

New refrigeration range  
2021 / 2022

Bringing nature's  
balance indoors



# Panasonic condensing units with natural refrigerant



Panasonic's CR Series of CO<sub>2</sub> condensing units provide the ideal solution for supermarkets, convenience stores and gas stations.

Keeping food always fresh at right temperature in showcases or cold rooms is a very critical point. And one of the biggest challenges for those retailers has been the expensive effects of refrigeration breakdowns which can result in costly product wastage.



**CHOOSE THE GREEN SOLUTION BY PANASONIC**  
Environmentally friendly CO<sub>2</sub> condensing units

CO <sub>2</sub> condensing units				Medium temperature solutions with PACi NX
MT/LT Type	MT Type	MT Type	MT/LT Type	
<b>Capacity range</b>				<b>Capacity range</b>
4 kW (MT) / 2 kW (LT)	7,5 kW	15 kW	16 kW (MT) / 8 kW (LT)	2,1 to 23,2 kW
<b>Low temperature</b>				<b>Low temperature</b>
✓	—	—	✓	—
<b>Medium temperature</b>				<b>Medium temperature</b>
—	✓	—	✓	✓
<b>Heat recovery port</b>				<b>Heat recovery port</b>
—	✓	—	✓	—
<b>ET (Evaporation Temperature) set points range</b>				<b>Room temperature set point</b>
-45 ~ -5 °C	-20 ~ -5 °C	-20 ~ -5 °C	-45 ~ -5 °C	+8 ~ +24 °C WB
<b>Room size example*</b>				
40 m <sup>2</sup> (MT) / 10 m <sup>2</sup> (LT)	80 m <sup>2</sup>	200 m <sup>2</sup>	200 m <sup>2</sup> (MT) / 50 m <sup>2</sup> (LT)	

\* Room size is reference. Please contact to authorized Panasonic dealer for calculation.

### Energy saving



**Natural CO<sub>2</sub> / R744.**  
R744 refrigerant provides higher energy saving and lower CO<sub>2</sub> emission compared to R404A. Zero ODP and GWP=1 means natural substance.



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



**High efficiency compressor.**  
Powerful 2-stage CO<sub>2</sub> rotary compressor by Panasonic. It delivers high performance all year around.

### High connectivity



**BMS connectivity.**  
The system can be supervised with major monitoring system.

### High performance and comfortability



**Super quiet.**  
Systems operate extremely quiet. Minimum 33 dB(A) @10 m with 4 HP model.



**Operation range up to 43 °C.**  
The system operates up to 43 °C, allowing for installation in various locations.



**Anti corrosion coating.**  
Selectable fin type with or without an anti corrosion coating. The anti corrosion coating prevents salt damage for a longer lifespan.



**Heat recovery port.**  
The heat recovery port is available to cut running costs as optional. By utilizing exhausted heat generated by refrigeration to the energy source for heating.



**Automatic fan.**  
Microprocessor control automatically adjusts the outdoor fan speed in CO<sub>2</sub> systems for efficient operation.



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

### Why CO<sub>2</sub>? : Natural refrigerant

EU F-Gas regulation is a key priority for European countries. It ensures compliance with the Kigali Amendment supporting international climate commitments on greenhouse gases and leading the global transition to climate-friendly HFC-free technologies. Carbon dioxide (R744) is regaining its place in the refrigeration world. Driven by environmental concerns, legislation now requires increased adoption of 'alternative' refrigerants, such as CO<sub>2</sub>. CO<sub>2</sub> is an environmentally-friendly solution, with zero ODP and "GWP" (Global Warming Potential)=1 means natural substance in the atmosphere.

In Europe a step-by-step HFC reduction has been in place since the F-Gas regulation was introduced in 2015. Countries all over the world have actively been preparing to enact the necessary domestic legislation to implement the agreement to reduce the use of HFCs. Panasonic is now able to provide a solution in Europe with CO<sub>2</sub> refrigeration systems to prevent global warming and to support environment-friendly retail operations. The following table shows how well R744 (CO<sub>2</sub>) performs regarding environmental impact and safety.

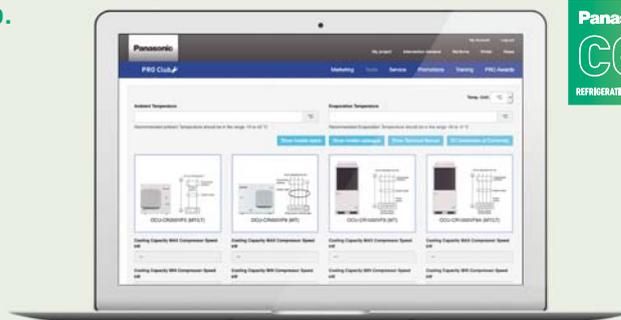
**ODP (Ozone Depletion Potential) = 0 - GWP (Global Warming Potential) = 1.**

	Next generation refrigerant			Current refrigerant	
	CO <sub>2</sub>	Ammonia	Isobutane	R410A	R404A
<b>ODP</b>	0	0	0	0	0
<b>GWP</b>	1	0	4	2090	3920
<b>Flammability</b>	Non flammable	Light flammable	Flammable	Non flammable	Non flammable
<b>Toxicity</b>	No	Yes	No	No	No

### Design support tool available in Panasonic PRO Club.

Panasonic has launched a new online calculator to support engineers, installers, and technicians to quickly make calculations when specifying solutions for commercial refrigeration systems. The calculator can be found on Panasonic's PRO Club.

- Evaporation temperature selection
- Cooling capacity calculator
- Refrigerant pipe calculation
- Electronic expansion valves calculation
- Refrigerant amount calculation



**Ready to works on all devices, computers, tablets and smartphones!!**



[www.panasonicproclub.com](http://www.panasonicproclub.com)  
or connect simply with your smartphone to the PRO Club using this QR



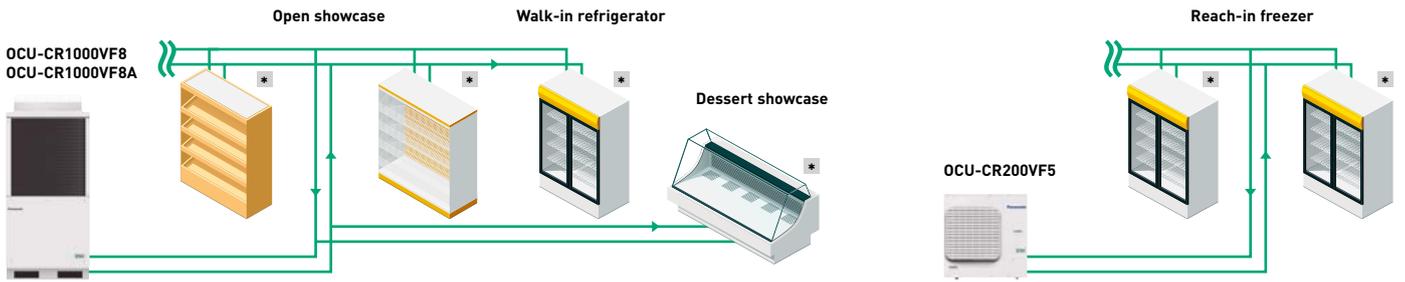
## Natural solution with high energy saving

Panasonic CO<sub>2</sub> condensing units with natural refrigerant: The environmentally friendly and reliable solution for convenience stores, supermarket, gas stations and cold rooms.



