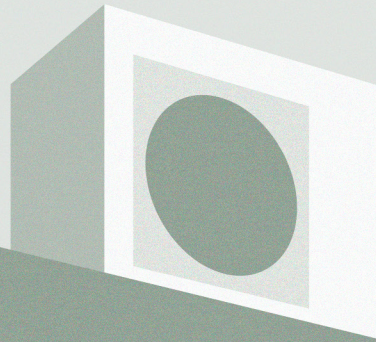# Panasonic

COMMERCIAL RANGE
2024 / 2025

PAC *i*

heating & cooling solutions

Panasonic Commercial air to air

Panasonic has developed an impressive range of highly efficient Commercial Air Conditioners. This range confirms our commitment to the environment, with our highly efficient Inverter compressor technology to optimise performance.

PAC i

Highlighted features

PACi: Commercial air to air. The compact and high efficiency solution for shops, restaurants, offices or residential applications.

Great savings and improved comfort. Panasonic has developed an impressive range of highly efficient Commercial air conditioners, with our highly efficient Inverter compressor technology to optimise performance.
A wide range for industry, office or residential application. With configuration from 1:1 to 4:1, Panasonic can offer the most comfortable climate with solutions designed for every environment.
The diverse array of connectivity and control systems allows you to manage your units whether locally or remotely. Receive real-time status updates and maintenance alerts, while optimising costs and energy usage.

Energy saving

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

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

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

Econavi.
Intelligent human activity sensor and sunlight sensor technologies that can detect and reduces the waste of energy by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy.

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

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

High efficiency compressor.
Panasonic Big PACi has compressors that operate with a wider Hz range realize a more efficient operation throughout the year.

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

Better efficiency and value for low temperature applications.
On an energy efficiency scale from D to A+++, both the PACi Water Heat Exchanger provide A++ rated heating.

High performance and indoor air quality

Down to -20 °C in cooling mode.
The air conditioner works in cooling mode when the outdoor temperature of -20 °C.

Down to -20 °C in heating mode.
The air conditioner works in heat pump mode when the outdoor temperature is as low as -20 °C.

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

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

DC fan.
Safe and precise.

Filter included.
Hide-away with filter included.

Bluefin.
Panasonic Big PACi has extended the life of its condensers with an original anti-rust coating.

Large fan.
Panasonic Big PACi large fan provides larger air flow rate and very quiet operation at low speed.

More comfort with Aerowings.
Panasonic's Aerowings feature incorporates two blades that concentrate the airflow to cool or heat in the shortest possible time by distributing the air evenly throughout the room. For wall-mounted YKEA.

Up to 46 °C in cooling mode.
PACi with Water Heat Exchanger system works in cooling mode at outdoor temperature up to 46 °C.

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

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

High connectivity

Panasonic AC Smart Cloud.
The AC Smart Cloud from Panasonic allows you to have complete control of all your installations. In a simple click, receive status updates from all your units in real-time, preventing breakdowns and optimising costs.

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

BMS connectivity.
The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic air conditioner to your home or Building Management System.

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

Advanced control.
A touch screen remote controller is included as a standard. Clean design, easy operation and quick access to all menus.

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.

R32
REFRIGERANT

Professional air conditioners with R32 refrigerant.

Panasonic recommends R32, with lower Global Warming Potential (GWP). Compared to R22 and R410A, R32 has a low potential impact on global warming.
Panasonic takes action in helping to protect the environment. In line with the European countries participating in the Montreal Protocol, protecting the ozone layer and preventing global warming, Panasonic is leading the switch to R32.

1 **Installation innovation**
· Extremely easy to install, practically the same as R410A
· Single substance refrigerant, which makes it easier to recycle and reuse

2 **Environmental innovation**
· Zero impact on the ozone layer
· 75% less impact on global warming

3 **Economic and energy consumption innovation**
· Lower cost and greater savings
· Higher energy efficiency than R410A

R32
GWP REDUCED BY
75%
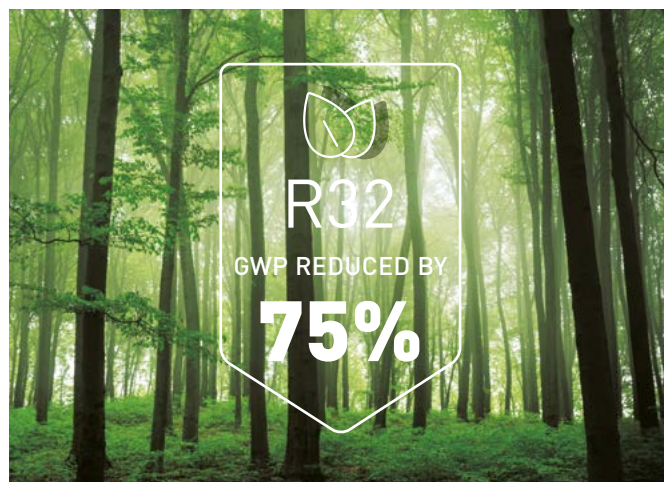
PACi NX Elite: Top-tier commercial air conditioning

The PAC NX Elite range has been expanded to include the Big PACi NX models 20,0-25,0 kW.
Outstanding performance at extreme ambient temperatures with very high energy efficiency both in heating and cooling. Fans, fan motors, compressors and heat exchangers engineered for maximum savings result in higher seasonal efficiencies, which ranks as one of the best in the industry, ensuring reduced CO_2 emissions, energy consumption and operating costs.

From 3,6 to 25,0 kW.
· Meeting all necessary approvals to ensure quality and safety

· Top class SEER: 8,9 A+++ / SCOP: 5,1 A+++ at 3,6 kW (in 90x90 cassette)
· A compact outdoor unit featuring a single fan across all the capacities
· Long piping allowance, maximum 100 m [1]
· Wide operation range, up to 52 °C in cooling and down to -20 °C in heating
· Auto restart after power outage
· Twin, triple and double-twin connections
· Compatible with AHU connection kit

1) For models 10,0 ~ 25,0 kW.

PACi NX Standard: For economy and value

With high quality design and engineering, the PACi NX Standard are the perfect solutions for projects which demand quality on a limited budget. In addition, compact and lightweight design makes them ideal for installations with limited space including small commercial and residential applications. The slim and lightweight outdoor unit design enables installation even in very challenging locations.

From 2,5 to 14,0 kW.
· Extended range of outdoor units starting from 2,5 kW
· Great balance of system cost and performance
· Top class SEER / SCOP in the standard Inverter category SEER: 8,1 A++ / SCOP: 4,8 A++ at 3,6 kW (in 90x90 cassette)
· Variety of individual and central controllers which provides full flexibility
· Compact outdoor units, small footprint and lightweight
· Twin connection possible from 10,0 to 14,0 kW
· Operation range, up to 43 °C in cooling and down to -15 °C in heating

Big PACi

20,0-25,0 kW is ideally suited for small and mid retail applications.
In addition to its lightweight, split-able, compact body, the hide-away unit enables easy installation and pipe work within a narrow void.

Panasonic Big PACi: Environmental friendly, strong and flexible.
· High efficiency with Panasonic compressor as the driving force

· Compact and light indoor body
· Easy pipe work with split-able hide-away indoor design
· Separable indoor unit allows for flexible installation to fit in narrow void
· Water heat exchanger and AHU connection compatibility
· Bluefin anti-corrosion coating of the heat exchanger as standard
· Wide range of controls including Cloud Control compatibility

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PACi NX Series. The next generation is here

NX Series with R32 refrigerant has been developed to meet the demand of easy refurbishment with 3 wire method.
Integrated with IoT solutions and includes nanoe™ X function as standard.
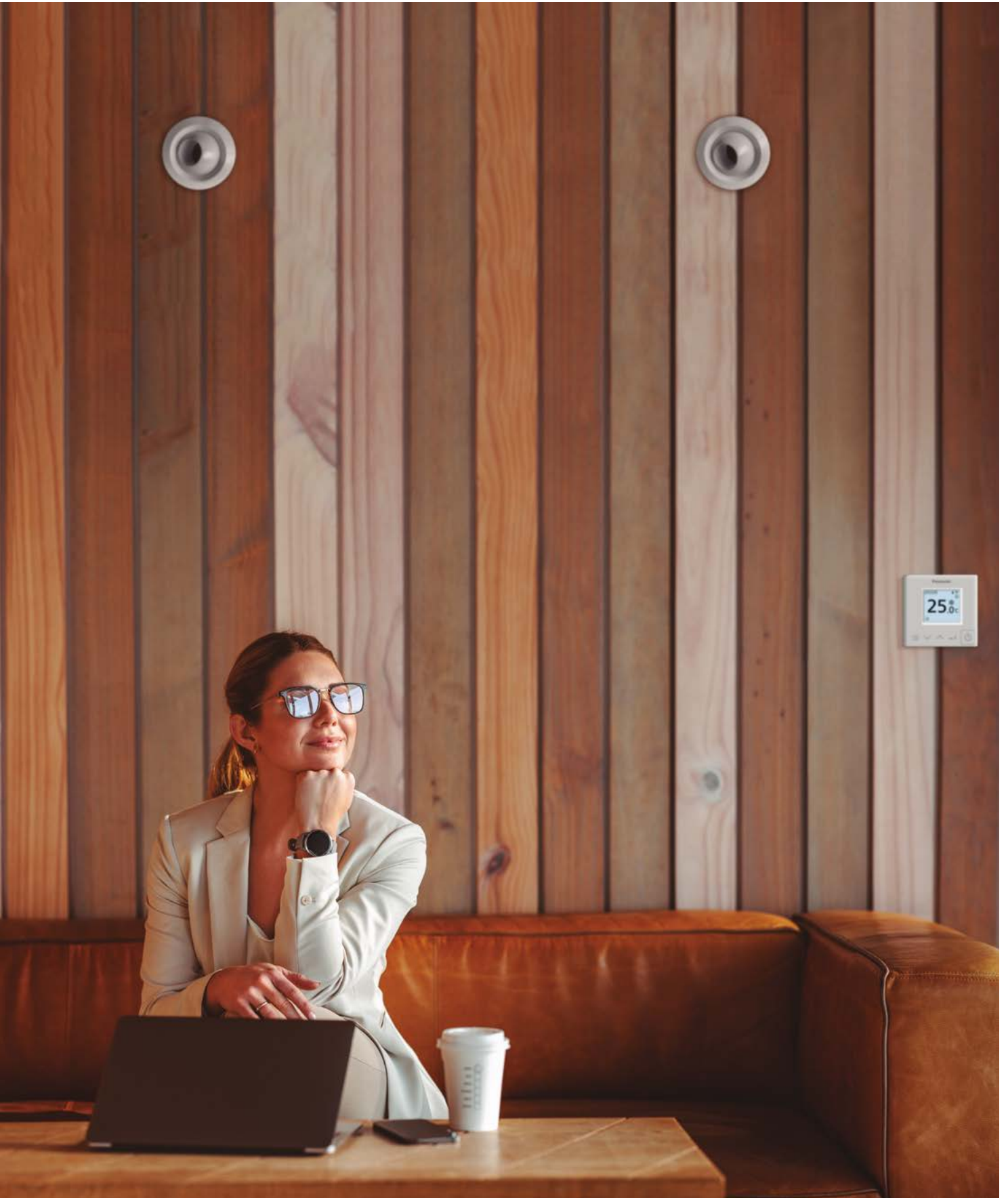
1 PACi NX Series for absolute ease of refurbishment

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

PACi PZ2/PZH2: 2 wire method.

Power supply — Signal wiring (2 wire shielded) — Power supply
Outdoor unit power wiring
Earth

PACi NX Series: 3 wire method.

Power supply — Power + Signal Wiring (3 wire + earth) —
Outdoor unit power wiring
Earth

2 CONEX with IoT integration

The wired remote controller series is fully integrated with IoT solutions developed by Panasonic.
Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

https://youtu.be/_USzG_9f6bk

CONEX

PACi SYSTEMS

Service checker interface
Bluetooth®
Wired remote controller
Bluetooth®   Wi-Fi

Panasonic service and installer
End user   End user

IoT SOLUTIONS BY PANASONIC

Panasonic H&C Diagnosis App [1]. Service checker function (detailed operation data etc...).

