NEW COMMERCIAL RANGE
EXTREMELY EFFICIENT
2013 / 2014
# NEW 2013 / 2014 COMMERCIAL RANGE

**Summary**

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NEW PACi STANDARD LINE UP

NEW 5kW PACi ELITE SUPER EFFICIENT OUTDOOR UNIT

NEW WALL MOUNTED PKEA FOR SERVER ROOM APPLICATIONS

NEW AIR CURTAIN CONNECTED TO PACi OUTDOOR UNITS

NEW CONNECTIVITY SOLUTIONS
History of Air Conditioning Group
Panasonic starts with a desire to create things of value. As hard work and dedication results in one innovative product after another, the fledgling company takes its first steps towards becoming the electronics giant of today.

1936
First electric Fan with Automatic Oscillation (36 cm table top model).

1958
First room air conditioner launched for domestic installation. Prior to this date, air conditioners were large and only for commercial use. Panasonic developed the first compact air conditioner for windows; it was lightweight and easy to install, improving the quality of life in Japanese homes. 1,100 units were sold in Japan in the first year, and just two years later, in 1960, this figure rose to 230,000.

1973
Panasonic launches the first highly efficient air-to-water heat pump in Japan.

1975
Panasonic becomes the first Japanese air conditioner manufacturer in Europe.

2002
The Ion and Oxygen Generator — two of the most important contributions to air conditioning systems.

2008
Etherea, a new concept of air conditioning systems: high efficiency and high performances with a great design. Etherea also includes a very innovative air quality sensor and air purifier in order to enjoy healthy air at home at all times.

2010
New Aquarea. Panasonic has created Aquarea, an innovative new, low-energy system, designed to help you enjoy ideal temperatures and hot water in your home, even with extreme outdoor temperatures. Aquarea cools or heats to ensure maximum comfort. Aquarea is far cleaner, safer and cheaper and environmentally friendly than alternatives, using gas, oil and other electrical systems.

2011
New ECO i VRF solution. The new Panasonic VRF solution for big buildings is the most efficient in the industry. It is more than 74% of combinations. ECO i satisfies the most demanding standards required by design offices, architects, owners and installers.

2012
New DHP units. Panasonic’s gas- driven VRF systems are ideal for projects where power restrictions apply. In 2012, Panasonic extended the Gas Heat Pump range with a new DHP line-up, now DHP & Power (electricity production) and the new Chiller Units.

2013
New ECO i 3-Pipes. The best efficiency for your building. Our New Series 3-Pipes is achieving a COP of 4.77 at full load, and even more when recovering heat from the building. There is no doubt, Panasonic is reducing environmental impact.

Panasonic – leading the way in Heating & Cooling
With more than 30 years of experience, selling to more than 120 countries around the world, Panasonic is unquestionably 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.
Panasonic Europe
Panasonic is committed to offering our customers innovative products in the heating and cooling market across Europe, which not only meet but exceed their requirements. Key to success is Panasonic’s investment in R&D, manufacture and training to ensure innovative, cutting edge products and investment in our distribution channels and partners so that these products are accessible in Europe. Panasonic has developed a comprehensive network across Europe of training centers and training academies for installers, design offices and service teams in all major countries.

Panasonic Factories and R&D Department
There is a close relationship between R&D innovation and good manufacturing processes, and so Panasonic has placed its R&D facilities very close to its manufacturing bases. This ensures good integration between all divisions to deliver high quality and reliable solutions to our markets.

We control the process
The company is also a world leader in innovation as it has filed more than 91,539 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 the international leader in heating and turn-key air conditioning solutions for homes, medium-sized buildings such as offices and restaurants, and large-scale buildings. These offer maximum effectiveness, comply with the strictest environmental standards and meet the most avant-garde construction requirements of our time.

At Panasonic we know what a great responsibility it is to install heating and cooling systems. Because offering you the best solutions in heating and cooling matters.
Eco & smart ideas for a sustainable lifestyle

Panasonic aims to be the No. 1 Green Innovation Company in the Electronics Industry by 2018. We will make the environment central to all our business activities and work to realize our vision with innovations for both everyday life and business.
Exemplary sustainable projects

Blackfriars Bridge
London, UK
with Panasonic solar panels.

Skolkovo City
Moscow, Russia
with Panasonic energy saving concept.

Photosynthesis
Milano Salone, Milano, Italy
with Panasonic LED light bulbs and HIT solar power generators.

Siestorage
Modular energy storage solution with Panasonic lithium ion batteries.

Solar Power Generator
HIT solar cells achieve maximum output even on smaller roofs. These solar modules are 100% emission free, have no moving parts and produce no noise.

Home AV
Panasonic offers a wide range of energy saving home equipment to fulfill a sustainable and comfortable lifestyle.

Heat Pump
The Aquarea Heat Pump is part of a new generation of heating systems that use a renewable, free energy source: air, to heat or cool the home and to produce hot water.

Fuel Cell
The Panasonic fuel cell is an energy-creating device, which generates electricity and heat at the same time with chemical reaction between hydrogen extracted from natural gas and oxygen.

Solar Power Generator
Our mobility space can be connected to our HIT solar panels – with help of our storage batteries.

Storage Battery
The battery stores the energy generated by a combination of solar power and fuel cells to ensure a constant supply of electricity on demand.

We aim to realize a lifestyle with virtually zero CO₂ emissions throughout the entire home.
Panasonic Professional

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

Panasonic announces a new initiative for all professionals involved in the heating and cooling business - the Panasonic PRO Club (www.panasonicproclub.com). This exciting new portal provides distributors, installers, engineers and specifiers with a direct communication channel with one of the industry’s major manufacturers.

The website contains a wealth of information from the latest versions of Panasonic’s Aquarea and Etherea Design Software, to Technical Documentation, Catalogues and Images for the company’s wide range of heating and cooling systems - all in an easy to navigate and use website. Also, registered users will be able to access news regarding special promotions and take advantage of these offers, as well as access helpful business advice such as ideas and guidelines for showroom decoration or van livery featuring Panasonic logos and display material.

www.panasonicproclub.com
or connect simply with your Smartphone to the proclub using this QR:

The Panasonic PRO-Academy opens its doors

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, as well as embracing today’s technology to offer an eLearning facility available 24 hours, 7 days a week!

New training courses cover three levels

- Design, installation, and commissioning & trouble-shooting
- Domestic applications Air to Air
- Aquarea air source heat pumps
- VRF ECOi

The courses are offered on site at Panasonic’s premises across Europe as well as via the Panasonic ProClub eLearning site. The Training Centres display Panasonic’s latest product range and give delegates an opportunity to get hands-on experience with the latest controllers, indoor and outdoor units from the VRF ECOi, Etherea, GHP and Aquarea ranges.
WELCOME TO THE COMMERCIAL RANGE

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. Our Inverter compressors optimise performance and thus reduce energy costs.
PACi Standard for economy and value

With high quality design and engineering, the PACi Standard is the perfect solution for projects which demand quality on a limited budget. In addition, its compact size and light weight make it ideal for installations with limited space including small commercial and residential applications.

PACi Elite, Newly designed next generation commercial!

Energy-saving concept. The use of energy saving designs for the structure of fans, fan motors, compressors and heat exchangers resulted in a high COP value, ranked as one of the top classed in the industry. In addition, use of highly efficient R410A refrigerant reduces CO₂ emission and lowers operating costs.

Inverter plus products improve on the characteristics of standard Inverter range by over 20%. This means 20% less consumption and 20% off your electric bill. A Inverter plus is also A class on cooling and heating mode.

Inverter Control is a next generation system providing a user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android or iOS Smartphone, tablet or PC via internet.

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

Exceptional Seasonal Cooling Efficiency based on the new ErP regulation. Higher SEER ratings mean greater efficiency. Save all the year while cooling!

Exceptional Seasonal Heating Efficiency based on the new ErP regulation. Higher SCOP ratings mean greater efficiency. Save all the year while heating!

The air conditioner works in cooling only mode with an outdoor temperature of -15°C.

The air conditioner works in heat pump mode even when outdoor temperatures are as low as -20 °C or -15 °C.

Environmentally friendly refrigerant.

R410A Environmentally friendly refrigerant.

Internet Control Ready

Internet Control is a next-generation system providing a user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android or iOS Smartphone, tablet or PC via internet.
PACi Standard and Elite

Newly designed next generation Commercial Range!

**New PACi Standard**
The use of an energy-saving design for the construction of fans, fan motors, compressors and heat exchangers, has resulted in a high COP value, which ranks as one of the best in class in the industry. In addition, use of highly efficient R410A refrigerant reduces CO₂ emission and lowers operating costs.

**PACi Elite**
DC Inverter can attain both comfort and energy-saving operation.
SEASONAL EFFICIENCY (SCOP)

PRODUCT FOLLOWS THE NEW ECODESIGN REQUIREMENTS

PACi Standard, Improved energy saving

- Good balance, system cost vs energy efficiency
- Top class SEER/SCOP as a Standard Inverter category
  SEER: A++ / SCOP: A+ at 10.0 kW (in Cassette 90x90)
- Interchangeable controller with ECOi
- Compact outdoor units
- Twin connection possible

PACi Elite

- Meeting all necessary safety approvals to ensure quality and safety
- Top-class SEER: A++ / SCOP: A+ at 10.0 kW (in Cassette 90x90 and Ceiling)
- Cooling operation is possible when outdoor temperature as high as 46 °C
- DC inverter technology combined with R410A for excellent efficiency
- Cooling operation is possible when outdoor temperature as low as -15 °C
- Heating operation is possible when outdoor temperature as low as -20 °C
- Compact outdoor units
- Auto restart from outdoor unit
PACi Standard: outdoor unit

**More compact**
The new outdoor unit is much more compact than the previous model. The slim and lightweight design means the PACi outdoor unit can be installed in a number of situations.

* Only for U-100PEY1E8, U-125PEY1E8, U-100PEY1E5 and U-125PEY1E5.

PACi Elite: outdoor unit

**Wide operating range**
- Cooling operation is possible when outdoor temperature as low as -15 °C
- Cooling operation is possible when outdoor temperature as high as 46 °C
- Heating operation is possible when outdoor temperature as low as -20 °C

The remote control temperature setting offers a range from 18 °C to 30 °C.

**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.
PACi Elite: outdoor unit

Increased Piping Length for Greater Design Flexibility
Adaptable to various building types and sizes.
Max. piping length: 75 m (10.0, 12.5, 14.0 kW). 50m (6.0, 7.1 kW).

Compact and Lightweight
As the unit only weighs 98 kg, it is easy to carry and easy to install.

Quiet mode
5 dB can be reduced by setting. External input signal is also available.

Demand Response Compliant (CZ-CAPDC3)
This optional part allows demand control of the outdoor unit.
Several level of settings 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%)

2.  PRINTED CIRCUIT BOARD (P-LINK)
3. DC FAN MOTOR
4. NEW LARGE DIAGONAL (520 mm) AIR FLOW FAN
5. HIGH-EFFICIENCY HEAT EXCHANGER

Compact & Flexible-design
The slim and lightweight design means the PACi outdoor unit can be installed in a number of compact situations.

Improved energy saving
Operating efficiency has been improved using highly efficient R410A refrigerant, new DC inverter compressor, new DC motor and a new heat exchanger design.

Energy saving concept
The use of energy saving designs for the structure of fans, fan motors, compressors and heat exchanges has resulted in a high COP value, ranked as one of the top classed in the industry. In addition, use of highly efficient R410A refrigerant reduces CO₂ emission and lowers operating costs.

1. COMPACT & HIGHLY EFFICIENT COMPRESSOR
2. PRINTED CIRCUIT BOARD (P-LINK)
3. DC FAN MOTOR
4. NEW LARGE DIAGONAL (520 mm) AIR FLOW FAN
5. HIGH-EFFICIENCY HEAT EXCHANGER

Lightweight 98 kg

Demand control terminal is available to control 0-50-75% of capacities.

Current Model in heating mode
New Model in heating mode

Current Model in cooling mode
New Model in cooling mode
360° Air Flow 4 Way 90x90 Cassette PACi Standard and Elite

4 Way 90x90 Cassette. Wide & Comfortable Airflow

This proprietary design provides a wide and very comfortable airflow. The cassette’s wide-angle discharge outlets and flaps are larger in the middle, featuring a shape that was selected based on geometrics and testing of actual prototype units. Air coming out of the center of the discharge outlets travels farther. From the sides of each outlet, where the openings are larger, airflow spreads out to reach the corners of the room. Air is discharged across a wide area from the four sides of the unit. The curves on the room temperature distribution graph expand gently out through 360° in a circle centered on the indoor unit.

HIGH-EFFICIENCY SPLIT FIN.
Improved heat-transfer coefficient due to adoption of high-efficiently grooved heat exchanger tube.

NEW DC-FAN MOTOR.
Optimum airflow is achieved by a new DC-fan motor with independent control.

INDIVIDUAL FLAP CONTROL.
Flexible Air flow direction control by individual flap control is possible. 4 Flaps can be controlled individually by setting on wired timer remote controller. It can make more flexible Air-flow control to be matched to several demands in a room.

Higher Efficiency Split Fin.
Improved heat transfer coefficient due to adoption of high-efficiently grooved heat exchanger tube.

High-Efficient & Silent Turbo Fan.
The newly developed larger fan chassis and optimised design of the airflow path has resulted in increased air volume and quieter performance.

New 360° Air Flow for improved comfort

The new air-outlet and flap design creates a soft and gentle air flow which circulates throughout the whole space and provides an even temperature distribution in the room.

Simulated condition: Floor area: 225 m². Ceiling height: 3 m, Unit 12.5 kW type.
Ample airflow: 36 m³/min
Industry’s highest in the 140 PU class.

High-Ceiling Installation (Up to 5 m for 100 PU and higher models)
The units can be installed in rooms with high ceilings, where they provide ample floor-level heating in the winter. (See ceiling height guidelines below.)

Flexible 3D air-flow control
Comfort air flow control & proper energy use. Flexible Air flow direction control by individual flap control:
- 4 Flaps can be controlled individually (by standard wired remote controller*).
- Versatile air flow control to cover a wide variety of demands.
* Pre-setting is required for this function at System Test-run procedure.

Ceiling height guidelines

<table>
<thead>
<tr>
<th>Settings¹</th>
<th>4-way discharge</th>
<th>High ceiling setting¹</th>
<th>High ceiling setting²</th>
<th>3-way discharge (optional air-blocking materials)²</th>
<th>2-way discharge (optional air-blocking materials)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor unit: 60PU-71PU</td>
<td>3.0</td>
<td>3.9</td>
<td>3.6</td>
<td>4.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Indoor unit: 100PU, 125PU, 140PU</td>
<td>3.6</td>
<td>3.9</td>
<td>4.5</td>
<td>4.7</td>
<td>5.0</td>
</tr>
</tbody>
</table>

¹ When using the unit in a configuration other than the factory settings, it is necessary to make settings on site to increase airflow. ² Use air-blocking materials (CZ-CFU2) to completely block two discharge outlets for 2-way airflow.

Easy Maintenance and Cleaning
The flap can be removed easily for washing with water.

Lighter and Slimmer, Easier Installation
A lightweight unit at 24 kg, the unit is also very slim with a height of only 256 mm, making installation possible even in narrow ceiling voids.

A Drain Height of Approx. 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.

Low-Profile 33.5 mm Panel
The square panel integrates seamlessly with the ceiling. Discharge outlets close when the unit is stopped.

New design
Wide direction air discharge by outlet design. The Circle Flow Flap and re-designed air-outlet eliminate airflow along recessed parts of the ceiling which reduces contamination. If air flows only along these recessed parts, they will quickly become dirty. The new, improved air outlet design therefore greatly reduces dirt accumulation.
PACi Standard and Elite: indoor units

4-Way 60x60 Cassette
Lightweight and slimmer, easier installation
Lightweight and very slim which makes installation possible even in narrow ceilings.

A drain height of approx. 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. Significant reduction of power consumption by using highly developed DC fan motors with variable speed, special heat exchangers, etc.
Convenient cleaning. The flap can be removed easily for washing.

Wall Mounted
The unit’s compact design and flat face ensure discreet installation, even in a small space.

Washable front panel.
The indoor unit’s front panel can be easily removed and washed for trouble-free cleaning.

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.

Smooth and durable design
The sleek, compact design ensures a discreet installation - even where space is limited.

Piping outlet in three directions
With three options for pipe outlets - rear, right and left - installation is made easy.

Air distribution is altered depending on the operational mode of the unit

Low Static Pressure Hide Away (PN Type)
Ultra-slim profile: 250 mm height for all models.

Discharge air temperature control
- Possible to reduce cold drafts at heating operation.

Cold Drafts Reduction at Heating
- Accurate temperature measurement by E1/E2 sensor to reduce cold drafts at heating.

System Example
An inspection port (450 mm x 450 mm or more) is required at the control-box side of the indoor unit body.

Ceiling
Further comfort improvement
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.
High Static Pressure Hide Away (PF Type)

Control of the PACi Hide Aways by Airzone
Airzone has developed interfaces to easily connect to Panasonic PACi Hide Away units. Ensuring optimum performance, comfort and energy savings, the new system is efficient and easy to install.

Interfase dimensions: 120 x 25 x 65 cm (W x H x D).
Interfases must be purchased direct from Airzone.

Airzone full range of accessories for any duct project

The static pressure outside the unit can be increased up to 150 Pa.

<table>
<thead>
<tr>
<th>Type</th>
<th>60</th>
<th>71</th>
<th>100</th>
<th>125</th>
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<tbody>
<tr>
<td>Standard</td>
<td>70 Pa</td>
<td>70 Pa</td>
<td>100 Pa</td>
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<tr>
<td>Max. available setting</td>
<td>150 Pa</td>
<td>150 Pa</td>
<td>150 Pa</td>
<td>150 Pa</td>
<td>150 Pa</td>
</tr>
</tbody>
</table>

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.