Showcases

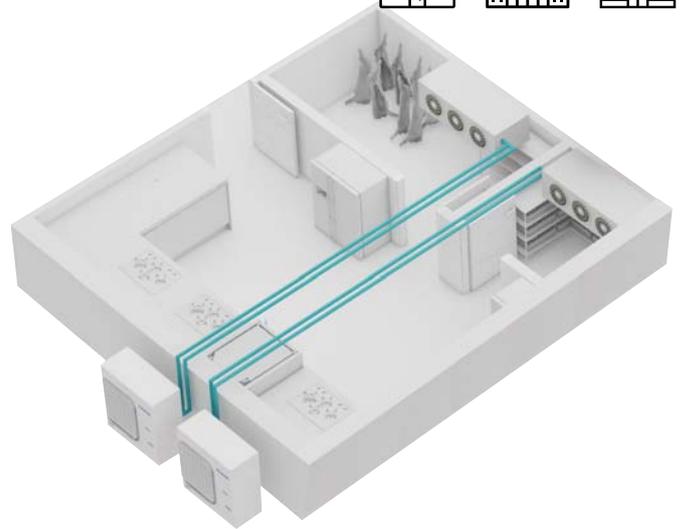
Convenience stores, supermarkets, service stations.



\* Controllers: PAW-CO2-PANEL or local supply.

Cold room application to keep food fresh

Restaurants, schools, fast food chains.



Cold room application integrated with PACi NX Series

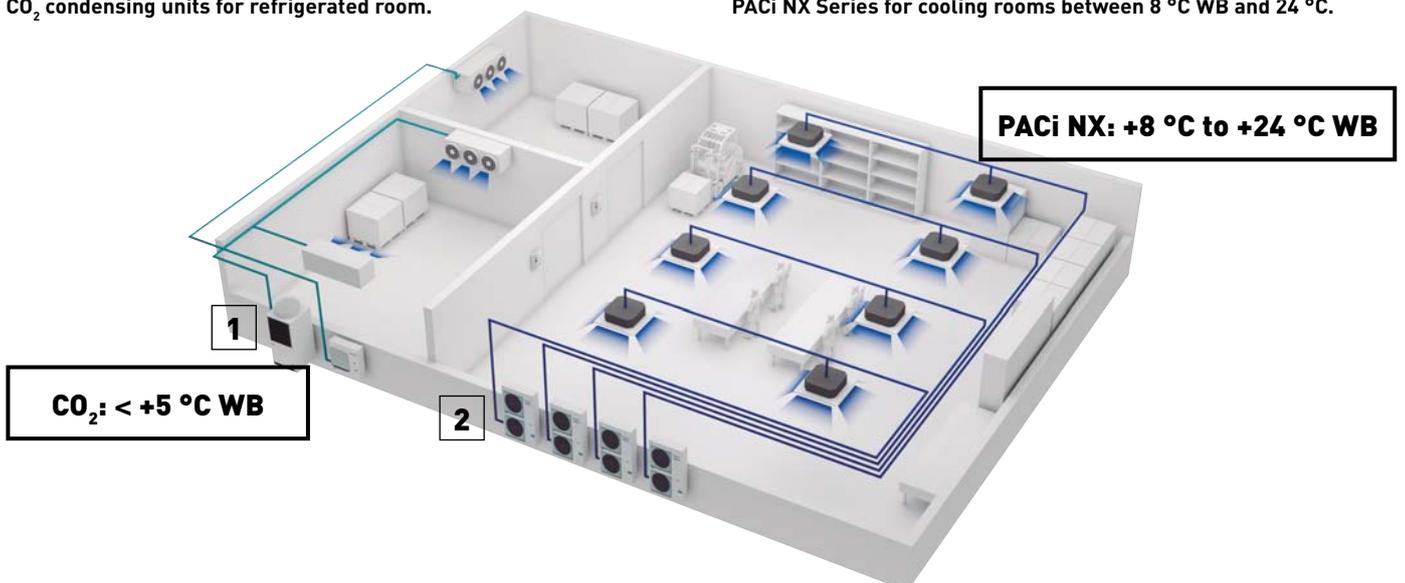
Panasonic offers various solutions for cold rooms by combining a wide range of products. Integrated with PACi NX Series, it allows for flexible design and installation.



CO<sub>2</sub> condensing units for refrigerated room.



PACi NX Series for cooling rooms between 8 °C WB and 24 °C.



## CO<sub>2</sub> transcritical condensing units CR Series

A new addition to the CR Series, the 7,5 kW MT Type offers a wide range of refrigeration systems, meeting the specific needs of small retail stores.



## 1 Superior efficiency with reliable quality

- Panasonic has combined the 2-stage compressor with the split cycle for increased efficiency
- High seasonal performance. SEPR: Maximum 3,83 in cooling, 1,92 in freezing<sup>1)</sup>
- High COP at high ambient temperature

1) 200VF5.

## 2 Flexible installation

- Set-points at medium or low temperature available depending on applications
- Compact unit
- Silent operation
- Long piping length: Maximum 100 m<sup>2)</sup>
- High external static pressure<sup>2)</sup>
- Transfer pressure control for stable expansion valve control in showcases<sup>2)</sup>

2) 1000VF8/8A.

## 3 Heat recovery port as renewable energy

- Maximum 16,7 kW of heating for free
- Optional possibility to get subsidy (depending on location)
- Easy connection process

### Superior cooling capacity at each evaporating temperature

CO<sub>2</sub> transcritical condensing units have a high cooling capacity at each set point. The CO<sub>2</sub> 2-stage compressor developed by Panasonic is designed to compress CO<sub>2</sub> refrigerant twice; it reduces the load in operation by half (compared to 1-stage refrigerant compression) and delivers increased durability and reliability.

Units can be programmed to run at low and medium temperatures at initial set-up. These settings can then be modified by turning a simple and user friendly rotary switch to further enhance energy savings.

MT/LT TYPE  
200VF5 - 4 kW / 2 kW

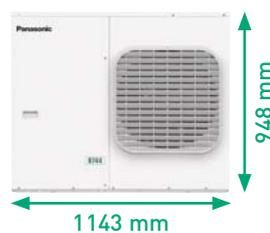
MT TYPE  
400VF8 - 7,5 kW

MT TYPE  
1000VF8 - 15 kW

MT/LT TYPE  
1000VF8A - 16 kW / 8 kW

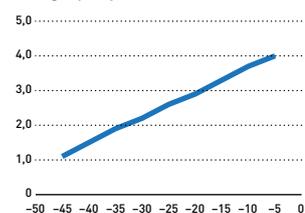
**3,83**  
SEPR COOLING\*

**1,92**  
SEPR FREEZING\*



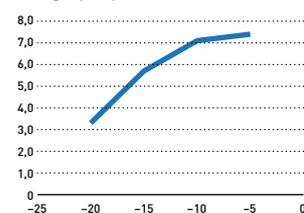
\* SEPR values has been tested at 3-part laboratory.

