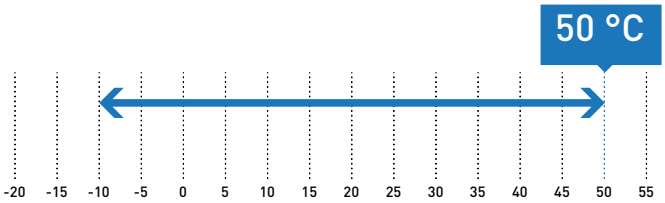
Cooling capacity: 134,0 to 208,8 kW

Powerful and efficient operation with 4 scroll compressors and superior flexibility with plug and play hydraulic options.

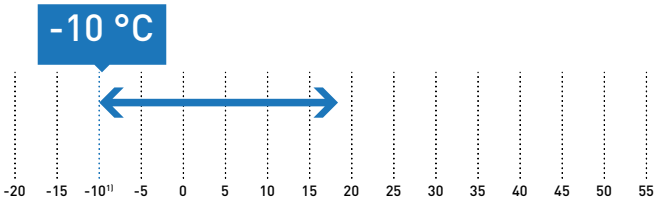


- High seasonal efficiency
- Ambient temperature operation range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Super quiet operation
- Victaulic water connections
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Modbus TCP/IP as standard
- Optional gauges hydraulic and refrigerant
- Optional BACnet
- Remote LAN connection as standard

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)).
* With glycol 45 % maximum, 5 °C without glycol.

Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (4)
- Refrigerant type: R410A
- Refrigerant circuit: 2
- Fan type (number of fans): axial fan (4)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Optional hydraulic kit
- Optional finned coil treatment

Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump Low Pressure	Fixed speed 1)	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Single pump High Pressure	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
Double pump Low Pressure	Variable capacity	Hydraulic gauges	Rubber pads	Modbus TCP/IP
Double pump High Pressure	Constant outlet pressure		Spring damper	BACnet IP
	Constant differential pressure		All seasons fan control	Refrigerant gauge
			High pressure fan	Container transport

1) Available for non-EU installation.

SEE MORE OPTIONS FOR COOLING ONLY OUTDOOR UNITS



Optional remote control.
PAW-SYSREMKIT

Model			**140**	**150**	**170**	**190**	**210**
Standard without buffer tank			**U-140CVNB**	**U-150CVNB**	**U-170CVNB**	**U-190CVNB**	**U-210CVNB**
With buffer tank			**U-140CVBL**	**U-150CVBL**	**U-170CVBL**	**U-190CVBL**	**U-210CVBL**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	132,0	146,0	164,0	181,0	208,0
Input power cooling [1]		kW	43,1	47,6	54,8	61,1	69,8
Total EER 100 % [1]			3,06	3,07	2,99	2,96	2,98
SEER [2]			**4,40**	**4,45**	**4,38**	**4,40**	**4,25**
ηsc [2]		%	173	175	172	173	167
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	108,0	119,0	136,0	153,0	170,0
Startup current w/o softstarter / w softstarter		A	251/130	262/141	324/161	341/178	396/201
Sound power (w standard fans)		dB(A)	85,4	85,4	87,0	88,1	88,1
Sound pressure (w standard fans) [3]		dB(A)	53,4	53,4	55,0	56,1	56,1
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210
Dimension (w standard fans) w buffer tank	H x W x D	mm	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210
Weight (w 1 low Pa pump) w/o buffer tank		kg	1510	1520	1610	1680	1940
Weight (w 1 low Pa pump) w buffer tank		kg	1640	1650	1740	1810	2070
Refrigerant (R410A)		kg	2 x 24,7	2 x 24,7	24,7/33,3	2 x 33,3	2 x 33,3
Number of refrigerant circuit			2	2	2	2	2
Compressors							
Number			4	4	4	4	4
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0 / 24 / 26 / 48 / 50 / 52 / 74 / 76 / 100	0 / 23 / 27 / 46 / 50 / 54 / 73 / 77 / 100	0 / 20 / 24 / 44 / 45 / 55 / 69 / 80 / 100	0 / 22 / 28 / 44 / 50 / 56 / 72 / 78 / 100	0 / 19 / 31 / 38 / 50 / 62 / 69 / 81 / 100
Crankcase heater		W	4 x 66	4 x 66	3 x 66/82	2 x 82/2 x 66	2 x 95/2 x 66
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m³/h	21,56	23,65	25,95	30,24	33,62
Water pressure drop (cooling)		kPa	33	39	24	32	40
Water volume		l	8,49	8,49	12,21	12,21	12,21
Antifreeze heater		W	60	60	120	120	120
Coils							
Number			4	4	4	4	4
Frontal surface		m²	11,88	11,88	11,88	11,88	11,88
Number of rows			2+2	2+2	2+3	3+3	3+3
Fans standard							
Number			4	4	4	4	4
Air flow		m³/h	56000	56000	71000	86000	83000
Rotation speed		r.p.m.	900	900	900	900	900
Power input (each fan)		W	940	940	940 - 1650	1650	1650
Water connections							
Type			Victaulic	Victaulic	Victaulic	Victaulic	Victaulic
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2

Accessories	
PAW-SYSREMKIT	Remote control

Accessories	
PAW-SYSVICTH	Victaulic connection kit for model 140 - 210

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

HIGH SEER 4,45 | ErP | SUPER QUIET | AUTOMATIC FAN | ULTIMATE CUSTOMISATION | 50°C COOLING MODE | DEFROST LIMITING | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Options for cooling only outdoor units

Options table 20 - 125

Option	Type	Ref.		Model											
1	Capacity			20	25	30	35	40	45	55	65	75	90	105	125
2	Refrigerant & compressor type	V	R410A, fixed speed, cooling only	•	•	•	•	•	•	•	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
		BS	Buffer tank (small)	•	•	•	•	•							
		BM	Buffer tank (medium)						•	•	•	•	•	•	•
4	Pump option		No pump [1]	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Single pump	•	•	•	•	•	•	•	•	•	•	•	•
			Double pump						•	•	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed [2]	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - variable twin speed (single pump) [3]	Std	Std	Std	Std	Std	•	•	•	•	•	•	•
			Pump drive - variable twin speed (double pump)						•	•	•	•	•	•	•
			Pump drive - variable speed capacity (single pump)	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - variable speed capacity (double pump)						•	•	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)						•	•	•	•	•	•	•
			Pump drive - constant differential pressure (single pump) [4]	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
6	Hydraulic options		No hydraulic options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Low water pressure sensor	•	•	•	•	•	•	•	•	•	•	•	•
			Water isolation valves	•	•	•	•	•	•	•	•	•	•	•	•
7	Ambient options		No ambient options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•	•	•	•	•	•	•	•
			Outdoor coil protection grid	•	•	•	•	•	•	•	•	•	•	•	•
			Rubber pads	•	•	•	•	•	•	•	•	•	•	•	•
			Spring damper	•	•	•	•	•	•	•	•	•	•	•	•
			Fan speed control (FSC)	•	•	•	•	•	•	•	•	•	•	•	•
			Low noise	Std	Std	Std	Std	Std	•	•	•	•	•	•	•
			High pressure fan [5]	SO	•	•	•	•	•	•	•	•	•	•	•
8	Miscellaneous options		No miscellaneous options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Soft starter	•	•	•	•	•	•	•	•	•	•	•	•
			Power supply w/o neutral [6]	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
			Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•	•	•	•	•	•	•	•
			BACnet MSTP	•	•	•	•	•	•	•	•	•	•	•	•
			BACnet IP	•	•	•	•	•	•	•	•	•	•	•	•
			Remote LAN connection	•	•	•	•	•	•	•	•	•	•	•	•
			Container transport						•	•	•	•	•	•	•
			Refrigerant gauge						•	•	•	•	•	•	•
			Desuperheater [7]	SO	SO	SO	SO	SO	•	•	•	•	•	•	•

1) The system may be supplied without a pump, but in order to meet EU ErP compliance, the installation must include a variable speed pump.
2) Fixed speed pump drive on cooling only chiller, is only suitable installation outside if the EU due to ErP compliance.
3) Variable twin speed drive is supplied as standard with models 20 - 40, when selecting single pump option. Please select alternate pump drive if required.
4) Constant differential pump drive option is only available on a special order and requires additional production time. Please contact your local sales representative.
5) High pressure fan is not available on model 20 due to body design.
6) Power supply without Neutral is only available on a special order and requires additional production time. Please contact your local sales representative.
7) Inclusion of desuperheater will extend standard production time, please contact your local Panasonic sales representative for details.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

Options table 140 - 210

Option	Type	Ref.	Description	Model				
1	Capacity			140	150	170	190	210
2	Refrigerant & compressor type	V	R410A, fixed speed, cooling only	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		BL	Buffer tank (large)	•	•	•	•	•
4	Pump option		No pump [1]	Std	Std	Std	Std	Std
			Single pump low pressure	•	•	•	•	•
			Single pump high pressure	•	•	•	•	•
			Double pump low pressure	•	•	•	•	•
			Double pump high pressure	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed [2]	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	•	•	•	•	•
			Pump drive - variable twin speed (double pump)	•	•	•	•	•
			Pump drive - variable speed capacity (single pump)	•	•	•	•	•
			Pump drive - variable speed capacity (double pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)	•	•	•	•	•
			Pump drive - constant differential pressure (single pump) [3]	SO	SO	SO	SO	SO
			Pump drive - constant differential pressure (double pump) [3]	SO	SO	SO	SO	SO
6	Hydraulic options		No hydraulic options	Std	Std	Std	Std	Std
			Low water pressure sensor	•	•	•	•	•
			Water isolation valves	•	•	•	•	•
			Hydraulic gauges	•	•	•	•	•
7	Ambient options		No ambient options	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
			Outdoor coil protection grid	•	•	•	•	•
			Rubber pads	•	•	•	•	•
			Spring damper	•	•	•	•	•
			Fan speed control (FSC)	•	•	•	•	•
			Low noise	Std	Std	Std	Std	Std
8	Miscellaneous options		No miscellaneous options	Std	Std	Std	Std	Std
			Soft starter	•	•	•	•	•
			Power supply w/o neutral	•	•	•	•	•
			Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Remote LAN connection	Std	Std	Std	Std	Std
			Container Transport	•	•	•	•	•
			Refrigerant gauge	•	•	•	•	•

1) The system may be supplied without a pump, but in order to meet EU ErP compliance, the installation must include a variable speed pump.
2) Fixed speed pump drive on cooling only chiller, is only suitable for installation outside of the EU due to ErP compliance.
3) Constant differential pump drive option is only available on a special order and requires additional production time. Please contact your local sales representative.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

Explore the new range of fan coils. Designed to fit with your environment and enhance comfort



Panasonic introduces the new range of fan coils.
The key to this range is to provide performance and comfort
and the ability to fit seamlessly within your environment.



Fan coils highlighted features

Presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location.





1 Innovation for an optimum comfort

Range of fan coil for heating and cooling with capacities from 0,5 to 21,9 kW in cooling and from 0,6 to 21,5 kW in heating. Bring full year comfort with water based systems.

2 Energy efficient and low noise fan

Dynamically balanced and specially designed fans, reinforced acoustic insulation and optimized fan speed staging for lower noise levels.
Improved efficiency with optional EC fan motor.

3 Quality and efficient coil

Constructed from staggered copper tubes, mechanically expanded into aluminium fins, providing maximum heat transfer efficiency, durability and hygiene.

4 Flexible installation

Various types of unit to fit your needs with flexible installation options. A choice of service side for hydraulic connections, piping configuration and horizontal or vertical installation for ducted units.

Offering a great range of capacities and performance, presented in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location. Whether the requirements are for cooling only, or for both heating and cooling, there is a fan coil to suit. With a variety of piping and fan configuration, the range is capable of meeting the most stringent of requirement. Line up available in AC and EC fans, it is possible to achieve both powerful performance, but with sustainability in mind.

Controllers with sophisticated designs, provide a user friendly interface while enabling an easy and low cost integration to building management systems.



PAW-FC-RC1
Optional wired remote controller for AC fan, 2-pipe and 4-pipe application.

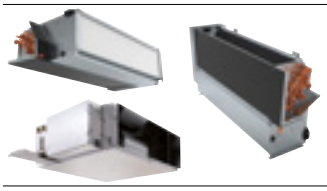


PAW-FC-TC903
Optional wired remote controller for AC fan 2-pipe application.

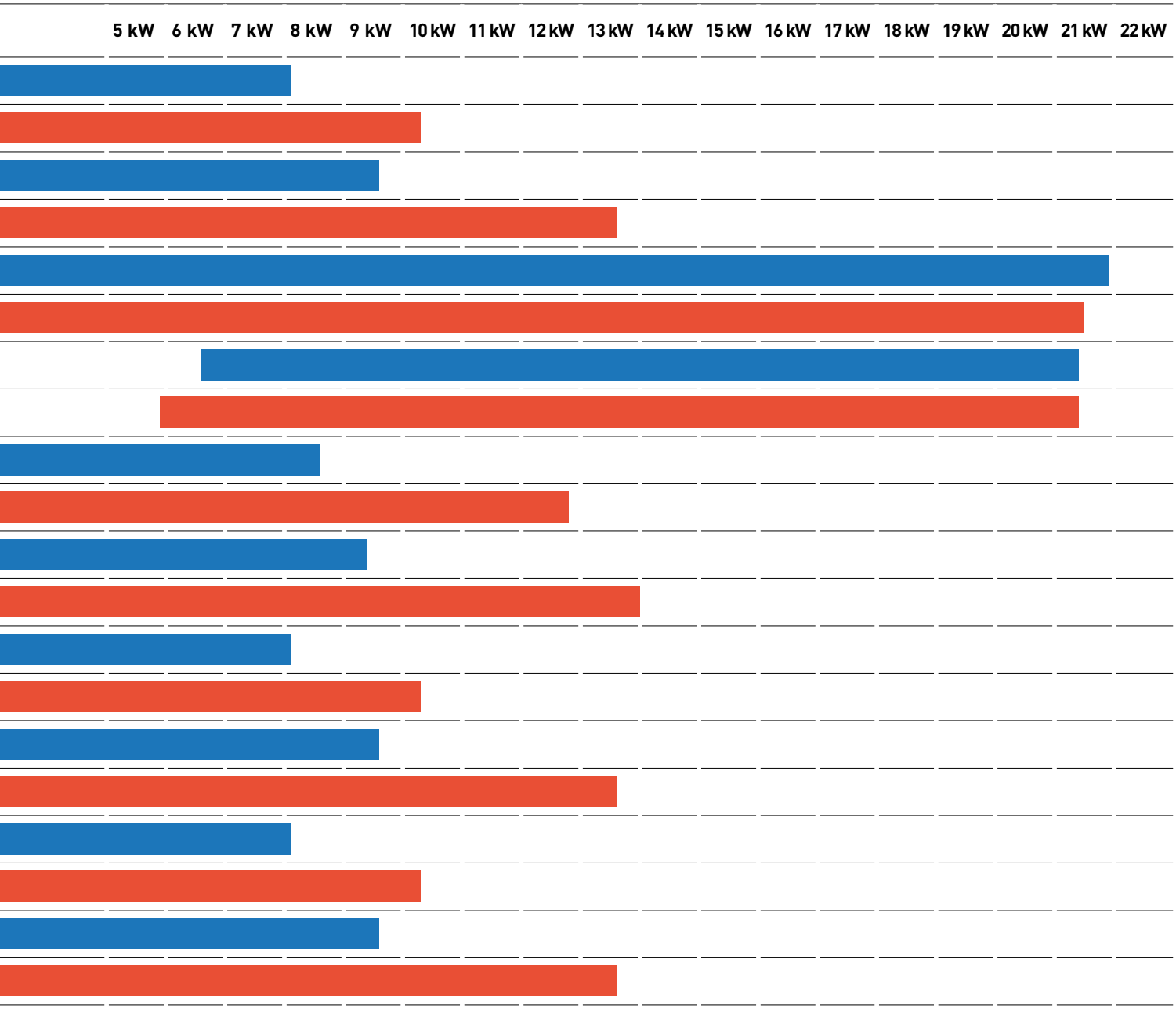


PAW-FC-907TC
Optional wired remote controller for EC fan, 2-pipe and 4-pipe application.

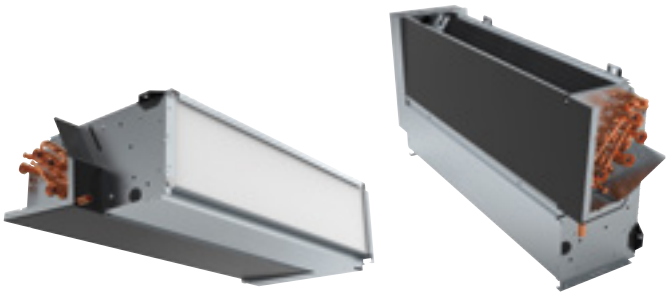
Range of fan coils

Page		Fan Type	Operation	Capacity range	0 kW 1 kW 2 kW 3 kW 4 kW
P. 446	Ducted 	AC	Cooling	0,7 to 8,1 kW	
			Heating	0,7 to 10,3 kW	
		EC	Cooling	0,5 to 9,6 kW	
			Heating	0,6 to 13,6 kW	
P. 448	High static ducted 	AC	Cooling	4,1 to 21,9 kW	
			Heating	4,7 to 21,5 kW	
		EC	Cooling	6,6 to 21,4 kW	
			Heating	5,9 to 21,4 kW	
P. 450	Cassette 	AC	Cooling	1.4 to 8,6 kW	
			Heating	1,1 to 12,8 kW	
		EC	Cooling	1,4 to 9,4 kW	
			Heating	1,1 to 14,0 kW	
P. 452	Ceiling chassis 	AC	Cooling	0,7 to 8,1 kW	
			Heating	0,7 to 10,3 kW	
		EC	Cooling	0,5 to 9,6 kW	
			Heating	0,6 to 13,6 kW	
P. 454	Floor-standing 	AC	Cooling	0,7 to 8,1 kW	
			Heating	0,7 to 10,3 kW	
		EC	Cooling	0,5 to 9,6 kW	
			Heating	0,6 to 13,6 kW	
P. 456	Wall-mounted 	AC	Cooling	1,0 to 3,9 kW	
			Heating	1,4 to 4,1 kW	
P. 457	Smart fan coils 	AC	Cooling	0,2 to 1,7 kW	
			Heating	0,2 to 1,7 kW	

Values indicated are for the full operating range. The data shown within the tables following are indicative of specific installation conditions.
For full details relating to performance and operating conditions, please refer to the technical data manual.


5 kW
6 kW
7 kW
8 kW
9 kW
10 kW
11 kW
12 kW
13 kW
14 kW
15 kW
16 kW
17 kW
18 kW
19 kW
20 kW
21 kW
22 kW

Fan coils - ducted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

2-pipe	Left connection (PAW-)		FC2A-D010L	FC2A-D020L	FC2A-D030L	FC2A-D040L	FC2A-D050L	FC2A-D060L	FC2A-D070L	FC2A-D080L
	Right connection (PAW-)		FC2A-D010R	FC2A-D020R	FC2A-D030R	FC2A-D040R	FC2A-D050R	FC2A-D060R	FC2A-D070R	FC2A-D080R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
4-pipe	**Left connection (PAW-)**		**FC4A-D010L**	**FC4A-D020L**	**FC4A-D030L**	**FC4A-D040L**	**FC4A-D050L**	**FC4A-D060L**	**FC4A-D070L**	**FC4A-D080L**
	Right connection (PAW-)		**FC4A-D010R**	**FC4A-D020R**	**FC4A-D030R**	**FC4A-D040R**	**FC4A-D050R**	**FC4A-D060R**	**FC4A-D070R**	**FC4A-D080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/0,9/1,3	0,6/1,1/1,6	1,0/1,9/2,4	1,1/2,3/3,0	1,7/3,0/4,3	2,6/4,4/5,6	3,3/5,9/6,9	4,5/5,9/8,0
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,5/0,8/1,2	0,8/1,5/1,8	0,8/1,7/2,2	1,2/2,2/3,1	1,8/3,2/4,3	2,3/4,2/4,9	3,3/4,4/6,2
Water flow	Lo/Med/Hi	l/h	114/159/225	109/192/268	165/327/414	194/388/517	284/522/748	449/756/967	575/1019/1193	775/1020/1380
Water pressure drop	Lo/Med/Hi	kPa	8,3/15,2/29,0	1,5/3,4/5,6	3,0/9,5/14,4	6,4/22,3/36,8	4,2/12,8/25,1	10,2/27,7/44,5	5,9/17,9/24,4	19,3/31,1/53,6
Heating capacity [2]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,6/0,9/1,1	1,0/1,4/1,6	0,9/1,6/2,1	1,5/2,3/3,0	1,9/2,9/3,7	2,7/3,6/4,3	3,9/5,6/7,1
Water flow	Lo/Med/Hi	l/h	79/127/178	100/146/190	164/232/274	160/273/354	251/401/508	325/505/633	456/626/736	673/963/1226
Water pressure drop	Lo/Med/Hi	kPa	1,9/3,5/5,6	1,5/3,2/5,3	5,1/9,0/11,9	9,2/26,5/42,7	10,7/24,6/29,5	20,3/43,9/52,9	67,2/117,9/137,8	33,1/63,7/75
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Air flow 4-pipe	Lo/Med/Hi	m³/h	95/168/253	89/161/241	132/263/369	162/335/467	242/466/671	334/614/885	470/859/1012	634/905/1370
Maximum external pressure		Pa	55	55	65	85	85	115	125	70
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Power consumption 4-pipe	Lo/Med/Hi	W	13/24/36	10/18/28	16/37/44	15/37/55	28/54/70	37/74/104	53/99/145	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight										
Dimension	H x W x D	mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530
Weight	2 / 4-pipes	kg	13/14	13/14	15/16	20/22	22/24	26/28	27/29	38/40

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual.

Technical focus

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

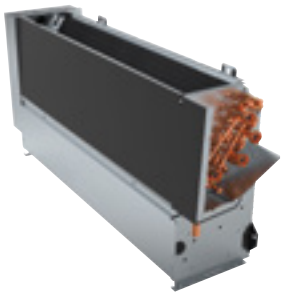
Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

ErP

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ducted (EC)



Optional controller. Wired remote controller for EC fans.
PAW-FC-907TC

2-pipe	Left connection (PAW-)		FC2E-D010L	FC2E-D020L	FC2E-D030L	FC2E-D040L	FC2E-D050L	FC2E-D060L	FC2E-D070L	FC2E-D080L	FC2E-F040L
	Right connection (PAW-)		FC2E-D010R	FC2E-D020R	FC2E-D030R	FC2E-D040R	FC2E-D050R	FC2E-D060R	FC2E-D070R	FC2E-D080R	FC2E-F040R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8	3,6/6,6/9,2
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6	2,9/6,1/9,1
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254	627/1142/1575
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6	10,6/51,2/93,8
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3	4,4/8,3/11,8
4-pipe	**Left connection (PAW-)**		**FC4E-D010L**	**FC4E-D020L**	**FC4E-D030L**	**FC4E-D040L**	**FC4E-D050L**	**FC4E-D060L**	**FC4E-D070L**	**FC4E-D080L**	**FC4E-F040L**
	Right connection (PAW-)		**FC4E-D010R**	**FC4E-D020R**	**FC4E-D030R**	**FC4E-D040R**	**FC4E-D050R**	**FC4E-D060R**	**FC4E-D070R**	**FC4E-D080R**	**FC4E-F040R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,6/1,2/2,2	0,8/1,9/2,9	1,2/2,7/4,0	1,2/3,6/4,6	1,8/4,1/4,9	2,6/5,1/6,4	5,0/6,2/9,6	3,3/6,4/8,8
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,4/0,9/1,7	0,4/1,0/1,8	0,6/1,5/2,2	0,9/1,9/2,8	1,0/2,8/3,5	1,2/3,2/3,8	1,9/3,8/4,8	3,6/4,6/7,2	2,7/5,6/8,0
Water flow	Lo/Med/Hi	l/h	92/185/327	97/206/375	129/321/493	205/457/681	212/625/686	306/707/749	443/886/977	855/1070/1242	567/1093/1511
Water pressure drop	Lo/Med/Hi	kPa	5,8/20,1/59,2	1,3/3,7/9,7	4,0/9,2/19,7	6,3/29,6/60,1	2,5/17,9/21,3	5,1/24,3/27,2	3,5/13,6/16,5	22,9/33,9/44,3	10,0/47,2/86,7
Heating capacity [2]	Lo/Med/Hi	kW	0,4/0,8/1,4	0,6/0,9/1,5	1,0/1,4/1,8	1,2/2,0/2,8	1,6/2,4/2,5	1,4/2,9/3,1	2,5/3,4/3,6	4,5/5,9/6,9	2,5/4,5/6,2
Water flow	Lo/Med/Hi	l/h	76/140/235	95/161/255	166/243/304	204/350/483	267/416/438	233/503/531	434/583/614	767/1011/1194	432/783/1065
Water pressure drop	Lo/Med/Hi	kPa	1,8/4,0/8,4	1,4/3,8/9,4	5,3/9,7/14,1	15,6/41,8/76,3	11,9/26,3/28,9	11,5/43,6/48,1	61,5/103,8/113,9	42,1/69,7/95,1	30,6/107,6/214,8
Sound levels											
Global sound power	Lo/Med/Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64	42/58/68 [3]
Global sound pressure [4]	Lo/Med/Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55	23/39/52
Fan											
Number			1	1	1	2	2	2	2	3	1
Air flow 2-pipe	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398	592/1284/1935
Air flow 4-pipe	Lo/Med/Hi	m³/h	91/199/379	84/200/380	123/342/540	148/369/627	185/587/646	205/668/716	329/798/894	660/884/1079	523/1222/1864
Maximum external pressure		Pa	75	75	75	105	70	105	115	115	190
Filter			G2	G2	G2	G2	G2	G2	G2	G2	G2
Electrical data											
Power supply	Voltage	V	230	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108	11/62/197
Power consumption 4-pipe	Lo/Med/Hi	W	5/11/39	5/13/40	6/15/40	2/12/42	2/23/44	2/28/52	11/43/75	22/41/116	11/60/188
Water connections											
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight											
Dimension	H x W x D	mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530	223 x 1233 x 653
Weight	2 / 4-pipes	kg	13/14	13/14	15/16	20/22	22/24	26/28	27/29	38/40	19/19

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound power levels indicated are from return and radiated measurements. 4) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Can be installed both horizontally and vertically*
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

* PAW-FC2E-F040 and PAW-FC4E-F040 may only be installed horizontally.

ErP
EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - High static pressure ducted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

2-pipe	**Left connection**		**PAW-FC2A-E070L**	**PAW-FC2A-E150L**	**PAW-FC2A-E180L**	**PAW-FC2A-E210L**	**PAW-FC2A-E240L***	**PAW-FC2A-E270L***
	Right connection		**PAW-FC2A-E070R**	**PAW-FC2A-E150R**	**PAW-FC2A-E180R**	**PAW-FC2A-E210R**	**PAW-FC2A-E240R***	**PAW-FC2A-E270R***
Total cooling capacity [1]	Lo/Med/Hi	kW	4,4/5,5/6,4	5,6/11,5/14,2	4,9/11,5/15,0	5,2/13,7/18,6	14,3/19,8/23,3	15,8/23,0/27,5
Sensible cooling capacity [1]	Lo/Med/Hi	kW	3,1/4,2/5,1	3,9/9,2/12,2	3,7/9,5/13,1	3,5/9,9/13,7	10,3/14,9/17,8	11,0/16,3/19,7
Water flow	Lo/Med/Hi	l/h	749/951/1095	966/1979/2437	837/1979/2589	899/2357/3201	2468/3410/4015	2718/3951/4740
Water pressure drop	Lo/Med/Hi	kPa	26,5/42,5/56,2	5,5/19,9/29,3	4,4/19,6/32,0	4,9/28,8/51,5	13,8/25,2/34,2	12,8/25,2/35,3
Heating capacity [2]	Lo/Med/Hi	kW	5,4/8,6/12,7	6,2/14,2/20,0	6,3/16,3/23,2	6,1/16,5/23,4	17,2/26,3/32,6	17,9/27,5/33,7
4-pipe	**Left connection**		**PAW-FC4A-E070L**	**PAW-FC4A-E150L**	**PAW-FC4A-E180L**	**PAW-FC4A-E210L**	**PAW-FC4A-E240L***	**PAW-FC4A-E270L***
	Right connection		**PAW-FC4A-E070R**	**PAW-FC4A-E150R**	**PAW-FC4A-E180R**	**PAW-FC4A-E210R**	**PAW-FC4A-E240R***	**PAW-FC4A-E270R***
Total cooling capacity [1]	Lo/Med/Hi	kW	4,0/5,4/6,0	5,3/10,1/11,9	5,5/11,2/13,6	5,9/14,4/18,8	13,3/17,7/20,5	14,3/19,9/23,4
Sensible cooling capacity [1]	Lo/Med/Hi	kW	2,8/4,1/4,7	3,7/8,4/10,9	3,9/9,1/12,0	4,0/10,6/14,5	9,9/13,9/16,3	10,3/14,9/17,8
Water flow	Lo/Med/Hi	l/h	680/924/1035	919/1739/2044	951/1928/2335	1013/2478/3241	2291/3053/3526	2464/3427/4032
Water pressure drop	Lo/Med/Hi	kPa	29,7/52,1/64,4	4,1/13,5/18,4	4,7/17,4/25,0	6,6/35,2/59,1	14,5/25,0/33,0	12,8/23,3/31,5
Heating capacity [2]	Lo/Med/Hi	kW	3,7/6,0/7,4	5,3/11,8/15,9	5,3/11,9/15,9	5,3/11,9/16,0	7,2/11,1/13,5	7,2/11,1/13,5
Water flow	Lo/Med/Hi	l/h	636/1029/1266	906/2038/2746	911/2045/2745	916/2051/2747	1242/1910/2329	1242/1910/2329
Water pressure drop	Lo/Med/Hi	kPa	14,2/30,7/43,6	39,0/167,6/293,0	23,9/100,8/174,3	24,2/101,4/174,6	45,8/87,8/120,3	28,3/53,3/72,5
Sound levels								
Sound power return + radiated	Lo/Med/Hi	dB(A)	54/60/63	52/66/72	54/66/74	52/66/72	65/73/75	65/73/75
Sound power discharge	Lo/Med/Hi	dB(A)	53/59/62	52/64/71	52/64/71	52/64/71	64/72/75	64/72/75
Sound pressure [3]	Lo/Med/Hi	dB(A)	33/39/42	31/45/51	31/45/51	31/45/51	44/52/54	44/52/54
Fan								
Number			1	1	1	1	1	1
Air flow 2-pipe	Lo/Med/Hi	m³/h	680/1091/1562	676/2110/3197	676/2110/3197	676/2110/3197	1927/3130/3923	1927/3130/3923
Air flow 4-pipe	Lo/Med/Hi	m³/h	552/1132/1496	676/2110/3197	676/2110/3197	676/2110/3197	1927/3130/3923	1927/3130/3923
Maximum external pressure		Pa	110	200	200	200	220	220
Filter			G3	G3	G3	G3	G3	G3
Electrical data								
Power supply	Voltage	V	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	132/182/222	180/421/675	180/421/675	180/421/675	420/530/673	420/530/673
Water connections								
Type			Female gas threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded
2-pipe		Inch	1/2	1	1 1/4	1 1/4	1 1/4	1 1/4
4-pipe	Cooling	Inch	1/2	1	1	1	1 1/4	1 1/4
	Heating	Inch	1/2	3/4	3/4	3/4	3/4	3/4
Dimensions and weight								
Dimension	H x W x D	mm	250 x 698 x 1200	375 x 798 x 1380	375 x 798 x 1380	375 x 798 x 1380	450 x 798 x 1500	450 x 798 x 1500
Weight		kg	42	63	65	67	76	80

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) Informative data: Considering an hypothetical sound attenuation of the room and installation of 21 dB.
Values indicated are for 50 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual.
* High fan speed used for capacity, water flow, sound and air flow values.

Technical focus

- 6 sizes
- Cooling capacity from 4,1 to 21,9 kW
- Heating capacity from 4,7 to 21,5 kW
- 5-speed AC fan motor

Main features and accessories

- 2 and 4-pipe, left & right hand configurations
- Static pressure up to 220Pa
- Double skin insulation
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G3 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - High static pressure ducted (EC)





Optional controller. Wired remote controller for EC fans.
PAW-FC-907TC

2-pipe	Left connection		PAW-FC2E-E150L	PAW-FC2E-E180L	PAW-FC2E-E210L	PAW-FC2E-E240L	PAW-FC2E-E270L
	Right connection		PAW-FC2E-E150R	PAW-FC2E-E180R	PAW-FC2E-E210R	PAW-FC2E-E240R	PAW-FC2E-E270R
Total cooling capacity [1]	Lo/Med/Hi	kW	7,0/11,3/14,5	7,8/13,1/17,3	8,6/14,2/19,0	9,3/16,1/20,3	10,2/18,1/23,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	5,2/9,1/12,1	5,7/10,3/14,1	6,1/10,9/15,0	6,7/12,4/16,2	7,2/13,6/17,8
Water flow	Lo/Med/Hi	l/h	1207/1945/2498	1351/2259/2979	1476/2451/3275	1592/2766/3498	1751/3120/3972
Water pressure drop	Lo/Med/Hi	kPa	11,5/19,3/30,7	6,1/24,9/41,5	6,0/31,0/53,8	6,3/17,1/26,4	5,9/16,4/25,4
Heating capacity [2]	Lo/Med/Hi	kW	8,8/15,8/20,7	9,5/17,9/24,3	10,0/19,4/26,8	11,1/20,8/27,5	11,7/22,8/30,4
4-pipe	**Left connection**		**PAW-FC4E-E150L**	**PAW-FC4E-E180L**	**PAW-FC4E-E210L**	**PAW-FC4E-E240L**	**PAW-FC4E-E270L**
	Right connection		**PAW-FC4E-E150R**	**PAW-FC4E-E180R**	**PAW-FC4E-E210R**	**PAW-FC4E-E240R**	**PAW-FC4E-E270R**
Total cooling capacity [1]	Lo/Med/Hi	kW	5,9/9,1/11,6	6,6/10,2/13,0	7,9/12,6/16,4	8,4/14,0/17,5	8,9/15,3/19,5
Sensible cooling capacity [1]	Lo/Med/Hi	kW	4,5/7,6/10,1	4,9/8,4/11,2	5,8/9,9/13,4	6,2/11,0/14,2	6,5/11,8/15,5
Water flow	Lo/Med/Hi	l/h	1011/1567/2005	1141/1764/2243	1361/2175/2826	1447/2409/3020	1529/2641/3359
Water pressure drop	Lo/Med/Hi	kPa	4,9/11,1/17,7	6,5/14,7/23,2	7,6/27,5/45,4	6,2/15,9/24,5	5,5/14,5/22,4
Heating capacity [2]	Lo/Med/Hi	kW	3,6/5,8/7,3	6,1/10,0/12,8	6,1/10,1/12,9	4,8/8,3/10,3	4,7/8,2/10,5
Water flow	Lo/Med/Hi	l/h	621/991/1264	1052/1729/2211	1057/1734/2227	832/1421/1780	804/1407/1804
Water pressure drop	Lo/Med/Hi	kPa	20,7/45,6/70,1	30,7/74,1/116,4	30,8/74,5/118,0	19,6/55,9/78,7	7,2/33,9/48,9
Sound levels							
Sound power return + radiated	Lo/Med/Hi	dB(A)	56/67/74	56/67/74	56/67/74	58/69/76	58/69/76
Sound power discharge	Lo/Med/Hi	dB(A)	56/65/74	56/65/74	56/65/74	58/67/76	58/67/76
Sound pressure [3]	Lo/Med/Hi	dB(A)	35/46/52	35/46/52	35/46/52	37/48/54	37/48/54
Fan							
Number			1	1	1	1	1
Air flow 2-pipe	Lo/Med/Hi	m³/h	1071/2418/3583	1071/2418/3583	1071/2418/3583	1227/2700/3829	1227/2700/3829
Air flow 4-pipe	Lo/Med/Hi	m³/h	1071/2418/3583	1071/2418/3583	1071/2418/3583	1227/2700/3829	1227/2700/3829
Maximum external pressure		Pa	300	300	300	300	300
Electrical data							
Power supply	Voltage	V	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	67/172/246	67/172/246	67/172/246	64/237/364	64/237/364
Water connections							
Type			Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded
2-pipe		Inch	1	1 1/4	1 1/4	1 1/4	1 1/4
4-pipe	Cooling	Inch	1	1	1	1 1/4	1 1/4
	Heating	Inch	3/4	3/4	3/4	3/4	3/4
Dimensions and weight							
Dimension	H x W x D	mm	375 x 798 x 1380	375 x 798 x 1380	375 x 798 x 1380	450 x 798 x 1500	450 x 798 x 1500
Weight		kg	63	65	67	76	80

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) Informative data: Considering an hypothetical sound attenuation of the room and installation of 21 dB.
Values indicated are for 50 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual.

Technical focus

- 5 sizes
- Cooling capacity from 6,6 to 19,9 kW
- Heating capacity from 5,9 to 21,4 kW
- Low energy consumption EC fan

Main features and accessories

- 2 and 4-pipe, left & right hand configurations
- Static pressure up to 300Pa
- Double skin insulation
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G3 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP
EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.



Fan coils - 4 way cassette (AC)



Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

2-pipe			**PAW-FC2A-U020-1**	**PAW-FC2A-U030-1**	**PAW-FC2A-U040-1**	**PAW-FC2A-U050-1**	**PAW-FC2A-U060-1**	**PAW-FC2A-U070-1**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,5/1,8/2,4	1,9/2,7/4,0	2,8/3,5/4,7	3,4/4,4/6,1	3,7/5,4/7,2	4,0/6,5/8,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,3/1,5/2,0	1,4/2,2/3,0	2,1/2,6/3,6	2,6/3,4/4,8	2,7/4,0/5,4	3,0/4,8/6,4
Water flow	Lo/Med/Hi	l/h	265/303/404	323/493/683	478/597/801	576/762/142	636/937/1233	695/1111/1476
Water pressure drop	Lo/Med/Hi	kPa	4,3/6,8/10,9	3,6/8,5/14,4	6,9/11,2/18,3	8,4/13,0/21,9	3,4/7,5/11,5	5,6/13,0/20,5
Heating capacity [2]	Lo/Med/Hi	kW	2,2/2,5/3,2	2,3/3,7/4,5	3,7/4,6/6,2	4,5/6,0/8,1	4,5/7,4/10,0	5,2/9,2/12,0
4-pipe			**PAW-FC4A-U020-1**	**PAW-FC4A-U030-1**	**PAW-FC4A-U040-1**	**—**	**PAW-FC4A-U060-1**	**PAW-FC4A-U070-1**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,4/1,5/2,0	2,0/2,7/3,4	2,5/3,3/4,0	—	3,0/4,9/6,6	3,2/6,0/7,5
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,2/1,4/1,8	1,5/2,1/2,6	2,0/2,6/3,2	—	2,3/3,8/5,1	2,5/4,6/5,9
Water flow	Lo/Med/Hi	l/h	232/258/359	342/465/576	437/563/683	—	511/851/1137	543/1030/1294
Water pressure drop	Lo/Med/Hi	kPa	6,6/8,9/13,6	4,4/8,3/11,6	6,7/11,2/15,3	—	6,0/13,9/22,2	7,1/18,9/27,5
Heating capacity [2]	Lo/Med/Hi	kW	0,8/0,9/1,2	2,2/3,1/3,8	3,0/3,5/4,1	—	3,7/5,5/7,0	4,5/7,1/8,9
Water flow	Lo/Med/Hi	l/h	132/153/201	374/530/658	521/603/699	—	636/939/1210	776/1214/1540
Water pressure drop	Lo/Med/Hi	kPa	25,7/33,4/53,6	13,7/24,2/35	24,2/30,9/39,8	—	7,6/13,8/20,7	10,2/20,8/30,9
Sound levels								
Global sound power 2-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/47/53	42/48/57	35/40/49	38/46/54	40/52/59
Global sound power 4-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/47/53	42/48/57	—	38/46/54	40/52/59
Global sound pressure 2-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	26/31/40	29/37/45	31/43/50
Global sound pressure 4-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	—	29/37/45	31/43/50
Fan								
Number			1	1	1	1	1	1
Air flow	Lo/Med/Hi	m³/h	360/450/659	320/504/734	486/626/900	529/720/979	500/824/1159	601/1080/1447
Filter			G1	G1	G1	G1	G1	G1
Electrical data								
Power supply	Voltage	V	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50	50	50
Power consumption 2-pipe	Lo/Med/Hi	W	25/35/58	17/34/58	38/58/99	28/41/66	34/61/88	44/92/125
Power consumption 4-pipe	Lo/Med/Hi	W	25/35/58	17/34/58	38/58/99	—	34/61/88	44/92/125
Water connections								
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	3/4	3/4	3/4	1	1	1
4-pipe	Cooling	Inch	3/4	3/4	3/4	—	1	1
	Heating	Inch	1/2	1/2	1/2	—	3/4	3/4
Dimensions and weight								
Dimension including panel	H x W x D	mm	334 x 720 x 720	334 x 720 x 720	334 x 720 x 720	339 x 960 x 960	339 x 960 x 960	339 x 960 x 960
Weight		kg	14,8	16,5	16,5	37,1	37,1	39,6

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/out: 7 °C/12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in/out: 45 °C / 40 °C. 3) Information data considering an hypothetical sound attenuation of the room and installation of -9 dB(A).

Technical focus

- 6 sizes*
- Cooling capacity from 1,4 to 8,6 kW
- Heating capacity from 1,1 to 12,8 kW
- 3-speed AC fan motor

Main features and accessories

- 2 and 4-pipe configurations
- Very low acoustic levels
- Quick access, by simply removing the front grille
- All connections: located at the same side
- Galvanized steel sheet with thermal and acoustical insulation, avoiding condensation on the casing and providing good sound attenuation
- Cleanable synthetic-type air filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

* 5 sizes available for 4-pipe configuration.

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.



Fan coils - 4 way cassette (EC)



Optional controller. Wired remote controller for EC fans.
PAW-FC-907TC

2-pipe			**PAW-FC2E-U020-1**	**PAW-FC2E-U030-1**	**PAW-FC2E-U040-1**	**PAW-FC2E-U050-1**	**PAW-FC2E-U060-1**	**PAW-FC2E-U070-1**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,6/1,8/2,4	1,9/2,9/4,0	2,8/3,5/4,7	3,4/4,4/6,1	3,7/5,5/7,2	4,1/6,5/9,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,3/1,5/2,0	1,4/2,2/3,1	2,1/2,7/3,6	2,6/3,5/4,7	2,7/4,1/5,4	3,0/4,9/7,2
Water flow	Lo/Med/Hi	l/h	267/306/409	325/497/688	481/604/808	579/765/1050	640/944/1243	700/1119/1649
Water pressure drop	Lo/Med/Hi	kPa	4,2/6,9/11,2	3,5/8,6/14,6	6,8/11,4/18,6	8,4/13,1/22,2	3,4/7,6/11,7	5,8/13,1/24,6
Heating capacity [2]	Lo/Med/Hi	kW	2,2/2,5/3,2	2,3/3,7/4,5	3,7/4,6/6,2	4,5/6,0/8,1	4,5/7,4/10,0	5,2/9,2/13,0
4-pipe			**PAW-FC4E-U020-1**	**PAW-FC4E-U030-1**	**PAW-FC4E-U040-1**	**—**	**PAW-FC4E-U060-1**	**PAW-FC4E-U070-1**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,4/1,5/2,0	2,0/2,7/3,4	2,6/3,2/4,0	—	3,0/5,0/6,6	3,2/6,1/7,9
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,2/1,4/1,9	1,5/2,1/2,6	2,1/2,6/3,3	—	2,3/3,8/5,1	2,6/4,7/6,3
Water flow	Lo/Med/Hi	l/h	234/262/344	344/464/581	442/556/690	—	516/858/1144	549/1041/1366
Water pressure drop	Lo/Med/Hi	kPa	6,6/9,1/14,0	4,4/8,2/11,7	6,7/10,9/15,5	—	6,0/14,1/22,4	7,2/19,2/30,1
Heating capacity [2]	Lo/Med/Hi	kW	0,8/0,9/1,2	2,2/3,1/3,8	3,0/3,5/4,1	—	3,7/5,5/7,0	4,5/7,1/9,8
Water flow	Lo/Med/Hi	l/h	132/153/201	374/530/658	521/603/699	—	636/939/1210	776/1214/1686
Water pressure drop	Lo/Med/Hi	kPa	25,7/33,4/53,6	13,7/24,2/35	24,2/30,9/39,8	—	7,6/13,8/20,7	10,2/20,8/36
Sound levels								
Global sound power 2-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/47/53	42/48/57	35/40/49	38/46/54	40/52/59
Global sound power 4-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/44/53	42/48/57	—	38/46/54	40/52/59
Global sound pressure 2-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	26/31/40	29/37/45	31/43/50
Global sound pressure 4-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	—	29/37/45	31/43/50
Fan								
Number			1	1	1	1	1	1
Air flow	Lo/Med/Hi	m³/h	360/450/659	320/504/734	486/626/900	529/720/979	500/824/1159	601/1080/1598
Filter			G1					
Electrical data								
Power supply	Voltage	V	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50	50	50
Power consumption 2-pipe	Lo/Med/Hi	W	9/13/29	7/14/32	13/22/57	7/12/25	9/23/25	11/40/115
Power consumption 4-pipe	Lo/Med/Hi	W	9/13/29	7/14/32	13/22/57	—	9/23/46	11/40/115
Water connections								
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	3/4	3/4	3/4	1	1	1
4-pipe	Cooling	Inch	3/4	3/4	3/4	—	1	1
	Heating	Inch	1/2	1/2	1/2	—	3/4	3/4
Dimensions and weight								
Dimension including panel	HxWxD	mm	334x720x720	334x720x720	334x720x720	339x960x960	339x960x960	339x960x960
Weight		kg	14,8	16,5	16,5	37,1	37,1	39,6

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/out: 7 °C/12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in/out: 45 °C / 40 °C. 3) Information data considering an hypothetical sound attenuation of the room and installation of -9 dB(A).

Technical focus

- 6 sizes*
- Cooling capacity from 1,4 to 9,4 kW
- Heating capacity from 1,1 to 14,0 kW
- Low energy consumption EC fan

Main features and accessories

- 2 and 4-pipe configurations
- Very low acoustic levels
- Quick access, by simply removing the front grille
- All connections: located at the same side
- Galvanized steel sheet with thermal and acoustical insulation, avoiding condensation on the casing and providing good sound attenuation
- Cleanable synthetic-type air filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

* 5 sizes available for 4-pipe configuration.

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EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ceiling chassis (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

2-pipe	**Left connection (PAW-)**		**FC2A-T010L**	**FC2A-T020L**	**FC2A-T030L**	**FC2A-T040L**	**FC2A-T050L**	**FC2A-T060L**	**FC2A-T070L**	**FC2A-T080L**
	Right connection (PAW-)		**FC2A-T010R**	**FC2A-T020R**	**FC2A-T030R**	**FC2A-T040R**	**FC2A-T050R**	**FC2A-T060R**	**FC2A-T070R**	**FC2A-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
4-pipe	**Left connection (PAW-)**		**FC4A-T010L**	**FC4A-T020L**	**FC4A-T030L**	**FC4A-T040L**	**FC4A-T050L**	**FC4A-T060L**	**FC4A-T070L**	**FC4A-T080L**
	Right connection (PAW-)		**FC4A-T010R**	**FC4A-T020R**	**FC4A-T030R**	**FC4A-T040R**	**FC4A-T050R**	**FC4A-T060R**	**FC4A-T070R**	**FC4A-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/0,9/1,3	0,6/1,1/1,6	1,0/1,9/2,4	1,1/2,3/3,0	1,7/3,0/4,3	2,6/4,4/5,6	3,3/5,9/6,9	4,5/5,9/8,0
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,5/0,8/1,2	0,8/1,5/1,8	0,8/1,7/2,2	1,2/2,2/3,1	1,8/3,2/4,3	2,3/4,2/4,9	3,3/4,4/6,2
Water flow	Lo/Med/Hi	l/h	114/159/225	109/192/268	165/327/414	194/388/517	284/522/748	449/756/967	575/1019/1193	775/1020/1380
Water pressure drop	Lo/Med/Hi	kPa	8,3/15,2/29,0	1,5/3,4/5,6	3,0/9,5/14,4	6,4/22,3/36,8	4,2/12,8/25,1	10,2/27,7/44,5	5,9/17,9/24,4	19,3/31,1/53,6
Heating capacity [2]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,6/0,9/1,1	1,0/1,4/1,6	0,9/1,6/2,1	1,5/2,3/3,0	1,9/2,9/3,7	2,7/3,6/4,3	3,9/5,6/7,1
Water flow	Lo/Med/Hi	l/h	79/127/178	100/146/190	164/232/274	160/273/354	251/401/508	325/505/633	456/626/736	673/963/1226
Water pressure drop	Lo/Med/Hi	kPa	1,9/3,5/5,6	1,5/3,2/5,3	5,1/9,0/11,9	9,2/26,5/42,7	10,7/24,6/29,5	20,3/43,9/52,9	67,2/117,9/137,8	33,1/63,7/75
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Air flow 4-pipe	Lo/Med/Hi	m³/h	95/168/253	89/161/241	132/263/369	162/335/467	242/466/671	334/614/885	470/859/1012	634/905/1370
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Power consumption 4-pipe	Lo/Med/Hi	W	13/24/36	10/18/28	16/37/44	15/37/55	28/54/70	37/74/104	53/99/145	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight										
Dimension	H x W x D	mm	225 x 766 x 477	225 x 766 x 477	225 x 951 x 477	225 x 1136 x 477	225 x 1321 x 477	225 x 1506 x 477	225 x 1319 x 477	225 x 1506 x 477
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.

Technical focus

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ceiling chassis (EC)





Optional controller. Wired remote controller for EC fans.
PAW-FC-907TC

2-pipe	Left connection (PAW-)		FC2E-T010L	FC2E-T020L	FC2E-T030L	FC2E-T040L	FC2E-T050L	FC2E-T060L	FC2E-T070L	FC2E-T080L
	Right connection (PAW-)		FC2E-T010R	FC2E-T020R	FC2E-T030R	FC2E-T040R	FC2E-T050R	FC2E-T060R	FC2E-T070R	FC2E-T080R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3
4-pipe	**Left connection (PAW-)**		**FC4E-T010L**	**FC4E-T020L**	**FC4E-T030L**	**FC4E-T040L**	**FC4E-T050L**	**FC4E-T060L**	**FC4E-T070L**	**FC4E-T080L**
	Right connection (PAW-)		**FC4E-T010R**	**FC4E-T020R**	**FC4E-T030R**	**FC4E-T040R**	**FC4E-T050R**	**FC4E-T060R**	**FC4E-T070R**	**FC4E-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,6/1,2/2,2	0,8/1,9/2,9	1,2/2,7/4,0	1,2/3,6/4,6	1,8/4,1/4,9	2,6/5,1/6,4	5,0/6,2/9,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,4/0,9/1,7	0,4/1,0/1,8	0,6/1,5/2,2	0,9/1,9/2,8	1,0/2,8/3,5	1,2/3,2/3,8	1,9/3,8/4,8	3,6/4,6/7,2
Water flow	Lo/Med/Hi	l/h	92/185/327	97/206/375	129/321/493	205/457/681	212/625/686	306/707/749	443/886/977	855/1070/1242
Water pressure drop	Lo/Med/Hi	kPa	5,8/20,1/59,2	1,3/3,7/9,7	4,0/9,2/19,7	6,3/29,6/60,1	2,5/17,9/21,3	5,1/24,3/27,2	3,5/13,6/16,5	22,9/33,9/44,3
Heating capacity [2]	Lo/Med/Hi	kW	0,4/0,8/1,4	0,6/0,9/1,5	1,0/1,4/1,8	1,2/2,0/2,8	1,6/2,4/2,5	1,4/2,9/3,1	2,5/3,4/3,6	4,5/5,9/6,9
Water flow	Lo/Med/Hi	l/h	76/140/235	95/161/255	166/243/304	204/350/483	267/416/438	233/503/531	434/583/614	767/1011/1194
Water pressure drop	Lo/Med/Hi	kPa	1,8/4,0/8,4	1,4/3,8/9,4	5,3/9,7/14,1	15,6/41,8/76,3	11,9/26,3/28,9	11,5/43,6/48,1	61,5/103,8/113,9	42,1/69,7/95,1
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398
Air flow 4-pipe	Lo/Med/Hi	m³/h	91/199/379	84/200/380	123/342/540	148/369/627	185/587/646	205/668/716	329/798/894	660/884/1079
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108
Power consumption 4-pipe	Lo/Med/Hi	W	5/11/39	5/13/40	6/15/40	2/12/42	2/23/44	2/28/52	11/43/75	22/41/116
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight										
Dimension	H x W x D	mm	225 x 766 x 477	225 x 766 x 477	225 x 951 x 477	225 x 1136 x 477	225 x 1321 x 477	225 x 1506 x 477	225 x 1319 x 477	225 x 1506 x 477
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP

EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.



Fan coils - floor-standing chassis (AC)



Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1



Optional controller. Integrated controller for Floor-standing fan coil (AC).
PAW-FC-RCFS

2-pipe	**Left connection (PAW-)**		**FC2A-P010L**	**FC2A-P020L**	**FC2A-P030L**	**FC2A-P040L**	**FC2A-P050L**	**FC2A-P060L**	**FC2A-P070L**	**FC2A-P080L**
	Right connection (PAW-)		**FC2A-P010R**	**FC2A-P020R**	**FC2A-P030R**	**FC2A-P040R**	**FC2A-P050R**	**FC2A-P060R**	**FC2A-P070R**	**FC2A-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
4-pipe	**Left connection (PAW-)**		**FC4A-P010L**	**FC4A-P020L**	**FC4A-P030L**	**FC4A-P040L**	**FC4A-P050L**	**FC4A-P060L**	**FC4A-P070L**	**FC4A-P080L**
	Right connection (PAW-)		**FC4A-P010R**	**FC4A-P020R**	**FC4A-P030R**	**FC4A-P040R**	**FC4A-P050R**	**FC4A-P060R**	**FC4A-P070R**	**FC4A-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/0,9/1,3	0,6/1,1/1,6	1,0/1,9/2,4	1,1/2,3/3,0	1,7/3,0/4,3	2,6/4,4/5,6	3,3/5,9/6,9	4,5/5,9/8,0
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,5/0,8/1,2	0,8/1,5/1,8	0,8/1,7/2,2	1,2/2,2/3,1	1,8/3,2/4,3	2,3/4,2/4,9	3,3/4,4/6,2
Water flow	Lo/Med/Hi	l/h	114/159/225	109/192/268	165/327/414	194/388/517	284/522/748	449/756/967	575/1019/1193	775/1020/1380
Water pressure drop	Lo/Med/Hi	kPa	8,3/15,2/29,0	1,5/3,4/5,6	3,0/9,5/14,4	6,4/22,3/36,8	4,2/12,8/25,1	10,2/27,7/44,5	5,9/17,9/24,4	19,3/31,1/53,6
Heating capacity [2]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,6/0,9/1,1	1,0/1,4/1,6	0,9/1,6/2,1	1,5/2,3/3,0	1,9/2,9/3,7	2,7/3,6/4,3	3,9/5,6/7,1
Water flow	Lo/Med/Hi	l/h	79/127/178	100/146/190	164/232/274	160/273/354	251/401/508	325/505/633	456/626/736	673/963/1226
Water pressure drop	Lo/Med/Hi	kPa	1,9/3,5/5,6	1,5/3,2/5,3	5,1/9,0/11,9	9,2/26,5/42,7	10,7/24,6/29,5	20,3/43,9/52,9	67,2/117,9/137,8	33,1/63,7/75
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Air flow 4-pipe	Lo/Med/Hi	m³/h	95/168/253	89/161/241	132/263/369	162/335/467	242/466/671	334/614/885	470/859/1012	634/905/1370
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Power consumption 4-pipe	Lo/Med/Hi	W	13/24/36	10/18/28	16/37/44	15/37/55	28/54/70	37/74/104	53/99/145	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight										
Dimension [4]	H x W x D	mm	477 x 225 x 766	766 x 225 x 477	477 x 225 x 951	477 x 225 x 1136	477 x 225 x 1321	477 x 225 x 1506	575 x 225 x 1319	575 x 225 x 1506
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds. 4) Without support feet.

Technical focus

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter
- PAW-FC-SFS feet for floor-standing units

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.



Fan coils - floor-standing chassis (EC)



Optional controller. Wired remote controller for EC fans.
PAW-FC-907TC

2-pipe	Left connection (PAW-)		FC2E-P010L	FC2E-P020L	FC2E-P030L	FC2E-P040L	FC2E-P050L	FC2E-P060L	FC2E-P070L	FC2E-P080L
	Right connection (PAW-)		FC2E-P010R	FC2E-P020R	FC2E-P030R	FC2E-P040R	FC2E-P050R	FC2E-P060R	FC2E-P070R	FC2E-P080R
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3
4-pipe	**Left connection (PAW-)**		**FC4E-P010L**	**FC4E-P020L**	**FC4E-P030L**	**FC4E-P040L**	**FC4E-P050L**	**FC4E-P060L**	**FC4E-P070L**	**FC4E-P080L**
	Right connection (PAW-)		**FC4E-P010R**	**FC4E-P020R**	**FC4E-P030R**	**FC4E-P040R**	**FC4E-P050R**	**FC4E-P060R**	**FC4E-P070R**	**FC4E-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,6/1,2/2,2	0,8/1,9/2,9	1,2/2,7/4,0	1,2/3,6/4,6	1,8/4,1/4,9	2,6/5,1/6,4	5,0/6,2/9,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,4/0,9/1,7	0,4/1,0/1,8	0,6/1,5/2,2	0,9/1,9/2,8	1,0/2,8/3,5	1,2/3,2/3,8	1,9/3,8/4,8	3,6/4,6/7,2
Water flow	Lo/Med/Hi	l/h	92/185/327	97/206/375	129/321/493	205/457/681	212/625/686	306/707/749	443/886/977	855/1070/1242
Water pressure drop	Lo/Med/Hi	kPa	5,8/20,1/59,2	1,3/3,7/9,7	4,0/9,2/19,7	6,3/29,6/60,1	2,5/17,9/21,3	5,1/24,3/27,2	3,5/13,6/16,5	22,9/33,9/44,3
Heating capacity [2]	Lo/Med/Hi	kW	0,4/0,8/1,4	0,6/0,9/1,5	1,0/1,4/1,8	1,2/2,0/2,8	1,6/2,4/2,5	1,4/2,9/3,1	2,5/3,4/3,6	4,5/5,9/6,9
Water flow	Lo/Med/Hi	l/h	76/140/235	95/161/255	166/243/304	204/350/483	267/416/438	233/503/531	434/583/614	767/1011/1194
Water pressure drop	Lo/Med/Hi	kPa	1,8/4,0/8,4	1,4/3,8/9,4	5,3/9,7/14,1	15,6/41,8/76,3	11,9/26,3/28,9	11,5/43,6/48,1	61,5/103,8/113,9	42,1/69,7/95,1
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398
Air flow 4-pipe	Lo/Med/Hi	m³/h	91/199/379	84/200/380	123/342/540	148/369/627	185/587/646	205/668/716	329/798/894	660/884/1079
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108
Power consumption 4-pipe	Lo/Med/Hi	W	5/11/39	5/13/40	6/15/40	2/12/42	2/23/44	2/28/52	11/43/75	22/41/116
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight										
Dimension [4]	H x W x D	mm	477 x 225 x 766	766 x 225 x 477	477 x 225 x 951	477 x 225 x 1136	477 x 225 x 1321	477 x 225 x 1506	575 x 225 x 1319	575 x 225 x 1506
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. 2) Air: 20 °C. Water in/out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds. 4) Without support feet.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON/OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter
- PAW-FC-SFS feet for floor-standing units

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP
EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - wall-mounted (AC)





Optional controller. Wired remote controller.
PAW-FC-903TC



Optional controller. Advanced wired remote controller.
PAW-FC-RC1



Infrared remote supplied with IR versions.
IR Controller

2-pipe			PAW-FC2A-K007	PAW-FC2A-K009	PAW-FC2A-K018	PAW-FC2A-K022
			PAW-FC2A-K007IR	PAW-FC2A-K009IR	PAW-FC2A-K018IR	PAW-FC2A-K022IR
Total cooling capacity [1]	Lo/Med/Hi	kW	1,0/1,3/1,7	1,6/1,7/2,4	2,8/3,0/3,5	2,9/3,1/3,9
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,2	1,2/1,3/1,9	2,1/2,3/2,7	2,3/2,5/3,1
Water flow	Lo/Med/Hi	l/h	172/231/287	270/291/418	483/508/609	502/535/669
Water pressure drop	Lo/Med/Hi	kPa	18,6/24,9/30,9	18,5/27,0/40,0	34,6/41,3/55,6	37,2/33,7/45,2
Heating capacity [2]	Lo/Med/Hi	kW	1,4/1,7/2,0	1,7/2,0/2,7	2,9/3,2/4,0	3,1/3,7/4,4
Sound levels						
Sound power	Lo/Med/Hi	dB(A)	45/49/51	47/52/57	49/53/56	53/57/63
Sound pressure [3]	Lo/Med/Hi	dB(A)	30/33/35	32/36/40	39/41/43	39/43/48
Fan						
Number			1	1	1	1
Air flow	Lo/Med/Hi	m³/h	282/321/360	367/413/551	532/592/680	617/709/850
Filter			G1	G1	G1	G1
Electrical data						
Power supply	Voltage	V	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50
Fuse rating		A	3	3	3	3
Power consumption	Lo/Med/Hi	W	39/42/62	30/47/59	44/50/55	50/55/70
Water connections						
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2
Dimensions and weight						
Dimension	H x W x D	mm	275 x 180 x 845	275 x 180 x 845	298 x 200 x 940	298 x 200 x 940
Weight		kg	11	11	13	13

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in/out: 45 °C / 40 °C. 3) Sound pressure considering a local of 100 m³ a reverberation time of 0,5 seconds and a distance of 1 m.

Technical focus

- 4 sizes
- Cooling capacity from 1,0 to 3,9 kW
- Heating capacity from 1,4 to 4,1 kW
- Version: 2-pipes, AC fan

Main features and accessories

- 2 way or 3 way valve ON/OFF
- 3-speed AC fan motor
- Silent unit for optimum customer comfort
- Aesthetic design suitable for residential and hotel applications
- Compatible with IR controller (supplied with IR versions)
- Coil with hydrophilic fins to improve the condensate flow

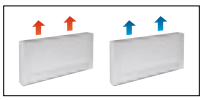
Operating limits	
Entering water temperature	From 5 to 60 °C
Indoor air temperature	From 6 to 40 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Smart fan coils







Built-in advanced thermostat.

			PAW-AAIR-200-2	PAW-AAIR-700-2	PAW-AAIR-900-2
Total cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,6	0,8/1,0/1,2	1,2/1,5/1,7
Sensible cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,5	0,6/0,9/1,1	1,1/1,4/1,6
Water flow	Lo/Med/Hi	kg/h	40,0/59,0/95,0	129,0/178,0/207,0	198,0/261,0/300,0
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	1,0/2,0/2,0	6,0/9,0/12,0
Inlet water temperature		°C	10	10	10
Outlet water temperature		°C	15	15	15
Inlet air temperature		°C	27,0	27,0	27,0
Outlet air temperature	Lo/Med/Hi	°C	15,0/17,0/18,0	14,0/16,0/17,0	16,0/17,0/18,0
Relative humidity of inlet air		%	47	47	47
Total heating capacity	Lo/Med/Hi	kW	0,2/0,5/0,6	0,7/1,0/1,2	0,9/1,4/1,7
Water flow	Lo/Med/Hi	kg/h	37,3/80,8/98,0	121,8/177,5/204,3	152,4/244,2/292,9
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	0,3/0,8/1,0	0,5/1,6/2,2
Inlet water temperature		°C	35	35	35
Outlet water temperature		°C	30	30	30
Inlet air temperature		°C	19,0	19,0	19,0
Outlet air temperature	Lo/Med/Hi	°C	38,9/32,0/30,0	33,3/31,8/30,6	30,2/31,1/30,6
Air flow	Lo/Med/Hi	m³/min	0,9/1,9/2,7	2,6/4,2/5,3	4,1/6,1/7,7
Maximum input power	Lo/Med/Hi	W	7,0/9,0/13,0	14,0/18,0/22,0	16,0/20,0/24,0
Sound pressure	Lo/Med/Hi	dB(A)	23/33/40	24/36/42	25/36/44
Dimension (H x W x D)		mm	735 x 579 x 129	935 x 579 x 129	1135 x 579 x 129
Net weight		kg	17	20	23
3 Ways valve included			Yes	Yes	Yes
Touch screen thermostat			Yes	Yes	Yes

Accessories	
PAW-AAIR-LEGS-1	Kits of 2 legs to protect the water pipings

Accessories	
PAW-AAIR-RHCABLE	Motor connection cable for units with hydraulic connections on the right

* Smart fan coils is produced by Innova.

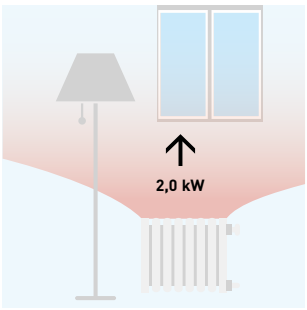
Stylish floor-standing fan coils with advanced controller

The slimline of Smart fan coils delivers high efficiency climate control.

With a depth of just under 13 cm they are at the cutting edge of the market. Blending easily into the home, Smart fan coil's elegant design and product refinements are clear to see in every detail.

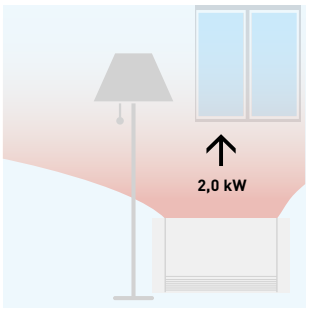
Exceptional ventilation efficiency means the motor uses considerably less energy (low wattage). The fan speed is continuously modulated by the temperature controller with proportional integral logic, with undoubted advantages for regulating the temperature and humidity in summer mode.

With standard cast radiators.



Water at 65 °C needed.

With Smart fan coil.



Water at 35 °C needed.

Technical focus

- 4 operation modes (auto, silent, night-time and maximum ventilation speed)
- Exclusive design
- Extremely compact (only 12,9 cm deep)
- Cooling and dehumidification functions possible (drain is needed)
- 3-way valve included (no overflow valve needed on the installation if more than 3 units installed)
- Touch screen thermostat

All temperature curves and capacity are available on www.panasonicproclub.com

Controls



Simple user friendly control for outdoor units



A control panel with intuitive design is equipped on all ECOi-W systems as standard. The microprocessor based control has a new IHM logic and implements a smart handling for your demand.

Basic operation.
· ON/OFF setting
· Cooling / Heating mode setting

Energy Saving.
· Intelligent logic control for inlet water temperature
· Night setback operation to reduce electrical consumption and noise
· Part load operating mode
· Maximum discharge temperature control

Service / Maintenance.
· Automatic test operation at the push of a button
· Alarm notice with the latest 10 alarms
· Counter for operating hours of compressor and pump
· Compressor operating limits saved in a flash memory

Others.
· BMS compatible (RS485 ModBus RTU or BacNet MSTP protocol)

Wired controllers for AC and EC fan coils

Advanced wired remote controller (AC)



PAW-FC-RC1
This advanced controller provides a higher level of comfort in heating. The sensor can be used as a water flow sensor, stopping the fan when the water temperature is low, avoiding cold drafts in winter.

Features:
· For 2-pipe and 4-pipe, AC fan
· Change Over function (cold draft prevention)
· Room thermostat
· 3 outputs, 230 V relays for fan control
· 2 outputs, 230 V relays for heating / cooling control
· Connection to BMS - Modbus RTU slave
· 1 DI for presence detection (key card switch)
· 1 AI for sensor

Wired remote controller (EC)



PAW-FC-907TC
Stylish and sophisticated design with backlit LCD display, is suitable for installation within a wide variety of locations such as office, hotel and residential applications. By connecting the controller to the range of EC fan coils, the user can take advantage of the improved performance, higher levels of efficiency and thus improved energy savings

Features:
· For 2-pipe and 4-pipe, EC fan
· Back lit LCD screen with touch control
· Adjustable range EC fan control
· Economiser
· Connection to BMS via Modbus
· 1 DI for presence detection (key card switch)

Wired remote controller (AC)



PAW-FC-903TC
Feature rich and perfectly adapted to control AC fan coils, the PAW-FC-903TC is the ideal addition for any fan coil. With intuitive user interface provided by the push button control and large LCD display, it will fit seamlessly with almost any location.

Features:
· For 2-pipe, AC fan
· Back lit LCD screen
· 3 speed control relay, for fan
· Economizer

Built-in controller for Floor Standing (AC)



PAW-FC-RCFS
Built-in basic controller fan floor standing units , for 2-pipe and 4-pipe, AC fan.