Air inlet
The unit features air inlet on one side, air outlet on the other side. The air inlet filter can be pulled out from the side of the unit and can be folded. Easy access if through the maintenance opening.

When air inlet duct (field supplied) is connected on suction side, remove the filter, frame and insulation materials on both sides of the unit. Connect the duct on the suction side of the unit by using prepared holes on the unit.

Air outlet site
A rectangular duct flange for the air outlet is fitted as standard. Round outlet flange kits are available as an optional accessory kit.

Circle duct flange (option)

<table>
<thead>
<tr>
<th>Model</th>
<th>N. of exits with diameters</th>
<th>Model Code</th>
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<tbody>
<tr>
<td>2 x Ø 200</td>
<td>CZ-56DAF2 (2 SA outlet)</td>
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</tr>
<tr>
<td>3 x Ø 200</td>
<td>CZ-90DAF2 (3 SA outlet)</td>
<td></td>
</tr>
<tr>
<td>4 x Ø 200</td>
<td>CZ-160DAF2 (4 SA outlet)</td>
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</tbody>
</table>
Range of Commercial units

### WALL-MOUNTED FOR PROFESSIONAL APPLICATIONS

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<tr>
<th>kW</th>
<th>Indoor Units</th>
<th>Outdoor Units</th>
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<tbody>
<tr>
<td>2.8</td>
<td>CS-E1PKEA</td>
<td>U-60PEY1E5</td>
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<td>3.2</td>
<td>CS-E12PKEA</td>
<td>U-50PE1E5</td>
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<tr>
<td>4.5</td>
<td>CS-E15PKEA</td>
<td>U-60PE1E5</td>
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<tr>
<td>5.0</td>
<td>CS-E18PKEA</td>
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</table>

*NEW*

* PKEA indoor units are only available only with PKEA Outdoor Units.

### INDOOR UNITS PACI STANDARD AND ELITE

<table>
<thead>
<tr>
<th>kW</th>
<th>Indoor Units</th>
<th>Outdoor Units</th>
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<tbody>
<tr>
<td>3.6</td>
<td>S-36PK1E5</td>
<td>U-60PEY1E5</td>
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<td>4.6</td>
<td>S-45PK1E5</td>
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<td>S-50PK1E5</td>
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<tr>
<td>6.0</td>
<td>S-60PK1E5</td>
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</table>

WALL PACI INVERTER+

4-WAY 60x60 CASSETTE PACI INVERTER+ (FOR TWIN COMBINATIONS)

4 WAY 90x90 CASSETTE PACI INVERTER+

LOW STATIC PRESSURE HIDE AWAY PACI INVERTER+

HIGH STATIC PRESSURE HIDE AWAY PACI INVERTER+

CEILING PACI INVERTER+

HIGH STATIC PRESSURE HIDE AWAY 20.0-25.0 kW PACI INVERTER+

AHU Kit

AIR CURTAIN JET-FLOW WITH HEX¹

AIR CURTAIN STANDARD WITH HEX¹

* The indoor units from 3.6 to 5.0 kW are only available only for Twin, Triple and Quadrule combinations. ¹ Available from April 2013.

### OUTDOOR UNITS PACI STANDARD AND ELITE

<table>
<thead>
<tr>
<th>kW</th>
<th>Indoor Units</th>
<th>Outdoor Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>S-36PT1E5</td>
<td>U-60PET1E5</td>
</tr>
<tr>
<td>6.0</td>
<td>S-45PT1E5</td>
<td></td>
</tr>
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</table>

* Single Phase ² Three Phase
<table>
<thead>
<tr>
<th>Power (kW)</th>
<th>Model</th>
<th>Model</th>
<th>Model</th>
<th>Model</th>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>7.1</td>
<td>S-71PK1E5</td>
<td>S-71PU1E5</td>
<td>S-71PN1E5</td>
<td>S-71PF1E5</td>
<td>S-71PT1E5</td>
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<tr>
<td>10.0</td>
<td>S-71PU1E5</td>
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<td>S-100PN1E5</td>
<td>S-100PF1E5</td>
<td>S-100PT1E5</td>
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<tr>
<td>12.5</td>
<td>S-100PU1E5</td>
<td>S-125PU1E5</td>
<td>S-125PN1E5</td>
<td>S-125PF1E5</td>
<td>S-125PT1E5</td>
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<tr>
<td>14.0</td>
<td>S-125PU1E5</td>
<td>S-140PU1E5</td>
<td>S-140PN1E5</td>
<td>S-140PF1E5</td>
<td>S-140PT1E5</td>
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<tr>
<td>20.0</td>
<td>S-140PU1E5</td>
<td>S-200PE1E8A</td>
<td>S-200PN1E5</td>
<td>S-200PF1E5</td>
<td>S-200PT1E5</td>
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<tr>
<td>25.0</td>
<td>S-200PU1E8A</td>
<td>S-250PE1E8</td>
<td>S-250PN1E5</td>
<td>S-250PF1E5</td>
<td>S-250PT1E5</td>
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<tr>
<td></td>
<td>CZ-280PAH1</td>
<td>CZ-280PAH1</td>
<td>CZ-280PAH1</td>
<td>CZ-280PAH1</td>
<td>CZ-280PAH1</td>
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<tr>
<td></td>
<td>PAW-10PAIRC-MJ</td>
<td>PAW-10PAIRC-MJ</td>
<td>PAW-10PAIRC-MJ</td>
<td>PAW-10PAIRC-MJ</td>
<td>PAW-10PAIRC-MJ</td>
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<tbody>
<tr>
<td>7.1</td>
<td>U-71PEY1E5</td>
<td>U-100PEY1E5</td>
<td>U-125PEY1E5</td>
<td>U-140PEY1E5</td>
<td>U-200PE1E8</td>
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<tr>
<td>10.0</td>
<td>U-100PEY1E5</td>
<td>U-100PEY1E5</td>
<td>U-125PEY1E5</td>
<td>U-125PEY1E5</td>
<td>U-140PEY1E5</td>
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<td>14.0</td>
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<td>U-140PEY1E5</td>
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<td>20.0</td>
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Complete line-up with high efficiency even at -15 °C

This wall-mounted air conditioner is especially designed for professional applications such as computer rooms where cooling inside the room is necessary even when the outside temperature is low. Furthermore this air conditioner has an automatic changeover system, in order to maintain the inside temperature even when sharp outside temperature changes occur.

### WALL MOUNTED PKEA

#### Single Phase

<table>
<thead>
<tr>
<th>Power Source</th>
<th>2.8 kW</th>
<th>3.2 kW</th>
<th>4.5 kW</th>
<th>5.9 kW</th>
</tr>
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<tbody>
<tr>
<td>V</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Recommended Fuse A</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Connection indoor / outdoor (mm)</td>
<td>4 x 1.5</td>
<td>4 x 1.5</td>
<td>4 x 1.5</td>
<td>4 x 1.5</td>
</tr>
<tr>
<td>Current (Nominal)</td>
<td>2.5 / 3.3</td>
<td>4.0 / 4.2</td>
<td>4.5 / 4.5</td>
<td>4.0 / 4.2</td>
</tr>
<tr>
<td>Max Current</td>
<td>7.8</td>
<td>8.4</td>
<td>9.6</td>
<td>11.3</td>
</tr>
<tr>
<td>Air Volume (m³/h)</td>
<td>1787 / 1782</td>
<td>1974 / 1973</td>
<td>2082 / 1980</td>
<td>2392 / 2374</td>
</tr>
<tr>
<td>Refrigerant loading</td>
<td>R410A</td>
<td>44 / 47</td>
<td>48 / 50</td>
<td>47 / 47</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>546 x 242 x 299</td>
<td>622 x 292 x 299</td>
<td>695 x 350 x 320</td>
<td>695 x 350 x 320</td>
</tr>
<tr>
<td>Precharge length</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Operating range</td>
<td>Cooling Min / Max °C</td>
<td>-15 / +43</td>
<td>-15 / +43</td>
<td>-15 / +43</td>
</tr>
<tr>
<td>Heating Min / Max °C</td>
<td>-15 / +24</td>
<td>-15 / +24</td>
<td>-15 / +24</td>
<td>-15 / +24</td>
</tr>
</tbody>
</table>

#### Indoor Unit

- **Power source:** V
- **Recommended Fuse A:** 16
- **Connection indoor / outdoor (mm):** 4 x 1.5, 4 x 1.5, 4 x 1.5, 4 x 1.5
- **Current (Nominal):** 2.5 / 3.3, 4.0 / 4.2, 4.5 / 4.5, 4.0 / 4.2
- **Max Current:** 7.8, 8.4, 9.6, 11.3
- **Air Volume (m³/h):** 1787 / 1782, 1974 / 1973, 2082 / 1980, 2392 / 2374
- **Refrigerant loading:** R410A
- **Dimensions (mm):** 546 x 242 x 299, 622 x 292 x 299, 695 x 350 x 320, 695 x 350 x 320
- **Precharge length:** 50
- **Operating range:** Cooling Min / Max °C, -15 / +43, -15 / +43, Heating Min / Max °C, -15 / +24, -15 / +24

#### Outdoor Unit

- **Power source:** V
- **Recommended Fuse A:** 16
- **Connection indoor / outdoor (mm):** 4 x 1.5, 4 x 1.5, 4 x 1.5, 4 x 1.5
- **Current (Nominal):** 2.5 / 3.3, 4.0 / 4.2, 4.5 / 4.5, 4.0 / 4.2
- **Max Current:** 7.8, 8.4, 9.6, 11.3
- **Air Volume (m³/h):** 1787 / 1782, 1974 / 1973, 2082 / 1980, 2392 / 2374
- **Refrigerant loading:** R410A
- **Dimensions (mm):** 546 x 242 x 299, 622 x 292 x 299, 695 x 350 x 320, 695 x 350 x 320
- **Precharge length:** 50
- **Operating range:** Cooling Min / Max °C, -15 / +43, -15 / +43, Heating Min / Max °C, -15 / +24, -15 / +24

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1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/88/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured at a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Eurovent A/2005-P9 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. Recommended fuse for the indoor unit.

Specifications subject to change without notice. For detailed information about ErP, please visit our page http://www.doc.panasonic.de
INCLUDED ON THE KIT
Timer remote controller

KIT-E9-PKEA KIT-E12-PKEA KIT-E15-PKEA KIT-E18-PKEA

Technical Focus
- DESIGNED FOR FOR 24H/7D A WEEK OPERATION
- HIGHLY EFFICIENT EVEN AT -15 °C

Outdoor
- Cooling from as low as ambient -15 °C
- Electronic expansion valve (accurate sub-cooling and adjustable refrigerant flow)
- Outdoor DC fan motor to provide flexible air-flow to ensure optimum condensation pressure (works on outdoor pipe temperature sensor)

2 INTERFACE OPTIONS TO MANAGE SERVER ROOM OPERATION

- IntesisHome, Advance package: PA-AC-WIFI-1 + Advance function. 1 interface PA-AC-WIFI-1 for indoor unit is needed. This interface must be connected to the local Wi-Fi network. Server room functionalities of the PA-AC-WIFI-1 + Advance function:
  - On/Off, temperature setting management
  - Backup management
  - Alternative running
  - Email in case of failure
  - Room temperature display on the online IntesisHome application
  - Energy consumption display
  - Online access of all functionalities
  - Ipad / Iphone / Android / Web application

- PAW-SERVER-PKEA server room interface with dry contacts for easy interconnection with BMS systems. 1 interface PAW-SERVER-PKEA can be connected to 2 PKEA indoor units. Server room functionalities with the PAW-SERVER-PKEA:
  - On/Off management by dry contact
  - Temperature set-up (easy setup on the interface without computer)
  - Backup management (easy setup on the interface without computer)
  - Alternative running (easy setup on the interface without computer)
  - Dry contact in case of failure (easy setup on the interface without computer)

Optional accessory: PAW-SERVER-PKEA
NEW STANDARD WALL PACI STANDARD AND ELITE INVERTER+

The extension of the range to include a 7.1 kW unit allows for many more applications such as studios, gyms, high ceiling areas and even computer server rooms.

Technical Focus
- New 7.1 kW capacity unit
- New flat face design for modern appearance
- New compact design offers over 15% reduction in overall size
- Washable front panel
- DC FAN for better efficiency and control

Down to -10 °C in cooling mode
Down to -15 °C in heating mode

INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-60PYK1E5.

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, please visit our page http://www.doc.panasonic.de

### Internet Control
- Control via BMS
- 5 year compressor warranty

### Technical Specifications

<table>
<thead>
<tr>
<th>Single Phase</th>
<th>6.0 kW</th>
<th>7.1 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KIT</strong></td>
<td>KIT-60PYK1E5*</td>
<td>KIT-71PYK1E5*</td>
</tr>
<tr>
<td><strong>Indoor</strong></td>
<td>6-60PK1E5</td>
<td>6-71PK1E5</td>
</tr>
<tr>
<td><strong>Outdoor</strong></td>
<td>6-60PETY1E5</td>
<td>6-71PETY1E5</td>
</tr>
<tr>
<td><strong>Cooling capacity</strong></td>
<td>Nom. (Min-Max) [kW]</td>
<td>6.0 (2.0-7.0)</td>
</tr>
<tr>
<td><strong>EER</strong></td>
<td>Nom. (Min-Max) [W/W]</td>
<td>3.23 (6.15-2.55)</td>
</tr>
<tr>
<td><strong>SEER</strong></td>
<td>[W]</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Power input Cooling</strong></td>
<td>Nom. (Min-Max) [kW]</td>
<td>1.860 (6.325-2.750)</td>
</tr>
<tr>
<td><strong>Annual Energy Consumption</strong></td>
<td>[kWh/a]</td>
<td>930</td>
</tr>
<tr>
<td><strong>Heating capacity</strong></td>
<td>Nom. (Min-Max) [kW]</td>
<td>6.115 (8.7-0.0)</td>
</tr>
<tr>
<td><strong>COP</strong></td>
<td>Nom. (Min-Max) [W/W]</td>
<td>4.46 (6.55-3.18)</td>
</tr>
<tr>
<td><strong>SCOP</strong></td>
<td>[W/W]</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Piping at -10 °C</strong></td>
<td>[kW]</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Power input Heating</strong></td>
<td>Nom. (Min-Max) [kW]</td>
<td>1.500 (6.275-2.200)</td>
</tr>
<tr>
<td><strong>Annual Energy Consumption (ErP)</strong></td>
<td>[kWh/a]</td>
<td>2184</td>
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<tr>
<td><strong>Indoor unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Air Volume Cool / Heat</strong></td>
<td>[m³/h]</td>
<td>1080 / 1080</td>
</tr>
<tr>
<td><strong>Sound pressure Level Cooling (Hi/Me/Lo)</strong></td>
<td>[dB(A)]</td>
<td>47 / 44 / 40</td>
</tr>
<tr>
<td><strong>Sound power level Cooling</strong></td>
<td>[dB]</td>
<td>94</td>
</tr>
<tr>
<td><strong>Dimensions H x W x D</strong></td>
<td>[mm]</td>
<td>300 x 1065 x 230</td>
</tr>
<tr>
<td><strong>Net weight</strong></td>
<td>[kg]</td>
<td>14.5</td>
</tr>
</tbody>
</table>

<p>| <strong>Outdoor unit</strong> | | | |
| <strong>Power source</strong> | V | 220 / 230 / 240 | 220 / 230 / 240 |
| <strong>Recommended fuse</strong> | A | 20 | 20 |
| <strong>Connection</strong> | [mm²] | 2.5 | 2.5 |
| <strong>Current Cooling</strong> | [A] | 8.80 / 8.35 / 8.25 | 11.76 / 11.30 / 10.90 |
| <strong>Current Heating</strong> | [A] | 7.06 / 6.80 / 6.60 | 9.00 / 8.70 / 8.40 |
| <strong>Air Volume Cool / Heat</strong> | [m³/h] | 1880 / 2100 | 2340 |
| <strong>Sound pressure Level Heating Cooling (Hi/Me/Lo)</strong> | [dB(A)] | 47 / 44 / 40 | 50 / 52 |
| <strong>Sound power level Heating Cooling</strong> | [dB] | 95 | 78 |
| <strong>Dimensions H x W x D</strong> | [mm] | 569 x 790 x 285 | 569 x 790 x 285 |
| <strong>Net weight</strong> | [kg] | 42 | 42 |
| <strong>Piping connections Liquid pipe</strong> | [mm] | 3/8 (9.52) | 3/8 (9.52) |
| <strong>Refrigerant loading</strong> | [R410A] | 1.9 | 1.9 |
| <strong>Elevation dif. (in/out)</strong> | [m] | 30 | 30 |
| <strong>Piping length</strong> | [min/max] | 50 | 50 |
| <strong>Precharge length</strong> | [m] | 20 | 20 |
| <strong>Additional charge</strong> | [g/m] | 40 | 40 |
| <strong>Operating range Cool Min/Max °C</strong> | | -10 / 43 | -10 / 43 |
| <strong>Heat Min/Max °C</strong> | | -15 / 24 | -15 / 24 |</p>
<table>
<thead>
<tr>
<th>Optional Controllers</th>
<th></th>
<th></th>
<th>Compatible with all ECOi Connectivity solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer remote controller</td>
<td>Wireless control</td>
<td>Simplified remote controller</td>
<td>C2-91E2</td>
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**Single Phase**

<table>
<thead>
<tr>
<th></th>
<th>5.0 kW</th>
<th>6.0 kW</th>
<th>7.1 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling capacity</td>
<td>5.0 (5.5-5.9)</td>
<td>6.0 (6.5-7.1)</td>
<td>7.1 (7.5-8.0)</td>
</tr>
<tr>
<td>EER</td>
<td>3.21 (5.77-2.47)</td>
<td>3.85 (5.56-3.55)</td>
<td>3.40 (5.56-3.52)</td>
</tr>
<tr>
<td>SEER</td>
<td>6.3</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Piping</td>
<td>5.0</td>
<td>6.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Power input Cooling</td>
<td>1.560 (0.260-2.250)</td>
<td>1.560 (0.450-2.000)</td>
<td>2.090 (0.450-2.650)</td>
</tr>
<tr>
<td>Cooling Capacity</td>
<td>780</td>
<td>780</td>
<td>1045</td>
</tr>
<tr>
<td>Heating Capacity</td>
<td>374</td>
<td>374</td>
<td>487</td>
</tr>
<tr>
<td>Heating capacity</td>
<td>1.560 (0.220-2.450)</td>
<td>1.830 (0.400-2.480)</td>
<td>2.130 (0.400-2.900)</td>
</tr>
<tr>
<td>EER Cooling</td>
<td>3.73 (5.8-2.64)</td>
<td>3.85 (5.80-3.23)</td>
<td>3.76 (5.00-3.10)</td>
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<tr>
<td>SCOP Heating</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
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<tr>
<td>Piping at -10 °C</td>
<td>4.0</td>
<td>4.0</td>
<td>7.1</td>
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<td>6.1</td>
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**Three Phase**

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<td>SEER</td>
<td>6.6</td>
<td>6.6</td>
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<tr>
<td>Piping</td>
<td>5.0</td>
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<td>3.76 (5.00-3.10)</td>
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<tr>
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<td>COP Heating</td>
<td>6.1</td>
<td></td>
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</table>

**Ratings 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.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2009/125/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured at a position 1 meter in front of the main body. The Sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013.