OCU-CR200VF5(SL)  
Cooling capacity (kW)



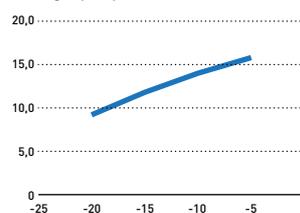
Ambient temperature: 32 °C, 230 V, refrigerant: R744, suction gas temperature: 18 °C.

OCU-CR400VF8(SL)  
Cooling capacity (kW)



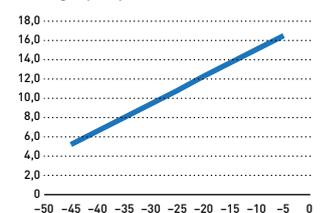
Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature: 18 °C.

OCU-CR1000VF8(SL)  
Cooling capacity (kW)



Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature: 18 °C.

OCU-CR1000VF8A(SL)  
Cooling capacity (kW)



Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature: 18 °C.

# Technology by Panasonic

Excellent quality control established by skilled factory team.  
Reliability is our main target and therefore we offer compressor warranties of 5 years, and 2 year warranties on other components!



## Reliable CO<sub>2</sub> technology by Panasonic

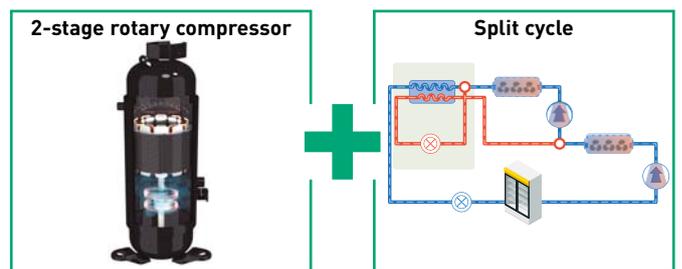
- Reliable quality: Made in Japan
- 10000 units sold and installed in 3700 retail operations such as convenience stores and supermarkets in Japan\*
- Excellent quality control established by skilled factory team
- Panasonic offers 5 year warranties on compressors and 2 years on components
- The 5 year compressor warranty matches the products long lifespan

\* As of the end of November 18.

## Panasonic's combined technology of the 2-stage compressor with the split cycle

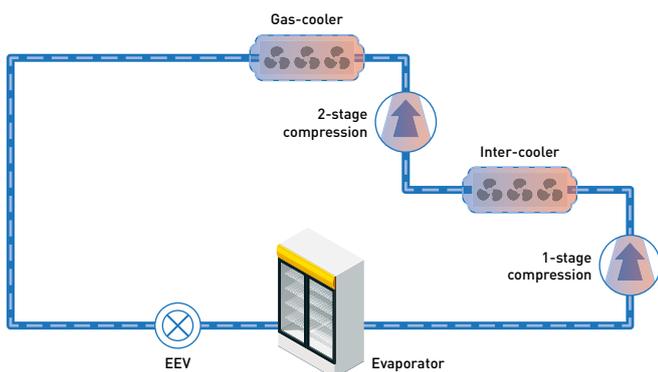
- Panasonic 2-stage rotary compressor delivering powerful performance for more than 20 years
- Split cycle\* enhances cooling effect

The video for detailed information is ready!

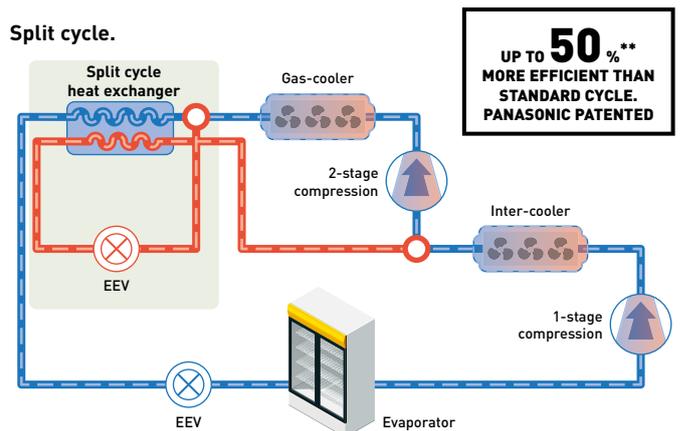


\* Available for 200VF5 and 1000VF8A models.  
\*\* In the case that the standard cycle with 1-stage rotary compressor was compared.

### Standard cycle.



### Split cycle.



### Heat recovery function for heating

This function offers refrigeration combined with heating all in one system. The ground-breaking solution allows for increased opportunity to cut running costs by utilizing exhausted heat from refrigeration and transferring to the energy source for heating.

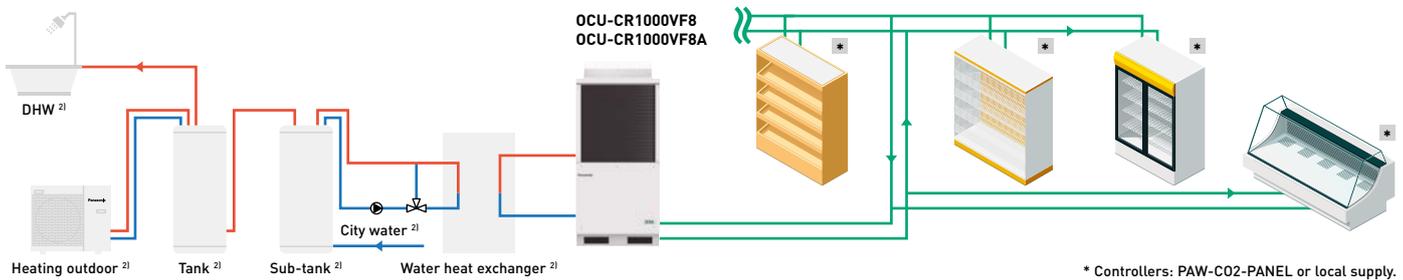
1) Under the condition: ambient temperature 32 °C, evaporation temperature -10 °C. 100 % Partial load.2) Local supply.

**16,7 kW<sup>1)</sup>**  
**OF HOT**  
**WATER FOR**  
**FREE**

#### What is heat recovery function?

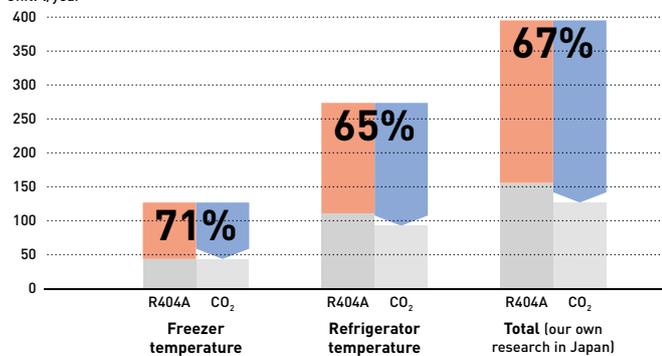
New solution example.

Heat recovery system can produce both heating and refrigeration.