Accessories and control

Shut off valves



Shut off valves kit for model 20 - 40.	Shut off valves kit for model 45 - 75.	Shut off valves kit for model 90 - 125.	Victaulic connection kit for model 140 - 210.
PAW-SYSSOV1	PAW-SYSSOV2	PAW-SYSSOV3	PAW-SYSVICTH

Wired remote controller for fan coil



Wired remote controller for fan coil.

PAW-FC-903TC



Advanced wired remote controller for fan coil.

PAW-FC-RC1



Wired remote controller for EC fan coil.

PAW-FC-907TC



Built-in controller for Floor-standing (AC).

PAW-FC-RCFS

Fan coil ceiling, floor-standing and ducted valve accessories

2 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 010-060. PAW-FC-2WY-11/55-1	2 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 070-080. PAW-FC-2WY-65/90-1	2 way valve + drain pan for 2-pipe ducted model F040. PAW-FC-2WY-F040
3 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 010-060. PAW-FC-3WY-11/55-1	3 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models and 070-080. PAW-FC-3WY-65/90-1	3 way valve + drain pan for 2-pipe ducted model F040. PAW-FC-3WY-F040
2 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 010-060. PAW-FC4-2WY-010	2 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 070-080. PAW-FC4-2WY-070	2 way valve + drain pan for 4-pipe ducted model F040. PAW-FC4-2WY-F040
3 way valve + drain pan for 4-pipe ducted, ceiling and floor-standing model 010. PAW-FC4-3WY-010	3 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 020-060. PAW-FC4-3WY-020	3 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 070-080. PAW-FC4-3WY-070
3 way valve + drain pan for 4-pipe ducted model F040 PAW-FC4-3WY-F040		

Fan coil high static ducted valve accessories

2 way valve + drain pan for 2-pipe high static ducted models E070. ———— PAW-FC2-2WY-E070	**2 way valve + drain pan for 2-pipe high static ducted models E150-E180.** ———— PAW-FC-2WY-150	**2 way valve + drain pan for 2-pipe high static ducted models E210-E240.** ———— PAW-FC2-2WY-E210
3 way valve + drain pan for 2-pipe high static ducted models E070. ———— PAW-FC2-3WY-E070	**3 way valve + drain pan for 2-pipe high static ducted models E150-E180.** ———— PAW-FC-3WY-150	**3 way valve + drain pan for 2-pipe high static ducted models E210-E240.** ———— PAW-FC2-3WY-E210
2 way valve + drain pan for 4-pipe high static ducted model E070. ———— PAW-FC4-2WY-E070	**2 way valve + drain pan for 4-pipe high static ducted models E150-E180.** ———— PAW-FC4-2WY-E150	**2 way valve + drain pan for 4-pipe high static ducted models E210-E240.** ———— PAW-FC4-2WY-E210
3 way valve + drain pan for 4-pipe high static ducted model E070. ———— PAW-FC4-3WY-E070	**3 way valve + drain pan for 4-pipe high static ducted models E150-E180.** ———— PAW-FC4-3WY-E150	**3 way valve + drain pan for 4-pipe high static ducted models E210-E240.** ———— PAW-FC4-3WY-E210

Fan coil cassette valve accessories

2 way valve + drain pan for 2-pipe cassette models U020-U040. ———— PAW-FC2-2WY-U020	**2 way valve + drain pan for 2-pipe cassette models U050-U070.** ———— PAW-FC2-2WY-U050	**3 way valve + drain pan for 2-pipe cassette models U020-040.** ———— PAW-FC2-3WY-U020	**3 way valve + drain pan for 2-pipe cassette models U050-070.** ———— PAW-FC2-3WY-U050
2 way valve + drain pan for 4-pipe cassette models U020-U040. ———— PAW-FC4-2WY-U020	**2 way valve + drain pan for 4-pipe cassette models U050-U070.** ———— PAW-FC4-2WY-U050	**3 way valve + drain pan for 4-pipe cassette models U020-U040.** ———— PAW-FC4-3WY-U020	**3 way valve + drain pan for 4-pipe cassette models U050-U070.** ———— PAW-FC4-3WY-U050

Fan coil wall-mounted valve accessories

2 way valve for 2-pipe wall-mounted K007-K022. ———— PAW-FC2-2WY-K007	**3 way valve for 2-pipe wall-mounted k007-K022.** ———— PAW-FC2-3WY-K007

Smart fan coil accessories

Kits of 2 legs to protect the water pipings. ———— PAW-AAIR-LEGS-1	**Motor connection cable for units with hydraulic connections on the right.** ———— PAW-AAIR-RHCABLE


CO2
REFRIGERATION



Panasonic condensing units with natural refrigerant

Panasonic's CR Series of CO_2 condensing units provide the ideal solution for supermarkets, convenience stores and gas stations.
Keeping food always fresh at right temperature in showcases or cold rooms is a very critical point. And one of the biggest challenges for those retailers has been the expensive effects of refrigeration breakdowns which can result in costly product wastage.

Choose the green solution by Panasonic	> 464
Natural solution with high energy saving	> 466
CO_2 transcritical condensing units CR Series	> 468
Technology by Panasonic	> 470
Range of CO_2 condensing units CR Series	> 472
CO_2 Condensing units	> 473
Panasonic PACi NX Elite can cool rooms down to 8 °C	> 474

Choose the green solution by Panasonic

Environmentally friendly CO_2 condensing units.



CO_2 condensing units				Medium temperature solutions with PACi NX
MT/LT Type	MT Type	MT Type	MT/LT Type	
				
Capacity range				Capacity range
4 kW (MT) / 2 kW (LT)	7,5 kW	15 kW	16 kW (MT) / 8 kW (LT)	2,1 to 23,2 kW
Low temperature				Low temperature
✓	–	–	✓	–
Medium temperature				Medium temperature
–	✓	–	✓	✓
Heat recovery port				Heat recovery port
–	✓	–	✓	–
ET (Evaporation Temperature) set points range				Room temperature set point
-45 ~ -5 °C	-20 ~ -5 °C	-20 ~ -5 °C	-45 ~ -5 °C	+8 ~ +24 °C WB
Room size example*				
40 m² (MT) / 10 m² (LT)	80 m²	200 m²	200 m² (MT) / 50 m² (LT)	

* Room size is reference. Please contact to authorized Panasonic dealer for calculation.

Energy saving

Natural CO_2 / R744.
R744 refrigerant provides higher energy saving and lower CO_2 emission compared to R404A. Zero ODP and GWP=1 means natural substance.

Inverter+.
Inverter Plus System classification highlights Panasonic's highest performing systems.

High efficiency compressor.
Powerful 2-stage CO_2 rotary compressor by Panasonic. It delivers high performance all year around.

High connectivity

BMS connectivity.
The system can by supervised with major monitoring system.

High performance and comfortability

Super quiet.
Systems operate extremely quiet. Minimum 33 dB(A) @10 m with 4 HP model.

Operation range up to 43 °C.
The system operates up to 43 °C, allowing for installation in various locations.

Anti corrosion coating.
Selectable fin type with or without an anti corrosion coating. The anti corrosion coating prevents salt damage for a longer lifespan.

Heat recovery port.
The heat recovery port is available to cut running costs as optional. By utilizing exhausted heat generated by refrigeration to the energy source for heating.

Automatic fan.
Microprocessor control automatically adjusts the outdoor fan speed in CO_2 systems for efficient operation.

5 Years compressor warranty.
We guarantee the outdoor unit compressors in the entire range for five years.

Why CO_2?: Natural refrigerant

EU F-Gas regulation is a key priority for European countries. It ensures compliance with the Kigali Amendment supporting international climate commitments on greenhouse gases and leading the global transition to climate-friendly HFC-free technologies.
Carbon dioxide (R744) is regaining its place in the refrigeration world. Driven by environmental concerns, legislation now requires increased adoption of 'alternative' refrigerants, such as CO_2.
CO_2 is an environmentally-friendly solution, with zero ODP and "GWP" (Global Warming Potential)=1 means natural substance in the atmosphere.

In Europe a step-by-step HFC reduction has been in place since the F-Gas regulation was introduced in 2015.
Countries all over the world have actively been preparing to enact the necessary domestic legislation to implement the agreement to reduce the use of HFCs.
Panasonic is now able to provide a solution in Europe with CO_2 refrigeration systems to prevent global warming and to support environment-friendly retail operations.
The following table shows how well R744 (CO_2) performs regarding environmental impact and safety.

ODP (Ozone Depletion Potential) = 0 - GWP (Global Warming Potential) = 1.

	Next generation refrigerant			Current refrigerant	
	CO_2	Ammonia	Isobutane	R410A	R404A
ODP	**0**	0	0	0	0
GWP	**1**	0	4	2090	3920
Flammability	**Non flammable**	Light flammable	Flammable	Non flammable	Non flammable
Toxicity	**No**	Yes	No	No	No

Design support tool available in Panasonic PRO Club.

Panasonic has launched a new online calculator to support engineers, installers, and technicians to quickly make calculations when specifying solutions for commercial refrigeration systems. The calculator can be found on Panasonic's PRO Club.

- Evaporation temperature selection
- Cooling capacity calculator
- Refrigerant pipe calculation
- Electronic expansion valves calculation
- Refrigerant amount calculation



Ready to works on all devices, computers, tablets and smartphones!!

PRO Club **www.panasonicproclub.com** or connect simply with your smartphone to the PRO Club using this QR

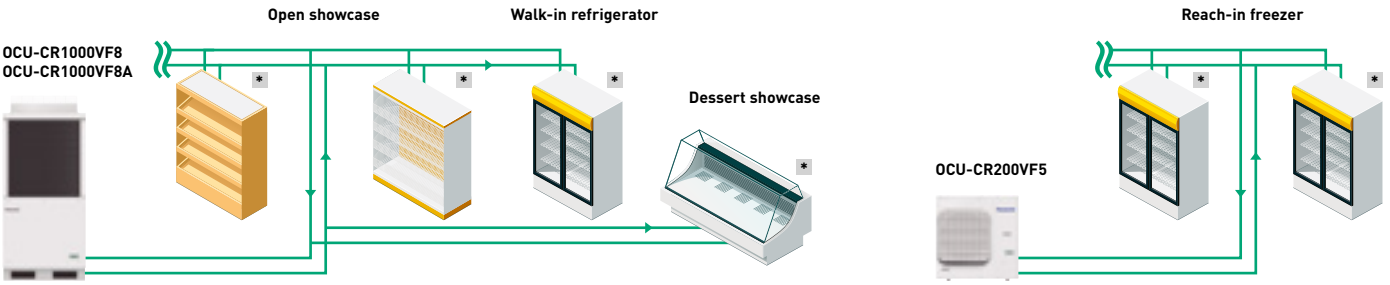
Natural solution with high energy saving

Panasonic CO_2 condensing units with natural refrigerant: The environmentally friendly and reliable solution for convenience stores, supermarket, gas stations and cold rooms.



Showcases

Convenience stores, supermarkets, service stations.

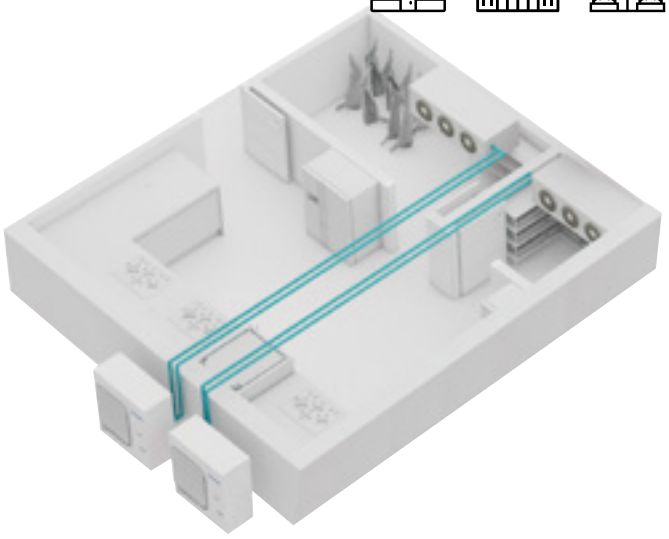


* Controllers: PAW-CO2-PANEL or local supply.

Cold room application to keep food fresh

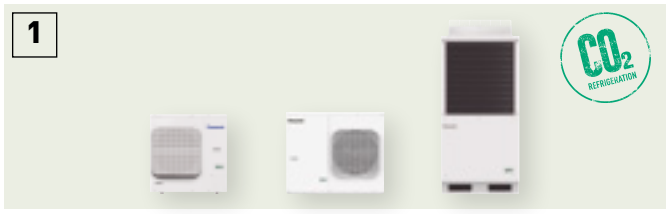
Restaurants, schools, fast food chains.





Cold room application integrated with PACi NX Series

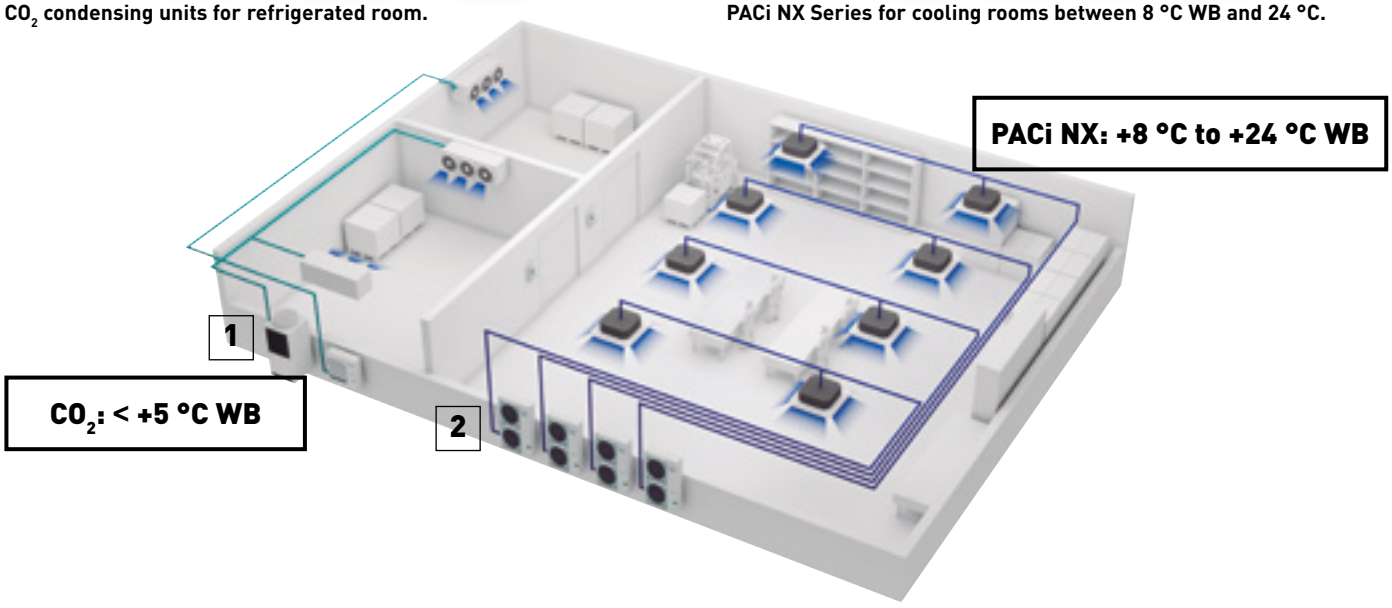
Panasonic offers various solutions for cold rooms by combining a wide range of products.
Integrated with PACi NX Series, it allows for flexible design and installation.



CO_2 condensing units for refrigerated room.



PACi NX Series for cooling rooms between 8 °C WB and 24 °C.



CO_2 transcritical condensing units CR Series

A new addition to the CR Series, the 7,5 kW MT Type offers a wide range of refrigeration systems, meeting the specific needs of small retail stores.



1 Superior efficiency with reliable quality

· Panasonic has combined the 2-stage compressor with the split cycle for increased efficiency
· High seasonal performance. SEPR: Maximum 3,83 in cooling, 1,92 in freezing[1)]
· High COP at high ambient temperature

1) 200VF5.

2 Flexible installation

· Set-points at medium or low temperature available depending on applications
· Compact unit
· Silent operation
· Long piping length: Maximum100 m[2)]
· High external static pressure[2)]
· Transfer pressure control for stable expansion valve control in showcases[2)]

2) 1000VF8/8A.

3 Heat recovery port as renewable energy

· Maximum 16,7 kW of heating for free
· Optional possibility to get subsidy (depending on location)
· Easy connection process

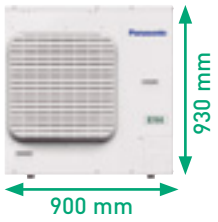
Superior cooling capacity at each evaporating temperature

CO_2 transcritical condensing units have a high cooling capacity at each set point. The CO_2 2-stage compressor developed by Panasonic is designed to compress CO_2 refrigerant twice; it reduces the load in operation by half (compared to 1-stage refrigerant compression) and delivers increased durability and reliability.

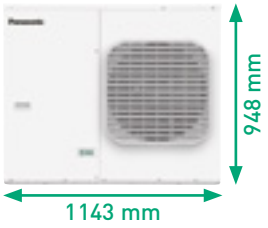
Units can be programmed to run at low and medium temperatures at initial set-up. These settings can then be modified by turning a simple and user friendly rotary switch to further enhance energy savings.

MT/LT TYPE
200VF5 - 4 kW / 2 kW

3,83
SEPR COOLING*
1,92
SEPR FREEZING*



MT TYPE
400VF8 - 7,5 kW



MT TYPE
1000VF8 - 15 kW

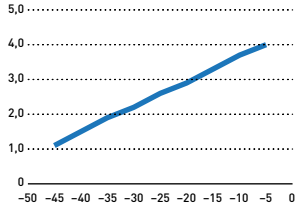


MT/LT TYPE
1000VF8A - 16 kW / 8 kW



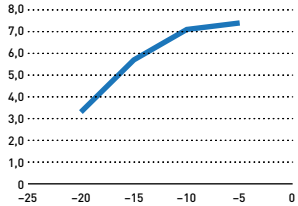
* SEPR values has been tested at 3-part laboratory.

OCU-CR200VF5(SL)
Cooling capacity (kW)



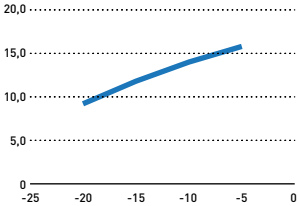
Ambient temperature: 32 °C, 230 V, refrigerant: R744, suction gas temperature: 18 °C.

OCU-CR400VF8(SL)
Cooling capacity (kW)



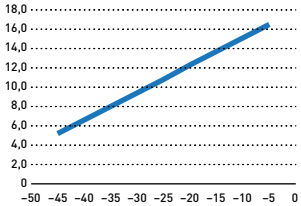
Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature:18 °C.

OCU-CR1000VF8(SL)
Cooling capacity (kW)



Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature:18 °C.

OCU-CR1000VF8A(SL)
Cooling capacity (kW)



Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature:18 °C.

Technology by Panasonic

Excellent quality control established by skilled factory team.
Reliability is our main target and therefore we offer compressor warranties of 5 years, and 2 year warranties on other components!



Reliable CO_2 technology by Panasonic

- Reliable quality: Made in Japan
- 10000 units sold and installed in 3700 retail operations such as convenience stores and supermarkets in Japan*
- Excellent quality control established by skilled factory team
- Panasonic offers 5 year warranties on compressors and 2 years on components
- The 5 year compressor warranty matches the products long lifespan

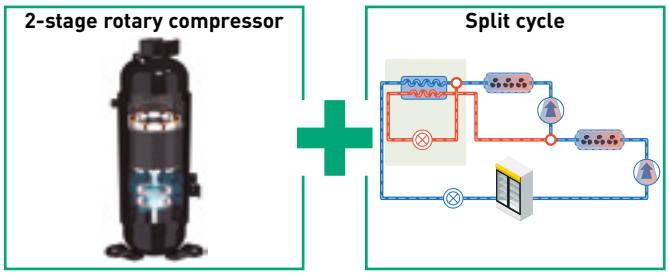
* As of the end of November 18.

Panasonic's combined technology of the 2-stage compressor with the split cycle

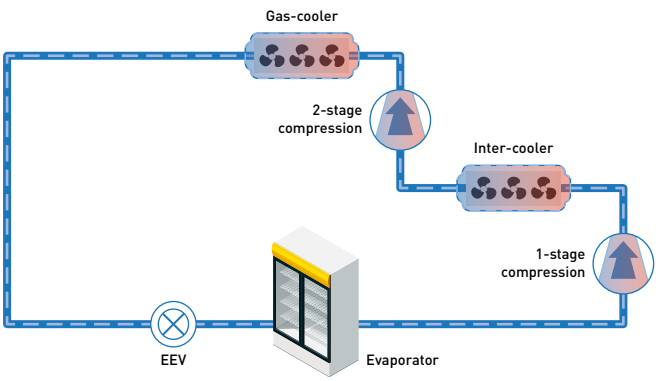
The video for detailed information is ready!

- Panasonic 2-stage rotary compressor delivering powerful performance for more than 20 years
- Split cycle* enhances cooling effect

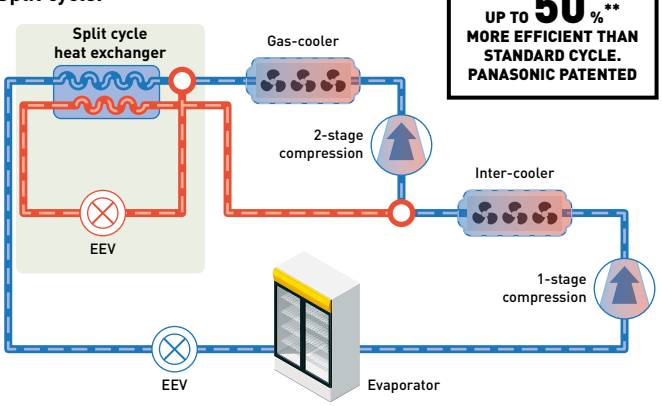
* Available for 200VF5 and 1000VF8A models.
** In the case that the standard cycle with 1-stage rotary compressor was compared.



Standard cycle.



Split cycle.



UP TO 50 % MORE EFFICIENT THAN STANDARD CYCLE. PANASONIC PATENTED**

Heat recovery function for heating

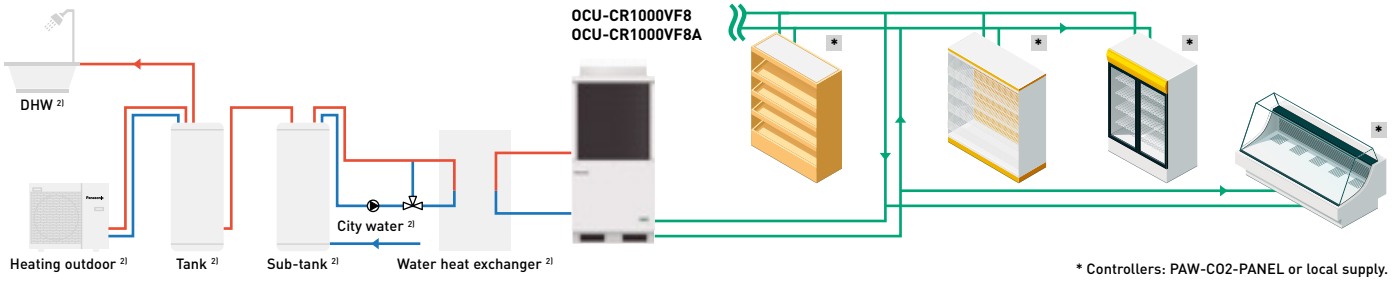
This function offers refrigeration combined with heating all in one system. The ground-breaking solution allows for increased opportunity to cut running costs by utilizing exhausted heat from refrigeration and transferring to the energy source for heating.

16,7 KW[1] OF HOT WATER FOR FREE

1) Under the condition: ambient temperature 32 °C, evaporation temperature -10 °C. 100 % Partial load.2) Local supply.

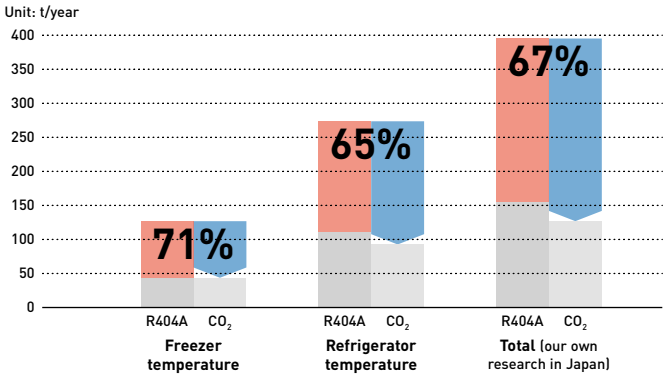
What is heat recovery function?

New solution example.
Heat recovery system can produce both heating and refrigeration.



* Controllers: PAW-CO2-PANEL or local supply.

Comparison of CO_2 emissions



ENERGY SAVING
25,4 % Freezer
16,2 % Refrigeration

CO_2 EMISSION
67 % Reduction

Direct influence [1] Indirect influence [2]

1) Direct influence presents the effect of refrigerant leakage comparing R744 (CO_2) with R404A.
2) Indirect influence presents CO_2 emissions linked to power consumption of CO_2 unit and conventional units.

By Panasonic research in Japan. Comparing 6 shops average for R404A inverter multi condensing unit.

Saving installation time with Plug & Play kit

To ensure a quick and easy installation, Panasonic has designed a one box solution that includes the condensing unit, a panel pre-programmed controller, electronic expansion and all required sensors in addition to providing simple instructions.



Plug & Play kit



Electronic expansion for superheat control.



Intelligent controller programmed specially for storage rooms and showcases.

Model code: PAW-CO2-PANEL

Panasonic condensing units with natural refrigerant:
The environmentally friendly and reliable solution for convenience stores, supermarket, service stations and cold rooms.

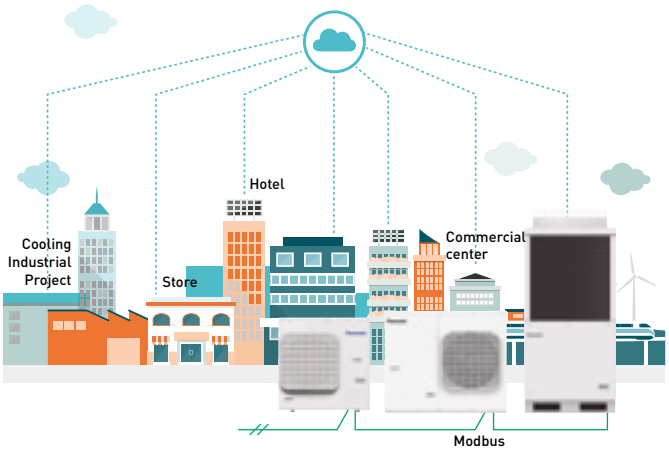
Modbus compatibility with monitoring system

Panasonic CO_2 condensing unit CR Series can be supervised by major monitoring system such as CAREL, Eliwell, Danfoss and RDM. Monitoring system ensures the recording, monitoring and reporting of temperature conditions etc... of entire CO_2 condensing units system at shops.

Monitoring system

CAREL	Danfoss	eliwell by Schneider Electric	Resource Data Management
Standard boss & boss-mini	AK-SM Series*	TelevisGo	DMTOUCH

* M2M1-10 gateway (Model code: FDS021) is required in addition to the monitoring system.
M2M1-10 gateway is a local supply.



Range of CO_2 condensing units CR Series

Outdoor units	MT	4,0 kW	7,0 kW	15,0 kW	16,0 kW
	LT	2,0 kW			8,0 kW
4 kW MT / LT (200VF5)					
		OCU-CR200VF5 OCU-CR200VF5SL			
7,5 kW MT (400VF8)					
			OCU-CR400VF8 OCU-CR400VF8SL		
15 kW MT (1000VF8)					
				OCU-CR1000VF8 OCU-CR1000VF8SL	
16 kW MT / LT (1000VF8A)					
					OCU-CR1000VF8A OCU-CR1000VF8ASL
PAW-CO2-PANEL					

CO_2 Condensing units






Standard model			OCU-CR200VF5		OCU-CR400VF8	OCU-CR1000VF8	OCU-CR1000VF8A	
Anti corrosion coating model			OCU-CR200VF5SL		OCU-CR400VF8SL	OCU-CR1000VF8SL	OCU-CR1000VF8ASL	
Type (MT: medium temp. LT: low temp.)			MT (4 kW) / LT (2 kW)		MT (7,5 kW)	MT (15 kW)	MT(16 kW) / LT (8 kW)	
Power supply	Voltage	V	220/230/240		380/400/415	380/400/415	380/400/415	
	Phase		Single phase		Three phase	Three phase	Three phase	
	Frequency	Hz	50		50	50	50	
Cooling capacity at ET -10 °C AT 32 °C		kW	3,70		7,10	14,00	15,10	
Cooling capacity at ET -35 °C AT 32 °C		kW	1,80		—	—	8,00	
Evaporator connection			Multiple		Multiple	Multiple	Multiple	
Evaporation temperature	Min ~ Max	°C	-45 ~ -5		-20 ~ -5	-20 ~ -5	-45 ~ -5	
Ambient temperature	Min ~ Max	°C	-15 ~ +43		-15 ~ +43	-15 ~ +43	-15 ~ +43	
Refrigerant			R744		R744	R744	R744	
Design pressure liquid line		Mpa	12		8	8	8	
Design pressure suction line		Mpa	8		8	8	8	
User system external alarm. Digital input. Non-voltage contact			Yes		Yes	Yes	Yes	
Liquid tube electromagnetic valve		Vac	220/230/240		220 / 230 / 240	220/230/240	220/230/240	
Showcase operation ON/OFF signal. Digital input. Non-voltage contact			Yes		Yes	Yes	Yes	
Modbus communication line (RS485)		Ports	2		2	2	2	
Compressor type			2- stage rotary		2- stage rotary	2- stage rotary	2- stage rotary	
Dimension	H x W x D	mm	930 x 900 x 437		948 x 1143 x 609	1941 x 890 x 890	1941 x 890 x 890	
Net weight		Kg	70		136	293	320	
Pipe diameter	Suction pipe	Inch (mm)	3/8 (9,52)		1/2 (12,70)	3/4 (19,05)	3/4 (19,05)	
	Liquid pipe	Inch (mm)	1/4 (6,35)		3/8 (9,52)	5/8 (15,88)	5/8 (15,88)	
Length of connection piping		m	25		50	100 [1]	100 [1]	
Standard performance	Ambient temperature	°C	32		32	32	32	
	Evaporating temperature	°C	-10	-35	-10	-10	-10	-35
	Cooling capacity	kW	3,70	1,80	7,10	14,00	15,10	8,00
	Power consumption	kW	1,79	1,65	4,00	8,20	8,20	7,57
	Nominal load ampere	A	7,94	7,26	6,14	12,60	12,60	11,60
	Sound pressure	dB(A)	35,5 [2]	35,5 [2]	33 [3]	36,0 [4]	36,0 [4]	36,0 [4]
PED		CAT	I		II	II	II	
Air flow		m³/min	54		59	220	220	
External static pressure		Pa	17		50	58	58	
Heat recovery port			—		Yes	—	Yes	
Necessary accessories								
Drier filter liquid line, diameter 6,35 mm		**D-152T**	Yes (included: delivered with the unit)		Yes (included: delivered with the unit)	—	—	
Drier filter liquid line, diameter 15,88 mm		**D-155T**	—		—	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	
Suction filter, diameter 19,05 mm (outer diameter welding)		**S-008T**	—		Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	

Accessories	
PAW-CO2-PANEL	Room and superheat control including both panel + expansion valve
SPK-TU125	Tube connector adaptor for vacuum and service

Spare parts for service and maintenance	
80203517115003	Lubrication oil PZ-68S (4 L)
80203517117000	Lubrication oil PZ-68S (0,5 L)
80203513180000	Filter dryer D-152T (type CO-082-S)
80203513179000	Filter dryer D-155T (type CO-085-S)

1) PZ-68S (refrigeration oil) must be added if >50 m. 2) ET-10 °C, 65 S-1, 10 m from product. 3) ET-10 °C, 80 S-1, 10 m from product. 4) ET -10 °C, 60 S-1, 10 m from product.



Drier filter liquid line, diameter 6,35 mm.
D-152T



Drier filter liquid line, diameter 15,88 mm.
D-155T



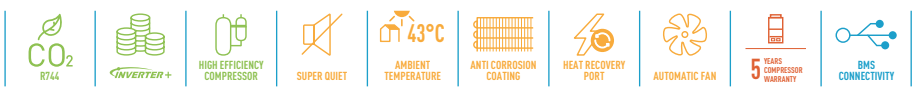
Suction filter, diameter 19,05 mm (outer diameter welding).
S-008T



Room and superheat control including both panel + expansion valve.
PAW-CO2-PANEL



Tube connector adaptor for vacuum and service.
SPK-TU125



Panasonic PACi NX Elite can cool rooms down to 8 °C

Panasonic PACi NX Elite offers a high quality and efficient solution for high temperature refrigeration applications for facilities such as wine cellars, food processing facilities and supermarkets.

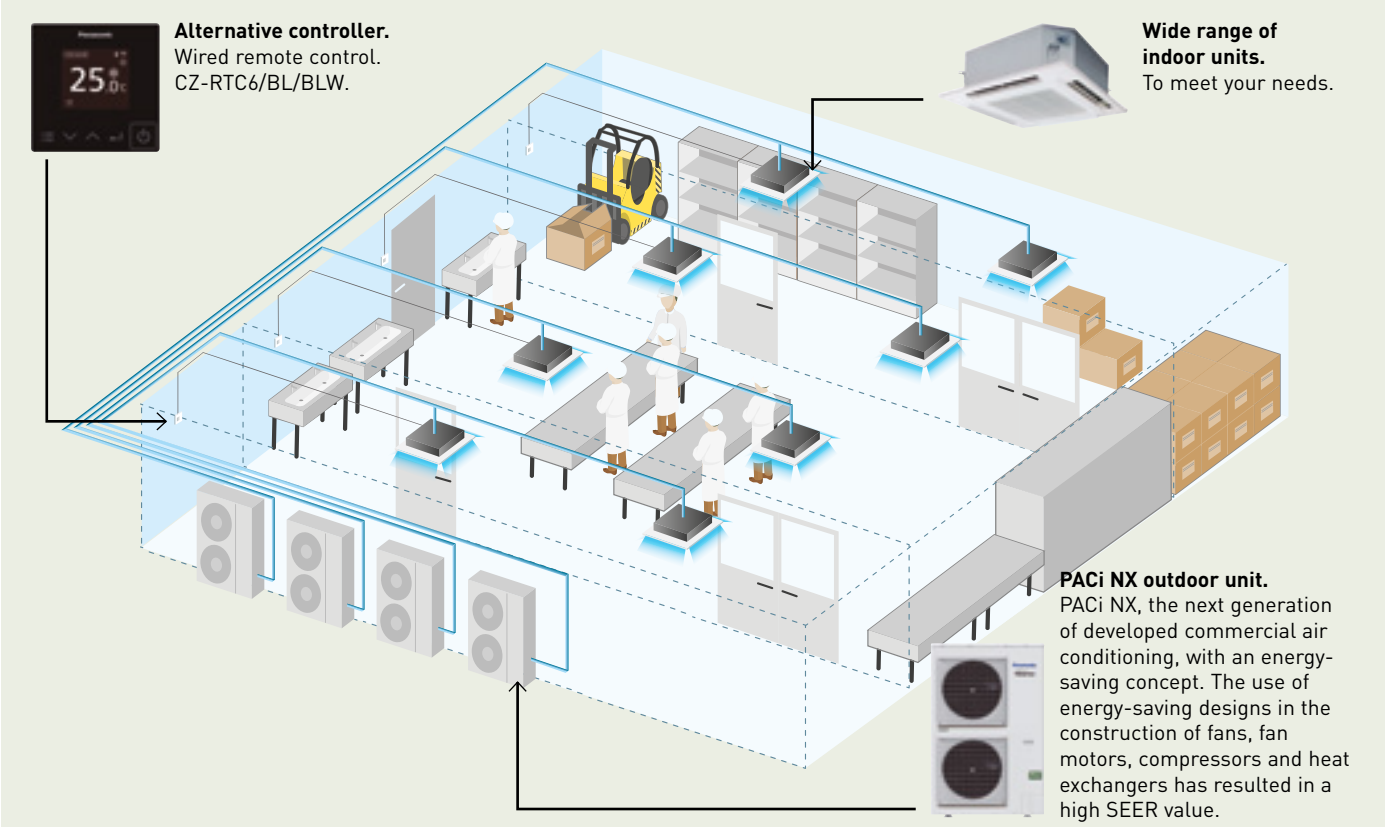
COOLING ROOMS BETWEEN 8 °C WB AND 24 °C WB



Solutions for cold rooms. Set the room temperature to 8 °C

Complete range from 2,1 to 23,2 kW. This unique solution is perfect for:
Wine cellars, ice cream factories, flower shops, supermarkets, grain stores, food storage, food processing, food distribution, lunchrooms, vegetable processing...

Just like all the indoor units in the PACi NX range, these units are compatible with all Panasonic control and monitoring solutions, which can be scaled from controlling a single zone to monitoring geographically distributed facilities.



- Flexibility with different type of indoors
- Benefits of hydroxyl radicals
- Out of the box solution from Panasonic. Outdoor, indoor, controller comes as package
- Provides wide scale of control options (individual, central, cloud)
- Redundancy for 2 systems with CONEX controller range and up to 3 systems with PAW-PACR3 optional redundancy controller



Possible outdoor / indoor units combinations

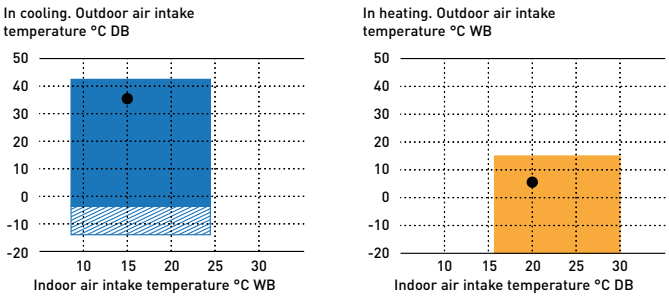
	Single						Twin		
Cooling capacity	**3,5 kW**	**4,9 kW**	**5,8 kW**	**6,9 kW**	**9,3 kW**	**11,6 kW**	**13,6 kW**	**18,5 kW**	**23,2 kW**
Outdoor unit	U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH3E5/8	U-100PZH3E5/8	U-125PZH3E5/8	U-140PZH3E5/8	U-200PZH2E8	U-250PZH2E8
Wall-mounted	S-6010PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E S-6010PK3E	S-6010PK3E S-6010PK3E	S-6010PK3E S-6010PK3E	S-6010PK3E + S-6010PK3E	—	—
4 way 90x90 cassette	S-6071PU3E	S-6071PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E + S-1014PU3E	S-1014PU3E + S-1014PU3E	S-1014PU3E + S-1014PU3E
Ceiling	S-6071PT3E	S-6071PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E + S-1014PT3E	S-1014PT3E + S-1014PT3E	S-1014PT3E + S-1014PT3E
Adaptive ducted unit	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E + S-1014PF3E	S-1014PF3E + S-1014PF3E	S-1014PF3E + S-1014PF3E

Wine cellars and special low temperature rooms

One of the main features of the PACi NX series is the possibility of adjusting the product for special applications, not just for regular heating and cooling applications. The purpose of this product information is to explain in detail these special applications that need a cooling operation to maintain the room temperature at +8 ~ +24 °C WB (or +10 ~ +30 °C DB). In order to do this in terms of enthalpy, the indoor unit needs to be overdimensioned and certain parameters need to be adjustable.

Temperature range for wine cellar		
	Indoor	Outdoor
Cooling operation	+8 ~ +24 °C WB	-5 (-15) ~ 43 °C DB

Temperature range – temperature range for wine cellar.



Only allowed after installation of wind and snow vents.

Area where cooling and heating capacity is established for this purpose.

Bringing nature's balance indoors

nanoe™ X, technology with the benefits of hydroxyl radicals.

nanoe™ X: improving protection 24/7



Acts to clean the work area, such as meat or fish handling in hotel kitchens, food handling in industrial processes, laboratories, wine cellars, etc. So that the indoor environment can be a cleaner and pleasant place to be all day long and keep the processes in better bacterial conditions.
nanoe™ X works together with the cooling function when during the day but can work independently when the area is not occupied.
Give the system the strength to increase the protection of persons, air, colds stuffs and working surfaces with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.



Cleans the air even when there is no work activity.
Leave the nanoe™ X mode ON to inhibit certain pollutants and deodorize before start the work activity again.

Improves your environment and better protects the products handled when you are or not at work.
Enjoy a cleaner comfortable space both when working indoors and simply when it comes to better protecting products in the cold room.

Capacity to inhibit pollutants



Bacteria and viruses



Mould



Dimensions

Aquarea

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Chiller

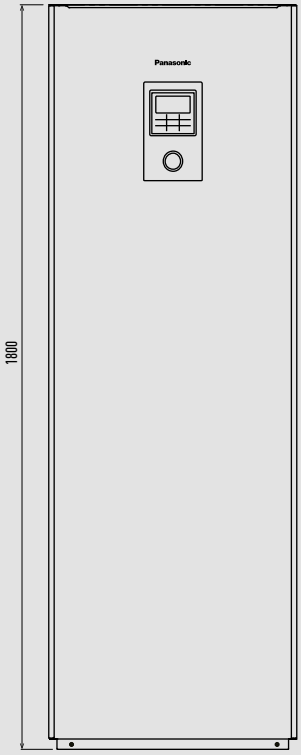
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Refrigeration

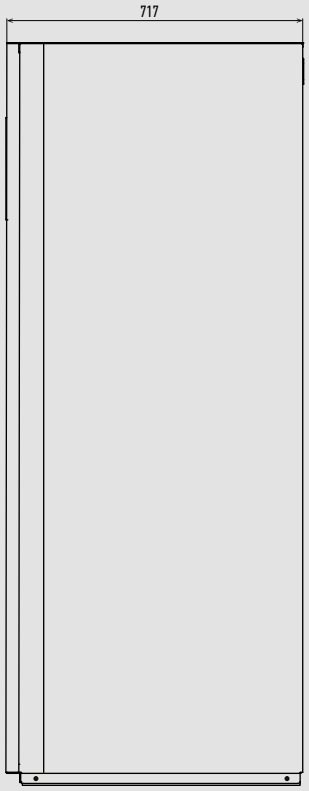
CR Series 4,0 kW	> 543
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Aquarea All in One H Generation

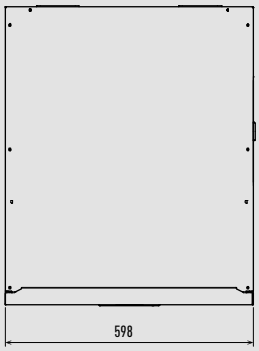
Front view



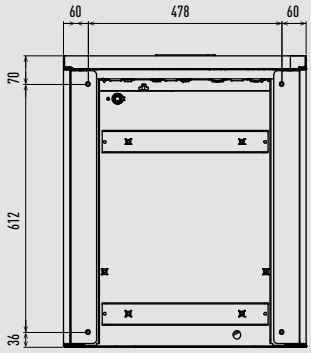
Side view



Top view



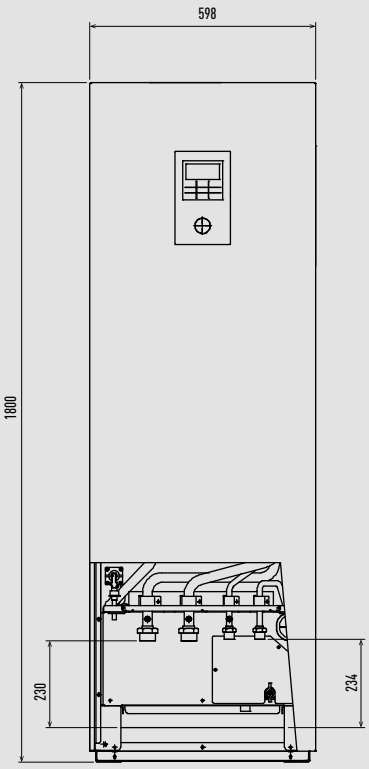
Bottom view



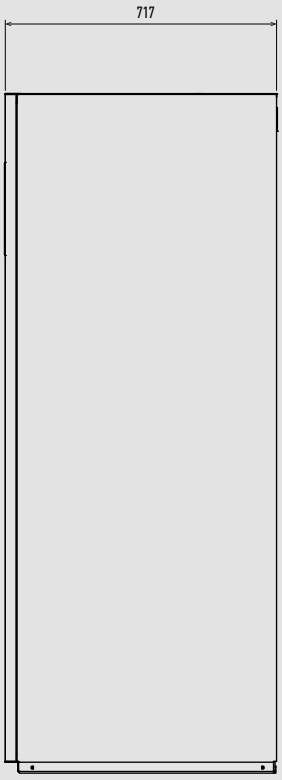
Unit: mm

Aquarea All in One J Generation

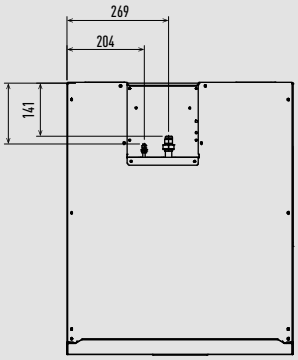
Front view



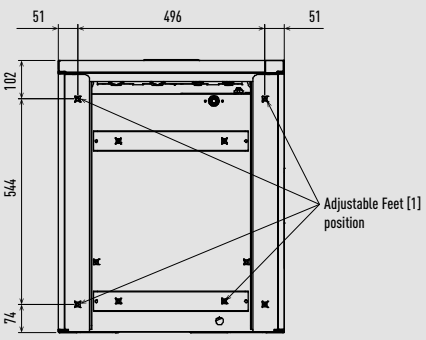
Side view



Top view



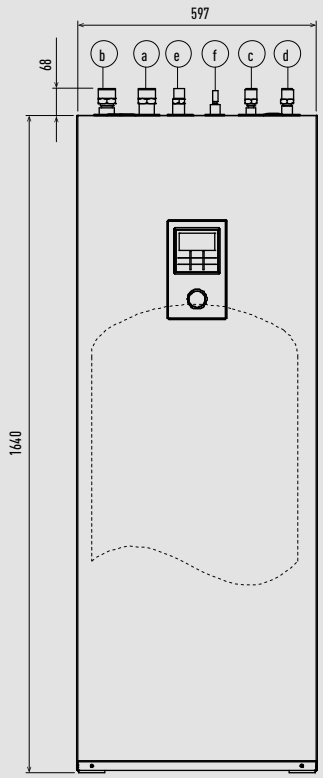
Bottom view



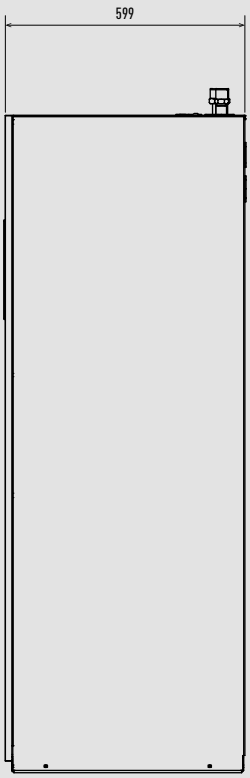
Unit: mm

Aquarea All in One Compact

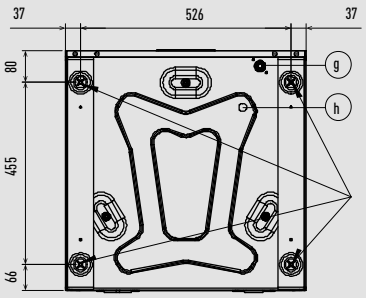
Front view



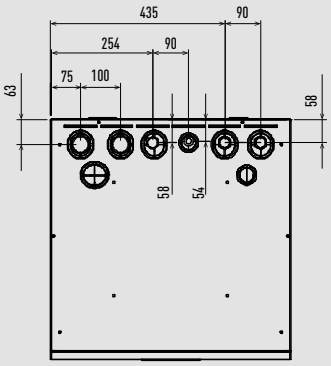
Side view



Bottom view



Top view

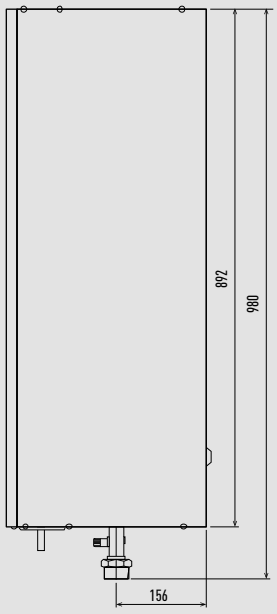


Tube connector	Function	Connector size
a	Water inlet (from space heating/cooling)	R 1¼"
b	Water outlet (to space heating/cooling)	R 1¼"
c	Cold water inlet (domestic hot water tank)	R ¾"
d	Hot water outlet (domestic hot water tank)	R ¾"
e	Refrigerant gas	7/8-14UNF
f	Refrigerant liquid	7/16-20UNF
g	Domestic hot water tank discharge (drain tap) type: ball valve	Rc 1/2"
h	Drain water hole	---

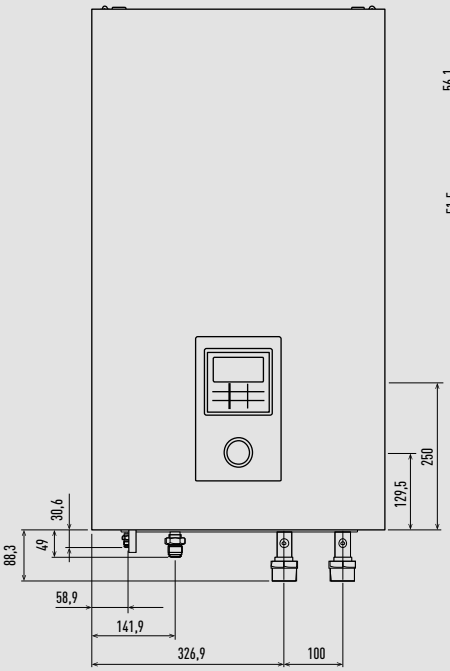
Unit: mm

Aquarea hydraulic module J and H Generation

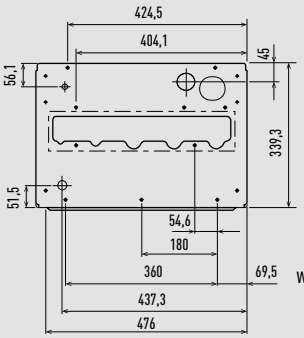
Side view



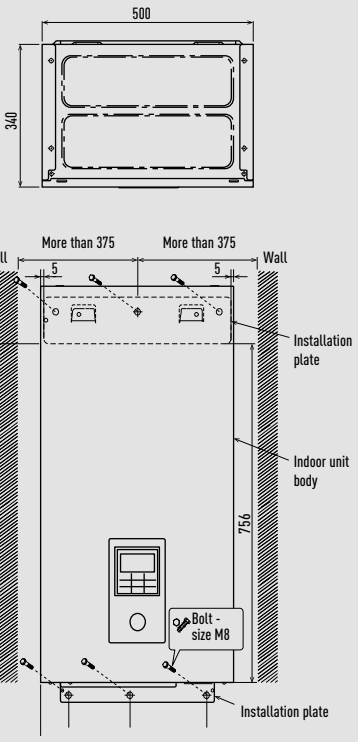
Front view



Bottom view



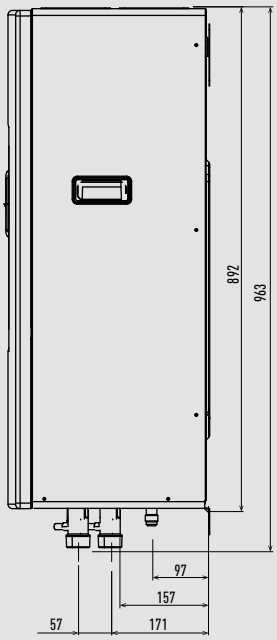
Top view



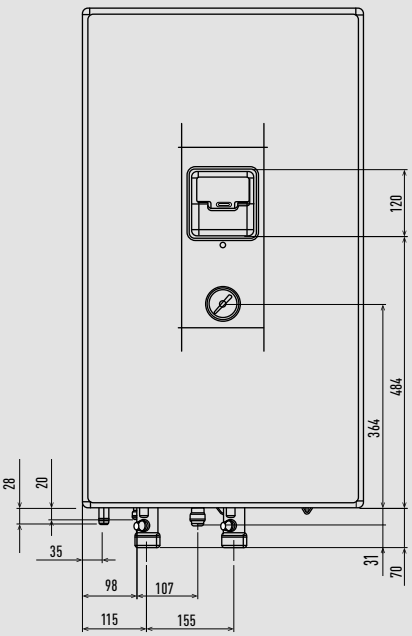
Unit: mm

Aquarea hydraulic module F Generation

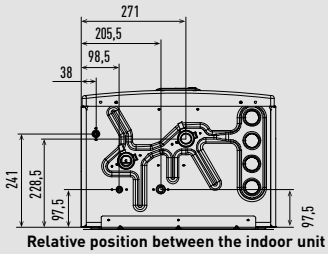
Side view



Front view

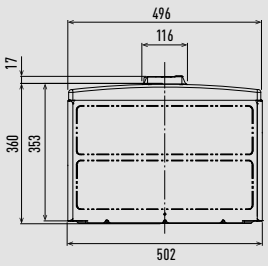


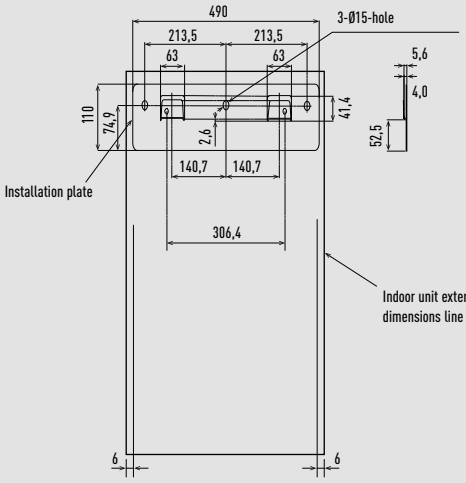
Bottom view



Relative position between the indoor unit and the installation plate front view.

Top view

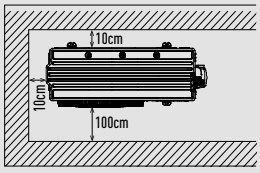




Unit: mm

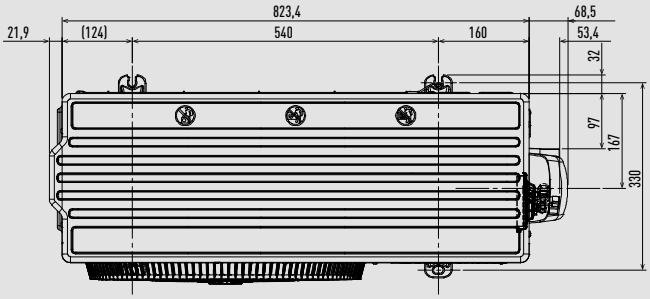
Aquarea High Performance Bi-bloc outdoor unit 3 and 5kW

Space necessary for installation

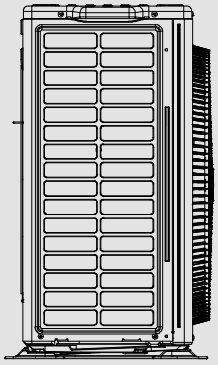


Anchor bolt pitch 355 x 260

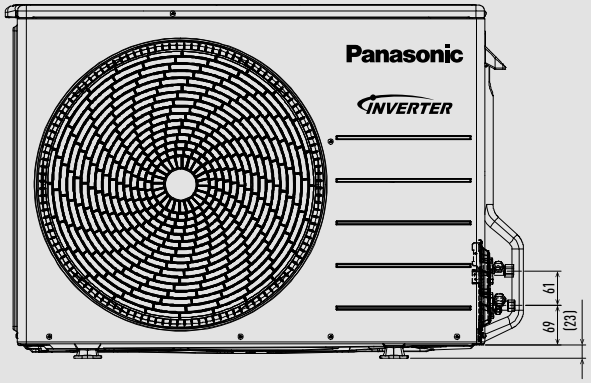
Top view



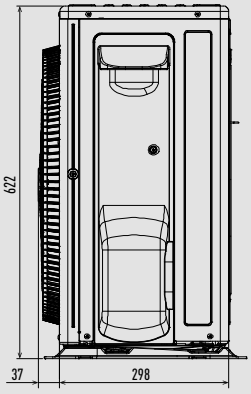
Side view



Front view

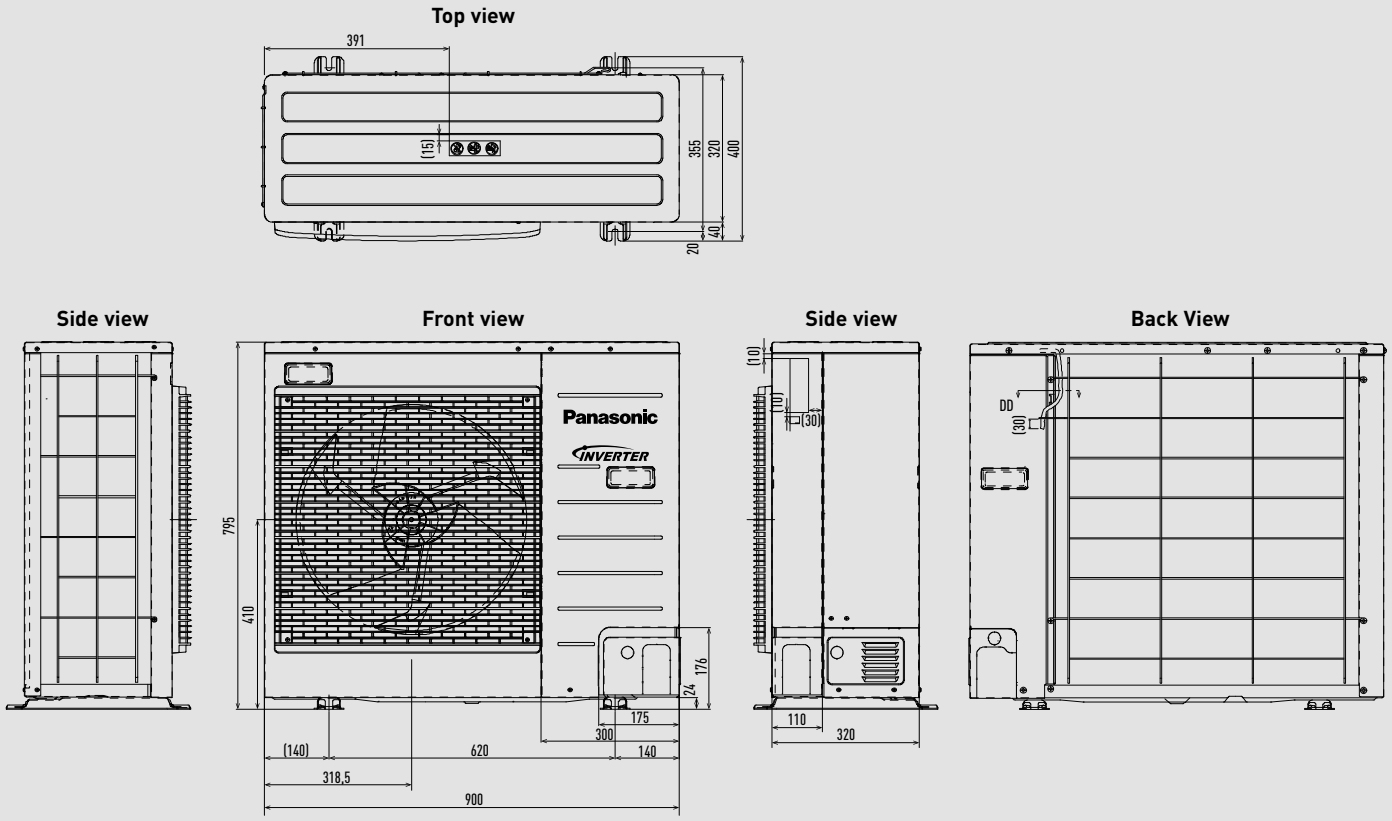


Side view



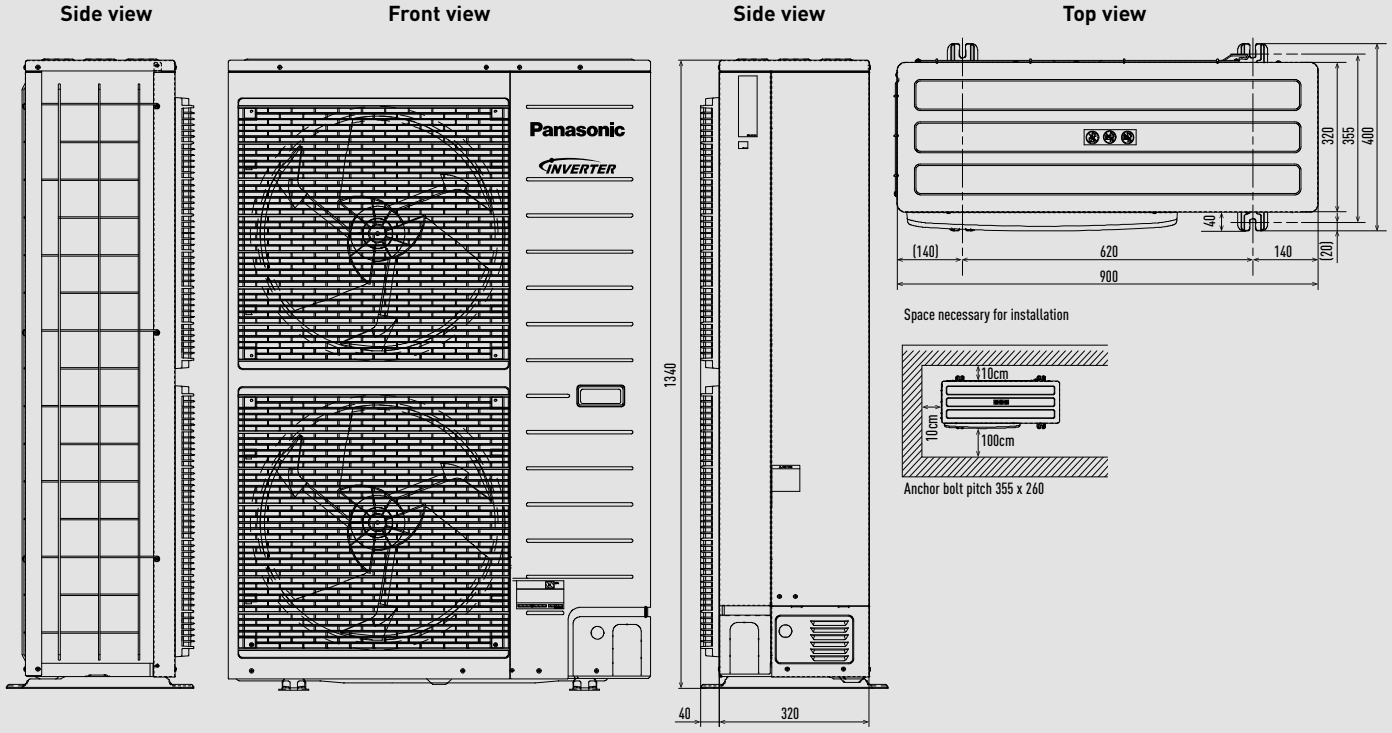
Unit: mm

Aquarea High Performance Bi-bloc outdoor unit 7 and 9kW



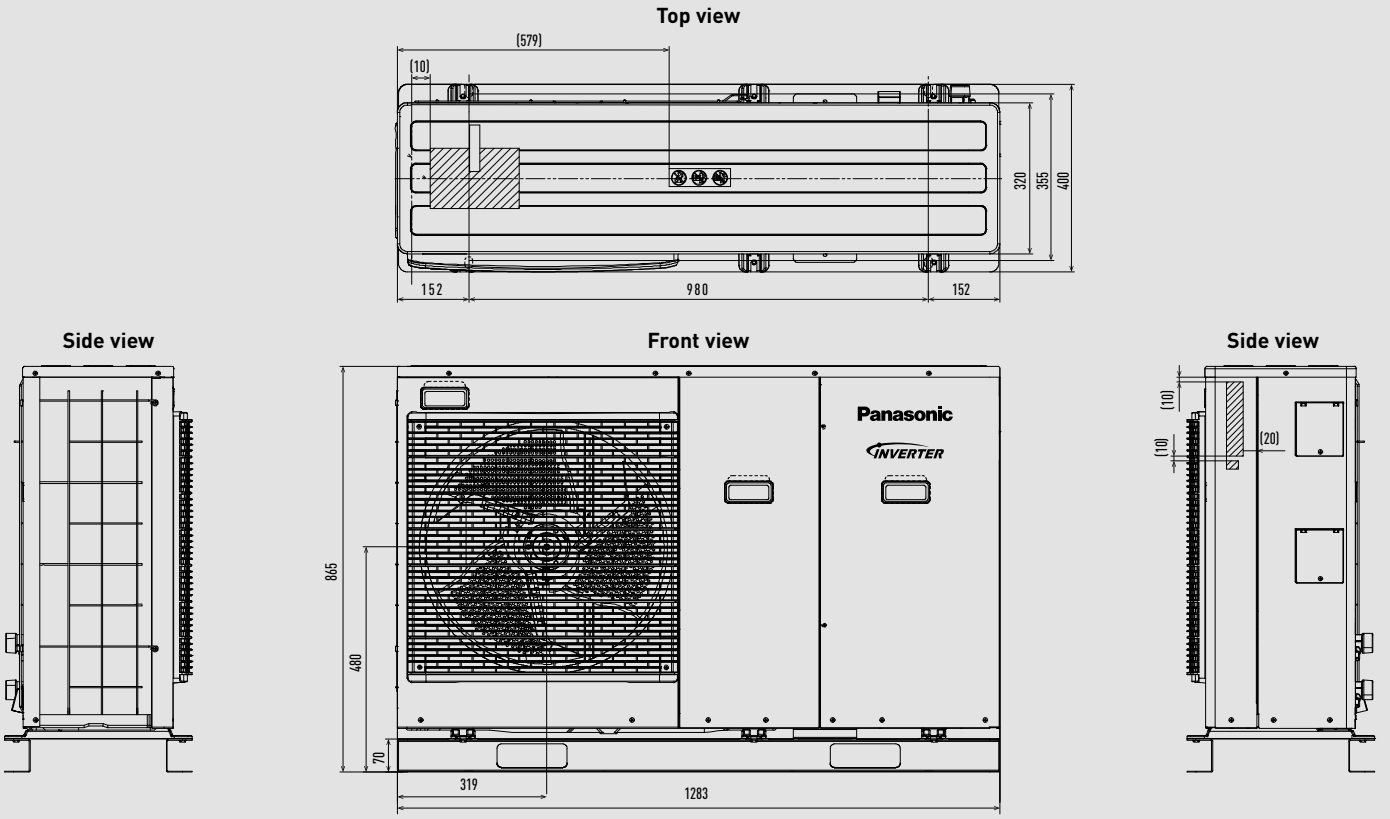
Unit: mm

Aquarea High Performance, T-CAP and HT Bi-bloc outdoor unit from 9 to 16kW



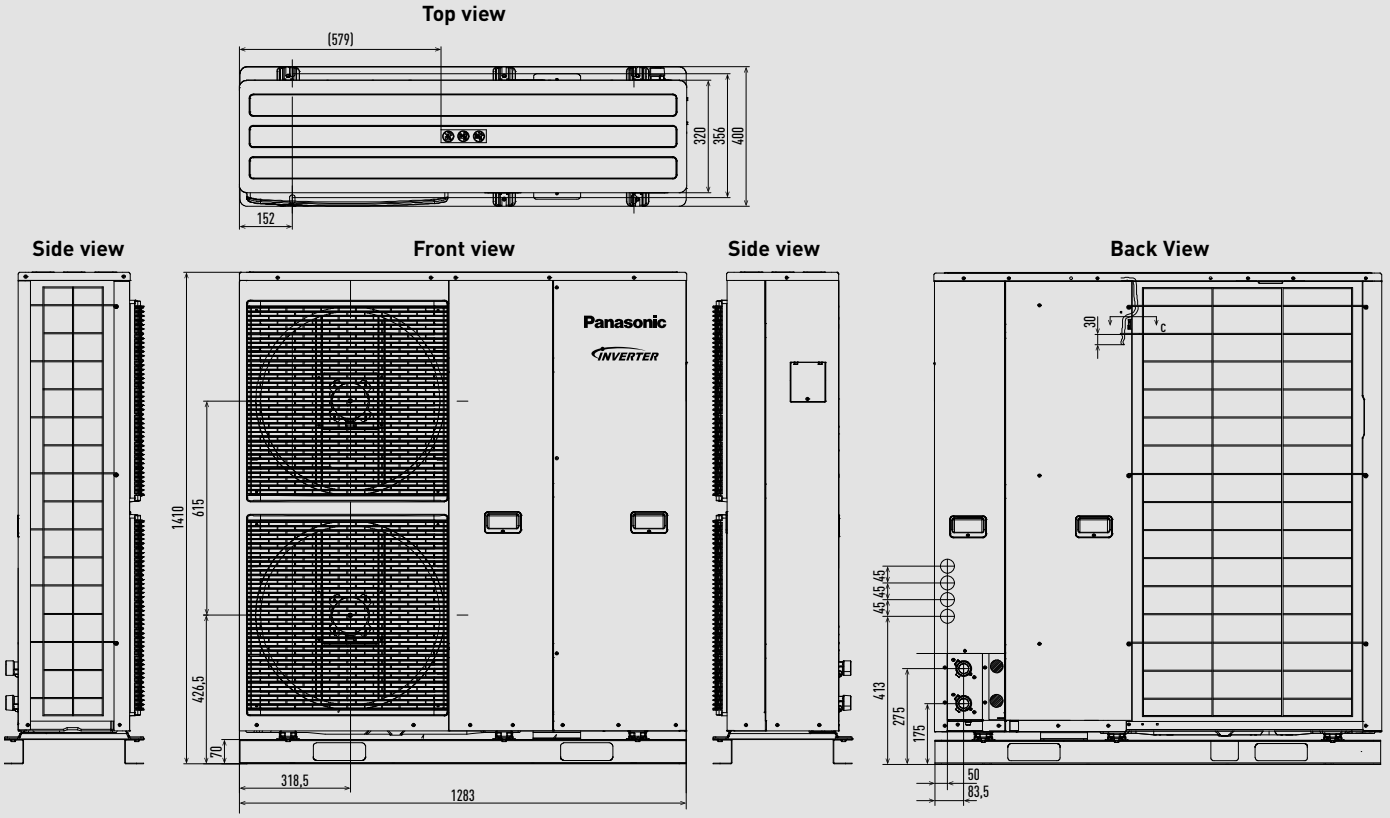
Unit: mm

Aquarea High Performance Mono-bloc outdoor unit J and H Generation from 5 to 9kW



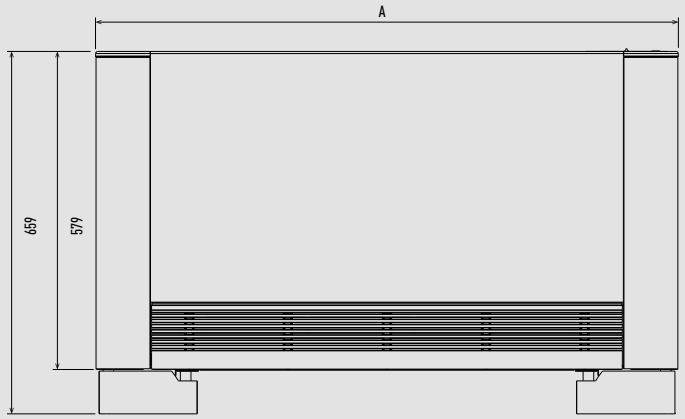
Unit: mm

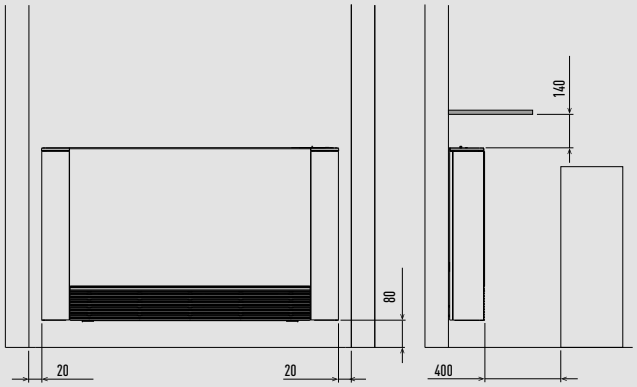
Aquarea High Performance and T-CAP Bi-bloc Super Quiet outdoor unit and Mono-bloc outdoor unit from 9 to 16kW