For detailed information about ErP, please visit our page [http://www.doc.panasonic.de](http://www.doc.panasonic.de)
NEW STANDARD

STANDARD AND ELITE INVERTER+

Small and powerful, ideal for offices and restaurants. Only for Twin, Triple and Double-twin combinations.

Technical Focus
- Fresh air knock out
- Multidirectional air flow
- Integrated drain pump gives 850 mm lift
- 3 speed centrifugal fan
- Anti-mould and anti-bacteria washable filters
- DC FAN for better efficiency and control

4 WAY 60x60 CASSETTE

Small and powerful, ideal for offices and restaurants. Only for Twin, Triple and Double-twin combinations.

Technical Focus
- Fresh air knock out
- Multidirectional air flow
- Integrated drain pump gives 850 mm lift
- 3 speed centrifugal fan
- Anti-mould and anti-bacteria washable filters
- DC FAN for better efficiency and control

STANDARD

<table>
<thead>
<tr>
<th>Indoor</th>
<th>5.0 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-5HPY1E5*</td>
<td></td>
</tr>
<tr>
<td>Panel</td>
<td>CZ-KPY21</td>
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<table>
<thead>
<tr>
<th>Cooling capacity</th>
<th>Nominal kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Volume</td>
<td>Cool/Heat n³/h 750 / 750</td>
</tr>
<tr>
<td>Moisture removal volume</td>
<td>l/h 2.8</td>
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</table>

<table>
<thead>
<tr>
<th>Sound pressure Level</th>
<th>Cool (Hi/Me/Lo) dB(A) 41 / 37 / 33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat (Hi/Me/Lo) dB(A) 41 / 37 / 33</td>
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<table>
<thead>
<tr>
<th>Sound power Level</th>
<th>Cool (Hi) dB 58 / 54 / 50</th>
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<td>Heat (Hi) dB 58 / 54 / 50</td>
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<table>
<thead>
<tr>
<th>Dimensions indoor</th>
<th>H x W x D mm 283 x 575 x 575</th>
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</thead>
<tbody>
<tr>
<td>Dimensions panel</td>
<td>H x W x D mm 30 x 625 x 625</td>
</tr>
</tbody>
</table>

| Net weight | Indoor (Panel) kg 16 (2.4) |

| 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.) |

1) Only for multi combinations.
Recommended fuse for the indoor 3A.

* Available from April 2013.
COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS

OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2

Wireless remote controller
CZ-RWSY2

Simplified remote controller
CZ-RE2C2

ELITE PANEL

CZ-KPY21

6.0 kW

KIT

Indoor
S-50PTE1E5*

Outdoor
S-50PRE1E5

Panel
CZ-KPY21

COP (Cooling) Nom. (Min-Max) kW 5.6 (1.5 - 6.3)

COP (Heating) Nom. (Min-Max) kW 5.6 (1.5 - 6.3)

Annual Energy Consumption (Cooling) Nom. (Min-Max) kWh/a 820

Annual Energy Consumption (Heating) Nom. (Min-Max) kWh/a 297

Timer
CZ-RTC2

Wireless
CZ-RWSY2

Simplified
CZ-RE2C2

Piping at -10 °C kW 4.6

Piping at 70 °C kW 4.9

Annual Energy Consumption (ErP) 1.1) kWh/a 1474

Heating capacity Nom. (Min-Max) kW 5.6 (1.5 - 6.3)

COP (Cooling) Nom. (Min-Max) W/W 3.12 (6.82 - 2.45)

COP (Heating) Nom. (Min-Max) W/W 3.12 (6.82 - 2.45)

SEER W/W 6.90

SCOP W/W 6.90

Piping at -10 °C kW 4.6

Power input Heating Nom. (Max) kW 1.79 (0.22 - 2.57)

Piping at 70 °C kW 4.9

Power input Cooling Nom. (Min-Max) kW 1.64 (0.26 - 2.45)

Piping at -10 °C kW 4.6

Air Volume Cooling/Heating m³/h 750 / 750

Moisture removal volume l/h 2.8

Sound pressure Level Cooling (Hi/Me/Lo) dB(A) 41 / 37 / 33

Heating (Hi/Me/Lo) dB(A) 41 / 37 / 33

Sound power Level Cooling (Hi) dB 58 / 54 / 50

Heating (Hi) dB 58 / 54 / 50

Dimensions H x W x D mm 283 x 575 x 575

Dimensions panel H x W x D mm 30 x 625 x 625

Net weight kg 16

Outdoor unit

Power source V 220 - 240

Recommended fuse A 16

Connection mm² 2.5

Current Cooling Nom. (Max) A 7.5

Current Heating Nom. (Max) A 8.2

Air Volume Cooling/Heating m³/h 1800 / 2100

Sound pressure Level (Cooling) dB(A) 66 / 50

Sound pressure Level (Heating) dB(A) 66 / 50

Sound power Level (Cooling) dB 65 / 69

Sound power Level (Heating) dB 65 / 69

Dimensions H x W x D mm 569 x 790 x 285

Dimensions panel H x W x D mm 39 x 625 x 625

Net weight kg 42

Pipe connections Liquid pipe / Gas pipe Inch (mm) 1/4 (6.35) / 1/2 (12.7)

Refrigerant Loading R410A kg 1.65

Elevation diff. (in/out) 4) Max m 30

Piping length Min/Max m 5 - 40

Precharge length Max m 30

Additional gas g/m 20

Operating range Cooling Min/Max °C -15 / 46

Heating Min/Max °C -20 / 24

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.

1) EER and COP, Energy Saving Classification, is at 220-240 V (380-415 V) only in accordance with EU directive 2004/22/EC. 2) The annual consumption is calculated by multiplying the input power at 220-240 V (380-415 V) by an average of 500 hours per year in cooling mode. 2-6 The annual consumption is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shown the value measured at a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. Recommended fuse for the indoor 3A. * Available from April 2013.

For detailed information about ErP, please visit our page http://www.doc.panasonic.de

5 year compressor warranty

INTERNET CONTROL READY

INTERNET CONTROL READY: Optional.

INTERNET CONTROL READY

INTERNET CONTROL READY

INTERNET CONTROL READY
### New 90x90 Cassette

#### PACi STANDARD AND ELITE INVERTER+

**Technical Focus**
- New Circle Flow Flap for more even temp. distribution
- Higher efficiency and silent turbo fan
- Individual flap control for flexible air flow direction
- DC FAN for better efficiency and control

### Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>U-60PEY1E5</th>
<th>U-71PEY1E5</th>
<th>U-100PEY1E5</th>
<th>U-125PEY1E5</th>
<th>U-100PEY1E8</th>
<th>U-125PEY1E8</th>
<th>U-140PEY1E8</th>
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<tbody>
<tr>
<td><strong>Air Volume (Cool / Heat)</strong></td>
<td>940 / 940</td>
<td>940 / 940</td>
<td>940 / 940</td>
<td>940 / 940</td>
<td>940 / 940</td>
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<td>V</td>
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<td><strong>Air Intake Chamber</strong></td>
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<tr>
<td><strong>Air Intake Box</strong></td>
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<tr>
<td><strong>Combustion Air Volume</strong></td>
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<tr>
<td><strong>Combustion Air Intake</strong></td>
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<td><strong>Refrigerant Loading</strong></td>
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<td>0.42</td>
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<td>0.73</td>
<td>0.73</td>
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<td><strong>Power Input</strong></td>
<td>kW</td>
<td>1.480</td>
<td>1.880</td>
<td>2.630</td>
<td>3.280</td>
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<td><strong>Annual Energy Consumption</strong></td>
<td>kWh/a</td>
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<td>2100</td>
<td>3500</td>
<td>3500</td>
<td>3500</td>
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<tr>
<td><strong>Sound pressure level</strong></td>
<td>dB(A)</td>
<td>46 / 50</td>
<td>50 / 52</td>
<td>54 / 54</td>
<td>54 / 54</td>
<td>54 / 54</td>
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<tr>
<td><strong>Sound power level</strong></td>
<td>dB</td>
<td>47 / 44</td>
<td>44 / 48</td>
<td>45 / 45</td>
<td>45 / 45</td>
<td>45 / 45</td>
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<tr>
<td><strong>Dimensions H x W x D</strong></td>
<td>mm</td>
<td>33.5 x 950 x 950</td>
<td>33.5 x 950 x 950</td>
<td>33.5 x 950 x 950</td>
<td>33.5 x 950 x 950</td>
<td>33.5 x 950 x 950</td>
<td>33.5 x 950 x 950</td>
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<tr>
<td><strong>Net weight</strong></td>
<td>kg</td>
<td>24</td>
<td>24</td>
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<td>27</td>
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<tr>
<td><strong>EER and COP</strong></td>
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<tr>
<td><strong>EER</strong></td>
<td>W/W</td>
<td>4.05</td>
<td>6.55</td>
<td>3.25</td>
<td>6.55</td>
<td>3.25</td>
<td>6.55</td>
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<tr>
<td><strong>COP</strong></td>
<td>W/W</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Cooling capacity</strong></td>
<td>kW</td>
<td>6.0</td>
<td>7.1</td>
<td>10.0</td>
<td>12.5</td>
<td>10.0</td>
<td>12.5</td>
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<tr>
<td><strong>Operating range</strong></td>
<td>°C</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
</tr>
<tr>
<td><strong>Operating range</strong></td>
<td>°C</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
</tr>
</tbody>
</table>

#### Other Features
- **DC Fan** for better efficiency and control
- **Special Adjustment for high ceiling application**
- **Optional INTERNET CONTROL**
- **Available from May 2013**

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**Note:** For detailed information about EER, please visit our website [http://www.doc.panasonic.com](http://www.doc.panasonic.com)
### PANEL

#### ELITE

#### OPTIONAL CONTROLLERS

<table>
<thead>
<tr>
<th>Single Phase</th>
<th>Three Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KIT</strong></td>
<td><strong>KIT</strong></td>
</tr>
<tr>
<td>G-50PUE6</td>
<td>G-50PUE6</td>
</tr>
<tr>
<td>G-60PUE6</td>
<td>G-60PUE6</td>
</tr>
<tr>
<td>G-71PUE6</td>
<td>G-71PUE6</td>
</tr>
<tr>
<td>G-100PUE6</td>
<td>G-100PUE6</td>
</tr>
<tr>
<td>G-125PUE6</td>
<td>G-125PUE6</td>
</tr>
<tr>
<td>G-140PUE6</td>
<td>G-140PUE6</td>
</tr>
</tbody>
</table>

#### COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS

- **SEER**
- **SCOP**
- **Pdesign**
- **Power input Cooling**
- **Heating capacity**
- **Power input Heating**
- **Annual Energy Consumption (ErP)**

### NEW

#### COMMERCIAL PACI ELITE / STANDARD

<table>
<thead>
<tr>
<th>Model</th>
<th>SEER</th>
<th>COP</th>
<th>Energy Saving Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZ-KPU2</td>
<td>A+++</td>
<td>A+</td>
<td>ELITE</td>
</tr>
<tr>
<td>CZ-RTC2</td>
<td>A++</td>
<td>A</td>
<td>PACi ELITE / STANDARD</td>
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<tr>
<td>CZ-RWSU2</td>
<td>A</td>
<td>A</td>
<td>COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS</td>
</tr>
</tbody>
</table>

---

1) **EER** and **COP**, Energy Saving Classification, is at 220 / 240 V (680 / 415 V) only in accordance with EU directive 2002/91/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (680 / 415 V) by an average of 500 hours per year in cooling mode, 2, 2) The annual consumption (SFP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level is measured of a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in a) Cool (Hi/Me/Lo) dB(A) 32 / 29 / 27 36 / 31 / 28 37 / 31 / 28 44 / 38 / 32 45 / 39 / 33 46 / 40 / 34 37 / 31 / 28 44 / 38 / 32 45 / 39 / 33 46 / 40 / 34

### Rating Conditions:


- **EER** and **COP**, Energy Saving Classification, is at 220 / 240 V (680 / 415 V) only in accordance with EU directive 2002/91/EC. 2) The annual consumption (SFP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shows the value measured at a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Standard EN 12101-1:2000 specification. 4) When installing the outdoor unit at a higher position than the indoor unit, (2) Recommended for use in the indoor 16. (*) Available from May 2015.

For detailed information about ErP, please visit our page [http://www.doc.parasieve.com](http://www.doc.parasieve.com)
LOW STATIC PRESSURE HIDE AWAY
PACI STANDARD AND ELITE INVERTER+

The depth of only 256mm provides greater installation flexibility and the unit can be used in more applications. Ideal for sites with narrow ceiling voids.

Technical Focus
- Compact indoor units without loosing static pressure (Only 250 mm high)
- 50 Pa static pressure
- Easy maintenance and service via external electrical box
- 3 speed centrifugal fan through wired or wireless remote control
- DC FAN for better efficiency and control

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.

- DC FAN for better efficiency and control
- 3 speed centrifugal fan through wired or wireless remote control
- 50 Pa static pressure
- Compact indoor units without loosing static pressure (Only 250 mm high)

Technical Focus
- Compact indoor units without loosing static pressure (Only 250 mm high)
- 50 Pa static pressure
- Easy maintenance and service via external electrical box
- 3 speed centrifugal fan through wired or wireless remote control
- DC FAN for better efficiency and control
### Optional Controllers

<table>
<thead>
<tr>
<th>Controller Type</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer remote controller</td>
<td>CZ-200E5</td>
</tr>
<tr>
<td>Wireless remote controller</td>
<td>GP-W2P3C1</td>
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<tr>
<td>Simplified remote controller</td>
<td>CZ-300E5</td>
</tr>
</tbody>
</table>

### Compatible with all ECO Connectivity Solutions

**Air Volume**

- **Cool**
  - U-100PE1E5 (500 m³/h)
  - U-125PE1E8 (660 m³/h)
  - U-140PE1E5 (810 m³/h)

- **Heat**
  - U-110PE1E5 (500 m³/h)
  - U-125PE1E8 (660 m³/h)
  - U-140PE1E5 (810 m³/h)

### Power Input

- **Heating**
  - Nom. (Min-Max) kW
    - 1.74 (0.22-2.52)
    - 1.94 (0.50-2.58)
    - 2.26 (0.50-2.82)
    - 2.95 (0.98-4.50)
    - 3.88 (1.05-5.40)
    - 4.69 (1.05-6.10)

- **Cooling**
  - Nom. (Min-Max) kW
    - 1.56 (0.26-2.31)
    - 1.85 (0.55-2.10)
    - 2.15 (0.55-2.15)
    - 2.67 (0.87-3.80)
    - 3.89 (1.00-4.80)
    - 4.65 (1.00-5.40)

### Elevation Difference

- Max: 3.0 m

### Dimensions (H x W x D)

- 250x100x98 mm
- 250x100x188 mm
- 350x100x188 mm
- 350x200x188 mm
- 350x200x288 mm
- 350x300x288 mm
- 350x300x388 mm
- 350x400x388 mm
- 350x400x488 mm
- 350x500x488 mm

### Operating Range

- **Cooling**
  - Min/Max °C
    - -15 / 46

- **Heating**
  - Min/Max °C
    - -15 / 46

### Other Features

- A+++/A++ Energy Efficiency Rating
- SEER Rating for Cooling: 220/240 V (1600 / 1800) kW
- **Remote Controller**
  - CZ-RTC2 (Timer)
  - CZ-RE2C2 (Wireless)
- **Accessories**
  - T-F1PPE1B: Filter kit
  - T-1PPE1B: Pipe kit
  - T-3PPE1B: Copper pipe kit
  - T-4PPE1B: Digital timer
  - T-5PPE1B: Energy consumption meter
  - T-6PPE1B: Remote controller

### Additional Information

- **Panasonic**
  - Visit our page for detailed information about ErP: [http://www.doc.panasonic.de](http://www.doc.panasonic.de)
  - Product lifetime warranty: 5 years

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### Note on EER and COP

- **EER** (Energy Efficiency Ratio) and **COP** (Coefficient of Performance) are calculated by multiplying the input power at 220/240 V (380/415 V) by an average of 500 hours per year in cooling mode.