Panasonic H&C Control App [2]. Detailed operation setting. Detailed maintenance setting.

Panasonic Comfort Cloud App [3]. Detailed operation setting. Remote operation via Wi-Fi.

1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW) is required when this app is used from indoor location. Compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW required. 3) CZ-RTC6WBLW or CZ-RTC6BLW required.

3 Let Panasonic take care of indoor air quality

nanoe X

Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances. This unique technology is equipped to provide better air quality whether residential or commercial.

7 effects of nanoe™ X – Panasonic unique technology.

Deodorises	Capacity to inhibit 5 types of pollutants					Moisturises
Odours	Bacteria and viruses	Mould	Allergens	Pollen	Hazardous substances	Skin and hair

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.
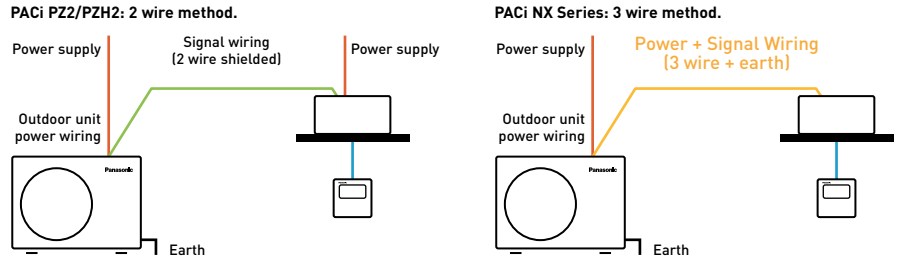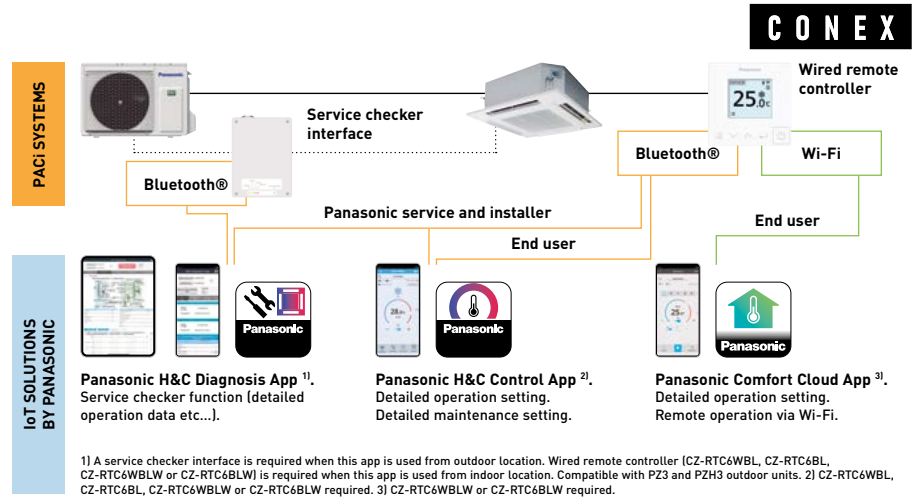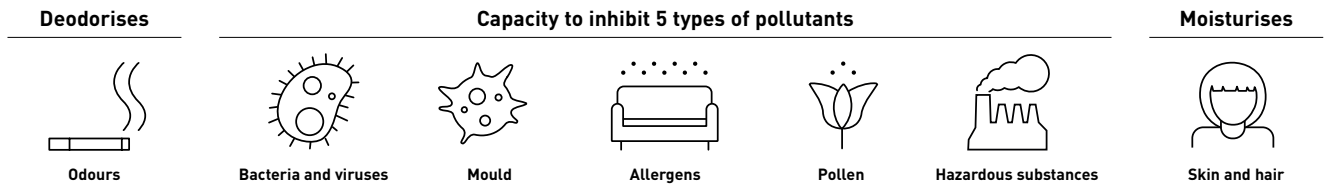
REFER TO PAGE 12 FOR MORE DETAILS AND VALIDATION DATA

4 Increasing the efficiency

The PACi NX Series have improved seasonal efficiencies in both heating and cooling versus the previous generation.

Energy class [1] and seasonal efficiency value ($\eta_{s,c}$ / $\eta_{s,h}$) [2]

kW	Wall-mounted - PK3 Elite		Wall-mounted - PK3 Standard		4 way cassette - PY3 Elite		4 way cassette - PY3 Standard		4 way cassette - PU3 Elite		4 way cassette - PU3 Standard		Ceiling - PT3 Elite		Ceiling - PT3 Standard		Adaptive ducted - PF3 Elite		Adaptive ducted - PF3 Standard		Hide-away - PE4 Elite	
2,5					A++	A++	A++	A++														
3,6	A++	A++	A++	A+	A++	A++	A++	A+	A+++	A+++	A++	A++	A++	A++	A++	A+	A++	A+	A+	A+		
5,0	A++	A++	A++	A+	A++	A++	A++	A+	A+++	A++	A++	A++	A++	A++	A++	A+	A++	A+	A++	A+		
6,0	A++	A++	A++	A++	A++	A+	A++	A+	A++	A++	A++	A++	A++	A++	A++	A++	A++	A+	A++	A+		
7,1	A++	A++	A+	A+					A++	A++	A++	A++	A++	A++	A+	A+	A++	A++	A+	A+		
10,0	A++	A	A++	A					A++	A++	A++	A+	A++	A+	A++	A+	A++	A+	A++	A		
12,5									304,3%	186,0%	267,0%	157,0%	278,4%	175,6%	241,7%	147,4%	281,7%	165,0%	257,4%	142,6%		
14,0									286,6%	181,2%	257,0%	152,2%	263,3%	169,3%	228,8%	145,3%	275,9%	162,6%	252,2%	140,6%		
20,0																					237,8%	146,0%
25,0																					213,0%	145,0%

1) Energy label scale from A+++ to D for models below 12,0 kW (EU regulation 626/2011). 2) $\eta_{s,c}$ / $\eta_{s,h}$ values for models above 12,0 kW (EN 14825).

PACi NX Elite Series 4

The compact chassis newly designed with one fan up to 25,0 kW, will fit in limited installation space.

· A compact outdoor unit featuring a single fan across all the capacities up to 25,0 kW.
· With the unit weighting only 66 kg*, it is easy to carry and easy to install.

* For model 7,1 kW.
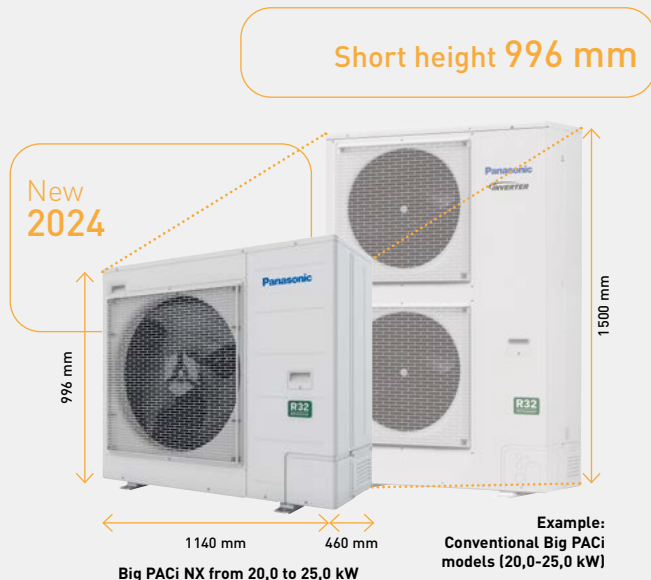
Short height 996 mm

New
2024

996 mm

1500 mm

1140 mm   460 mm

PACi NX Elite from 7,1 to 14,0 kW

Big PACi NX from 20,0 to 25,0 kW

Example: Conventional Big PACi models (20,0-25,0 kW)

Highly efficient performance in a compact body

One fan outdoor units keep the excellent seasonal performance by optimizing the layers of the heat exchanger.
As a result, PZH4 Series provide the equivalent high seasonal performance to conventional 2 fan models.
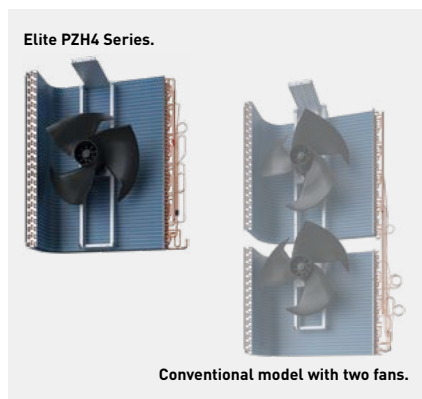
Elite PZH4 Series.

Conventional model with two fans.

PZH4 Series seasonal performance.

SEER / SCOP

	7,1 kW	10,0 kW
SEER	7,7	7,8
SCOP	4,8	4,9

$\eta_{s,c}$ / $\eta_{s,h}$

	12,5 kW	14,0 kW	20,0 kW	25,0 kW
SEER	304,3	286,6	237,8	213,0
SCOP	186,0	181,2	146,0	145,0
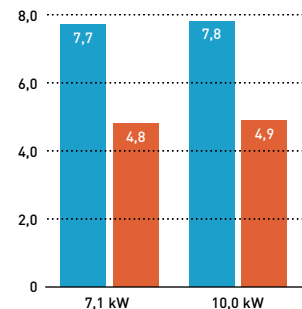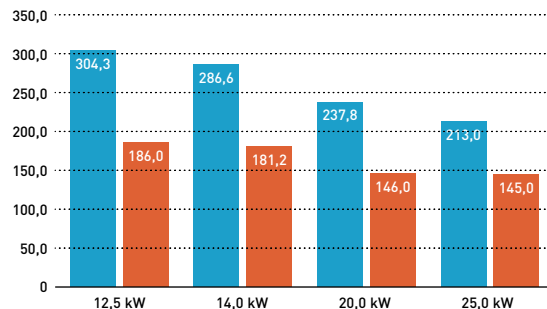
■ SEER   ■ SCOP

* Performance tested with a 4-way cassette90×90 cassette for 7.1 to 14 kW and a high static pressure hideaway for 20-25 kW.

Extended operation range up to 52 °C in cooling and down to -20 °C in heating

Upgraded PACi NX Elite Series are capable of working even in the challenging ambient conditions. Cooling operation is possible when outdoor temperature is as low as -20 °C* or as high as 52 °C.
Heating operation can also be utilized at outdoor temperatures down to -20 °C when outdoor temperature is as low as -20 °C.

* For models 10,0 ~ 25,0 kW with pipe length up to 30 m.

Cooling design operation conditions.

52 °C

-25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55

-20 °C

Heating design operation conditions.

-25 -20 -15 -10 -5 0 5 10 15 20 25 30 35* 40

* For models 20,0 ~ 25,0 kW.
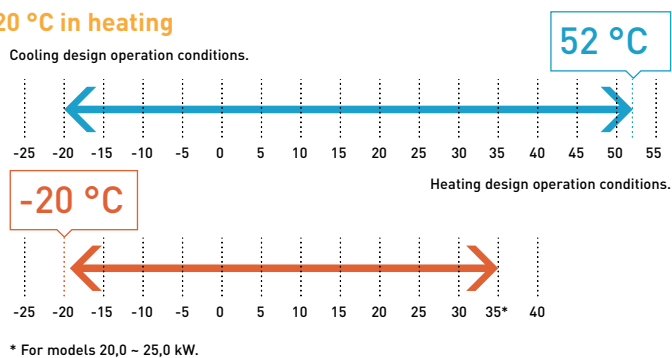
Long piping allowance maximum 100 m*

Increased piping length gives great design flexibility to adapt various building types and sizes.
Piping length: 100 m (10,0 to 25,0 kW), 60 m (7,1 kW)

* For models 10,0 ~ 25,0 kW.