### Comparison of CO<sub>2</sub> emissions

Unit: t/year



**ENERGY SAVING**  
25,4 % Freezer  
16,2 % Refrigeration

**CO<sub>2</sub> EMISSION**  
67 % Reduction

Direct influence <sup>1)</sup> Indirect influence <sup>2)</sup>

1) Direct influence presents the effect of refrigerant leakage comparing R744 [CO<sub>2</sub>] with R404A.  
2) Indirect influence presents CO<sub>2</sub> emissions linked to power consumption of CO<sub>2</sub> unit and conventional units.

By Panasonic research in Japan. Comparing 6 shops average for R404A inverter multi condensing unit.

### Saving installation time with Plug & Play kit

To ensure a quick and easy installation, Panasonic has designed a one box solution that includes the condensing unit, a panel pre-programmed controller, electronic expansion and all required sensors in addition to providing simple instructions.



**Panasonic condensing units with natural refrigerant:**  
**The environmentally friendly and reliable solution for convenience stores, supermarket, service stations and cold rooms.**

**Plug & Play kit**

Electronic expansion for superheat control.

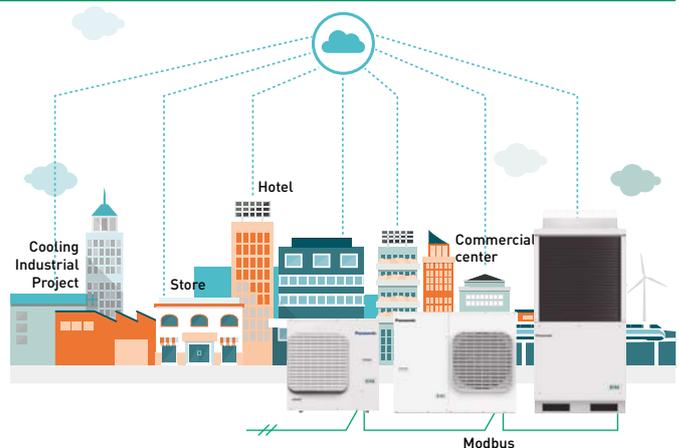
Intelligent controller programmed specially for storage rooms and showcases.

**Model code: PAW-C02-PANEL**

### Modbus compatibility with monitoring system

Panasonic CO<sub>2</sub> condensing unit CR Series can be supervised by major monitoring system such as CAREL, Eliwell, Danfoss and RDM. Monitoring system ensures the recording, monitoring and reporting of temperature conditions etc... of entire CO<sub>2</sub> condensing units system at shops.

Monitoring system			
Standard boss & boss-mini	AK-SM Series	TelevisGo	DMTOUCH



# Range of CO<sub>2</sub> condensing units CR Series

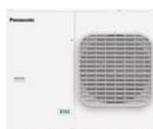
Outdoor units	MT	4,0 kW	7,0 kW	15,0 kW	16,0 kW
	LT	2,0 kW	3,5 kW	7,5 kW	8,0 kW

4 kW MT / LT  
(200VF5)



OCU-CR200VF5  
OCU-CR200VF5SL

7,5 kW MT  
(400VF8)



OCU-CR400VF8  
OCU-CR400VF8SL

15 kW MT  
(1000VF8)



OCU-CR1000VF8  
OCU-CR1000VF8SL

16 kW MT / LT  
(1000VF8A)



OCU-CR1000VF8A  
OCU-CR1000VF8ASL

PAW-CO2-PANEL



CO<sub>2</sub> Condensing units

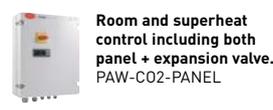


Standard model			OCU-CR200VF5	OCU-CR400VF8	OCU-CR1000VF8	OCU-CR1000VF8A
Anti corrosion coating model			OCU-CR200VF5SL	OCU-CR400VF8SL	OCU-CR1000VF8SL	OCU-CR1000VF8ASL
Type (MT: medium temp. LT: low temp.)			MT (4 kW) / LT (2 kW)	MT (7,5 kW)	MT (15 kW)	MT(16 kW) / LT (8 kW)
Power supply	Voltage	V	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415
	Phase		Single phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity at ET -10 °C AT 32 °C		kW	3,70	7,10	14,00	15,10
Cooling capacity at ET -35 °C AT 32 °C		kW	1,80	—	—	8,00
Evaporator connection			Multiple	Multiple	Multiple	Multiple
Evaporation temperature	Min ~ Max	°C	-45 ~ -5	-20 ~ -5	-20 ~ -5	-45 ~ -5
Ambient temperature	Min ~ Max	°C	-15 ~ +43	-15 ~ +43	-15 ~ +43	-15 ~ +43
Refrigerant			R744	R744	R744	R744
Design pressure liquid line		Mpa	12	8	8	8
Design pressure suction line		Mpa	8	8	8	8
User system external alarm. Digital input. Non-voltage contact			Yes	Yes	Yes	Yes
Liquid tube electromagnetic valve		Vac	220 / 230 / 240	380 / 400 / 415	220 / 230 / 240	220 / 230 / 240
Showcase operation ON/OFF signal. Digital input. Non-voltage contact			Yes	Yes	Yes	Yes
Modbus communication line (RS485)		Ports	2	2	2	2
Compressor type			2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary
Dimension	HxWxD	mm	930 x 900 x 437	948 x 1143 x 609	1941 x 890 x 890	1941 x 890 x 890
Net weight		Kg	70	136	293	320
Pipe diameter	Suction pipe	Inch (mm)	3/8(9,52)	1/2(12,70)	3/4(19,05)	3/4(19,05)
	Liquid pipe	Inch (mm)	1/4(6,35)	3/8(9,52)	5/8(15,88)	5/8(15,88)
Length of connection piping		m	25	50	100 <sup>1)</sup>	100 <sup>1)</sup>
Standard performance	Ambient temperature	°C	32	32	32	32
	Evaporating temperature	°C	-10	-10	-10	-10
	Cooling capacity	kW	3,70	1,80	7,10	14,00
	Power consumption	kW	1,79	1,65	4,00	8,20
	Nominal load ampere	A	7,94	7,26	6,14	12,60
	Sound pressure	dB(A)	35,5 <sup>2)</sup>	35,5 <sup>2)</sup>	33 <sup>3)</sup>	36,0 <sup>4)</sup>
PED	CAT		I	II	II	II
Air flow	m <sup>3</sup> /min		54	59	220	220
External static pressure		Pa	17	50	58	58
Heat recovery port			—	Yes	—	Yes
<b>Necessary accessories</b>						
Drier filter liquid line, diameter 6,35 mm		<b>D-152T</b>	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	—	—
Drier filter liquid line, diameter 15,88 mm		<b>D-155T</b>	—	—	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)
Suction filter, diameter 19,05 mm (outer diameter welding)		<b>S-008T</b>	—	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)

Accessories	
<b>PAW-CO2-PANEL</b>	Room and superheat control including both panel + expansion valve
<b>SPK-TU125</b>	Tube connector adaptor for vacuum and service

Spare parts for service and maintenance	
<b>80203517115003</b>	Lubrication oil PZ-68S (4 L)
<b>80203517117000</b>	Lubrication oil PZ-68S (0,5 L)
<b>80203513180000</b>	Filter dryer D-152T (type CO-082-S)
<b>80203513179000</b>	Filter dryer D-155T (type CO-085-S)

1) PZ-68S (refrigeration oil) must be added if >50 m. 2) ET-10 °C, 65 S-1, 10 m from product. 3) ET-10 °C, 80 S-1, 10 m from product. 4) ET -10 °C, 60 S-1, 10 m from product.