Unit: mm

Smart fan coils

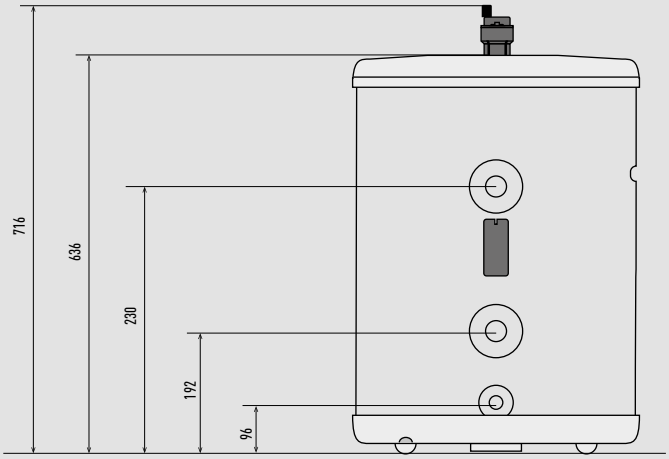


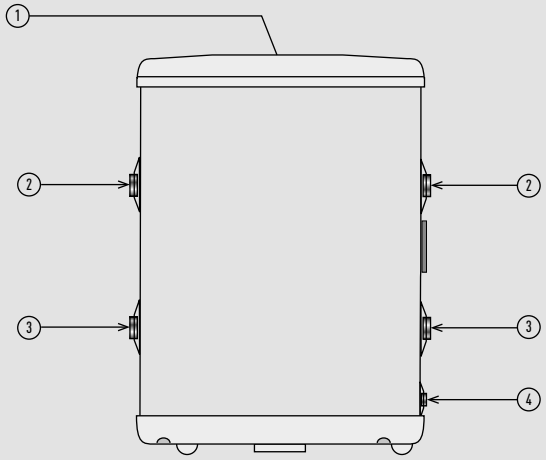


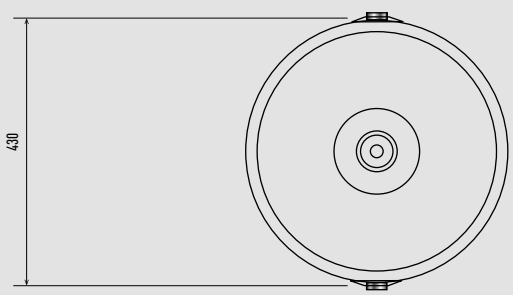
	PAW-AAIR-200-2	PAW-AAIR-700-2	PAW-AAIR-900-2
A	735	935	1135

Unit: mm

Buffer tank - PAW-BTANK50L-2





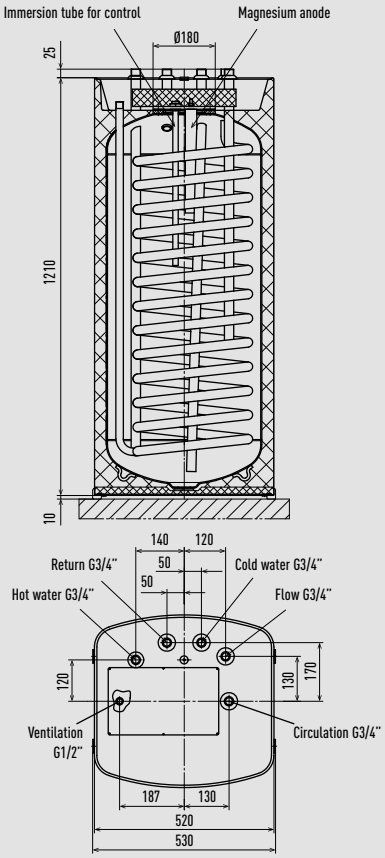


	Dimension	Connection description
1	1/2" BSPP female	Venting
2	1" BSPP female	Flow/ret. connection upper
3	1" BSPP female	Flow/ret. connection lower
4	1/4" BSPP female	Drain

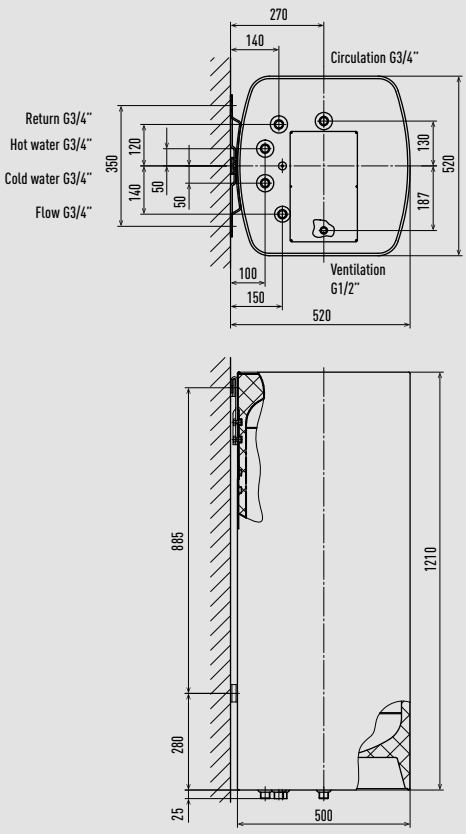
Unit: mm

Enamelled tank - PAW-TA15C1E5STD

Connection point for vertical assembly

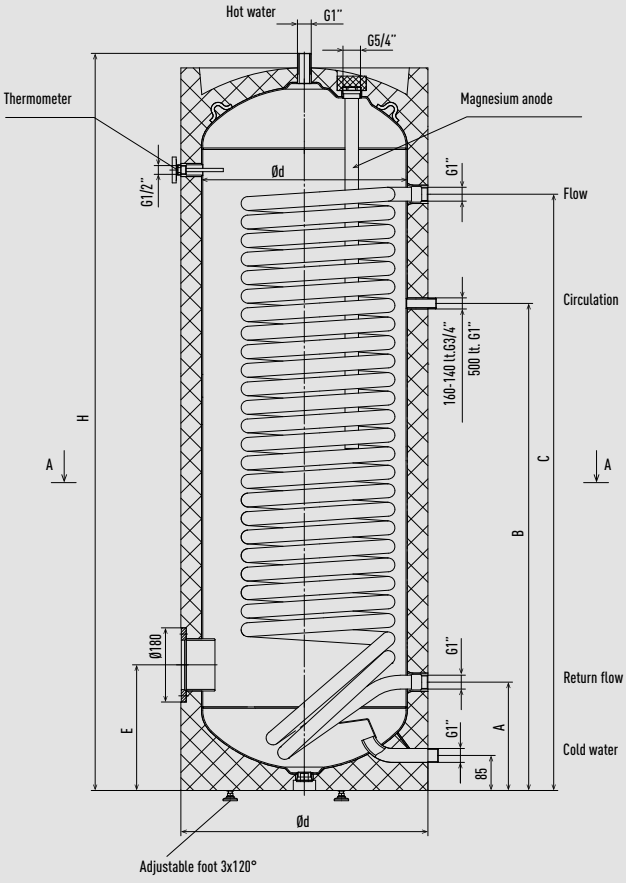


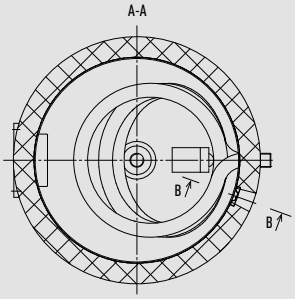
Connection point for hanging assembly

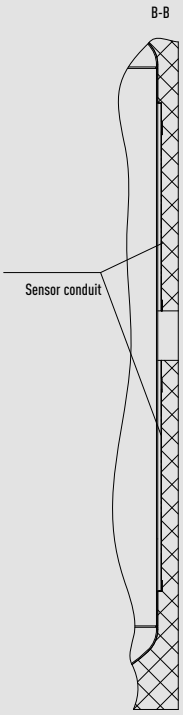


Unit: mm

Enamelled tanks - PAW-TA20C1E5STD / PAW-TA30C1E5STD / PAW-TA40C1E5STD



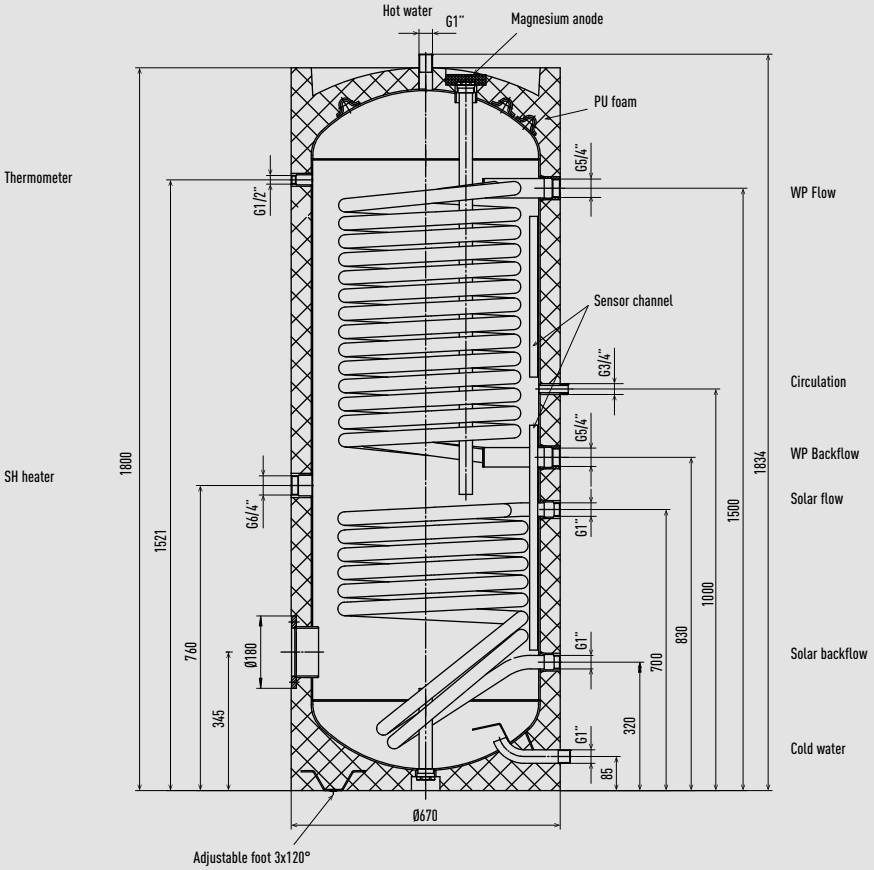




	Ød	H	A	B	C	E
PAW-TA20C1E5STD	500	1340	263	803	998	305
PAW-TA30C1E5STD	500	1797	263	983	1313	305
PAW-TA40C1E5STD	570	1832	320	1000	1460	345

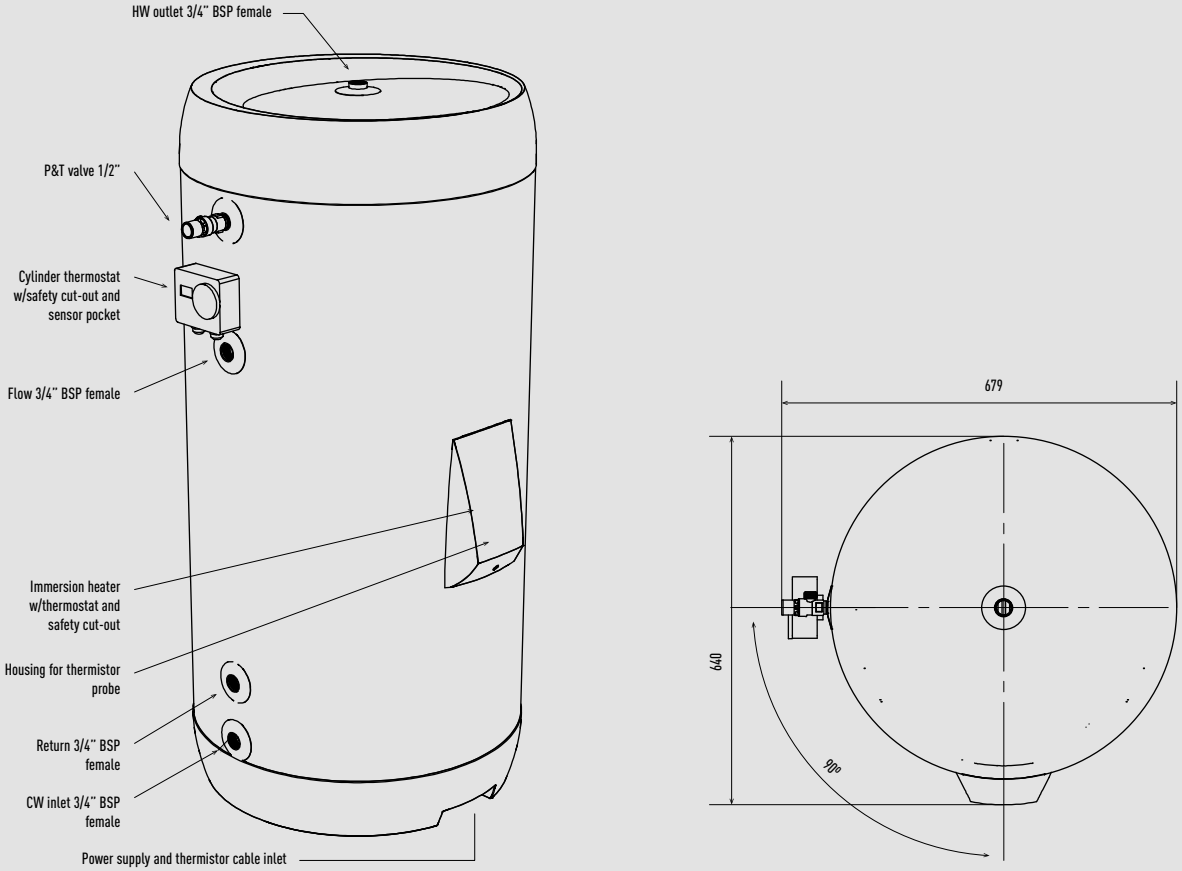
Unit: mm

Enamelled tank - PAW-TA30C2E5STD



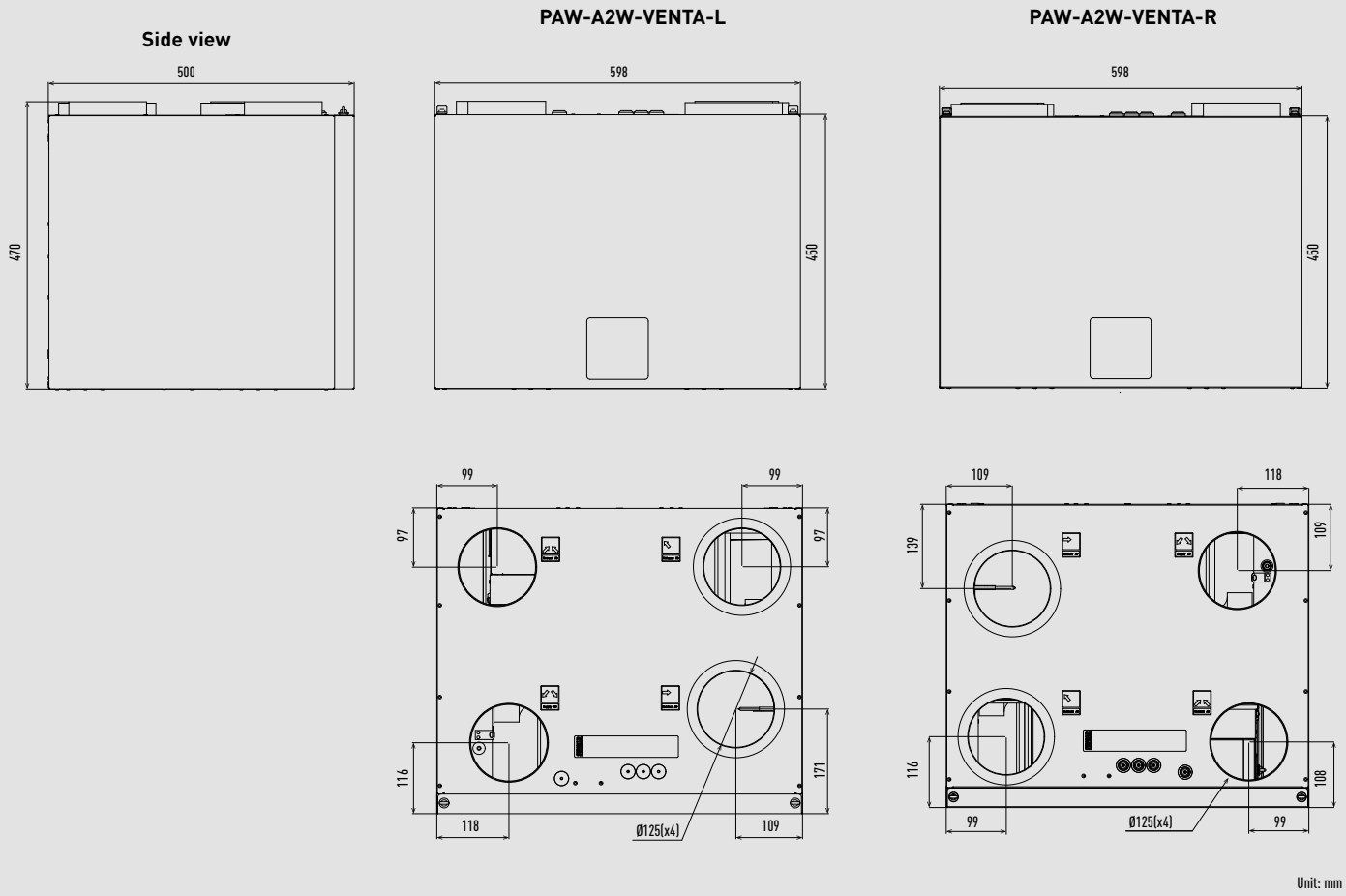
Unit: mm

Stainless steel tanks - PAW-TD20C1E5 / PAW-TD30C1E5



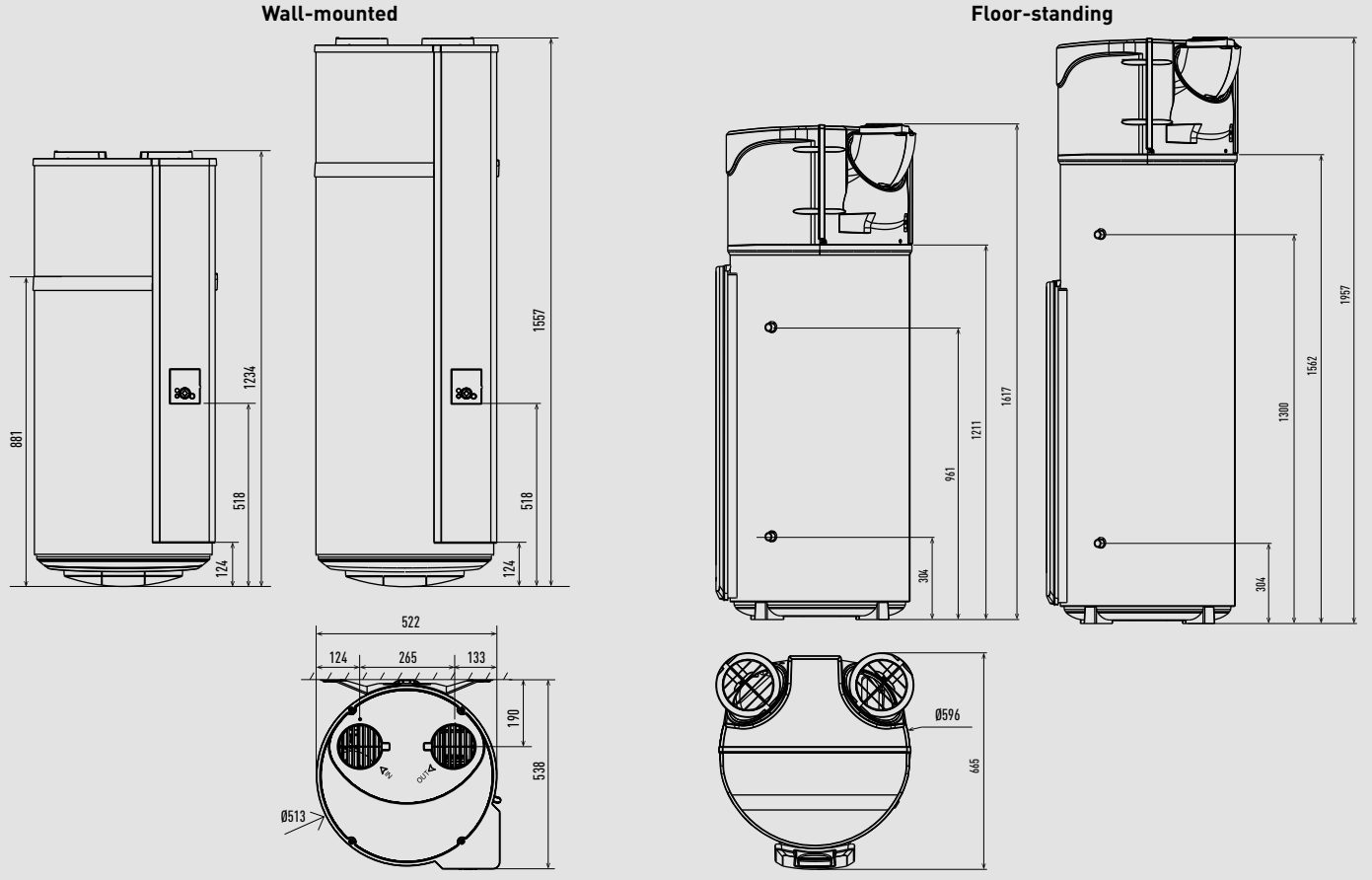
Unit: mm

Heat recovery ventilation unit



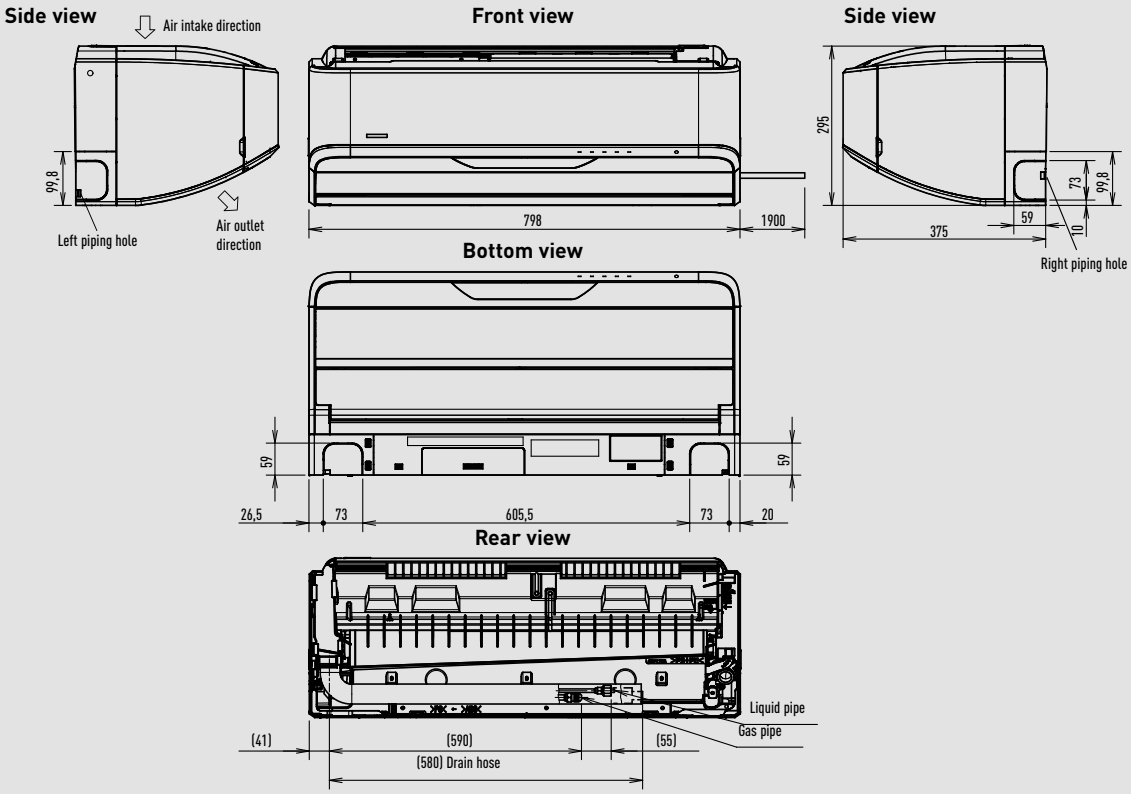
Unit: mm

DHW Stand Alone

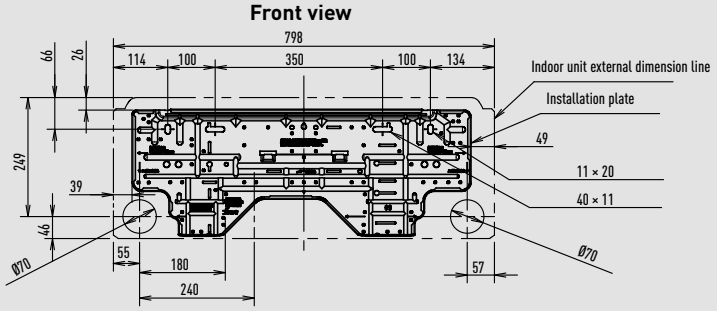


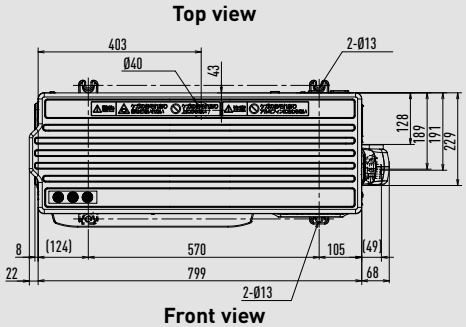
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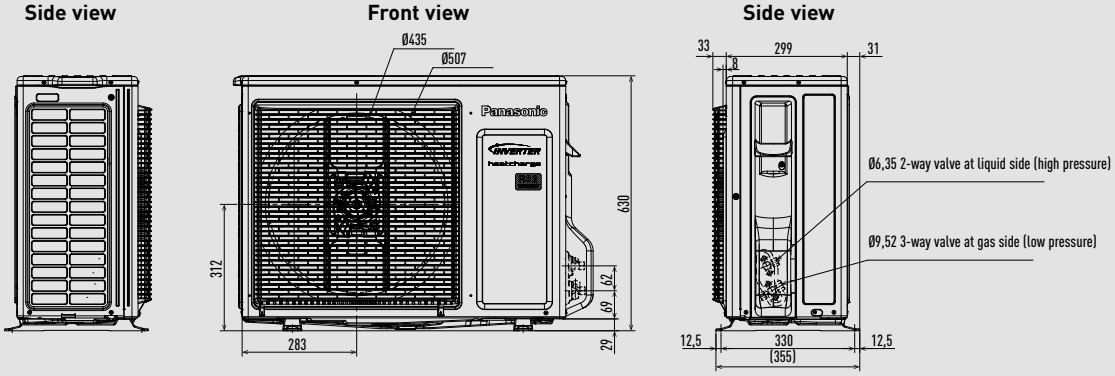
Wall-mounted Heatcharge VZ



Relative position between the indoor unit and the installation plate



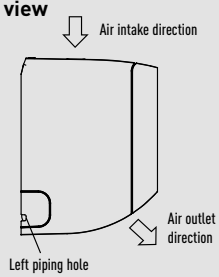




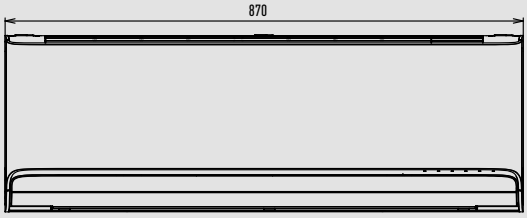
Unit: mm

Wall-mounted Etherea (from 1,6 to 4,2 kW)

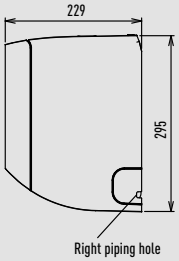
Side view



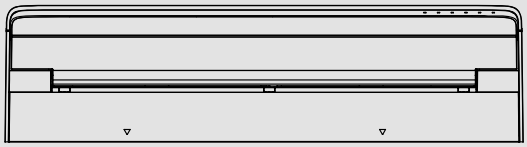
Front view



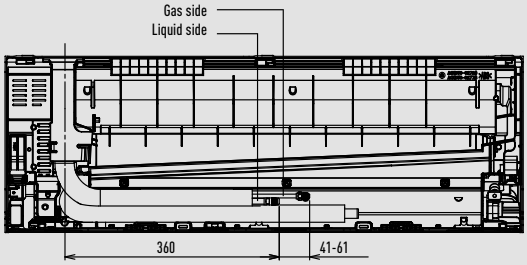
Side view



Bottom view

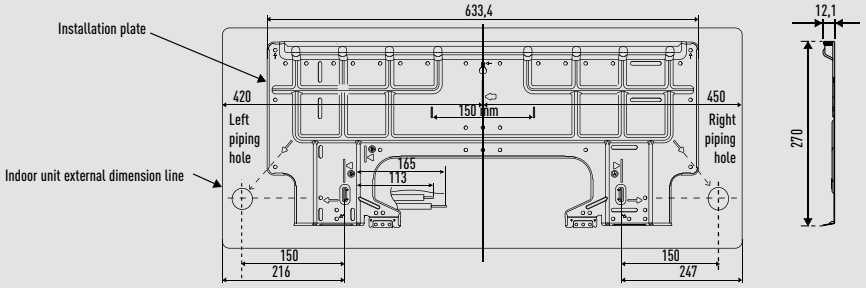


Rear view

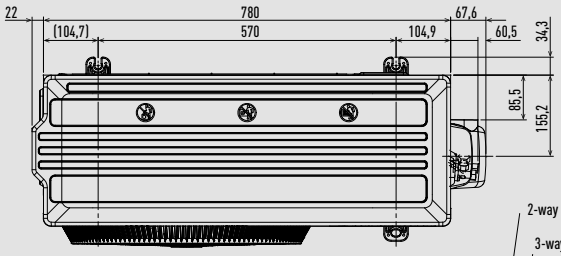


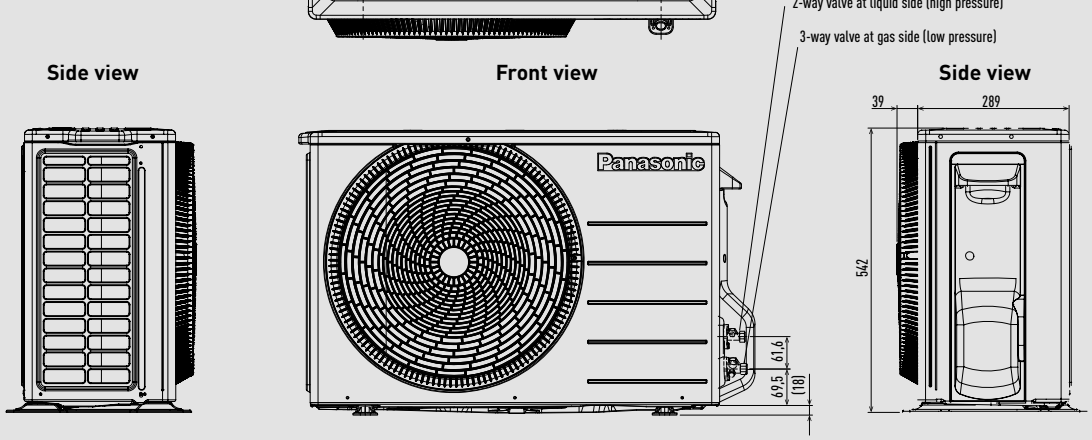
Relative position between the indoor unit and the installation plate

Front view



Top view

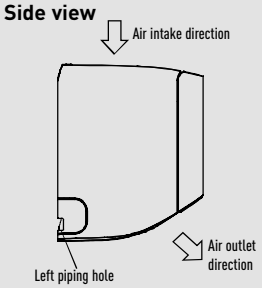




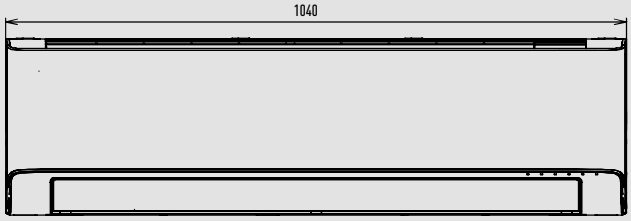
Unit: mm

Wall-mounted Etherea (5,0 and 7,1 kW)

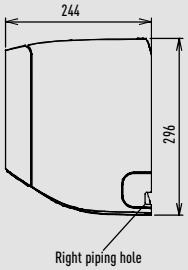
Side view



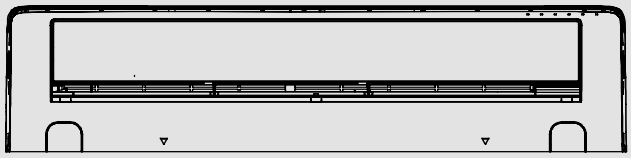
Front view



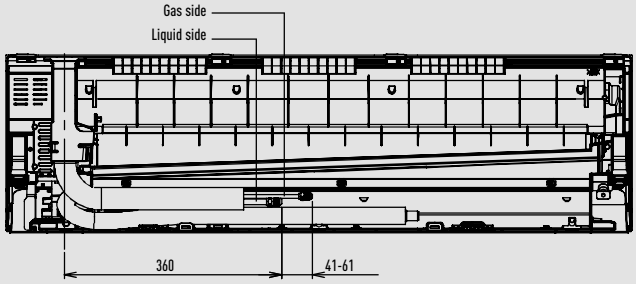
Side view



Bottom view

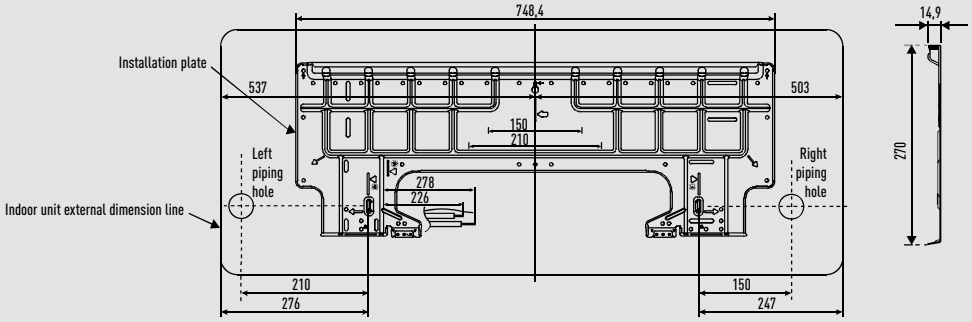


Rear view

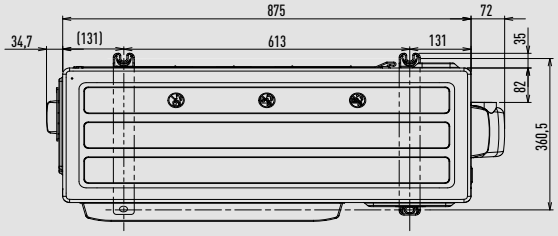


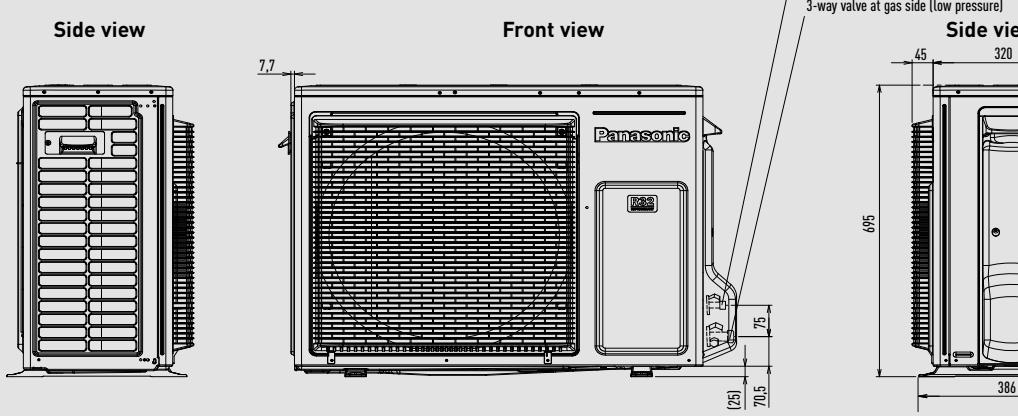
Relative position between the indoor unit and the installation plate

Front view



Top view

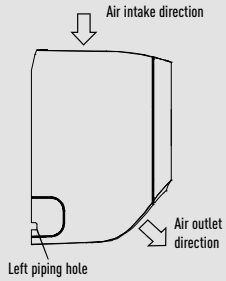




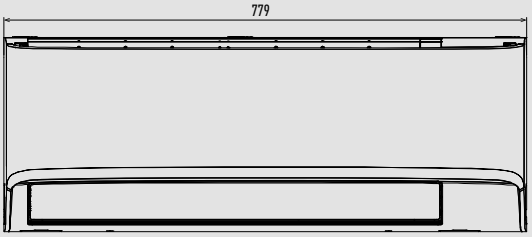
Unit: mm

Wall-mounted TZ super-compact (from 1,6 to 5,0 kW)

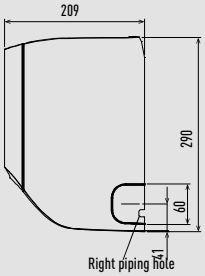
Side view



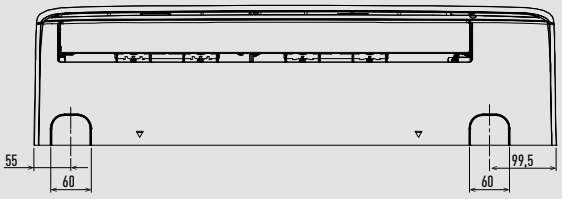
Front view



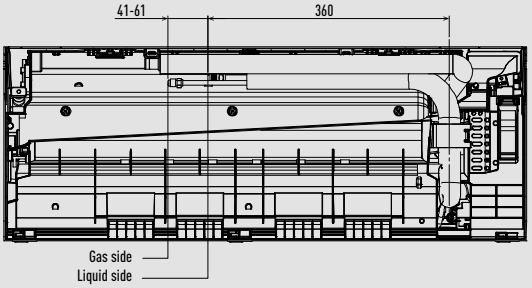
Side view



Bottom view

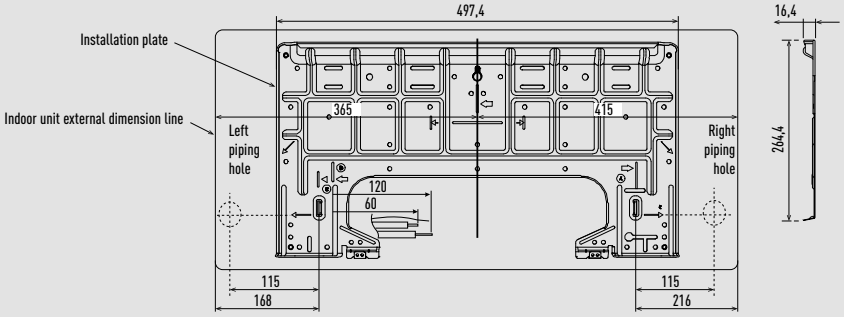


Rear view



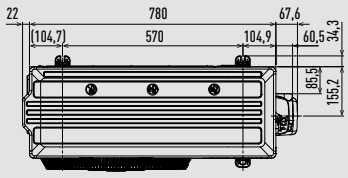
Relative position between the indoor unit and the installation plate

Front view

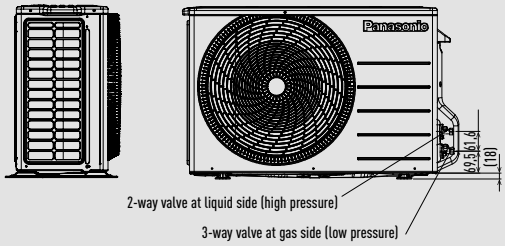


CU-TZ20WKE / CU-TZ25WKE / CU-TZ35WKE / CU-TZ42WKE

Top view

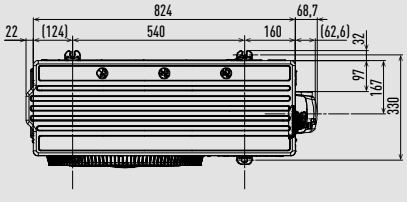


Side view **Front view** **Side view**

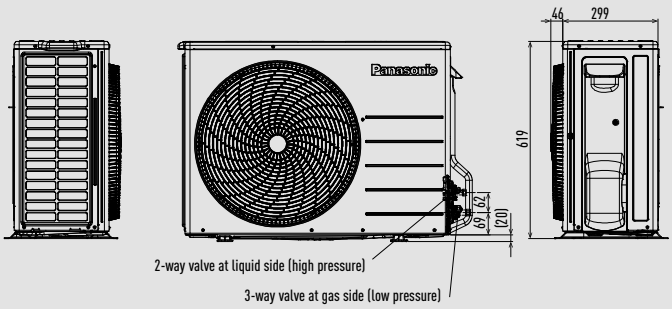


CU-TZ50WKE

Top view



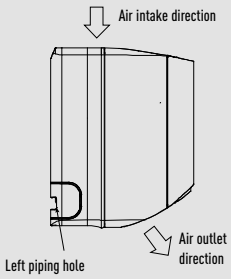
Side view **Front view** **Side view**



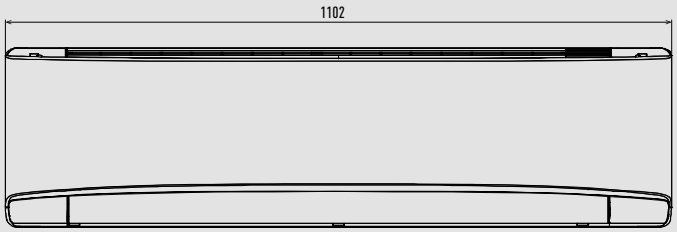
Unit: mm

Wall-mounted TZ super-compact (6,0 and 7,1 kW)

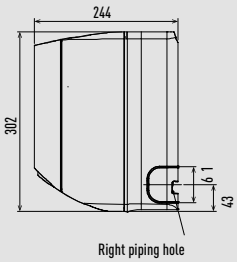
Side view



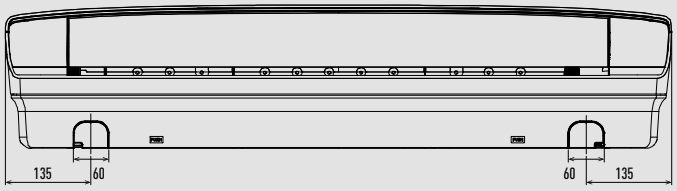
Front view



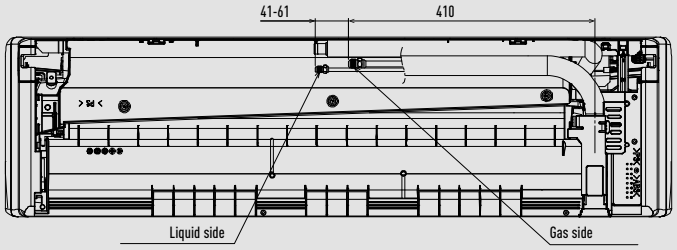
Side view



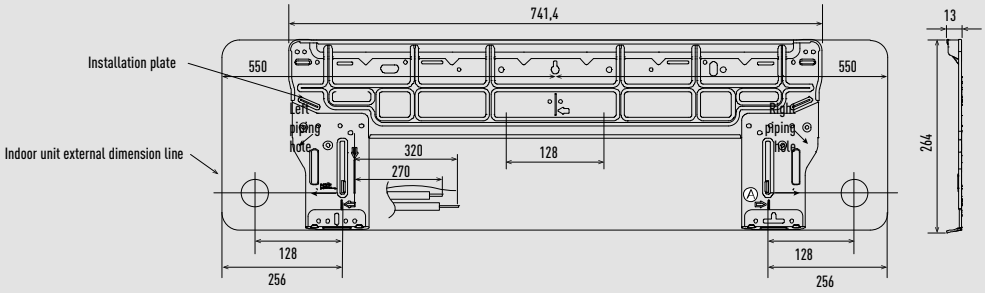
Bottom view



Rear view

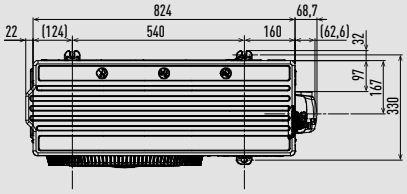


Relative position between the indoor unit and the installation plate
Front view



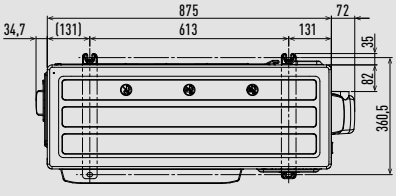
CU-TZ60WKE

Top view

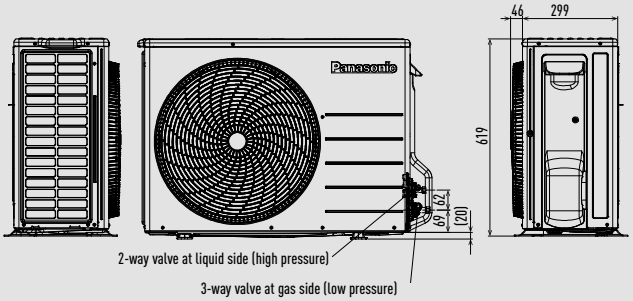


CU-TZ71WKE

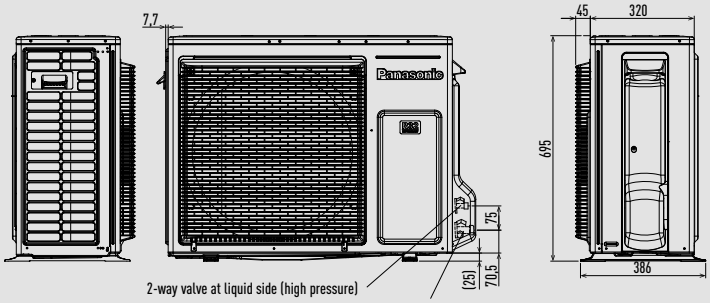
Top view



Side view **Front view** **Side view**



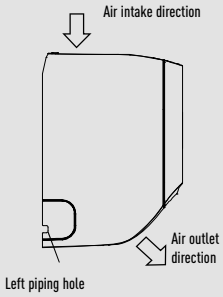
Side view **Front view** **Side view**



Unit: mm

Wall-mounted FZ super-compact

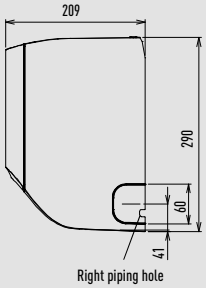
Side view



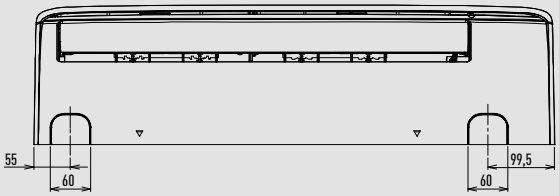
Front view



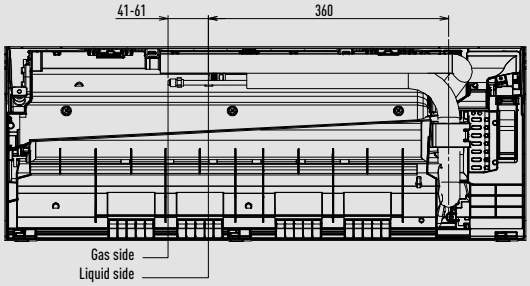
Side view



Bottom view

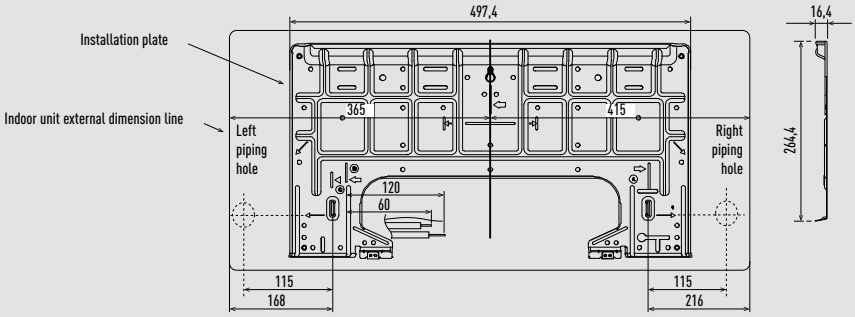


Rear view



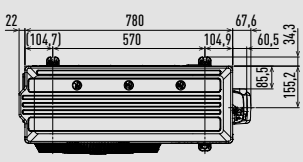
Relative position between the indoor unit and the installation plate

Front view

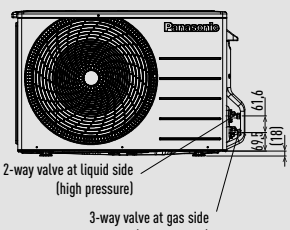


CU-FZ25WKE / CU-FZ35WKE

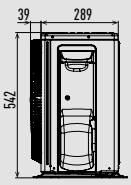
Top view



Front view

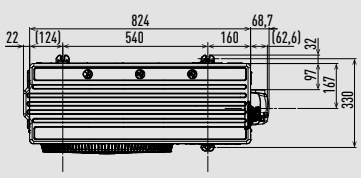


Side view

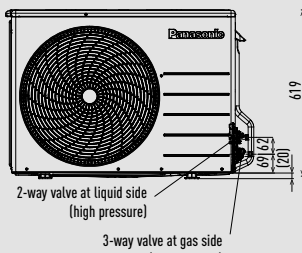


CU-FZ50WKE

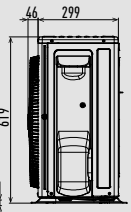
Top view



Front view

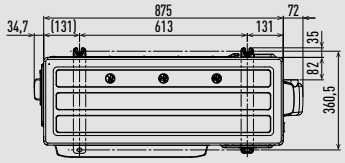


Side view

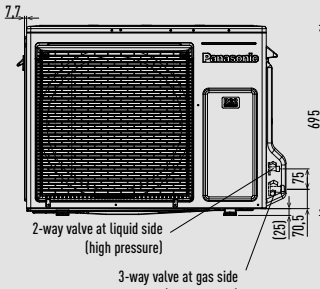


CU-FZ60WKE

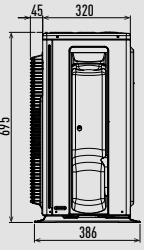
Top view



Front view



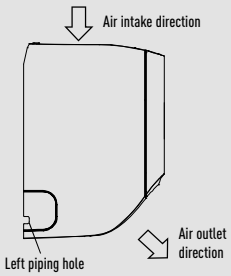
Side view



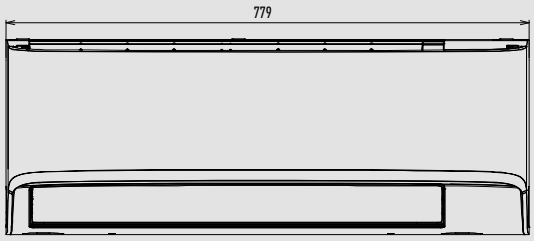
Unit: mm

Wall-mounted UZ and PZ super-compact

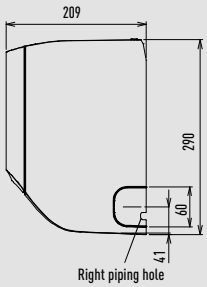
Side view



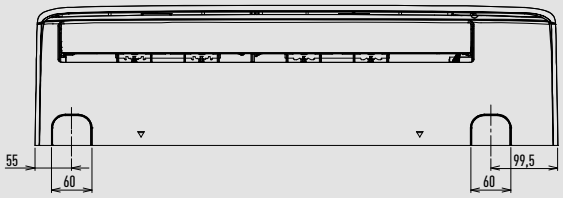
Front view



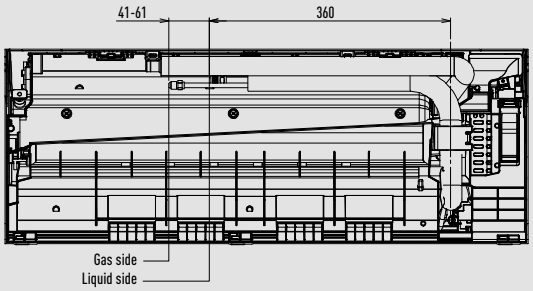
Side view



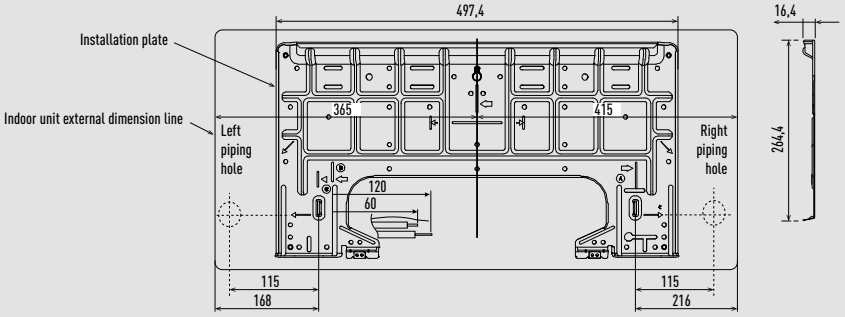
Bottom view



Rear view

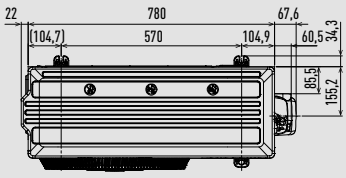


Relative position between the indoor unit and the installation plate
Front view

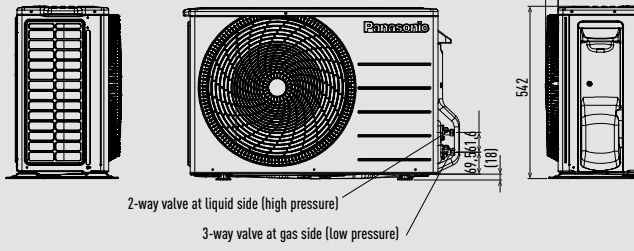


CU-PZ25WKE / CU-PZ35WKE / CU-UZ25WKE / CU-UZ35WKE

Top view

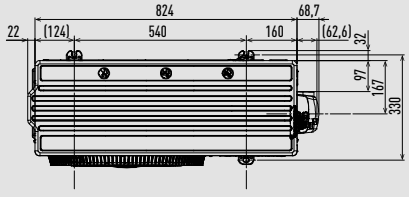


Side view **Front view** **Side view**

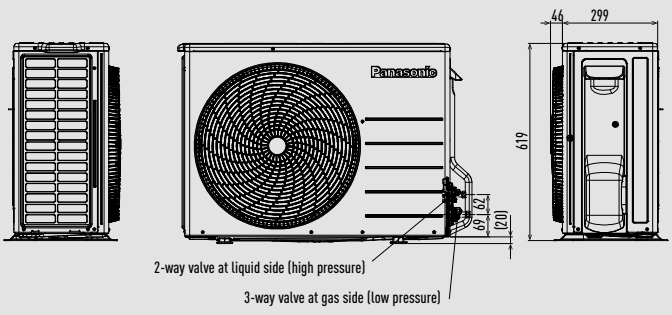


CU-PZ50WKE / CU-UZ50WKE

Top view



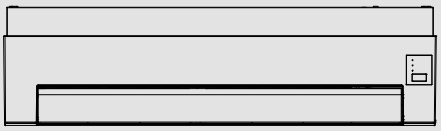
Side view **Front view** **Side view**



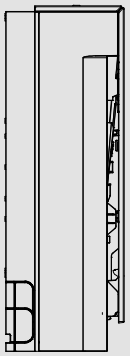
Unit: mm

Floor console

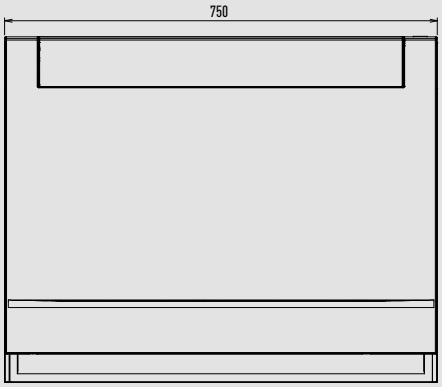
Top view



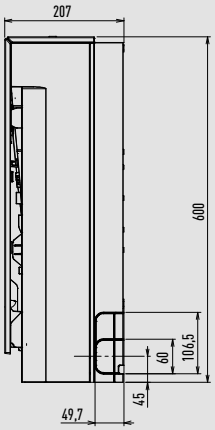
Side view



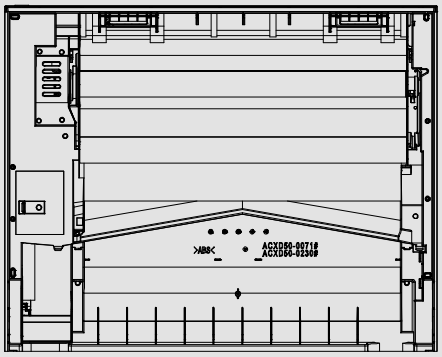
Front view



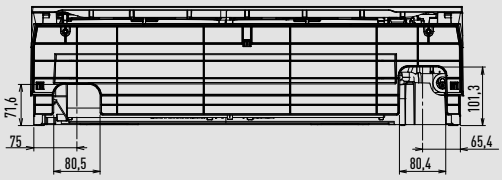
Side view



Back view

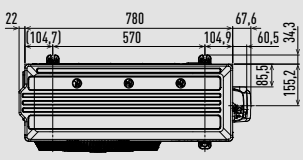


Bottom view

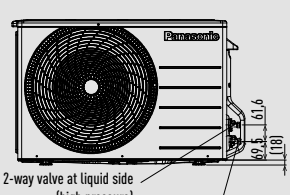


CU-Z25UBEA

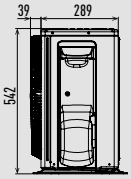
Top view



Front view

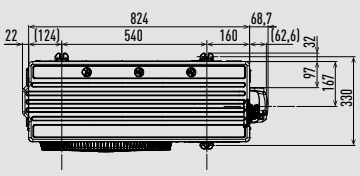


Side view

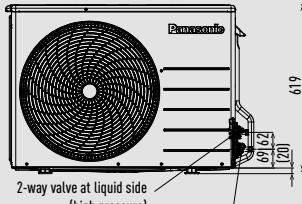


CU-Z35UBEA

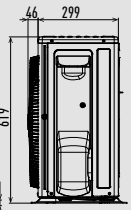
Top view



Front view

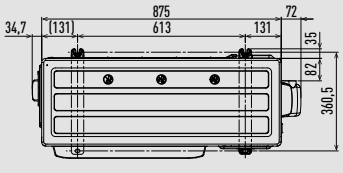


Side view

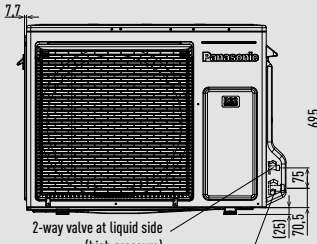


CU-Z50UBEA

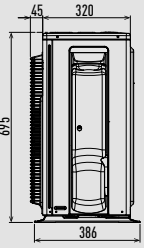
Top view



Front view

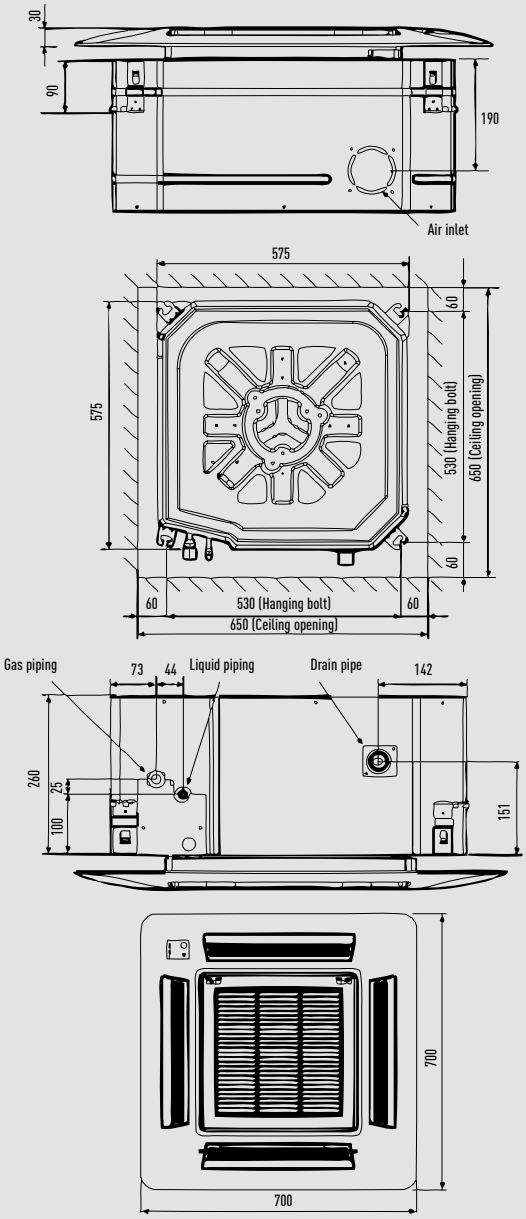


Side view



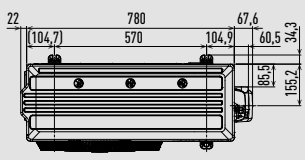
Unit: mm

4 Way 60x60 cassette

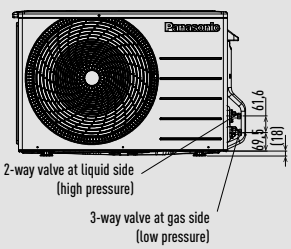


CU-Z25UBEA

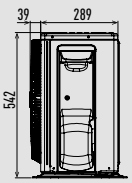
Top view



Front view

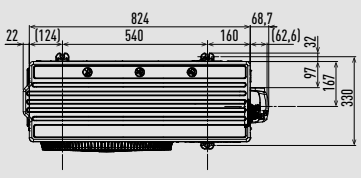


Side view

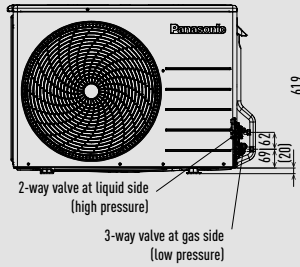


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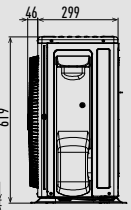
Top view



Front view

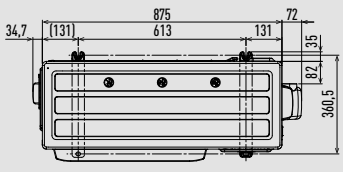


Side view

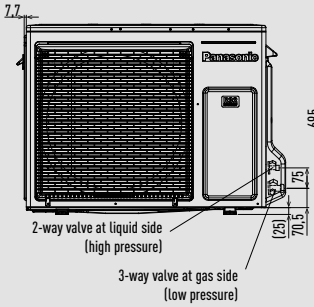


CU-Z50UBEA / CU-Z60UBEA

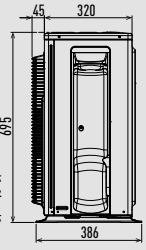
Top view



Front view



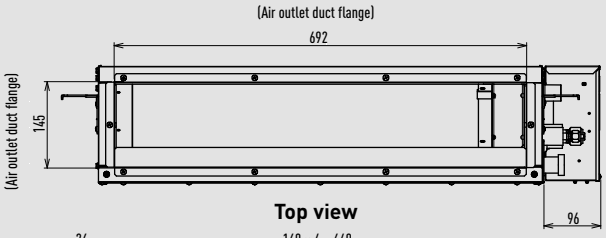
Side view



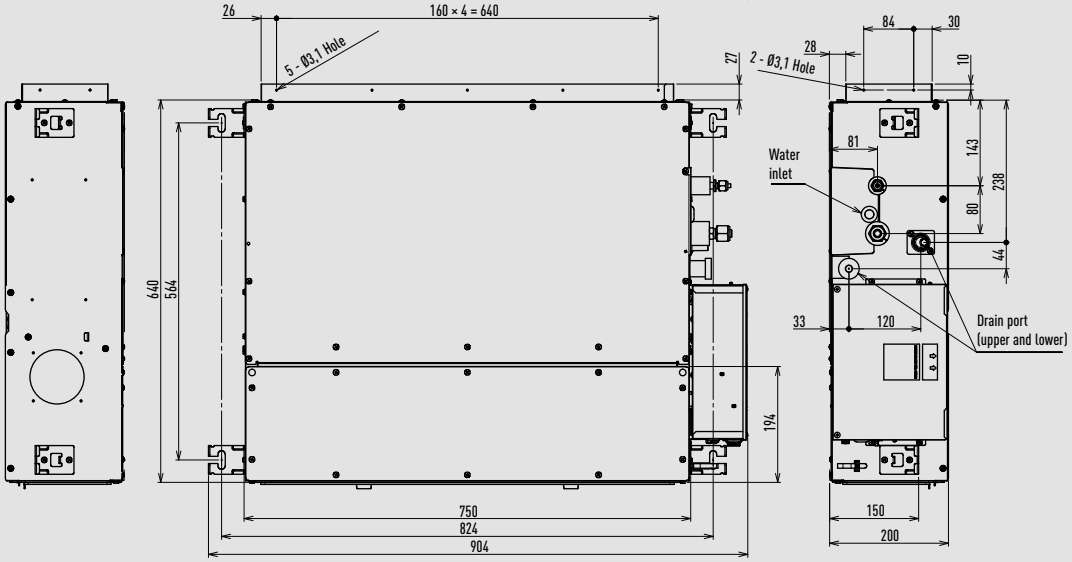
Unit: mm

Low static pressure hide-away

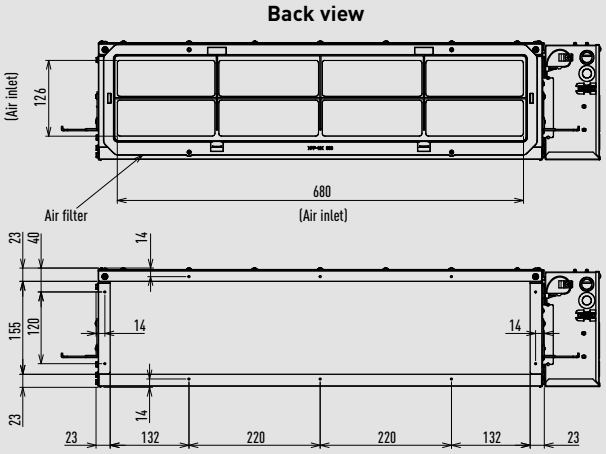
Front view



Side view / Top view / Side view

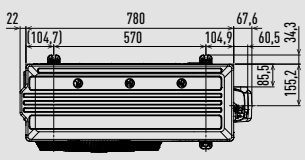


Back view

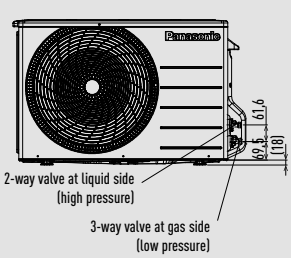


CU-Z25UBEA

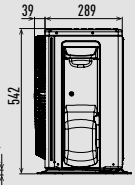
Top view



Front view

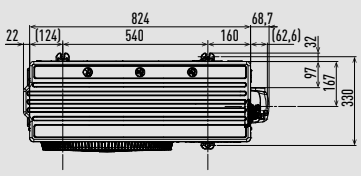


Side view

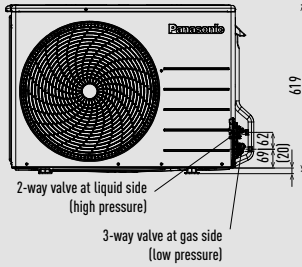


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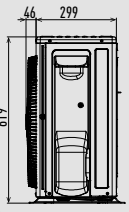
Top view