### Further Information

For detailed information about ErP, please visit our page: [http://www.doc.panasonic.de](http://www.doc.panasonic.de)
### Standard

#### Single Phase

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Capacity</th>
<th>Refrigerant</th>
<th>SEER</th>
<th>EER</th>
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<td>10.0 kW</td>
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<td>3.7</td>
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<tr>
<td>2.0 kV</td>
<td>14.0 kW</td>
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#### Three Phase

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<th>Capacity</th>
<th>Refrigerant</th>
<th>SEER</th>
<th>EER</th>
</tr>
</thead>
<tbody>
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<td>25.0 kW</td>
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<td>7.2</td>
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<tr>
<td>3.0 kV</td>
<td>30.0 kW</td>
<td>R-410A</td>
<td>7.8</td>
<td>5.2</td>
</tr>
</tbody>
</table>

### Technical Focus
- Extremely quiet operation from 26 dB(A)
- Auto restart after power failure
- Auto changeover
- Twin, triple and double-twin split options
- DC FAN for better efficiency and control
- Built in drain pump

### Cooling and Heating
- Low temperature heating: 
  - R-410A to 30°C
  - R-22 to 35°C
- High temperature: 
  - R-410A to 36°C
  - R-22 to 46°C

### Recommended Pressures
- High pressure: 1.2 bar
- Low pressure: 0.8 bar

### System Protection
- Built-in drain pump
- DC FAN for better efficiency and control
- Twin, triple and double-twin split options
- Auto changeover
- Built-in drain pump

### Energy Efficiency
- A+ class energy efficiency
- EER and COP, Energy Saving Classification, is at 220/240 V (380/415 V) only in accordance with EU directive 2002/96/EC. 2) The annual consumption is calculated by multiplying the input power at 220/240 V (380/415 V) by an average of 500 hours per year in cooling mode. 3) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 4) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 5) When installing the outdoor unit at a higher position than the indoor unit, recommended fuse is 10 A. 6) * Available from May 2013. ** Available from January 2013. *** TBC.

### Rating Conditions
- Cooling Indoor: 37°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). 7) Specifications subject to change without notice.

### Additional Features
- 80% recovery rate of condensate water
- Intelligent control
- Possible to use on R22 piping system
- Easy control by BMS

### Standard Features
- Built-in drain pump
- DC FAN for better efficiency and control
- Twin, triple and double-twin split options
- Auto changeover
- Built-in drain pump

### Key Specifications
- EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/96/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 4) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 5) When installing the outdoor unit at a higher position than the indoor unit, recommended fuse is 10 A. 6) * Available from May 2013. ** Available from January 2013. *** TBC.

### Internet Control Ready
- Optional: SEER and SCOP for Kit-60PFY1E5 and Kit-71PFY1E5

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**Technical Focus**

- Extremely quiet operation from 26 dB(A)
- Auto restart after power failure
- Auto changeover
- Twin, triple and double-twin split options
- DC FAN for better efficiency and control
- Built in drain pump

---

**Standard**

### Single Phase

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Capacity</th>
<th>Refrigerant</th>
<th>SEER</th>
<th>EER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 kV</td>
<td>10.0 kW</td>
<td>R-410A</td>
<td>5.8</td>
<td>3.7</td>
</tr>
<tr>
<td>2.0 kV</td>
<td>14.0 kW</td>
<td>R-410A</td>
<td>7.2</td>
<td>4.8</td>
</tr>
</tbody>
</table>

### Three Phase

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Capacity</th>
<th>Refrigerant</th>
<th>SEER</th>
<th>EER</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0 kV</td>
<td>25.0 kW</td>
<td>R-410A</td>
<td>7.2</td>
<td>5.0</td>
</tr>
<tr>
<td>3.0 kV</td>
<td>30.0 kW</td>
<td>R-410A</td>
<td>7.8</td>
<td>5.2</td>
</tr>
</tbody>
</table>

### Technical Focus

- Low temperature heating: 
  - R-410A to 30°C
  - R-22 to 35°C
- High temperature: 
  - R-410A to 36°C
  - R-22 to 46°C

### Recommended Pressures

- High pressure: 1.2 bar
- Low pressure: 0.8 bar

### System Protection

- Built-in drain pump
- DC FAN for better efficiency and control
- Twin, triple and double-twin split options
- Auto changeover
- Built-in drain pump

### Energy Efficiency

- A+ class energy efficiency
- EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/96/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 4) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 5) When installing the outdoor unit at a higher position than the indoor unit, recommended fuse is 10 A. 6) * Available from May 2013. ** Available from January 2013. *** TBC.

### Rating Conditions

- Cooling Indoor: 37°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). 7) Specifications subject to change without notice.

### Additional Features

- 80% recovery rate of condensate water
- Intelligent control
- Possible to use on R22 piping system
- Easy control by BMS

### Standard Features

- Built-in drain pump
- DC FAN for better efficiency and control
- Twin, triple and double-twin split options
- Auto changeover
- Built-in drain pump

### Key Specifications

- EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/96/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 4) The sound pressure level of the units shows the value measured at a distance of 1 meter in front of the main body and 1.5 m from the ground. 5) When installing the outdoor unit at a higher position than the indoor unit, recommended fuse is 10 A. 6) * Available from May 2013. ** Available from January 2013. *** TBC.

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### ELITE

<table>
<thead>
<tr>
<th>Single Phase</th>
<th>Three Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 kW</td>
<td>—</td>
</tr>
<tr>
<td>6.0 kW</td>
<td>—</td>
</tr>
<tr>
<td>7.1 kW</td>
<td>—</td>
</tr>
<tr>
<td>10.8 kW</td>
<td>—</td>
</tr>
<tr>
<td>12.5 kW</td>
<td>—</td>
</tr>
<tr>
<td>14.0 kW</td>
<td>—</td>
</tr>
</tbody>
</table>

**KIT**
- KIT-50PF1E5
- KIT-60PF1E5
- KIT-71PF1E5
- KIT-100PF1E5
- KIT-125PF1E5
- KIT-140PF1E5
- KIT-170PF1E5
- KIT-185PF1E5

**Indoor**
- J-50PF1E5
- J-60PF1E5
- J-71PF1E5
- J-100PF1E5
- J-125PF1E5
- J-140PF1E5
- J-170PF1E5
- J-185PF1E5

**Outdoor**
- G-50PF1E5
- G-60PF1E5
- G-71PF1E5
- G-100PF1E5
- G-125PF1E5
- G-140PF1E5
- G-170PF1E5
- G-185PF1E5

**Cooling capacity Nom. (Max-Max)**
- Nom: 5.6 (1.5-5.6)
- Max: 6.2 (2.7-6.8)

**EER**
- Nom: 7.9 (5.9-7.9)
- Max: 7.9 (5.9-7.9)

<table>
<thead>
<tr>
<th>SEEN</th>
<th>kW</th>
<th>5.6</th>
<th>—</th>
</tr>
</thead>
<tbody>
<tr>
<td>V/S</td>
<td>kW</td>
<td>6.2</td>
<td>—</td>
</tr>
<tr>
<td>V/H</td>
<td>kW</td>
<td>6.2</td>
<td>—</td>
</tr>
</tbody>
</table>

**Design condition**
- Cooling: Indoor 27 °C DB / 19 °C WB. Outdoor 35 °C DB / 24 °C WB. Heating: Indoor 20 °C DB. Outdoor 7 °C DB / 6 °C WB.

**Annual Energy Consumption (ErP)**
- 2-b) kWh/a
- 1474
- 2156
- 2485
- 3084
- 3480
- 3480
- 3480
- 3480
- 3480

**Pdesign at -10 °C kW**
- 4.0
- 6.0
- 7.1
- 10.0
- —
- —
- 7.1
- 10.0
- —
- —

**Pdesign kW**
- 5.0
- 6.0
- 7.1
- 10.0
- —
- —
- 7.1
- 10.0
- —
- —

**Refrigerant loading**
- R410A kg
- 1.65
- 2.0
- 2.35
- 3.4
- 3.4
- 3.4
- 2.35
- 3.4
- 3.4
- 3.4

**Additional charge g/m**
- 20
- 50
- 50
- 50
- 50
- 50
- 50
- 50
- 50
- 50

**Sound power level Cool / Heat (Hi) dB**
- 65 / 69
- 65 / 67
- 65 / 67
- 69 / 69
- 70 / 70
- 71 / 71
- 65 / 67
- 69 / 69
- 70 / 70
- 71 / 71

### OPTIONAL CONTROLLERS

- Timer remote controller
- Wireless remote controller
- Simplified remote controller

### PLEUMS

- Air Outlet Plemum
- Air Inlet Plemum
- Bus Plemum

### COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS

- R22 pippings
- R23a removal
- 5 year compressor warranty

**Ratings Conditions:**
- Cooling: Indoor 37 °C DB / 19 °C WB. Outdoor 35 °C DB / 24 °C WB. Heating: Indoor 20 °C DB. Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).

**New & Innovative Features:**
- Gas pipe Inch (mm): 1/2 (12.7) / 5/8 (15.88)
- Heat Min/Max °C: -20 / 24
- Heat (Hi/Me/Lo) dB: 56 / 52 / 48

**ENERGY EFFICIENCY RATING**
- A+ (T1)
- A++ (T2)
- A (T3)
- A+ (T1)
- A++ (T2)
- A (T3)

**New Features:**
- Control: 10 year compressor warranty
- R22 removal
- Improved performance: +18% efficiency
- Energy saving: 4.0 A+ SCOP
- 100% eco-friendly refrigerant R32

Rating Conditions: Cooling Indoor 37 °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.

1) ERP and COP Energy Saving Classification refers to ISO 13280-1 (A) and ISO 13280-2 (A) only in accordance with EU directive 2010/30/EU. The annual consumption is calculated by multiplying the input power at 230 / 240 V (400 / 415 V) by an average of 500 hours per year in cooking mode. 2) The annual consumption (kWh) is calculated by formulae determined by ERP regulation. 3) Medium External static pressure setting from factory. 4) The Sound pressure level of the units shows the value measured at position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with EN711 16/03-97 specification. 5) When installing the outdoor unit at a higher position than the indoor unit, refer to the installation guide. 6) Available from May 2013.
**CEILING PACI STANDARD AND ELITE INVERTER+**

This range of 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.

**Technical Focus**
- All units just 210 mm high
- Twin, Triple and Double-twin split options
- Industry-leading low sound levels
- Large and wide air distribution
- All units just 210 mm high
- All the units are the same height and depth for a uniform appearance in mixed installations.

**STANDARD**
- **Internet Control Ready**: Optional.
- **SEER and SCOP**: For KIT-100PFY1E5.
- **Power inputCooling Nom. (Min-Max) kW**
  - 1.480 (0.275-2.155)
  - 1.970 (0.275-2.600)
  - 2.700 (0.410-4.000)
  - 3.380 (0.730-4.400)
- **Annual Energy Consumption (ErP) 2-b) kWh/a**
  - 1035
  - 1350
  - 1725
  - 2155
- **COP**
  - 4.05 (6.55-3.25)
- **Sound pressure Level Cooling (Hi / Lo) dB(A)**
  - 39 / 36 / 33
  - 39 / 36 / 33
  - 42 / 38 / 35
  - 45 / 40 / 37
- **Air Volume Cool / Heat m³/h**
  - 1140 / 1140
  - 1140 / 1140
  - 1980 / 1980
  - 2100 / 2100
- **Recommended fuse A**
  - 20
  - 20
  - 25
  - 30
- **Power source V**
  - 220 / 230 / 240
  - 220 / 230 / 240
  - 220 / 230 / 240
  - 220 / 230 / 240
- **Net weight kg**
  - 25
  - 25
  - 33
  - 33
- **Operating range Cool Min/Max °C**
  - -10 ~ 43
  - -10 ~ 43
  - -10 / 43
  - -10 / 43

Rating Conditions: Cooling Indoor 37 °C DB / 19 °C WB; Cooling Outdoor 35 °C DB / 24 °C WB; Heating Indoor 20 °C DB; Heating Outdoor 7 °C DB / 4 °C WB; (Dry Bulb WB; Wet Bulb). // Specifications subject to change without notice.

1) **EER and COP**: Energy Saving Classification. is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2009/125/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3-b) The annual consumption in cooling mode is calculated by formula determined by EFP regulation. 3-a) The Sound pressure level of the units shows the value measured at a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure level is measured in accordance with European AC/TCM-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. ** Available from January 2013. *** TBC.

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### Piping Connections

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Inch</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>6.35</td>
<td>9.52</td>
</tr>
<tr>
<td>3/8</td>
<td>6.35</td>
<td>12.94</td>
</tr>
<tr>
<td>1/2</td>
<td>9.52</td>
<td>15.87</td>
</tr>
<tr>
<td>3/4</td>
<td>19.05</td>
<td>19.05</td>
</tr>
<tr>
<td>1</td>
<td>25.40</td>
<td>25.40</td>
</tr>
</tbody>
</table>

### Piping Lengths

<table>
<thead>
<tr>
<th>Length</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>40</td>
<td>5-50</td>
</tr>
<tr>
<td>3/8</td>
<td>5-75</td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>5-75</td>
<td></td>
</tr>
<tr>
<td>3/4</td>
<td>5-75</td>
<td></td>
</tr>
</tbody>
</table>

### Sound Power Levels

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cool / Heat</th>
<th>dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi</td>
<td>65 / 69</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>47</td>
<td></td>
</tr>
</tbody>
</table>

### Air Volume

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cool / Heat</th>
<th>m³/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>780 / 780</td>
<td></td>
</tr>
<tr>
<td>Hi</td>
<td>1980 / 1980</td>
<td></td>
</tr>
</tbody>
</table>

### Current Cooling

<table>
<thead>
<tr>
<th>Condition</th>
<th>Nom. (Min-Max) A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>7.70 / 7.45 / 7.20</td>
</tr>
<tr>
<td>Hi</td>
<td>19.80 / 19.50 / 19.30</td>
</tr>
</tbody>
</table>

### Dimensions

<table>
<thead>
<tr>
<th>Condition</th>
<th>H x W x D mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>210 x 910 x 680</td>
</tr>
<tr>
<td>Hi</td>
<td>210 x 1180 x 680</td>
</tr>
</tbody>
</table>

### Weight

<table>
<thead>
<tr>
<th>Condition</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>25</td>
</tr>
<tr>
<td>Hi</td>
<td>33</td>
</tr>
</tbody>
</table>

### Compatibility

COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS

U-71PE1E8
U-125PE1E8
U-140PE1E8
U-140PE1E5
U-125PE1E8

### Optional Controllers

- Timer remote controller: C2-9T2C
- Wireless remote controller: C2-PWNC1 / C2-PWNC2
- Simplified remote controller: C2-H2C2

### Elitie

- Single Phase: 5.0 kW, 6.0 kW, 7.5 kW
- Three Phase: 12.5 kW, 14.0 kW

### SEER

<table>
<thead>
<tr>
<th>Condition</th>
<th>SEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>15.0 (5.5-6.0)</td>
</tr>
<tr>
<td>Hi</td>
<td>14.0 (4.5-5.4)</td>
</tr>
</tbody>
</table>

### EER

<table>
<thead>
<tr>
<th>Condition</th>
<th>EER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>2.99 (2.07-2.48)</td>
</tr>
<tr>
<td>Hi</td>
<td>3.24 (3.09-3.48)</td>
</tr>
</tbody>
</table>

### Power Consumption

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cooling</th>
<th>Heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>1.441 (1.00-2.00)</td>
<td>2.210</td>
</tr>
</tbody>
</table>

### Energy Saving Class

A++ for cooling and A+ for heating.
Panasonic breaks new ground in offering high performance and power in a small space. The 20.0-25.0 kW from Panasonic is ideally suited for large retail applications and other large areas not needing the higher capacities of VRF systems. The lightweight and compact design enables easier installation in any commercial space. The twin fan system saves valuable footprint compared to traditional 20.0-25.0 kW systems which have a larger and therefore require more space.