## Panasonic PACi NX Elite can cool rooms down to 8 °C



Panasonic PACi Elite offers a high quality and efficient solution for high temperature refrigeration applications for facilities such as wine cellars, food processing facilities and supermarkets.

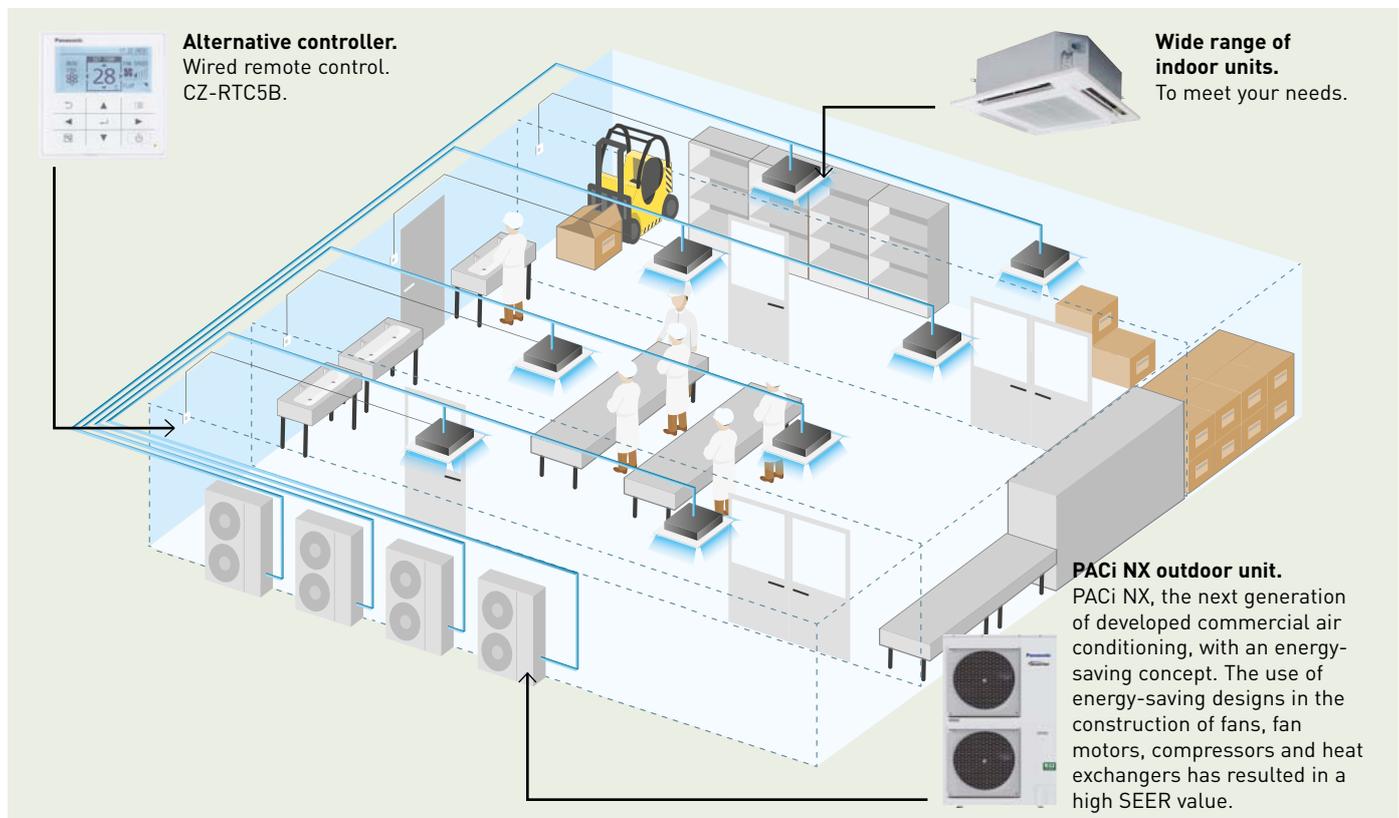


**COOLING ROOMS  
BETWEEN 8 °C WB  
AND 24 °C WB**

### Solutions for cold rooms. Set the room temperature to 8 °C

Complete range from 2,1 to 23,2 kW. This unique solution is perfect for:  
 Wine cellars, ice cream factories, flower shops, supermarkets, grain stores, food storage, food processing, food distribution, lunchrooms, vegetable processing...

Just like all the indoor units in the PACi NX range, these units are compatible with all Panasonic control and monitoring solutions, which can be scaled from controlling a single zone to monitoring geographically distributed facilities.



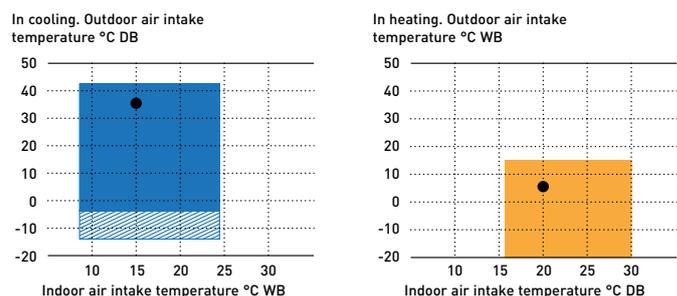
- Flexibility with different type of indoors
- Benefits of hydroxyl radicals
- Out of the box solution from Panasonic. Outdoor, indoor, controller comes as package
- Provides wide scale of control options (individual, central, cloud)
- Redundancy for 2 systems with the standard wired controller CZ-RTC5B and up to 3 systems with PAW-PCR3 optional redundancy controller



### Wine cellars and special low temperature rooms

One of the main features of the PACi NX series is the possibility of adjusting the product for special applications, not just for regular heating and cooling applications. The purpose of this product information is to explain in detail these special applications that need a cooling operation to maintain the room temperature at +8 ~ +24 °C WB (or +10 ~ +30 °C DB). In order to do this in terms of enthalpy, the indoor unit needs to be oversized and certain parameters need to be adjustable.

Temperature range – temperature range for wine cellar.



Only allowed after installation of wind and snow vents.

Area where cooling and heating capacity is established for this purpose.

Temperature range for wine cellar		
	Indoor	Outdoor
Cooling operation	+8 ~ +24 °C WB	-5 [-15] ~ 43 °C DB

# Bringing nature's balance indoors



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

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

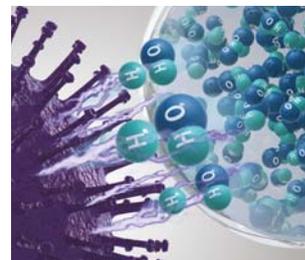


### Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment

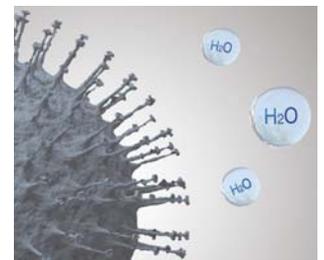
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



1 | nanoe™ X reliably reaches pollutants.