Front view

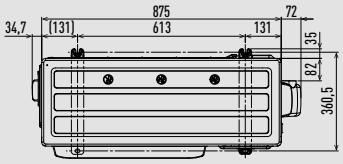


Side view

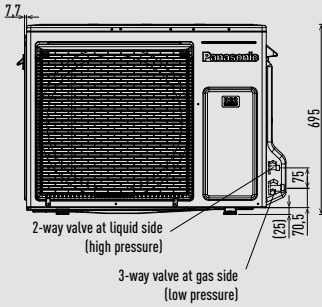


CU-Z50UBEA / CU-Z60UBEA

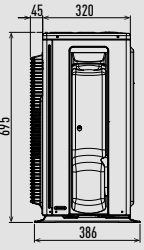
Top view



Front view



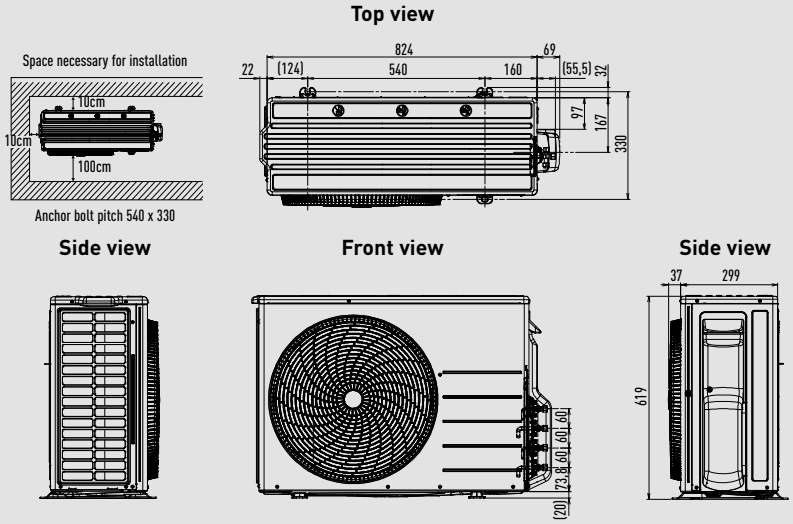
Side view



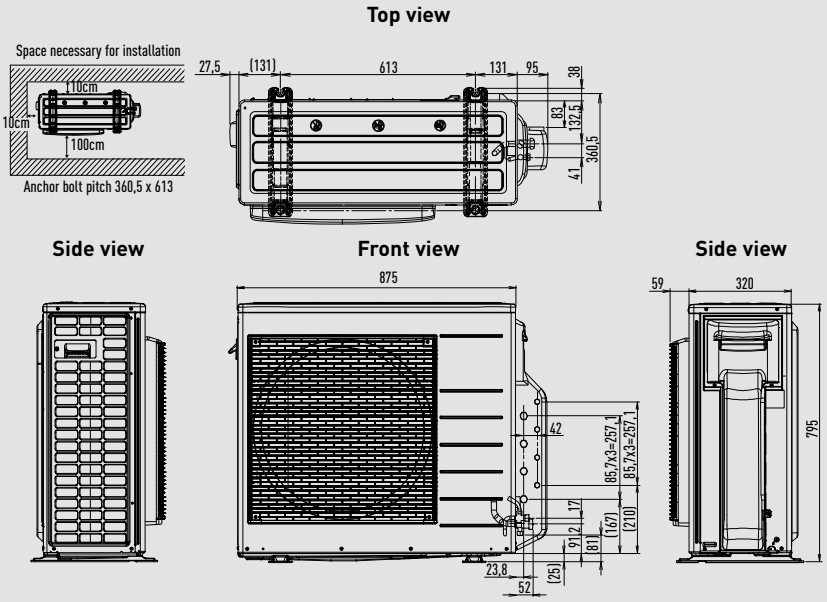
Unit: mm

Outdoor units Free Multi System Z

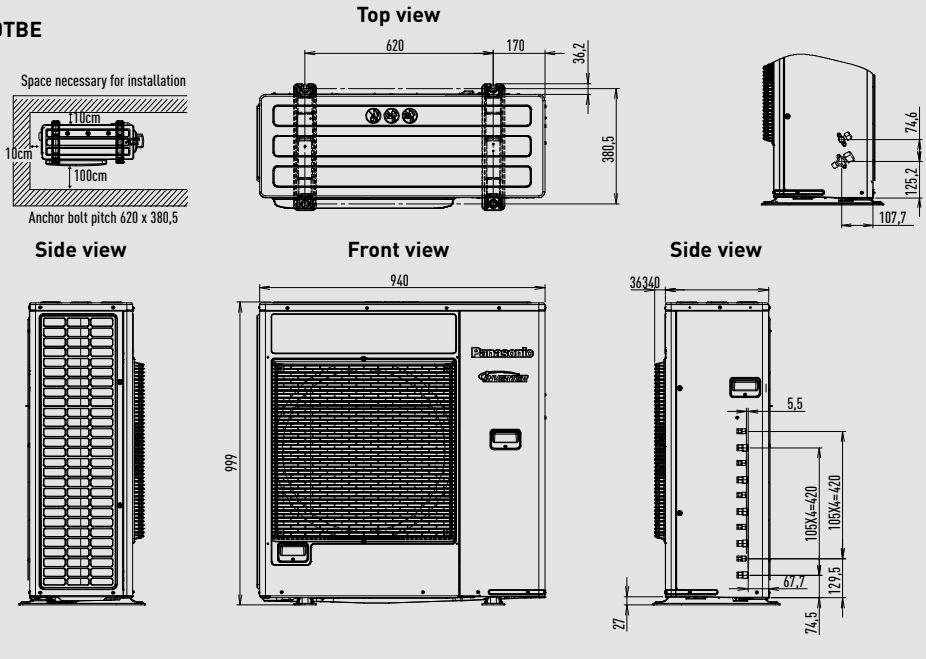
CU-2Z35TBE / CU-2Z41TBE / CU-2Z50TBE



CU-3Z52TBE / CU-3Z68TBE / CU-4Z68TBE



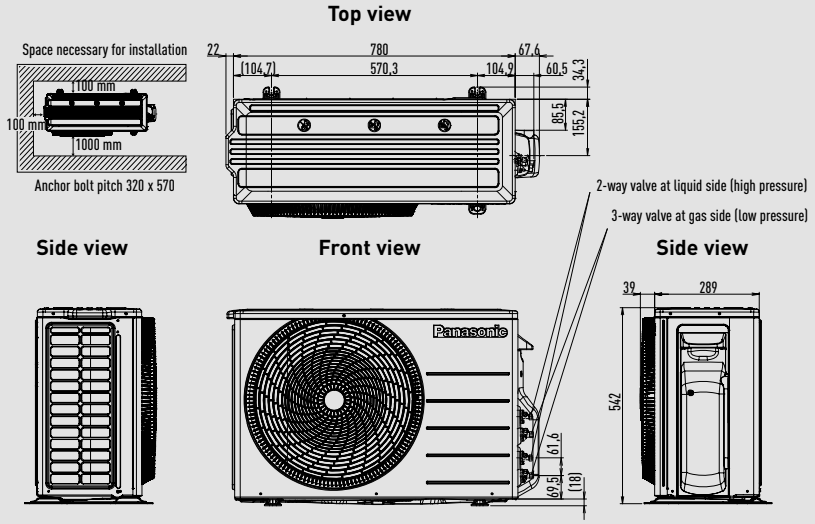
CU-4Z80TBE / CU-5Z90TBE



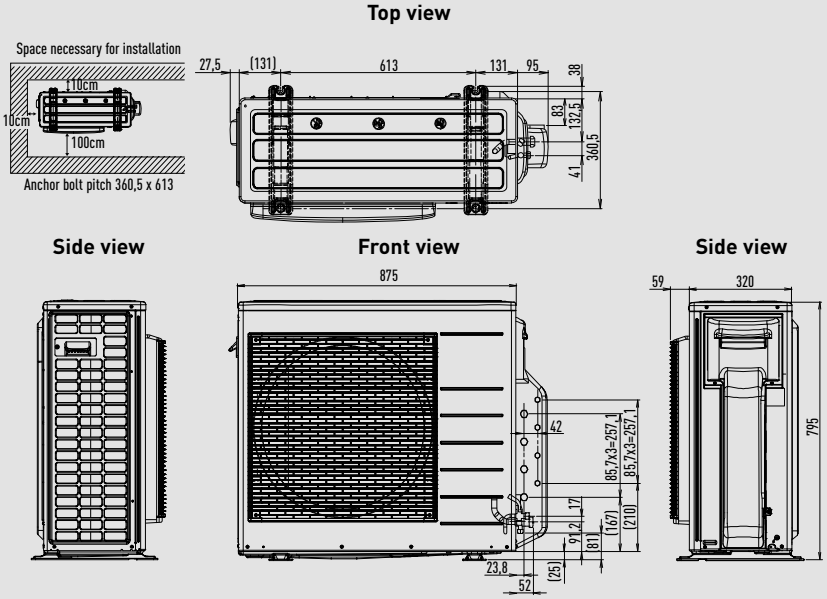
Unit: mm

Outdoor units Multi Wall TZ

CU-2TZ41TBE / CU-2TZ50TBE

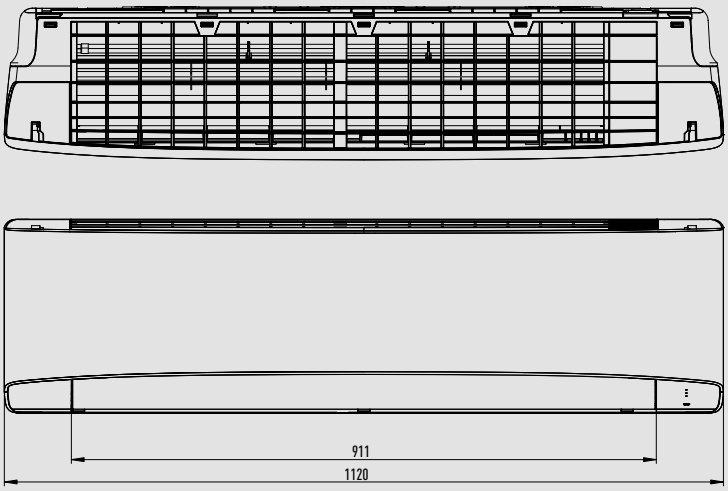


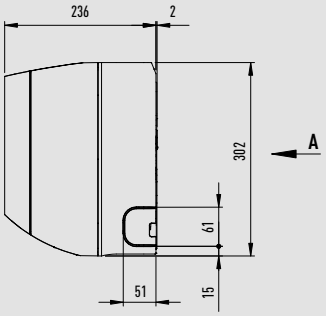
CU-3TZ52TBE



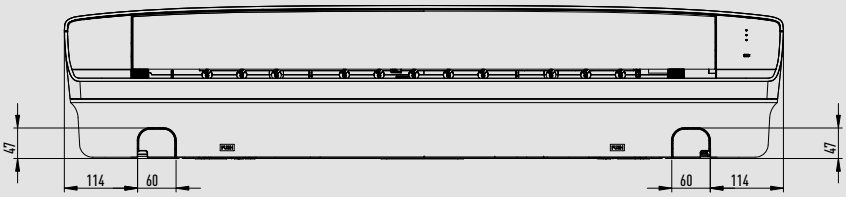
Unit: mm

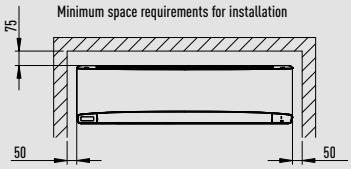
PACi NX Series wall-mounted

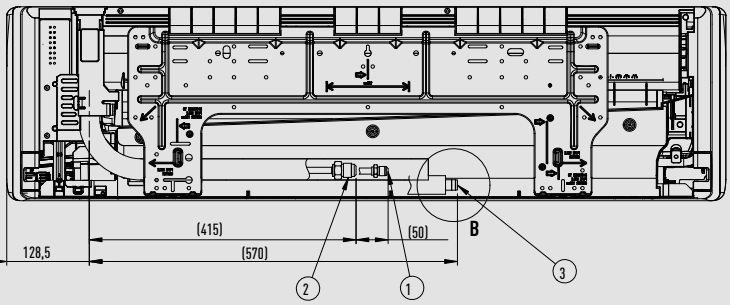




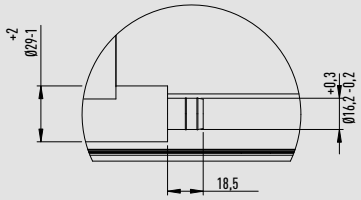
Symmetry



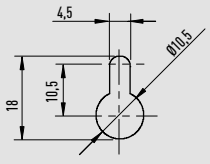




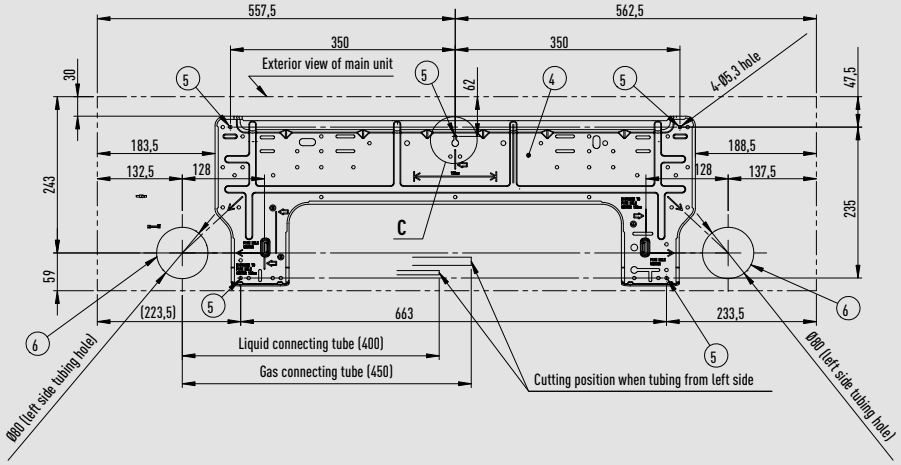
View A



Detailed view B



Detailed view C

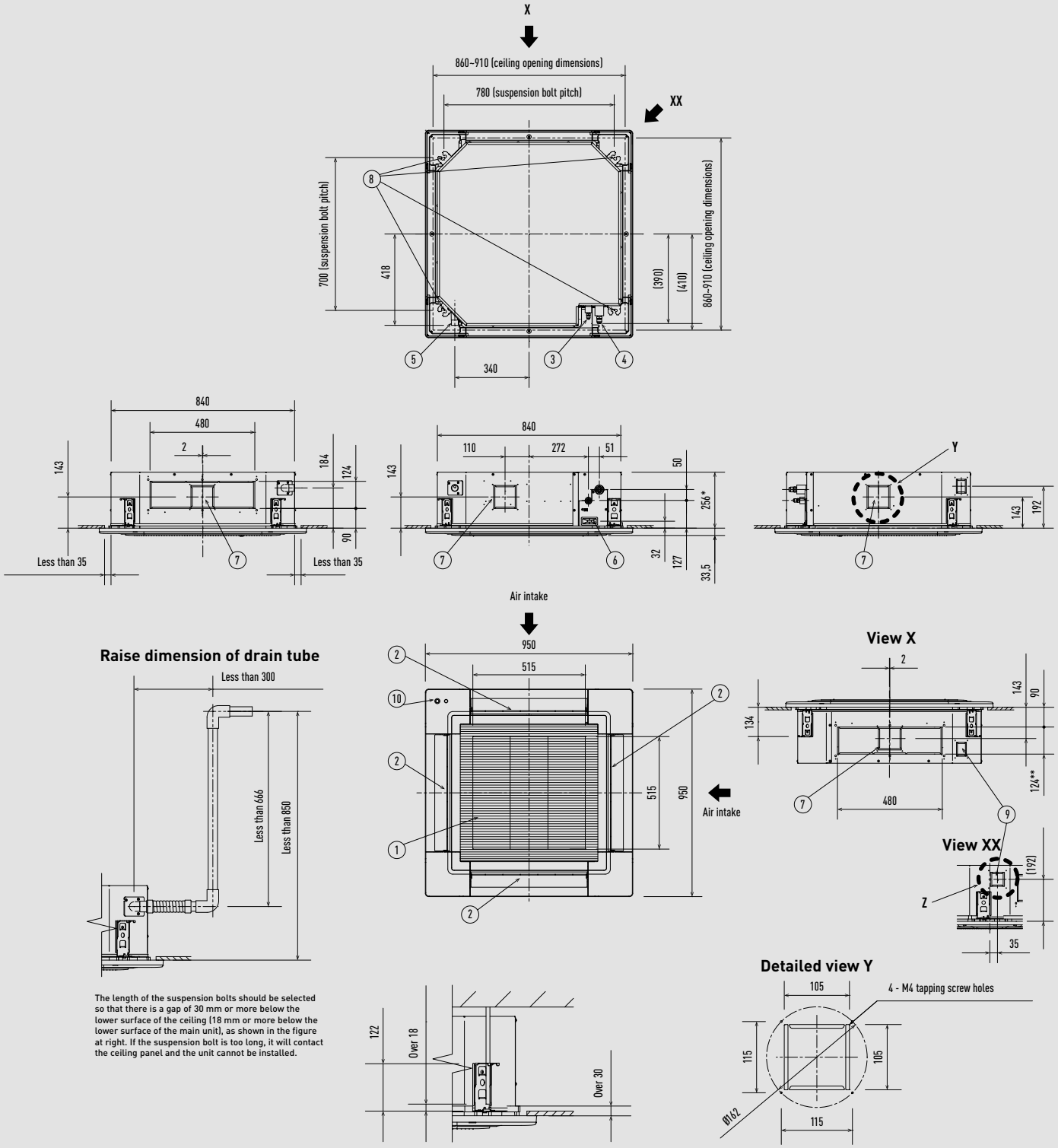


Type		S-3650PK3E	S-6010PU3E
1	Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared) [1]
2	Refrigerant tubing (gas)	Ø12,70 (flared)	60: Ø15,88 (flared) [2] 71: Ø15,88 (flared) 100: Ø15,88 (flared)
3	Drain hose		
4	Rear panel		
5	Rear panel fixing holes (Ø5,3 holes or as shown in figure "C")		
6	Tubing and wiring holes (Ø80)		

1) When connecting with U-60PZ3E5, U-71PZ3E5 or U-60PZH3E5, connect the liquid socket tube (Ø9,52 - Ø6,35) to the liquid tubing side indoor unit.
2) When connecting with U-60PZ3E5 or U-60PZH3E5, connect the gas socket tube (Ø15,88 - Ø12,7) to the gas tubing side indoor unit.

Unit: mm

PACi NX Series 4 way 90x90 cassette



Type		S-3650PU3E	S-6071PU3E	S-1014PU3E
1	Air intake			
2	Discharge outlet			
3	Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared) [1]	Ø9,52 (flared)
4	Refrigerant tubing (gas)	Ø12,70 (flared)	60: Ø15,88 (flared) [2] 71: Ø15,88 (flared)	Ø15,88 (flared)
5	Drain tube connection port VP25		Outer diameter Ø32	
6	Power supply port			
7	Suspension bolt hole		4-12x30 elongated hole	
8	Fresh air intake duct connection port		Ø100 [3]	
9	Suspension bolt hole		4-12x30 elongated hole	
10	Econavi sensor (only CZ-KPU3A or CZ-KPU3AW)			

1) When connecting with U-60PZ3E5, U-71PZ3E5 or U-60PZH3E5, connect the liquid socket tube (Ø9,52 - Ø6,35) to the liquid tubing side indoor unit.
2) When connecting with U-60PZ3E5 or U-60PZH3E5, connect the gas socket tube (Ø15,88 - Ø12,7) to the gas tubing side indoor unit.
3) Necessary to attach duct connecting flange (field supply).

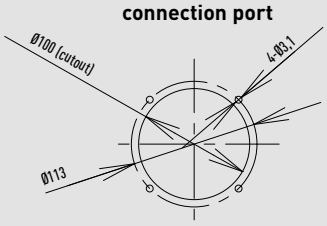
Filter dimension: 520 x 520 x 15 mm.

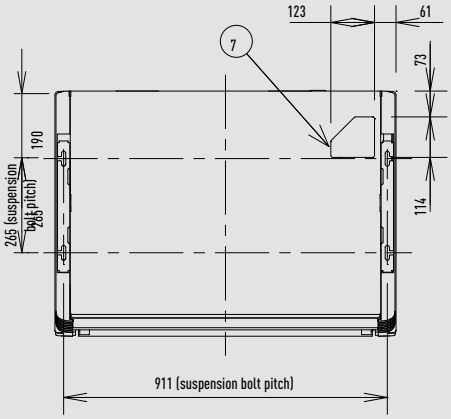
* 319 mm for S-1014PU3E.
** 187 mm for S-1014PU3E.

Unit: mm

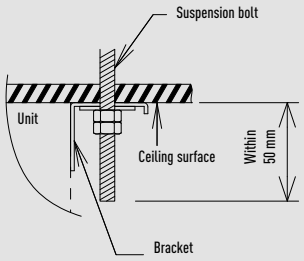
PACi NX Series ceiling (S-3650PT3E)

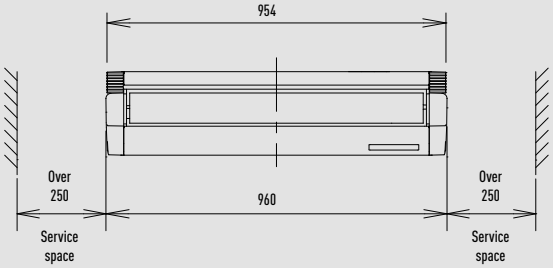
Detailed view of intaking outside air duct connection port

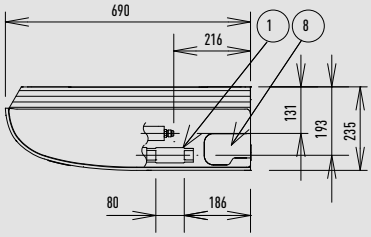


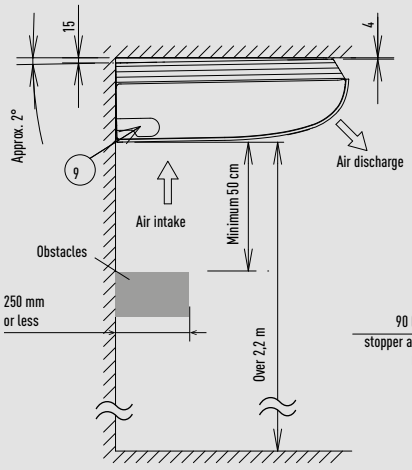


Distance of each exposed bolt must be of equal length within 50 mm.

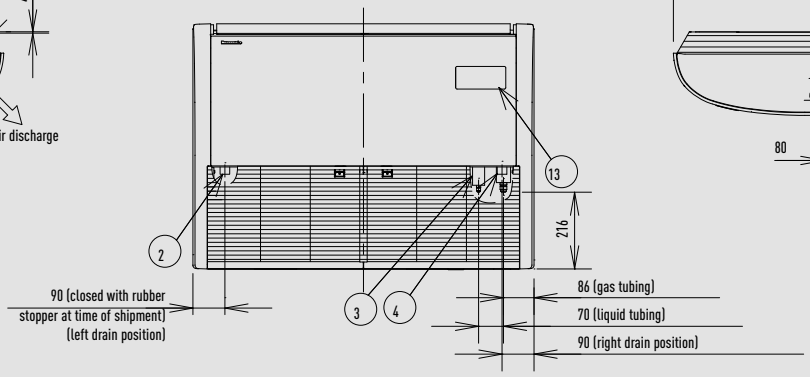




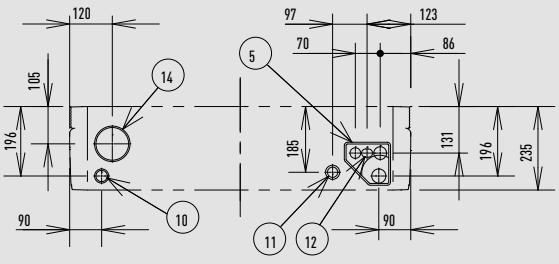




Side view



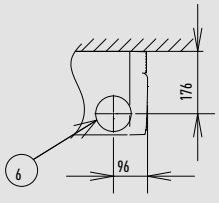
Hole position of indoor unit rear-side (figure shows view from front)



1	Drain port VP20	Inside diameter Ø26 mm, drain hose supplied
2	Left drain position	
3	Refrigerant tubing (liquid)	Ø6,35mm (flared)
4	Refrigerant tubing (gas)	Ø12,7mm (flared)
5	Cover of rear tubing hole	
6	Tubing hole on wall surface	Ø100 mm
7	Upper side tubing port	
8	Right side drain hose outlet port (cutout)	
9	Left side drain hose outlet port (cutout)	
10	Left-rear side drain hose outlet port (cutout)	
11	Power inlet port	
12	Remote control wiring and inter-unit wiring inlet port	
13	Wireless remote controller receiver installation location	
14	Outside air intake duct connection port	Ø100 mm (cutout)

Filter dimension: 421 x 250 x 16 mm × 2 pcs.

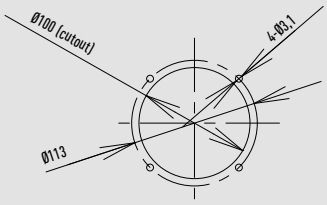
Tubing hole position on wall surface (figure shows view from front)

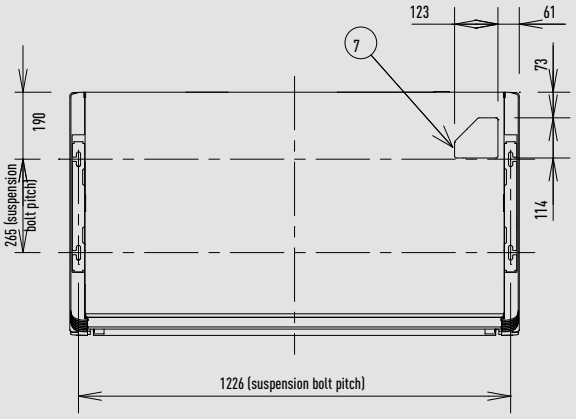


Unit: mm

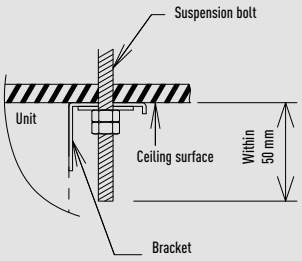
PACi NX Series ceiling (S-6071PT3E)

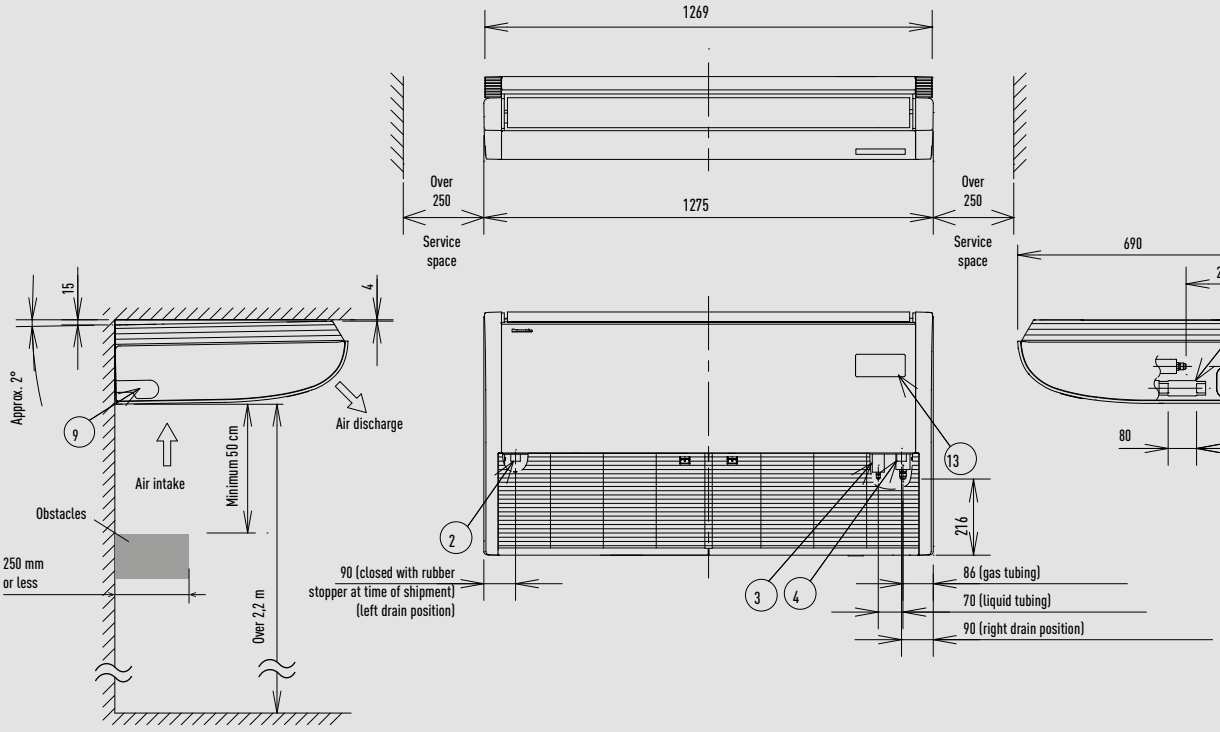
Detailed view of intaking outside air duct connection port





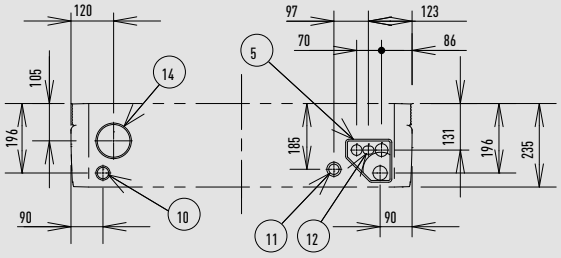
Distance of each exposed bolt must be of equal length within 50 mm.





Side view

Hole position of indoor unit rear-side (figure shows view from front)

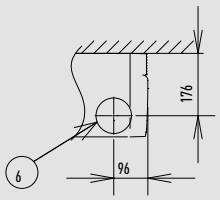


1	Drain port VP20	Inside diameter Ø26 mm, drain hose supplied
2	Left drain position	
3	Refrigerant tubing (liquid)	Ø9,52 (flared) [1]
4	Refrigerant tubing (gas)	Ø15,88 (flared) [2]
5	Cover of rear tubing hole	
6	Tubing hole on wall surface	Ø100 mm
7	Upper side tubing port	
8	Right side drain hose outlet port (cutout)	
9	Left side drain hose outlet port (cutout)	
10	Left-rear side drain hose outlet port (cutout)	
11	Power inlet port	
12	Remote control wiring and inter-unit wiring inlet port	
13	Wireless remote controller receiver installation location	
14	Outside air intake duct connection port	Ø100 mm (cutout)

1) When connecting with U-60PZ3E5, U-71PZ3E5 or U-60PZH3E5, connect the liquid socket tube (Ø9,52 - Ø6,35) to the liquid tubing side indoor unit.
2) When connecting with U-60PZ3E5 or U-60PZH3E5, connect the gas socket tube (Ø15,88 - Ø12,7) to the gas tubing side indoor unit.

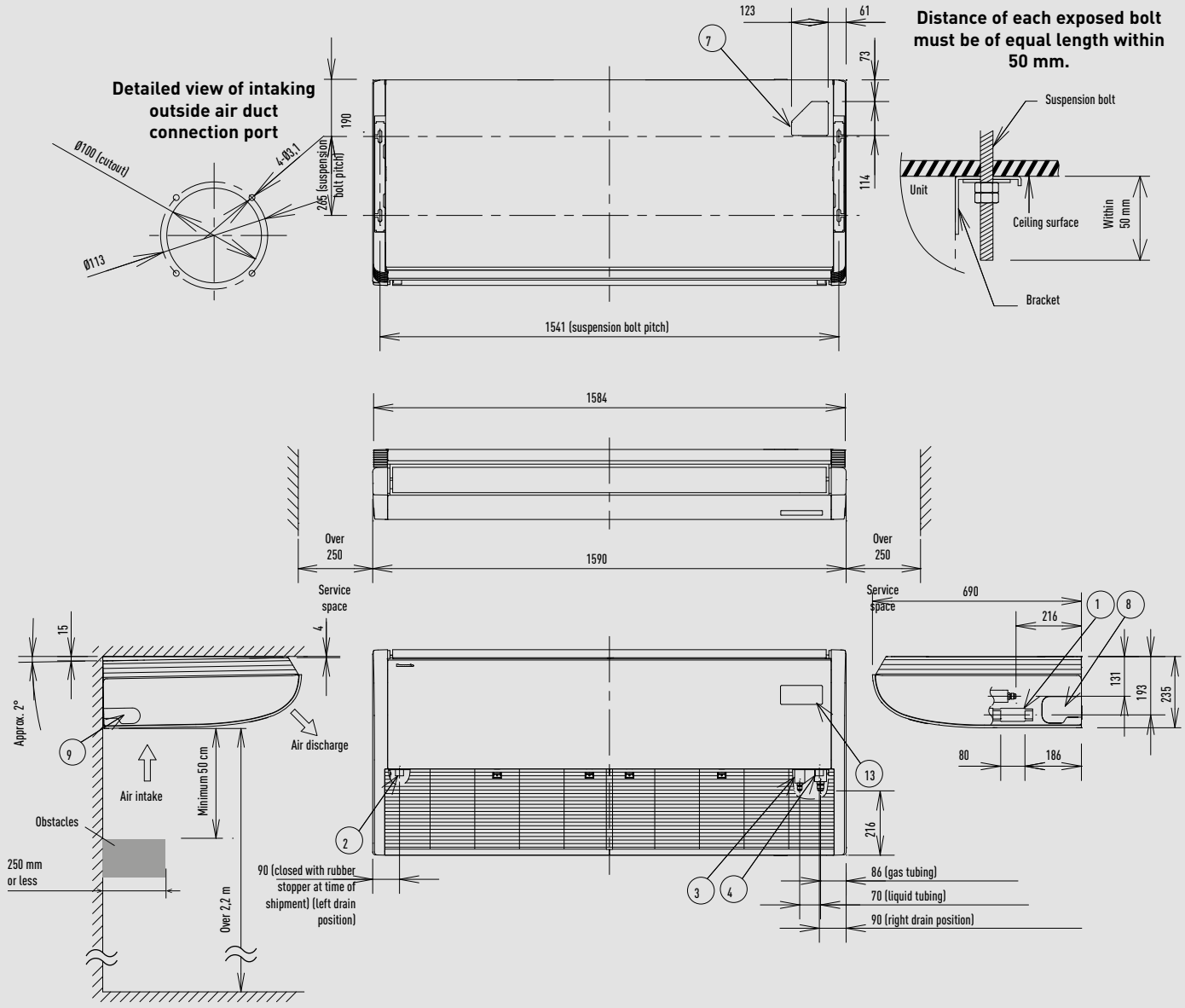
Filter dimension: 579 x 250 x 16 mm × 2 pcs.

Tubing hole position on wall surface (figure shows view from front)



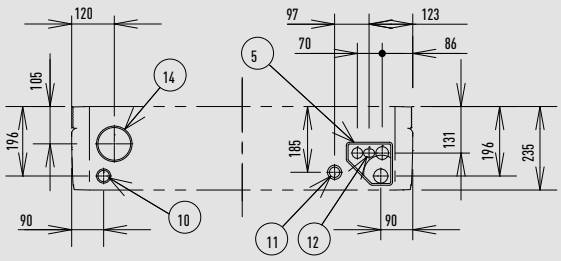
Unit: mm

PACi NX Series ceiling (S-1014PT3E)

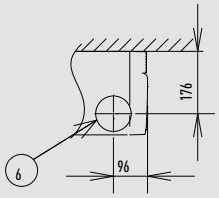


Side view

Hole position of indoor unit rear-side (figure shows view from front)



Tubing hole position on wall surface (figure shows view from front)

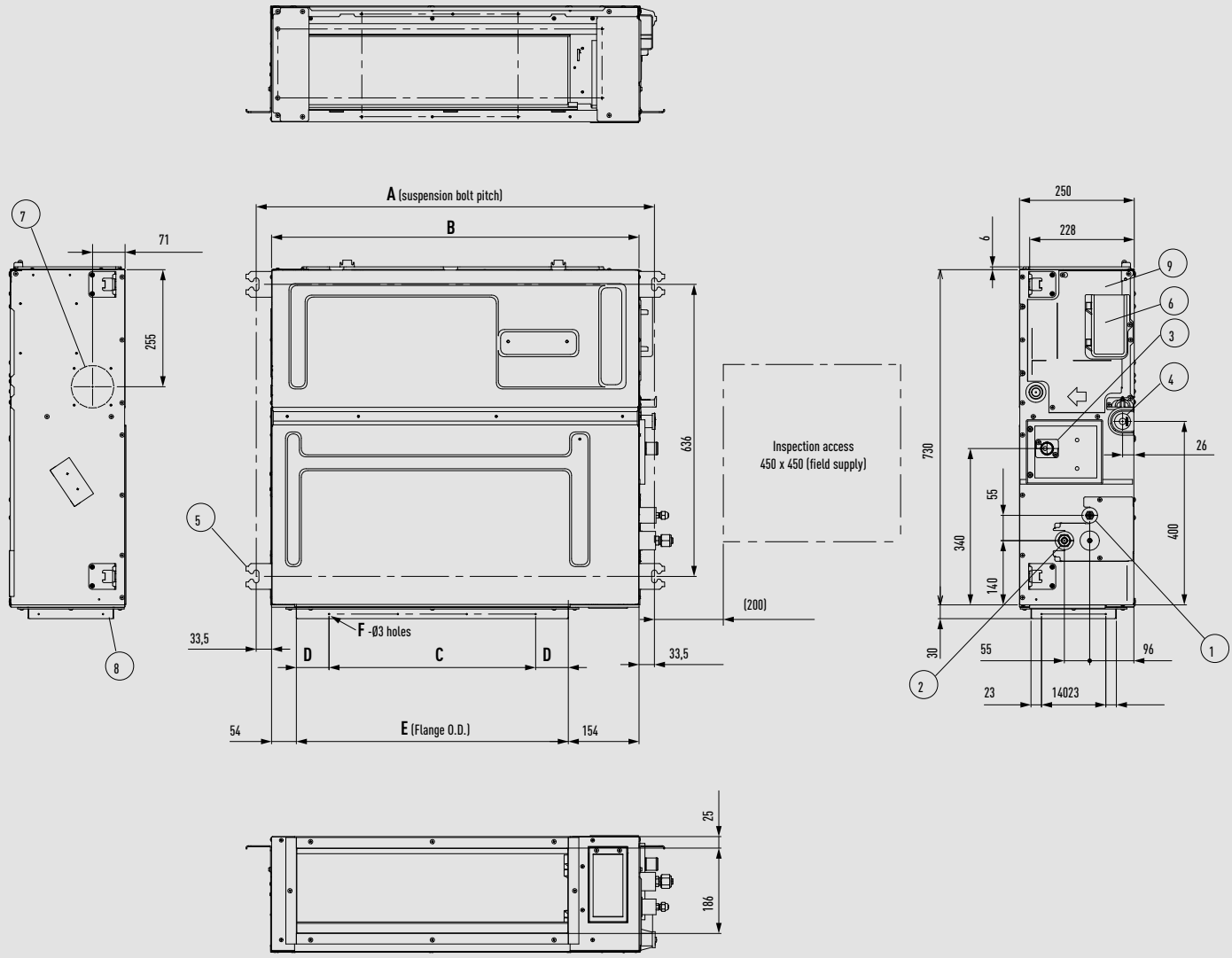


1	Drain port VP20	Inside diameter Ø26 mm, drain hose supplied
2	Left drain position	
3	Refrigerant tubing (liquid)	Ø9,52 (flared)
4	Refrigerant tubing (gas)	Ø15,88 (flared)
5	Cover of rear tubing hole	
6	Tubing hole on wall surface	Ø100 mm
7	Upper side tubing port	
8	Right side drain hose outlet port (cutout)	
9	Left side drain hose outlet port (cutout)	
10	Left-rear side drain hose outlet port (cutout)	
11	Power inlet port	
12	Remote control wiring and inter-unit wiring inlet port	
13	Wireless remote controller receiver installation location	
14	Outside air intake duct connection port	Ø100 mm (cutout)

Filter dimension: 736 x 250 x 16 mm × 2 pcs.

Unit: mm

PACi NX Series adaptive ducted unit



Type	A	B	C	D	E	F
	mm	mm	mm	mm	mm	Q'ty
S-3650PF3E	867	800	450 (pitch 150 x 3)	71	592	12
S-6071PF3E	1067	1000	750 (pitch 150 x 5)	21	792	16
S-1014PF3E	1467	1400	1050 (pitch 150 x 7)	71	1192	20

Type		S-3650PF3E	S-6071PF3E	S-1014PF3E
1	Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared) [1]	Ø9,52 (flared)
2	Refrigerant tubing (gas)	Ø12,70 (flared)	60: Ø15,88 (flared) [2] 71: Ø15,88 (flared)	Ø15,88 (flared)
3	Upper drain port VP20	Ø26 (200 mm flexible hose supplied)		
4	Suspension lug	4-12x30		
5	Power supply port			
6	Bottom drain port VP20	Ø26 mm		
7	Fresh air intake duct connection port	Ø100 [3]		
8	Flange for flexible air outlet duct			
9	Electrical component box			

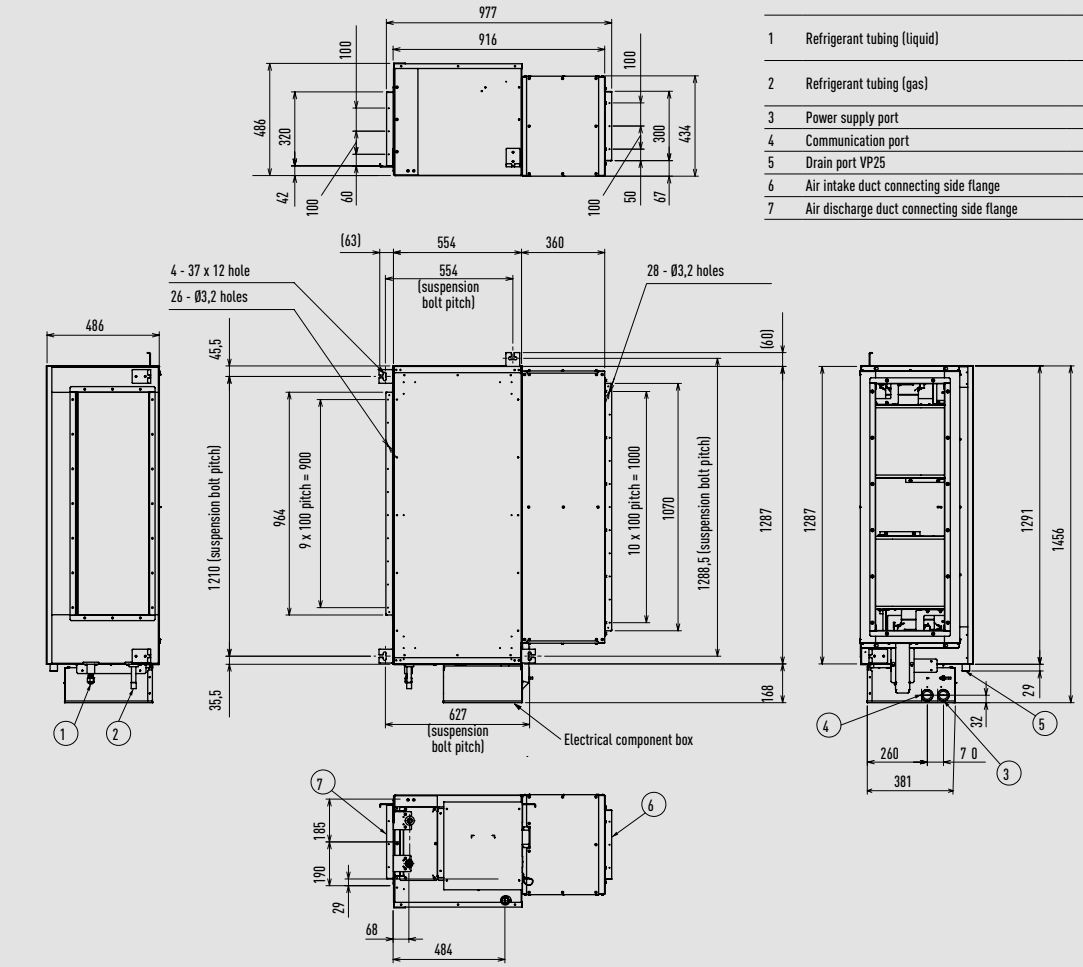
1) When connecting with U-60PZ3E5, U-71PZ3E5 or U-60PZH3E5, connect the liquid socket tube (Ø9,52 - Ø6,35) to the liquid tubing side indoor unit.
2) When connecting with U-60PZ3E5 or U-60PZH3E5, connect the gas socket tube (Ø15,88 - Ø12,7) to the gas tubing side indoor unit.
3) Necessary to attach duct connecting flange (field supply).

Filter dimension: 520 x 520 x 15 mm.

* 319 mm for S-1014PU3E.
** 187 mm for S-1014PU3E.

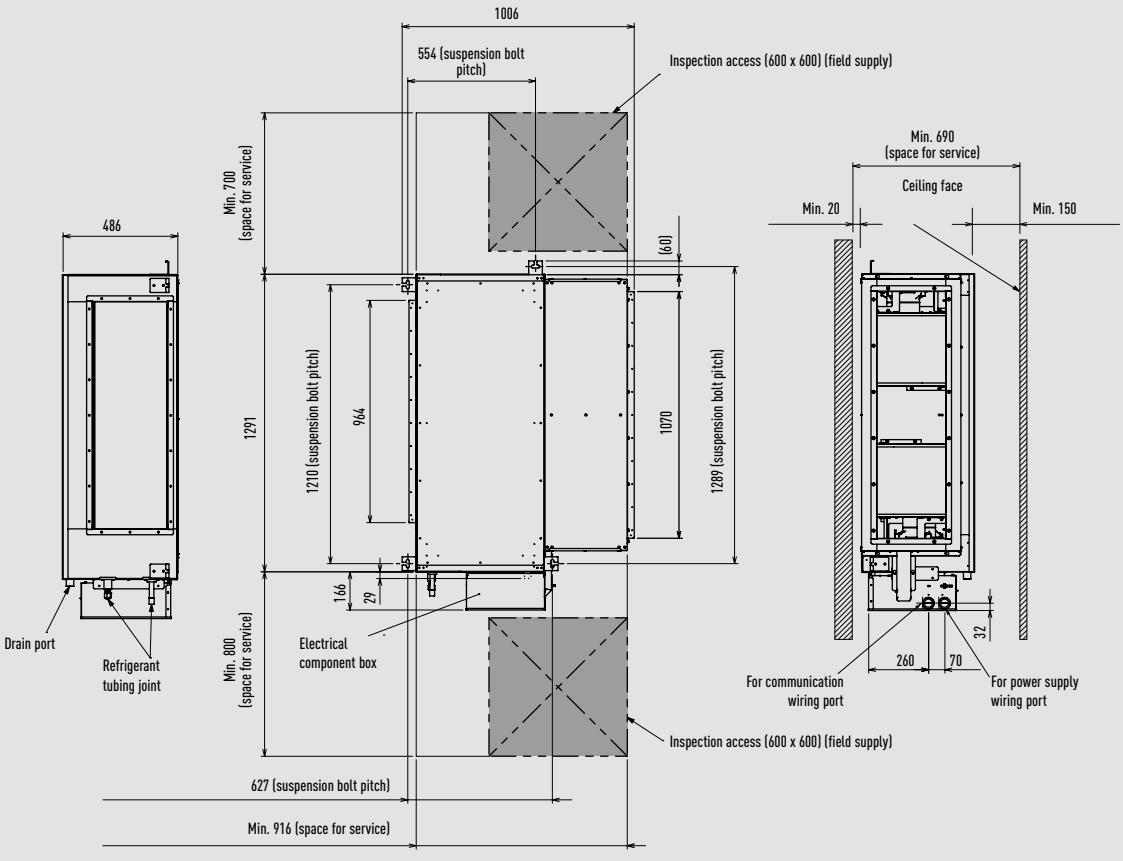
Unit: mm

Big PACi high static pressure hide-away 20,0-25,0 kW



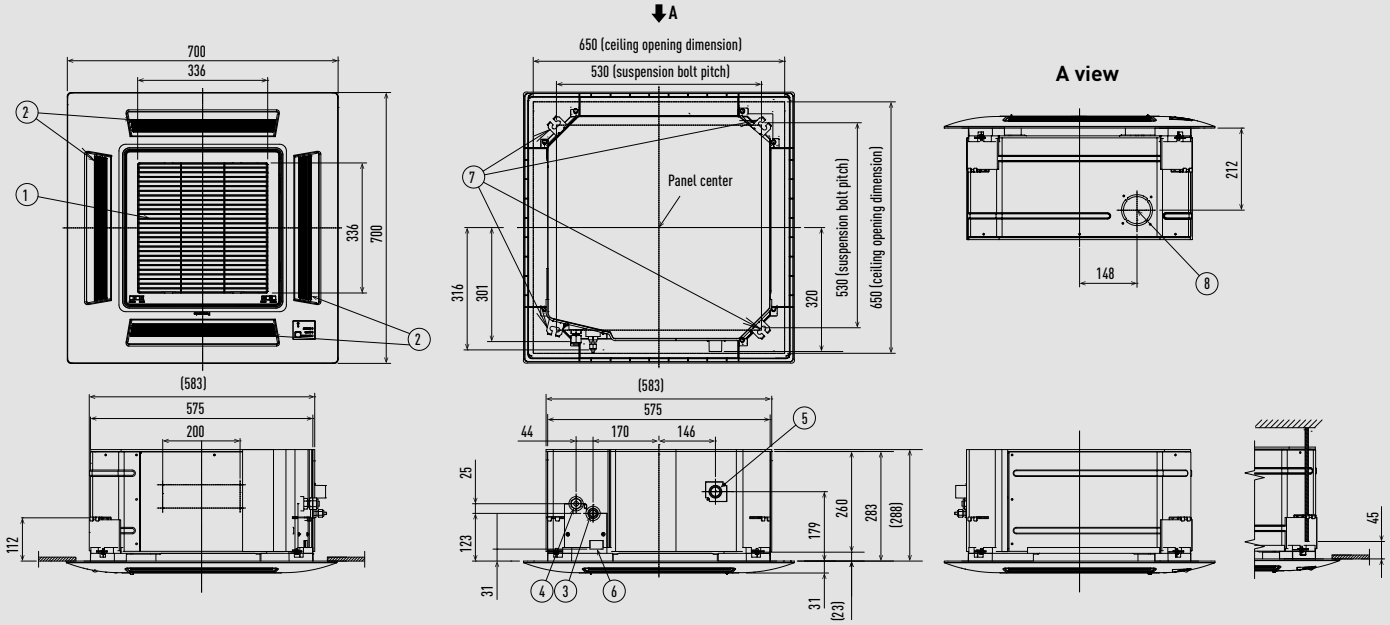
		S-200PE3E5B	S-250PE3E5B
1	Refrigerant tubing (liquid)	Connection tubing Ø12,70 → Ø9,52	Ø12,70 (flared)
2	Refrigerant tubing (gas)	Connection tubing Ø19,05 → Ø25,40	Ø19,05 (brazing)
3	Power supply port		
4	Communication port		
5	Drain port VP25		
6	Air intake duct connecting side flange		
7	Air discharge duct connecting side flange		

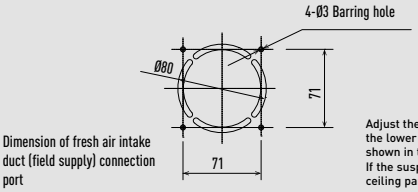
Dimensions of suspension bolt pitch and unit.
Required Minimum Space for Installation and Service



Unit: mm

PACi 4 way 60x60 cassette





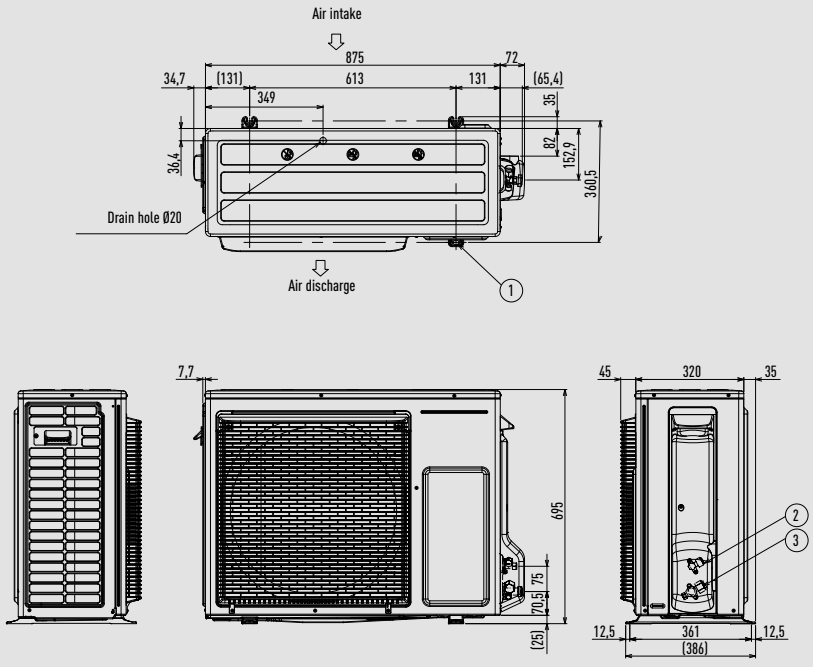
Dimension of fresh air intake duct (field supply) connection port

Adjust the suspension bolt length so that the gap from the lower ceiling surface becomes 45 mm or more, as shown in the figure at right.
If the suspension bolts is too long, it will contact the ceiling panel and the unit cannot be installed.

1	Air intake	
2	Discharge outlet	
3	Refrigerant tubing (liquid)	Ø6,35 (flared)
4	Refrigerant tubing (gas)	Ø12,70 (flared)
5	Drain tube connection port VP25	Outer diameter Ø32
6	Power supply port	
7	Suspension bolt hole	4-11 x 26 hole
8	Fresh air intake duct connection port	Ø80

Unit: mm

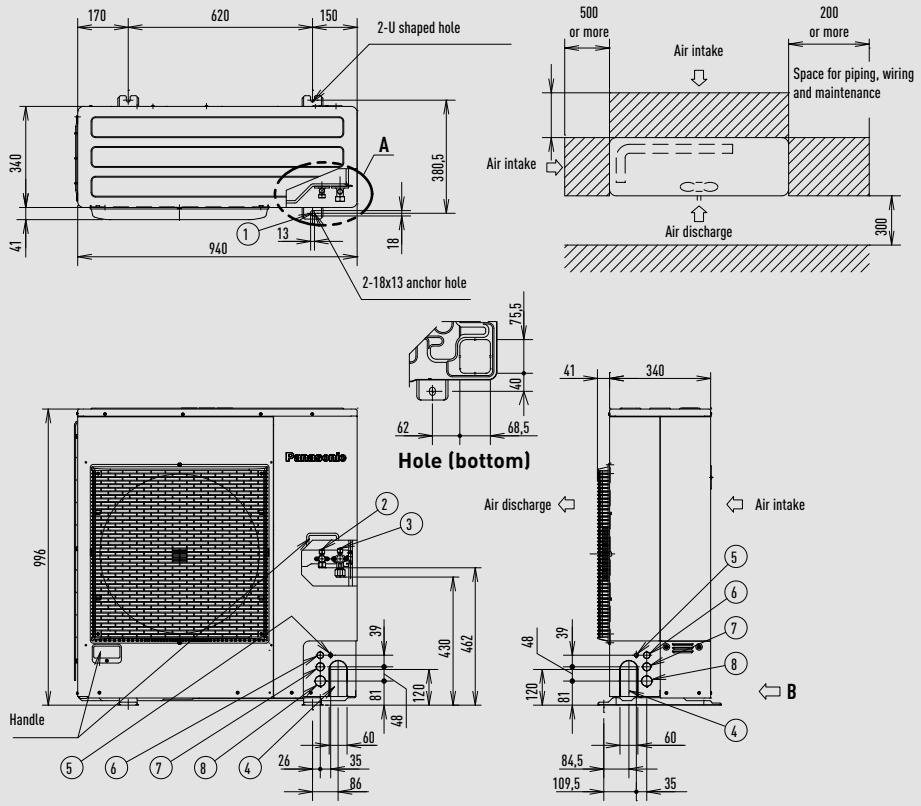
PACi NX Series Elite outdoor unit from 3,6 to 6,0 kW and Standard 6,0 and 7,1 kW



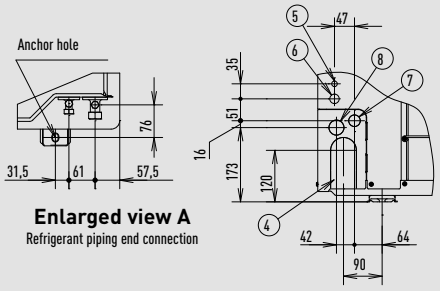
1	Mounting hole (4-R6,5), anchor bolt: M10
2	Refrigerant tubing (liquid tube), Ø6,35 (flared)
3	Refrigerant tubing (gas tube), Ø12,70 (flared). U-71PZ3E5, Ø15,88 (flared)

Unit: mm

PACi NX Series Elite outdoor unit 7,1 kW

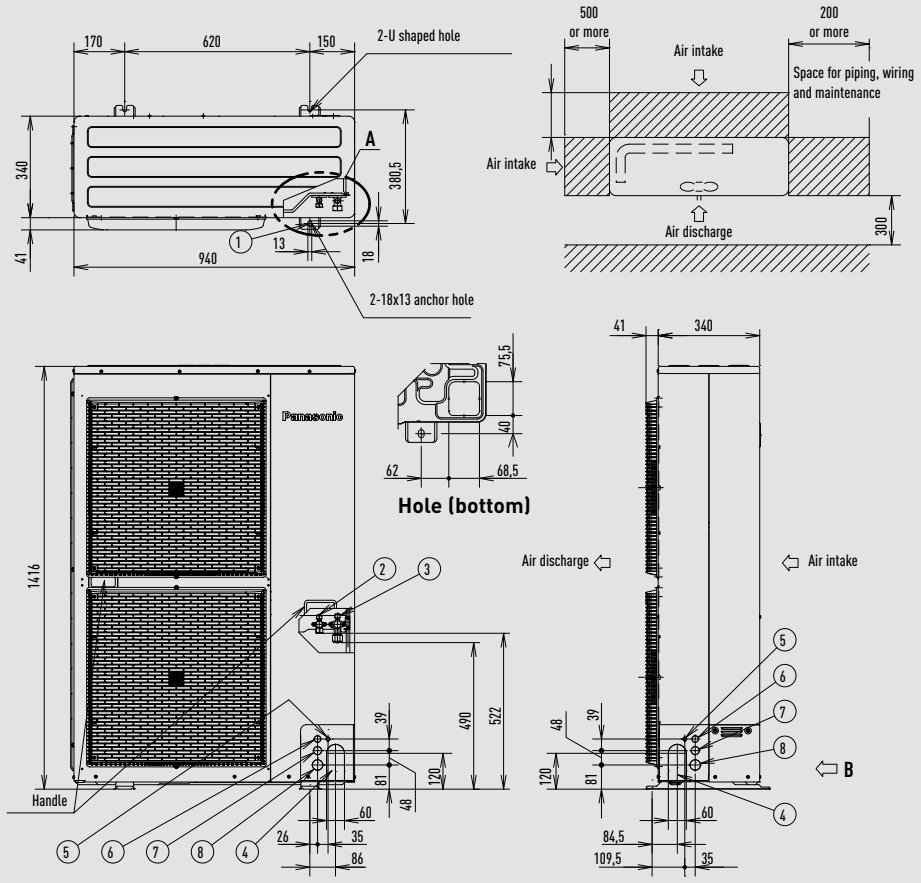


1	Mounting hole, anchor bolt: M10
2	Refrigerant tubing (liquid tube), Ø9,52 (flared)
3	Refrigerant tubing (gas tube), Ø15,88 (flared)
4	Refrigerant piping hole
5	Electrical wiring port (Ø13)
6	Electrical wiring port (øØ22)
7	Electrical wiring port (Ø27)
8	Electrical wiring port (Ø35)

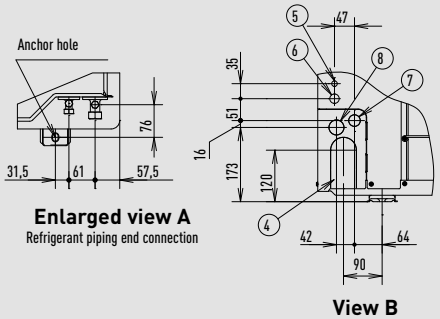


Unit: mm

PACi NX Series Elite outdoor unit from 10,0 to 14,0 kW

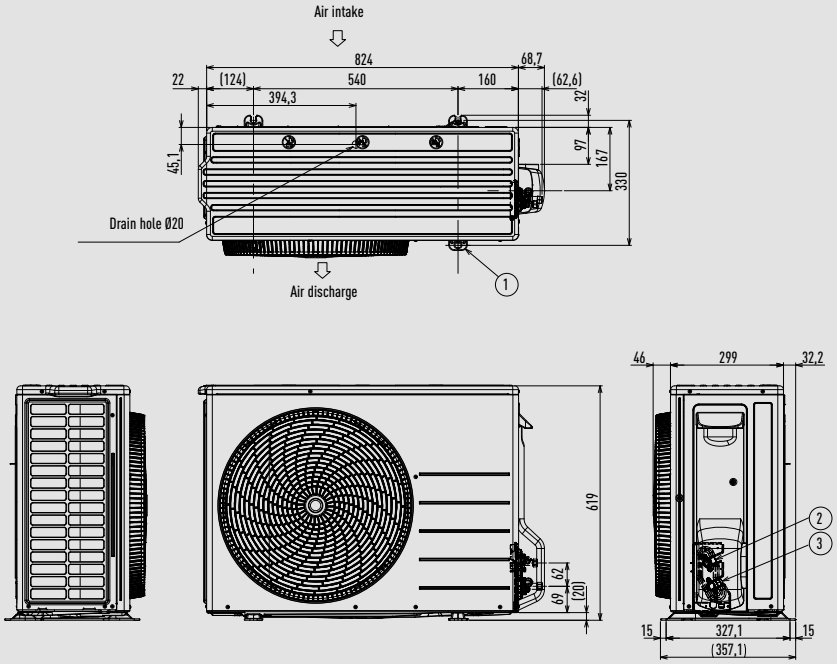


1	Mounting hole, anchor bolt: M10
2	Refrigerant tubing (liquid tube), Ø9,52 (flared)
3	Refrigerant tubing (gas tube), Ø15,88 (flared)
4	Refrigerant piping hole
5	Electrical wiring port (Ø13)
6	Electrical wiring port (øØ22)
7	Electrical wiring port (Ø27)
8	Electrical wiring port (Ø35)



Unit: mm

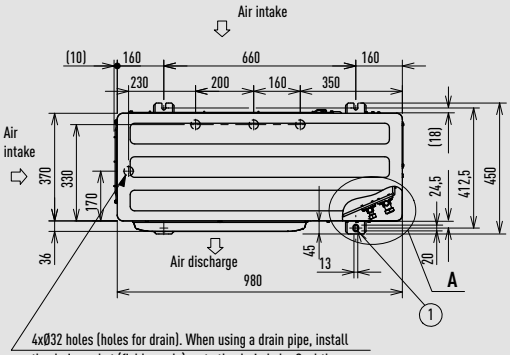
PACi NX Series Standard outdoor unit 3,6 and 5,0 kW



1	Mounting hole (4-R6,5), anchor bolt: M10
2	Refrigerant tubing (liquid tube), Ø6,35 (flared)
3	Refrigerant tubing (gas tube), Ø12,70 (flared)

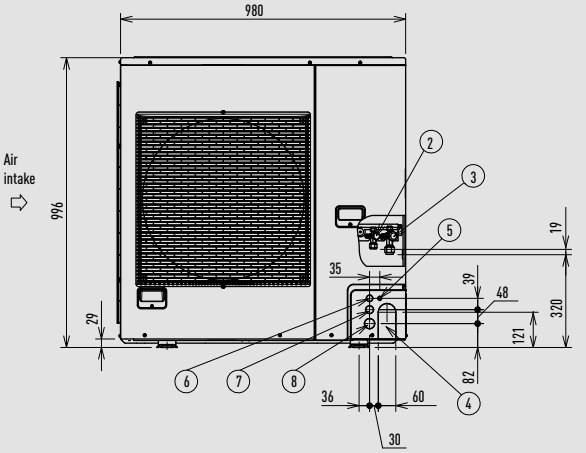
Unit: mm

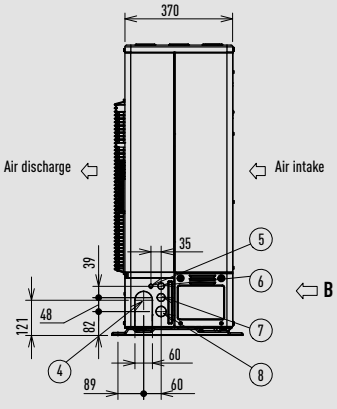
PACi NX Series Standard outdoor unit from 10,0 to 14,0 kW

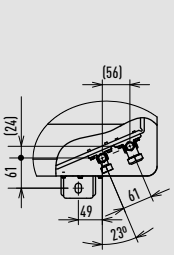


4xØ32 holes (holes for drain). When using a drain pipe, install the drain socket (field supply) on to the drain hole. Seal the other drain hole with the rubber cap

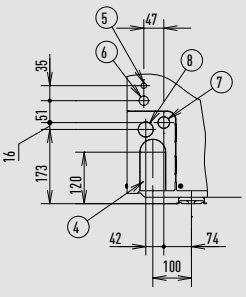
1	Mounting hole, anchor bolt: M10
2	Refrigerant tubing (liquid tube), Ø9,52 (flared)
3	Refrigerant tubing (gas tube), Ø15,88 (flared)
4	Refrigerant piping hole
5	Electrical wiring port (Ø13)
6	Electrical wiring port (øØ22)
7	Electrical wiring port (Ø27)
8	Electrical wiring port (Ø35)







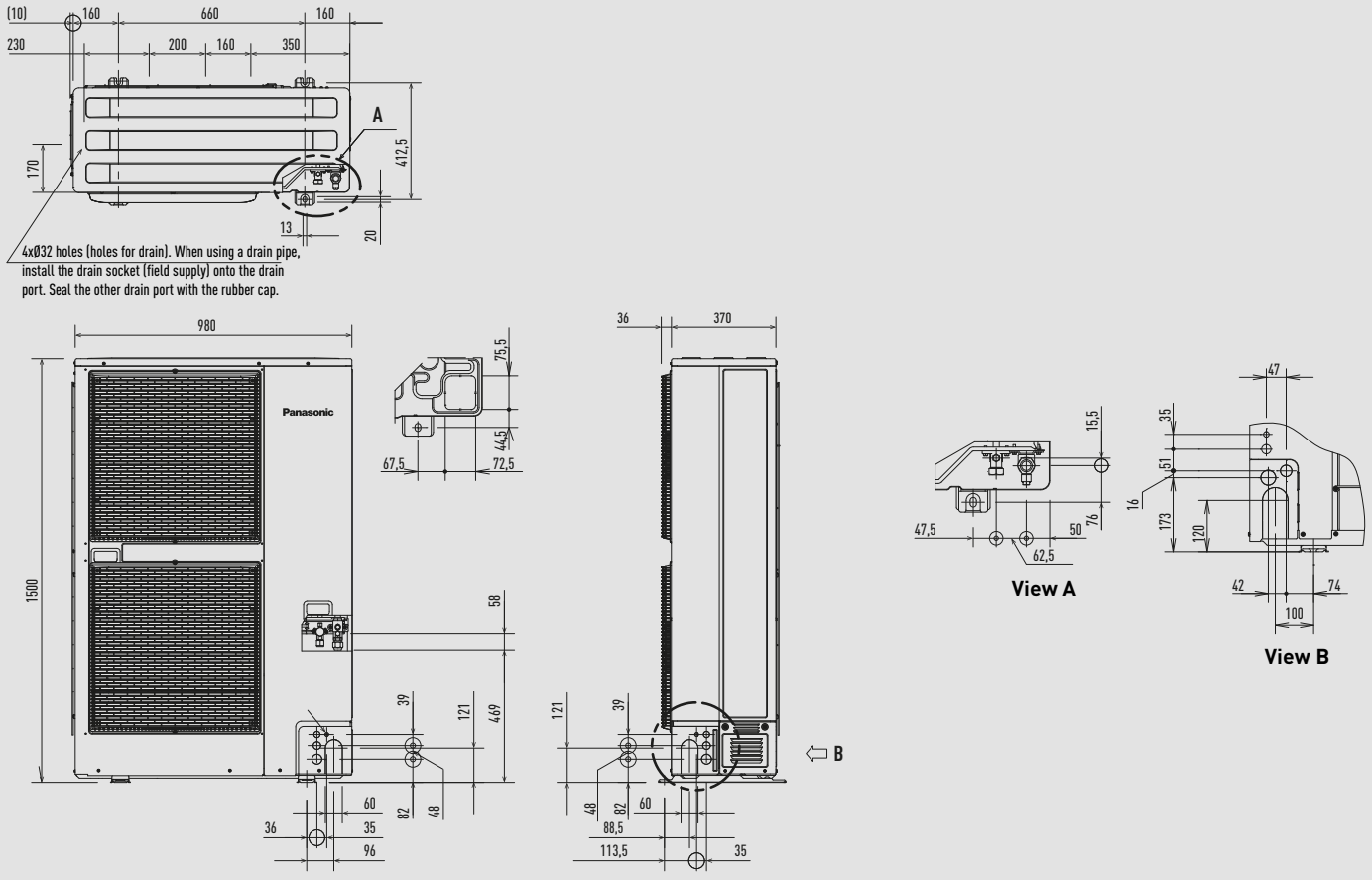
View A



View B

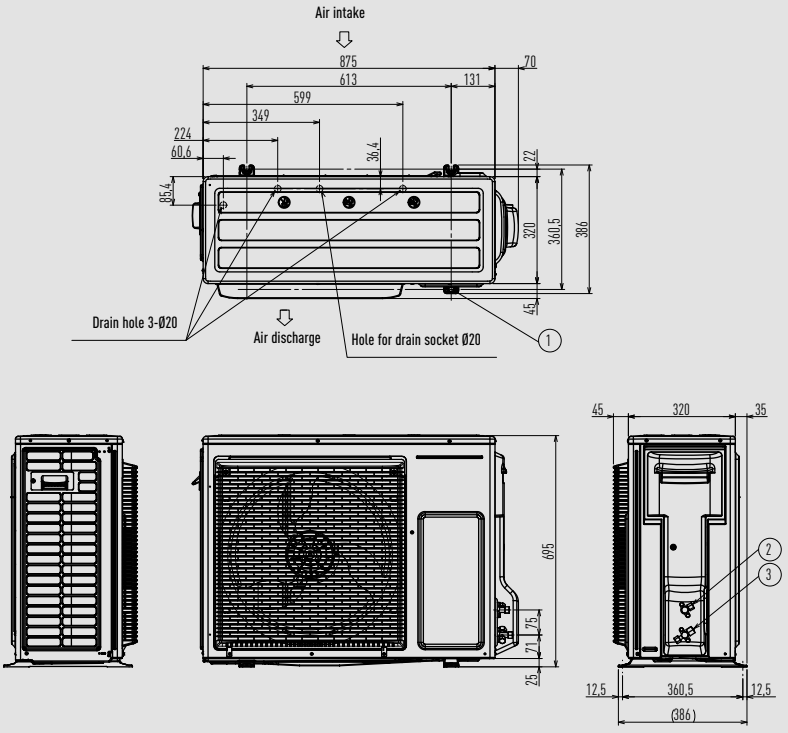
Unit: mm

Big PACi outdoor unit 20,0-25,0 kW



Unit: mm

PACi Elite outdoor unit 3,6 and 5,0 kW

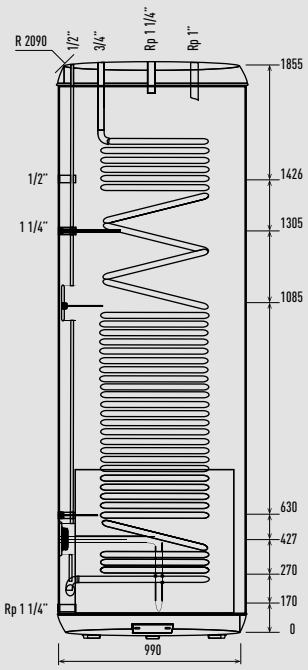


1	Mounting hole (4-R6,5), anchor bolt: M10
2	Refrigerant tubing (liquid tube), Ø6,35 (flared)
3	Refrigerant tubing (gas tube), Ø12,70 (flared)

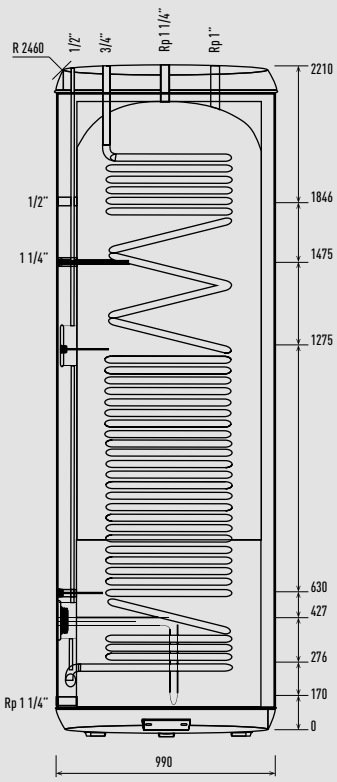
Unit: mm

PACi PRO-HT Tank

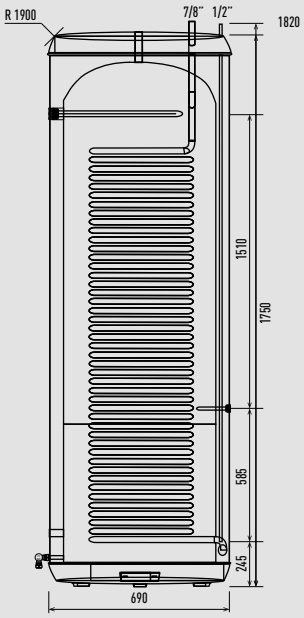
PAW-VP750LDHW-1



PAW-VP1000LDHW-1



PAW-VP380L

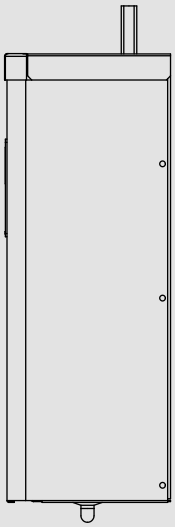


Note: R value indicates maximum overturning height.