Maximum height difference between outdoor unit and indoor unit:
30 m*

Maximum total pipe length: 100 m
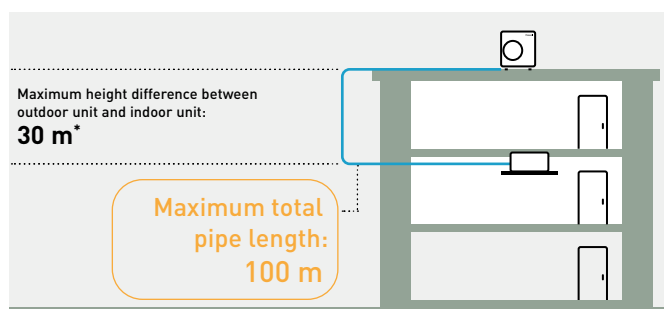
* 15 m if the outdoor unit is below the indoor unit.

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CONEX. Devices and apps

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

1 Intuitive control with stylish design
· Simple operation at a glance
· Clean face with full flat and LCD display
· Compact body, only 86x86 mm

2 Control comfort with your smartphone
· Flexible control options with IoT integration
· Panasonic H&C Control App for daily remote control operation
· Panasonic Comfort Cloud App for remote operation 24/7/365

3 Easy maintenance with service support app
· Quick and easy app set-up for system setting
· Panasonic H&C Diagnosis App enables the user to obtain detailed system operation data

* The use of apps depends on the remote controller model.

CONEX with IoT integration

CONEX

The wired remote controller series is fully integrated with IoT solutions developed by Panasonic.
Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

PACi SYSTEMS

Service checker interface

Wired remote controller

Bluetooth®

Bluetooth®

Wi-Fi

Panasonic service and installer

End user

End user

IoT SOLUTIONS BY PANASONIC

Panasonic H&C Diagnosis App [1].
Service checker function (detailed operation data etc...).

Panasonic H&C Control App [2].
Detailed operation setting.
Detailed maintenance setting.

Panasonic Comfort Cloud App [3].
Detailed operation setting.
Remote operation via Wi-Fi.

1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW) is required when this app is used from indoor location. Compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW required. 3) CZ-RTC6WBLW or CZ-RTC6BLW required.

White model	CZ-RTC6W	CZ-RTC6WBL	CZ-RTC6WBLW
Black model	CZ-RTC6	CZ-RTC6BL	CZ-RTC6BLW
Wired connection compatible with	PACi, PACi NX, ECOi, GHP	PACi, PACi NX, ECOi, GHP	PACi NX only
Wireless functions	No wireless capability	Bluetooth®	Bluetooth® + Wi-Fi
App compatibility			
Panasonic Comfort Cloud App	—	—	✔
Panasonic H&C Control App	—	✔ PACi, PACi NX, ECOi, GHP	✔ PACi NX only
Panasonic H&C Diagnosis App [1]	—	✔ PACi NX only [2]	✔ PACi NX only [2]
Outdoor unit settings (remote controller connected to indoor unit)	✔ PACi NX only [2]	✔ PACi NX only [2]	✔ PACi NX only [2]

1) Compatible with U-71/100/125/140PZH3E5/8 and U-100/125/140PZ3E5/8. 2) When connected to PACi NX indoor and outdoor unit combination.

Commercial Wi-Fi Adaptor

Panasonic CZ-CAPWFC1 interface adaptor, allows connection of one or a group of indoor units to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling and error alerts.
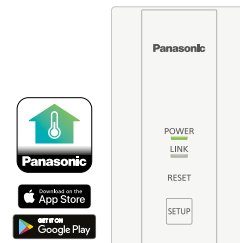
Advanced smartphone control

Control PACi, ECOi and ECO G indoor units with your smartphone from wherever and whenever you are, by using Panasonic Comfort Cloud App and Commercial Wi-Fi Adaptor. This scalable solution is ideal for one system, one site or multiple locations. Coupling the adapter with the already feature rich systems, makes it an ideal solution for residential and commercial applications.

1 From 1 to 200 units
User can control up to 10 different sites, with up to 20 units / groups per site. Additionally, one adaptor can be connected to 1 indoor or to a group of up to 8 indoors.

2 Voice control compatible
When registering the unit to Panasonic Comfort Cloud App makes it compatible with most popular voice assistants.

3 Multi user
The Panasonic Comfort Cloud App allows multi-user access control. Restrict user access to specific units.

4 Easy scheduling
Complex weekly scheduling made simple. Not only for one unit, but across multiple sites and from a smartphone.

5 Energy monitor
See the estimated power consumption and compare with other periods, to see how energy consumption can be reduced even more. Check list of units that provides consumption*.

* Function available depending on the model.

6 Error codes
Error code notification through the App, provides early notification and allows for faster repair.

Connection Diagram

Commercial Wi-Fi Adaptor wiring length is 1,9 m and connects to indoor unit via T10 connector and R1/R2 terminal connectors.

RC Terminal (R1,R2)
T10
Communication line: 1,9 m
POWER
LINK
RESET
SETUP
Wireless LAN

Download free app:
Panasonic Comfort Cloud App.

Other hardware requirements: Router and Internet (purchase and subscribe separately).

Panasonic Cloud Server is designed, operated and managed by Panasonic.
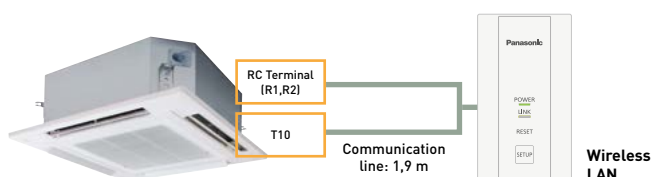
Input Voltage	DC 12 V (supplied from T10 connector)
Power Consumption	Maximum 2,4 W
Size (H x W x D)	120 x 70 x 25 mm
Weight	190 g (including communications lines)
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4 GHz band
Operating range	0 ~ 55 °C, 20 ~ 80 RH%
Connectable indoor unit	1 unit
Length of communication line	1,9 m (included)

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 more pleasant place to be, whether at home, work, or visiting hotels, shops and restaurants etc.

What is unique about nanoe™ X?

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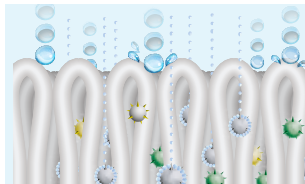
1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

Longer lifespan.

2 | Contained in tiny water particles, nanoe™ X has a long lifespan, which is about 600 seconds, to spread easily around the room.

Huge quantity.

3 | nanoe X Generator Mark 3 produces 48 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

Maintenance-free.
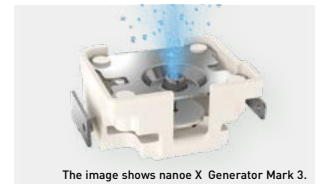
The image shows nanoe X Generator Mark 3.

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

7 effects of nanoe™ X – Panasonic unique technology
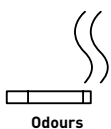
Deodorises — Odours

Capacity to inhibit 5 types of pollutants — Bacteria and viruses, Mould, Allergens, Pollen, Hazardous substances
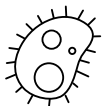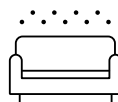
Moisturises — Skin and hair

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

First nanoe™ device was developed by Panasonic in 2003

Generator: nanoe™	Generator: nanoe™ X		
2003	Mark 1 - 2016	Mark 2 - 2019	Mark 3 - 2022
480 billion hydroxyl radicals/sec	4,8 trillion hydroxyl radicals/sec	9,6 trillion hydroxyl radicals/sec	48 trillion hydroxyl radicals/sec
Ion particle structure — Hydroxyl radicals	10x times	20x times	100x times
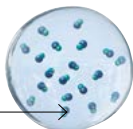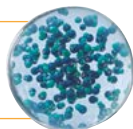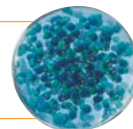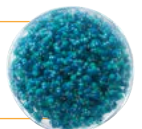
nanoe™ X, internationally-validated technology in testing facilities.

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

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	Generator	Result	Capacity	Time	Testing organisation	Report No.
Airborne	Virus	Influenza (H1N1)	Mark 2	98,3% inhibited	30 m³	1,5 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2003WT8888-00889
		Bacteriophage ΦX174	Mark 1	99,2% inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1
	Bacteria	Staphylococcus aureus	Mark 1	99,7% inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	24_0301_1
Adhering	Virus	SARS-CoV-2	Mark 1	91,4% inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3
		SARS-CoV-2	Mark 1	99,9% inhibited	45 L	2 h	Texcell (France)	1140-01 A1
		Bacteriophage ΦX174	Mark 1	99,8% inhibited	Approx. 25 m³	8 h	Japan Food Research Laboratories	13001265005-01
		Xenotropic murine leukemia virus	Mark 1	99,999% inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—
		Coxsackie virus (CA16)	Mark 2	99,9%inhibited	30 m³	4 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2002WT8888-00439
		Bacteriophage	Mark 3	98,81% inhibited	Approx. 139,3 m³	4 h	SGS Inc	SHES210901902584
		MS2 Phage Virus	Mark 3	99,99% inhibited	Approx. 25 m³	2 h	Shokukanken, Inc.	227131N
	Bacteria	Staphylococcus aureus	Mark 1	99,9% inhibited	20 m³	8 h	Danish Technological Institute	868988
	Pollen	Cedar pollen	Mark 3	99%inhibited	Approx. 24 m³	12 h	Panasonic Product Analysis Center	H21YA017-1
		Ambrosia pollen	Mark 1	99,4% inhibited	20 m³	8 h	Danish Technological Institute	868988
	Odours	Cigarette smoke odour	Mark 1	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04
			Mark 3	Odour intensity reduced 1,7 levels	Approx. 139,3 m³	0,5 h	SGS Inc	SHES210901902478

Licensed in VDI 6022

Certification of a HVAC system under VDI 6022 guarantees that the system fulfills the market's strictest hygiene requirements.

VDI 6022 – Part 5 [1] Certification.

Avoidance of allergenic exposure.

Inhibits a wide range of harmful bacteria, viruses, mould, pollen and allergens.

VDI 6022 – Part 1 [1] & 1.1 [2] Certification.

Ventilation and indoor-air quality.

Panasonic nanoe™ X technology improving indoor air quality.

1) Certification mark only valid for nanoe X Generator Mark 3. 2) Certification mark only valid for nanoe X Generator Mark 2 and Mark 3.

nanoe™ X: improving protection 24/7.

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

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

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

Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment
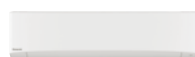
Wall-mounted.
Built-in nanoe X Generator Mark 2.

Ceiling.
Built-in nanoe X Generator Mark 2.

4 Way 60x60 cassette.
Built-in nanoe X Generator Mark 2.

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

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

High static pressure hide-away.
Built-in nanoe X Generator Mark 3.

Ceiling mounted air-e nanoe X Generator.
Built-in nanoe X Generator Mark 1.

PACi NX 4 way 90x90 cassette - PU3

These cassettes offer upgraded nanoe™ X and Econavi technologies to make the room air more comfortable and healthy and to increase the energy efficiency.

·nanoeX™

1 Improved indoor air quality with nanoe™ X and fresh air intake

· nanoe™ X technology equipped as standard for improved indoor air quality
· Internal cleaning function for the unit with nanoe™ X
· High external fresh air intake volume with optional kit (CZ-FDU3 + CZ-ATU2)

2 Superior energy efficiency and comfort

· High seasonal efficiency both in heating and cooling, maximum SEER: 8,9 A+++ / SCOP: 5,1 A+++*
· Econavi: Intelligent sensors to increase energy savings and comfort
· Super Quiet operation down to 27 dB(A)

* For 3,6 kW model.

3 Easy installation

· Light weight, easy piping and integrated drain pump for quick installation
· Wired remote controller CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®

Always fresh and clean air with nanoe™ X

The 4 way 90x90 cassette with nanoe™ X, when tested, has shown to inhibit hazardous substances by 92%, when compared to natural reduction*.
In addition to the 7 effects of nanoe™ X, the indoor unit can also be cleaned with a short operation of nanoe™ X + dry mode.

* Controllers (CZ-RTC5B, CZ-RTC6W/BL/BLW or CZ-RTC6/BL/BLW) are required.