### Three Phase

<table>
<thead>
<tr>
<th></th>
<th>20.0 kW</th>
<th>25.0 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIT</td>
<td>KIT-200PETEB</td>
<td>KIT-250PETEB</td>
</tr>
<tr>
<td>Indoor</td>
<td>6-200PETEB</td>
<td>6-250PETEB</td>
</tr>
<tr>
<td>Outdoor</td>
<td>6-200PETEB</td>
<td>6-250PETEB</td>
</tr>
</tbody>
</table>

#### Cooling capacity

| Nom. (Min-Max) kW | 20.0 (6.0-22.4) | 25.0 (6.0-28.0) |

#### EER

| Nominal W/W | 2.62 D | 2.62 D |

#### SEER

| W/W          | —     | —     |

#### Pôrisme

| kW          | —     | —     |

#### Power input

| Nominal kW | 7.646 | 9.950 |

#### Running amperes

| A          | 11.8  | 14.8  |

#### Annual Energy Consumption

| EER (W/E) | 3020  | 4775  |

#### COP

| Nominal W/W | 3.54 D | 3.41 D |

#### SCOP

| W/W          | —     | —     |

#### Power input at -10 °C

| kW          | —     | —     |

#### Power input Heating

| Nominal kW | 6.156 | 8.810 |

#### Running amperes

| A          | 9.5   | 12.6  |

#### Annual Energy Consumption (ErP)

| W/E         | —     | —     |

### Indoor unit

- **Power source**: V / ph / Hz 220 / 240 / 1 / 50 220 / 240 / 1 / 50
- **External static pressure**: With booster cable Pa 216 (235) 216 (235)
- **Air volume**: Cooling/Heating m³/h 4320 4320
- **Sound pressure level**: H/1/1/1/1 dB(A) 51 / 50 / 49 51 / 50 / 49
- **Sound power level**: dB(A) 82 82
- **Dimensions / Net weight**: H x W x D mm / kg 479 x 1428 x 1230 / 120 479 x 1428 x 1230 / 120

### Outdoor unit

- **Power source**: V / ph / Hz 380 / 415 / 3+N / 50/60 380 / 415 / 3+N / 50/60
- **Recommended fuse**: A 15 20
- **Air volume**: Cooling/Heating m³/h 7940 7940
- **Sound pressure level**: Cooling / Heating (H/1/1/1/1) dB(A) 97 / 97 97 / 97
- **Sound power level**: (H/1/1/1/1) dB 72 73
- **Dimensions**: H x W x D mm 1526 x 940 x 340 1526 x 940 x 340
- **Net weight**: kg 118 128
- **Piping connections**: Liquid pipe mm (inch) 9.52 (3/8) 9.52 (3/8) Gas pipe mm (inch) 25.4 (1) 25.4 (1)
- **Refrigerant loading**: 5.3 6.5
- **Elevation diff. (incl/decl)**
  - **Max**: m 30 30
  - **Piping Max**: m 5-100 5-100
  - **Procharge length**: m 30 30
  - **Additional charge**: g/m 30 30
  - **Operating range**: Cool Min/Max °C -15 / 43 -15 / 43
  - **Heat Min/Max °C -20 / 15 -20 / 15

#### Specifications subject to change without notice.
KIT-200PE1E8 // KIT-250PE1E8

Technical Focus

- **HIGH EFFICIENCY INVERTER SYSTEM**
- **COOLING WITH LOW OUTDOOR TEMPERATURES (DOWN TO -15 °C)**
- **MAXIMUM PIPE LENGTH 100 M (MORE THAN 40% LONGER THAN OTHER SPLIT SYSTEMS)**
- **MULTIFUNCTIONAL WIRELESS REMOTE CONTROL WITH BUILT-IN TEMPERATURE CONTROL**
- **FRESH AIR SUPPLY FOR IMPROVED AIR QUALITY**

Features

**ENERGY EFFICIENCY AND ECOLOGY**
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

**COMFORT**
- Cooling with low outdoor temperatures (down to -15 °C)
- Selection of temperature sensor at indoor unit or wired remote control

**EASE OF USE**
- Weekly On/Off timer (6 settings per day and 42 per week)
- Selection of wired / Wireless and simplified wired remote controller

**EASY INSTALLATION AND MAINTENANCE**
- High static pressure units ideal for shops and offices

System example

An inspection port (450 x 450 mm or more) is required at the lower side of the indoor unit body. Distributor (field supply).

Plenums

<table>
<thead>
<tr>
<th>Air Outlet Plenum (suitable for rigid + flexible duct)</th>
<th>N. of exits with diameters</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-200PE1E8A / S-250PE1E8</td>
<td>1 x 500 mm</td>
<td>CZ-TREMIESPW76</td>
</tr>
</tbody>
</table>
PACi Standard Single and Twin System

Up to 2 indoor units connectable on the same outdoor.

Panasonic’s PACi 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.

### Single/Simultaneous operation system combinations

<table>
<thead>
<tr>
<th>Indoor size</th>
<th>Outdoor size</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 kW</td>
<td>Twin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 kW</td>
<td>Twin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0 kW</td>
<td>Single</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.5 kW</td>
<td>Single</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Compatible Outdoor Units

<table>
<thead>
<tr>
<th>Outdoor Unit</th>
<th>10.0 kW</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
<th>12.5 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor</td>
<td>U-100PEY1E5</td>
<td>U-100PEY1E8</td>
<td>U-125PEY1E5</td>
<td>U-125PEY1E8</td>
</tr>
<tr>
<td>Cooling capacity Nom. (Min-Max) kW</td>
<td>10</td>
<td>10.8 (2.7-13.5)</td>
<td>12.5 (3.8-15.0)</td>
<td>12.5 (3.8-15.0)</td>
</tr>
<tr>
<td>Heating capacity Nom. (Min-Max) kW</td>
<td>10</td>
<td>10.8 (2.1-13.8)</td>
<td>12.5 (3.4-15.0)</td>
<td>12.5 (3.4-15.0)</td>
</tr>
<tr>
<td>Power source V</td>
<td>220 / 230 / 240</td>
<td>380 / 400 / 415</td>
<td>230 / 240</td>
<td>380 / 400 / 415</td>
</tr>
<tr>
<td>Connection mm²</td>
<td>Ø15.88</td>
<td>Ø15.88</td>
<td>Ø12.7</td>
<td>Ø12.7</td>
</tr>
<tr>
<td>Refrigerant Loading kg</td>
<td>2.80</td>
<td>2.60</td>
<td>2.30</td>
<td>2.30</td>
</tr>
<tr>
<td>Elevation dif. (in/out) Max m</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Piping length Min/Max m</td>
<td>5 ~ 50</td>
<td>5 ~ 50</td>
<td>5 ~ 50</td>
<td>5 ~ 50</td>
</tr>
<tr>
<td>Operating range Cooling Min/Max °C</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
<td>-10 / 43</td>
</tr>
<tr>
<td>Heating Min/Max °C</td>
<td>-15 / 24</td>
<td>-15 / 24</td>
<td>-15 / 24</td>
<td>-15 / 24</td>
</tr>
</tbody>
</table>

U-__PEY1E5 Single Phase // U-__PEY1E8 Three Phase
## Compatible Indoor Units

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PK1E5</td>
<td>5.0</td>
<td>6.0</td>
<td>300 x 1065 x 230</td>
<td>40 / 36 / 32</td>
</tr>
<tr>
<td>S-50PY1E5</td>
<td>5.0</td>
<td>5.6</td>
<td>300 x 1065 x 230</td>
<td>40 / 36 / 32</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PK1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>300 x 1065 x 230</td>
<td>47 / 44 / 46</td>
</tr>
</tbody>
</table>

### 4 Way 40x40 Cassette

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PY1E5</td>
<td>5.0</td>
<td>5.6</td>
<td>285 x 575 x 575</td>
<td>41 / 37 / 33</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-60PY1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>285 x 575 x 575</td>
<td>41 / 37 / 33</td>
</tr>
</tbody>
</table>

### 4 Way 10x10 Cassette

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PY1E5</td>
<td>5.0</td>
<td>5.6</td>
<td>256 x 840 x 840</td>
<td>32 / 29 / 27</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-60PY1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>256 x 840 x 840</td>
<td>32 / 29 / 27</td>
</tr>
</tbody>
</table>

### Low Static Pressure Hide Away

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PN1E5</td>
<td>5.0</td>
<td>5.6</td>
<td>250 x 780 (+100) x 650</td>
<td>35 / 39 / 41</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-60PN1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>250 x 780 (+100) x 650</td>
<td>35 / 39 / 41</td>
</tr>
</tbody>
</table>

### Hide Away High Static Pressure

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PF1E5</td>
<td>5.0</td>
<td>5.6</td>
<td>290 x 890 x 700</td>
<td>35 / 39 / 41</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-60PF1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>290 x 890 x 700</td>
<td>35 / 39 / 41</td>
</tr>
</tbody>
</table>

### Ceiling

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PT1E5</td>
<td>5.0</td>
<td>5.6</td>
<td>210 x 910 x 680</td>
<td>38 / 33 / 30</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-60PT1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>210 x 910 x 680</td>
<td>38 / 33 / 30</td>
</tr>
</tbody>
</table>

## Compatible Outdoor Units

### U-100PEY1E5 // U-125PEY1E5 // U-100PEY1E8 // U-125PEY1E8

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Dimensions</th>
<th>Sound Pressure Level</th>
<th>Air Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooling kW</td>
<td>Heating kW</td>
<td>H x W x D mm</td>
<td>Cooling (Hi / Me / Lo) dB(A)</td>
</tr>
<tr>
<td><strong>5.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PK1E5 / S-60PK1E5</td>
<td>5.0</td>
<td>6.0</td>
<td>390 x 1065 x 230</td>
<td>47 / 44 / 46</td>
</tr>
<tr>
<td><strong>6.0 kW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-50PK1E5 / S-60PK1E5</td>
<td>6.0</td>
<td>6.0</td>
<td>390 x 1065 x 230</td>
<td>47 / 44 / 46</td>
</tr>
</tbody>
</table>
PACi Elite Single, Twin, Triple and Double-Twin System from 7.1 to 14.0 kW

### Single/Simultaneous operation system combinations

<table>
<thead>
<tr>
<th>Indoor unit combinations (see examples above)</th>
<th>Single</th>
<th>Twin</th>
<th>Double-Twin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor unit main pipe diameter (L) (mm)</td>
<td>6-36</td>
<td>6-45</td>
<td>5-50</td>
</tr>
<tr>
<td>Outdoor unit main pipe diameter (L) (mm)</td>
<td>50</td>
<td>71</td>
<td>100 - 140</td>
</tr>
<tr>
<td>Liquid pipe (mm)</td>
<td>Ø 9.52</td>
<td>Ø 6.35</td>
<td>Ø 6.35</td>
</tr>
<tr>
<td>Gas pipe (mm)</td>
<td>Ø 15.88</td>
<td>Ø 12.70</td>
<td>Ø 12.70</td>
</tr>
<tr>
<td>Branch pipe kit (option)</td>
<td>Single Twin Double-Twin</td>
<td>Single Twin Double-Twin</td>
<td></td>
</tr>
</tbody>
</table>

### Compatible Outdoor Units

<table>
<thead>
<tr>
<th>Outdoor unit combinations</th>
<th>7.1 kW</th>
<th>7.1 kW</th>
<th>10.0 kW</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
<th>12.5 kW</th>
<th>14.0 kW</th>
<th>14.0 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin Combination</td>
<td>S-36</td>
<td>S-45</td>
<td>S-50</td>
<td>S-60</td>
<td>S-71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71 Type</td>
<td>u-71PE1E5</td>
<td>u-71PE1E8</td>
<td>u-100PE1E5</td>
<td>u-100PE1E8</td>
<td>u-125PE1E5</td>
<td>u-125PE1E8</td>
<td>u-140PE1E5</td>
<td>u-140PE1E8</td>
</tr>
<tr>
<td>100 Type</td>
<td>u-71PE1E5</td>
<td>u-71PE1E8</td>
<td>u-100PE1E5</td>
<td>u-100PE1E8</td>
<td>u-125PE1E5</td>
<td>u-125PE1E8</td>
<td>u-140PE1E5</td>
<td>u-140PE1E8</td>
</tr>
<tr>
<td>125 Type</td>
<td>u-71PE1E5</td>
<td>u-71PE1E8</td>
<td>u-100PE1E5</td>
<td>u-100PE1E8</td>
<td>u-125PE1E5</td>
<td>u-125PE1E8</td>
<td>u-140PE1E5</td>
<td>u-140PE1E8</td>
</tr>
<tr>
<td>140 Type</td>
<td>u-71PE1E5</td>
<td>u-71PE1E8</td>
<td>u-100PE1E5</td>
<td>u-100PE1E8</td>
<td>u-125PE1E5</td>
<td>u-125PE1E8</td>
<td>u-140PE1E5</td>
<td>u-140PE1E8</td>
</tr>
</tbody>
</table>

### Refrigerant Charging

- For the twin connection, the amount of refrigerant required for pipe length 20 m has been included in this unit at the factory while that required for pipe length 30 m has been included for the Triple / Double-Twin connections.
- No additional charge is required for the first 30 m in pipe length in the case of the twin connection and for the first 18 m in the case of the Triple / Double-Twin connections. The amount of included refrigerant for each model is listed on the NAMA PLATE.
- Make additional charges by adding up pipe length in an order of main (L) then branch (L1 → L2 → L3 → wide diameter) and then selecting the amount of refrigerant corresponding to the remaining (after 30 m for the Twin connection and after 20 m for the Triple / Double-Twin connections) liquid side pipe diameter and pipe length from the below table.

### Joint distribution

- Single: Joint distribution (sold separately)
- Twin: Joint distribution
- Double-Twin: Joint distribution

### Joint distribution

- Single: Joint distribution (sold separately)
- Twin: Joint distribution
- Double-Twin: Joint distribution

### Table of liquid pipe diameter and addition amount of refrigerant

<table>
<thead>
<tr>
<th>Liquid pipe diameter (mm)</th>
<th>Addition amount of refrigerant (g/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 9.52</td>
<td>0.76</td>
</tr>
<tr>
<td>Ø 6.35</td>
<td>0.49</td>
</tr>
</tbody>
</table>

### Table of operating range

<table>
<thead>
<tr>
<th>Operating range</th>
<th>7.1 kW</th>
<th>7.1 kW</th>
<th>10.0 kW</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
<th>12.5 kW</th>
<th>14.0 kW</th>
<th>14.0 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor unit combinations</td>
<td>S-36</td>
<td>S-45</td>
<td>S-50</td>
<td>S-60</td>
<td>S-71</td>
<td>u-71PE1E5</td>
<td>u-71PE1E8</td>
<td>u-100PE1E5</td>
</tr>
<tr>
<td>Summer</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
</tr>
<tr>
<td>Winter</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
<td>70 - 71</td>
</tr>
</tbody>
</table>

---

40
### Compatible Indoor Units

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Cooling kW</th>
<th>Heating kW</th>
<th>Dimensions H x W x D (mm)</th>
<th>Sound Pressure Level (Hi / Me / Lo) dB(A)</th>
<th>Air Volume Cooling / Heating m³/h</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wall</strong></td>
<td>S-36PK1E5</td>
<td>S-45PK1E5</td>
<td>256 x 840 x 840</td>
<td>40 / 38 / 35</td>
<td>840 / 840</td>
</tr>
<tr>
<td></td>
<td>S-50PK1E5</td>
<td>S-50PK1E5</td>
<td>256 x 840 x 840</td>
<td>40 / 38 / 35</td>
<td>840 / 840</td>
</tr>
<tr>
<td></td>
<td>S-60PK1E5</td>
<td>S-71PK1E5</td>
<td>290 x 1000 x 840</td>
<td>40 / 38 / 35</td>
<td>1260 / 1260</td>
</tr>
<tr>
<td></td>
<td>S-70PK1E5</td>
<td>S-70PK1E5</td>
<td>290 x 1000 x 840</td>
<td>40 / 38 / 35</td>
<td>1260 / 1260</td>
</tr>
</tbody>
</table>

### Compatible Outdoor Units

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Cooling kW</th>
<th>Heating kW</th>
<th>Dimensions H x W x D (mm)</th>
<th>Sound Pressure Level (Hi / Me / Lo) dB(A)</th>
<th>Air Volume Cooling / Heating m³/h</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Static Pressure</strong></td>
<td>S-36PF1E5</td>
<td>S-45PF1E5</td>
<td>290 x 800 x 700</td>
<td>33 / 29 / 25</td>
<td>840 / 840</td>
</tr>
<tr>
<td></td>
<td>S-50PF1E5</td>
<td>S-50PF1E5</td>
<td>290 x 800 x 700</td>
<td>33 / 29 / 25</td>
<td>840 / 840</td>
</tr>
<tr>
<td></td>
<td>S-60PF1E5</td>
<td>S-60PF1E5</td>
<td>290 x 1000 x 700</td>
<td>35 / 32 / 26</td>
<td>1260 / 1260</td>
</tr>
<tr>
<td></td>
<td>S-71PF1E5</td>
<td>S-71PF1E5</td>
<td>290 x 1000 x 700</td>
<td>35 / 32 / 26</td>
<td>1260 / 1260</td>
</tr>
</tbody>
</table>
PACi Elite Single, Twin, Triple and Double-Twin System from 20 to 25 kW

Up to 4 indoor units can be connected to the same outdoor unit. Panasonic’s PACi units 200 and 250 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.