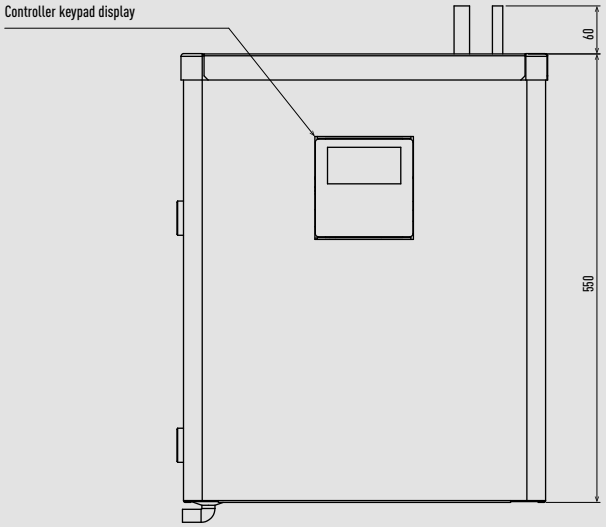
Unit: mm

PACi water heat exchanger

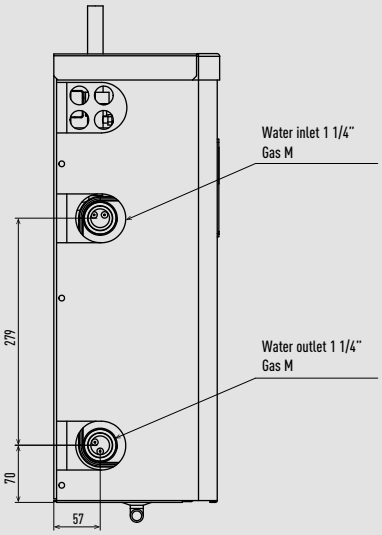
Right View



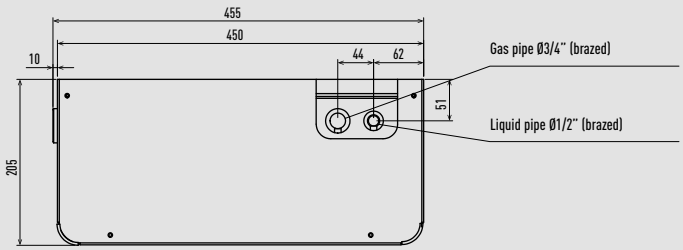
Front view



Left View



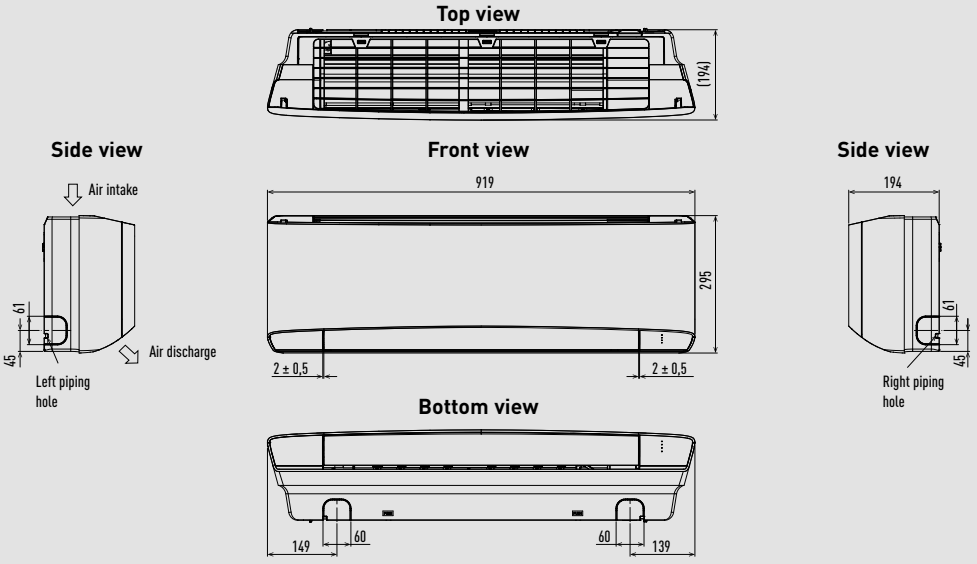
Top view



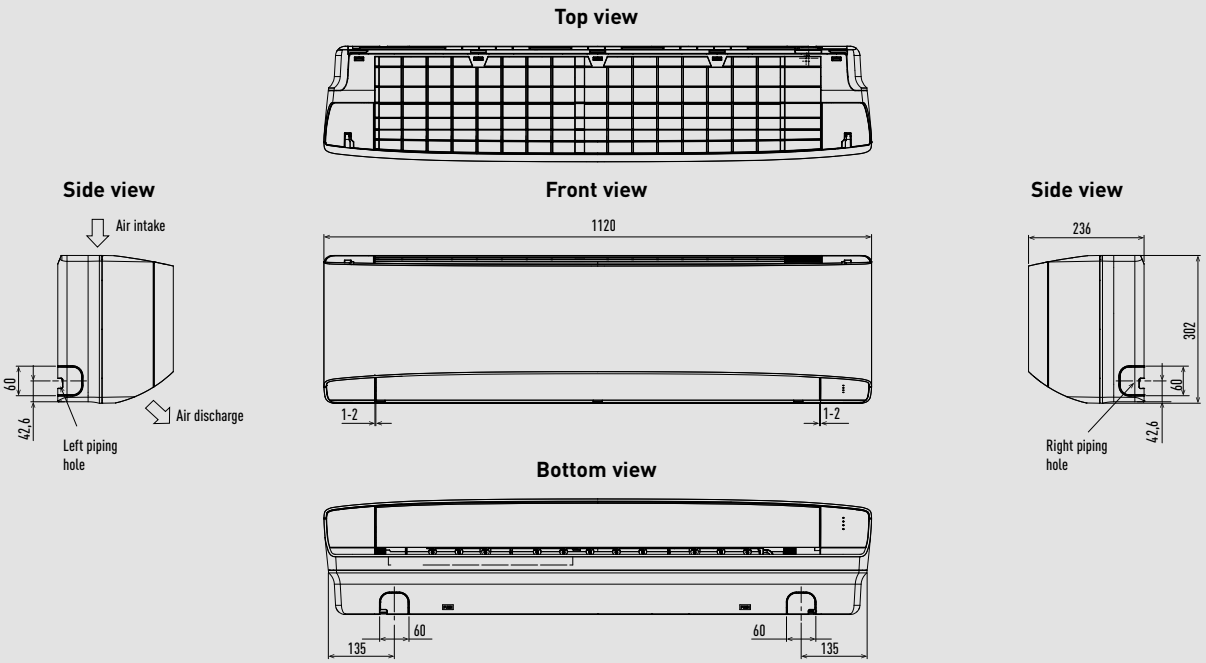
Unit: mm

Wall-mounted TKEA

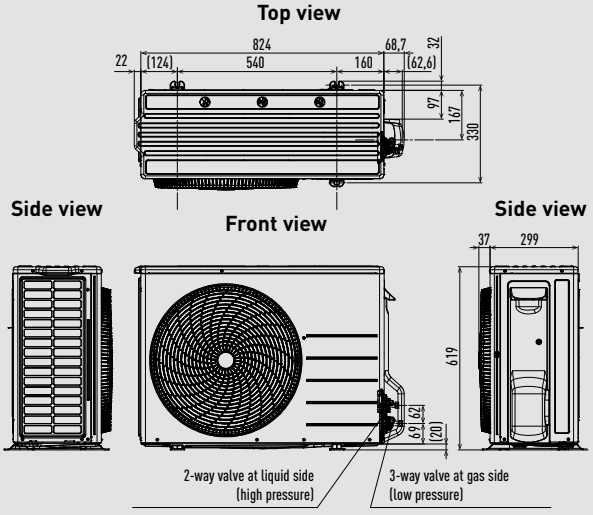
CS-Z25TKEA / CS-Z35TKEA



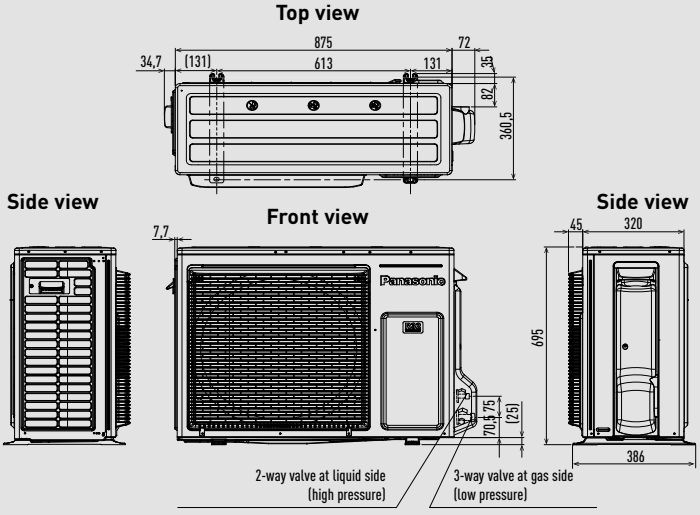
CS-Z42TKEA / CS-Z50TKEA / CS-Z71TKEA



CU-Z25TKEA / CU-Z35TKEA / CU-Z42TKEA



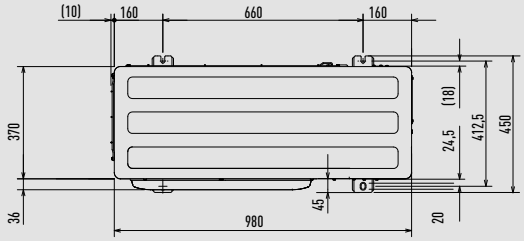
CU-Z50TKEA / CU-Z71TKEA



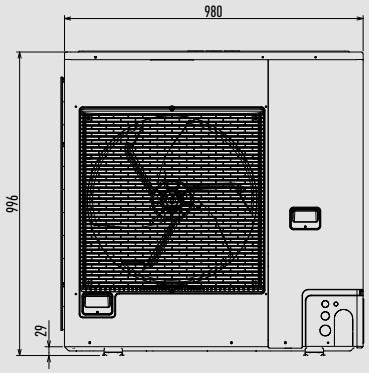
Unit: mm

Mini ECOi LZ2 Series 4 to 6 HP

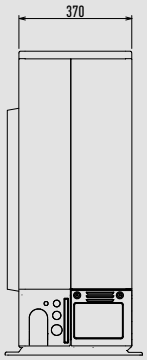
Top view



Front view



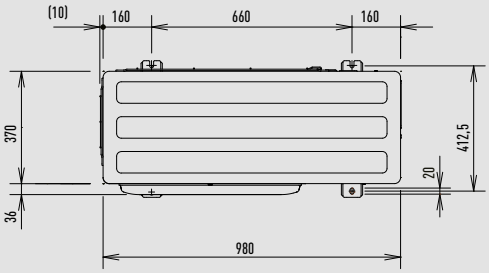
Side view



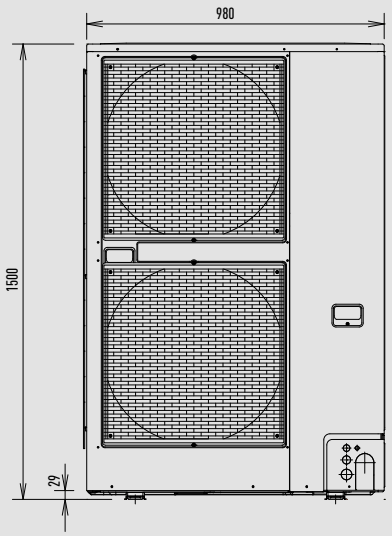
Unit: mm

Mini ECOi LZ2 Series 8 and 10 HP

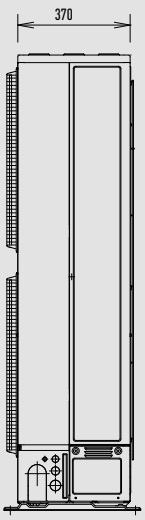
Top view



Front view

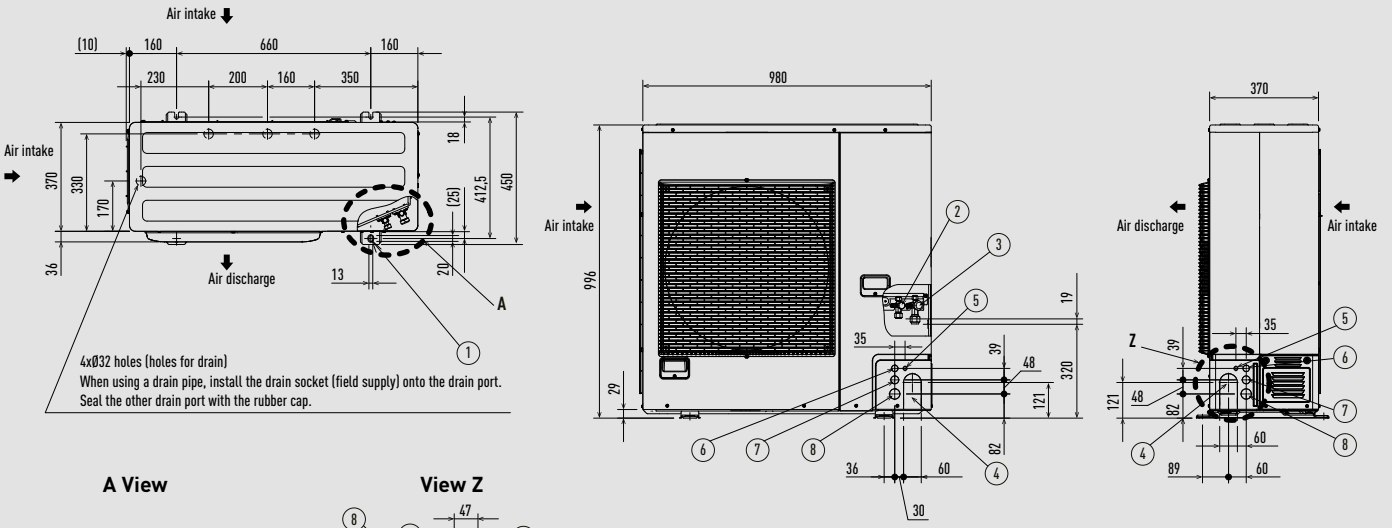


Side view

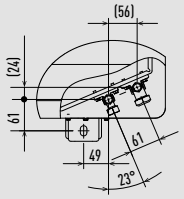


Unit: mm

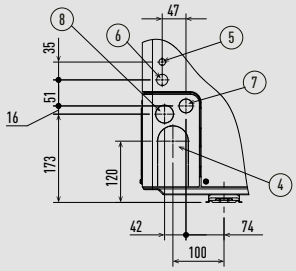
Mini ECOi LE2 Series High Efficiency 4 to 6 HP



A View



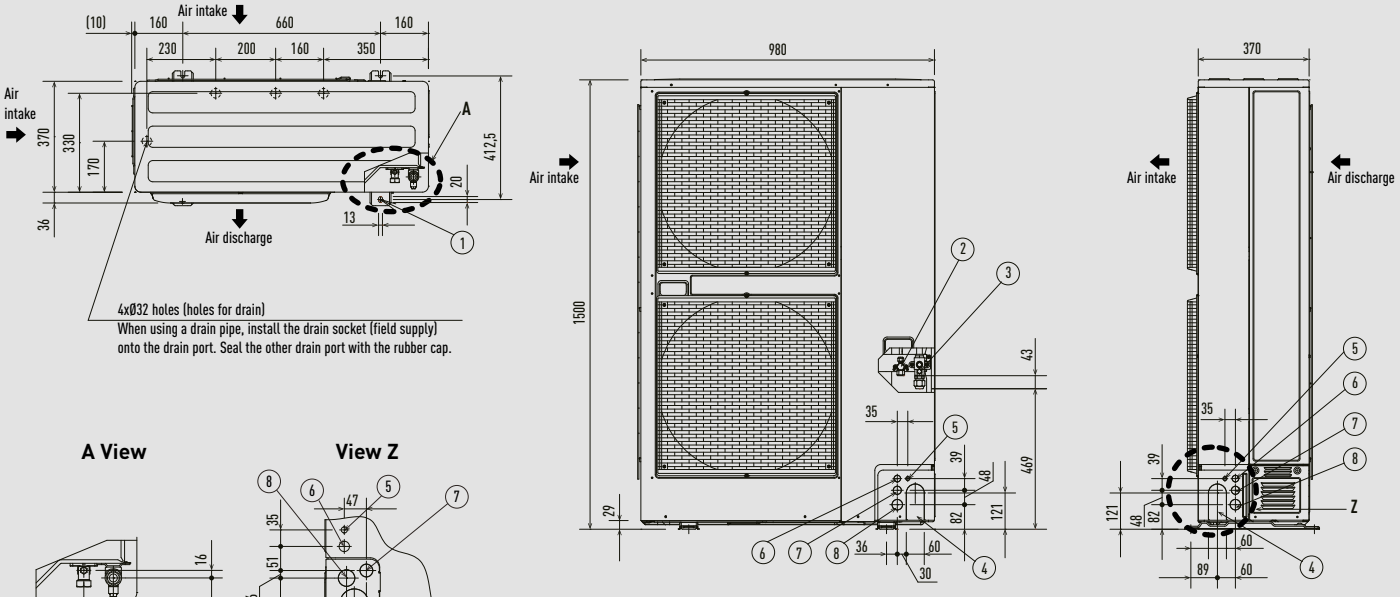
View Z



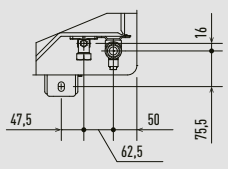
1	Mounting hole (4-R6,5), anchor bolt: M10
2	Refrigerant tubing (liquid), Ø9,52 (flared)
3	Refrigerant tubing (gas), Ø19,05 (flared)
4	Refrigerant piping port
5	Electrical wiring port (Ø13)
6	Electrical wiring port (Ø22)
7	Electrical wiring port (Ø27)
8	Electrical wiring port (Ø35)

Unit: mm

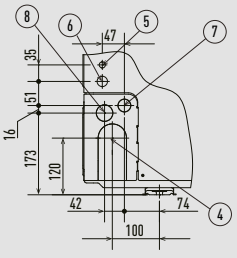
Mini ECOi LE1 Series High Efficiency 8 and 10 HP



A View



View Z

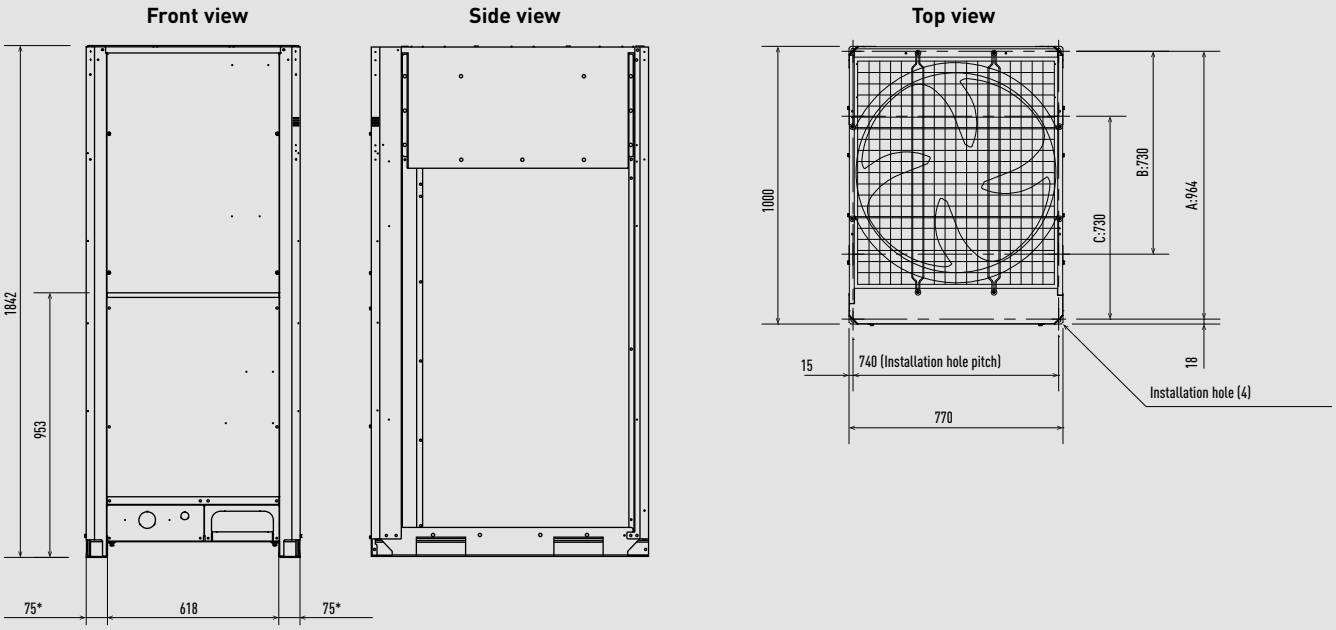


1	Mounting hole (4-R6,5), anchor bolt: M10
2	Refrigerant tubing (liquid), Ø9,52 (flared)
3	Refrigerant tubing (gas), Ø19,05 (flared)
4	Refrigerant piping port
5	Electrical wiring port (Ø13)
6	Electrical wiring port (Ø22)
7	Electrical wiring port (Ø27)
8	Electrical wiring port (Ø35)

The piping of the gas main has a diameter of ø22,22, but the connection to the service valve of the outdoor unit has a diameter of ø19,05, so a flare has to be used. Consequently, be sure to use the enclosed joint tube B and joint tube A in making connections (braze).

Unit: mm

2-Pipe ECOi EX ME2 Series 8 and 10 HP



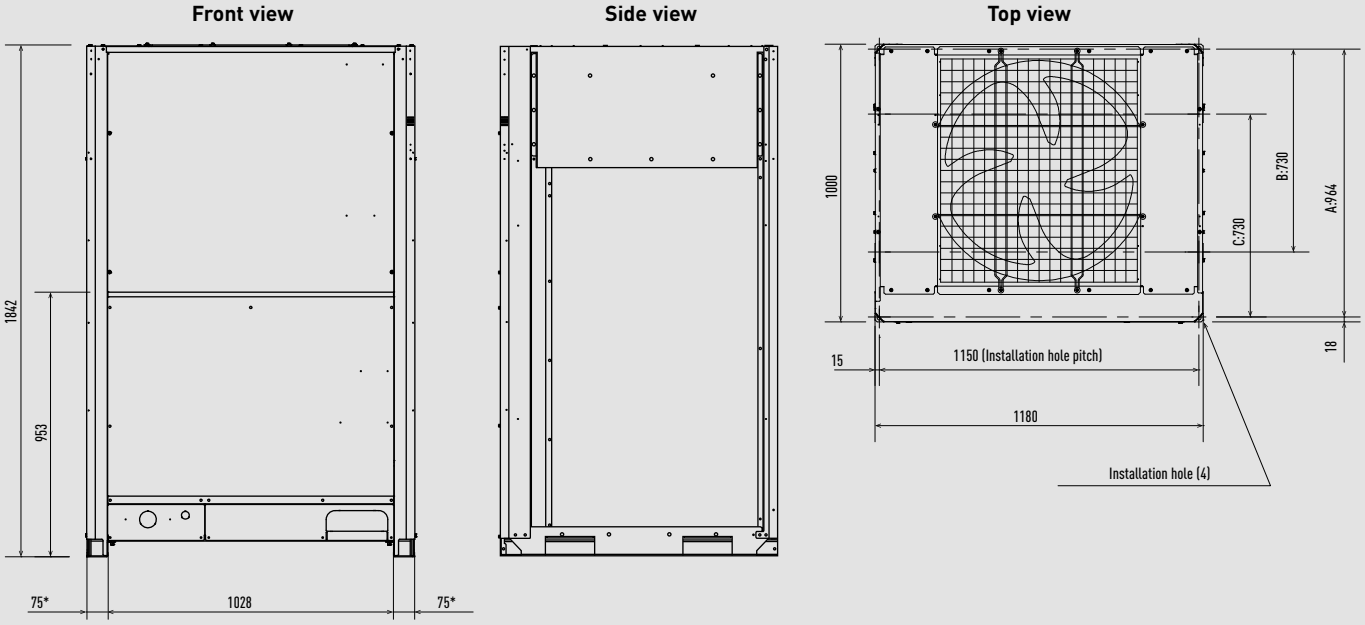
According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

A: 964 (Installation hole pitch). The piping is routed out from the front.
B: 730 (Installation hole pitch)*. The piping is routed out from the bottom.
C: 730 (Installation hole pitch).

* Installation fixing bracket. Installation side.

Unit: mm

2-Pipe ECOi EX ME2 Series 12, 14 and 16 HP / 3-Pipe ECOi EX MF3 Series 8 to 16 HP



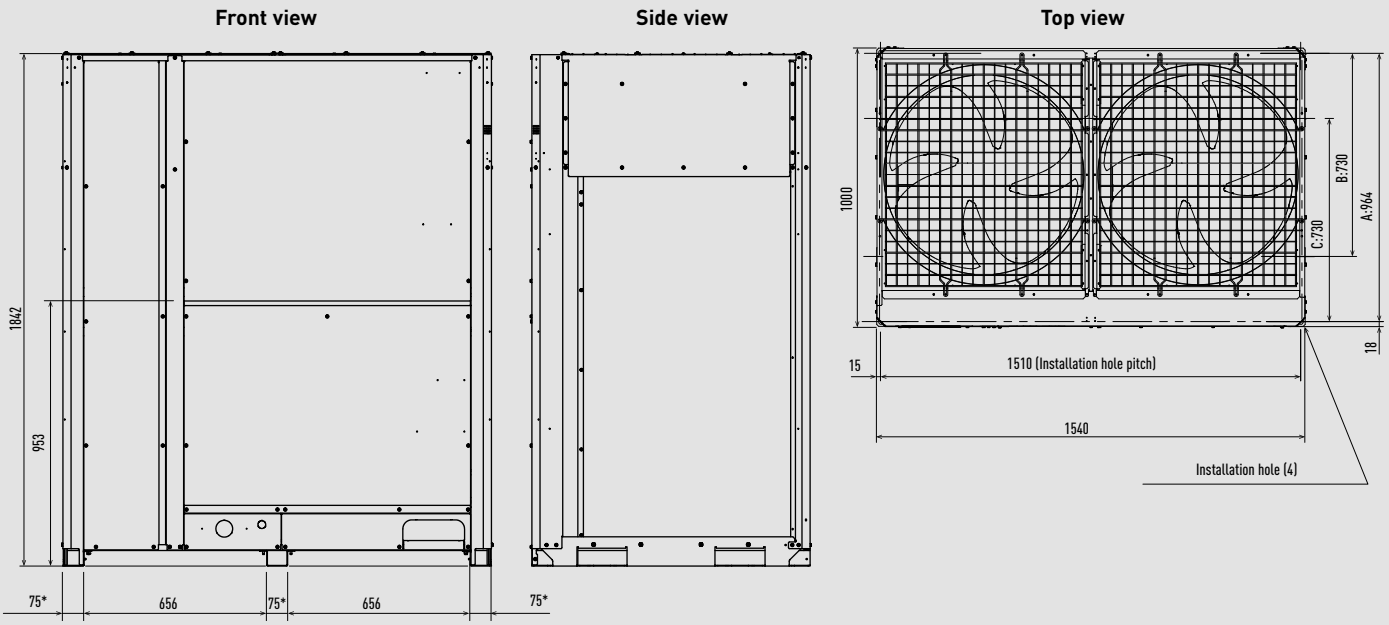
According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

A: 964 (Installation hole pitch). The piping is routed out from the front.
B: 730 (Installation hole pitch)*. The piping is routed out from the bottom.
C: 730 (Installation hole pitch).

* Installation fixing bracket. Installation side.

Unit: mm

2-Pipe ECOi EX ME2 Series 18 and 20 HP



According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

A: 964 (Installation hole pitch). The piping is routed out from the front.
B: 730 (Installation hole pitch)*. The piping is routed out from the bottom.
C: 730 (Installation hole pitch).

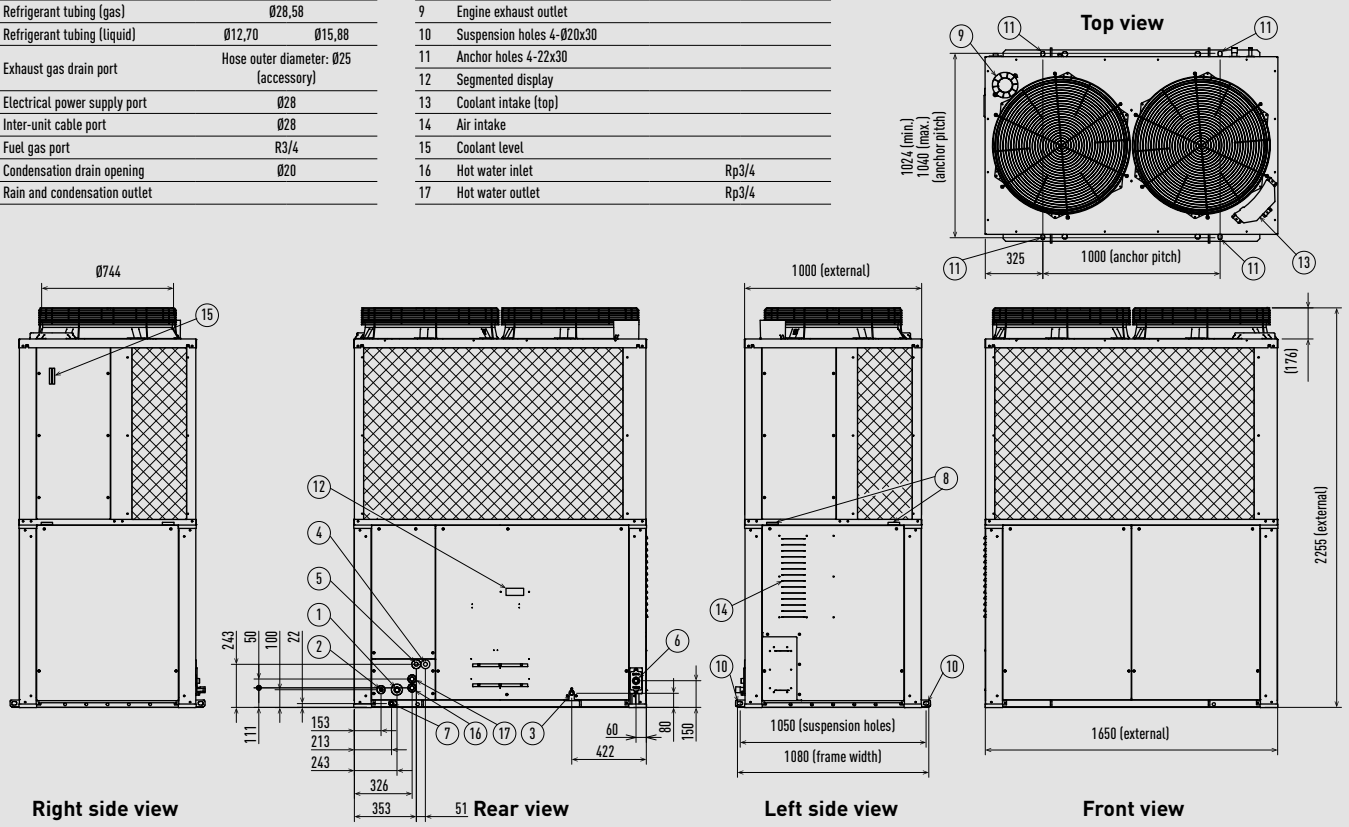
* Installation fixing bracket. Installation side.

Unit: mm

ECO G GE3 Series 16 and 20 HP

	Type	16 HP	20 HP
1	Refrigerant tubing (gas)	Ø28,58	
2	Refrigerant tubing (liquid)	Ø12,70	Ø15,88
3	Exhaust gas drain port	Hose outer diameter: Ø25 (accessory)	
4	Electrical power supply port	Ø28	
5	Inter-unit cable port	Ø28	
6	Fuel gas port	R3/4	
7	Condensation drain opening	Ø20	
8	Rain and condensation outlet		

	Type	16 HP	20 HP
9	Engine exhaust outlet		
10	Suspension holes 4-Ø20x30		
11	Anchor holes 4-22x30		
12	Segmented display		
13	Coolant intake (top)		
14	Air intake		
15	Coolant level		
16	Hot water inlet	Rp3/4	
17	Hot water outlet	Rp3/4	

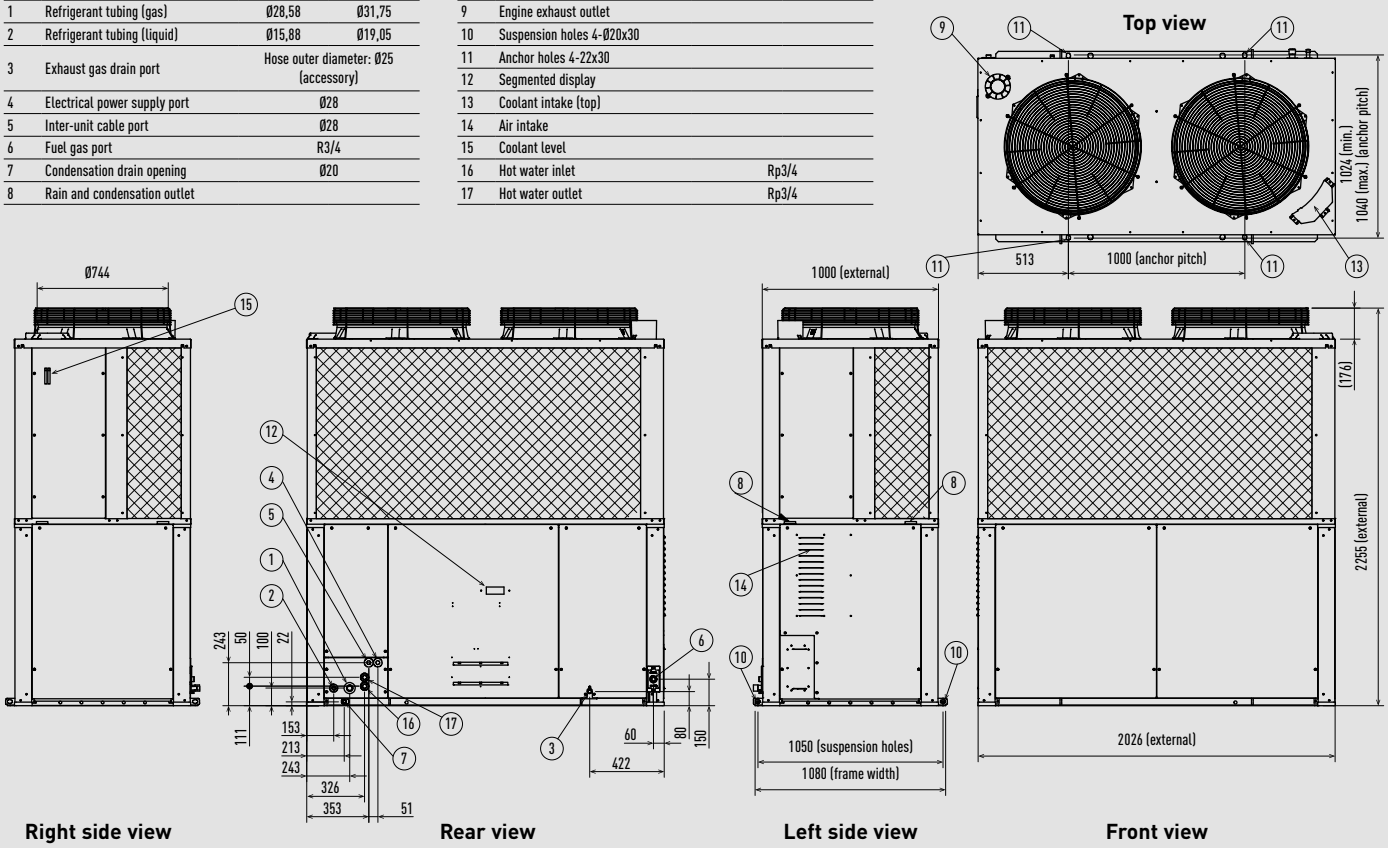


Unit: mm

ECO G GE3 Series 25 and 30 HP

	Type	25 HP	30 HP
1	Refrigerant tubing (gas)	Ø28,58	Ø31,75
2	Refrigerant tubing (liquid)	Ø15,88	Ø19,05
3	Exhaust gas drain port	Hose outer diameter: Ø25 (accessory)	
4	Electrical power supply port	Ø28	
5	Inter-unit cable port	Ø28	
6	Fuel gas port	R3/4	
7	Condensation drain opening	Ø20	
8	Rain and condensation outlet		

	Type	25 HP	30 HP
9	Engine exhaust outlet		
10	Suspension holes 4-Ø20x30		
11	Anchor holes 4-22x30		
12	Segmented display		
13	Coolant intake (top)		
14	Air intake		
15	Coolant level		
16	Hot water inlet	Rp3/4	
17	Hot water outlet	Rp3/4	

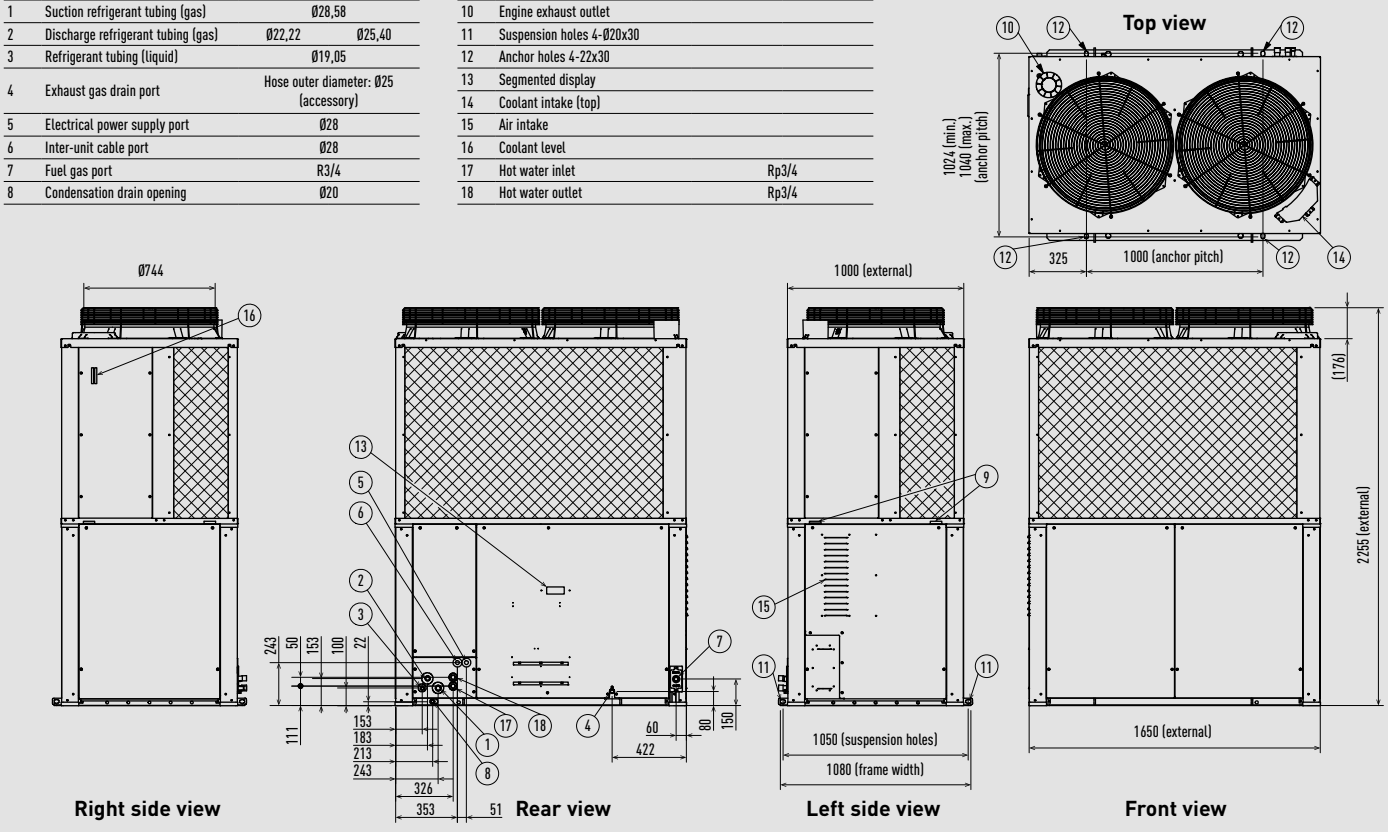


Unit: mm

ECO G GF3 Series 16 and 20 HP

	Type	16HP	20HP
1	Suction refrigerant tubing (gas)	Ø28,58	
2	Discharge refrigerant tubing (gas)	Ø22,22	Ø25,40
3	Refrigerant tubing (liquid)	Ø19,05	
4	Exhaust gas drain port	Hose outer diameter: Ø25 (accessory)	
5	Electrical power supply port	Ø28	
6	Inter-unit cable port	Ø28	
7	Fuel gas port	R3/4	
8	Condensation drain opening	Ø20	

	Type		
9	Rain and condensation outlet		
10	Engine exhaust outlet		
11	Suspension holes 4-Ø20x30		
12	Anchor holes 4-22x30		
13	Segmented display		
14	Coolant intake (top)		
15	Air intake		
16	Coolant level		
17	Hot water inlet	Rp3/4	
18	Hot water outlet	Rp3/4	

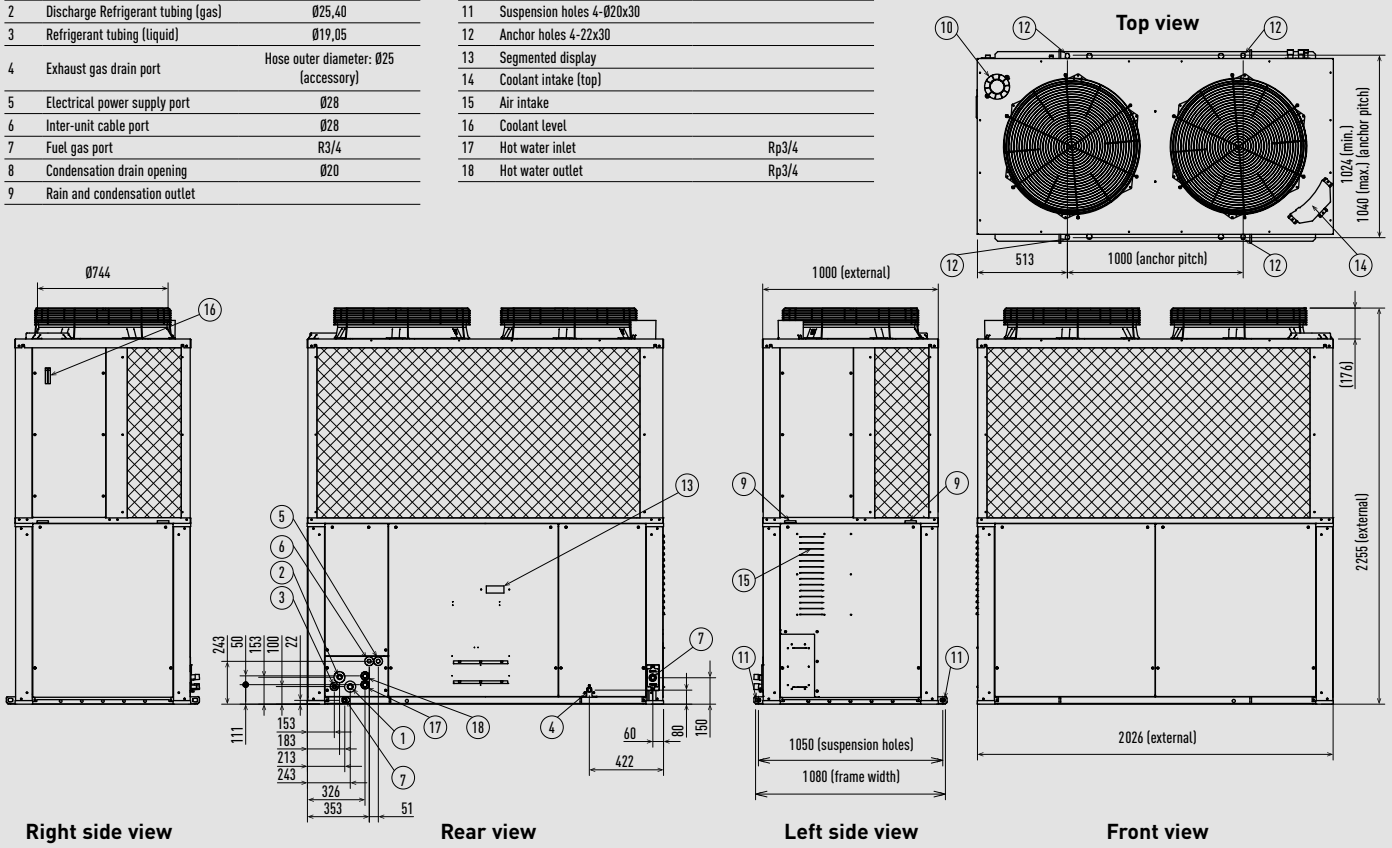


Unit: mm

ECO G GF3 Series 25 HP

1	Suction Refrigerant tubing (gas)	Ø28,58
2	Discharge Refrigerant tubing (gas)	Ø25,40
3	Refrigerant tubing (liquid)	Ø19,05
4	Exhaust gas drain port	Hose outer diameter: Ø25 (accessory)
5	Electrical power supply port	Ø28
6	Inter-unit cable port	Ø28
7	Fuel gas port	R3/4
8	Condensation drain opening	Ø20
9	Rain and condensation outlet	

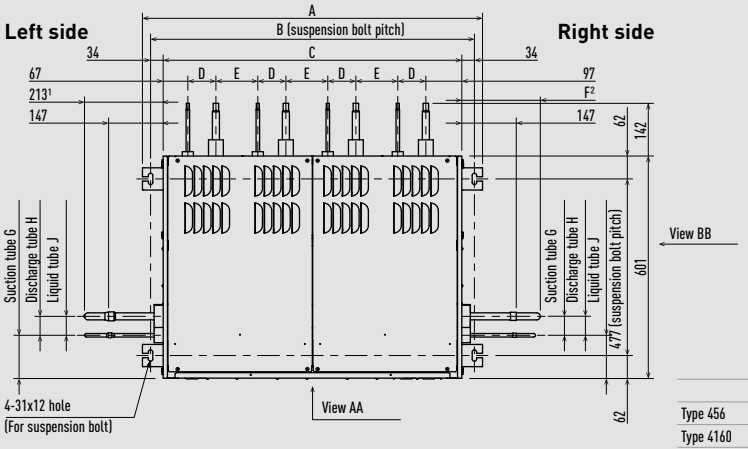
10	Engine exhaust outlet	
11	Suspension holes 4-Ø20x30	
12	Anchor holes 4-22x30	
13	Segmented display	
14	Coolant intake (top)	
15	Air intake	
16	Coolant level	
17	Hot water inlet	Rp3/4
18	Hot water outlet	Rp3/4

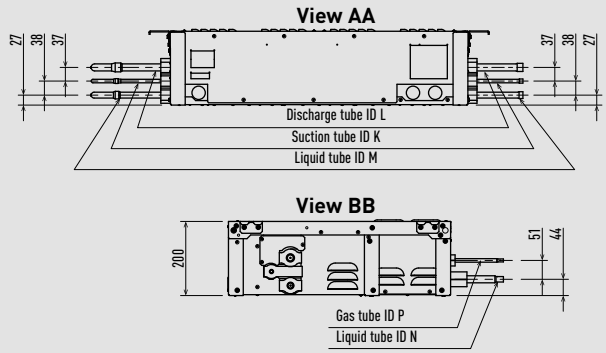


Unit: mm

3-Pipe Control Box Kit / Multiple connection type

Heat recovery box dimensions

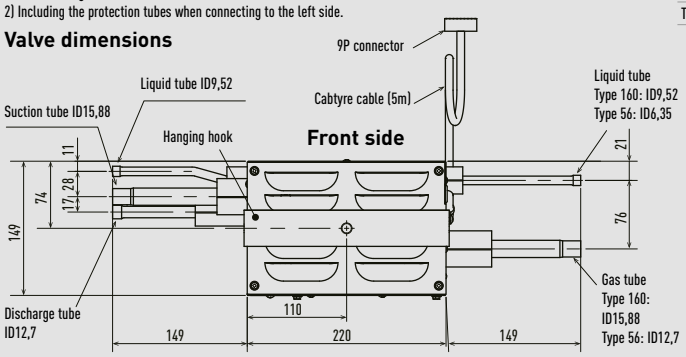


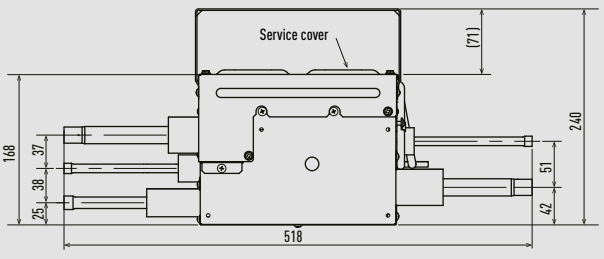


	A	B	C	D	E	F	G	H	J	K	L	M	N	P
Type 456	919	874	807	67	113	213	51	51	117	Ø19,05	Ø15,88	Ø9,52	Ø6,35	Ø12,70
Type 4160	919	874	807	67	113	207	55	54	113	Ø9,52	Ø15,88	Ø28,58	Ø25,40	Ø15,88
Type 656	1297	1253	1185	67	113	213	54	55	115	Ø25,40	Ø19,05	Ø12,70	Ø6,35	Ø12,70
Type 856	1675	1631	1563	67	113	213	53	53	115	Ø28,58	Ø22,22	Ø12,70	Ø6,35	Ø12,70

1) In case of right side connection.
2) Including the protection tubes when connecting to the left side.

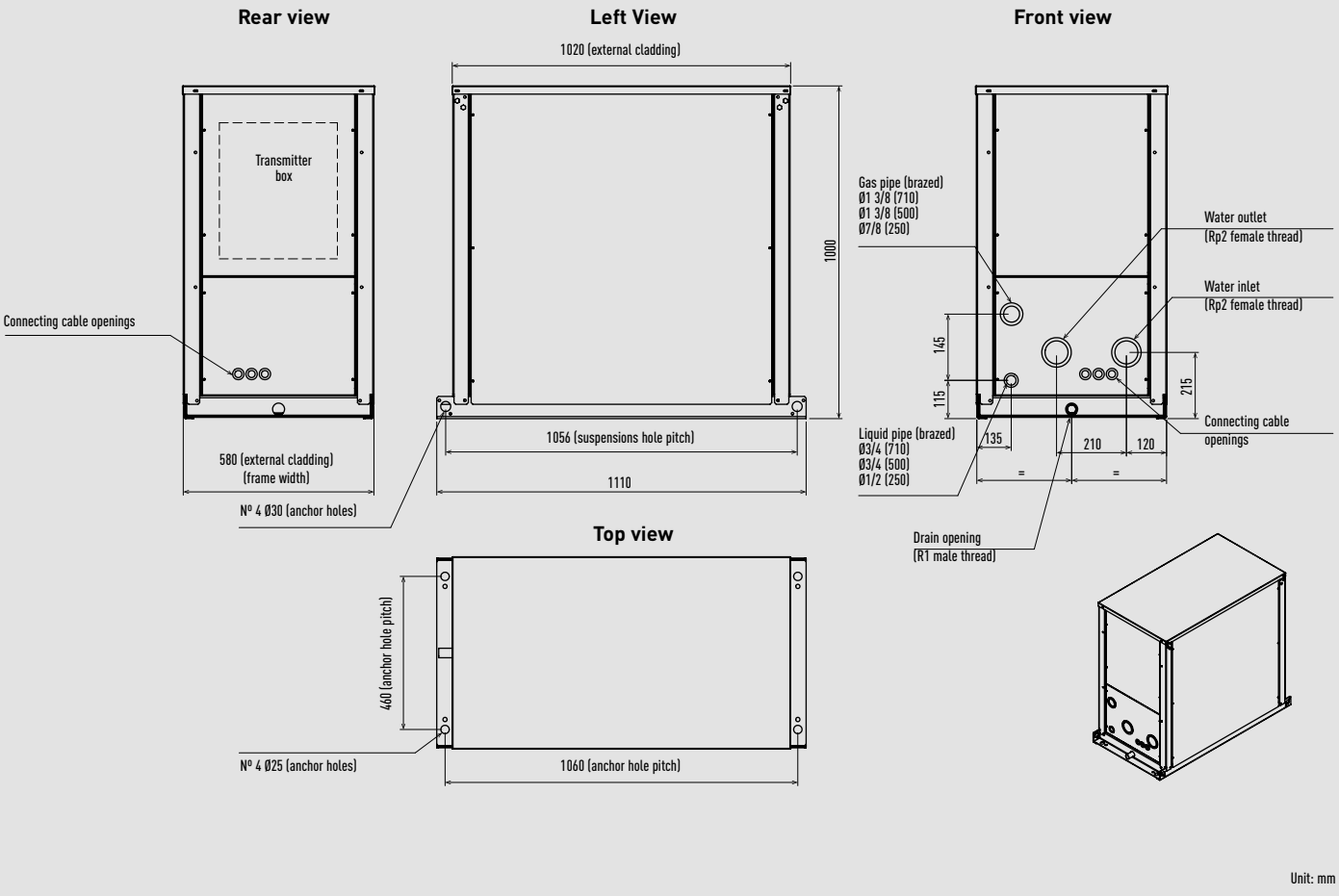
Valve dimensions





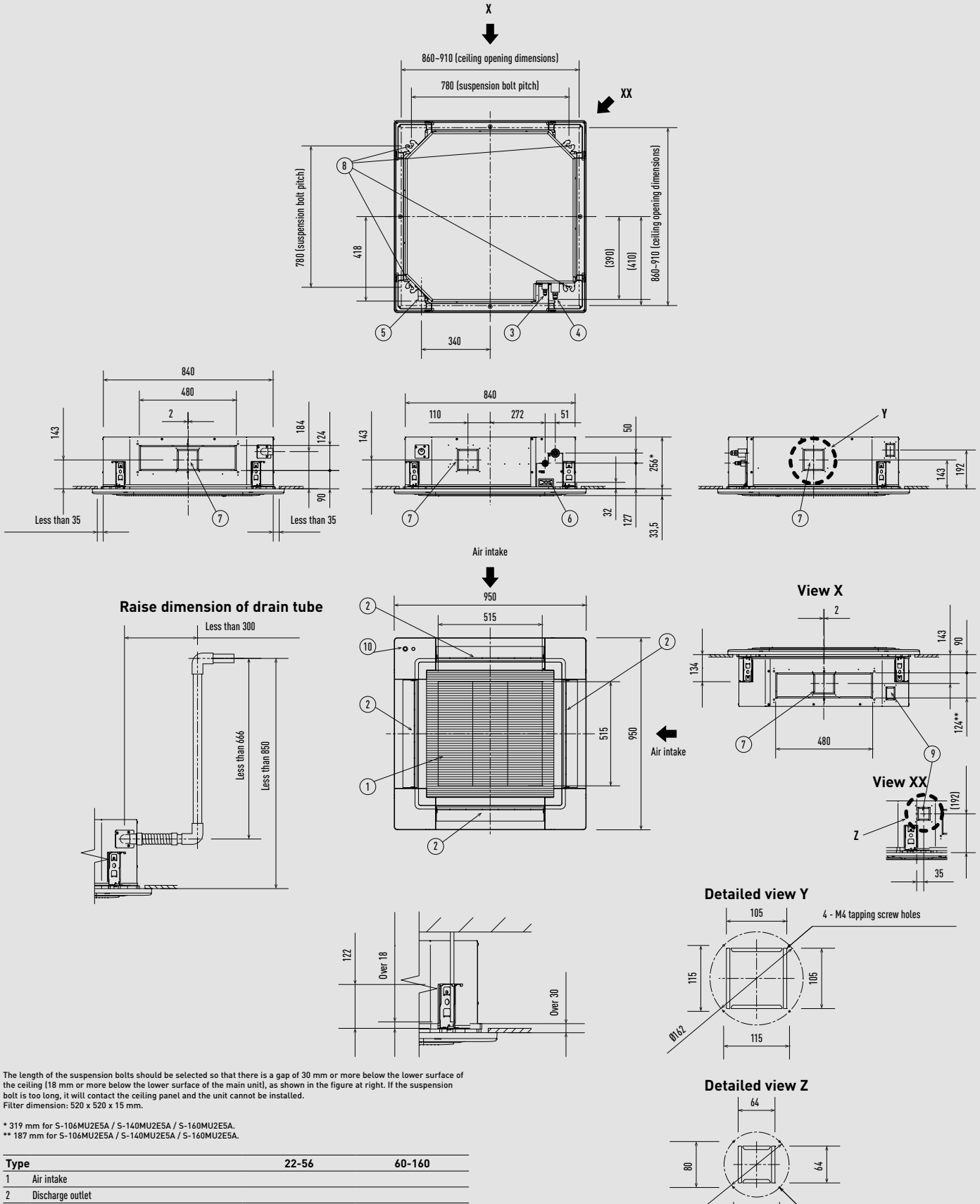
Unit: mm

Water heat exchanger for chilled and hot water production



Unit: mm

U2 Type 4 way 90x90 cassette



The length of the suspension bolts should be selected so that there is a gap of 30 mm or more below the lower surface of the ceiling (18 mm or more below the lower surface of the main unit), as shown in the figure at right. If the suspension bolt is too long, it will contact the ceiling panel and the unit cannot be installed.
Filter dimension: 520 x 520 x 15 mm.

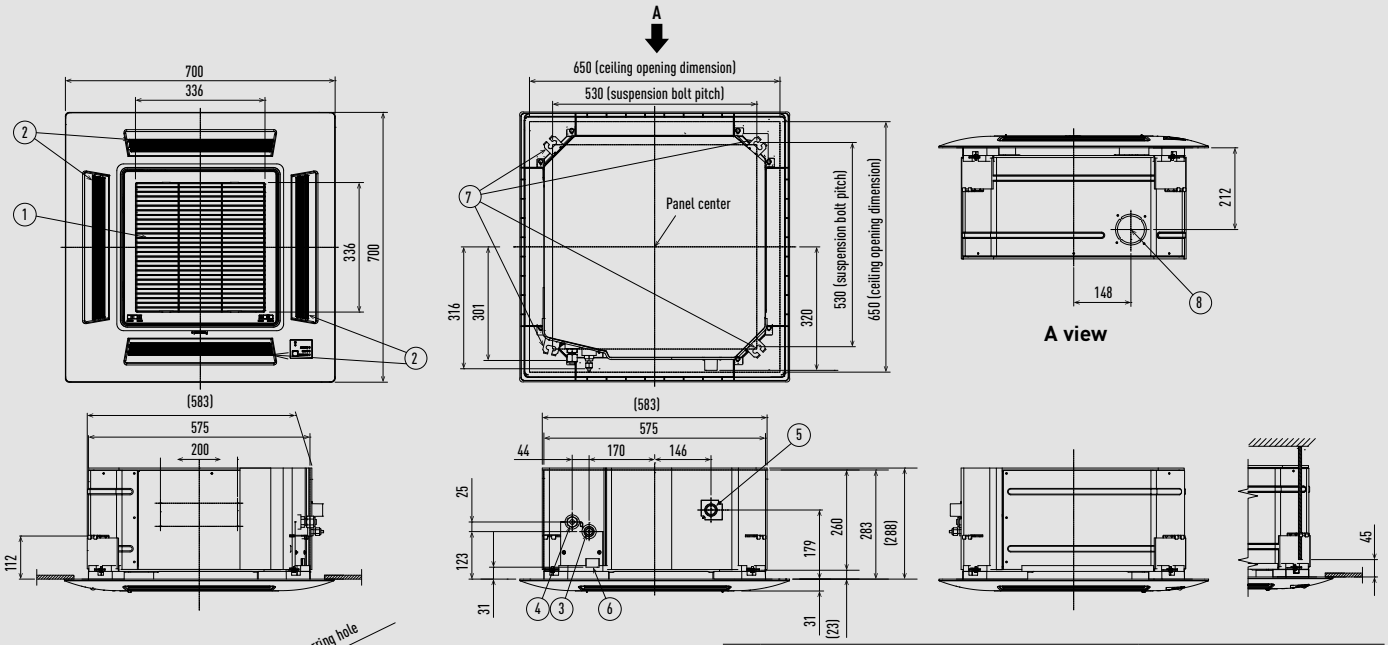
* 319 mm for S-106MU2E5A / S-140MU2E5A / S-160MU2E5A.
** 187 mm for S-106MU2E5A / S-140MU2E5A / S-160MU2E5A.