After cooling/drying operation, the inside of the indoor unit is automatically dried and nanoe™ X is activated to suppress mould growth.
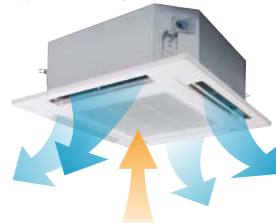
Operates the fan to discharge internal humidity.
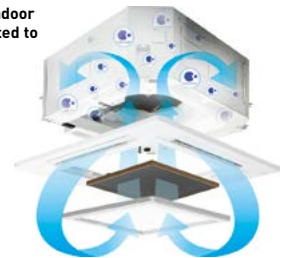
Operate the fan to circulate nanoe™ X internally.

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nanoe™ X effect against odour proven in large space

92% of hexadecane [1] is inhibited after 8-hours exposure in room side 267 m².

Hexadecane inhabitation ratio (%).

14 %

92% inhibited

8 hours later
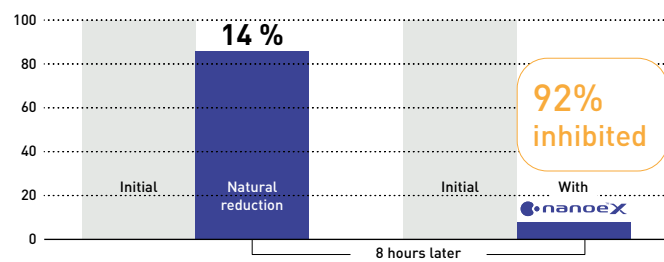
Test ambient.

3rd party certification organization SIRIM [2] conducted the performance experiment of 4 way cassette equipped with nanoe X Generator Mark 1 device in inhibiting hexadecane, a chemical contaminant.

1) Hexadecane is a hazardous substance contained in gasoline and diesel exhaust gas, and considered to be one cause of oil odour. 2) SIRIM Berhad (SIRIM),a premier industrial research and technology organization in Malaysia, wholly-owned by the Ministry of Finance Incorporated.

Hexadecane

4 way cassette

3 m

16,4 m 16,3 m

267 m²
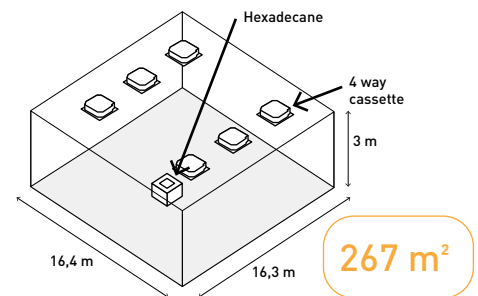
Optional Econavi intelligent sensor

Human activity sensor and floor temperature sensor can reduce waste energy, by optimising air conditioner operation.
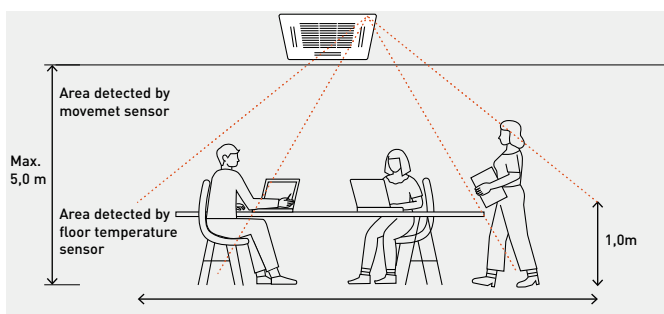
Advanced Econavi functions.

2 sensors (movement and floor temperature) can provide a reduction in wasted energy by means of effective control. The floor temperature can be detected with a ceiling height of up to 5 m.

ECONAVI
INTELLIGENT ECO SENSORS

Area detected by movemet sensor

Max. 5,0 m

Area detected by floor temperature sensor

1,0m

Econavi exclusive panel. Optional (CZ-KPU3AW)

Floor temperature sensor. This sensor detects average floor temperature and operates circulation if floor temperature is low.

Movement sensor. This sensor detects the amount of human activity, and operates effectively.

Wired remote controller CZ-RTC5B, CZ-RTC6W/BL/BLW or CZ-RTC6/BL/BLW is required.

PACi NX adaptive ducted unit – PF3

The adaptive ducted units provide better flexibility with both installation possibilities, horizontal and vertical. The powerful external static pressure, maximum 150 Pa.

nanoe X™
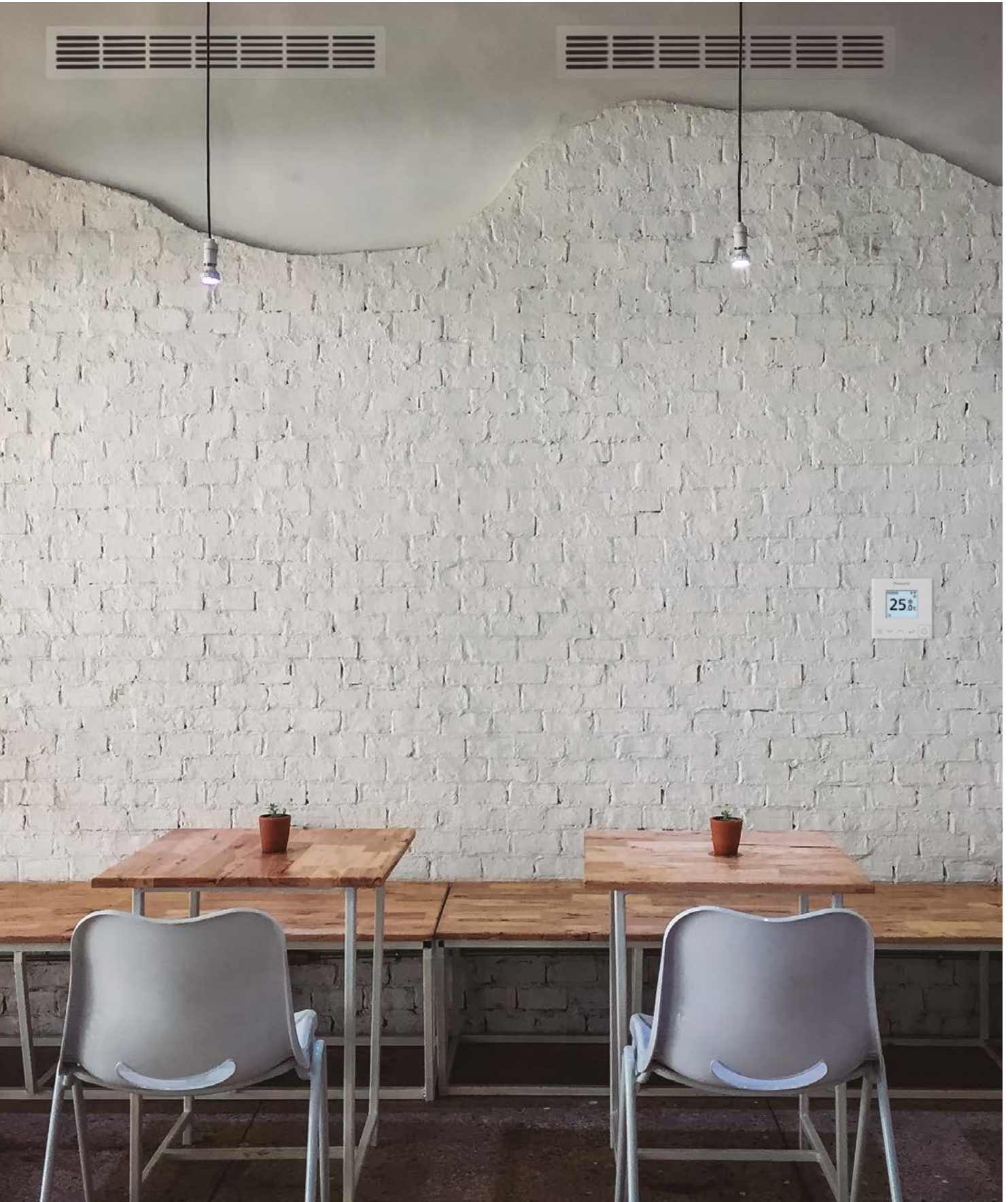
1 Highly flexible installation
2 installation possibilities (horizontal / vertical).

2 High seasonal performance with slim body
Maximum SEER: 7,4 A++ [1] / SCOP: 4,7 A++ [2].

1) For 10,0 kW model. 2) For 7,1 kW model.

3 Comfort operation
· Super Quiet operation, minimum 22 dB(A)*
· Optimized IAQ solutions for different target objectives. nanoe™ X and the new BION air pollutant filter (optional)

* 3,6 kW model and when operating with external static pressure 50 Pa in low fan mode.

2 installation possibilities (horizontal / vertical)
Vertical installation is available. External static pressure 150 Pa, sufficient for remotely installing units away from the rooms.

Improved drain pan design
Just one drain pan for both horizontal and vertical installations. No need to modify the unit.

Horizontal
Shared drain pan

Vertical
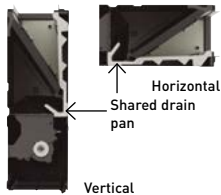
Selectable inlet air position
Inlet air position may be adjusted by means of a removable panel, to allow rear or bottom entry, depending on the duct installation.

or
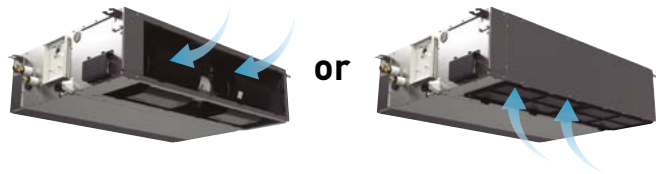
Maximum efficiency

Energy class [1] and seasonal efficiency value ($\eta_{s,c}$ / $\eta_{s,h}$) [2]								
	kW	3,6	5,0	6,0	7,1	10,0	12,5	14,0
Elite	❄	A++	A++	A++	A++	A++	281,7%	275,9%
	☀	A+	A+	A++	A++	A+	170,0%	171,0%
Standard	❄	A+	A++	A++	A++	A++	257,4%	252,2%
	☀	A+	A+	A++	A+	A	142,6%	140,6%

1) Energy label scale from A+++ to D for models below 12,0 kW (EU regulation 626/2011). 2) $\eta_{s,c}$ / $\eta_{s,h}$ values for models above 12,0 kW (EN 14825).

Compact body
· Only 250 mm high
· Light units from 25 to 39 kg

Conventional model	Adaptive ducted
33 kg	30 kg
290 mm	250 mm

Adaptive ducted

250 mm

Better indoor air quality with nanoe™ X
The performance of nanoe™ X technology is maintained, even with 10 m long ducts*.
The effect of improved air quality is sufficient to allow for numerous duct shapes to fit the application.

* Panasonic internal survey.

10 m

One bend   Two bends   Three bends

As the experiments demonstrate, up to a duct length of 10 m, effectiveness of nanoe™ X is maintained even if the duct is bended 3 times.

nanoe™ X effect against odour proven in large space
In a room of 139 m², tobacco odour is reduced by a factor of 0,7 when compared to natural reduction over a period of 2 hours.

Tobacco deodorisation ratio.

Natural reduction

nanoe™ X

Odour level

Time (hour)

nanoe™ X reduced by **0,7 rank**
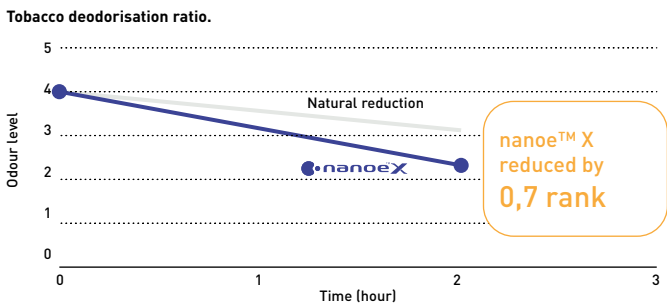
Test ambient.
3rd party international testing institute KAKEN [1] conducted the performance experiment of Adaptive ducted equipped with nanoe X Generator Mark 2 device removing tobacco odour.

1) KAKEN TEST CENTER General Incorporated Foundation in Japan, international testing institute.