<table>
<thead>
<tr>
<th>Outdoor Unit</th>
<th>200 Type</th>
<th>250 Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin Combination</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>200 Type</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>250 Type</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Tripe Combination</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Double-Twin Combination</td>
<td>(1)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

### Single/Simultaneous operation system combinations

| Indoor size | Outdoor size | Total pipe length (L) (mm) | Double-twin distribution pipe (L1, L2) (mm) | Height difference (O/U located lower) (m) | Height difference (O/U located higher) (m) | Height difference between indoor units (m) | Equivalent lengths and height differences (m) for outdoor unit sizes...
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6 kW</td>
<td>20.0 kW</td>
<td>≤100</td>
<td>≤100</td>
<td>≤30</td>
<td>≤15</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>4.5 kW</td>
<td>25.0 kW</td>
<td>≤100</td>
<td>≤100</td>
<td>≤30</td>
<td>≤15</td>
<td>0.5</td>
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### Compatibility Outdoor Units

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<th>20.0 kW</th>
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<tr>
<td>Cooling capacity Nom.</td>
<td>kW</td>
<td>kW</td>
</tr>
<tr>
<td>Heating capacity Nom.</td>
<td>kW</td>
<td>kW</td>
</tr>
<tr>
<td>Power source V / ph / Hz</td>
<td>380 / 415 / 3-N / 50/60</td>
<td>380 / 415 / 3-N / 50/60</td>
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<tr>
<td>Recommended fuse</td>
<td>16A</td>
<td>16A</td>
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<tr>
<td>Recommended cable size</td>
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<td>7900</td>
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<td>Sound pressure level Cooling / Heating (dB(A))</td>
<td>57 / 57</td>
<td>57 / 57</td>
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<td>Sound power level (dB)</td>
<td>72</td>
<td>73</td>
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<tr>
<td>Dimensions / Net weight H x W x D mm / kg</td>
<td>1526 x 940 x 340 / 118</td>
<td>1526 x 940 x 340 / 128</td>
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<td>Refrigerant circuit</td>
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<tr>
<td>Tube diameter Narrow/Wide mm (inch)</td>
<td>9.52 (3/8) / 25.4 (1)</td>
<td>9.52 (3/8) / 25.4 (1)</td>
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<tr>
<td>Max piping length</td>
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<tr>
<td>Amount of additional refrigerant g/m</td>
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<tr>
<td>Piping connections Liquid / Gas pipe mm (inch)</td>
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<td>Ø 9.52 (3/8) / 25.4 (1)</td>
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<td>Refrigerant loading</td>
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<td>Elevation diff. (m/s)</td>
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<td>Piping length Min-Max m</td>
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<td>Operating range Cooling Min/Max °C</td>
<td>-15 / 43</td>
<td>-15 / 43</td>
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<tr>
<td>Heating Min/Max °C</td>
<td>-20 / 15</td>
<td>-20 / 15</td>
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Compatible Indoor Units

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<tr>
<th>Model</th>
<th>5.0 kW</th>
<th>6.0 kW</th>
<th>7.1 kW</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
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<tr>
<td><strong>Wall</strong>&lt;br&gt;Capacity Cooling kW</td>
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<td>6.0</td>
<td>7.1</td>
<td>10.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Heating kW</td>
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<td>6.0</td>
<td>7.1</td>
<td>10.0</td>
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<td>300 x 1065 x 230</td>
<td>300 x 1065 x 230</td>
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<tr>
<td>Sound pressure level Cooling (Hi / Me / Lo) dB(A)</td>
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<td>47 / 44 / 40</td>
<td>47 / 44 / 40</td>
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<tr>
<td>Heating (Hi / Me / Lo) dB(A)</td>
<td>40 / 36 / 32</td>
<td>47 / 44 / 40</td>
<td>47 / 44 / 40</td>
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<tr>
<td>Air Volume Cooling / Heating m³/h</td>
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<td>1080 / 1080</td>
<td>1080 / 1080</td>
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<td><strong>4-Way 40x40 Cassette</strong>&lt;br&gt;Capacity Cooling kW</td>
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<td>7.1</td>
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<td>12.5</td>
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<tr>
<td>Heating kW</td>
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<td>6.0</td>
<td>7.1</td>
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<td>12.5</td>
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<td>Panel H x W x D mm</td>
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<tr>
<td>Sound pressure level Cooling (Hi / Me / Lo) dB(A)</td>
<td>41 / 37 / 33</td>
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<tr>
<td>Heating (Hi / Me / Lo) dB(A)</td>
<td>41 / 37 / 33</td>
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<td>Air Volume Cooling / Heating m³/h</td>
<td>750 / 750</td>
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<tr>
<td><strong>Low Static Pressure Hide Away</strong>&lt;br&gt;Capacity Cooling kW</td>
<td>5.0</td>
<td>6.0</td>
<td>7.1</td>
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<td>12.5</td>
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<tr>
<td>Heating kW</td>
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<td>6.0</td>
<td>7.1</td>
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<td>Dimensions H x W x D mm</td>
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<td>250 x 1000(+100) x 650</td>
<td>250 x 1000(+100) x 650</td>
<td>250 x 1200(+100) x 650</td>
<td>250 x 1200(+100) x 650</td>
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<td>External static pressure High / Medium / Low Pa</td>
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<td>Air Volume Cooling / Heating m³/h</td>
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<td>1200 / 1200</td>
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<td>7.1</td>
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<td>12.5</td>
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<tr>
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<td>6.0</td>
<td>7.1</td>
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<td>12.5</td>
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<td>Dimensions H x W x D mm</td>
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<td>210 x 1180 x 680</td>
<td>210 x 1180 x 680</td>
<td>210 x 1180 x 680</td>
<td>210 x 1595 x 680</td>
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<td>Sound pressure level Cooling (Hi / Me / Lo) dB(A)</td>
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<tr>
<td>Air Volume Cooling / Heating m³/h</td>
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<tr>
<td>1140 / 1140</td>
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<td>6.0</td>
<td>7.1</td>
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<td>12.5</td>
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<tr>
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<td>6.0</td>
<td>7.1</td>
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<td>12.5</td>
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<td>Dimensions H x W x D mm</td>
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<td>39 / 36 / 33</td>
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<tr>
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<tr>
<td>Air Volume Cooling / Heating m³/h</td>
<td>840 / 840</td>
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Compatible Outdoor Units

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<th>5.0 kW</th>
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<th>7.1 kW</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
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<td>7.1</td>
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<td>1200 / 1200</td>
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<td>1200 / 1200</td>
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<tr>
<td><strong>Low Static Pressure Hide Away</strong>&lt;br&gt;Capacity Cooling kW</td>
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<td>7.1</td>
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<td>12.5</td>
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<td>Sound pressure level Cooling (Hi / Me / Lo) dB(A)</td>
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<tr>
<td>Heating (Hi / Me / Lo) dB(A)</td>
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<th>5.0 kW</th>
<th>6.0 kW</th>
<th>7.1 kW</th>
<th>10.0 kW</th>
<th>12.5 kW</th>
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<tbody>
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<td>6.0</td>
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<td>12.5</td>
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<tr>
<td>Sound pressure level Cooling (Hi / Me / Lo) dB(A)</td>
<td>39 / 36 / 33</td>
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<tr>
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<td>39 / 36 / 33</td>
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<td>840 / 840</td>
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</table>

43
ELECTRIC AIR CURTAIN

Air curtains can help reduce whole building heating or cooling costs by helping to stop heat escaping the building or keeping cooled air in. Panasonic offers 2 sizes - 900 mm and 1200 mm electric air curtains. Ideal for separating areas and energy saving.

<table>
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<th>FY-10ESPNAH</th>
<th>FY-10ELPNAH</th>
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<tbody>
<tr>
<td>Width</td>
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<td>Watts Lo W</td>
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<td>74</td>
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<td>Current Hi A</td>
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<td>0,34</td>
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<td>Current Lo A</td>
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<td>0,35</td>
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<tr>
<td>Air speed Hi m/s</td>
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<td>13,1</td>
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<td>Air speed Lo m/s</td>
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<td>Noise lever Hi dB(A)</td>
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<td>Noise lever Lo dB(A)</td>
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<td>41</td>
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<td>Weight kg</td>
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INDOOR UNIT DIMENSIONS FY-10ESPNAH

INDOOR UNIT DIMENSIONS FY-10ELPNAH
FY-10ESPNAH // FY-10ELPNAH

Technical Focus
- 2 SIZES: 900 MM AND 1,200 mm
- POWERFUL AIR FLOW (10 m/s)
- VERY LOW NOISE, ONLY 42 dB

Features

COMFORT
- Easy redirection of airflow by means of the manual deflector

EASE OF USE
- Speed selector (high and low) on the unit itself

EASY INSTALLATION AND MAINTENANCE
- Simple installation
- Compact dimensions improve installation and positioning in any space

* Effectiveness of air
AIR CURTAIN
WITH HEX

High efficiency Air curtain connected to your PACi installation on 1x1 connection!
EC Fan motor for a smooth operation and efficient performance.
2 types of Air flow available: Jet-Flow and Standard.
2015 Fan Standard available today.
Easy Cleaning and Servicing.

INTERNET CONTROL
An intuitive and user-friendly application on your PC or Smartphone screen lets you manage the air conditioning system in the same way you do with the remote controller.

<table>
<thead>
<tr>
<th>HP</th>
<th>4</th>
<th>8</th>
<th>10</th>
<th>4</th>
<th>10</th>
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<tr>
<td>Air Curtain Type</td>
<td>PAW-10PAIRC-MJ*</td>
<td>PAW-15PAIRC-MJ*</td>
<td>PAW-20PAIRC-MJ*</td>
<td>PAW-10PAIRC-MS*</td>
<td>PAW-20PAIRC-MS*</td>
</tr>
<tr>
<td>Air Volume (High / Med / Low) m³/h</td>
<td>2700 / 1900 / 1200</td>
<td>3600 / 2500 / 1600</td>
<td>5400 / 3800 / 2400</td>
<td>2700 / 1900 / 1200</td>
<td>5400 / 3800 / 2400</td>
</tr>
<tr>
<td>Air Flow Length (A) m</td>
<td>1.0</td>
<td>1.5</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Refrigerant</td>
<td>R410A</td>
<td>R410A</td>
<td>R410A</td>
<td>R410A</td>
<td>R410A</td>
</tr>
<tr>
<td>Tubing Gas (mm)</td>
<td>16</td>
<td>18</td>
<td>22</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>Fan Rating High / Med / Low A</td>
<td>2.1 / 0.8 / 0.3</td>
<td>2.8 / 1.1 / 0.4</td>
<td>4.2 / 1.6 / 0.6</td>
<td>2.1 / 0.8 / 0.3</td>
<td>4.2 / 1.6 / 0.6</td>
</tr>
<tr>
<td>Electrical Consumption High / Med / Low kW</td>
<td>0.44 / 0.17 / 0.06</td>
<td>0.59 / 0.23 / 0.08</td>
<td>0.89 / 0.34 / 0.12</td>
<td>0.44 / 0.17 / 0.06</td>
<td>0.89 / 0.34 / 0.12</td>
</tr>
<tr>
<td>Protecting Fuse A</td>
<td>M16A</td>
<td>M16A</td>
<td>M16A</td>
<td>M16A</td>
<td>M16A</td>
</tr>
<tr>
<td>Noise (dB)</td>
<td>40-55</td>
<td>40-57</td>
<td>40-57</td>
<td>40-55</td>
<td>40-57</td>
</tr>
<tr>
<td>Dimensions (L x H x D) mm</td>
<td>1210 x 260 x 590</td>
<td>1710 x 260 x 590</td>
<td>2210 x 260 x 590</td>
<td>1210 x 260 x 490</td>
<td>2210 x 260 x 490</td>
</tr>
<tr>
<td>Weight kg</td>
<td>70</td>
<td>100</td>
<td>130</td>
<td>60</td>
<td>128</td>
</tr>
</tbody>
</table>

Outdoor combination with PACi Elite unit U-100PTE1E/B U-200PTE1E/B U-250PTE1E/B U-100PTE1E/B U-250PTE1E/B
Outdoor combination with PACi Standard unit U-100PTEY1E/B U-200PTEY1E/B

* Available from April 2013.

Technical Focus
- SAVE UP TO 40% ENERGY COSTS BY USE OF THE INTEGRATED EC FAN TECHNOLOGY
  - HIGHER EFFICIENCY THAN CONVENTIONAL AC FAN
  - SOFTSTART
  - LONGER MOTOR DURATION
- 3 LENGTHS OF AIR CURTAINS, FROM 1.0 TO 2.0 m
- INSTALLATION HEIGHT UP TO 2.7 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
- DRAIN INCLUDED FOR COOLING OPERATION

STANDARD: PAW-10PAIRC-MS // PAW-20PAIRC-MS

Technical Focus
- SAVE UP TO 40% ENERGY COSTS BY USE OF THE INTEGRATED EC FAN TECHNOLOGY
  - HIGHER EFFICIENCY THAN CONVENTIONAL AC FAN
  - SOFTSTART
  - LONGER MOTOR DURATION
- 2 LENGTHS OF AIR CURTAINS, 1.0 AND 2.0 m
- INSTALLATION HEIGHT UP TO 2.4 m
- CONTROL WITH PANASONIC REMOTE CONTROL SYSTEMS (OPTIONAL)
- DIRECT INTEGRATION TO BMS BY OPTIONAL PANASONIC INTERFACES
- DRAIN INCLUDED FOR COOLING OPERATION

Features
COMFORT
- Easy redirection of Air-Flow by means of manual deflector (Jet-Flow)

EASE OF USE
- Speed selector (high and low) on the unit itself

EASY INSTALLATION AND MAINTENANCE
- Easy installation
- Compact dimensions improve installation and positioning (Jet-Flow)
- Easy cleaning of grid without opening of the unit

MAX INSTALLATION HIGH
Jet-Flow: 2.7 m
Standard flow: 2.4 m
The Panasonic AHU Kits offer a wealth of connectivity possibilities so can be easily integrated into many systems. Application: Hotels, offices, server rooms or all large buildings where air quality control such as humidity control and fresh air and is needed.
Panasonic AHU Kit, 5-25 kW connected to PACi outdoor unit
PCB, Transformer, Thermistor x 3 pcs, Terminal Base and Electrical Component Box.

Optional parts: Following functions are available by using different type of control accessories:

CZ-RTC2 Wired remote controller
- Operation-ON/OFF
- Mode select
- Temperature setting

* Fan operation signal can be taken from the PCB.

CZ-T10 terminal
- Input signal= Operation ON/OFF
- Remote controller prohibition
- Output signal= Operating-ON status
- Alarm output (by DC12 V)

PAW-OCT, DC12 V outlet. OPTION terminal
- Output signal= Cool / Heat/Fan status
- Defrost
- Thermostat-ON

CZ-CAPBC2 Mini seri-para I/O unit
- Temperature setting by 0-10 V or 0-140 input signal
- Room (inlet air) temp outlet by 4-20 mA
- Mode select or/and ON/OFF control
- Fan operation control
- Operation status output/ Alarm output

### COMBINATION TABLE FOR PACi SINGLE OUTDOOR UNIT
Combination shown in below table is available for PACi single system

<table>
<thead>
<tr>
<th>Power</th>
<th>Size</th>
<th>PACi Standard</th>
<th>PACi Elite</th>
<th>AHU kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>phase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0 kW</td>
<td></td>
<td>U-50PE1E5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 kW</td>
<td>U-60PEY1E5</td>
<td>U-60PE1E5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 kW</td>
<td>U-71PEY1E5</td>
<td>U-71PE1E5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0 kW</td>
<td>U-100PEY1E5</td>
<td>U-100PE1E5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.5 kW</td>
<td>U-125PEY1E5</td>
<td>U-125PE1E5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.0 kW</td>
<td>U-140PEY1E5</td>
<td>U-140PE1E5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>phase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1 kW</td>
<td></td>
<td>U-71PE1E8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0 kW</td>
<td>U-100PEY1E8</td>
<td>U-100PE1E8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.5 kW</td>
<td>U-125PEY1E8</td>
<td>U-125PE1E8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.0 kW</td>
<td>U-140PEY1E8</td>
<td>U-140PE1E8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.0 kW</td>
<td>U-200PE1E8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.0 kW</td>
<td>U-250PE1E8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Additional notice/instruction for system design, installation work will be defined for PAC-i connection.
## OPERATION SYSTEM

### INDIVIDUAL CONTROL SYSTEMS

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Normal operation</th>
<th>Operation from each seat</th>
<th>Quick and easy operation</th>
<th>Daily and weekly program</th>
</tr>
</thead>
</table>

### External appearance

- Timer Remote Controller (Wired)
- Wireless Remote Controller
- Simplified Remote Controller
- Backlight remote controller
- Schedule Timer

<table>
<thead>
<tr>
<th>Type, model name</th>
<th>CZ-RTC2</th>
<th>CZ-RWSU2</th>
<th>CZ-RWSY2</th>
<th>CZ-RWSL2</th>
<th>CZ-RWSC2</th>
<th>CZ-RWST2</th>
<th>CZ-RWSK2</th>
<th>CZ-RE2C2</th>
<th>CZ-RELC2</th>
<th>CZ-ESWC2</th>
</tr>
</thead>
</table>

### Built-in Thermostat

- ✔

### N. of I/O which can be controlled

<table>
<thead>
<tr>
<th>Use limitations</th>
<th>1 group, 8 units</th>
<th>1 group, 8 units</th>
<th>1 group, 8 units</th>
<th>64 groups, max. 64 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Up to 2 controllers can be connected</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>- Up to 2 controllers can be connected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- CZ-RE2C2: up to 2 controllers can be</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- CZ-RELC2: can not operate other (SUB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Other controllers connected per group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Required power supply from the system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- When there is no system controller,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Connection is possible to the T10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Terminal of an indoor unit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Function ON/OFF

- ✔

### Mode setting

- ✔

### Fan speed setting

- ✔

### Temperature setting

- ✔

### Air flow direction

- ✔

### Permit/Prohibit switching

- ✔

### Weekly program

- ✔

---

1. Setting is not possible when a remote control unit is present. (Use the remote control for setting.)

All specifications subject to change without notice.
## Control Systems for PACi

A WIDE VARIETY OF CONTROL OPTIONS TO MEET THE REQUIREMENTS OF DIFFERENT APPLICATIONS.

### CENTRALIZED CONTROL SYSTEMS

<table>
<thead>
<tr>
<th>Operation with various function from center station</th>
<th>Only ON/OFF operation from center station</th>
<th>Simplified load distribution ratio (LDR) for each tenant</th>
<th>BMS System. PC Base</th>
<th>Connection with 3rd Party Controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Controller</td>
<td>ON/OFF Controller</td>
<td>Intelligent Controller (Touch screen panel)</td>
<td>P-AIMS. Basic Software</td>
<td>Seri-Para I/O unit for outdoor unit</td>
</tr>
<tr>
<td>CZ-64ESMC2</td>
<td>CZ-ANC2</td>
<td>CZ-256ESMC2 (CZ-CFUNC2)</td>
<td>CZ-C5WNC2</td>
<td>CZ-C5WNC2</td>
</tr>
<tr>
<td>✘</td>
<td>✘</td>
<td>✘</td>
<td>✘</td>
<td>✘</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>64 groups, max. 64 units</td>
<td>16 groups, max. 64 units</td>
<td>64 units x 4 systems, max. 256 units</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

- 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.

- Up to 8 controllers (4 main units + 4 sub units) can be connected to one system.
- Use without remote controller is impossible.

- A communication adaptor (CZ-CFUNC2) must be installed for three or more systems.
Individual Control Systems

Timer remote controller (CZ-RTC2)

- Time Function: 24 hours real time clock
  - Week day indicator.

- Weekly Programme Function: A maximum of 6 actions can be programmed for each day.

- Outing Function: This function can prevent the room temperature from dropping or rising when the occupants are out for a long time.