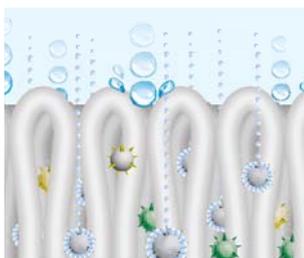
2 | Hydroxyl radicals denature pollutants' proteins.



3 | Pollutants activity is inhibited.

### What is unique about nanoe™ X?

#### Effective on fabrics and surfaces.



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

#### Longer lifespan.



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

#### Huge quantity.



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

#### Maintenance-free.



The image shows nanoe X Generator Mark 2.

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

## 7 effects of nanoe™ X – Panasonic unique technology

### Deodorises



Odours

### Capacity to inhibit 5 types of pollutants



Bacteria and viruses



Mould



Allergens



Pollen



Hazardous substances



Skin and hair

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

## nanoe™ X, internationally-validated technology in testing facilities

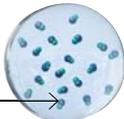
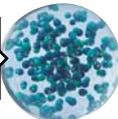
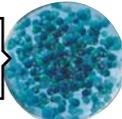
The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Malaysia and Japan.

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

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

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

## First nanoe™ device was developed by Panasonic in 2003

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

## nanoe™ X: improving protection 24/7



Acts to clean the work area, such as meat or fish handling in hotel kitchens, food handling in industrial processes, laboratories, wine cellars, etc. So that the indoor environment can be a cleaner and pleasant place to be all day long and keep the processes in better bacterial conditions.

nanoe™ X works together with the cooling function when during the day but can work independently when the area is not occupied.

Give the system the strength to increase the protection of persons, air, colds stuffs and working surfaces with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.



### Cleans the air even when there is no work activity.

Leave the nanoe™ X mode ON to inhibit certain pollutants and deodorize before start the work activity again.

### Improves your environment and better protects the products handled when you are or not at work.

Enjoy a cleaner comfortable space both when working indoors and simply when it comes to better protecting products in the cold room.

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



Wall-mounted.  
Built-in nanoe X Generator Mark 2.



Ceiling.  
Built-in nanoe X Generator Mark 2.



4 Way 90x90 cassette.  
Built-in nanoe X Generator Mark 1.



Adaptive ducted unit.  
Built-in nanoe X Generator Mark 2.

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2021

**nanoe™ X**  
nanoe™ X as a standard.

NEW PACi NX Series Elite wall-mounted Inverter+ • R32



Kit		Low temperature								
Indoor unit - 1		36	50	60	71	100	125	140		
Indoor unit - 2		S-6010PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3Ex2	S-6010PK3E	S-6010PK3E	S-6010PK3E		
Outdoor unit		U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH3E5/8	U-100PZH3E5/8	U-125PZH3E5/8	U-140PZH3E5/8		
Outdoor	Indoor									
35 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,90	9,30	11,60	13,60
		EER		4,55	3,83	3,56	3,14	3,60	3,09	3,19
		Input power cooling	kW	0,77	1,28	1,63	2,20	2,58	3,75	4,27
	12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,28	8,46	10,56	12,38
		EER		4,22	3,55	3,30	2,91	3,35	2,87	2,96
		Input power cooling	kW	0,75	1,25	1,60	2,16	2,53	3,68	4,18
	8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16
		EER		3,50	2,94	2,74	2,41	2,77	2,38	2,45
		Input power cooling	kW	0,60	1,00	1,27	1,72	2,01	2,93	3,33
30 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	7,04	9,95	12,41	14,55
		EER		5,29	4,45	3,86	3,40	4,19	3,60	3,70
		Input power cooling	kW	0,71	1,18	1,53	2,07	2,37	3,45	3,93
	12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,42	9,11	11,37	13,33
		EER		4,95	4,17	3,60	3,17	3,93	3,37	3,47
		Input power cooling	kW	0,69	1,15	1,50	2,02	2,32	3,38	3,84
	8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16
		EER		3,90	3,28	2,97	2,61	3,09	2,65	2,73
		Input power cooling	kW	0,54	0,90	1,17	1,58	1,81	2,63	2,99
7/6 °C (DB/WB)	20 °C (DB)	Heating capacity	kW	4,00	5,60	7,00	8,00	11,20	14,00	16,00
		COP		5,88	5,00	5,30	4,35	4,04	3,92	3,80
		Input power heating	kW	0,68	1,12	1,32	1,84	2,77	3,57	4,21
Indoor unit	Dimension (HxWxD)		mm	302 x 1120 x 236						
	Net weight		kg	14	14	14	14	14	14	14
	nanoe X Generator			Mark 2						
Outdoor unit	Dimension (HxWxD)		mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
	Net weight		kg	42	42	43	65	98	98	98

Accessories	
<b>CZ-RTC6</b>	CONEX wired remote controller (non-wireless)
<b>CZ-RTC6BL</b>	CONEX wired remote controller with Bluetooth®
<b>CZ-RTC6BLW</b>	CONEX wired remote controller with Wi-Fi and Bluetooth®
<b>CZ-RTC5B</b>	Wired remote controller with Econavi function and datanavi
<b>CZ-RWS3</b>	Infrared remote controller
<b>CZ-CAPWFC1</b>	Commercial Wi-Fi Adaptor

Accessories	
<b>PAW-PACR3</b>	Interfaces to run 3 units on Backup and alternative run
<b>PAW-WTRAY</b>	Tray for condenser water compatible with outdoor elevation platform
<b>PAW-GRDBSE20</b>	Outdoor base ground support for noise and vibration absorption
<b>PAW-GRDSTD40</b>	Outdoor elevation platform 400 x 900 x 400 mm
<b>CZ-CENSC1</b>	Econavi energy savings sensor

**Technical focus**

- Modern design with flat face and compact size
- DC fan for better efficiency and control
- Six directional piping outlet
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

**Closed discharge port**

When the unit is turned OFF, the flap closes completely to prevent dust getting into the unit and to keep the equipment clean.

**Quiet operation**

These units are among the quietest in the industry, making them ideal for all types of installations.

**Piping outlet in six directions**

Piping outlet is possible in the six directions of right, right rear, right bottom, left, left rear and left bottom, making the installation work easier.

NEW  
2021



**nanoe™ X**

nanoe™ X as a standard.