Ducted unit

Adhered odour

2,7 m

20 m

7 m

139 m²

New BION air pollutant filter (optional)

Collaborating with BION, experts in filtration equipment, a new molecular filtration is available to improve indoor air quality.

The efficiency of nitrogen dioxide (NO$_2$) removal can reach 99,5%*

* Measured by ASTM6646 international standards. Efficiency reaches 99,5% within 4,8 seconds of contact time with the media bed (FAM filter). ** The performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. BION air pollutant filter is not medical device, local regulations on building design must be followed. Test results conducted under controlled laboratory conditions. Performance of BION air pollutant filter might differ in real life environment.

BION air pollutant filter traps and reduces certain types of harmful pollutant gases, listed below

· Nitrogen oxides (NO$_x$)
· Ozone (O$_3$)
· Sulfur dioxide (SO$_2$)
· Formaldehyde (HCHO)
· Volatile organic compounds (VOCs)

Adaptive ducted unit with BION air pollutant filter.
Improve air quality
Supply air   Return air

Adaptive ducted unit without BION air pollutant filter.
Supply air   Return air
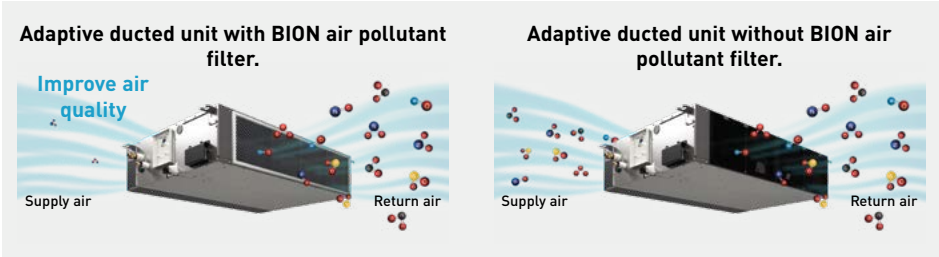
The BION air pollutant filter is an ideal solution for improving indoor air quality in urban areas.

Air pollution in urban areas in Europe

It is reported that in 2021, a significant portion of the Europe's urban population has been exposed to high levels of key air pollutants*.
· 75% of the urban population was exposed to NO$_2$ concentrations above 10 µg/m³
· 94% were exposed to concentrations of O$_3$ above 60 µg/m³

* The "Europe's Air Quality Status 2023" report (EEA, 2023) assesses levels of air pollutants measured in ambient air across Europe (> 2000 locations) for the years 2021 and 2022. It compares them against both EU standards as set out in the Ambient Air Quality Directives and the 2021 WHO Air Quality Guidelines.

NO$_2$ (WHO guidelines).
75%

O$_3$ (WHO guidelines).
94%
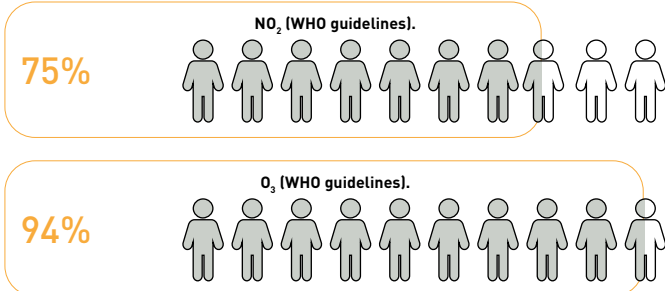
Share of the Europe's urban population exposed to air pollutant concentrations above EU standards and WHO guidelines in 2021, as referenced in the EEA 2023.

Why outdoor air pollution matters to IAQ?

Poor indoor air quality is associated with outdoor air pollutants such as car exhaust and factory fumes, and the two are closely linked. A significant portion of human exposure to air pollution occurs when they are indoors.

Different objectives, different IAQ solutions

In today's world, we are concerned about wellbeing and the air we breathe. And technology exists to ensure improved indoor air quality. With the introduction of the new BION air pollutant filter, Panasonic offers IAQ solutions optimized for various target objectives.

IAQ Solution	nanoe™ X	BION air pollutant filter
Objectives	Inhibit particles such as pollutants, certain types of viruses, and bacteria to clean and deodorise.	Inhibit gases such as nitrogen oxides (NO$_x$), ozone (O$_3$), sulfur dioxide (SO$_2$), formaldehyde (HCHO) and volatile organic compounds (VOCs)
Technology	Hydroxyl radicals contained in water	Molecular filtration
Filtering mechanism	Physical capture of particles	Adsorption and absorption
Availability	Built into all air-to-air indoor units as a standard	Optional accessory for the adaptive ducted unit (PF3/MF3)

BION air pollutant filter*	PAW-APF800F	PAW-APF1000F	PAW-APF1400F
Compatible adaptive ducted unit	S-3650PF3E	S-6071PF3E	S-1014PF3E

* The filter cartridge and filter casing are included in the package.

PACi NX wall-mounted, 4 way 60x60 cassette and ceiling

A new era of air conditioning solutions are here, with built-in nanoe™ X technology.

nanoe X

PACi NX wall-mounted - PK3.
Providing a small, lightweight and low noise level design, it is ideal for small offices and other commercial applications. It also has a stylish smooth design with a washable front panel.

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

Air outlet angle is automatically adjusted for cooling and heating operation.
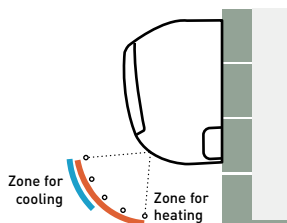
Zone for cooling

Zone for heating

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.

Piping outlet in six directions

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

PACi NX 4 way 60x60 cassette - PY3.
The PY3 not only perfectly matches with 600 x 600 mm ceiling grids but also provides an additional benefit for better indoor quality, with nanoe™ X built-in.

Industry-leading energy efficiency

· Energy class A++* with Elite outdoor range
· Energy class A++ with Standard outdoor range 2,5 kW model

* Except for 6,0 kW.

Internal cleaning function

When cooling or dry operation stopped, internal drying and nanoe™ X circulation airflow is activated in order to suppress the mould proliferation inside the unit (airflow passage, fan, heat exchanger)*.

* Depending on the installation environment or operating hours, mould proliferation or inhabitation of mould growth will be changed.

Compact and stylish design

· Required ceiling depth of only 250 mm
· Exposed area is only 30 mm

Individual flap control

Better control of the air flow with 4 motors, providing individual flap control. Perfect air distribution without direct airflow, to reduce the feeling of cold drafts.
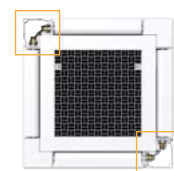
PACi NX ceiling - PT3.
Providing outstanding energy-saving performance, comfort and long-distance airflow distribution, these units are perfect for retail stores and schools.

Comfortable, long-distance airflow distribution

The shape of the outlet has been optimised to provide long-distance air flow distribution.
Even in long rooms, air flow reaches every corner for exceptionally comfortable air conditioning.

* Results are based on specific testing conditions.

Ceiling height:
4,3 m*

Air flow distance:
9,5 m*
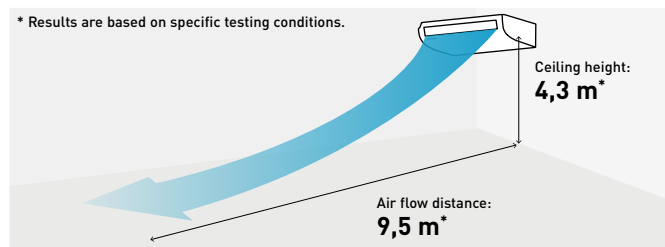
Compact looking, stylish, one-motion design

With its streamlined, one-motion form, the unit looks thin and compact when installed for a neat appearance in any room. When not operating, the louver closes to provide an elegant look while also keeping the unit clean.

Energy-saving technology delivering top-class efficiency

Optimisation of the shape of the casing and fan assures bigger air flow and higher efficiency. Energy-saving performance is top class in the industry. Thanks to new DC fan motor and large diagonal air flow fan.

High static pressure hide-away 20,0-25,0 kW - PE4, PE3

The split-able indoor unit design facilitates easy piping work. nanoe™ X technology* equipped as standard for improved indoor air quality.

* For models S-200PE4E and S-250PE4E.

nanoe X

nanoe™ X as a standard for PE4 model.

1 Compact and light indoor body

Compact and light indoor body, keeping the high efficiency, has a split-able design for easy installation within a limited narrow space. Plus ease of maintenance due to the simplified disassembly design.

2 Easy pipe work with split-able hide-away indoor design

Heat exchanger and fan elements (fan + casing) can be separated during installation. The hide-away indoor unit is easily reassembled and will fit through a narrow space.

3 High external static pressure, maximum 200 Pa* setting

A high static pressure enables the use of long ducts for installation in a wide range of spaces.

* For models S-250PE4E and S-250PE3E5B.

4 Comfort operation

· nanoe™ X [1] as standard for improved indoor air quality.
· Smartphone control-ready with the Panasonic Comfort Cloud App [2].

1) For models S-200PE4E and S-250PE4E. 2) Panasonic Wi-Fi Adaptor CZ-CAPWFC1 is required.

Improved indoor air quality with nanoe™ X

The nanoe™ X technology is now available for the Big PACi range from 20,0-25,0 kW.
The new PE4 model is equipped with Generator Mark 3, generating 48 trillion hydroxyl radicals/sec, specifically designed to accommodate long duct piping applications.

High static pressure hide-away line-up and the availability of nanoe™ X

	New PE4	PE3
20,0 kW	S-200PE4E	S-200PE3E5B
25,0 kW	S-250PE4E	S-250PE3E5B
nanoe™ X	Mark 3 as a standard	—

Maximum 200 Pa* static pressure setting

A high static pressure enables the use of long ducts for installation in a wide range of spaces.

3-step static pressure set up.
Selectable of static pressure modes can change 200 Pa / 130 Pa / 75 Pa for extra installation flexibility.

* For models S-250PE4E and S-250PE3E5B.

200 Pa* — **130 Pa*** — **75 Pa** Factory Setting

Easy installation with light components

Indoor unit can easily be split into 3 components, the heaviest of which weighs only 48 kg.

Dimensions of each component (lightweight design for easy disassembly).

Heat Exchanger

486 mm
673 mm
48 Kg

Fan

377 mm
428 mm
28 Kg

Fan Casing

434 mm
395 mm
11 Kg
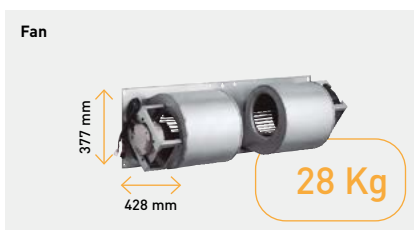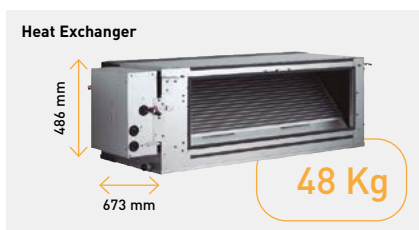
The weight is for S-250PE4E model.

Panasonic

Solutions for server rooms applications

Effectively protect your IT related spaces, 24/7, with a complete range of solutions offering redundancy control. High efficiency products provide reliable cooling all year round.

NON STOP
OPERATION
24/7
365

YKEA server room solution.

· Perfect solution for smaller server rooms
· Compact design
· Reaching SEER value of 9,6 (A+++) [1]
· High seasonal performance
· Range of capacities available
· Operation down to -25 °C ambient

1) For 3,5 kW unit.

PACi solution.

· Scalability for larger applications
· Twin, triple and double-twin options [1]
· Increased piping lengths of up to 90 m [2]
· Increased sensible capacity options available
· Flexible and adaptable control options

1) Compatible with PAW-PACR4 only. 2) For Big PACi 20 kW unit.

Redundancy ensured by three different functionalities.

Computer and server rooms are very sensitive areas of application. Any downtime caused by high room temperatures must be avoided by any means. Air conditioner redundancy is one of the key points to ensure a reliable nonstop cooling operation.

1 Backup operation

When an air conditioner fails for whatever reason, another one will awake from standby mode and cover the room's cooling load.