- Max. 8 indoor units can be controlled from one remote controller

- Remote control 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.

- Possible to connect to the outdoor unit using PAW-MRC cable for servicing purposes

Basic remote controller ON/OFF
- Operation mode changeover (Cooling, Heating, Dry, Auto, Fan).
- Temperature setting (Cooling/Dry: 18-30 deg; Heating: 16-30 deg).
- Fan speed setting (H/ M/ L) and Auto.
- Air flow direction adjustment.

Wireless remote controller

- Easy installation for the 4-way cassette type simply by replacing the corner part

- 24 hour timer function

- Remote control 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-RWSC2 is used, wireless control becomes possible for all indoor units
  - When a separate receiver is set up in a different room, control from that room also becomes possible.
  - 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 control (interlocked operation with the indoor unit or independent ventilation ON/OFF).
Simplified remote controller (CZ-RE2C2)

A remote controller with simple functions and basic operation
- Suitable for open rooms or hotels where detailed functions are not required.
- ON/OFF, operation mode switching, temperature setting, air speed switching, air flow direction setting, alarm display, and remote controller self-diagnosis can be performed.
- Batch group control for up to 8 indoor units.
- Remote control by main remote controller and sub controller is possible with a simplified remote controller or a wired remote controller (up to two units).

Backlight remote controller (CZ-RELC2)

Backlight remote controller with simple and friendly operation
- ON/OFF, operation mode switching, temperature setting, air speed switching, air flow direction setting, alarm display can be performed. LCD backlight display.
- Built-in temperature sensor and batch group control for up to 8 indoor units.

Remote sensor (CZ-CSRC2)

- This remote sensor can be connected to any indoor unit. Please 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 control switch, use the remote control switch as main remote controller.
- Batch group control for up to 8 indoor units.

CONTROL CONTENTS

**Standard Control**
- Control of the various operations of the indoor unit by wired or wireless 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.

<table>
<thead>
<tr>
<th>PART NAME, MODEL NO.</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer remote controller CZ-RTC1 // CZ-RE2C2 // CZ-RELC2</td>
<td>1 unit each</td>
</tr>
<tr>
<td>Wireless remote controller CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2</td>
<td></td>
</tr>
<tr>
<td>Main or sub. Timer remote controller CZ-RTC2 // CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2</td>
<td>As required</td>
</tr>
</tbody>
</table>

**Group control**
- Batch remote control on all indoor units.
- Operation of all indoor cells in the same mode.
- Up to 8 units can be connected.

<table>
<thead>
<tr>
<th>PART NAME, MODEL NO.</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer remote controller CZ-RTC1 // CZ-RE2C2 // CZ-RELC2</td>
<td>1 unit</td>
</tr>
<tr>
<td>Wireless remote controller CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2</td>
<td></td>
</tr>
<tr>
<td>Main or sub. Timer remote controller CZ-RTC2 // CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2</td>
<td>As required</td>
</tr>
</tbody>
</table>

**Main/sub remote control**
- Max 2 remote controllers per indoor unit.
- The button pressed last has priority.
- Timer setting is possible even with the sub remote controller.

<table>
<thead>
<tr>
<th>PART NAME, MODEL NO.</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main or sub. Timer remote controller CZ-RTC2 // CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2</td>
<td>As required</td>
</tr>
</tbody>
</table>
Centralised Control Systems

Schedule timer (CZ-ESWC2)

The power supply for the schedule timer is taken from one of the following.
1. Control circuit board (T10) of a nearby indoor unit (power supply wiring length: within 200 m from the indoor unit).
2. System controller (power supply wiring length: within 100 m from the indoor unit).

When the power supply for the schedule timer is taken from the control circuit board of the indoor unit, that indoor unit cannot be used with other control devices using the CZ-T10 terminal. As operation mode and temperature settings are not possible with the schedule timer, it must be used together with a remote controller, a system controller, an intelligent controller, etc. Also, as it does not have an address setting function, the control function of a system controller etc. must be used for address setting.

Up to 64 groups (max. 64 indoor units) can be controlled divided into 8 timer groups

Six program operations (Operation/Stop/Local permission/Local prohibition) per day can be set in a program for one week
- Only operation or stop, remote controller local permission or remote controller local prohibition, and their respective combinations are possible. (Operation + local permission, stop + local prohibition, only local permission, etc.)
- Local prohibition and the combination of the three items of temperature setting, mode change, and operation/stop can be set at the time of installation.

A function for pausing the timer in case of national holidays has been added, and timer operation also can be stopped for a long time
- By setting holidays or operation stop within one week, the timer can be paused just for that week.
- All timer settings can be stopped with the timer “ON/OFF effective” button. (Return to timer operation is made by pressing the button again.)

ON/OFF controller (CZ-ANC2)

- 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.

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.
System controller (CZ-64ESMC2)

A control mode corresponding to the use condition can be selected from 10 patterns

A. Operation mode: Central control mode or remote control mode can be selected

Central control mode: The system controller is used as centralised control device. (Setting from a remote controller can be prohibited by prohibiting local operation from the system controller.)

Remote control mode: The system controller is used as a remote controller. (Setting from the system controller can be prohibited by prohibiting local operation from another central control unit.)

B. Controlled unit number mode: All mode or zone 1, 2, 3, 4 mode can be selected

All mode: All zone, or group unit can be selected.
Zone 1, 2, 3, 4 mode: Setting is possible only for the indoor units of zone 1, 2, 3, or 4.

Control of systems without a remote controller and of main/sub systems (a total of up to 2 units) is possible

External Contacts On Central Controllers

Terminals for remote monitoring:
A1) Input for turning ON air conditioners concurrently
A2) Input for turning OFF air conditioners concurrently
A3) Common input for turning air conditioners ON or OFF
B1) On operation state indicator output
B2) Alarm indicator output
B3) Common indicator output

Dimensions
H 120 x W 120 x D 21 + 69 (embedding dimension mm)

Power supply: AC 220 to 240 V
I/O part: Remote input (effective voltage: DC 24 V): All ON/All OFF
Remote output (voltage-free contact): All ON/All OFF (external Power supply within DC 30 V, max 1 A)
Total wiring length 1 km

Individual control is possible for max. 64 groups, 64 indoor units.
Control of 64 indoor units divided into 4 zones. (One zone can have up to 16 groups, and one group can have up to 8 units.)
Control is possible for ON/OFF, operation mode, fan speed, air flow direction (only when used without a remote controller), operation monitoring, alarm monitoring, ventilation, remote controller local operation prohibition, etc.

Individual All operations are possible from the remote controller. However, the contents will be changed to the last settings used on the controller.

Central 1 The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)

Central 3 The remote controller cannot be used for mode change or temperature setting change. (All other operations are possible from the remote controller.)

Central 4 The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

Joint use with a remote controller, an intelligent controller, a schedule timer, etc. is possible

(The maximum number of connectable system controllers is 10, including other central controllers on the same circuit.)
(In case of joint use with a wireless remote controller, there are limitations for the control mode. Please use only with “Individual” and “Central 1”.)

Control of systems without a remote controller and of main/sub systems (a total of up to 2 units) is possible

External Contacts On Central Controllers

Terminals for remote monitoring:
A1) Input for turning ON air conditioners concurrently
A2) Input for turning OFF air conditioners concurrently
A3) Common input for turning air conditioners ON or OFF
B1) On operation state indicator output
B2) Alarm indicator output
B3) Common indicator output

Control mode example 2: Central control for zone 1

System controller
Control mode example 2: Central control for zone 1
Individual remote controller
Group control

Control mode example 4: Central control for zone 3

System controller
System without a remote controller
Control of a group without remote controller

Control mode example 5: Remote control for zone 4

System controller
System without a remote controller
Control of a group without remote controller

Control mode example 1: All central control

All mode
Central control mode
Remote control mode

Zone 1 mode
Zone 1 central control
Zone 1 remote control

Zone 2 mode
Zone 2 central control
Zone 2 remote control

Zone 3 mode
Zone 3 central control
Zone 3 remote control

Zone 4 mode
Zone 4 central control
Zone 4 remote control

Example 1: All central control

Example 2: Central control for zone 1

Example 3: Remote control for zone 2

Example 4: Central control for zone 3

Example 5: Remote control for zone 4
Intelligent controller (CZ-256ESMC2)

**Limitation contents for prohibited operation**

Prohibition means limiting the operations possible from the remote controller. It is also possible to change the prohibition items.

**Limitation contents (Limitations can be user defined)**

- **Individual**
  - No limits are set for the remote controller operation. However, the contents will be changed to the controller’s last settings. (Last-pressed priority.)

- **Prohibition 1**
  - The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)

- **Prohibition 2**
  - The remote controller cannot be used for ON/OFF, operation mode change and temperature setting. (All other operations are possible from the remote controller.)

- **Prohibition 3**
  - The remote controller cannot be used for operation mode change and temperature setting. (All other operations are possible from the remote controller.)

- **Prohibition 4**
  - The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

**Note:** Avoid joint use of the AMY system and the intelligent controller on the same indoor/outdoor operation line.

**Max. 256 indoor units (4 systems x 64 units) can be controlled. In case of three or more systems, a communication adaptor CZ-CFUNC2 must be installed on the outside.**

**Operation is possible as batch, in zone units, in tenant and in group units.**

**ON/OFF, operation mode setting, temperature setting, fan speed setting, air flow direction setting (when used without a remote controller), and remote controller local operation prohibition (prohibition 1, 2, 3, 4)**

A system without a remote controller is possible. Joint use with a remote controller or a system controller is also possible.

Use of a schedule timer and holiday setting also can be done.

Proportional distribution of the air conditioning energy is possible. Including csv-file export via CF-card (supplementary accessory)

**NEW function:** Pulse signal input from electric/gas consumption meter

In case of joint use with a wireless remote control system, there are limitations for the control mode. Please use only with "Permission" and "Prohibition 1".

**Dimensions**

- H 240 x W 280 x D 138 mm
- Power supply: AC 100 to 240 V (50 Hz), 30 W
- Input/Output: Remote input (voltage-free contact): All ON/OFF
  Remote output (voltage-free contact): All ON, All alarm (external power supply within DC 30 V 0.5 A)
- Total wiring length: 1 km for each system
- Only for embedding in the panel

**Web application**

**Linked system No. 1**

**Linked system No. 2**

**Linked system No. 3**

**Linked system No. 4**

**RS 485**

(Polarity shield wire)

**Communication adaptor CZ-CFUNC2**

**System signal x 4**

**Max. 4 links can be connected for the indoor/outdoor operation line = Max. 64 indoor units x 4 (256 units) / Max. 38 outdoor units x 4 (152 units)**
Web Interface / CZ-CWEBC2

Functions
- Access and operation by Web browser.
- Icon display.
- Language codes available in English, French, German, Italian, Portuguese, Spanish.
- Individual control possible (max. 64 indoor units)
  ON/OFF operation mode, set temperature, fan speed, Flap set, timer on/off alarm code monitoring, prohibit Remote Control.
- Zone control*.
- All Units control.
- Alarm Log.
- Mail Sent Log.
- Program Timer set 50 daily timers with 50 actions each day, 50 weekly timers 50 weekly timers, 1 holiday timer, 5 special day timers, for each tenant
- Prohibit Remote Control settings.
- IP ADDRESS could be changed via Internet.

Note: It is recommended to install a remote controller or a system controller on site to enable local control if it network experience a problem.

Easy to set to every room by recognizable icon and user-friendly remote control window
- If any of the indoor units is selected, the remote control window shown will be displayed for detailed setting modifications.

Easy to manage and monitor each tenant use*
- Each floor or tenant, otherwise each zone can be displayed and controlled.
- All unit statuses can also be displayed on one screen.

Program Timer set
- 50 daily timers with 50 actions each day, 50 weekly timers, holiday timer, 5 special day timers, for each tenant.

* Web interface system not applicable for load distribution.

Web Interface Device (CZ-CWEBC2)

Functions
- Access and operation by Web browser.
- Icon display.
- Language codes available in English, French, German, Italian, Portuguese, Spanish.
- Individual control possible (max. 64 indoor units) ON/OFF operation mode, set temperature, fan speed, Flap set, timer on/off alarm code monitoring, prohibit Remote Control.
- Each Tenant (Zone) control.
- All Units control.
- Alarm Log.
- Mail Sent Log.
- Program Timer set 50 daily timers with 50 actions each day, 50 weekly timers 50 weekly timers, 1 holiday timer, 5 special day timers, for each tenant
- Prohibit Remote Control settings.
- IP ADDRESS could be changed via Internet.

Note: It is recommended to install a remote controller or a system controller on site to enable local control if it network experience a problem.
Seripara I/O unit for outdoor unit (CZ-CAPDC2 for ECOi, CZ-CAPDC3 for Mini ECOi and PACi)

- 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.

**SYSTEM EXAMPLE**

---

Local adaptor for ON/OFF control (CZ-CAPC2)

- 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.

**SYSTEM EXAMPLE**

---

CZ-CAPBC2 Parallel interface 0-10 V

- Power is supplied from the CZ-T10 terminal of the indoor units.
- Separate power supply also is possible (in case of suction temperature measuring).

**SYSTEM EXAMPLE**

---

- 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.
- The analog input for temperature setting is 0 to 10 V, or 0 to 140 Ohm.
P-AIMS. Panasonic Total Air Conditioning Management System

P-AIMS Basic software / CZ-CSWKC2
/ Up to 1024 indoor units can be controlled by one PC /

Functions of basic software
• Standard remote control 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 max. 8 C/A units, and control max. 512 units. In total, 1024 indoor units can be controlled by 1 ”P-AIMS” PC.

PC Environment:
XP Professional
CPU: Pentium 2.8 GHz or over
Memory: 2 GB or over
HDD: 100 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 for Load distribution
Load distribution calculation for each tenant
• Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m³, kWh).
• Calculated data is stored as a CSV type file.
• Data from the last 365 days is stored.

P-AIMS optional software CZ-CSWWC2 for Web application
Web access & control from remote station
• Accessing P-AIMS software from remote PC.
• You can monitor/operate ECOi 6N system by using Web browser (Internet Explorer).

P-AIMS optional software CZ-CSWG2C2 for Object layout display
Whole system can be controlled visually
• 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 for BACnet software interface
Connectable to BMS system
• Can communicate with other equipment by BACnet protocol.
• ECOi 6N system can be controlled by both BMS and P-AIMS.
• Max. 255 indoor units can be connected to 1 PC (that has P-AIMS basic & BACnet software).
Control your comfort and efficiency with the lowest energy consumption

What’s Internet Control?
Internet Control is a next generation system providing a user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android or iOS Smartphone, tablet or PC via internet.

Simple Installation
Just connect the Internet Control device to the air conditioner or heat pump with the supplied wire and then link it to your WIFI Access point.

Internet Control. Easy to install. Maximum benefit
Internet Control is underlined with the slogan “Your home in the cloud”, meaning a simple and easy to handle solution has been considered for every user to manage the device, not requiring any communication or computer skills.
No servers. No adaptors. No wires. Just a small box is needed to be connected and placed close to the air conditioning indoor unit... and your Smartphone, tablet or PC.
Start the App from your Smartphone device, your tablet or your computer, and enjoy a new experience in comfort. An intuitive and user-friendly application on the screen of your Smartphone or PC that lets you manage the air conditioning unit in the same way you do with the remote controller. Internet Control can be downloaded in Apple’s AppStore and Android’s PlayStore.

Control your air conditioning with the smart internet control device via Smartphones, tablet, PC and smart desktop phone via internet
Offering the same functions as if you were at home or office: start/stop, Mode Operation, Set Temperature, Room Temperature etc as well as the new, advanced functionality provided by Internet Control to achieve the best comfort and efficiency with the lowest energy consumption.

Study Case. Alice, Shop Owner
“I want maximum comfort and the best savings for my shop. And I manage to get these in the easiest and most natural way possible. From my Smartphone, something I always carry with me, I can control the temperature of my shop and in this way, as well as maintaining an ideal temperature I also save a small fortune in electricity at the end of the year.”
Panasonic Partners have designed solutions specifically for Panasonic air conditioners, and provide complete monitoring, control and full functionality of the entire Commercial line-up from KNX / EnOcean / Modbus / LonWorks / BACnet installations.

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

For more information, contact Panasonic.

---

**Easy control by BMS CONNECTIVITY**

<table>
<thead>
<tr>
<th>PANASONIC MODEL NAME</th>
<th>INTERFACE</th>
<th>CONNECTED ON THE INDOOR UNIT</th>
<th>MAX NUMBER OF INDOOR UNITS CONNECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAW-RC2-KNX-1</td>
<td>KNX</td>
<td>Indoor unit</td>
<td>1 (1 Group of Indoor units)</td>
</tr>
<tr>
<td>PAW-RC2-MBS-1</td>
<td>Modbus RTU**</td>
<td>Indoor unit</td>
<td>1 (1 Group of Indoor units)</td>
</tr>
<tr>
<td>PAW-RC2-ENO-1</td>
<td>EnOcean</td>
<td>Indoor unit</td>
<td>1 (1 Group of Indoor units)</td>
</tr>
<tr>
<td>PA-RC2-WIFI-1</td>
<td>IntesisHome</td>
<td>Indoor unit</td>
<td>1 (1 Group of Indoor units)</td>
</tr>
</tbody>
</table>

* Interface Modbus RTU/TC is needed

---

**AIRZONE. CONTROL OF THE PACI HIDE AWAYS**

Airzone has developed interfaces to easily connect to Panasonic PACi 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 RC (wireless, ...)