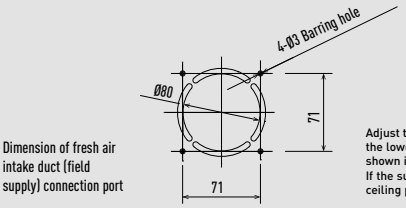
Type		22-56	60-160
1	Air intake		
2	Discharge outlet		
3	Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared)
4	Refrigerant tubing (gas)	Ø12,70 (flared)	Ø15,88 (flared)
5	Drain tube connection port VP25	Outer diameter Ø32	
6	Power supply port		
7	Suspension bolt hole	4-12x30 elongated hole	
8	Fresh air intake duct connection port	Ø100 [1]	
9	Suspension bolt hole	4-12x30 elongated hole	
10	Econavi sensor (only CZ-KPU3A)		

1) Necessary to attach duct connecting flange(field supplied).

Unit: mm

Y2 Type 4 way 60x60 cassette





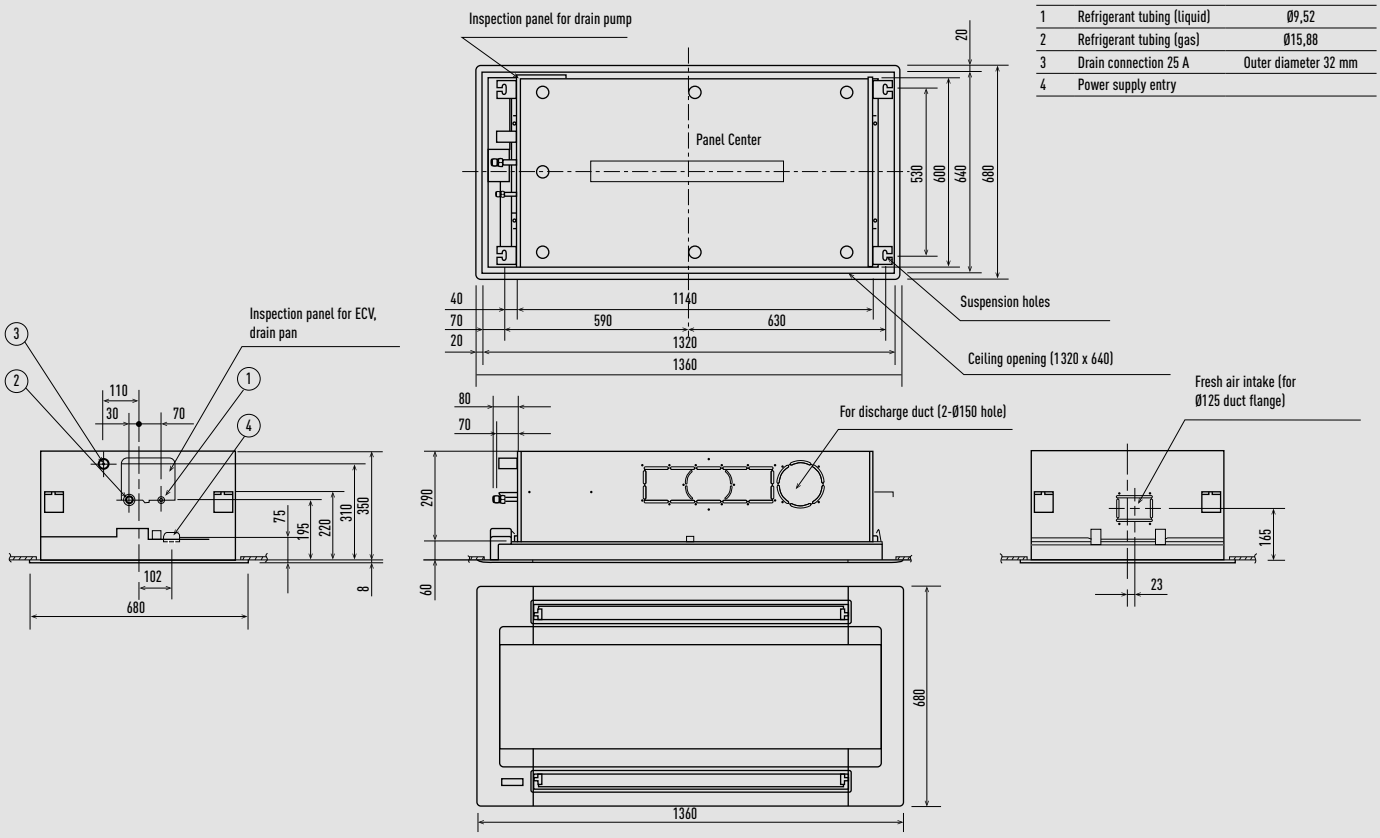
Dimension of fresh air intake duct (field supply) connection port

Adjust the suspension bolt length so that the gap from the lower ceiling surface becomes 45 mm or more, as shown in the figure at right.
If the suspension bolts is too long, it will contact the ceiling panel and the unit cannot be installed.

1	Air intake	
2	Discharge outlet	
3	Refrigerant tubing (liquid)	Ø6,35 (flared)
4	Refrigerant tubing (gas)	Ø12,70 (flared)
5	Drain tube connection port VP25	Outer diameter Ø32
6	Power supply port	
7	Suspension bolt hole	4-11 x 26 hole
8	Fresh air intake duct connection port	Ø80

Unit: mm

L1 Type 2 Way Cassette

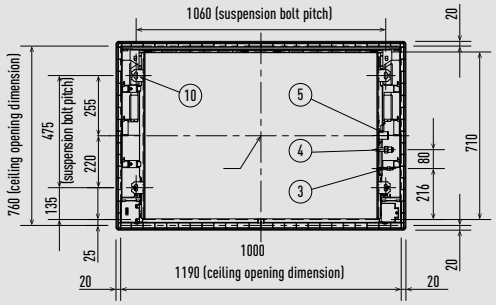


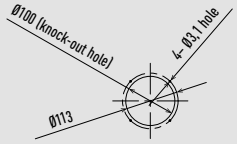
1	Refrigerant tubing (liquid)	Ø9,52
2	Refrigerant tubing (gas)	Ø15,88
3	Drain connection 25 A	Outer diameter 32 mm
4	Power supply entry	

Unit: mm

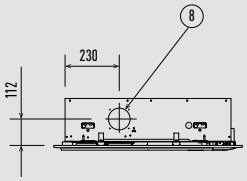
D1 Type 1 way cassette

		28-56	73
1	Air intake grille		
2	Discharge outlet		
3	Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared)
4	Refrigerant tubing (gas)	Ø12,70 (flared)	Ø15,88 (flared)
5	Drain tube connection port VP25	Outer diameter32	
6	Power supply entry		
7	Discharge duct connection port (for descending ceiling)		
8	Fresh air intake duct connection port	Ø100	
9	Installation port for wireless remote controller receiver		
10	Suspension bolt hole	4-12 x 30 mm	

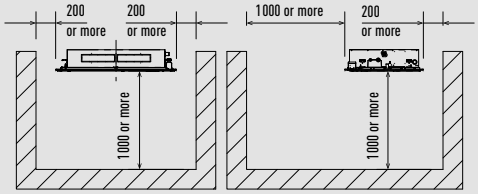


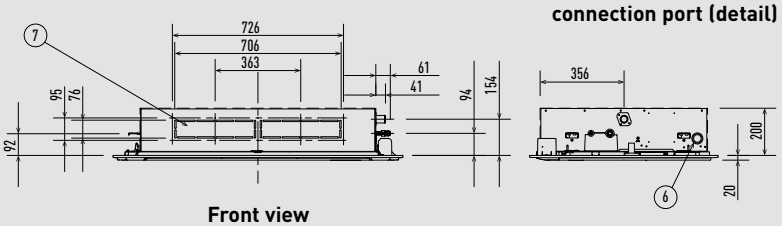


Fresh air intake duct connection port (detail)

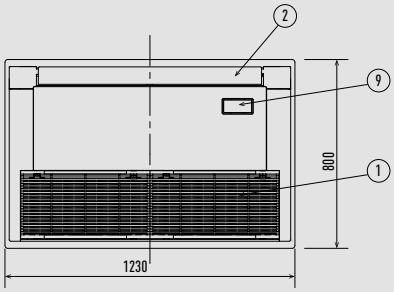


Required space for installation





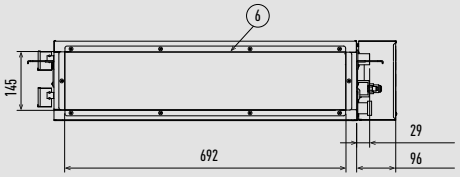
Front view

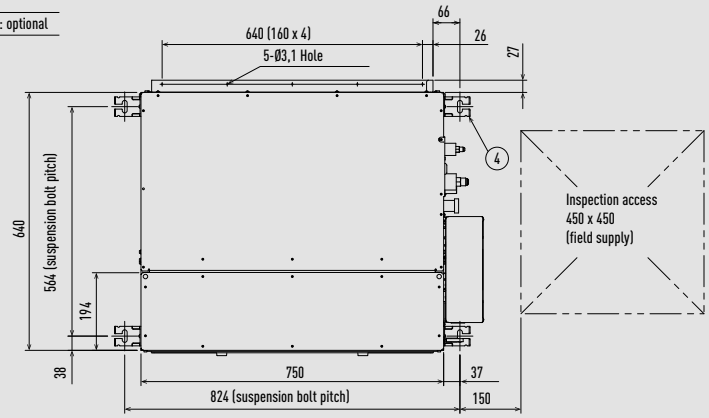


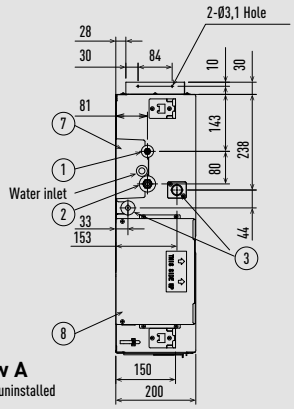
Unit: mm

M1 Type slim variable static pressure hide-away concealed duct

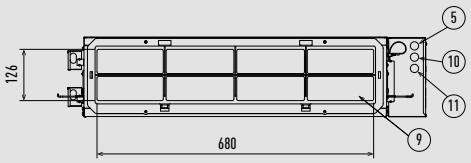
1	Refrigerant piping (narrow tube)	
2	Refrigerant piping (wide tube)	
3	Upper and bottom drain port	Outer diameter 26 mm
4	Suspension lug	
5	Power supply outlet	2- Ø30
6	Flange for air intake duct	
7	PL cover	
8	Electrical component box	
9	Frame filter	
10	Signal output board	ACC-SG-AGB: optional

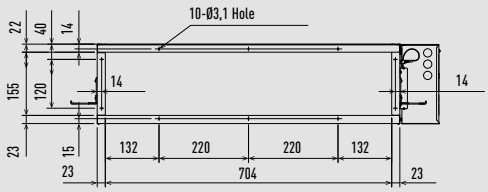






View A
Frame filter uninstalled

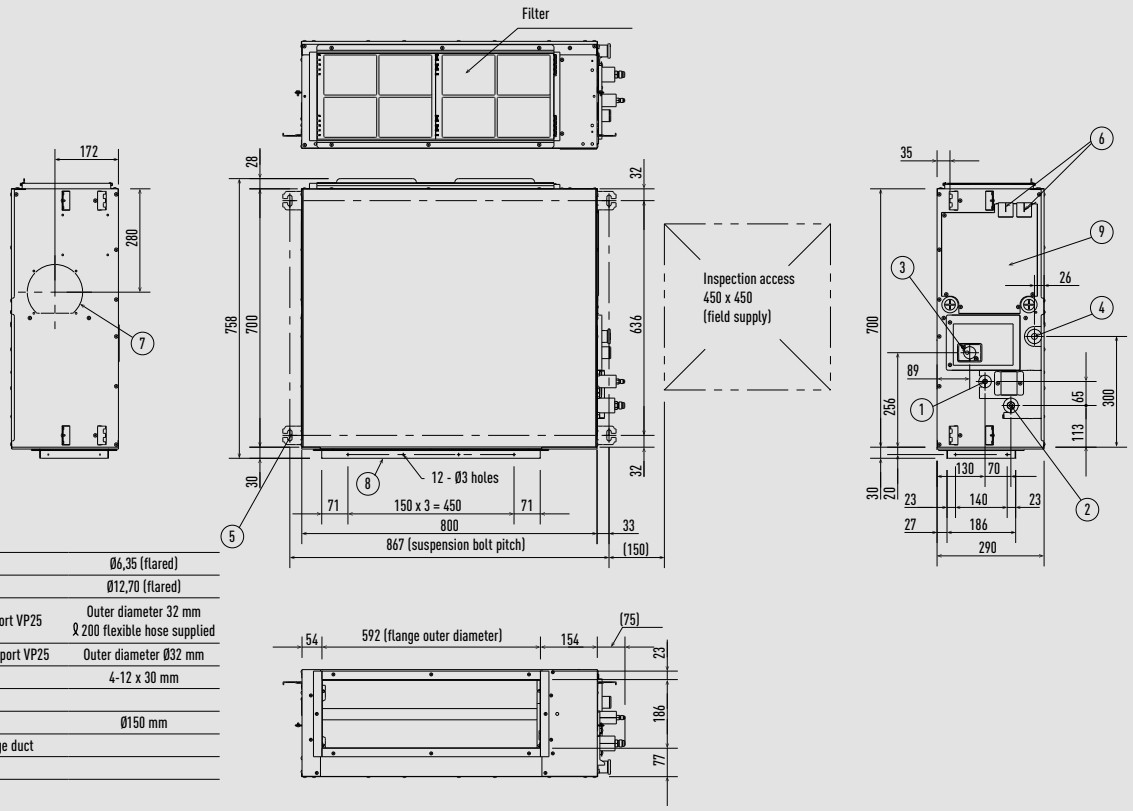




Unit: mm

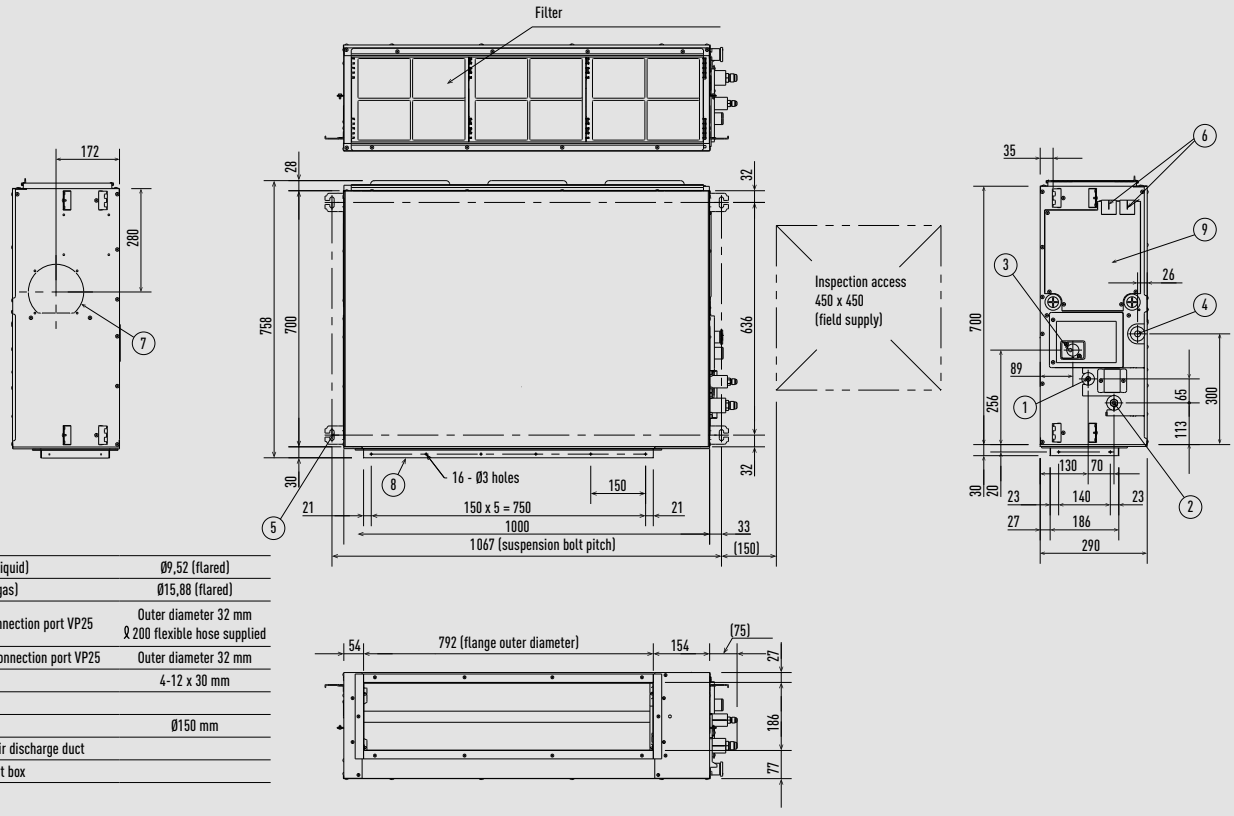
F2 Type variable static pressure hide-away

S-15MF2E5A / S-22MF2E5A / S-28MF2E5A / S-36MF2E5A / S-45MF2E5A / S-56MF2E5A



1	Refrigerant tubing (liquid)	Ø6,35 (flared)
2	Refrigerant tubing (gas)	Ø12,70 (flared)
3	Upper drain tube connection port VP25	Outer diameter 32 mm ℓ 200 flexible hose supplied
4	Bottom drain tube connection port VP25	Outer diameter Ø32 mm
5	Suspension lug	4-12 x 30 mm
6	Power supply outlet	
7	Fresh air intake port	Ø150 mm
8	Flange for flexible air discharge duct	
9	Electrical component box	

S-60MF2E5A / S-73MF2E5A / S-90MF2E5A

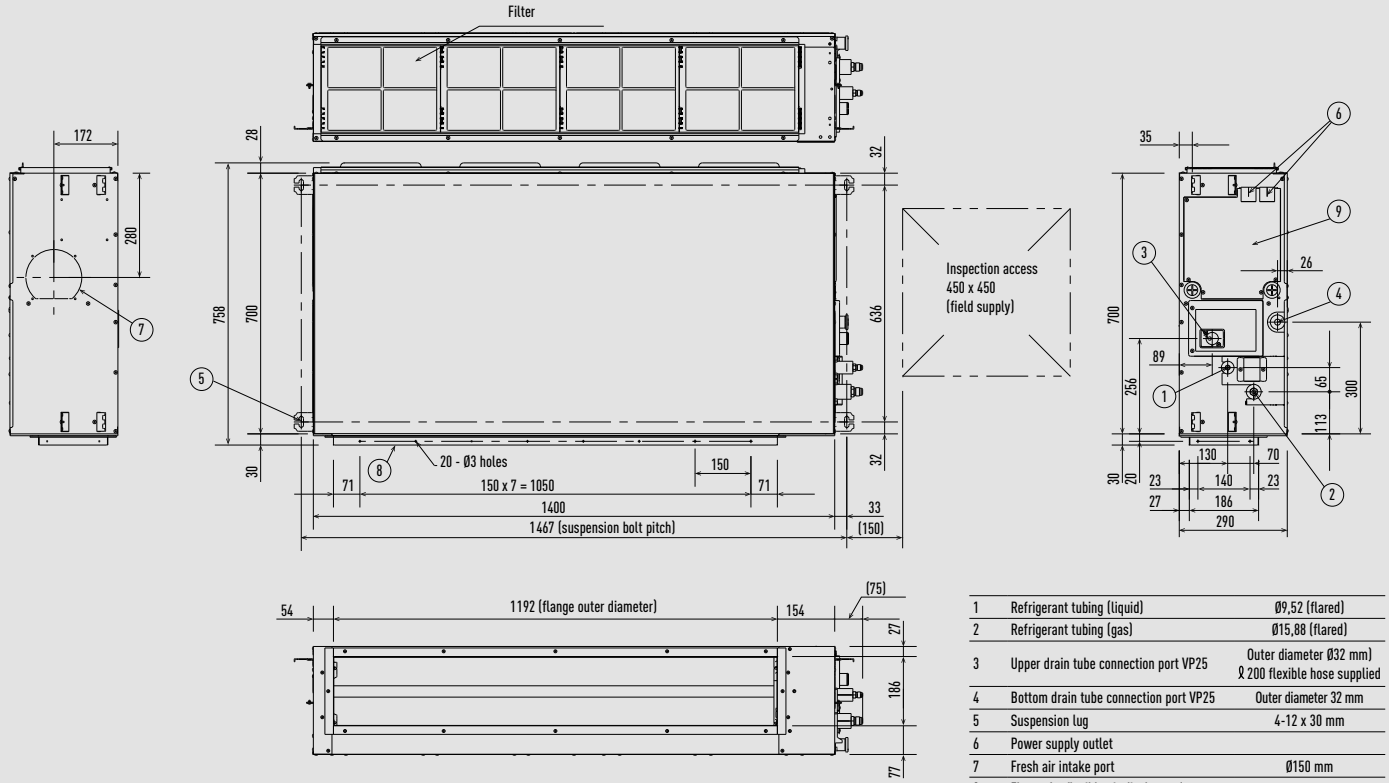


1	Refrigerant tubing (liquid)	Ø9,52 (flared)
2	Refrigerant tubing (gas)	Ø15,88 (flared)
3	Upper drain tube connection port VP25	Outer diameter 32 mm ℓ 200 flexible hose supplied
4	Bottom drain tube connection port VP25	Outer diameter 32 mm
5	Suspension lug	4-12 x 30 mm
6	Power supply outlet	
7	Fresh air intake port	Ø150 mm
8	Flange for flexible air discharge duct	
9	Electrical component box	

Unit: mm

F2 Type variable static pressure hide-away

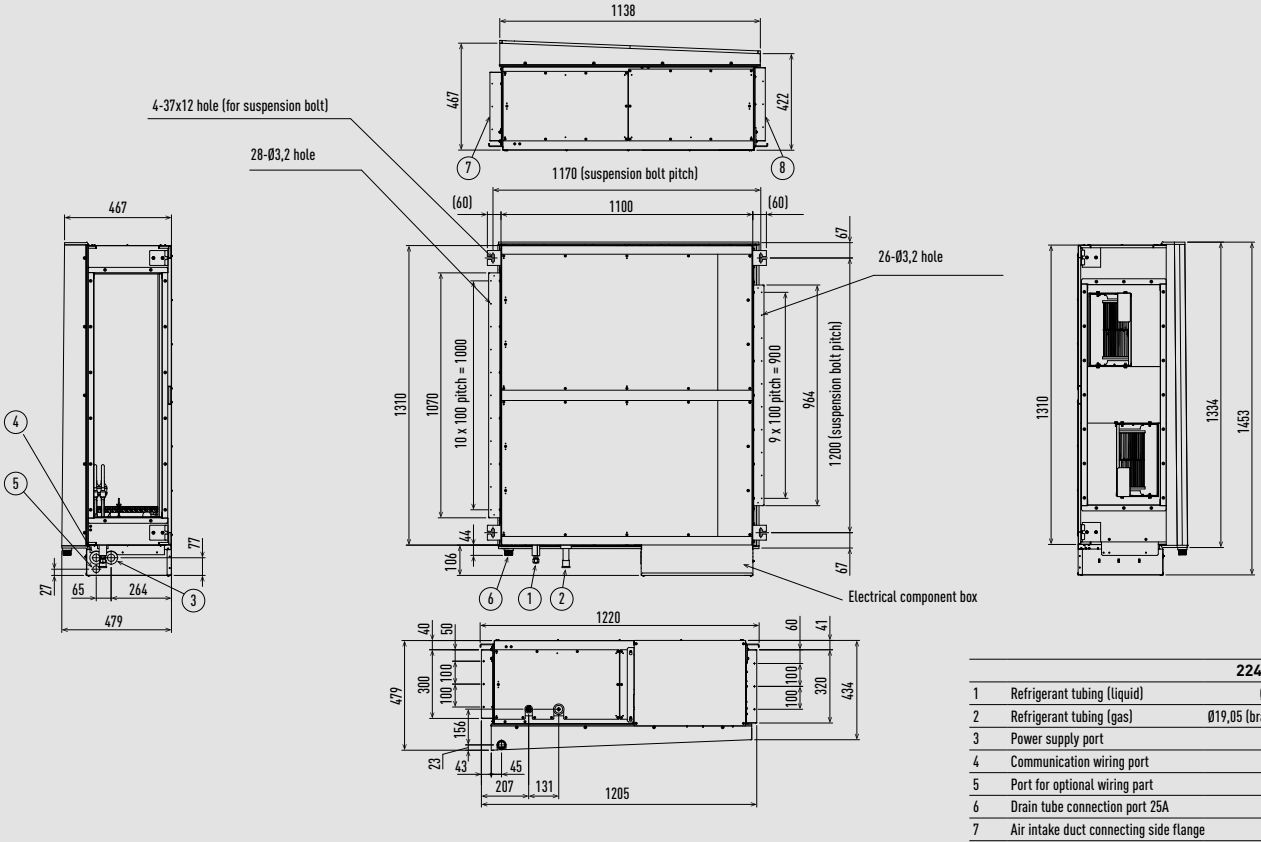
S-106MF2E5A / S-140MF2E5A / S-160MF2E5A



1	Refrigerant tubing (liquid)	Ø9,52 (flared)
2	Refrigerant tubing (gas)	Ø15,88 (flared)
3	Upper drain tube connection port VP25	Outer diameter Ø32 mm) ℓ 200 flexible hose supplied
4	Bottom drain tube connection port VP25	Outer diameter 32 mm
5	Suspension lug	4-12 x 30 mm
6	Power supply outlet	
7	Fresh air intake port	Ø150 mm
8	Flange for flexible air discharge duct	
9	Electrical component box	

Unit: mm

E2 Type high static pressure hide-away

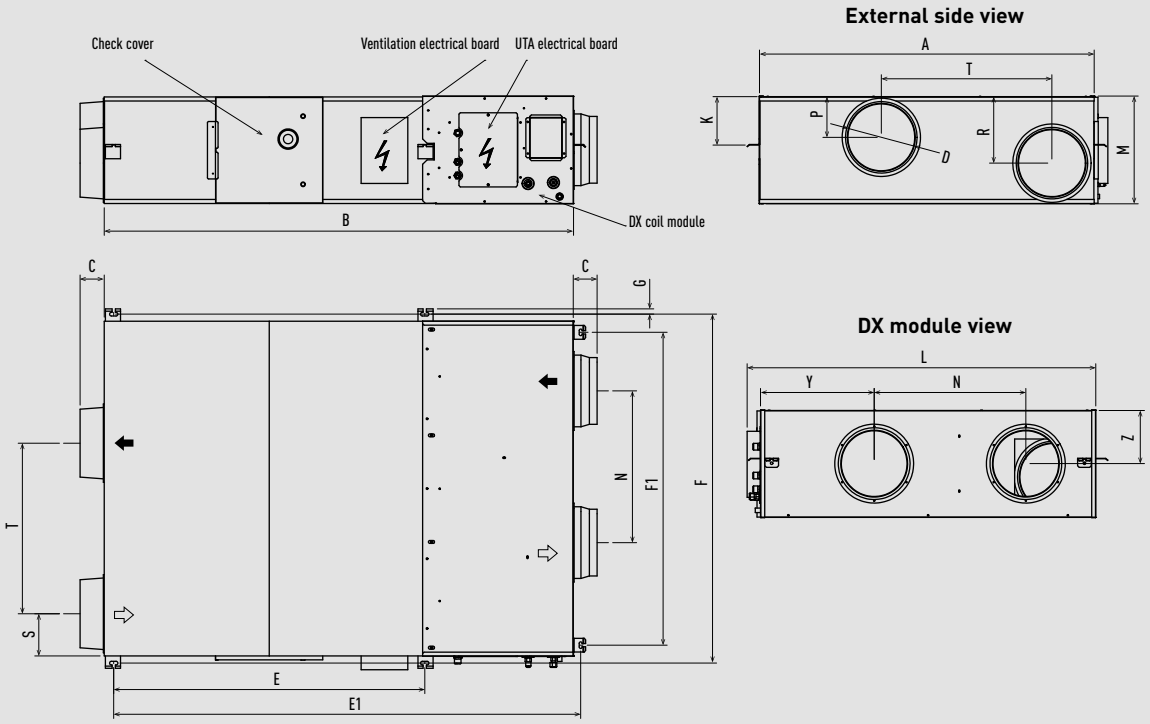


		224	280
1	Refrigerant tubing (liquid)	Ø9,52 (flared)	
2	Refrigerant tubing (gas)	Ø19,05 (brazing)	Ø22,22 (brazing)
3	Power supply port		
4	Communication wiring port		
5	Port for optional wiring part		
6	Drain tube connection port 25A		
7	Air intake duct connecting side flange		
8	Air discharge duct connecting side flange		

Unit: mm

Heat recovery with DX coil

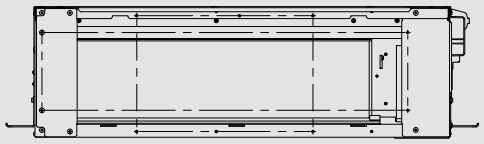
	A	B	C	D	E	E1	F	F1	G	L	T	K	M	N	P	R	S	Y	Z	Net weight
PAW-500ZDX3N	904	1400	107	200	825	1395	960	830	19	955	500	135	270	350	135	135	202	350	135	90 - 98
PAW-800ZDX3N	1134	1695	85	250	1115	1685	1190	1060	19	1200	678	170	388	500	170	170	228	415	195	100 - 110
PAW-01KZDX3N	1216	1700	85	250	1130	1700	1273	1140	19	1290	621	171	388	550	146	241	151	415	195	105 - 120

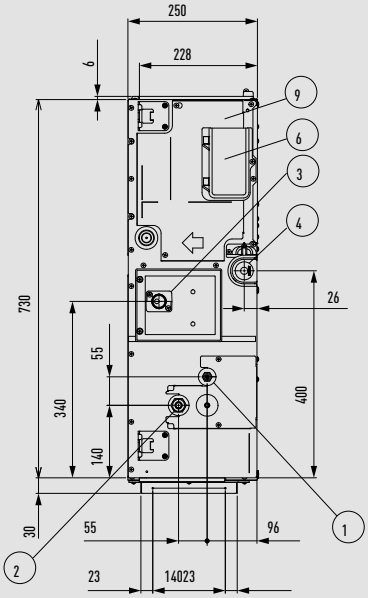


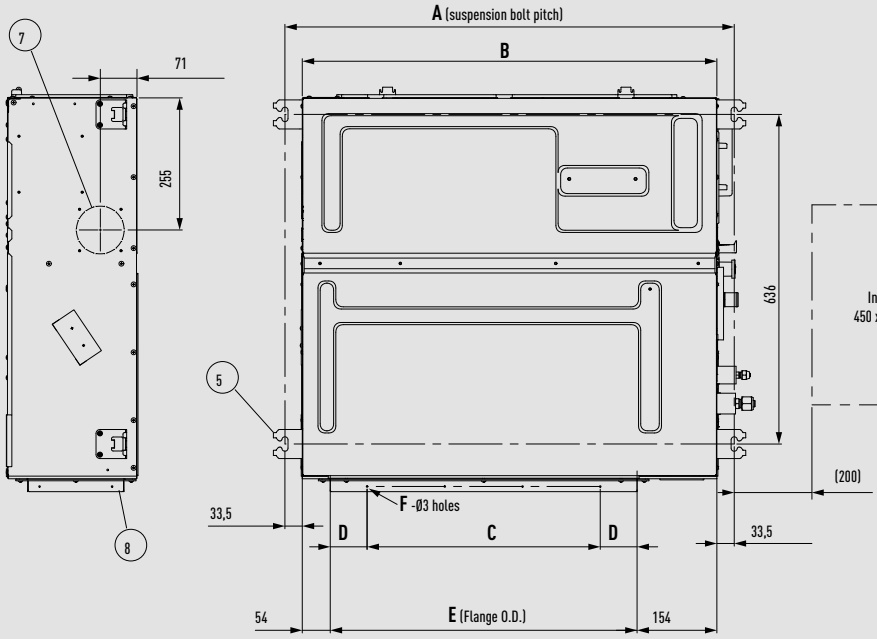
Unit: mm

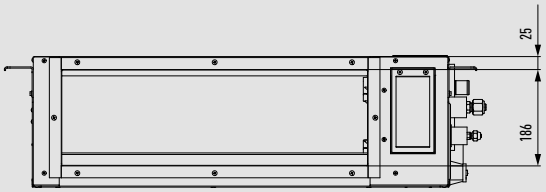
NEW F3 Type variable static pressure adaptive duct

Type	A	B	C	D	E	F
	mm	mm	mm	mm	mm	Q'ty
S-15MF3E5B/A...S-56MF3E5B/A	867	800	450 (pitch 150 x 3)	71	592	12
S-60MF3E5B/A...S-90MF3E5B/A	1067	1000	750 (pitch 150 x 5)	21	792	16
S-106MF3E5B/A...S-160MF3E5B/A	1467	1400	1050 (pitch 150 x 7)	71	1192	20







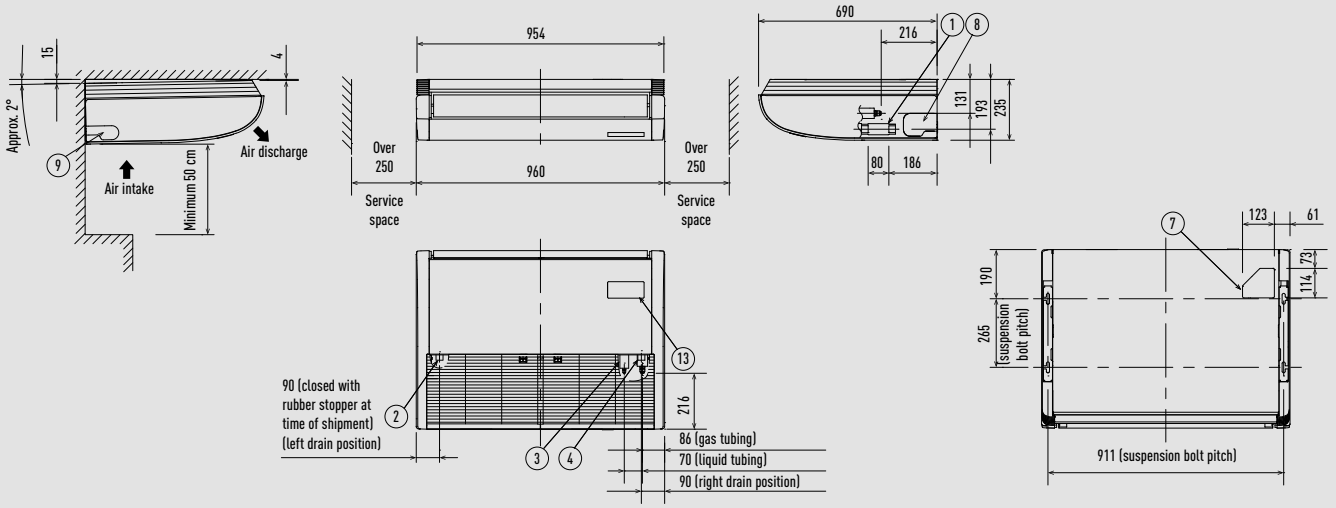


Type	S-15MF3E5B/A – S-56MF3E5B/A	S-60MF3E5B/A – S-90MF3E5B/A	S-106MF3E5B/A – S-160MF3E5B/A
1 Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared) [1]	Ø9,52 (flared)
2 Refrigerant tubing (gas)	Ø12,70 (flared)	60: Ø15,88 (flared) [2] 71: Ø15,88 (flared)	Ø15,88 (flared)
3 Upper drain port VP20	Ø26 (200 mm flexible hose supplied)		
4 Suspension lug	4-12x30		
5 Power supply port			
6 Bottom drain port VP20	Ø26 mm		
7 Fresh air intake duct connection port	Ø100 [3]		
8 Flange for flexible air outlet duct			
9 Electrical component box			

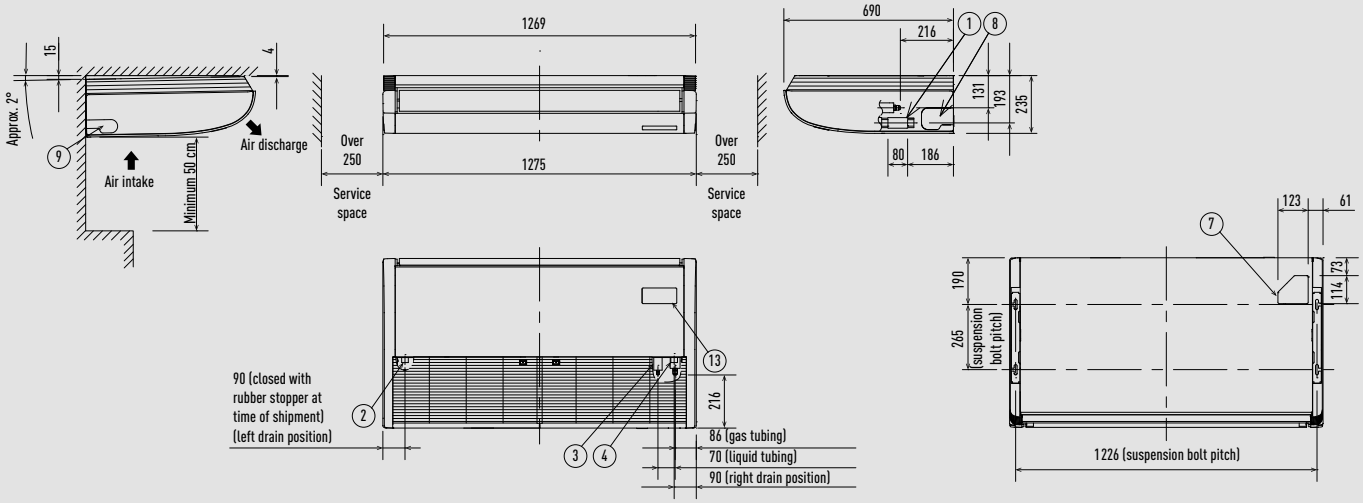
Unit: mm

T2 Type ceiling

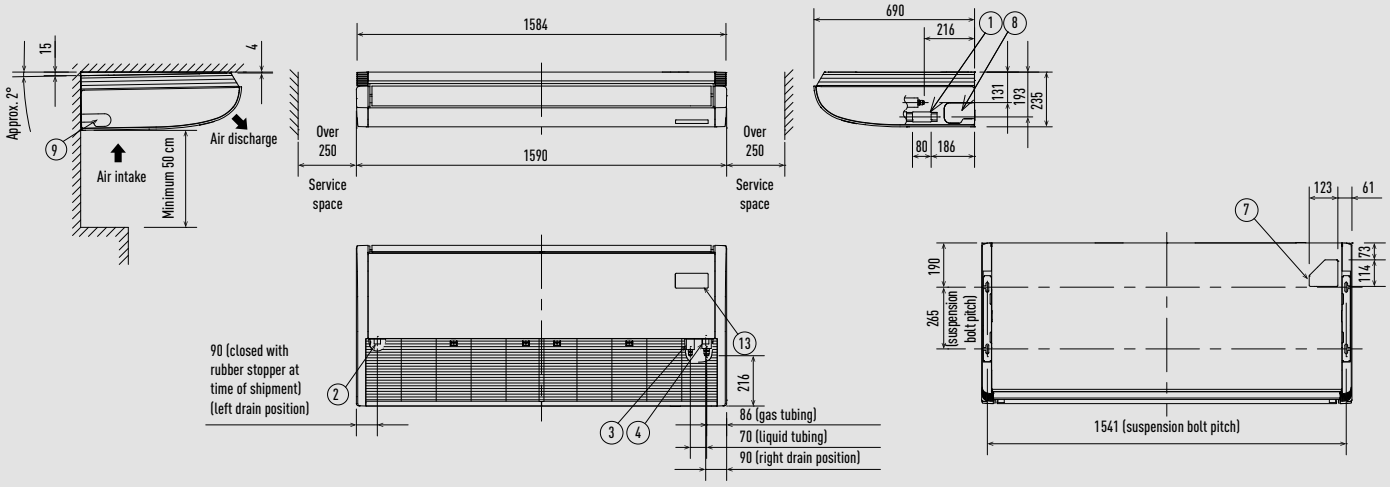
S-36MT2E5A / S-45MT2E5A / S-56MT2E5A



S-73MT2E5A



S-106MT2E5A / S-140MT2E5A



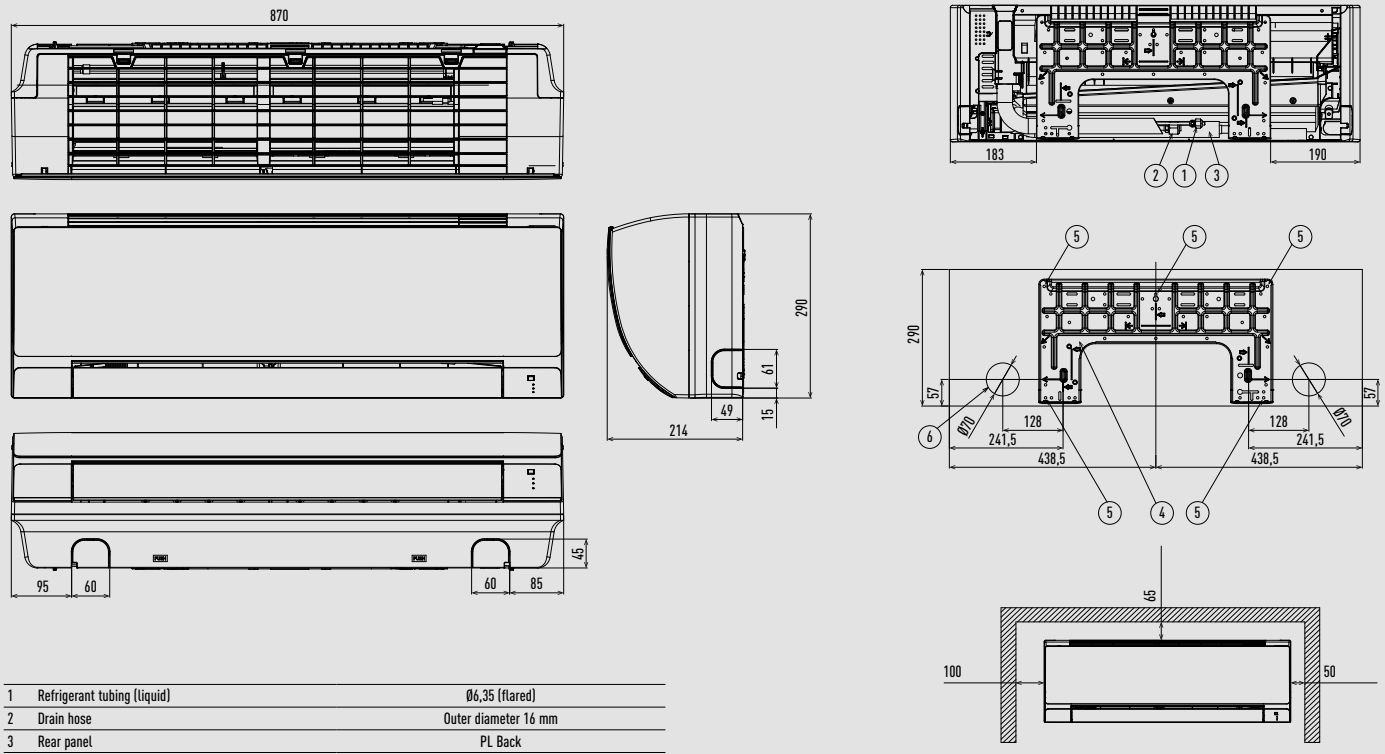
1	Drain tube connection port VP20	Inside diameter Ø26 mm, drain hose supplied
2	Left drain position	
3	Refrigerant tubing (liquid)	Ø9,52 (flared)
4	Refrigerant tubing (gas)	Ø15,88 (flared)
5	Left side drain hose outlet port (cut out)	

6	Tubing hole on wall surface	Ø100 mm
7	Upper side tubing port	
8	Right side drain hose outlet port (cut out)	
9	Wireless remote controller receiver installation location	

Unit: mm

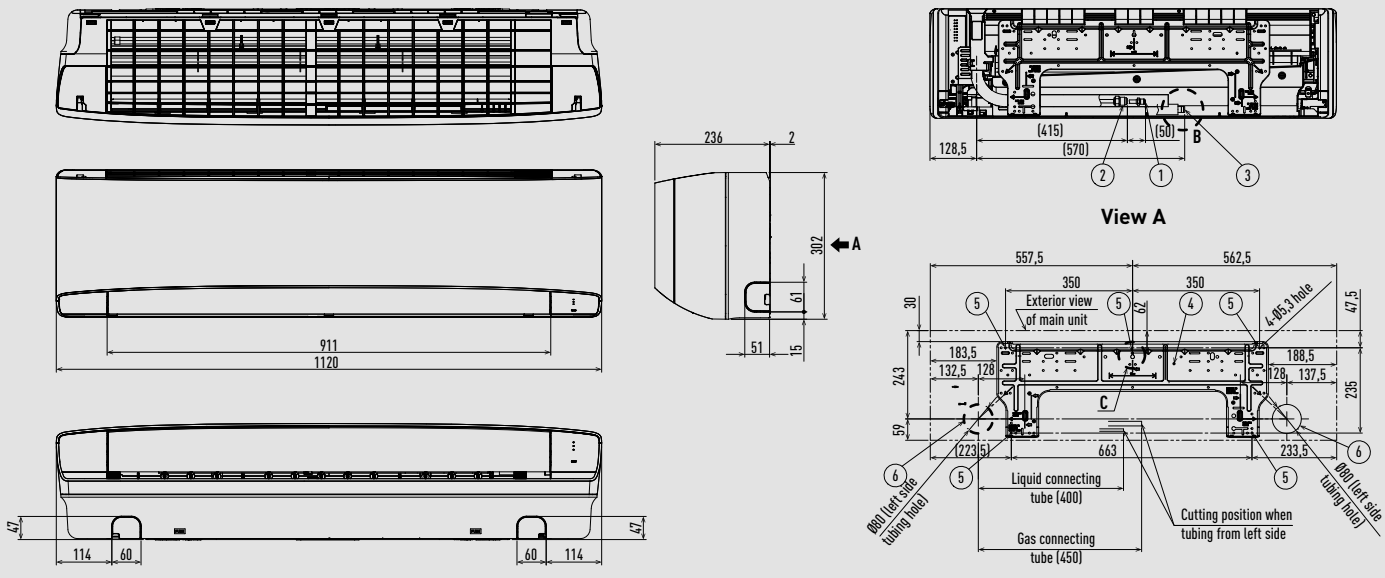
K2 Type wall-mounted

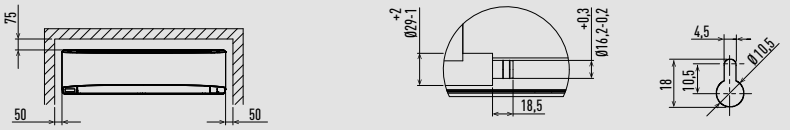
S-15MK2E5A / S-22MK2E5A / S-28MK2E5A / S-36MK2E5A



1	Refrigerant tubing (liquid)	Ø6,35 (flared)
2	Drain hose	Outer diameter 16 mm
3	Rear panel	PL Back
4	Refrigerant tubing (gas)	Ø12,70 (flared)
5	Rear panel fixing holes	
6	Piping and wiring holes	Ø70

S-45MK2E5A / S-56MK2E5A / S-73MK2E5A / S-106MK2E5A





Minimum space requirements for installation

Detailed view B

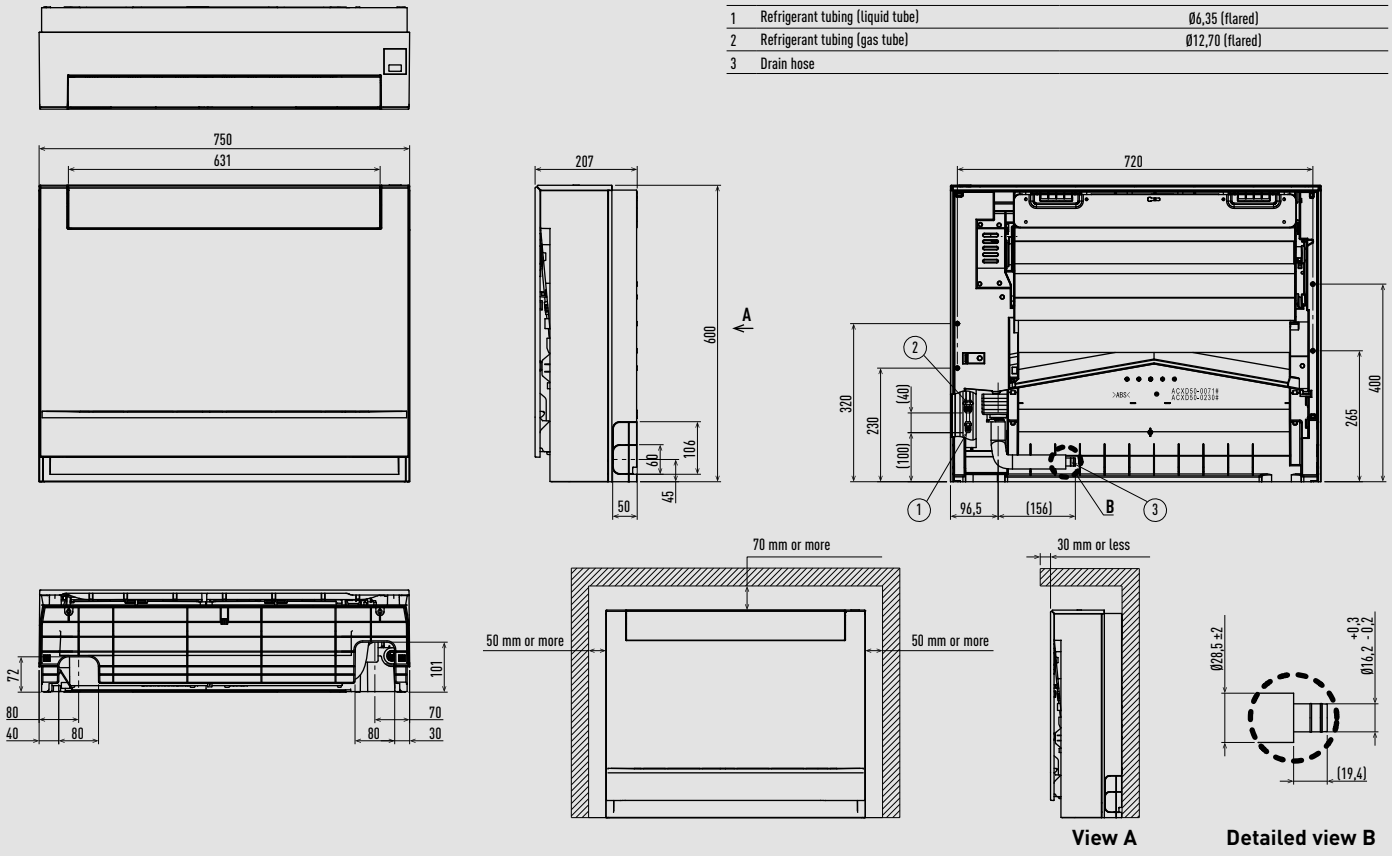
Detailed view C

Type		45-56	73-106
1	Refrigerant tubing (liquid)	Ø6,35 (flared)	Ø9,52 (flared)
2	Refrigerant tubing (gas)	Ø12,70 (flared)	Ø15,88 (flared)
3	Drain hose		
4	Rear panel		
5	Rear panel fixing holes (Ø5,3 holes or as shown in figure "C")		
6	Tubing and wiring holes (Ø80)		

Unit: mm

G1 Type floor console

1	Refrigerant tubing (liquid tube)	Ø6,35 (flared)
2	Refrigerant tubing (gas tube)	Ø12,70 (flared)
3	Drain hose	

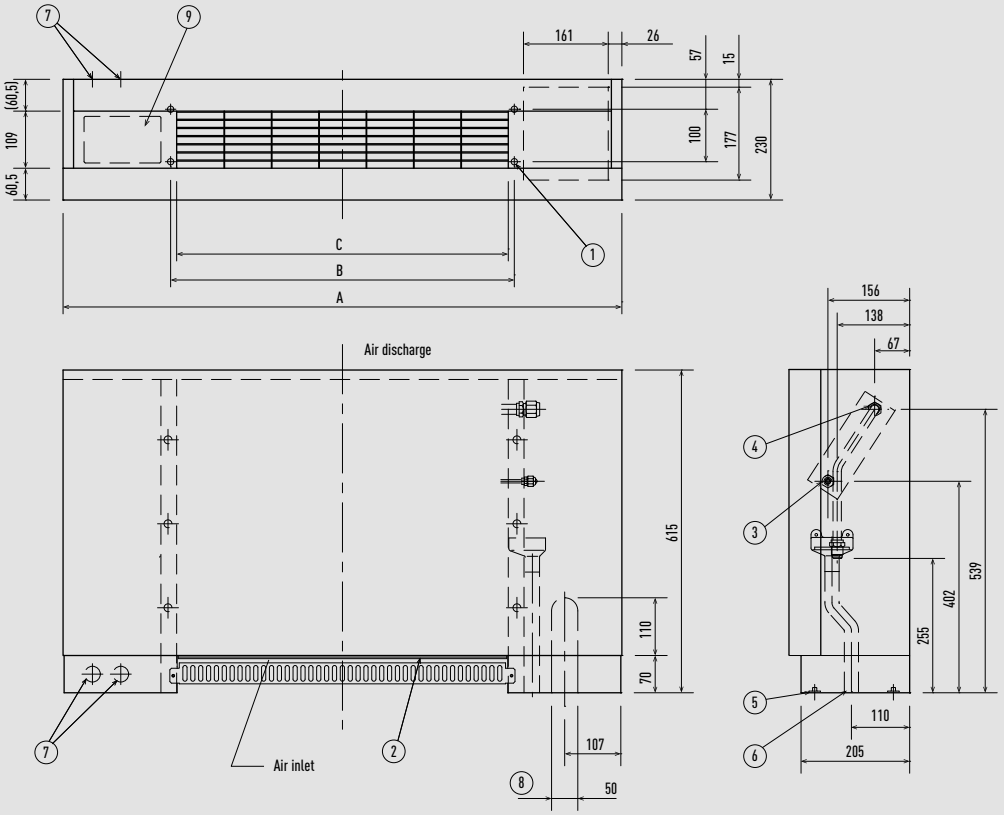


Unit: mm

P1 Type floor-standing

1	4-Ø12 hole (for fastening the indoor unit to the floor with screws)
2	Air filter
3	Refrigerant tubing (liquid)
4	Refrigerant tubing (gas)
5	Level adjusting bolt
6	Drain tube connection port (20 A)
7	Power cord outlet (downward, rear)
8	Refrigerant piping outlet (downward, rear)
9	Location for mounting the remote controller (remote controller can be attached within the room)

	A	B	C	Liquid pipes	Gas pipes
22-36	1065	665	632	Ø6,35	Ø12,70
45					
56	1380	980	947		
71				Ø9,52	Ø15,88

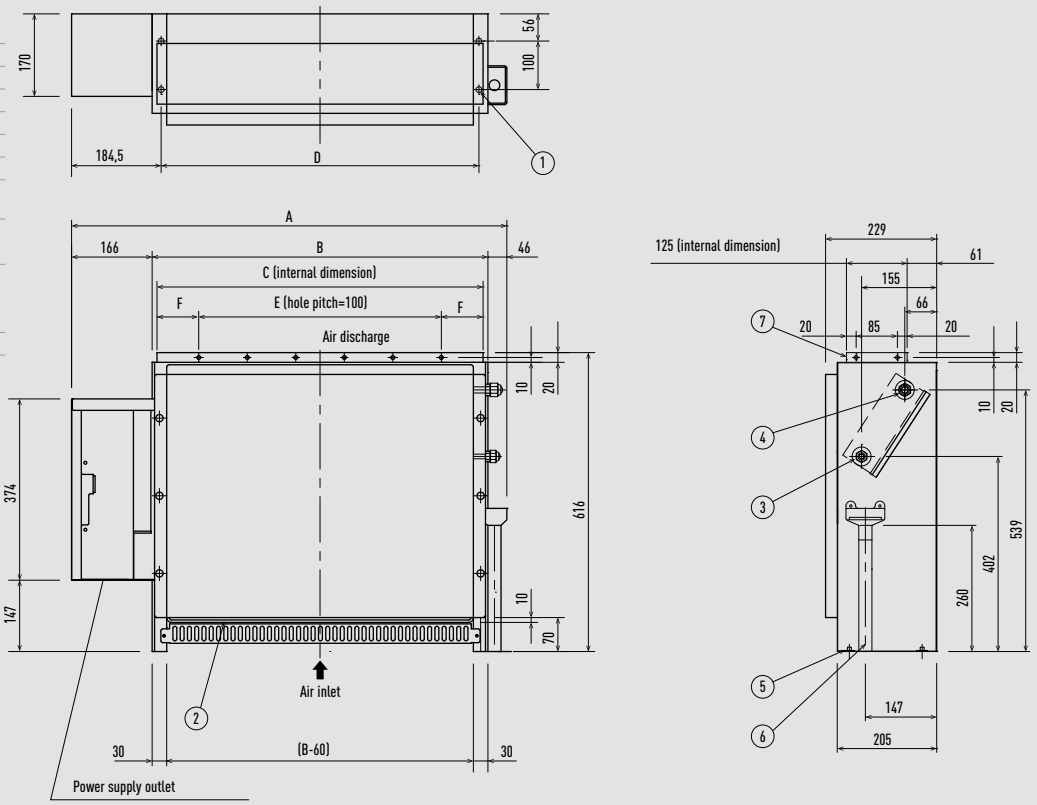


Unit: mm

R1 Type concealed floor-standing

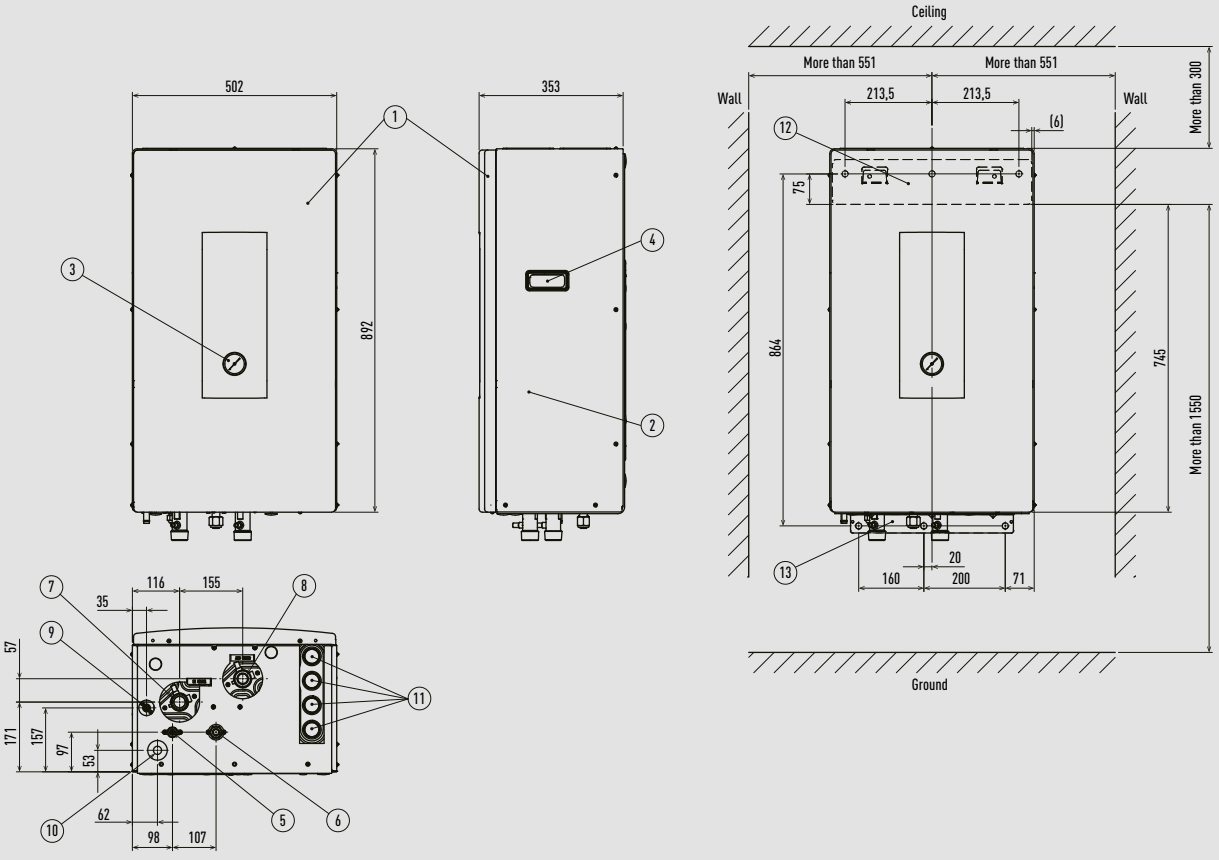
1	4-Ø12 hole (for fastening the indoor unit to the floor with screws)
2	Air filter
3	Refrigerant tubing (liquid)
4	Refrigerant tubing (gas)
5	Level adjusting bolt
6	Drain tube connection port (20 A)
7	Flange for the air-outlet duct

	A	B	C	D	E	F	Liquid pipes	Gas pipes
22-36	904	692	672	665	500	86		
45							Ø6,35	Ø12,70
56	1219	1007	1002	980	900	51		
71							Ø9,52	Ø15,88



Unit: mm

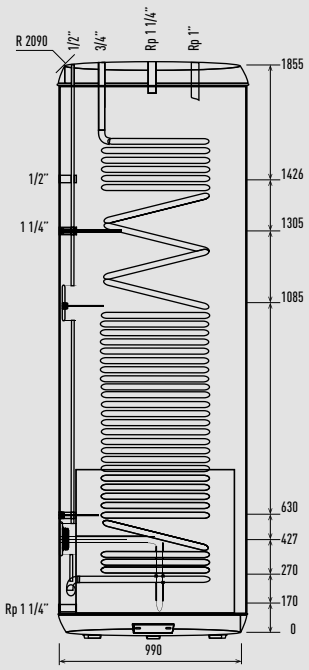
Hydrokit for ECOi, water at 45 °C



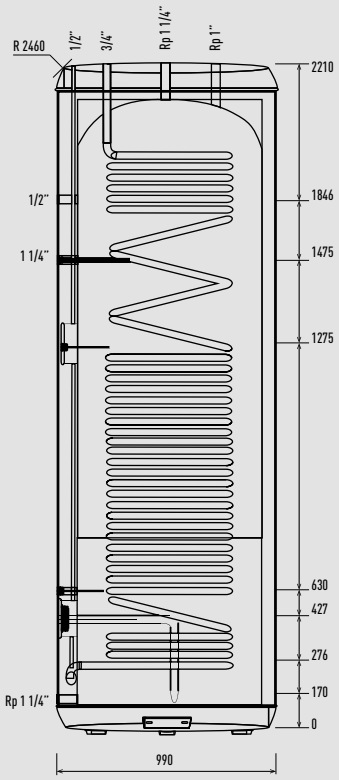
Unit: mm

ECOi PRO-HT Tank

PAW-VP750LDHW-1



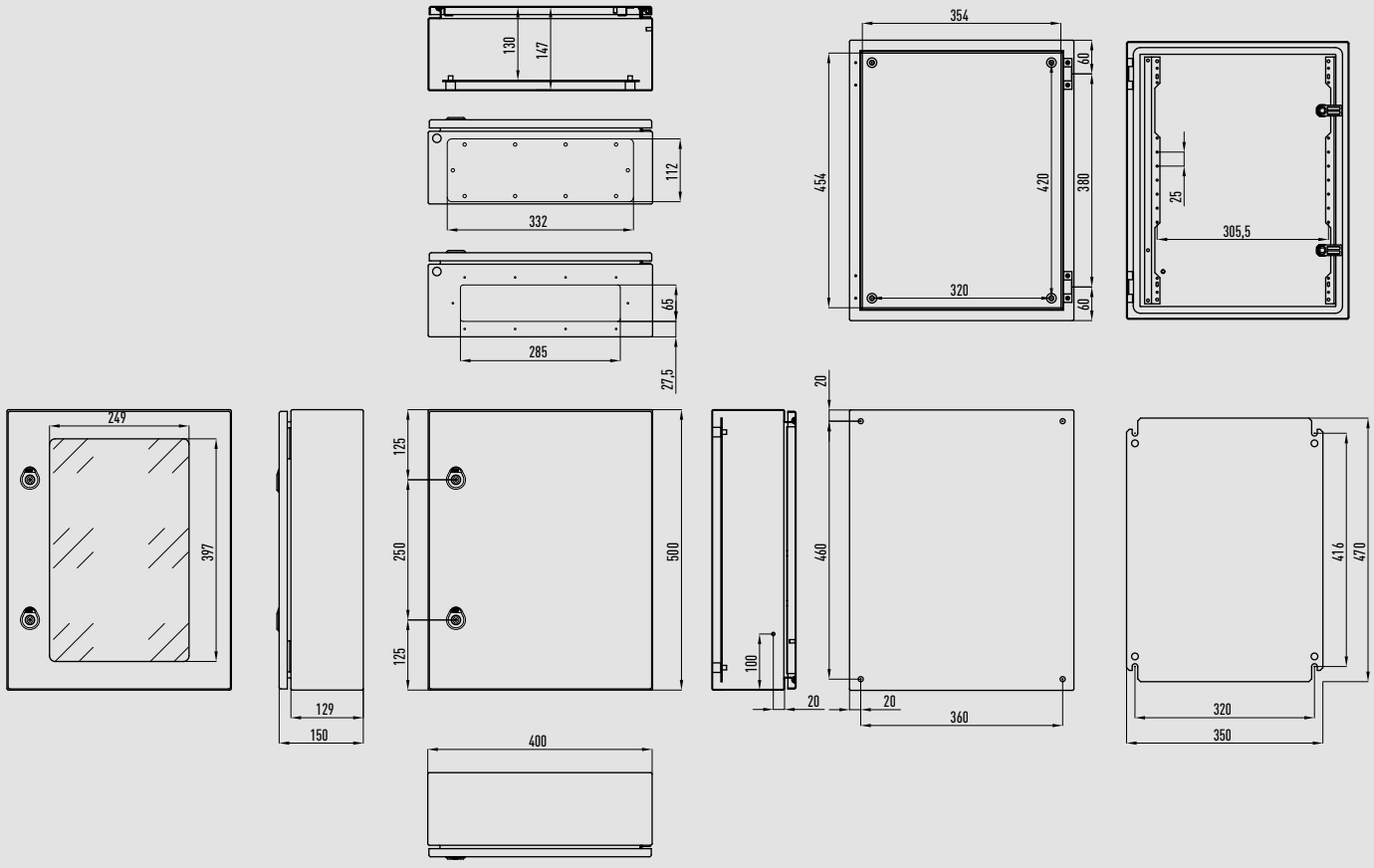
PAW-VP1000LDHW-1



Note: R value indicates maximum overturning height.