	Power supply error or PCB error
System 1	Operation / ⚠ Error
System 2	Stand by / Operation
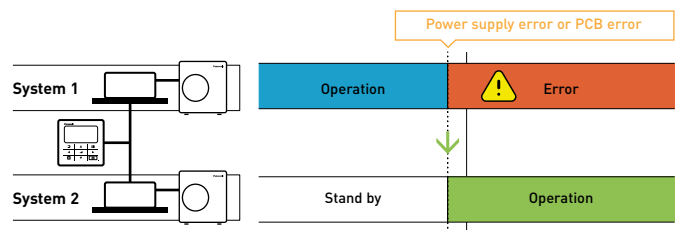
2 Support operation

Support operation, also called cascade control, makes sure that the capacity required to cool the room is delivered by one or more units whenever required. When the capacity of 1 air conditioner is not sufficient, another one will be started to support the operation.

Temperature threshold exceeded (cooling) — Temperature falls below threshold (cooling)

System 1	Operation	Operation	Operation
System 2	Stand by	Operation	Stand by
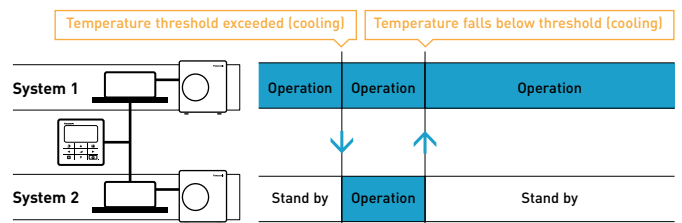
3 Rotation operation

Backup and support operation are key functions for a redundant operation in computer rooms. This concept implies a main system and a sub system. In order to avoid an imbalance of the operating hours of the systems, the redundancy control equalises the operation time by rotating the main and the sub systems, thus providing a "rotation operation".

System 1	Operation	Stand by	Operation	Stand by	Operation
System 2	Stand by	Operation	Stand by	Operation	Stand by

178
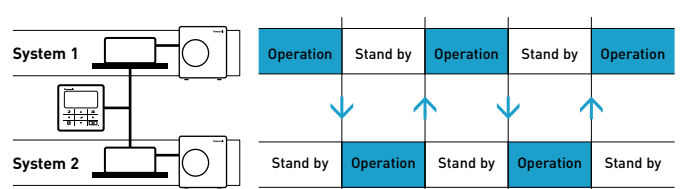
Redundancy control options for 24/7/365 applications

YKEA integral solution

· Ideal solution for small server rooms, providing full redundancy functionality integrated in YKEA's remote controller (requires optional CZ-RCC5 cable set)
· Up to 2 YKEA systems connectable to 1 remote controller
· Individual alarm display for each system
· Operation can be monitored by Panasonic Comfort Cloud App (via WLAN)
· No digital inputs/outputs

Remote controller
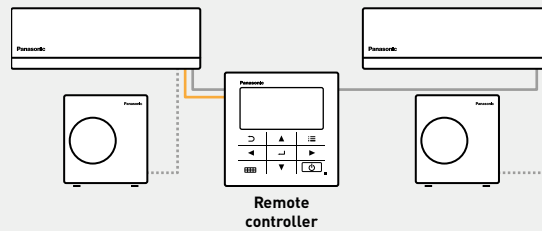
Optional interface for YKEA units

PAW-SERVER-PKEA
· Ideal solution for small server rooms, providing full redundancy functionality
· Up to 2 YKEA systems connectable to PAW-SERVER-PKEA
· Additional benefits: Operation and alarm outputs for each system, ON / OFF inputs for each system for connection to external BMS

Cable length 5 meters each

Output alarm signals.
Units A and B (2 dry contact maximum 48 V)

Output run signals.
Units A and B (2 dry contact maximum 48 V)

Input ON / OFF signals.
Units A and B (2 dry contact)

PAW-SERVER-PKEA   Remote controller
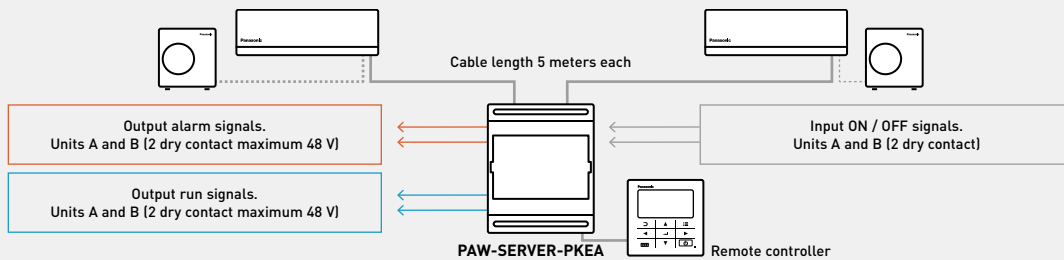
PACi integral solution

CZ-RTC5B / CZ-RTC6W / CZ-RTC6 / CZ-RTC6WBL / CZ-RTC6BL / CZ-RTC6WBLW / CZ-RTC6BLW
· Full redundancy functionality
· Quick and easy installation using PACi group control
· Up to 2 PACi systems connectable to 1 remote controller
· Delta T setting for support operation selectable from 4 to 10 K
· Connectable to Panasonic centralised control systems
· Optional interfaces for connection to external BMS (Modbus, BACnet, KNX)

CZ-RTC5B

Remote controller
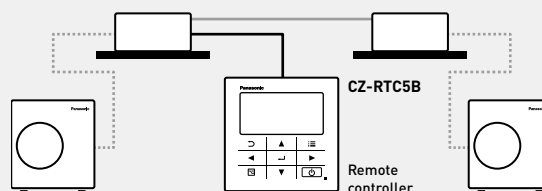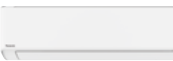
Optional interface up to 4 indoor units PACi or VRF

PAW-PACR4
· Redundancy control up to 4 indoor unit groups
· Actual unit operation / alarm status can be displayed
· Common digital alarm / operation status output
· For each support operation level, individual temperature thresholds can be set (cascade control)
· Room temperature display (by device's own temperature sensor)
· Modbus connection (up to 4 PAW-RC2-MBS-1)
· Available external inputs (ON / OFF, heating/ cooling change, fire prevention contact)

PAW-PACR4

Status contacts   Room sensor   Operation contacts
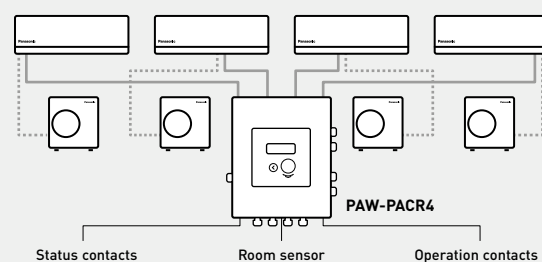
Commercial units range

Page	Indoor units	2,5 kW	3,6 kW	4,5 kW [1]	5,0 kW	6,0 kW
P. 182	Wall-mounted Professional · R32 [2]	CS-Z25YKEA	CS-Z35YKEA	CS-Z42YKEA	CS-Z50YKEA	
P. 184	PACi NX wall-mounted · R32		S-3650PK3E	S-3650PK3E	S-3650PK3E	S-6010PK3E
P. 188	PACi NX 4 way 60x60 cassette · R32	S-25PY3E	S-36PY3E		S-50PY3E	S-60PY3E
P. 190	PACi NX 4 way 90x90 cassette · R32		S-3650PU3E	S-3650PU3E	S-3650PU3E	S-6071PU3E
P. 194	PACi NX ceiling · R32		S-3650PT3E	S-3650PT3E	S-3650PT3E	S-6071PT3E
P. 198	PACi NX adaptive ducted · R32		S-3650PF3E	S-3650PF3E	S-3650PF3E	S-6071PF3E
P. 202	**NEW** Big PACi NX high static pressure hide-away 20-25 kW					
P. 203	Big PACi high static pressure hide-away 20-25 kW					

Outdoor units	2,5 kW	3,6 kW		5,0 kW	6,0 kW
PACi NX Elite Big PACi NX (20-25 kW)		U-36PZH3E5		U-50PZH3E5	U-60PZH3E5
PACi NX Standard	U-25PZ3E5	U-36PZ3E5		U-50PZ3E5	U-60PZ3E5A
Big PACi					

1) The 4,5 kW indoor capacity options are only available only for twin, triple and double-twin combinations. 2) Not compatible with PACi NX outdoors and accessories. Domestic range sales conditions may apply.
Check with your sales representative. 3) These two units are not in PACi NX range but part of Big PACi range.
* U-__E5 Single phase / U-__E8 Three phase.

OPTIONAL UNITS ON VENTILATION SECTION
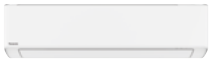
7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
CS-Z71YKEA					
S-6010PK3E	S-6010PK3E				
S-6071PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E		
S-6071PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E		
S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E		
				S-200PE4E	S-250PE4E
				S-200PE3E5B	S-250PE3E5B

7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
U-71PZH4E5 / U-71PZH4E8	U-100PZH4E5 / U-100PZH4E8	U-125PZH4E5 / U-125PZH4E8	U-140PZH4E5 / U-140PZH4E8	U-200PZH4E8	U-250PZH4E8
U-71PZ3E5A	U-100PZ3E5 / U-100PZ3E8	U-125PZ3E5 / U-125PZ3E8	U-140PZ3E5 / U-140PZ3E8		
				U-200PZH2E8 [3]	U-250PZH2E8 [3]

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YKEA series for server rooms

High efficiency products for 24/7 applications. Panasonic has developed a complete range of solutions for server rooms which efficiently protect your servers, keeping them at an appropriate temperature even when the outdoor temperature is below -25 °C.

NON STOP
OPERATION
24/7
365

1 **Designed for 24h/7d a week operation**

High efficiency all year round. This wall-mounted air conditioner is designed for professional, critical applications such as computer rooms where reliable cooling inside the room is necessary even with extreme ambient conditions.

2 **Remote controller for better usability**

Wired remote controller, which can assure the operation 24/7 of two server room units, thanks to the integrated duty rotation mode. This function manages rotation and backup of two units and it is available when connecting an optional CN-CNT cable (CZ-RCC5) between the controller and each of the two indoor units.

Not compatible with PACi NX outdoors and accessories. Domestic range sales conditions may apply. Check with your sales representative.