**NEW PACi NX Series Elite 4 way 90x90 cassette Inverter+ R32**



Kit		Low temperature										
		36	50	60	71	100	125	140	200	250		
<b>Indoor unit - 1</b>		<b>S-6071PU3E</b>	<b>S-6071PU3E</b>	<b>S-6071PU3E</b>	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>		
<b>Indoor unit - 2</b>		—	—	—	—	—	—	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>	<b>S-1014PU3E</b>		
<b>Outdoor unit</b>		<b>U-36PZH3E5</b>	<b>U-50PZH3E5</b>	<b>U-60PZH3E5</b>	<b>U-71PZH3E5/8</b>	<b>U-100PZH3E5/8</b>	<b>U-125PZH3E5/8</b>	<b>U-140PZH3E5/8</b>	<b>U-200PZH2E8</b>	<b>U-250PZH2E8</b>		
Outdoor	Indoor											
35 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,90	9,30	11,60	13,60	18,50	23,20
		EER		5,12	4,05	3,81	3,65	3,97	3,46	3,51	3,38	2,97
		Input power cooling	kW	0,68	1,21	1,52	1,89	2,34	3,35	3,88	5,48	7,82
	12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,28	8,46	10,56	12,38	16,84	21,11
		EER		4,78	3,76	3,54	3,39	3,69	3,22	3,25	3,13	2,75
		Input power cooling	kW	0,67	1,19	1,49	1,85	2,29	3,28	3,80	5,37	7,66
8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16	11,10	13,92	
	EER		3,96	3,12	2,94	2,81	3,06	2,66	2,70	2,60	2,28	
	Input power cooling	kW	0,53	0,94	1,19	1,47	1,83	2,61	3,03	4,27	6,10	
30 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	7,04	9,95	12,41	14,55	20,17	25,29
		EER		5,99	4,71	4,14	3,96	4,62	4,03	4,08	4,00	3,51
		Input power cooling	kW	0,63	1,11	1,43	1,78	2,15	3,08	3,57	5,04	7,19
	12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,42	9,11	11,37	13,33	18,50	23,20
		EER		5,60	4,41	3,86	3,69	4,33	3,77	3,82	3,75	3,30
		Input power cooling	kW	0,61	1,09	1,40	1,74	2,11	3,02	3,49	4,93	7,04
8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16	11,10	13,92	
	EER		4,41	3,47	3,18	3,04	3,41	2,97	3,00	2,89	2,54	
	Input power cooling	kW	0,48	0,85	1,09	1,36	1,64	2,35	2,72	3,84	5,47	
7/6 °C (DB/WB)	20 °C (DB)	Heating capacity	kW	4,00	5,60	7,00	8,00	11,20	14,00	16,00	22,40	28,00
		COP		6,44	5,05	4,79	4,68	5,21	4,86	4,89	4,39	3,99
		Input power heating	kW	0,62	1,11	1,46	1,71	2,15	2,88	3,27	5,10	7,01
Indoor unit	Dimension (HxWxD)	mm	256x840x840	256x840x840	256x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840	
	Net weight	kg	19	19	20	20	25	25	25	25	25	
	nanoe X Generator		Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	
Outdoor unit	Dimension (HxWxD)	mm	695x875x320	695x875x320	695x875x320	996x940x340	1416x940x340	1416x940x340	1416x940x340	1500x980x370	1500x980x370	
	Net weight	kg	42	42	43	65	98	98	98	117	128	

**Accessories**

<b>CZ-RTC6</b>	CONEX wired remote controller (non-wireless)
<b>CZ-RTC6BL</b>	CONEX wired remote controller with Bluetooth®
<b>CZ-RTC6BLW</b>	CONEX wired remote controller with Wi-Fi and Bluetooth®
<b>CZ-RTC5B</b>	Wired remote controller with Econavi function and datanavi
<b>CZ-RWS3 + CZ-RWRU3W</b>	Infrared remote controller
<b>CZ-CAPWFC1</b>	Commercial Wi-Fi Adaptor

**Accessories**

<b>CZ-KPU3AW</b>	Econavi exclusive panel
<b>PAW-WTRAY</b>	Tray for condenser water compatible with outdoor elevation platform
<b>PAW-GRDBSE20</b>	Outdoor base ground support for noise and vibration absorption
<b>PAW-GRDSTD40</b>	Outdoor elevation platform 400x900x400 mm
<b>CZ-FDU3+CZ-ATU2</b>	Fresh air-intake kit

**Technical focus**

- High performance turbo fan, path system for heat exchanger
- Econavi: An optional intelligent sensor to reduce waste of energy
- nanoe™ X (Generator Mark 1= 4,8 trillion hydroxyl radicals/sec) as standard for better indoor air quality, indoor unit internal cleaning with nanoe™ X and dry operation
- Lower noise in slow fan operation
- Light weight, easy piping and integrated drain pump for quick installation
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3+CZ-ATU2)

NEW  
2021

**nanoe™ X**  
nanoe™ X as a standard.

**NEW PACi NX Series Elite ceiling Inverter+ • R32**



Kit		Low temperature										
Indoor unit - 1		36	50	60	71	100	125	140	200	250		
Indoor unit - 2		—	—	—	—	—	—	S-1014PT3E	S-1014PT3E	S-1014PT3E		
Outdoor unit		U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH3E5/8	U-100PZH3E5/8	U-125PZH3E5/8	U-140PZH3E5/8	U-200PZH2E8	U-250PZH2E8		
Outdoor	Indoor											
35 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,90	9,30	11,60	13,60	18,50	23,20
		EER		4,67	3,71	3,63	3,67	3,92	3,30	3,45	3,32	2,92
		Input power cooling	kW	0,75	1,32	1,60	1,88	2,37	3,52	3,94	5,57	7,94
	12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,28	8,46	10,56	12,38	16,84	21,11
		EER		4,33	3,45	3,37	3,41	3,64	3,06	3,21	3,08	2,71
		Input power cooling	kW	0,74	1,29	1,57	1,84	2,32	3,45	3,86	5,46	7,78
8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16	11,10	13,92	
	EER		3,59	2,86	2,79	2,82	3,02	2,53	2,66	2,55	2,25	
	Input power cooling	kW	0,59	1,03	1,25	1,47	1,85	2,75	3,07	4,34	6,19	
30 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	7,04	9,95	12,41	14,55	20,17	25,29
		EER		5,43	4,32	3,93	3,98	4,56	3,83	4,01	3,94	3,46
		Input power cooling	kW	0,69	1,21	1,50	1,77	2,18	3,24	3,62	5,12	7,30
	12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,42	9,11	11,37	13,33	18,50	23,20
		EER		5,08	4,04	3,66	3,71	4,27	3,59	3,76	3,69	3,25
		Input power cooling	kW	0,68	1,19	1,47	1,73	2,13	3,17	3,55	5,01	7,15
8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16	11,10	13,92	
	EER		4,00	3,18	3,02	3,06	3,36	2,82	2,96	2,85	2,50	
	Input power cooling	kW	0,53	0,92	1,15	1,35	1,66	2,46	2,76	3,90	5,56	
7/6 °C (DB/WB)	20 °C (DB)	Heating capacity	kW	4,00	5,60	7,00	8,00	11,20	14,00	16,00	22,40	28,00
		COP		5,71	4,79	4,96	4,30	4,26	3,99	3,95	3,54	3,23
		Input power heating	kW	0,70	1,17	1,41	1,86	2,63	3,51	4,05	6,32	8,68
Indoor unit	Dimension (HxWxD)	mm	235x1275x690	235x1275x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	
	Net weight	kg	34	34	40	40	40	40	40	40	40	
	nanoe X Generator		Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	
Outdoor unit	Dimension (HxWxD)	mm	695x875x320	695x875x320	695x875x320	996x940x340	1416x940x340	1416x940x340	1416x940x340	1500x980x370	1500x980x370	
	Net weight	kg	42	42	43	65	98	98	98	117	128	