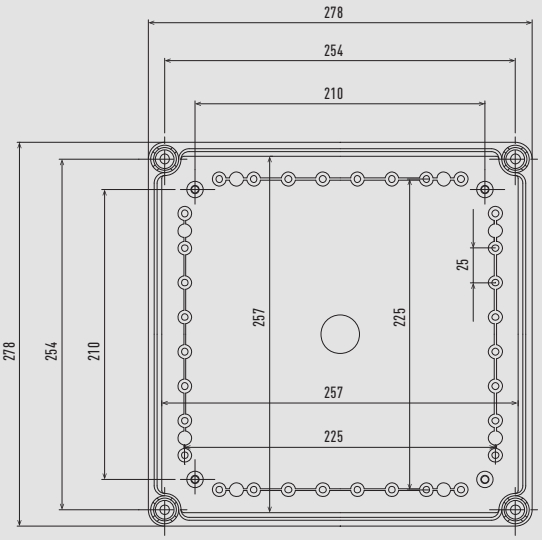
Unit: mm

AHU connection kit 3,6 to 14,0 kW for PACi NX

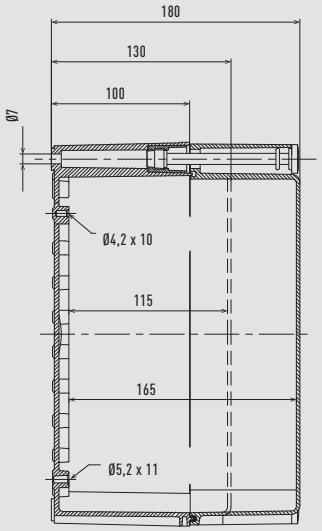


Unit: mm

AHU Connection Kit



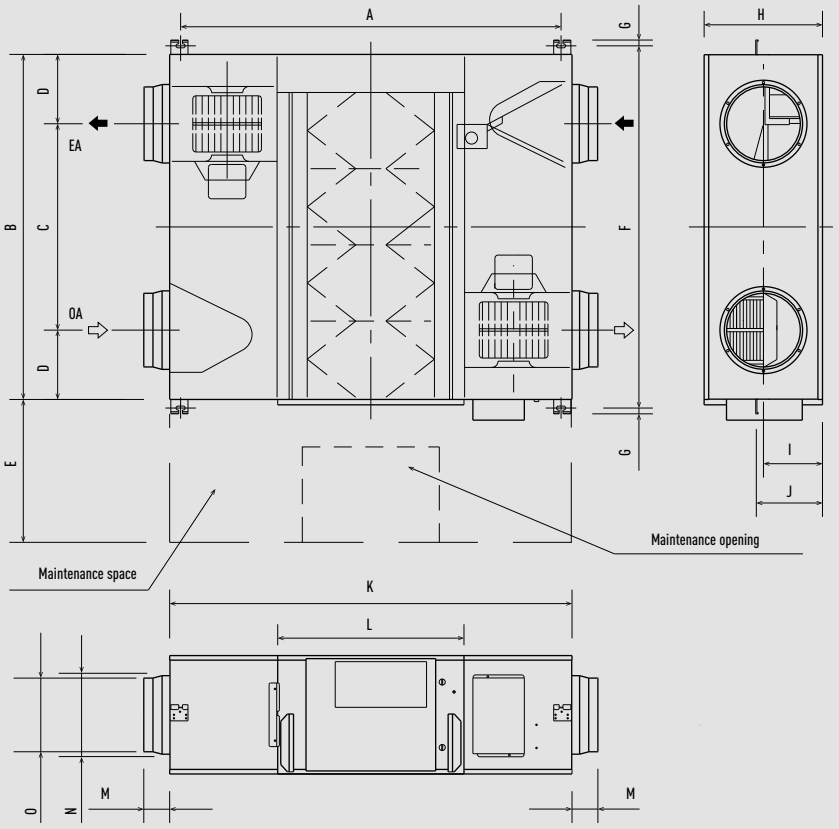
Front view (transparent cover removed)



Side view

Unit: mm

Energy recovery ventilation

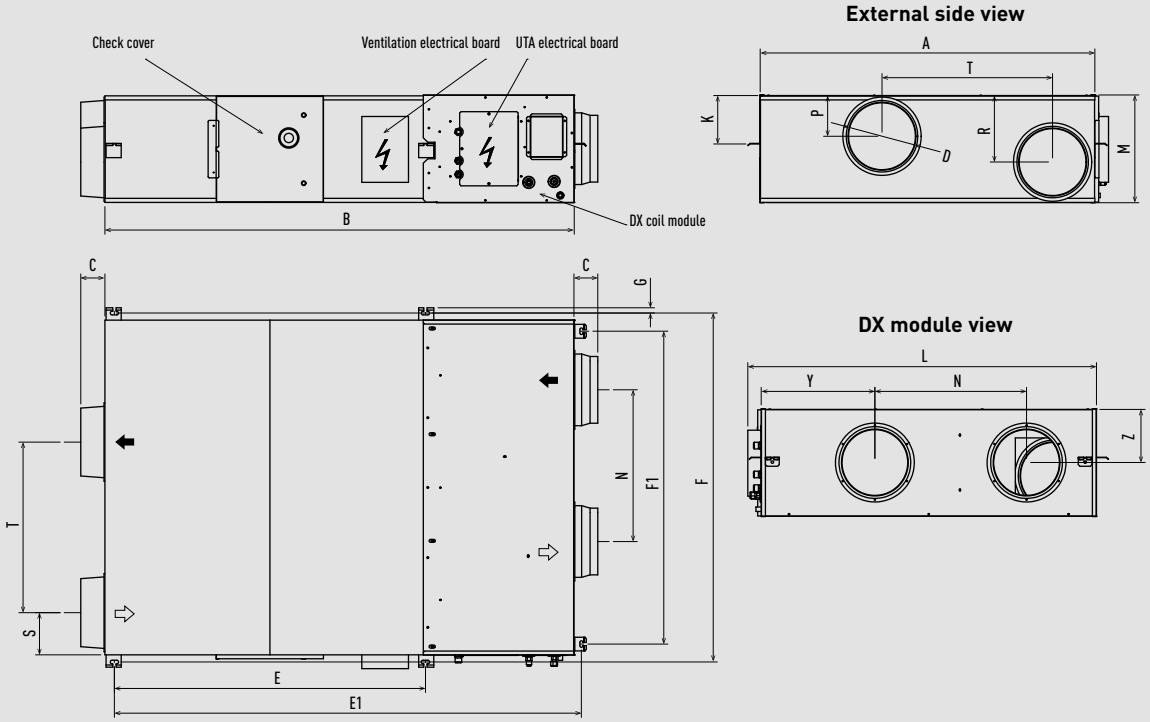


	FY-250ZDY8R	FY-350ZDY8R	FY-500ZDY8R	FY-800ZDY8R	FY-01KZDY8R
A	810	978	1018	1250	1250
B	599	804	904	884	1134
C	315	580	640	428	678
D	142	112	132	228	228
E	600	600	600	600	600
F	655	860	960	940	1190
G	19	19	19	19	19
H	270	317	317	388	388
I	135	159	159	194	194
J	159	182	182	218	218
K	882	1050	1090	1322	1322
L	414	470	470	612	612
M	95	70	70	85	85
N	164	164	210	258	258
O	144	144	194	242	242

Unit: mm

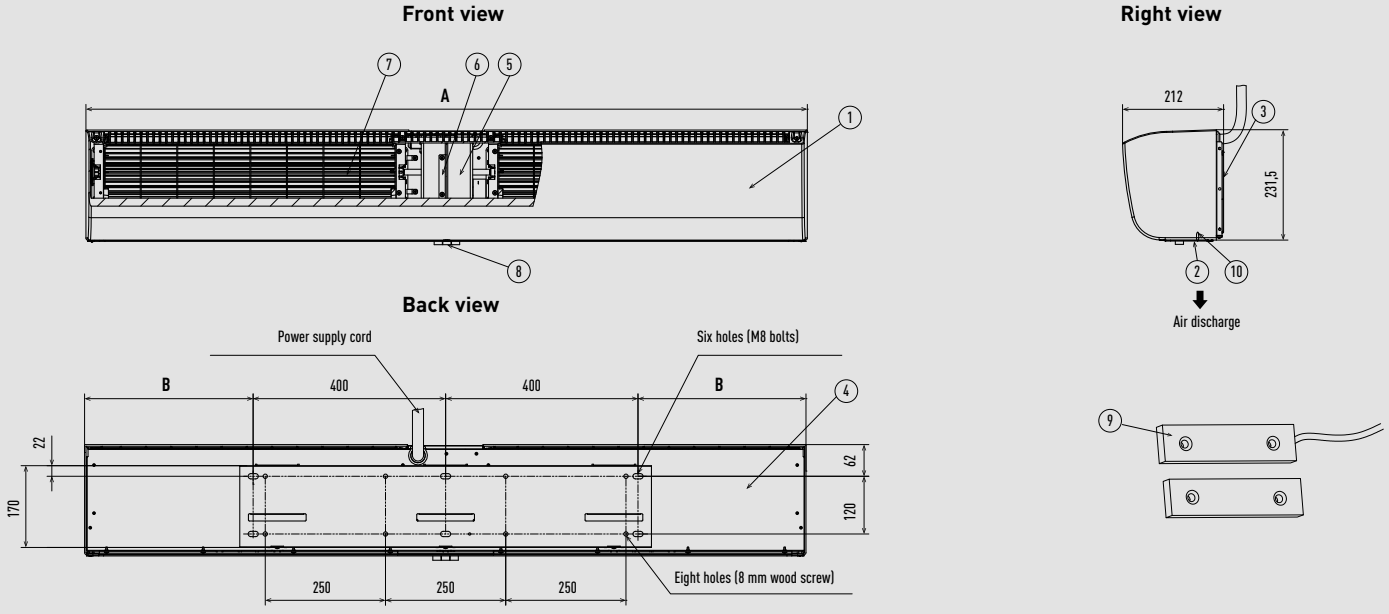
Heat recovery with DX coil

	A	B	C	D	E	E1	F	F1	G	L	T	K	M	N	P	R	S	Y	Z	Net weight
PAW-500ZDX3N	904	1400	107	200	825	1395	960	830	19	955	500	135	270	350	135	135	202	350	135	90 - 98
PAW-800ZDX3N	1134	1695	85	250	1115	1685	1190	1060	19	1200	678	170	388	500	170	170	228	415	195	100 - 110
PAW-01KZDX3N	1216	1700	85	250	1130	1700	1273	1140	19	1290	621	171	388	550	146	241	151	415	195	105 - 120



Unit: mm

Electric air curtain



1	Front panel
2	Air discharge
3	Mounting plate
4	Back panel
5	Motor

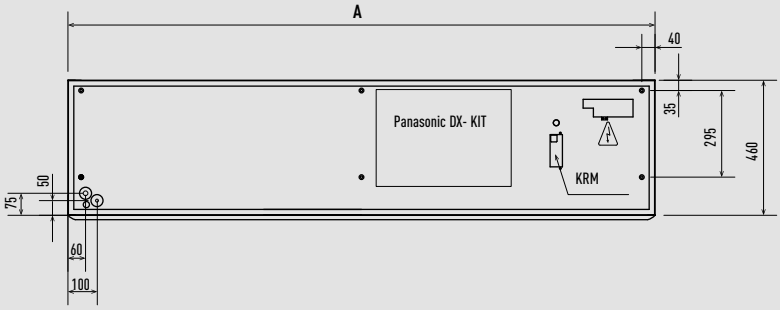
6	Motor support
7	Cross-flow impeller
8	Push-button switch
9	Gate magnetic switch
10	Guide plate

	FY-3009U1	FY-3012U1	FY-3015U1
A	900	1200	1500
B	50	200	350

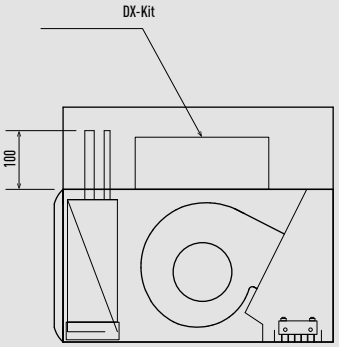
Unit: mm

Air curtain with DX coil

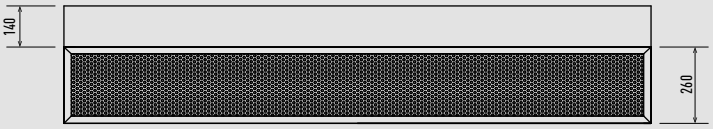
Top view



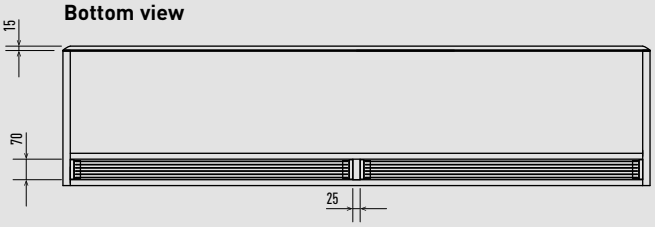
Side view



Front view



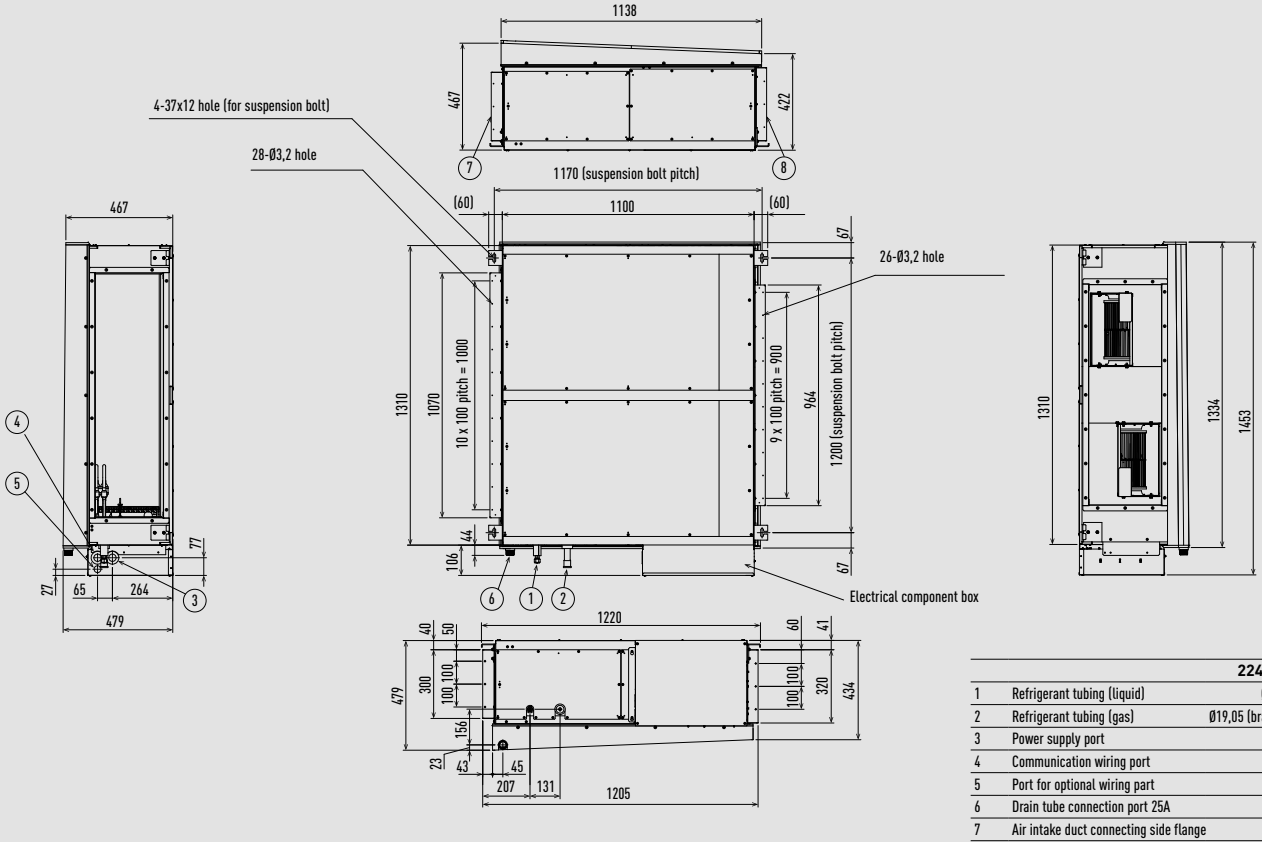
Bottom view



	PAW-10EAIRC-LS	PAW-15EAIRC-LS	PAW-20EAIRC-LS	PAW-25EAIRC-LS
	PAW-10EAIRC-HS	PAW-15EAIRC-HS	PAW-20EAIRC-HS	PAW-25EAIRC-HS
	PAW-10PAIRC-LS	PAW-15PAIRC-LS	PAW-20PAIRC-LS	PAW-25PAIRC-LS
	PAW-10PAIRC-HS	PAW-15PAIRC-HS	PAW-20PAIRC-HS	PAW-25PAIRC-HS
A	1,0m	1,5m	2,0m	2,5m

Unit: mm

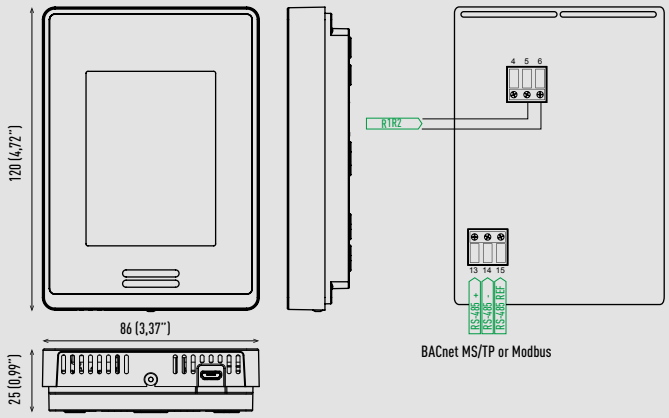
E2 Type high static pressure hide-away



		224	280
1	Refrigerant tubing (liquid)	Ø9,52 (flared)	
2	Refrigerant tubing (gas)	Ø19,05 (brazing)	Ø22,22 (brazing)
3	Power supply port		
4	Communication wiring port		
5	Port for optional wiring part		
6	Drain tube connection port 25A		
7	Air intake duct connecting side flange		
8	Air discharge duct connecting side flange		

Unit: mm

Room controller for SE8000



BACnet MS/TP or Modbus

Check with your local government for instruction on disposal of these products.

THIS PRODUCT FOR COMMERCIAL USE ONLY.

Dimensions:
Height: 12 cm/4,72 in.
Width: 8,6 cm/3,39 in.
Depth: 2,7 cm/1,06 in.

Power requirements:
16 Vdc from Panasonic R-R IDU connectors.
50/60 Hz, 4 VA, Class 2 Supply.

Range from indoor unit:
Recommended 500 ft (150 m).

Operating conditions:
0 °C to 50 °C (32 °F to122 °F).
0% to 95% R.H. non-condensing.

Storage conditions:
-30 °C to 50 °C (-22 °F to 122 °F).
0% to 95% R.H. non-condensing.

Temperature sensor:
Local 10 K NTC type 2 thermistor.

Temperature sensor resolution:
± 0,1 °C (± 0,2 °F).

Temperature sensor accuracy:
± 0,5 °C (± 0,9 °F) @ 21 °C (70 °F) typical calibrated.

Humidity sensor and calibration:
Single point calibrated bulk polymer type sensor.

Humidity sensor precision:
Reading range from 10% to 90% R.H. non-condensing.
10% to 20% precision: 10%.
20% to 80% precision: 5%.
80% to 90% precision: 10%.

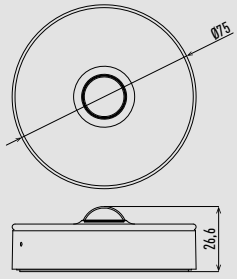
Humidity sensor stability:
Less than 1,0% yearly (typical drift).

Wiring:
Maximum wire length between last indoor unit to SER8150RxB1194 equals 490 ft (150 m) with AWG #18 wire (0,82 mm²).
Refer to Panasonic VRF guidelines "Wiring system diagram for remote controller" for this limitation.

Approximate shipping weight:
0,34 kg (0,75 lb)

Unit: mm

Wall/ceiling wireless sensor SED-MTH-G-5045



Certification

Check with your local government for instruction on disposal of these products.

Dimensions:
70 mm diameter x 26,6 mm.

Colour:
White.

Weight:
59 g.

Communication:
ZigBee 3,0 HA.

Detection range:
Ceiling: Ø4m (installation height 2,5 m).
Wall: R5m (installation height 1,2 m).

Battery voltage:
3 V.

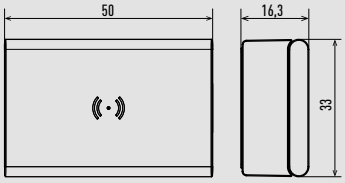
Battery cell:
LR03 AAA (2 pcs).

Battery life:
Up to 5 years.

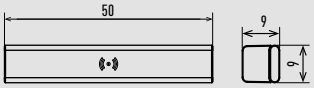
Ambient temperature:
-10 °C ~ +50 °C.

Door/window wireless sensor SED-WDC-G-5045

Master part



Slave part



Certification

Check with your local government for instruction on disposal of these products.

Dimensions:
Master part: 50 x 33 x 16,3 mm.
Slave part: 50 x 9 x 9 mm.

Colour:
White / transparent.

Weight:
30 g

Communication:
ZigBee 3,0 HA.

Detection range:
Trigger 'close': wood 30 mm, metal 18 mm.
Trigger 'open': wood 32 mm, metal 20 mm.

Battery voltage:
3 V.

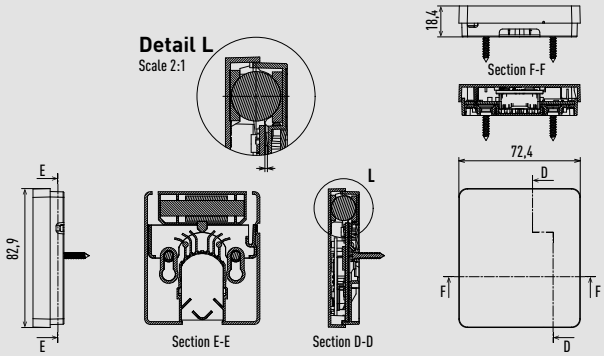
Battery cell:
CR2450.

Battery life:
Up to 5 years.

Ambient temperature:
-10 °C ~ +50 °C.

Unit: mm

CO_2 sensor SED-CO2-G-5045



Certification

Check with your local government for instruction on disposal of these products.

Dimensions:
3,26 x 2,85 x 0,72 inches.
82,9 x 72,4 x 18,4 mm.

Operating temperature:
0 °C to 50 °C (32 °F to 122 °F).

Temperature accuracy:
±0,3 °C (0,54 °F) typical within operating range.

Humidity range:
0% to 100%.

Humidity accuracy:
± 3% RH (typical within 0% to 80% RH).

Measurement range:
0 to 5000ppm.

Measurement/Transmission intervals:
2,5 minutes (day), 10 minutes (evening).
Note: Battery life will be reduced should interval be shortened (i,e, using remote temperature/humidity functions).

CO_2 accuracy at NTP:
±60 ppm +3% of reading (400 - 2,000 ppm range).

Communication:
Zigbee 3,0 Green Power (encrypted, bi-directional).

Battery voltage:
3,6 V.

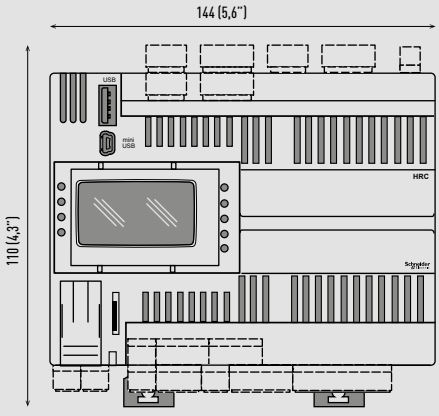
Battery cell:
AA Lithium ion.

Battery life:
10+ years (non-replaceable).
Note: Battery life can be reduced when sensor is operated at temperatures approaching the operating limits.

Ambient temperature:
-30 °C to 70 °C.

Unit: mm

Hotel room controller (HRC)



Dimensions:
5,6 x 4,3 x 2,4 inches.
144 x 110 x 60,5 mm.

Digital inputs:
12.

High voltage relay digital outputs:
10 x 3 A SPST +250 VAC relays.

Analog inputs:
2 x configurable analog inputs.
DI: voltage free DI, 10 kΩ input impedance.
0-20 mA: range 0,1000, < 150 Ω impedance.
0-10 V: range 0,1000 > 10 kΩ impedance.

Analog outputs:
6 x 0-10 V outputs, Load impedance > 700 Ω.

Certification

Supply voltage:
24 VAC + 10% NOT ISOLATED.
+20...38 Vdc NOT ISOLATED.

Supply frequency:
50/60 Hz.

Power cycle:
35 VA / 15 W.

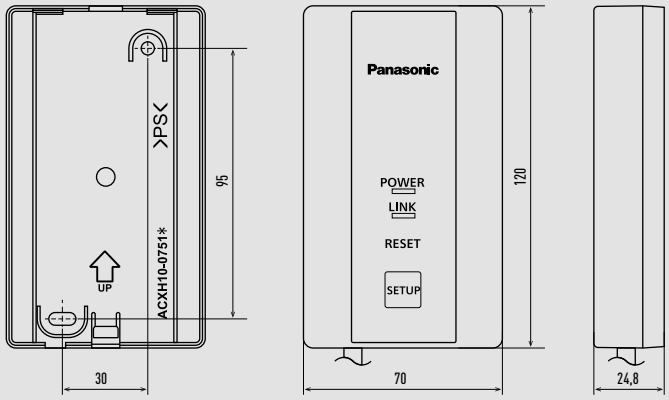
Operating temperature:
-20 to 60 °C (-4 to 140 °F) conforming to UL 60730-1.

Storage temperature:
-30 to 70 °C (-22 to 158 °F).

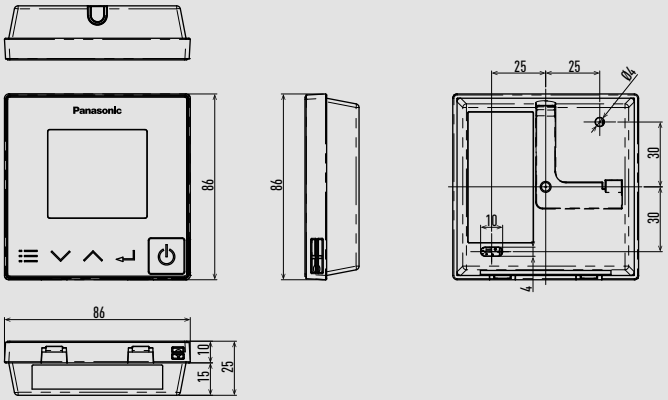
* Power supply is not included.

Check with your local government for instruction on disposal of these products.

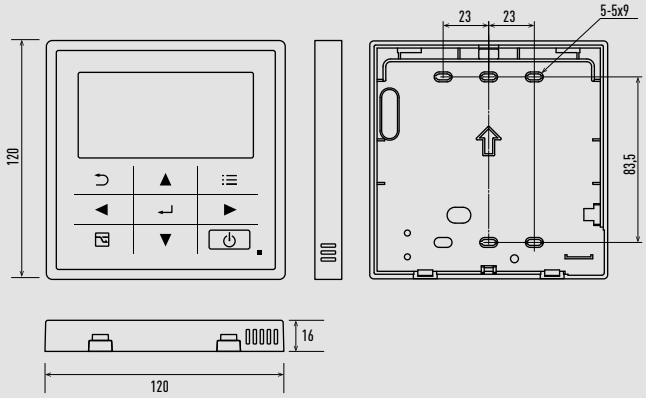
CZ-CAPWFC1 Commercial Wi-Fi Adaptor



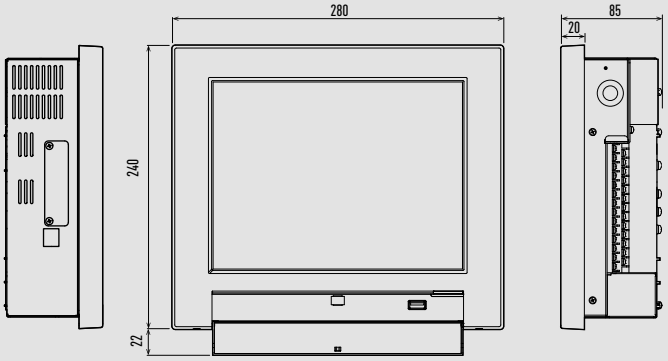
CZ-RTC6 / BL / BLW CONEX wired remote controller



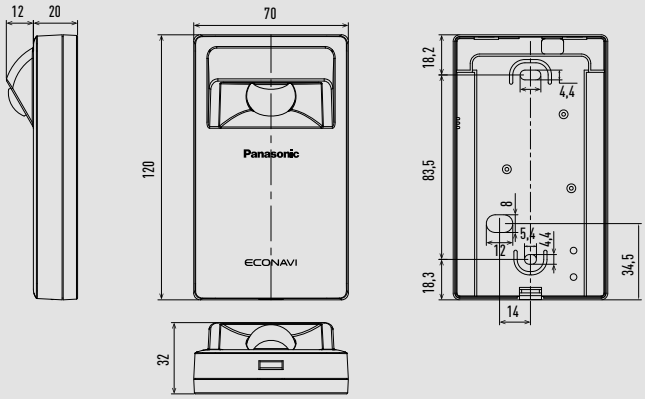
CZ-RTC5B design wired remote controller



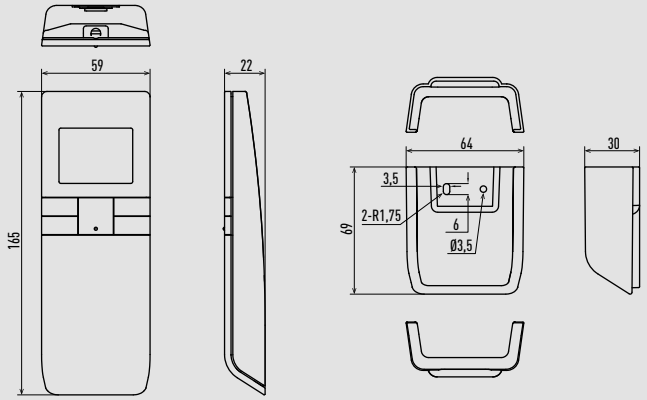
CZ-256ESMC3 intelligent controller (touch screen/web server)



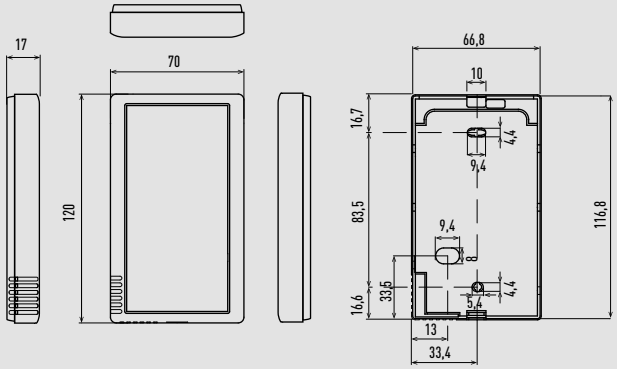
CZ-CENSC1 Econavi sensor



CZ-RWS3 infrared remote controller

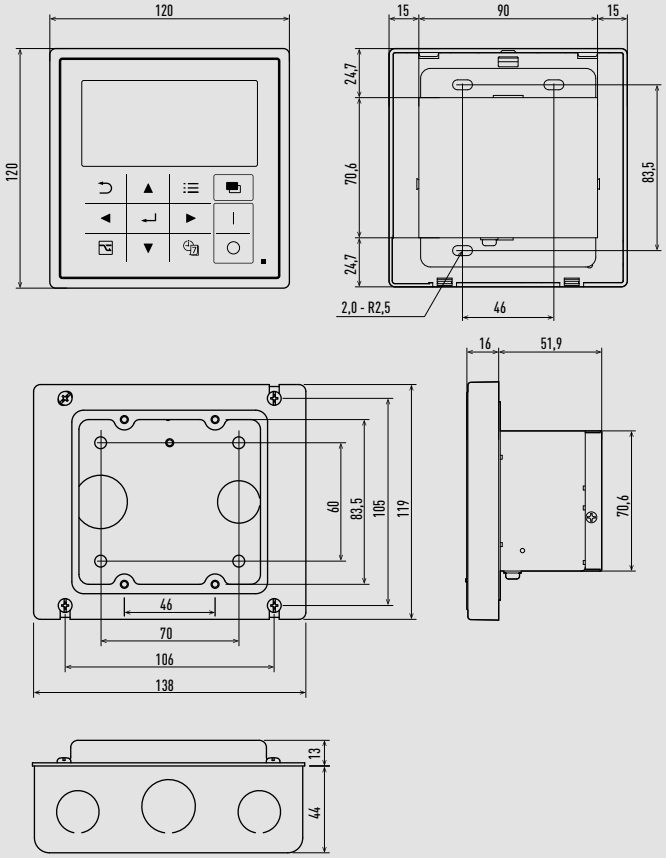


CZ-CSRC3 remote sensor

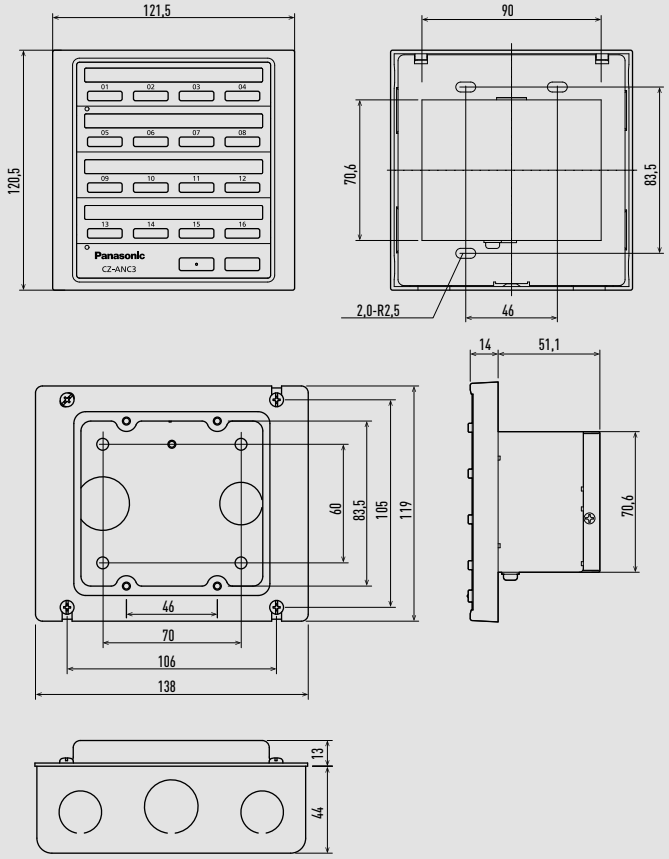


Unit: mm

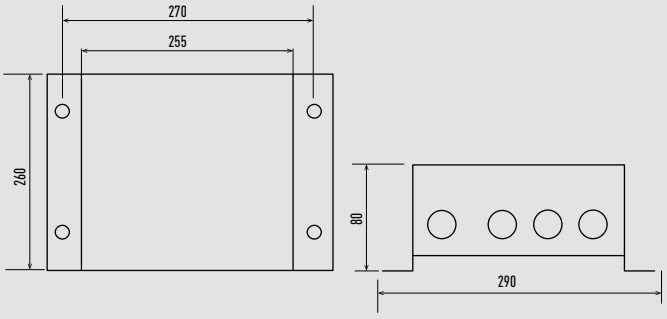
CZ-64ESMC3 system controller with weekly timer



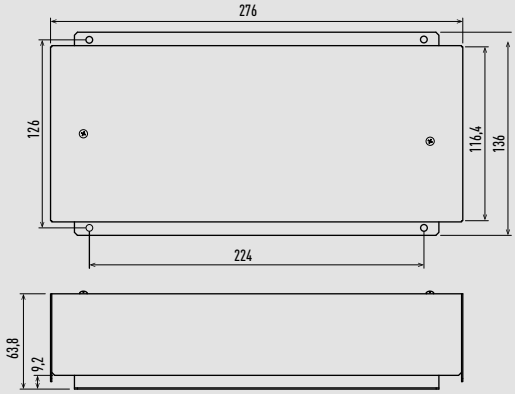
CZ-ANC3 central ON/OFF controller



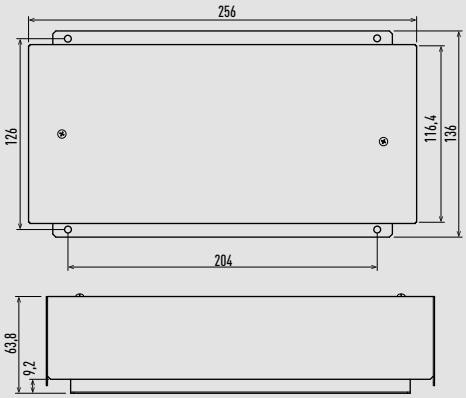
CZ-CAPDC2 Seri-Para I/O unit for outdoor unit



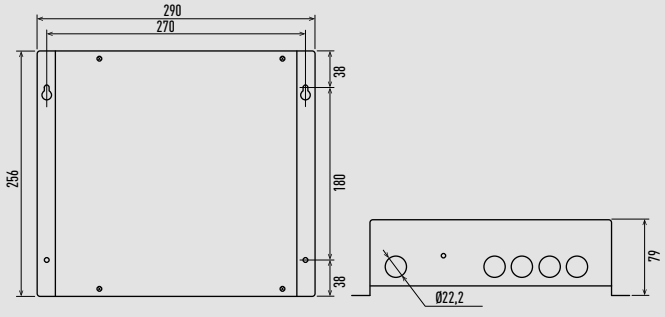
CZ-CAPC3 local adaptor for ON/OFF control



CZ-CAPBC2 Mini Seri-Para I/O Unit 0 -10 V



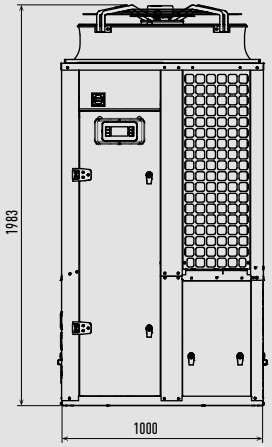
CZ-CFUNC2 communication adaptor



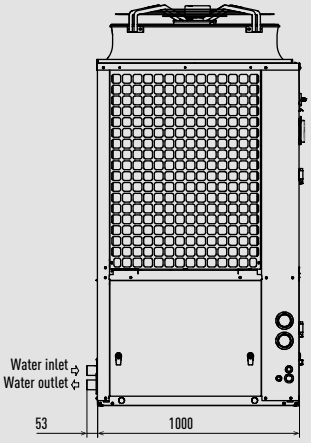
Unit: mm

ECOi-W 20 to 40 with condenser fans standard

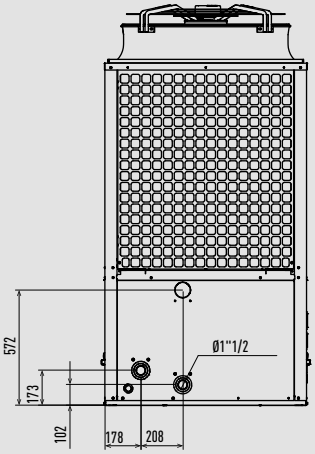
Front view



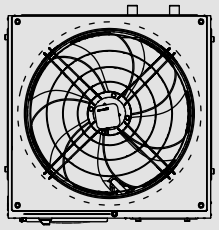
Side view

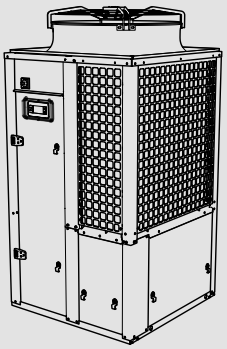


Rear view

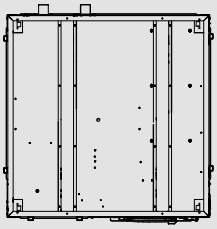


Top view





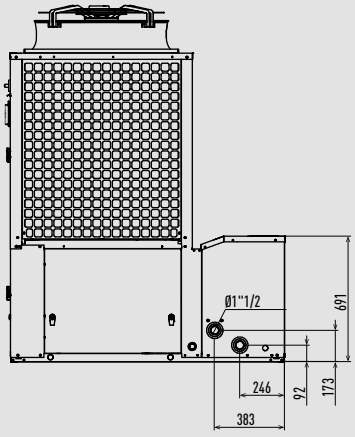
Bottom view



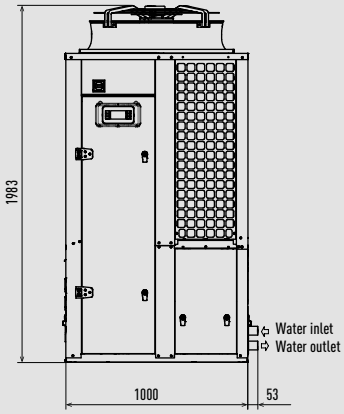
Unit: mm

ECOi-W 20 to 40 with condenser fans standard and buffer tank

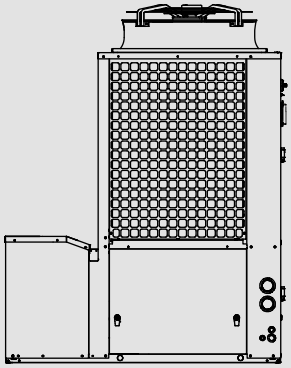
Side view



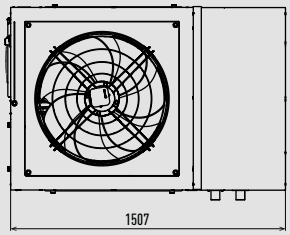
Front view

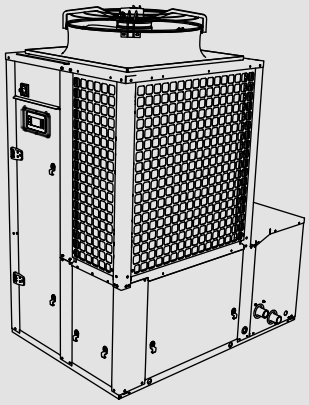


Side view

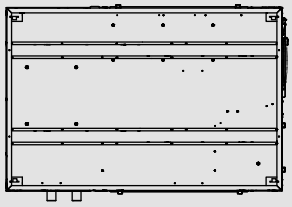


Top view



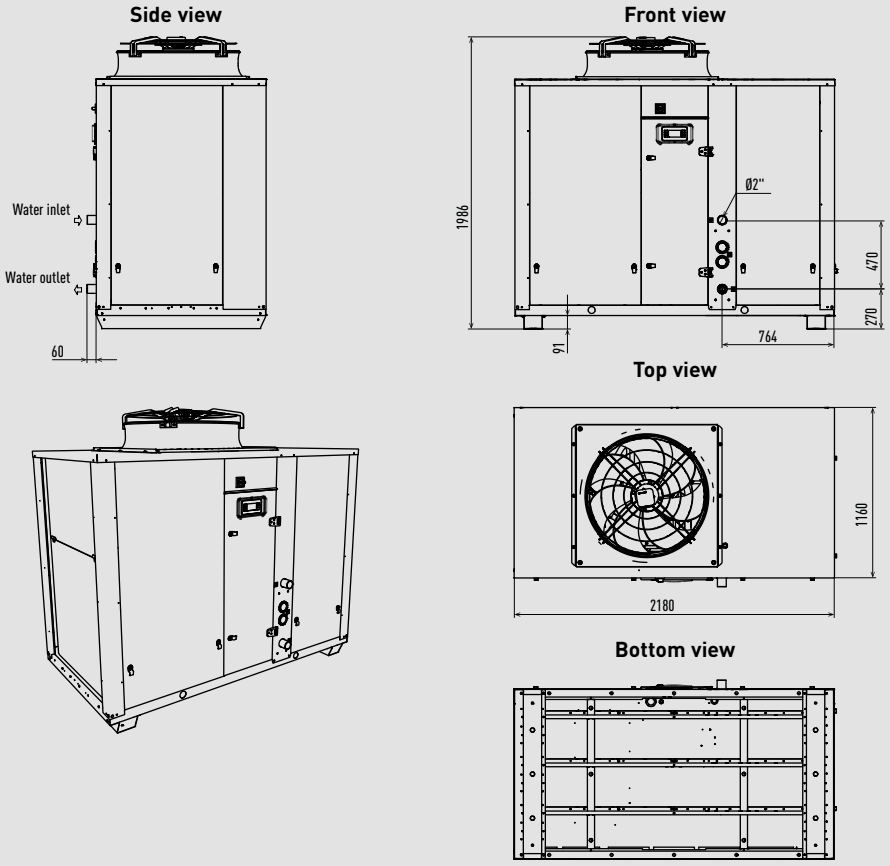


Bottom view



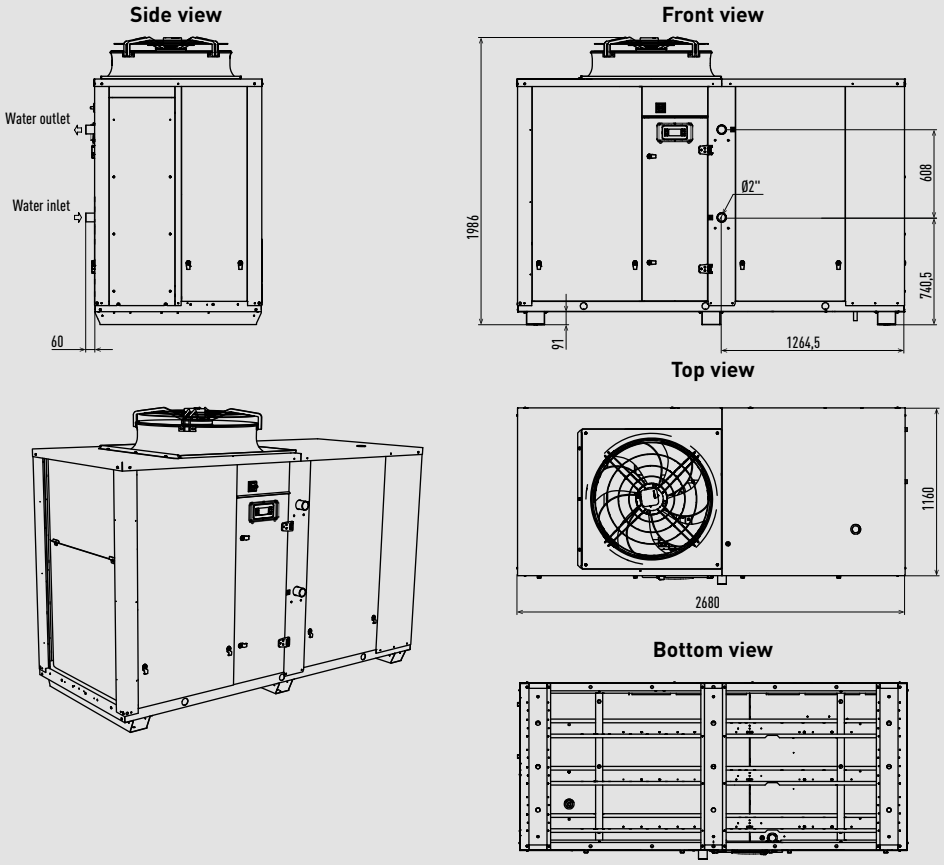
Unit: mm

ECOi-W 45 to 55 with condenser fans standard



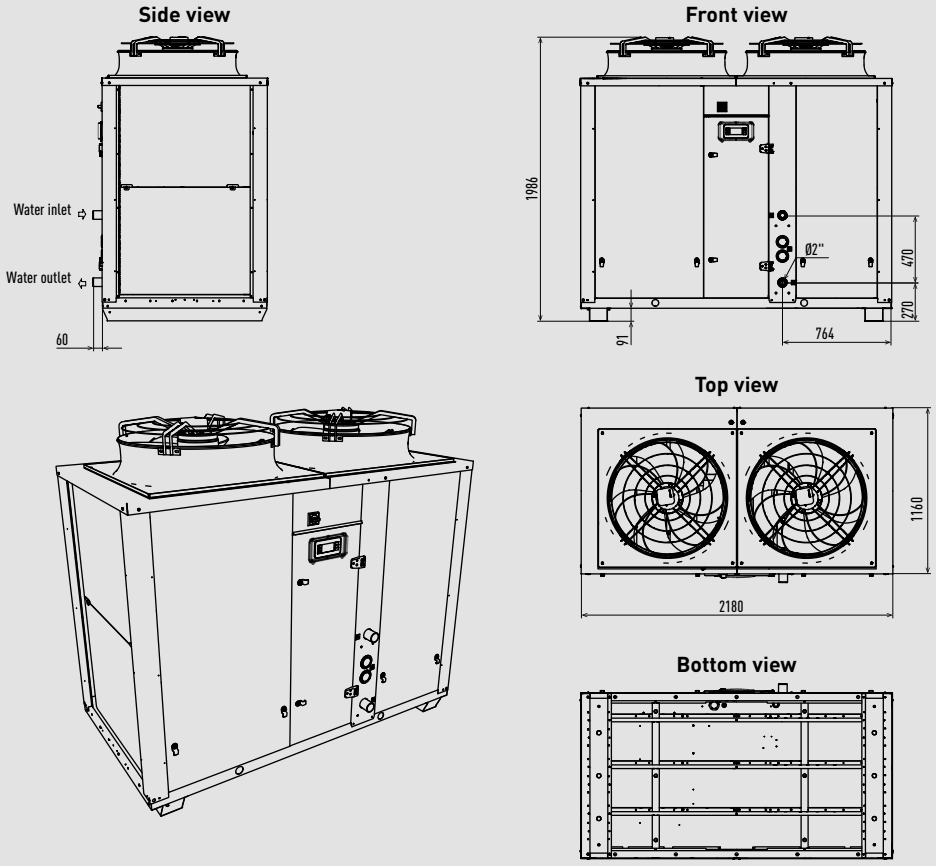
Unit: mm

ECOi-W 45 to 55 with condenser fans standard and buffer tank



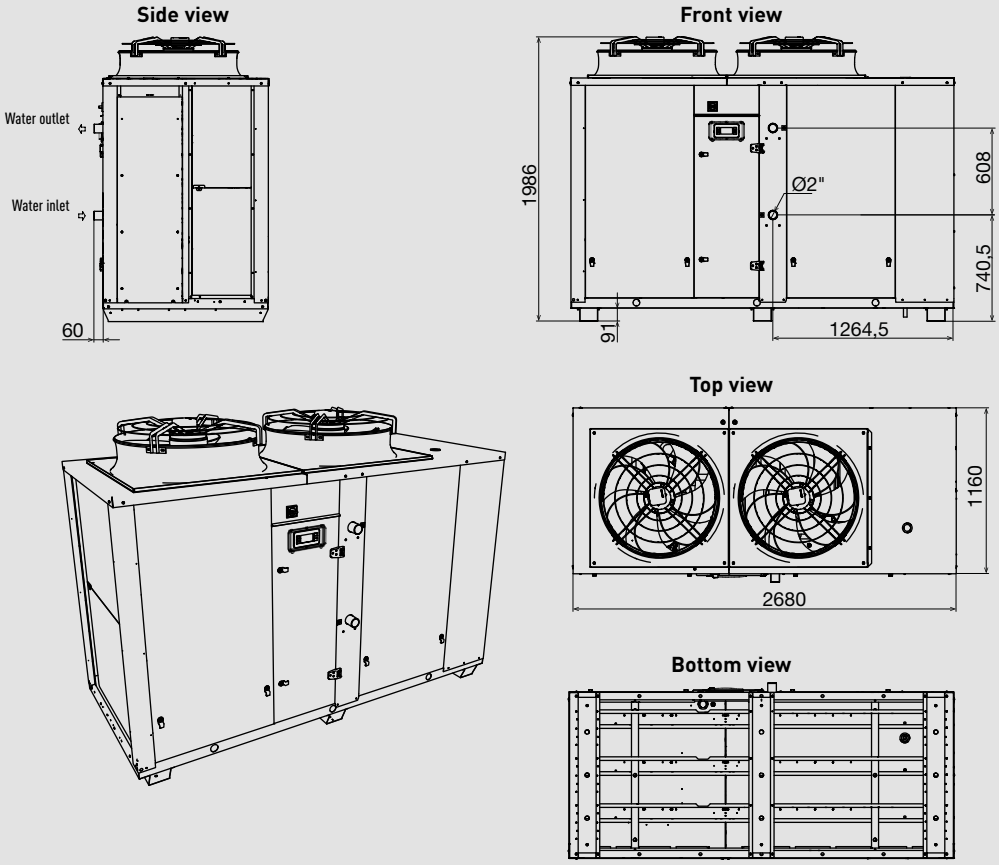
Unit: mm

ECOi-W 65 to 75 with condenser fans standard



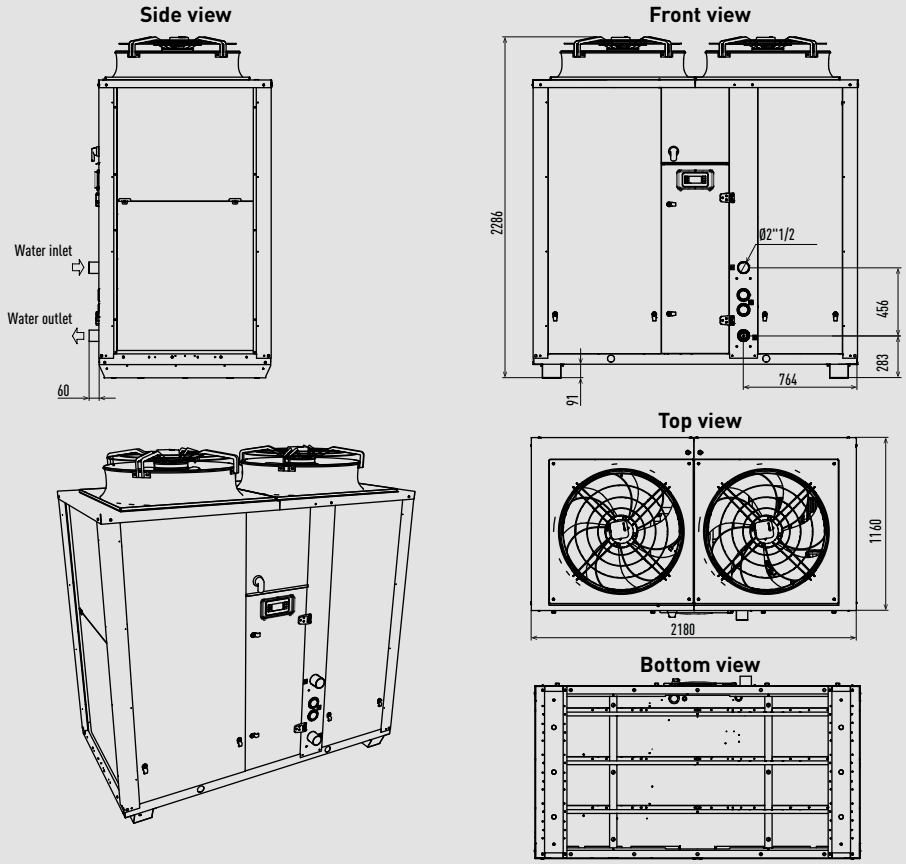
Unit: mm

ECOi-W 65 to 75 with condenser fans standard and buffer tank



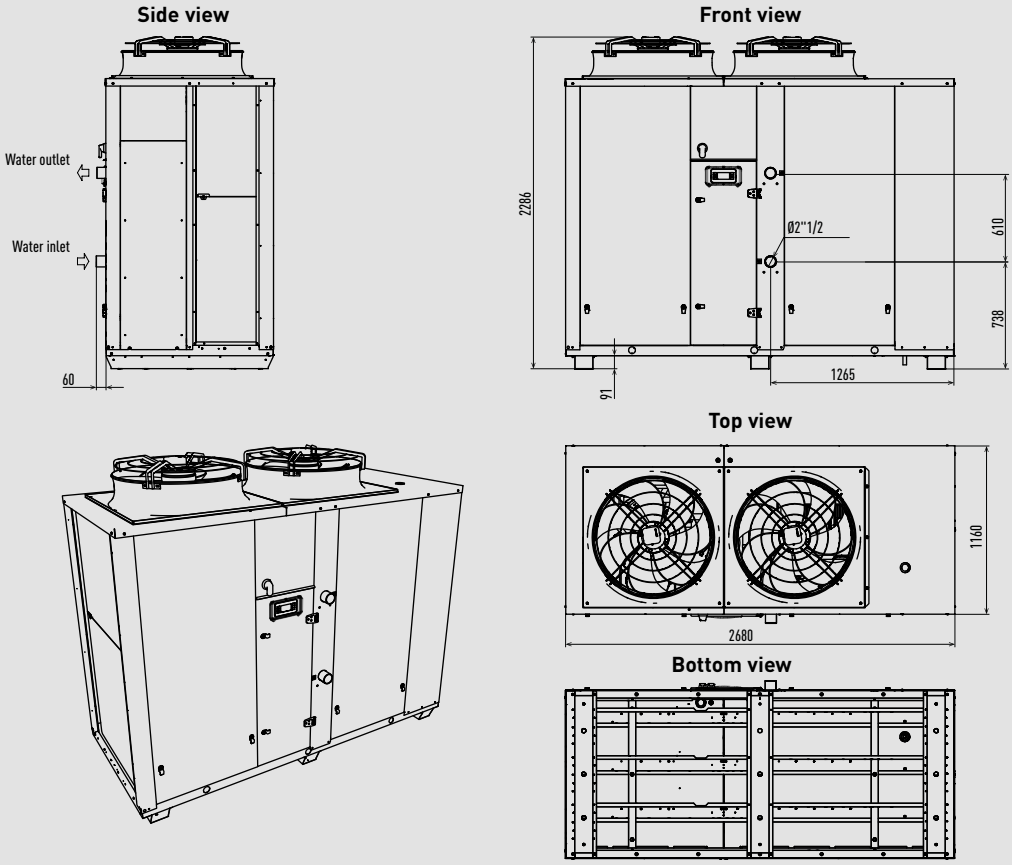
Unit: mm

ECOi-W 90 to 125 with condenser fans standard



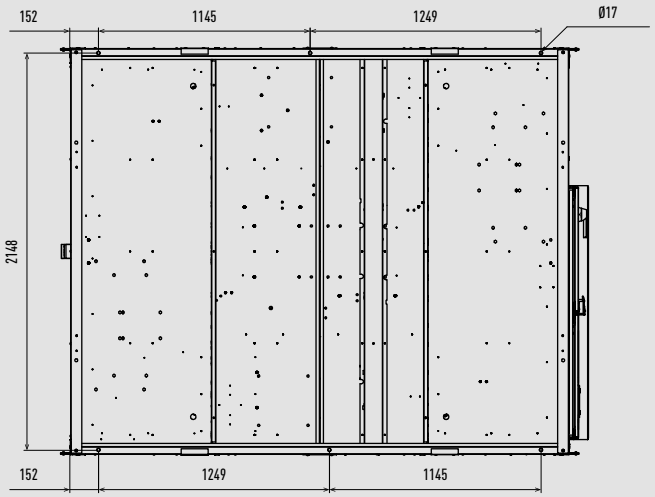
Unit: mm

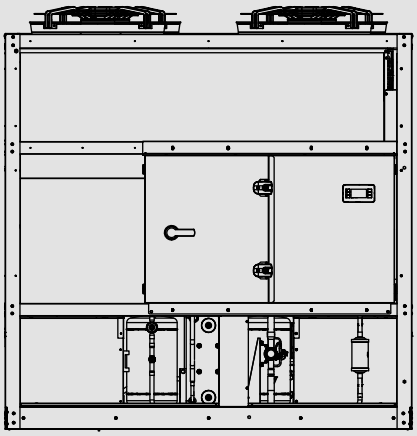
ECOi-W 90 to 125 with condenser fans standard and buffer tank

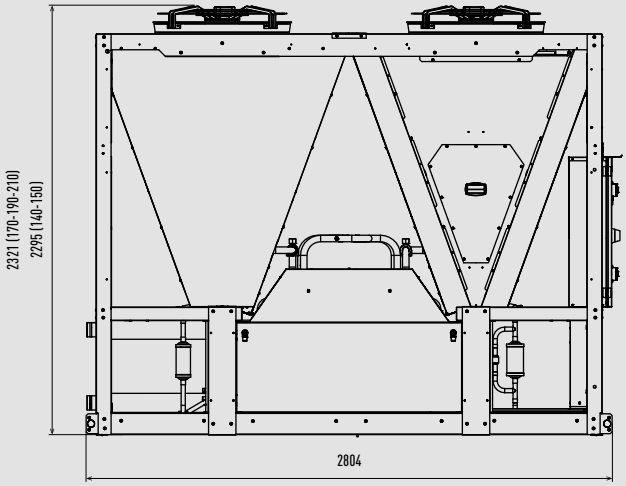


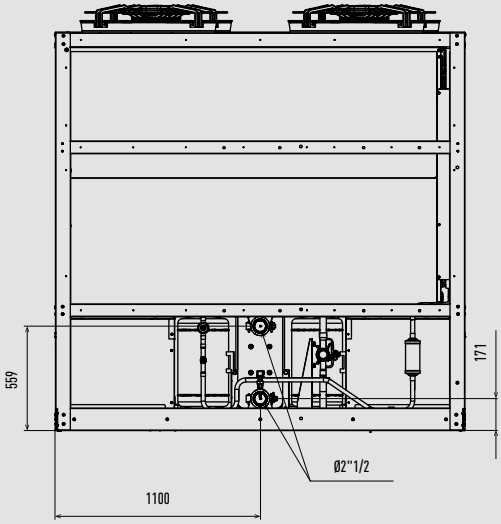
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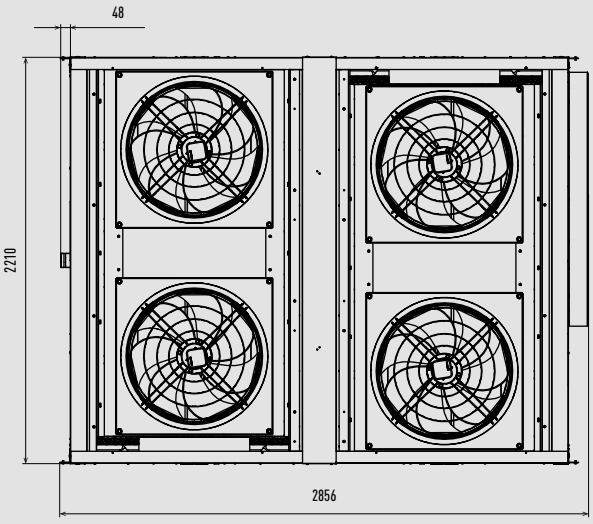
ECOi-W 140 to 210 without pump

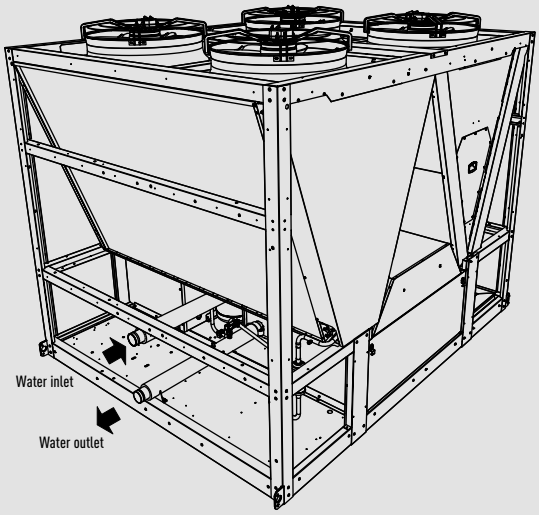






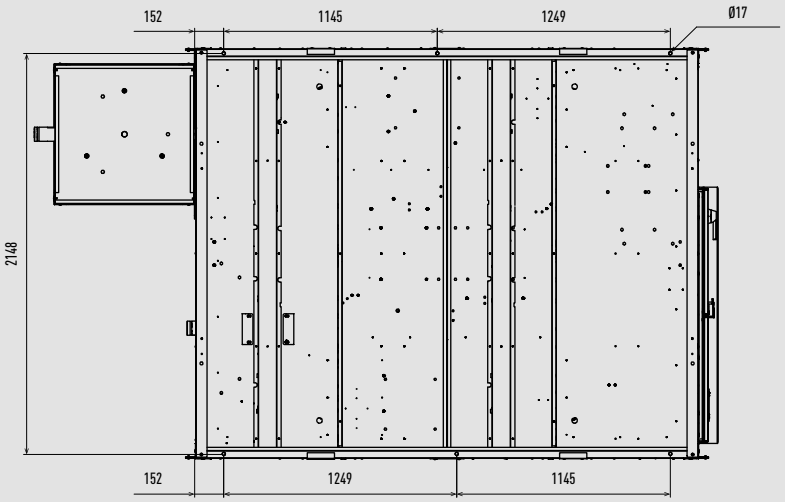


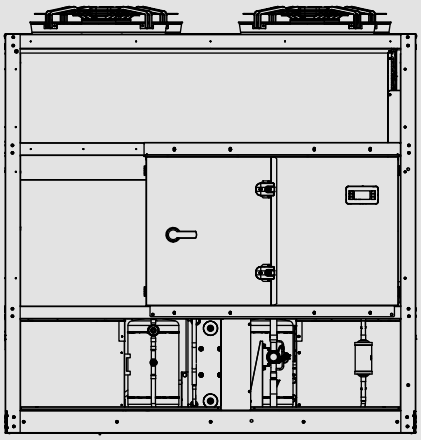


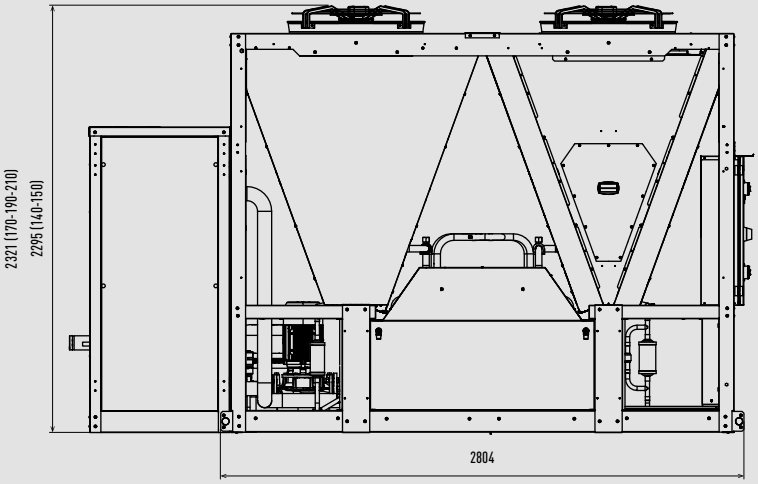


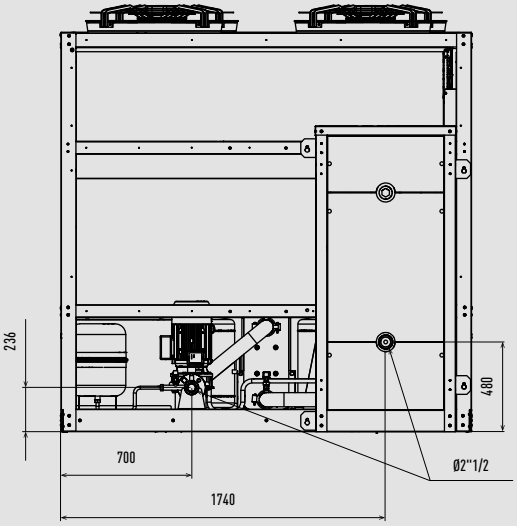
Unit: mm

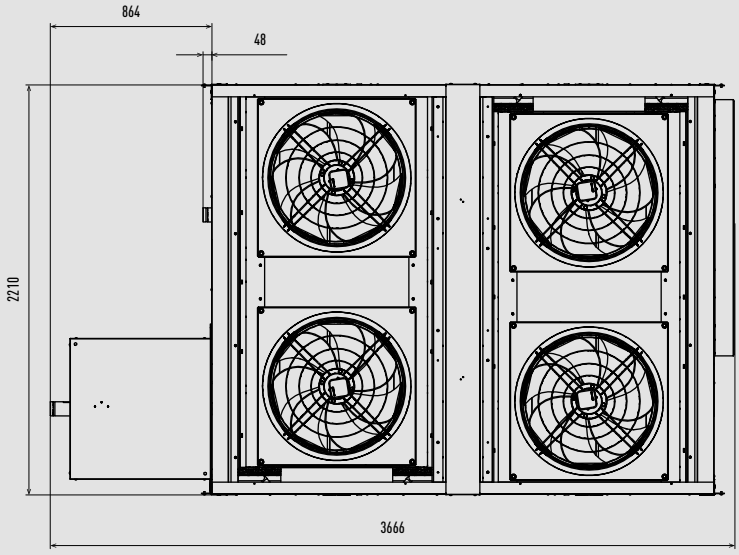
ECOi-W 140 to 210 with 1 pump and buffer tank

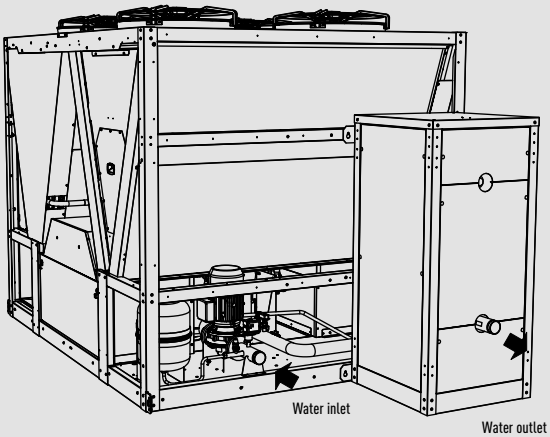






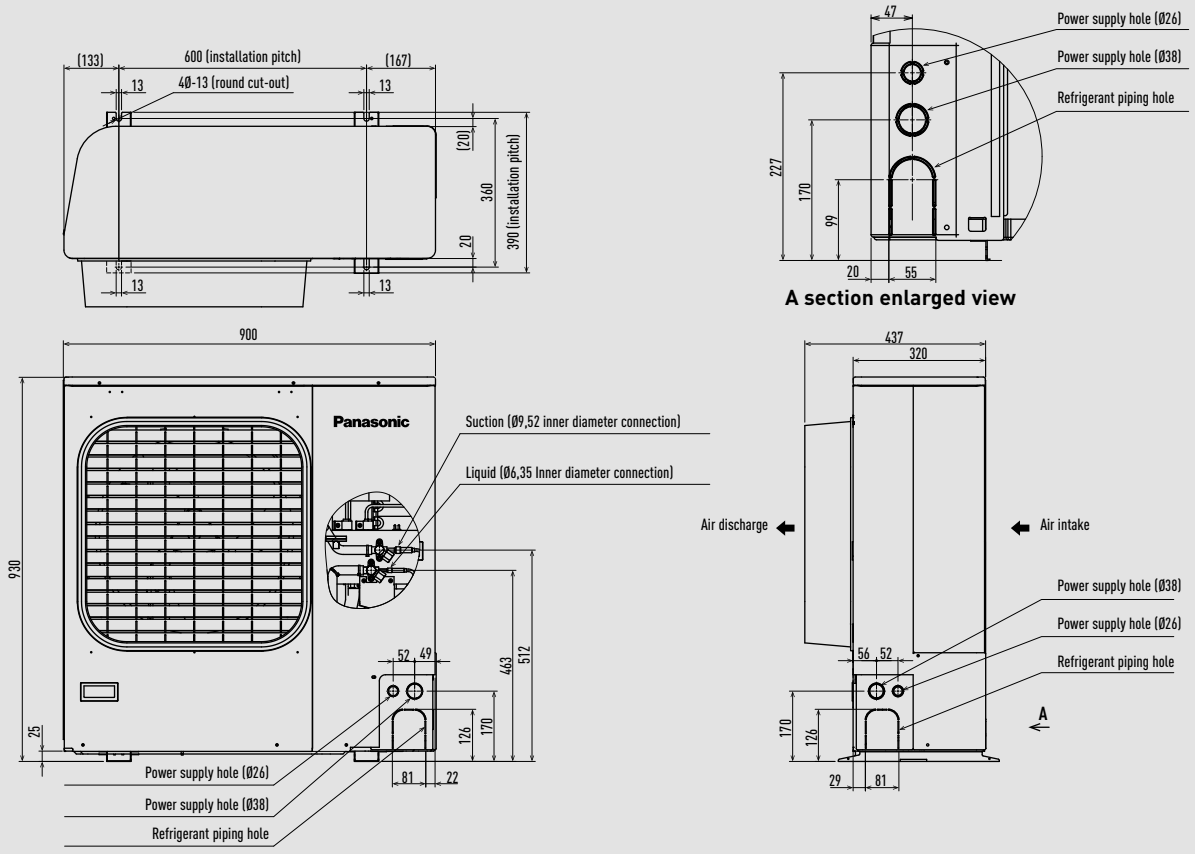






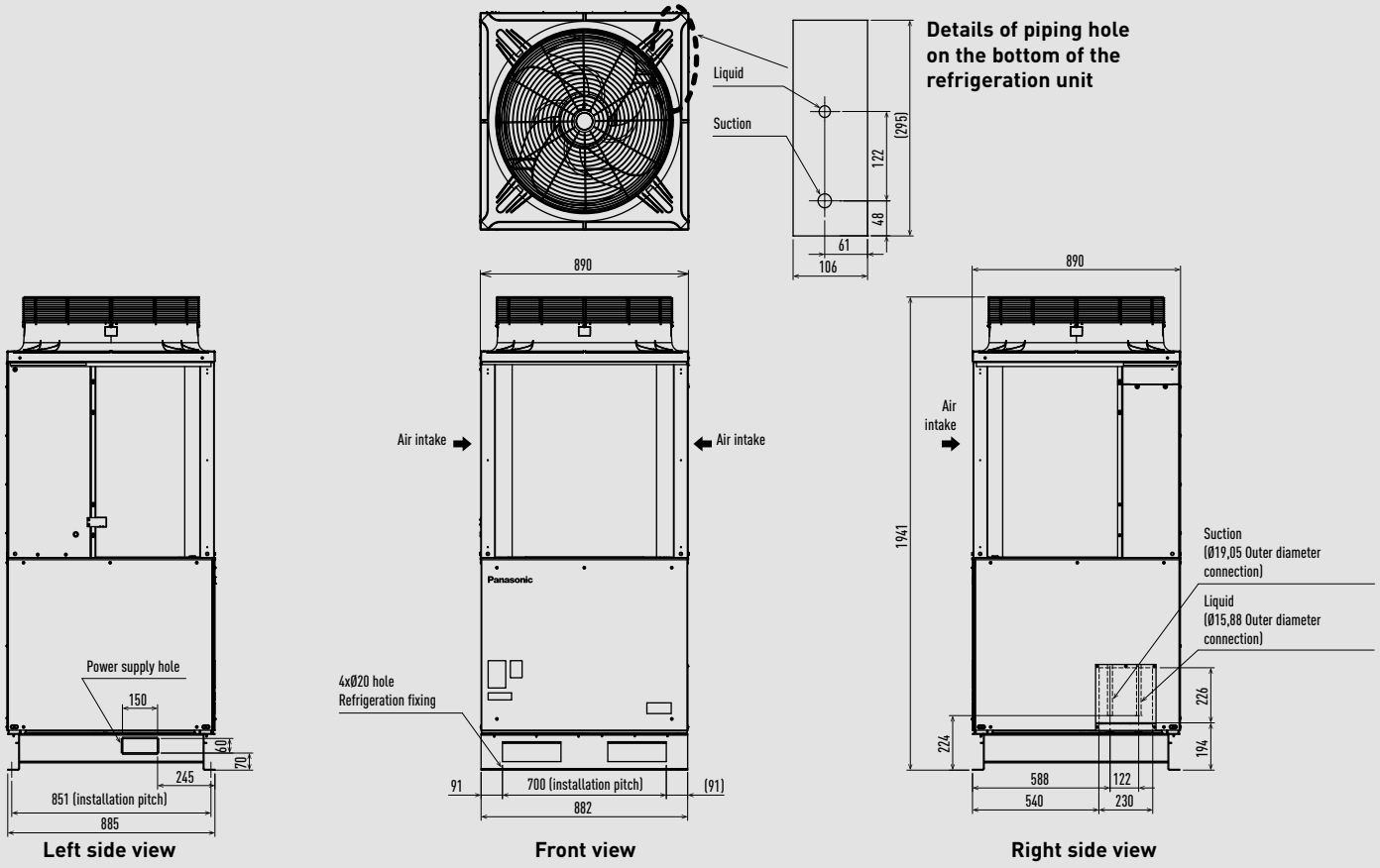
Unit: mm

Condensing units CR Series 4,0 kW



Unit: mm

Condensing units CR Series 15,0 and 16,0 kW



Unit: mm



Wiring diagrams

Domestic

Wall-mounted kits 1x1	> 545
Wall-mounted Professional kits 1x1	> 546
Floor console kits 1x1	> 546
4 Way 60x60 cassette kits 1x1	> 547
Low static pressure hide-away kits 1x1	> 547
Free Multi System 2 rooms	> 548
Free Multi System 3 rooms	> 548
Free Multi System 4 rooms	> 549
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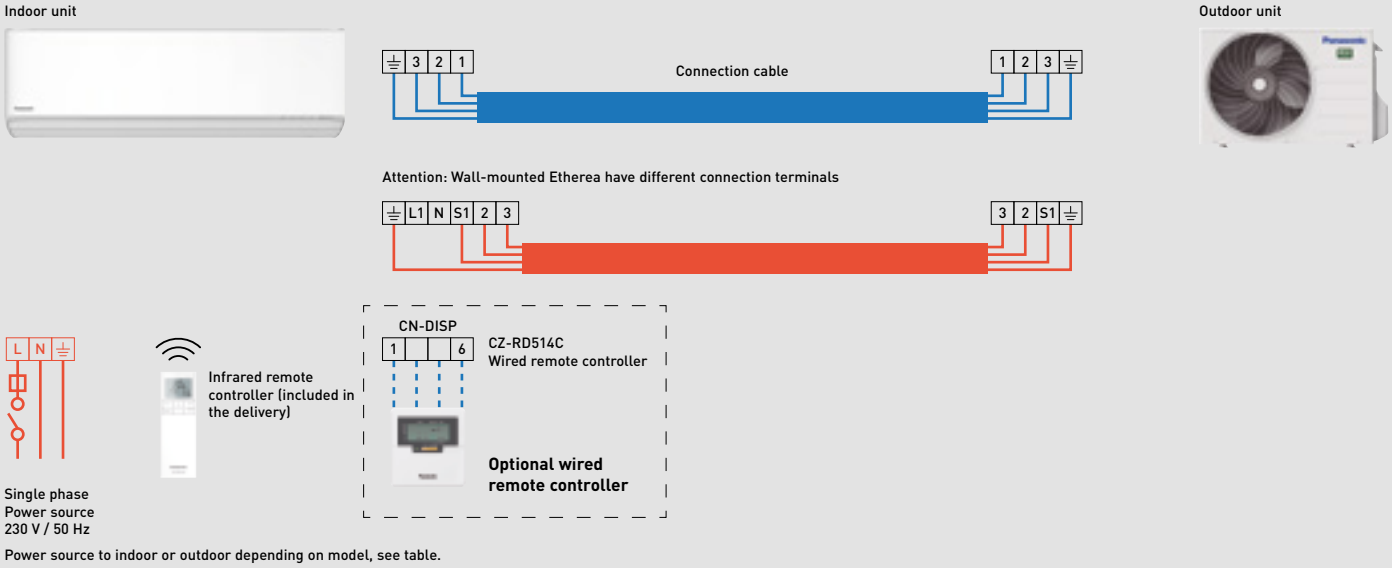
Commercial

PACi NX wall-mounted kits 1x1	> 550
PACi NX 4 way 60x60 cassette kits 1x1	> 550
PACi NX 4 way 90x90 cassette kits 1x1	> 551
PACi NX ceiling kits 1x1	> 551
PACi NX adaptive ducted unit kits 1x1	> 552
BIG PACi high static pressure hide-away 20,0-25,0 kW kits 1x1	> 552
PACi 4 way 60x60 cassette kits 1x1	> 553
PACi NX twin system	> 553
PACi NX triple system	> 554
PACi NX double-twin system	> 554
PACi triple system	> 555
PACi double-twin system	> 555

VRF Systems

Mini ECOi Series	> 556
ECOi EX and ECO G Series	> 556
Hybrid GHP/EHP	> 557

Wall-mounted kits 1x1



Power source to indoor or outdoor depending on model, see table.