3 **Highest energy rating in cooling**

The SEER and SCOP of the Server room unit has been further improved to achieve top class energy efficiency. The 3,5 kW unit reaches now the SEER value of 9,6 (A+++).
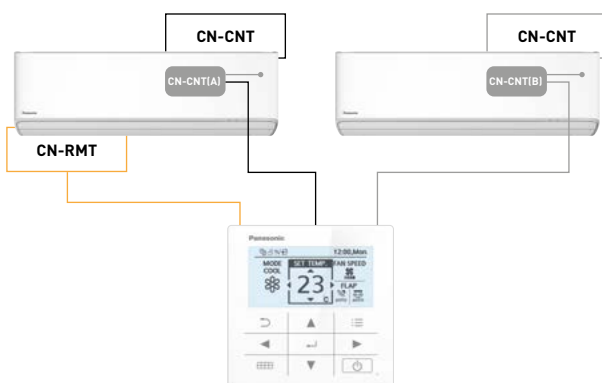
4 **Built-in Wi-Fi and compatible with Voice Assistant**

The unit is ready to connect to the internet and to be controlled by smartphone with Panasonic Comfort Cloud App. Control, monitor energy consumption statistics and easily identify errors in case of failure.
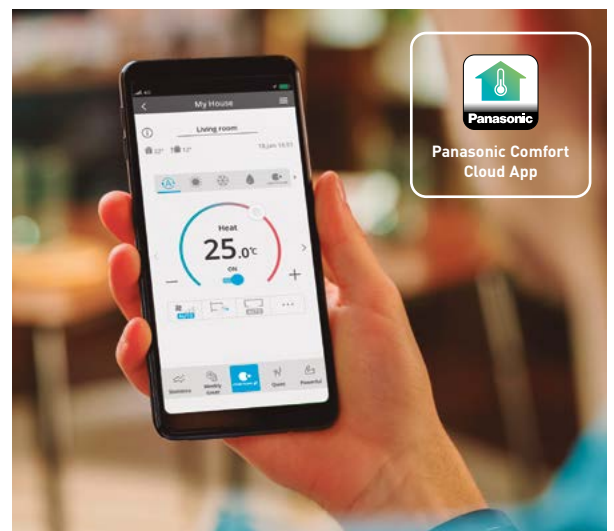
Panasonic Comfort
Cloud App

Wall-mounted Professional -25 °C · R32

· Designed for 24h/7d a week operation
· Wired remote controller, with optional duty rotation mode
· Improved SEER / SCOP to achieve top class energy efficiency
· Aerowings 2.0, for a better control of the airflow
· Built-in Wi-Fi for smart control via Panasonic Comfort Cloud App
· Compatible with Google Assistant and Amazon Alexa
· Chassis and parts designed for easier installation

Kit			KIT-Z25-YKEA	KIT-Z35-YKEA	KIT-Z42-YKEA	KIT-Z50-YKEA	KIT-Z71-YKEA
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,85 - 3,50)	3,50 (0,85 - 4,20)	4,20 (0,85 - 5,00)	5,00 (0,98 - 6,00)	7,10 (0,98 - 8,50)
EER [1]	Nominal (Min - Max)	W/W	4,90 (4,72 - 3,98)	4,12 (4,72 - 3,68)	3,82 (4,72 - 3,25)	3,68 (3,92 - 3,16)	3,23 (2,33 - 2,83)
SEER [2]			9,5 A+++	9,6 A+++	8,6 A+++	8,6 A+++	6,5 A++
Pdesign		kW	2,50	3,50	4,20	5,00	7,10
Input power	Nominal (Min - Max)	kW	0,51 (0,18 - 0,88)	0,85 (0,18 - 1,14)	1,10 (0,18 - 1,54)	1,36 (0,25 - 1,90)	2,20 (0,42 - 3,00)
Annual energy consumption [3]		kWh/a	92	128	171	203	382
Heating capacity	Nominal (Min - Max)	kW	3,40 (0,85 - 5,00)	4,00 (0,85 - 5,80)	5,30 (0,85 - 6,80)	5,80 (0,98 - 8,00)	8,20 (0,98 - 10,20)
Heating capacity at -7 °C		kW	3,05	3,40	4,11	4,80	6,31
COP [1]	Nominal (Min - Max)	W/W	4,86 (4,72 - 3,97)	4,44 (4,72 - 3,87)	3,93 (4,72 - 3,66)	4,08 (4,26 - 3,35)	3,71 (2,45 - 3,29)
SCOP [2]			4,6 A++	4,6 A++	4,5 A+	4,6 A++	4,1 A+
Pdesign at -10 °C		kW	2,70	3,20	3,60	4,20	5,50
Input power	Nominal (Min - Max)	kW	0,70 (0,18 - 1,26)	0,90 (0,18 - 1,50)	1,35 (0,18 - 1,86)	1,42 (0,23 - 2,39)	2,21 (0,40 - 3,10)
Annual energy consumption [3]		kWh/a	822	974	1120	1278	1878
Indoor unit			CS-Z25YKEA	CS-Z35YKEA	CS-Z42YKEA	CS-Z50YKEA	CS-Z71YKEA
Power supply		V	230	230	230	230	230
Recommended fuse		A	16	16	16	16	20
Connection indoor / outdoor		mm²	4x1,5	4x1,5	4x1,5	4x2,5	4x2,5
Air flow	Cool / Heat	m³/min	11,4/13,8	12,7/14,8	13,2/15,2	17,4/19,1	19,0/19,9
Moisture removal volume		L/h	1,5	2,0	2,4	2,8	4,1
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	39/25/21	42/28/21	43/32/29	44/37/30	47/38/35
	Heat (Hi / Lo / Q-Lo)	dB(A)	41/27/22	43/30/22	44/35/29	44/37/30	47/38/35
Sound power	Cool / Heat (Hi)	dB(A)	55/57	58/59	59/60	60/60	63/63
Dimension	H x W x D	mm	295 x 870 x 229	295 x 870 x 229	295 x 870 x 229	295 x 1040 x 244	295 x 1040 x 244
Net weight		kg	11	11	11	12	13
Outdoor unit			CU-Z25YKEA	CU-Z35YKEA	CU-Z42YKEA	CU-Z50YKEA	CU-Z71YKEA
Air flow	Cool / Heat	m³/min	27,6/27,6	29,8/29,8	29,8/31,0	39,8/36,9	44,7/45,8
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	46/48	48/50	48/51	48/50	52/54
Sound power	Cool / Heat (Hi)	dB(A)	61/63	63/65	63/66	63/65	66/68
Dimension [5]	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	695 x 875 x 320	695 x 875 x 320
Net weight		kg	30	30	30	40	45
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)
Pipe length range		m	3 ~ 20	3 ~ 20	3 ~ 20	3 ~ 30	3 ~ 30
Elevation difference (in / out)		m	15	15	15	15	20
Pre-charged pipe length		m	7,5	7,5	7,5	7,5	10
Additional gas amount		g/m	10	10	10	15	25
Refrigerant (R32) / CO₂ Eq.		kg / T	0,89 / 0,60	0,89 / 0,60	0,97 / 0,65	1,13 / 0,76	1,35 / 0,91
Operating range	Cool Min ~ Max	°C	-25 ~ +43	-25 ~ +43	-25 ~ +43	-25 ~ +43	-25 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) Energy Label Scale from A+++ to D. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. * Not compatible with PACi NX outdoors and accessories. Domestic range sales conditions may apply. Check with your sales representative.

Accessories	
CZ-RCC5	CN-CNT cables x2 for server room application, control of 2 units, rotation, backup, etc.
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform

Accessories	
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm

SEER: For KIT-Z35-YKEA. SCOP: For KIT-Z25-YKEA, KIT-Z35-YKEA and KIT-Z50-YKEA. SUPER QUIET: For KIT-Z25-YKEA. INTERNET CONTROL: Built-in Wi-Fi.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

PACi NX Series Elite wall-mounted - PK3 · R32

The wall-mounted units with stylish matt color can be offered for many applications such as studios, gyms, high ceiling areas and even computer server rooms.

The compact design and flat face ensure discreet installation, even in a small space.

nanoeX

nanoe™ X as a standard.

			Single phase				
			3,6 kW	**5,0 kW**	**6,0 kW**	**7,1 kW**	**10,0 kW**
Kit			KIT-36PK3ZH5	KIT-50PK3ZH5	KIT-60PK3ZH5	KIT-71PK3ZH45	KIT-100PK3ZH45
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,1 (1,2 - 7,1)	7,1 (2,2 - 9,0)	9,5 (3,1 - 10,5)
EER [1]	Nominal (Min - Max)	W/W	4,93 (4,49 - 5,45)	4,24 (3,61 - 5,45)	3,86 (3,02 - 5,45)	3,50 (2,69 - 5,79)	3,21 (3,09 - 5,34)
SEER [2]			8,4 A++	8,0 A++	7,2 A++	6,8 A++	6,4 A++
Pdesign		kW	3,6	5,0	6,1	7,1	9,5
Input power	Nominal (Min - Max)	kW	0,73 (0,22 - 0,89)	1,18 (0,22 - 1,55)	1,58 (0,22 - 2,35)	2,03 (0,38 - 3,35)	2,96 (0,58 - 3,40)
Annual energy consumption [3]		kWh/a	150	219	297	365	520
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	8,0 (2,0 - 9,0)	9,5 (3,1 - 11,5)
COP [1]	Nominal (Min - Max)	W/W	4,82 (4,17 - 5,45)	4,15 (3,55 - 5,45)	4,19 (3,40 - 5,45)	4,00 (3,16 - 5,56)	3,88 (3,43 - 5,54)
SCOP [2]			4,9 A++	4,7 A++	4,8 A++	4,7 A++	3,9 A
Pdesign at -10 °C		kW	3,6	4,5	4,6	5,2	8,0
Input power	Nominal (Min - Max)	kW	0,83 (0,22 - 1,20)	1,35 (0,22 - 1,83)	1,67 (0,22 - 2,35)	2,00 (0,36 - 2,85)	2,45 (0,56 - 3,35)
Annual energy consumption [3]		kWh/a	1029	1341	1342	1549	2871
Indoor unit			S-3650PK3E	S-3650PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E
Air flow	Hi / Med / Lo	m³/min	13,0 / 11,0 / 9,0	16,0 / 13,5 / 11,0	20,0 / 17,5 / 14,5	20,0 / 17,5 / 14,5	22,0 / 18,5 / 15,5
Moisture removal volume		L/h	0,9	1,8	2,0	3,0	4,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	35 / 31 / 27	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	51 / 47 / 43	56 / 52 / 48	63 / 60 / 56	63 / 60 / 56	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	13	13	14	14	14
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-100PZH4E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,60 - 3,45 - 3,30	5,60 - 5,35 - 5,10	7,40 - 7,10 - 6,80	10,3 - 9,80 - 9,40	14,60 - 14,00 - 13,40
	Heat	A	4,05 - 3,90 - ,3,70	6,40 - 6,10 - 5,85	7,75 - 7,40 - 7,10	10,10 - 9,65 - 9,25	12,00 - 11,60 - 11,10
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	62,0 / 66,0	76,0 / 70,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370
Net weight		kg	42	42	43	66	84
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 60	5 ~ 100
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30	30
Additional gas amount		g/m	15	15	15	30	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	2,70 / 1,82
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +52	-20 [8] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

· Modern design with flat face and compact size
· DC fan for better efficiency and control
· Six directional piping outlet
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
· Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
· Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Closed discharge port

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

Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

Piping outlet in six directions

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

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3

Econavi sensor. CZ-CENSC1

			Three phase	
			7,1 kW	**10,0 kW**
Kit			KIT-71PK3ZH48	KIT-100PK3ZH48
Remote controller			CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	7,1 (2,2 - 9,0)	9,5 (3,1 - 10,5)
EER [1]	Nominal (Min - Max)	W/W	3,50 (2,69 - 5,79)	3,21 (3,09 - 5,34)
SEER [2]			**6,7 A++**	**6,3 A++**
Pdesign		kW	7,1	9,5
Input power	Nominal (Min - Max)	kW	2,03 (0,38 - 3,35)	2,96 (0,58 - 3,40)
Annual energy consumption [3]		kWh/a	370	526
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	9,5 (3,1 - 11,5)
COP [1]	Nominal (Min - Max)	W/W	4,00 (3,16 - 5,56)	3,88 (3,43 - 5,54)
SCOP [2]			**4,7 A++**	**3,9 A**
Pdesign at -10 °C		kW	5,2	8,0
Input power	Nominal (Min - Max)	kW	2,00 (0,36 - 2,85)	2,45 (0,56 - 3,35)
Annual energy consumption [3]		kWh/a	1549	2871
Indoor unit			**S-6010PK3E**	**S-6010PK3E**
Air flow	Hi / Med / Lo	m³/min	20,0 / 17,5 / 14,5	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	3,0	4,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	47 / 44 / 40	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	63 / 60 / 56	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	14	14
nanoe X Generator			Mark 2	Mark 2
Outdoor unit			**U-71PZH4E8**	**U-100PZH4E8**
Power supply		V	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	3,45 - 3,25 - 3,15	4,95 - 4,70 - 4,50
	Heat	A	3,40 - 3,20 - 3,10	4,10 - 3,90 - 3,70
Air flow	Cool / Heat	m³/min	62,0 / 66,0	76,0 / 70,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370
Net weight		kg	66	82
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 60	5 ~ 100
Elevation difference (in / out) [7]		m	15 / 30	15 / 30
Pre-charged pipe length		m	30	30
Additional gas amount		g/m	30	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	2,70 / 1,82
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-20 [8] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP are calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. 8) Pipe length up to 30 m. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3	Infrared remote controller

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

R32 | A++ 8,4 SEER | A++ 4,9 SCOP | INVERTER+ | -15 °C COOLING MODE | -20 °C HEATING MODE | nanoeX | DC FAN | R22/R410A R22 / R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-3650PK3E + U-36PZH3E5. INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PACi NX Series Standard wall-mounted - PK3 · R32

The wall-mounted units with stylish matt color can be offered for many applications such as studios, gyms, high ceiling areas and even computer server rooms.
The compact design and flat face ensure discreet installation, even in a small space.

nanoe✕
nanoe™ X as a standard.