Accessories	
<b>CZ-RTC6</b>	CONEX wired remote controller (non-wireless)
<b>CZ-RTC6BL</b>	CONEX wired remote controller with Bluetooth®
<b>CZ-RTC6BLW</b>	CONEX wired remote controller with Wi-Fi and Bluetooth®
<b>CZ-RTC5B</b>	Wired remote controller with Econavi function and datanavi
<b>CZ-RW53 + CZ-RWRT3</b>	Infrared remote controller

Accessories	
<b>CZ-CAPWFC1</b>	Commercial Wi-Fi Adaptor
<b>PAW-WTRAY</b>	Tray for condenser water compatible with outdoor elevation platform
<b>PAW-GRDBSE20</b>	Outdoor base ground support for noise and vibration absorption
<b>PAW-GRDSTD40</b>	Outdoor elevation platform 400x900x400 mm
<b>CZ-CENSC1</b>	Econavi energy savings sensor

**Technical focus**

- Wide air distribution for large rooms
- Horizontal air flow reaches maximum 9,5 m
- Fresh air connection available on the unit
- Slim design with 235 m height fits narrow space
- Silent operation
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®
- Twin, Triple and Double-twin split options
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

**Further comfort improvement with airflow distribution**

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms. The wide air discharge opening expands the air flow to the left and the right. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, so that the degree of comfort is increased.

NEW  
2021

nanoe™ X

nanoe™ X as a standard.

NEW PACi NX Series Elite adaptive ducted unit Inverter+  
• R32



Kit		Low temperature										
			36	50	60	71	100	125	140	200	250	
Indoor unit - 1			S-6071PF3E	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E	
Indoor unit - 2			—	—	—	—	—	—	S-1014PF3E	S-1014PF3E	S-1014PF3E	
Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH3E5/8	U-100PZH3E5/8	U-125PZH3E5/8	U-140PZH3E5/8	U-200PZH2E8	U-250PZH2E8	
35 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	0,00	9,30	11,60	13,60	18,50	23,20
		EER		3,98	3,20	3,52	3,50	3,94	3,36	3,64	3,50	3,08
		Input power cooling	kW	0,88	1,53	1,65	1,97	2,36	3,45	3,74	5,29	7,54
	12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,28	8,46	10,56	12,38	16,84	21,11
		EER		3,69	2,97	3,26	3,25	3,66	3,12	3,38	3,25	2,86
		Input power cooling	kW	0,86	1,50	1,62	1,93	2,31	3,38	3,67	5,18	7,39
	8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16	11,10	13,92
		EER		3,06	2,46	2,70	2,69	3,03	2,59	2,80	2,69	2,37
		Input power cooling	kW	0,69	1,19	1,29	1,54	1,84	2,69	2,92	4,13	5,88
30 °C (DB)	15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	7,04	9,95	12,41	14,55	20,17	25,29
		EER		4,63	3,72	3,81	3,80	4,58	3,91	4,23	4,14	3,65
		Input power cooling	kW	0,81	1,41	1,55	1,85	2,17	3,17	3,44	4,87	6,94
	12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,42	9,11	11,37	13,33	18,50	23,20
		EER		4,33	3,49	3,55	3,54	4,29	3,66	3,96	3,89	3,42
		Input power cooling	kW	0,79	1,38	1,52	1,81	2,12	3,11	3,37	4,76	6,79
8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,58	6,96	8,16	11,10	13,92	
	EER		3,41	2,75	2,93	2,92	3,38	2,88	3,12	3,00	2,64	
	Input power cooling	kW	0,62	1,07	1,19	1,42	1,65	2,42	2,62	3,70	5,28	
7/6 °C (DB/WB)	20 °C (DB)	Heating capacity	kW	4,00	5,60	7,00	8,00	11,20	14,00	16,00	22,40	28,00
		COP		4,94	4,27	4,32	4,68	4,27	3,78	4,03	3,62	3,29
		Input power heating	kW	0,81	1,31	1,62	1,71	2,62	3,70	3,97	6,19	8,50
Indoor unit	Dimension (H x W x D)	mm	250x1000x730	250x1000x730	250x1000x730	250x1400x730	250x1400x730	250x1400x730	250x1400x730	250x1400x730	250x1400x730	
	Net weight	kg	30	30	30	39	39	39	39	39	39	
	nanoe X Generator		Mark 2	Mark 2	Mark 2	Mark 2	Mark 2					
Outdoor unit	Dimension (H x W x D)	mm	695x875x320	695x875x320	695x875x320	996x940x340	1416x940x340	1416x940x340	1416x940x340	1500x980x370	1500x980x370	
	Net weight	kg	42	42	43	65	98	98	98	117	128	

Accessories

<b>CZ-RTC6</b>	CONEX wired remote controller (non-wireless)
<b>CZ-RTC6BL</b>	CONEX wired remote controller with Bluetooth®
<b>CZ-RTC6BLW</b>	CONEX wired remote controller with Wi-Fi and Bluetooth®
<b>CZ-RTC5B</b>	Wired remote controller with Econavi function and datanavi
<b>CZ-RWS3 + CZ-RWRC3</b>	Infrared remote controller
<b>CZ-CAPWFC1</b>	Commercial Wi-Fi Adaptor

Accessories

<b>PAW-WTRAY</b>	Tray for condenser water compatible with outdoor elevation platform
<b>PAW-GRDBSE20</b>	Outdoor base ground support for noise and vibration absorption
<b>PAW-GRDSTD40</b>	Outdoor elevation platform 400x900x400 mm
<b>CZ-CENSC1</b>	Econavi energy savings sensor
<b>CZ-56DAF2</b>	Air outlet plenum for S-3650PF3E
<b>CZ-90DAF2</b>	Air outlet plenum for S-6071PF3E
<b>CZ-160DAF2</b>	Air outlet plenum for S-1014PF3E

Technical focus

- 2 installation possibilities (horizontal / vertical)
- Maximum external static pressure: 150 Pa
- Selectable inlet air position (rear / bottom entry)
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included
- nanoe™ X (Generator Mark 2= 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case\*
- Wired remote control CZ-RTC6BL allows easy system setting via Bluetooth®

\* The performance of nanoe™ X air can be expected even by 10 m long duct by Panasonic internal survey.

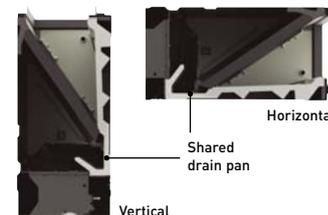
2 installation possibilities (horizontal / vertical)

Vertical installation is newly available. ESP 150Pa, sufficient for remotely installing units away from the rooms.



Improved drain pan design

Drain pan is shared in both cases horizontal and vertical installation. No need to alternate anymore.



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# Panasonic®

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Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of the other refrigerant.  
The outdoor units in this catalogue contains fluorinated greenhouse gases with a GWP higher than 150.