Wall-mounted Heatcharge VZ R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-VZ9SKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-VZ9SKE
CS-VZ12SKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-VZ12SKE

Wall-mounted Etherea Silver / Pure White Matt R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-XZ20XKEW / CS-Z20XKEW	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z20XKE
CS-XZ25XKEW / CS-Z25XKEW	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z25XKE
CS-XZ35XKEW / CS-Z35XKEW	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z35XKE
— / CS-Z42XKEW	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z42XKE
CS-XZ50XKEW / CS-Z50XKEW	230 V (indoor)	16 A	4 x 2,5 mm²	CU-Z50XKE
— / CS-Z71XKEW	230 V (indoor)	20 A	4 x 2,5 mm²	CU-Z71XKE

Wall-mounted TZ super-compact R32

Indoor unit	Power source	Recommended fuse	Power supply cable	Connection indoor / outdoor	Outdoor unit
CS-TZ20WKEW	230 V (indoor)	16 A	3 x 1,5 mm²	4 x 1,5 mm²	CU-TZ20WKE
CS-TZ25WKEW	230 V (indoor)	16 A	3 x 1,5 mm²	4 x 1,5 mm²	CU-TZ25WKE
CS-TZ35WKEW	230 V (indoor)	16 A	3 x 1,5 mm²	4 x 1,5 mm²	CU-TZ35WKE
CS-TZ42WKEW	230 V (indoor)	16 A	3 x 1,5 mm²	4 x 1,5 mm²	CU-TZ42WKE
CS-TZ50WKEW	230 V (indoor)	16 A	3 x 2,5 mm²	4 x 2,5 mm²	CU-TZ50WKE
CS-TZ60WKEW	230 V (indoor)	16 A	3 x 2,5 mm²	4 x 2,5 mm²	CU-TZ60WKE
CS-TZ71WKEW	230 V (indoor)	20 A	3 x 2,5 mm²	4 x 2,5 mm²	CU-TZ71WKE

Wall-mounted FZ super-compact R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-FZ25WKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-FZ25WKE
CS-FZ35WKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-FZ35WKE
CS-FZ50WKE	230 V (indoor)	16 A	4 x 2,5 mm²	CU-FZ50WKE
CS-FZ60WKE	230 V (indoor)	16 A	4 x 2,5 mm²	CU-FZ60WKE

Wall-mounted UZ super-compact R32

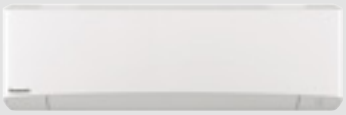
Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-UZ25WKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-UZ25WKE
CS-UZ35WKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-UZ35WKE
CS-UZ50WKE	230 V (indoor)	16 A	4 x 2,5 mm²	CU-UZ50WKE

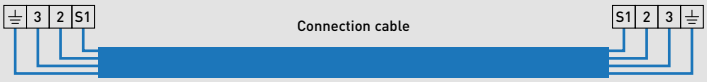
Wall-mounted PZ super-compact R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-PZ25WKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-PZ25WKE
CS-PZ35WKE	230 V (indoor)	16 A	4 x 1,5 mm²	CU-PZ35WKE
CS-PZ50WKE	230 V (indoor)	16 A	4 x 2,5 mm²	CU-PZ50WKE

Wall-mounted Professional kits 1x1

Indoor unit





Outdoor unit





Single phase
Power source
230 V / 50 Hz

CN-RMT



CZ-RD514C
Included wired remote controller

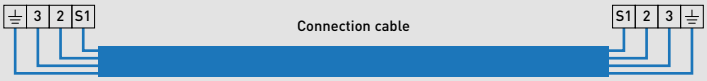
Wall-mounted Professional -20 °C R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-Z25TKEA	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z25TKEA
CS-Z35TKEA	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z35TKEA
CS-Z42TKEA	230 V (indoor)	16 A	4 x 1,5 mm²	CU-Z42TKEA
CS-Z50TKEA	230 V (indoor)	16 A	4 x 2,5 mm²	CU-Z50TKEA
CS-Z71TKEA	230 V (indoor)	20 A	4 x 2,5 mm²	CU-Z71TKEA

Floor console kits 1x1

Indoor unit





Outdoor unit





Infrared remote controller (included in the delivery)



Single phase
Power source
230 V / 50 Hz

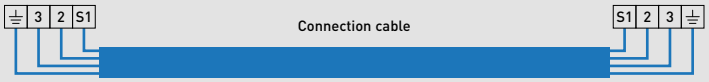
Floor console R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-Z25UFEAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z25UBEA
CS-Z35UFEAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z35UBEA
CS-Z50UFEAW	230 V (outdoor)	16 A	4 x 2,5 mm²	CU-Z50UBEA

4 Way 60x60 cassette kits 1x1

Indoor unit



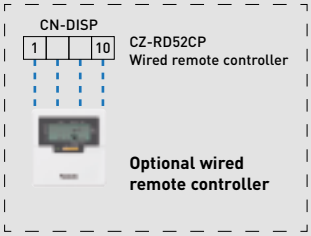


Outdoor unit





Infrared remote controller (included in the delivery)





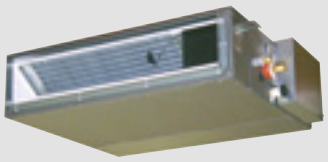
Single phase
Power source
230 V / 50 Hz

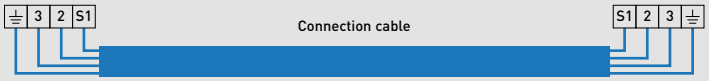
4 Way 60x60 Cassette R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-Z25UB4EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z25UBEA
CS-Z35UB4EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z35UBEA
CS-Z50UB4EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z50UBEA
CS-Z60UB4EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z60UBEA

Low static pressure hide-away kits 1x1

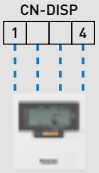
Indoor unit





Outdoor unit







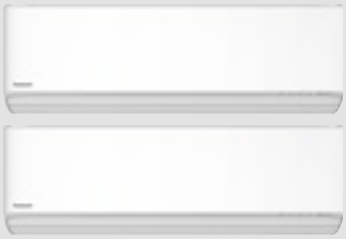
Single phase
Power source
230 V / 50 Hz

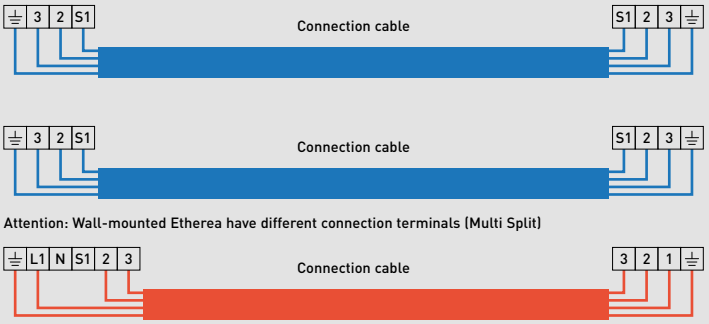
Low Static Pressure Hide Away R32

Indoor unit	Power source	Recommended fuse	Connection indoor / outdoor	Outdoor unit
CS-Z25UD3EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z25UBEA
CS-Z35UD3EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z35UBEA
CS-Z50UD3EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z50UBEA
CS-Z60UD3EAW	230 V (outdoor)	16 A	4 x 1,5 mm²	CU-Z60UBEA

Free Multi System 2 rooms

Indoor unit





Attention: Wall-mounted Etherea have different connection terminals (Multi Split)

Outdoor unit





Single phase
Power source
230 V / 50 Hz / 16 A

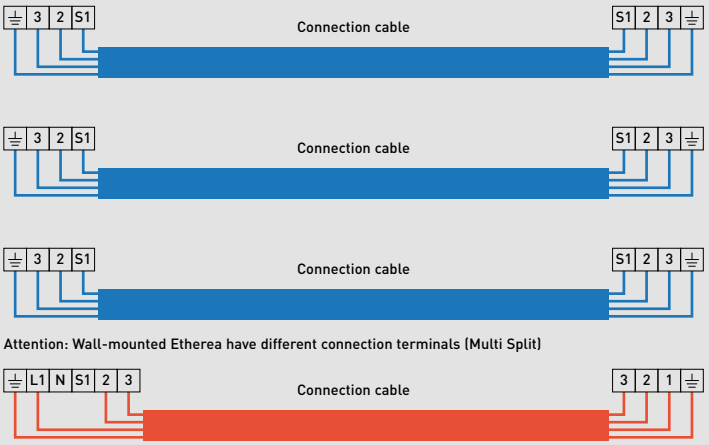
Free Multi System R32

Outdoor unit	Power source	Recommended fuse	Power supply cable	Connection indoor / outdoor
CU-2Z35TBE	230 V	16 A	3 x 1,5 mm²	4 x 1,5 mm²
CU-2Z41TBE	230 V	16 A	3 x 1,5 mm²	4 x 1,5 mm²
CU-2Z50TBE	230 V	16 A	3 x 1,5 mm²	4 x 1,5 mm²
CU-2TZ41TBE	230 V	16 A	3 x 1,5 mm²	4 x 1,5 mm²
CU-2TZ50TBE	230 V	16 A	3 x 1,5 mm²	4 x 1,5 mm²

Free Multi System 3 rooms

Indoor unit





Attention: Wall-mounted Etherea have different connection terminals (Multi Split)

Outdoor unit





Single phase
Power source
230 V / 50 Hz / 16 A

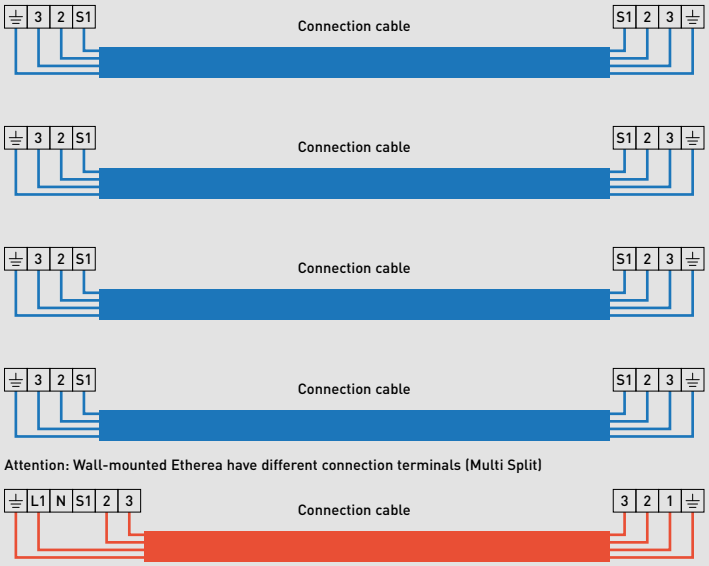
Free Multi System R32

Outdoor unit	Power source	Recommended fuse	Power supply cable	Connection indoor / outdoor
CU-3Z52TBE	230 V	16 A	3 x 2,5 mm²	4 x 1,5 mm²
CU-3Z68TBE	230 V	16 A	3 x 2,5 mm²	4 x 1,5 mm²
CU-3TZ52TBE	230 V	16 A	3 x 2,5 mm²	4 x 1,5 mm²

Free Multi System 4 rooms

Indoor unit





Attention: Wall-mounted Etherea have different connection terminals (Multi Split)

Outdoor unit





Single phase
Power source
230 V / 50 Hz / 20 A

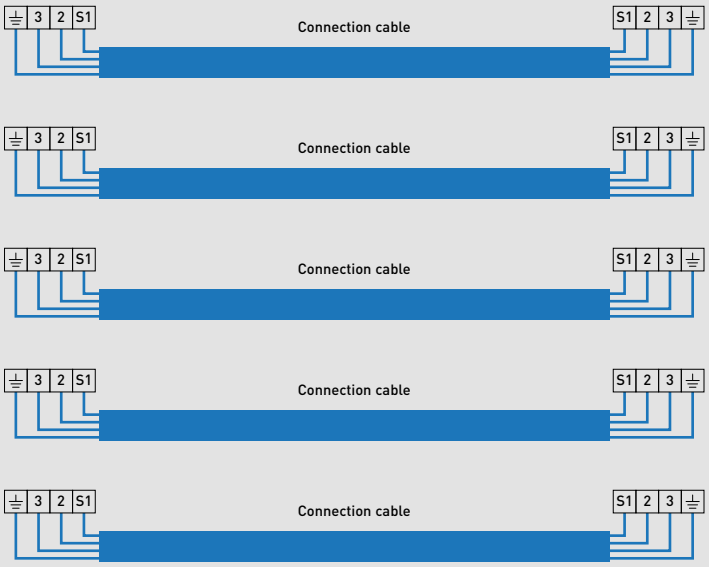
Free Multi System R32

Outdoor unit	Power source	Recommended fuse	Power supply cable	Connection indoor / outdoor
CU-4Z68TBE	230 V	20 A	3 x 2,5 mm²	4 x 1,5 mm²
CU-4Z80TBE	230 V	20 A	3 x 2,5 mm²	4 x 1,5 mm²

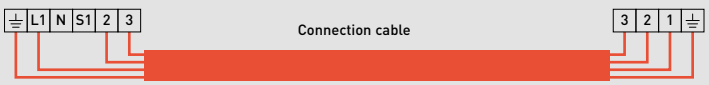
Free Multi System 5 rooms

Indoor unit





Attention: Wall-mounted Etherea have different connection terminals (Multi Split)



Outdoor unit





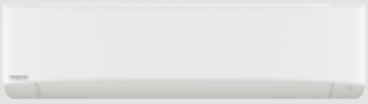
Single phase
Power source
230 V / 50 Hz / 25 A

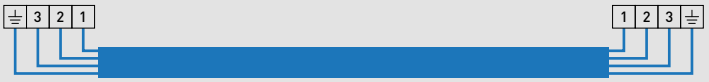
Free Multi System R32

Outdoor unit	Power source	Recommended fuse	Power supply cable	Connection indoor / outdoor
CU-5Z90TBE	230 V	25 A	3 x 4,0 mm²	4 x 1,5 mm²

PACi NX wall-mounted kits 1x1

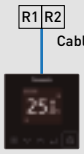
Indoor unit



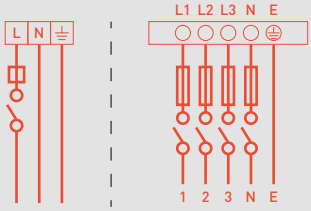


Outdoor unit









Single phase
Power source
230 V / 50 Hz / *

Three phase
Power source
3 x 400 V / 1 N ~ 50 Hz / **

Single phase

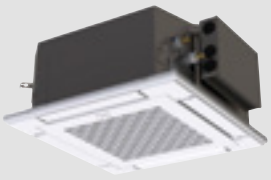
Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker*
S-3650PK3E	4 x 1,5 mm²	U-36PZH3E5	220/230/240V	20 A
S-3650PK3E	4 x 1,5 mm²	U-50PZH3E5		20 A
S-6010PK3E	4 x 1,5 mm²	U-60PZH3E5		25 A
S-6010PK3E	4 x 2,5 mm²	U-71PZH3E5		25 A
S-6010PK3E	4 x 2,5 mm²	U-100PZH3E5		35 A
S-6010PK3E	4 x 1,5 mm²	U-36PZ3E5		16 A
S-6010PK3E	4 x 1,5 mm²	U-50PZ3E5		16 A
S-6010PK3E	4 x 1,5 mm²	U-60PZ3E5A		20 A
S-6010PK3E	4 x 1,5 mm²	U-71PZ3E5A		20 A
S-6010PK3E	4 x 2,5 mm²	U-100PZ3E5		35 A

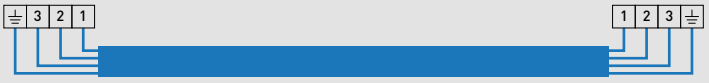
Three phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker**
S-6010PK3E	4 x 2,5 mm²	U-71PZH3E8	380/400/415V	16 A
S-6010PK3E	4 x 2,5 mm²	U-100PZH3E8		16 A
S-6010PK3E	4 x 2,5 mm²	U-100PZ3E8		16 A

PACi NX 4 way 60x60 cassette kits 1x1

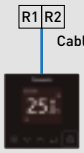
Indoor unit





Outdoor unit







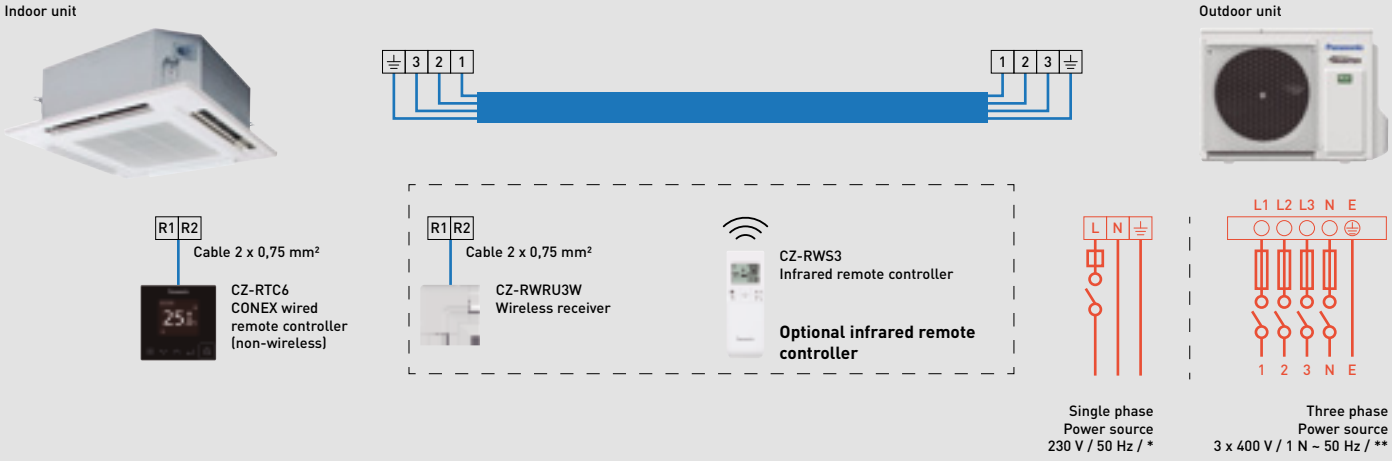


Single phase
Power source
230 V / 50 Hz / 16 A

Single phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker
S-36PY3E	4 x 1,5 mm²	U-36PZH3E5	220/230/240 V	16 A
S-50PY3E	4 x 1,5 mm²	U-50PZH3E5		16 A
S-60PY3E	4 x 1,5 mm²	U-60PZH3E5		16 A
S-25PY3E	4 x 1,5 mm²	U-25PZ3E5		16 A
S-36PY3E	4 x 1,5 mm²	U-36PZ3E5		16 A
S-50PY3E	4 x 1,5 mm²	U-50PZ3E5		16 A
S-60PY3E	4 x 1,5 mm²	U-60PZ3E5A		16 A

PACi NX 4 way 90x90 cassette kits 1x1



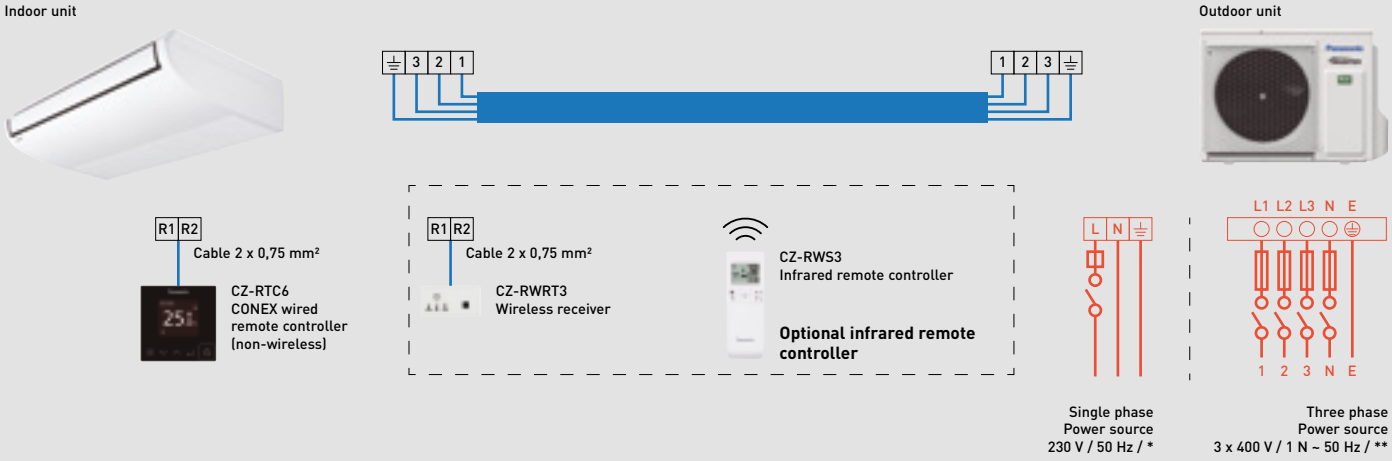
Single phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker*
S-3650PU3E	4 x 1,5 mm²	U-36PZH3E5	220/230/240 V	20 A
S-3650PU3E	4 x 1,5 mm²	U-50PZH3E5		20 A
S-6071PU3E	4 x 1,5 mm²	U-60PZH3E5		25 A
S-6071PU3E	4 x 2,5 mm²	U-71PZH3E5		25 A
S-1014PU3E	4 x 2,5 mm²	U-100PZH3E5		35 A
S-1014PU3E	4 x 2,5 mm²	U-125PZH3E5		40 A
S-1014PU3E	4 x 2,5 mm²	U-140PZH3E5		40 A
S-3650PU3E	4 x 1,5 mm²	U-36PZ3E5		16 A
S-3650PU3E	4 x 1,5 mm²	U-50PZ3E5		16 A
S-6071PU3E	4 x 1,5 mm²	U-60PZ3E5A		20 A
S-6071PU3E	4 x 1,5 mm²	U-71PZ3E5A		20 A
S-6010PK3E	4 x 2,5 mm²	U-100PZ3E5		35 A
S-1014PU3E	4 x 2,5 mm²	U-125PZ3E5		40 A
S-1014PU3E	4 x 2,5 mm²	U-140PZ3E5		40 A

Three phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker**
S-6071PU3E	4 x 2,5 mm²	U-71PZH3E8	380/400/415 V	16 A
S-1014PU3E	4 x 2,5 mm²	U-100PZH3E8		16 A
S-1014PU3E	4 x 2,5 mm²	U-125PZH3E8		16 A
S-1014PU3E	4 x 2,5 mm²	U-140PZH3E8		16 A
S-1014PU3E	4 x 2,5 mm²	U-100PZ3E8		20 A
S-1014PU3E	4 x 2,5 mm²	U-125PZ3E8		20 A
S-1014PU3E	4 x 2,5 mm²	U-140PZ3E8		20 A

PACi NX ceiling kits 1x1



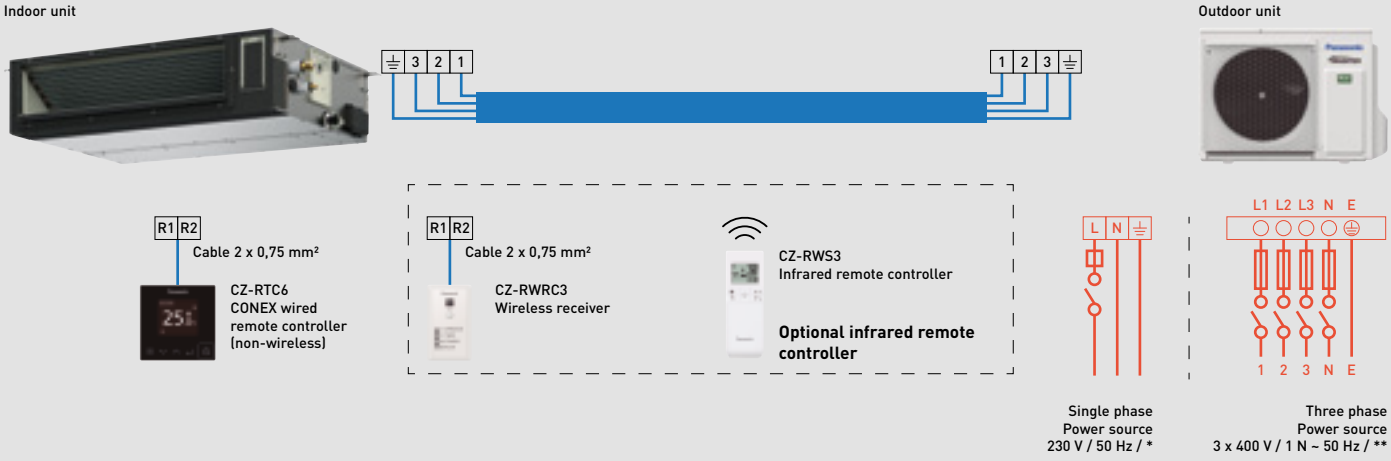
Single phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker*
S-3650PT3E	4 x 1,5 mm²	U-36PZH3E5	220/230/240 V	20 A
S-3650PT3E	4 x 1,5 mm²	U-50PZH3E5		20 A
S-6071PT3E	4 x 1,5 mm²	U-60PZH3E5		25 A
S-6071PT3E	4 x 2,5 mm²	U-71PZH3E5		25 A
S-1014PT3E	4 x 2,5 mm²	U-100PZH3E5		35 A
S-1014PT3E	4 x 2,5 mm²	U-125PZH3E5		40 A
S-1014PT3E	4 x 2,5 mm²	U-140PZH3E5		40 A
S-3650PT3E	4 x 1,5 mm²	U-36PZ3E5		16 A
S-3650PT3E	4 x 1,5 mm²	U-50PZ3E5		16 A
S-6071PT3E	4 x 1,5 mm²	U-60PZ3E5A		20 A
S-6071PT3E	4 x 1,5 mm²	U-71PZ3E5A		20 A
S-6010PK3E	4 x 2,5 mm²	U-100PZ3E5		35 A
S-1014PT3E	4 x 2,5 mm²	U-125PZ3E5		40 A
S-1014PT3E	4 x 2,5 mm²	U-140PZ3E5		40 A

Three phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker**
S-6071PT3E	4 x 2,5 mm²	U-71PZH3E8	380/400/415 V	16 A
S-1014PT3E	4 x 2,5 mm²	U-100PZH3E8		16 A
S-1014PT3E	4 x 2,5 mm²	U-125PZH3E8		16 A
S-1014PT3E	4 x 2,5 mm²	U-140PZH3E8		16 A
S-1014PT3E	4 x 2,5 mm²	U-100PZ3E8		20 A
S-1014PT3E	4 x 2,5 mm²	U-125PZ3E8		20 A
S-1014PT3E	4 x 2,5 mm²	U-140PZ3E8		20 A

PACi NX adaptive ducted unit kits 1x1



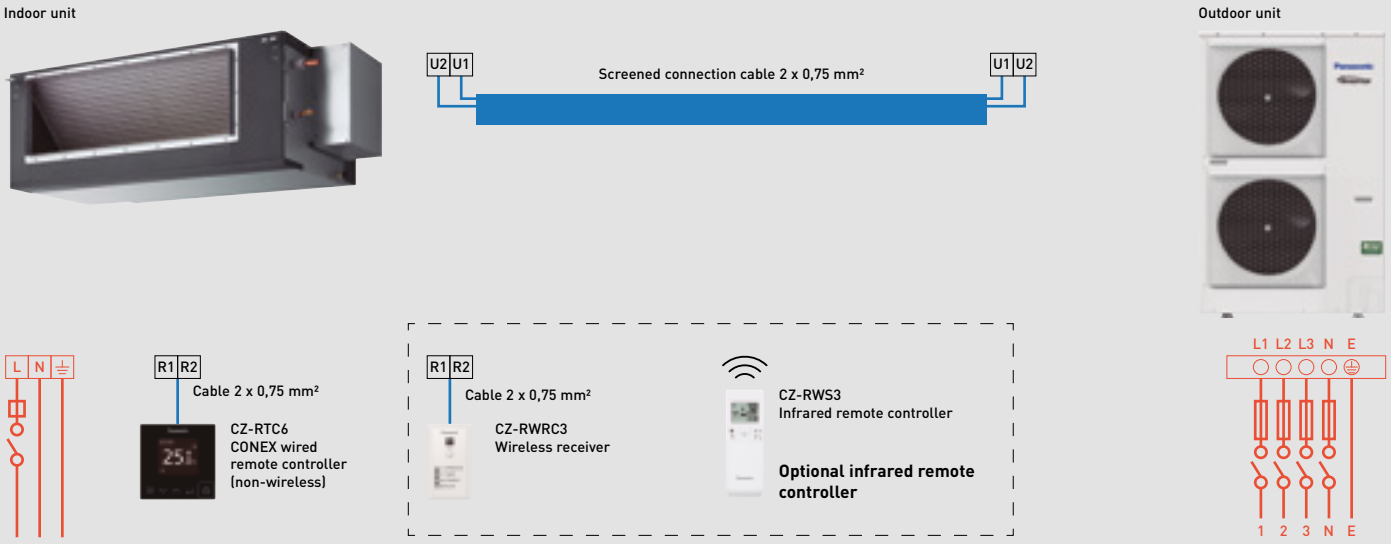
Single phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker*
S-3650PF3E	4 x 1,5 mm²	U-36PZH3E5	220/230/240 V	20 A
S-3650PF3E	4 x 1,5 mm²	U-50PZH3E5		20 A
S-6071PF3E	4 x 1,5 mm²	U-60PZH3E5		25 A
S-6071PF3E	4 x 2,5 mm²	U-71PZH3E5		25 A
S-1014PF3E	4 x 2,5 mm²	U-100PZH3E5		35 A
S-1014PF3E	4 x 2,5 mm²	U-125PZH3E5		40 A
S-1014PF3E	4 x 2,5 mm²	U-140PZH3E5		40 A
S-3650PF3E	4 x 1,5 mm²	U-36PZ3E5		16 A
S-3650PF3E	4 x 1,5 mm²	U-50PZ3E5		16 A
S-6071PF3E	4 x 1,5 mm²	U-60PZ3E5A		20 A
S-6071PF3E	4 x 1,5 mm²	U-71PZ3E5A		20 A
S-6010PK3E	4 x 2,5 mm²	U-100PZ3E5		35 A
S-1014PF3E	4 x 2,5 mm²	U-125PZ3E5		40 A
S-1014PF3E	4 x 2,5 mm²	U-140PZ3E5		40 A

Three phase

Indoor unit	Connection indoor / outdoor	Outdoor unit	Power source	Circuit breaker**
S-6071PF3E	4 x 2,5 mm²	U-71PZH3E8	380/400/415 V	16 A
S-1014PF3E	4 x 2,5 mm²	U-100PZH3E8		16 A
S-1014PF3E	4 x 2,5 mm²	U-125PZH3E8		16 A
S-1014PF3E	4 x 2,5 mm²	U-140PZH3E8		16 A
S-1014PF3E	4 x 2,5 mm²	U-100PZ3E8		20 A
S-1014PF3E	4 x 2,5 mm²	U-125PZ3E8		20 A
S-1014PF3E	4 x 2,5 mm²	U-140PZ3E8		20 A

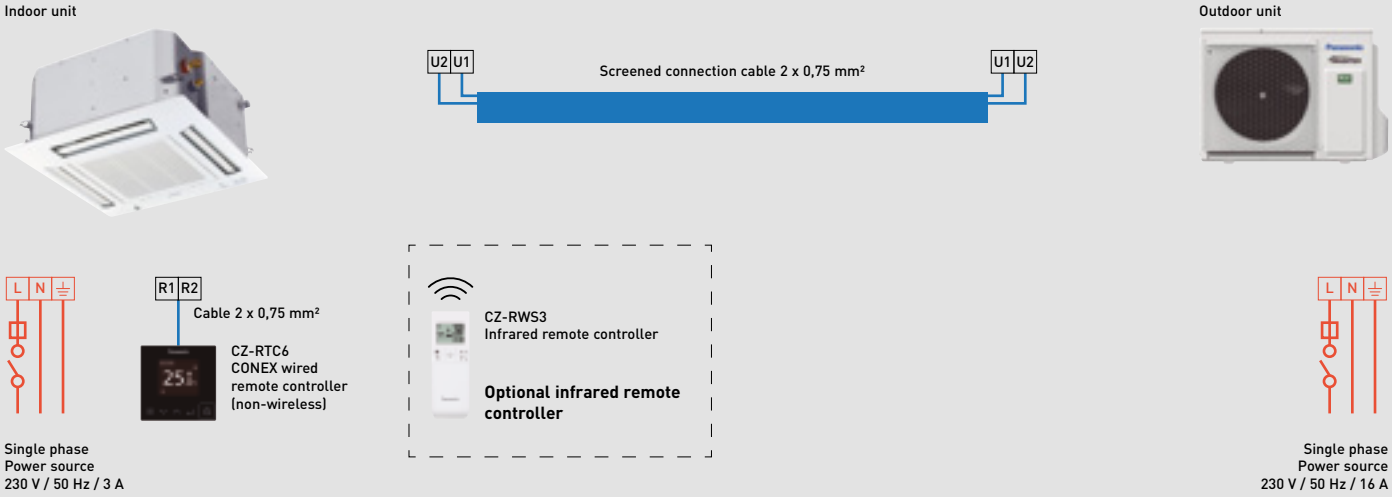
BIG PACi high static pressure hide-away 20,0-25,0 kW kits 1x1



Three phase

Indoor unit	Power source	Outdoor unit	Power source	Circuit breaker
S-200PE3E5B	220/230/240 V	U-200PZH2E8	380/400/415 V	16 A
S-250PE3E5B		U-250PZH2E8		20 A

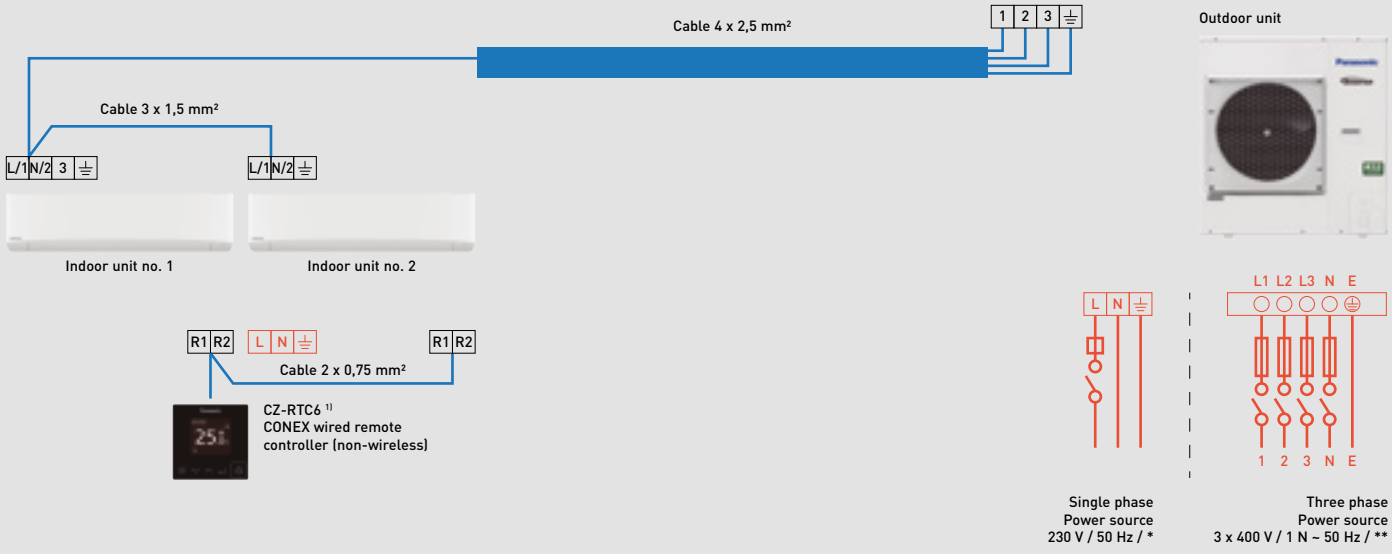
PACi 4 way 60x60 cassette kits 1x1



Single phase

Indoor unit	Power source	Outdoor unit	Power source	Circuit breaker
S-36PY2E5B	220/230/240 V	U-36PZH3E5	220/230/240 V	16 A
S-50PY2E5B		U-50PZH3E5		16 A

PACi NX twin system



Single phase

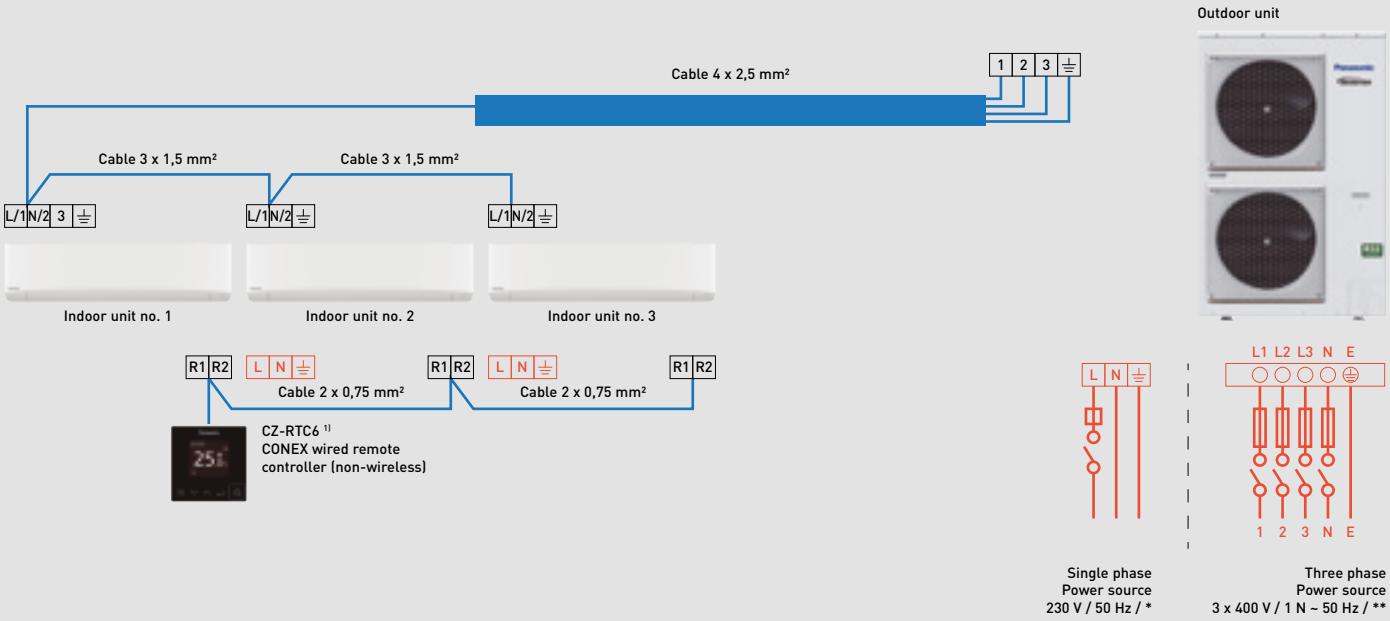
Outdoor unit	Power source	Circuit breaker*
U-71PZH3E5	220/230/240 V	25 A
U-100PZH3E5		30 A
U-125PZH3E5		25 A
U-140PZH3E5		35 A
U-100PZ3E5		35 A
U-125PZ3E5		40 A
U-140PZ3E5		40 A

1) Optional infrared remote controller is also possible. Wireless receivers may be required depending on indoor units.

Three phase

Outdoor unit	Power source	Circuit breaker**
U-71PZH3E8	380/400/415 V	16 A
U-100PZH3E8		16 A
U-125PZH3E8		16 A
U-140PZH3E8		16 A
U-200PZH2E8		20 A
U-250PZH2E8		30 A
U-100PZ3E8		16 A
U-125PZ3E8		20 A
U-140PZ3E8		20 A

PACi NX triple system



Single phase

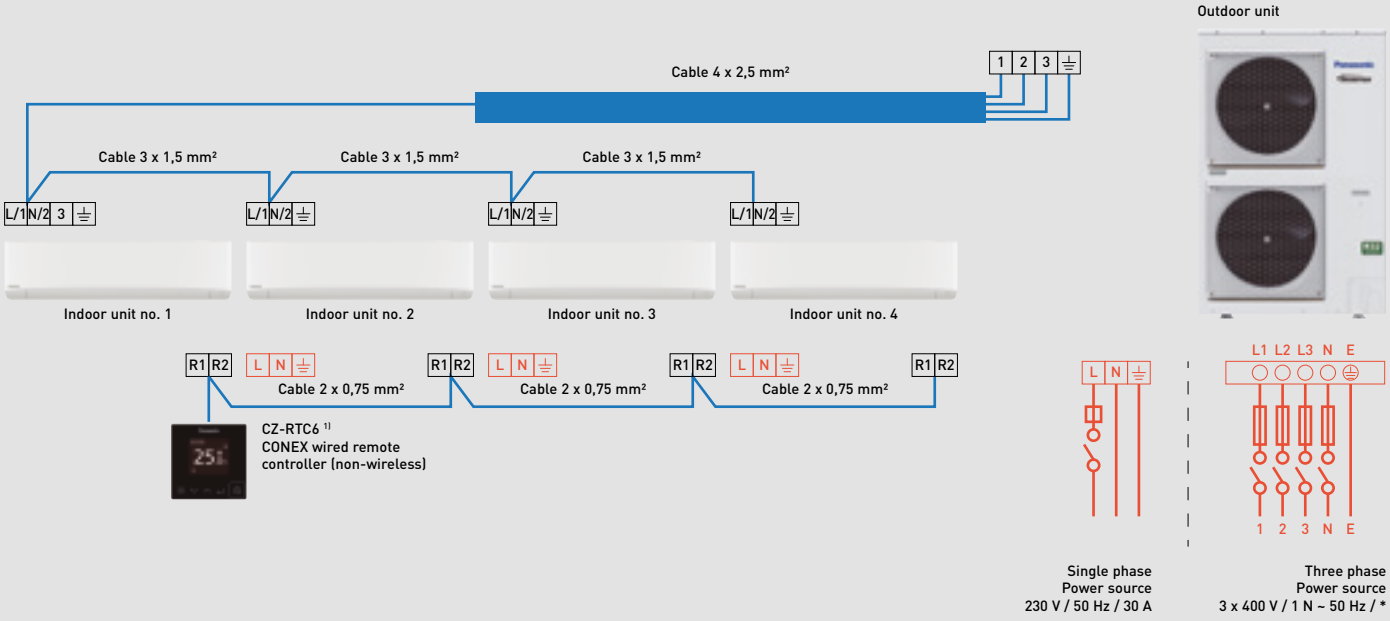
Outdoor unit	Power source	Circuit breaker*
U-100PZH3E5	220 / 230 / 240 V	35 A
U-125PZH3E5		35 A
U-140PZH3E5		40 A

Three phase

Outdoor unit	Power source	Circuit breaker**
U-100PZH3E8	380 / 400 / 415 V	16 A
U-125PZH3E8		16 A
U-140PZH3E8		16 A

1) Optional infrared remote controller is also possible. Wireless receivers may be required depending on indoor units.

PACi NX double-twin system



Single phase

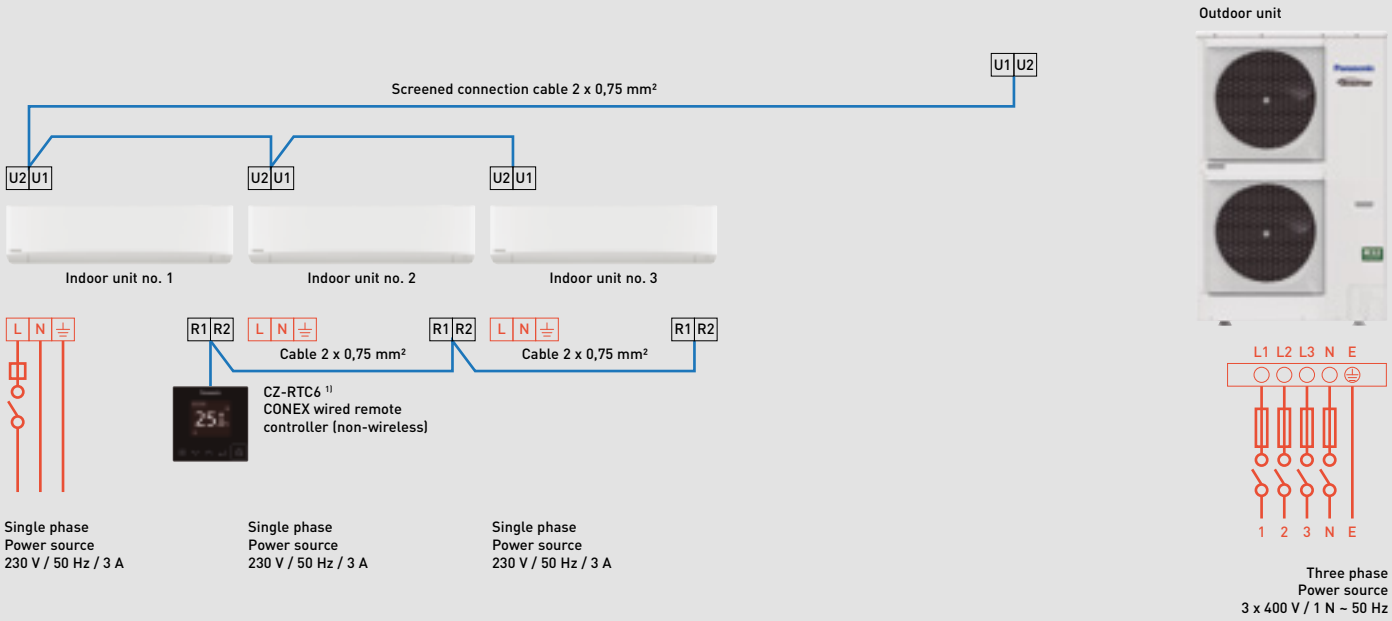
Outdoor unit	Power source	Circuit breaker
U-125PZH3E5	220 / 230 / 240 V	35 A

Three phase

Outdoor unit	Power source	Circuit breaker*
U-125PZH3E8	380 / 400 / 415 V	16 A

1) Optional infrared remote controller is also possible. Wireless receivers may be required depending on indoor units.

PACi triple system

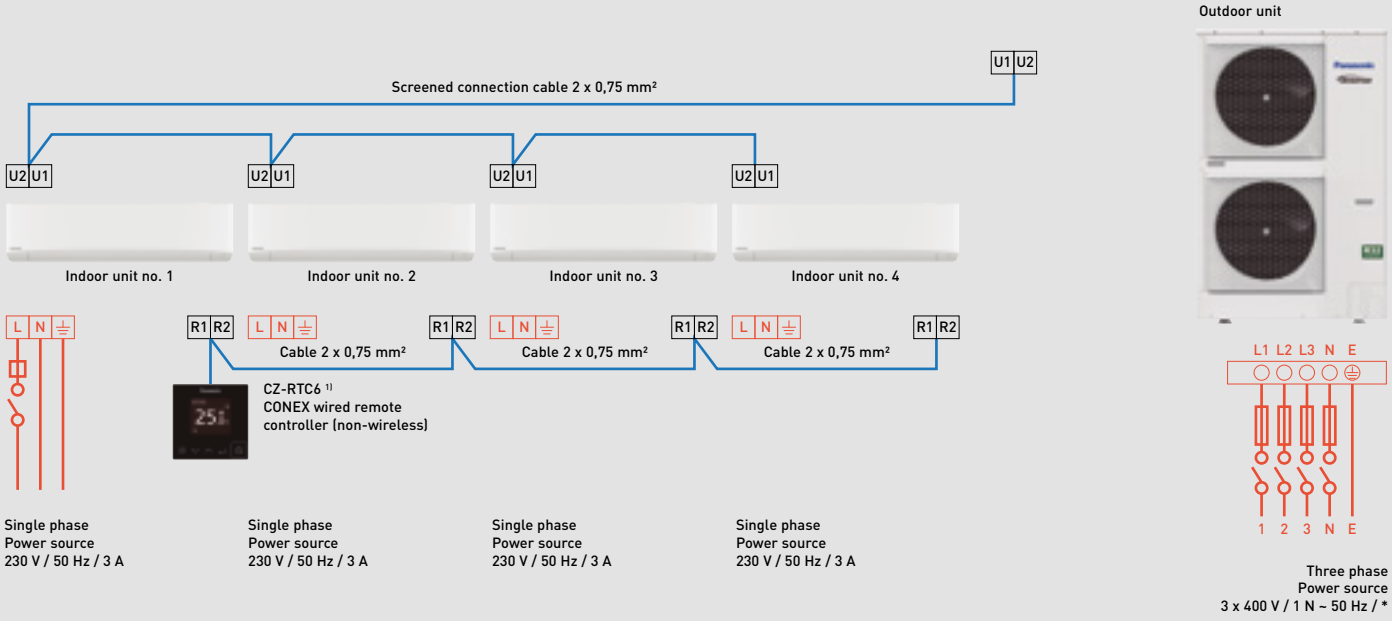


Three phase

Outdoor unit	Power source	Circuit breaker
U-200PZH2E8	380 / 400 / 415 V	16 A

1) Optional infrared remote controller is also possible. Wireless receivers may be required depending on indoor units.

PACi double-twin system

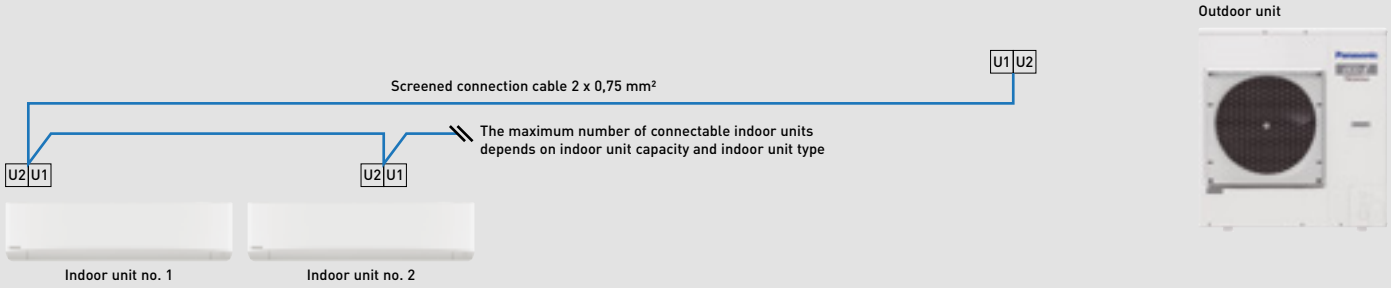


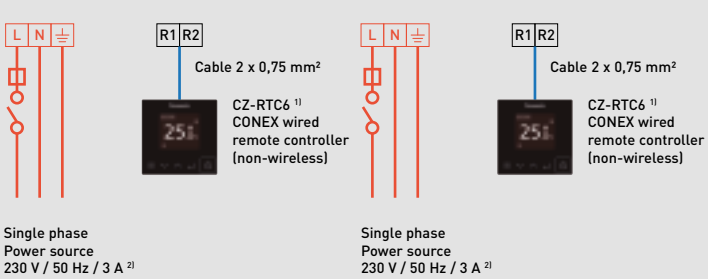
Three phase

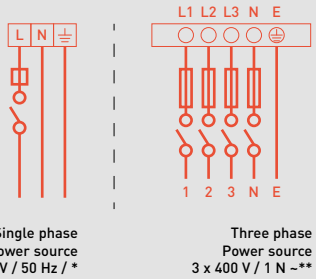
Outdoor unit	Power source	Circuit breaker
U-200PZH2E8	380 / 400 / 415 V	16 A
U-250PZH2E8	380 / 400 / 415 V	25 A

1) Optional infrared remote controller is also possible. Wireless receivers may be required depending on indoor units.

Mini ECOi Series







Single phase

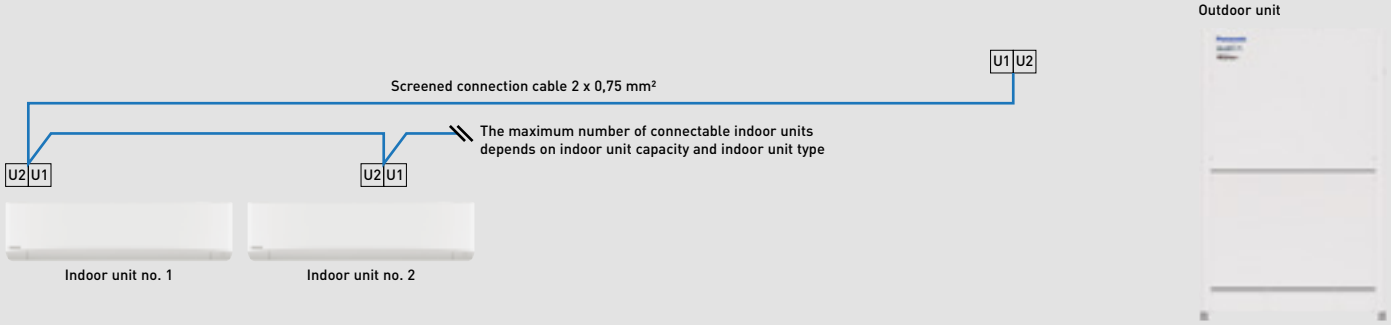
Outdoor unit	Power source	Circuit breaker*
U-4LZ2E5	220 / 230 / 240 V	20 A
U-5LZ2E5		25 A
U-6LZ2E5		30 A
U-4LE2E5		20 A
U-5LE2E5		25 A
U-6LE2E5		30 A

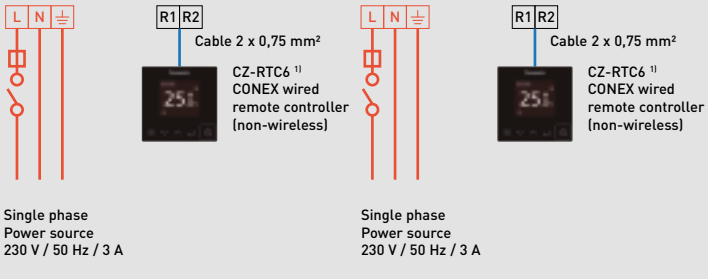
1) Wireless remote controller is also possible. Wireless receivers may be required depending on indoor units.
2) 10 A for single indoor connection to S-224ME2E5 / S-280ME2E5, in combination with U-8LE1E8 / U-10LE1E8.

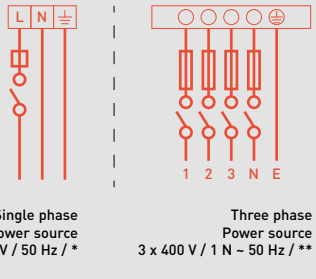
Three phase

Outdoor unit	Power source	Circuit breaker**
U-4LZ2E8	380 / 400 / 415 V	10 A
U-5LZ2E8		16 A
U-6LZ2E8		16 A
U-8LZ2E8		16 A
U-10LZ2E8		20 A
U-4LE2E8		10 A
U-5LE2E8		16 A
U-6LE2E8		16 A
U-8LE2E8		16 A
U-10LE2E8		20 A

ECOi EX and ECO G Series







ECOi EX Series

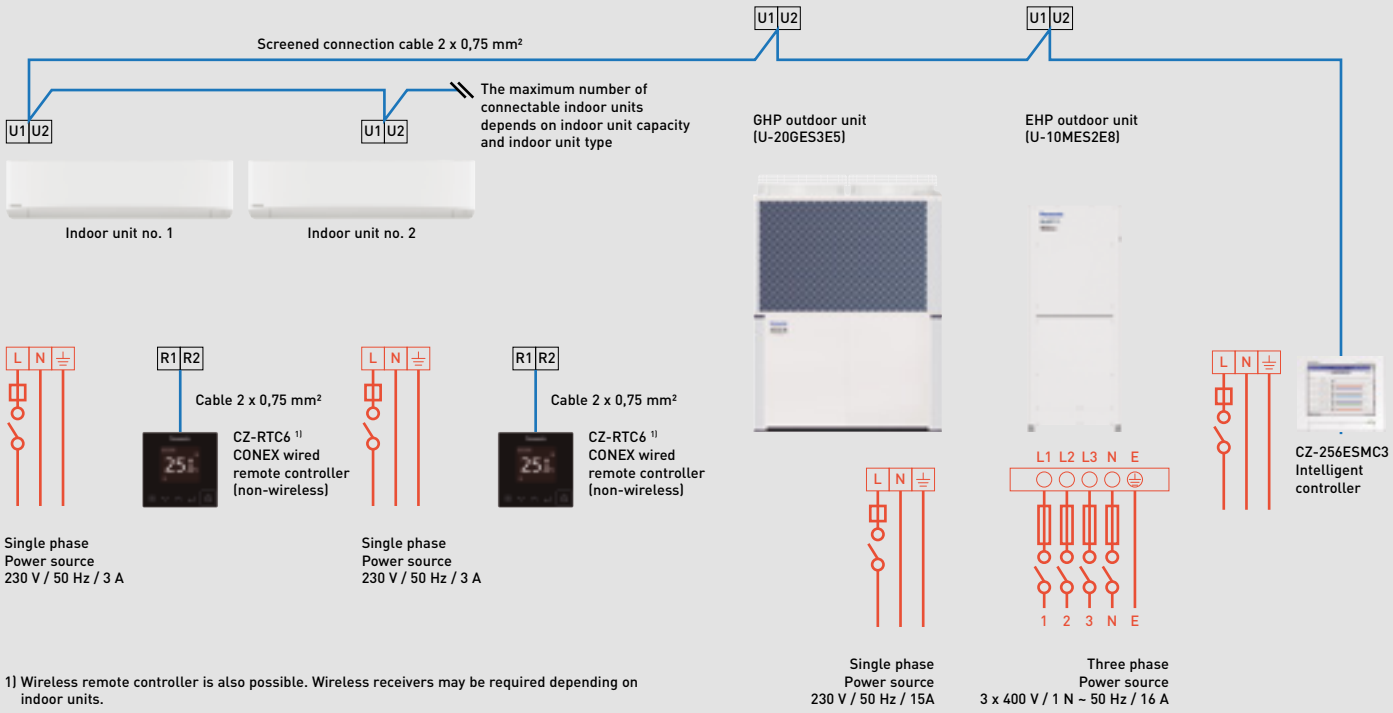
2-Pipe			3-Pipe		
Outdoor unit	Power source	Circuit breaker**	Outdoor unit	Power source	Circuit breaker**
U-8ME2E8	380 / 400 / 415 V	16 A	U-8MF3E8	380 / 400 / 415 V	16 A
U-10ME2E8		16 A	U-10MF3E8		20 A
U-12ME2E8		20 A	U-12MF3E8		25 A
U-14ME2E8		25 A	U-14MF3E8		40A
U-16ME2E8		30 A	U-16MF3E8		30 A
U-18ME2E8		40A			
U-20ME2E8		40A			

ECO G Series

2-Pipe			3-Pipe		
Outdoor unit	Power source	Circuit breaker*	Outdoor unit	Power source	Circuit breaker*
U-16GE3E5	220 / 230 / 240 V	16 A	U-16GF3E5	220 / 230 / 240 V	16 A
U-20GE3E5		16 A	U-20GF3E5		16 A
U-25GE3E5		16 A	U-25GF3E5		16 A
U-30GE3E5		16 A			

1) Wireless remote controller is also possible. Wireless receivers may be required depending on indoor units.

Hybrid GHP/EHP



1) Wireless remote controller is also possible. Wireless receivers may be required depending on indoor units.

Notes

Notes





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heating & cooling solutions

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