Interface dimensions: 120 x 25 x 65 cm (W x H x D). Interfaces must be purchased direct from Airzone.
Example of BMS connection for air conditioner central control system

A/C unit settings
- Unit ON/OFF
- Mode-change
- Room temperature setting
- Fan speed setting
- Flap setting
- Central control setting
- Filter-sign clear
- Alarm reset

A/C unit status
- Unit ON/OFF status
- Operation mode
- Setting temperature
- Fan speed status
- Flap status
- Central control setting
- Filter-sign situation
- Correct/incorrect status
- Alarm code
PACi Connectivity indoor units

**T10 connector (CN015)**

**PCB’s and Cables for PACi/VRF Indoor Units**

<table>
<thead>
<tr>
<th>Name of the Cables</th>
<th>Function</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZ-T10</td>
<td>All T10 functions</td>
<td>Requires field supplied accessory</td>
</tr>
<tr>
<td>PAW-FDC</td>
<td>Operate external fan</td>
<td>Requires field supplied accessory</td>
</tr>
<tr>
<td>PAW-OCCT</td>
<td>All option monitoring signals</td>
<td>Requires field supplied accessory</td>
</tr>
<tr>
<td>PAW-EXT</td>
<td>Forced Thermo OFF/Leakage D.</td>
<td>Requires field supplied accessory</td>
</tr>
</tbody>
</table>

**Name of the PCB**

<table>
<thead>
<tr>
<th>Name of the PCB</th>
<th>Function</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAW-T10</td>
<td>All T10 functions</td>
<td>Allows easy connection “Plug &amp; Play”</td>
</tr>
<tr>
<td>PAW-T10V</td>
<td>All T10 functions + powermonitoring</td>
<td>Same like PAW-T10 + monitoring the power supply of indoor unit</td>
</tr>
<tr>
<td>PAW-T10H</td>
<td>ON/OFF; Prohibit SVD &amp; 230VAC</td>
<td>Specials for single hotel card or window contact</td>
</tr>
<tr>
<td>PAW-T10HW</td>
<td>ON/OFF; Prohibit SVD</td>
<td>For hotel card + window contact at same time</td>
</tr>
<tr>
<td>PAW-PACR2</td>
<td>Redundancy of 2 systems; T monitor</td>
<td>Redundancy of 2 PACi systems including temperature monitoring an equal operating time</td>
</tr>
<tr>
<td>PAW-PACR3</td>
<td>Redundancy of 3 systems; T monitor</td>
<td>Redundancy of 3 PACi systems including temperature monitoring an equal operating time</td>
</tr>
<tr>
<td>PAW-ECF</td>
<td>Fan speed control external EC Fan</td>
<td>For external production Air Curtain units allow the EC Fan control by standard VRF IU PCB</td>
</tr>
</tbody>
</table>

**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)**


- 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 cannot work).

**Operation ON/OFF signal output**

- Condition: 4-5 (Static output): 12 V output during the unit ON / No output at OFF

- Example of wiring

**Example of Applications**

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**Example of Applications**

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- Condition: 4-5 (Static output): 12 V output during the unit ON / No output at OFF

- Example of wiring
Fan Drive Connector (CN017)

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 (CN017).

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

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.

- 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

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 I_U is possible!

4P (WHITE): OUTPUTS EXTERNAL SIGNALS AS SHOWN IN THE FIGURE BELOW.

- Examples of wiring:

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 (CN017).

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- Displayed alarm message P14

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With the combination of the T10 and the option CN060 an external control of the I_U is possible!

4P (WHITE): OUTPUTS EXTERNAL SIGNALS AS SHOWN IN THE FIGURE BELOW.

- Examples of wiring:
Why renewal?

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 Community.

Panasonic are doing our 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 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 system you can benefit from around 30% running cost saving compared to the R22 system.

The installation can also qualify for the government’s ECA (Enhanced Capital Allowance Scheme) which enables you to offset the cost against your Capital Gains Tax.

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 RENEWAL

Possible to use on R22 pipings
R22 RENEWAL

Reuse of existing piping (Renewal Design & Installation)

Notes on Reuse of Existing Refrigerant Piping

It is possible for each series of PE1 type and PEY1 type outdoor unit to reuse the existing refrigerant piping without cleaning when obtained a certain condition. 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, 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 type, use our genuine branch piping for refrigerant R410A.

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 R410A becomes higher compared to R22. 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 discolored 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 R410A.

- 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 R410A.

1. In case of single unit
It is not necessary to charge with additional refrigerant until the charge less 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.

NOTES ON RENEWAL FOR SIMULTANEOUS OPERATION OF MULTIPLE UNITS

<table>
<thead>
<tr>
<th>Capacity class</th>
<th>Standard piping size</th>
<th>Liquid pipe</th>
<th>Gas pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 50</td>
<td>Ø6.35</td>
<td>Ø12.7</td>
<td></td>
</tr>
<tr>
<td>Type from 60 to 140</td>
<td>Ø9.52</td>
<td>Ø15.88</td>
<td></td>
</tr>
<tr>
<td>Type 200</td>
<td>Ø9.52</td>
<td>Ø25.4</td>
<td></td>
</tr>
<tr>
<td>Type 250</td>
<td>Ø12.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 PE1 Type and PEY1 Type Outdoor Unit

- Use our genuine branch piping for refrigerant R410A.
- Re-process the flare of existing piping for R410A and use the flare nut attached to the service valve of the outdoor unit (for R410A).

-Collect the refrigerant by the refrigerant recovery equipment.
-Remove existing indoor and outdoor units
-Check inside the piping from the pipe end.
-Is the oil remained inside the piping transparent?
-Is the residue inside the piping removed?
-Has the compressor in existing air conditioner been operated without any trouble?

- Carry out the installation work according to Installation Instructions.
- Be sure to install a new piping.
- Wash it thoroughly or make sure to install a new piping. Existing refrigerant piping cannot be used as is.

<table>
<thead>
<tr>
<th>OPPOSITE SIDE DIMENSION OF FLARE NUT (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piping size</td>
</tr>
<tr>
<td>For R410A</td>
</tr>
<tr>
<td>For R22/R407C</td>
</tr>
</tbody>
</table>

Level “3 Over” according to color scale level
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)

<table>
<thead>
<tr>
<th>Material</th>
<th>Ø6.35</th>
<th>Ø9.52</th>
<th>Ø12.7</th>
<th>Ø15.88</th>
<th>Ø19.05</th>
<th>Ø22.22</th>
<th>Ø25.4</th>
<th>Ø28.58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* 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: 3.6 - 14.0 kW TYPE (mm)

<table>
<thead>
<tr>
<th>Liquid pipe</th>
<th>Ø6.35</th>
<th>Ø9.52</th>
<th>Ø12.7</th>
<th>Ø15.88</th>
<th>Ø19.05</th>
<th>Ø22.22</th>
<th>Ø25.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas pipe</td>
<td>Ø9.52</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
</tr>
</tbody>
</table>

#### PE

<table>
<thead>
<tr>
<th>Type 50</th>
<th>Standard</th>
<th>40 m (30 m)</th>
<th>40 m (30 m)</th>
<th>20 m (15 m)</th>
<th>20 m (15 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 60</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
</tr>
<tr>
<td>Type 71</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
</tr>
</tbody>
</table>

#### PEY

<table>
<thead>
<tr>
<th>Type 60</th>
<th>Ø12.7</th>
<th>Ø15.88</th>
<th>Ø19.05</th>
<th>Ø19.05</th>
<th>Ø19.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 71</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
</tr>
<tr>
<td>Type 100</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
</tr>
</tbody>
</table>

**Additional refrigerant charging amount per 1 m**

<table>
<thead>
<tr>
<th>PE</th>
<th>20 g/m</th>
<th>40 g/m</th>
<th>80 g/m</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEY</td>
<td>20 g/m</td>
<td>40 g/m</td>
<td>80 g/m</td>
</tr>
</tbody>
</table>

### TABLE 2 - 2 REFRIGERANT PIPING SIZE: 20.0 - 25.0 kW TYPE (mm)

<table>
<thead>
<tr>
<th>Liquid pipe</th>
<th>Ø9.52</th>
<th>Ø12.7</th>
<th>Ø15.88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas pipe</td>
<td>Ø22.22</td>
<td>Ø25.4</td>
<td>Ø28.58</td>
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</tbody>
</table>

#### PE

<table>
<thead>
<tr>
<th>Type 200</th>
<th>Standard</th>
<th>100 m (30 m)</th>
<th>100 m (30 m)</th>
<th>50 m (15 m)</th>
<th>50 m (15 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 250</td>
<td>Ø12.7</td>
<td>Ø15.88</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
<td>Ø19.05</td>
</tr>
</tbody>
</table>

**Additional refrigerant charging amount per 1 m**

<table>
<thead>
<tr>
<th>PE</th>
<th>60 m (30 m)</th>
<th>60 m (30 m)</th>
<th>60 m (30 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEY</td>
<td>60 m (30 m)</td>
<td>60 m (30 m)</td>
<td>60 m (30 m)</td>
</tr>
</tbody>
</table>

**Additional refrigerant charging amount per 1 m**

<table>
<thead>
<tr>
<th>PE</th>
<th>60 g/m</th>
<th>120 g/m</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEY</td>
<td>60 g/m</td>
<td>120 g/m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>≥ 10 m (6 m)</th>
<th>≥ 10 m (6 m)</th>
<th>≥ 10 m (6 m)</th>
<th>≥ 10 m (6 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 10 m (6 m)</td>
<td>≥ 10 m (6 m)</td>
<td>≥ 10 m (6 m)</td>
<td>≥ 10 m (6 m)</td>
</tr>
</tbody>
</table>

### TABLE 3 DETERIORATION CRITERIA FOR REFRIGERANT OIL

| 0  | 0.5 | 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 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

**Additional refrigerant charging amount per 1 m**

<table>
<thead>
<tr>
<th>PE</th>
<th>60 g/m</th>
<th>120 g/m</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEY</td>
<td>60 g/m</td>
<td>120 g/m</td>
</tr>
</tbody>
</table>

**Allowable**

| Cooling capacity down | Limited piping length | Unallowable | Maximum piping length (50 m) | Charge loss piping length in a single connection |
PKEA dimensions

Wall Mounted PKEA

Relative position between the Indoor Unit and the Installation Plate (Front View)

Installation plate
Indoor unit external dimensions line

Air intake direction
Left piping hole
Right piping hole

Installation plate
Indoor unit external dimensions line

Unit: mm

CS-E9PKEA / CS-E12PKEA / CS-E15PKEA

Anchor Bolt Pitch 330 x 540

CS-E18PKEA

Anchor Bolt Pitch 383 x 612.5

A

3-way valve at gas side (Low Pressure)
3-way valve at liquid side (High Pressure)

2-way valve at liquid side (High Pressure)
2-way valve at liquid side (Low Pressure)

Space necessary for installation

Space necessary for installation

CS-09PKA CS-12PKA CS-15PKA
PACi Standard and Elite dimensions

**Wall**

![Wall Diagram]

**4-Way 60x60 Cassette**

![A VIEW Diagram]

- 1 Air intake
- 2 Discharge outlet
- 3 Refrigerant tubing (liquid tube) Ø6.35 (flared)
- 4 Refrigerant tubing (gas tube) Ø12.7 (flared)
- 5 Drain tube connection port VP20 (outer dia. Ø26a)
- 6 Power supply port
- 7 Suspension bolt hole (4-12 x 30 hole)
- 8 Fresh air intake duct connection port (Ø100)

**Dimensions**

Unit: mm
PACi Standard and Elite dimensions

4 Way 90x90 Cassette

<table>
<thead>
<tr>
<th>Type</th>
<th>36-50</th>
<th>60-140</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Air intake grill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Air discharge outlet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Refrigerant piping (liquid pipes)</td>
<td>Ø6.35 (flared)</td>
<td>Ø9.52 (flared)</td>
</tr>
<tr>
<td>4 Refrigerant piping (gas pipes)</td>
<td>Ø12.7 (flared)</td>
<td>Ø15.88 (flared)</td>
</tr>
<tr>
<td>5 Drain outlet VP50</td>
<td>outer Ø32</td>
<td></td>
</tr>
<tr>
<td>6 Power supply port</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Discharge duct</td>
<td>Ø150</td>
<td></td>
</tr>
<tr>
<td>8 Suspension bolt hole</td>
<td>4-12x30 slotted</td>
<td></td>
</tr>
<tr>
<td>9 Fresh air intake duct connection port</td>
<td>Ø100°</td>
<td></td>
</tr>
</tbody>
</table>

1 Air inlet kit is necessary.
Filter size: 520 x 520 x 16

Adjust the suspension bolt length so that the gap from the lower ceiling surface becomes 30 mm or more (18 mm or more from the lower surface of the body) as shown in the figure. When the suspension bolt length is long, it hits the ceiling panel and installation is not possible.

Unit: mm

Low Static Pressure Hide Away

S-36PN1E5 // S-45PN1E5 // S-50PN1E5

Type | 36-71 | 100-140 |
A | 256 | 270 |
B | 124 | 129 |

S-60PN1E5 // S-71PN1E5

S-100PN1E5 // S-125PN1E5 // S-140PN1E5

Unit: mm
High Static Pressure Hide Away

1. Refrigerant tubing joint (liquid tube)
2. Refrigerant tubing joint (gas tube)
3. Upper drain port VP25 (O.D. 32 mm)
4. Bottom drain port VP25 (O.D. 32 mm)
5. Suspension lag (60 × 12 × 30 mm)
6. Power supply outlet
7. Fresh air intake port (185 mm)
8. Flange for flexible air outlet duct
9. Electrical component box
10. Filter

Position of Suspension Bolt

<table>
<thead>
<tr>
<th>Type</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>36, 45, 50</td>
<td>857</td>
<td>800</td>
<td>458 (Pitch 156 × 3)</td>
<td>71</td>
<td>572</td>
<td>12</td>
</tr>
<tr>
<td>60, 71</td>
<td>1,167</td>
<td>1,000</td>
<td>716 (Pitch 156 × 5)</td>
<td>21</td>
<td>792</td>
<td>16</td>
</tr>
<tr>
<td>100, 125, 140</td>
<td>1,447</td>
<td>1,400</td>
<td>1,000 (Pitch 156 × 7)</td>
<td>75</td>
<td>1,792</td>
<td>20</td>
</tr>
</tbody>
</table>

Ceiling

1. Drain port VP20 (inner Ø25, hose accessory)
2. Drain for left piping
3. Upper piping outlet port (knock-out hole)
4. Right piping outlet port (knock-out hole)
5. Drain left piping outlet port (knock-out hole)
6. Power supply entry port (knock-out hole Ø40)
7. Remote controller wiring inlet port
8. Wireless remote control receiver mounting part

<table>
<thead>
<tr>
<th>Type</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 to 50</td>
<td>Ø12.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 to 140</td>
<td>Ø15.88</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
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<thead>
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<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 to 50</td>
<td>Ø6.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 to 140</td>
<td>Ø9.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PACi Standard and Elite dimensions

High Static Pressure Hide Away 20.0-25.0 kW

1 Refrigerant piping (liquid pipes)
20.0 kW type: Ø9.52/Ø12.7 (With reducer Ø9.52/Ø12.7)
25.0 kW type: Ø12.7
2 Refrigerant piping (gas pipes) Ø7.9
3 Power supply outlet
4 Power supply outlet Ø25.4 mm in size
5 Drain port 25 A, male thread
6 Duct connection for suction
7 Duct connection for discharge

Unit: mm

Outdoor Unit PACi Standard 6.0 and 7.1 kW and PACi Elite 5.0 kW

1 Refrigerant piping (liquid pipes)
 Ø9.52 mm (50)
 Ø9.52 mm (60, 71)
2 Refrigerant piping (gas pipes)
 Ø12.7
3 Power supply outlet
4 Power supply outlet (spare)
5 Drain port
6 Duct connection for suction
7 Duct connection for discharge

Unit: mm
Outdoor unit PACi Standard 10.0 and 12.5 kW and PACi Elite 6.0 and 7.1 kW

1. Mounting hole (ø4-R6.5), anchor bolt: M10
2. Refrigerant piping (liquid pipe), flared connection (ø9.52)
3. Refrigerant piping (gas pipe), flared connection (ø15.88)
4. Electrical wiring port (ø13)
5. Electrical wiring port (ø22)
6. Electrical wiring port (ø27)
7. Electrical wiring port (ø35)

Air intake or more
Air outlet or more
Space for piping, wiring and maintenance

Unit: mm
Outdoor unit PACi Standard 14.0 kW
and PACi Elite from 10.0 to 14.0 kW

1 Mounting hole (Ø6.5), anchor bolt : M10
2 Refrigerant piping (liquid pipe), flared connection (Ø9.52)
3 Refrigerant piping (gas pipe), flared connection (Ø15.88)
4 Electrical wiring port (Ø13)
5 Electrical wiring port (Ø22)
6 Electrical wiring port (Ø27)
7 Electrical wiring port (Ø35)

Air intake

Air discharge

Unit: mm
Outdoor unit PACi Elite 20.0 and 25.0 kW

1 Mounting holes (4 x R6.5), anchor bolt : M10
2 Refrigerant tubing (liquid tube), flared connection (20kW: Ø9.52, 25kW: Ø12.7)
3 Refrigerant tubing (gas tube), flared connection (Ø19.05)
4 Refrigerant tubing port
5 Electrical wiring port (Ø16)
6 Electrical wiring port (Ø19)
7 Electrical wiring port (Ø29)
8 Electrical wiring port (Ø38)

Remark:
There are two types of supplied tubings. The one tubing port ø19.05 (flare process) is connected to the flared connection of the gas port side’s service valve. The other “L” shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing (ø25.4).

Name | Figure | Qty
--- | --- | ---
Reducing Joint Tube (Ø19.05 ➡ Ø25.4) | 1
Joint Tube (Ø19.05) | 1

Of the 4 ø32 holes, use 1 of the 2 holes specified for drain use to install the port. Use rubber plugs to seal the remaining 3 holes.

Air intake

Air discharge

Unit: mm
Panasonic