			Single phase				
			3,6 kW	**5,0 kW**	**6,0 kW**	**7,1 kW**	**10,0 kW**
Kit			KIT-36PK3Z5	KIT-50PK3Z5	KIT-60PK3Z5	KIT-71PK3Z5	KIT-100PK3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,0)	5,0 (1,5 - 5,6)	6,1 (2,0 - 7,1)	7,1 (2,6 - 7,7)	9,0 (3,0 - 9,7)
EER [1]	Nominal (Min - Max)	W/W	4,14 (3,74 - 5,88)	3,52 (3,03 - 6,25)	3,67 (3,01 - 6,90)	3,16 (2,77 - 5,00)	3,47 (3,13 - 5,36)
SEER [2]			7,6 A++	7,4 A++	7,0 A++	5,8 A+	6,5 A++
Pdesign		kW	3,6	5,0	6,1	7,1	9,0
Input power	Nominal (Min - Max)	kW	0,87 (0,26 - 1,07)	1,42 (0,24 - 1,85)	1,66 (0,29 - 2,36)	2,25 (0,52 - 2,78)	2,59 (0,56 - 3,10)
Annual energy consumption [3]		kWh/a	166	237	3,05	429	485
Heating capacity	Nominal (Min - Max)	kW	3,6 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,1 (1,8 - 7,0)	7,1 (2,1 - 8,1)	9,0 (3,0 - 10,5)
COP [1]	Nominal (Min - Max)	W/W	4,62 (4,11 - 6,52)	4,20 (3,17 - 7,50)	4,39 (3,18 - 7,50)	4,23 (3,38 - 6,36)	3,93 (3,56 - 5,36)
SCOP [2]			4,5 A+	4,4 A+	4,7 A++	4,4 A+	3,9 A
Pdesign at -10 °C		kW	2,8	4,0	4,6	5,2	9,0
Input power	Nominal (Min - Max)	kW	0,78 (0,23 - 1,12)	1,19 (0,20 - 2,02)	1,39 (0,24 - 2,20)	1,68 (0,33 - 2,40)	2,29 (0,56 - 2,95)
Annual energy consumption [3]		kWh/a	872	1273	1370	1653	3231
Indoor unit			S-3650PK3E	S-3650PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E
Air flow	Hi / Med / Lo	m³/min	13,0 / 11,0 / 9,0	16,0 / 13,5 / 11,0	20,0 / 17,5 / 14,5	20,0 / 17,5 / 14,5	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	0,9	1,8	2,0	3,0	4,3
Sound pressure [4]	Hi / Med / Lo	dB(A)	35 / 31 / 27	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	51 / 47 / 43	56 / 52 / 48	63 / 60 / 56	63 / 60 / 56	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236	302 x 1120 x 236
Net weight		kg	13	13	14	14	14
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,05 - 3,85 - 3,70	6,60 - 6,30 - 6,05	7,70 - 7,35 - 7,05	10,4 - 10,00 - 9,55	12,9 - 12,4 - 11,9
	Heat	A	3,65 - 3,50 - 3,35	5,60 - 5,35 - 5,10	6,45 - 6,15 - 5,90	7,80 - 7,45 - 7,15	11,4 - 10,9 - 10,5
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370
Net weight		kg	32	35	42	50	83
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	1/4 (6,35) [5]	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88) [6]	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50
Elevation difference (in / out) [7]		m	15 / 15	15 / 15	15 / 30	20 / 30	15 / 30
Pre-charged pipe length		m	7,5	7,5	30	30	30
Additional gas amount		g/m	10	15	15	17	45
Refrigerant (R32) / CO$_2$ Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,4 / 1,62
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

· Modern design with flat face and compact size
· DC fan for better efficiency and control
· Six directional piping outlet
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
· Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
· Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Closed discharge port

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

Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

Piping outlet in six directions

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

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3

Econavi sensor. CZ-CENSC1

			Three phase
			10,0 kW
Kit			**KIT-100PK3Z8**
Remote controller			**CZ-RTC5B**
Cooling capacity	Nominal (Min - Max)	kW	9,0 (3,0 - 9,7)
EER [1]	Nominal (Min - Max)	W/W	3,47 (5,36 - 3,13)
SEER [2]			**6,5 A++**
Pdesign		kW	9,0
Input power	Nominal (Min - Max)	kW	2,59 (0,56 - 3,10)
Annual energy consumption [3]		kWh/a	485
Heating capacity	Nominal (Min - Max)	kW	9,0 (3,0 - 10,5)
COP [1]	Nominal (Min - Max)	W/W	3,93 (5,36 - 3,56)
SCOP [2]			**3,9 A**
Pdesign at -10 °C		kW	9,0
Input power	Nominal (Min - Max)	kW	2,29 (0,56 - 2,95)
Annual energy consumption [3]		kWh/a	3231
Indoor unit			**S-6010PK3E**
Air flow	Hi / Med / Lo	m³/min	22,0 / 18,5 / 15,0
Moisture removal volume		L/h	4,3
Sound pressure [4]	Hi / Med / Lo	dB(A)	49 / 45 / 41
Sound power	Hi / Med / Lo	dB(A)	65 / 61 / 57
Dimension	H x W x D	mm	302 x 1120 x 236
Net weight		kg	14
nanoe X Generator			Mark 2
Outdoor unit			**U-100PZ3E8**
Power supply		V	380 - 400 - 415
Current	Cool	A	4,30 - 4,10 - 3,95
	Heat	A	3,80 - 3,65 - 3,50
Air flow	Cool / Heat	m³/min	73,0 / 73,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70
Dimension	H x W x D	mm	996 x 980 x 370
Net weight		kg	83
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)
Pipe length range		m	5 ~ 50
Elevation difference (in / out) [7]		m	15 / 30
Pre-charged pipe length		m	30
Additional gas amount		g/m	45
Refrigerant (R32) / CO$_2$ Eq.		kg / T	2,4 / 1,62
Operating range	Cool Min ~ Max	°C	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3	Infrared remote controller

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

R32

A++ 7,6 SEER

A++ 4,7 SCOP

INVERTER+

-10 °C COOLING MODE

-15 °C HEATING MODE

nanoeX

DC FAN

R22 R410A / R32 R22 / R410A RENEWAL

OPTIONAL WI-FI

BMS CONNECTIVITY

5 YEARS COMPRESSOR WARRANTY

SEER: For S-3650PK3E + U-36PZ3E5. SCOP: For S-6010PK3E + U-60PZ3E5A. INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

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PACi NX Series Elite and Standard 4 way 60x60 cassette – PY3 · R32

· From 2,5 to 6,0 kW (4 capacity sizes)
· Maximum SEER: 7,3 A++ / SCOP: 4,7 A++*
· Built-in drain pump
· DC drain pump and float switch to reduce the noise
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as
  standard for better indoor air quality

* For Elite 3,6 KW model.

· nanoeX™

nanoe™ X as a standard.

Elite			Single phase		
			3,6 kW	**5,0 kW**	**6,0 kW**
Kit			KIT-36PY3ZH5	KIT-50PY3ZH5	KIT-60PY3ZH5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,0 (1,2 - 6,5)
EER [1]	Nominal (Min - Max)	W/W	4,50 (4,04 - 5,45)	3,76 (3,41 - 5,45)	3,43 (2,77 - 5,45)
SEER [2]			7,3 A++	7,0 A++	6,7 A++
Pdesign		kW	3,6	5,0	6,0
Input power	Nominal (Min - Max)	kW	0,80 (0,22 - 0,99)	1,33 (0,22 - 1,64)	1,75 (0,20 - 2,35)
Annual energy consumption [3]		kWh/a	400	685	875
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 7,5)
COP [1]	Nominal (Min - Max)	W/W	4,12 (3,45 - 5,45)	3,37 (2,95 - 5,45)	3,35 (3,38 - 5,45)
SCOP [2]			4,7 A++	4,6 A++	4,3 A+
Pdesign at -10 °C		kW	3,6	4,5	4,6
Input power	Nominal (Min - Max)	kW	0,97 (0,22 - 1,45)	1,66 (0,22 - 2,20)	2,09 (0,22 - 2,22)
Annual energy consumption [3]		kWh/a	1073	1370	1495
Indoor unit			S-36PY3E	S-50PY3E	S-60PY3E
Air flow	Hi / Med / Lo	m³/min	9,5 / 7,5 / 6,0	12,0 / 9,5 / 6,5	14,0 / 10,5 / 8,0
Moisture removal volume		L/h	1,5	2,5	2,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	34 / 30 / 25	39 / 34 / 27	43 / 37 / 31
Sound power	Hi / Med / Lo	dB(A)	49 / 45 / 40	54 / 49 / 42	58 / 52 / 46
Dimension	Indoor (H x W x D)	mm	243 x 575 x 575	243 x 575 x 575	243 x 575 x 575
	Panel (H x W x D)	mm	30 x 625 x 625	30 x 625 x 625	30 x 625 x 625
Net weight	Indoor / Panel	kg	15 / 2,8	15 / 2,8	15 / 2,8
nanoe X Generator			Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,95 - 3,60 - 3,60	5,30 - 5,00 - 5,75	8,20 - 7,85 - 7,60
	Heat	A	4,75 - 4,55 - 4,35	7,85 - 7,50 - 7,20	9,70 - 9,25 - 8,90
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320
Net weight		kg	42	42	43
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30
Additional gas amount		g/m	15	15	15
Refrigerant (R32) / CO$_2$ Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24

Compact and stylish design

· Required ceiling depth of only 250 mm
· Exposed area is only 30 mm

Individual flap control

Better control of the air flow with 4 motors, providing individual flap control.
Perfect air distribution without direct airflow, to reduce the feeling of cold drafts.

R32 · A++ 7,3 SEER · A++ 4,7 SCOP · ECONAVI 28% · INVERTER+ · -15 °C COOLING MODE · -20 °C HEATING MODE · nanoeX · DC FAN · R22 R410A / R22 / R410A RENEWAL · OPTIONAL WI-FI · BMS CONNECTIVITY · 5 YEARS COMPRESSOR WARRANTY
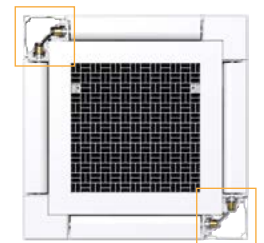
SEER and SCOP: For S-36PY3E + U-36PZH3E5. ECONAVI and INTERNET CONTROL: Optional.

Panel.
CZ-KPY4

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3 + CZ-RWRY3

Econavi sensor. CZ-CENSC1

Standard			Single phase			
			2,5 kW	**3,6 kW**	**5,0 kW**	**6,0 kW**
Kit			KIT-25PY3Z5	KIT-36PY3Z5	KIT-50PY3Z5	KIT-60PY3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	2,5 (1,5 - 3,9)	3,6 (1,5 - 4,0)	5,0 (1,5 - 5,6)	6,0 (2,0 - 7,0)
EER [1]	Nominal (Min - Max)	W/W	4,46 (3,55 - 5,88)	3,96 (3,57 - 5,88)	3,50 (3,03 - 6,25)	3,39 (2,77 - 6,90)
SEER [2]			6,5 A++	6,7 A++	7,3 A++	6,8 A++
Pdesign		kW	2,5	3,6	5,0	6,0
Input power	Nominal (Min - Max)	kW	0,56 (0,26 - 1,10)	0,91 (0,26 - 1,12)	1,43 (0,24 - 1,85)	1,77 (0,29 - 2,53)
Annual energy consumption [3]		kWh/a	134	188	238	3,05
Heating capacity	Nominal (Min - Max)	kW	3,2 (1,5 - 4,6)	3,6 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,0 (1,8 - 7,0)
COP [1]	Nominal (Min - Max)	W/W	4,44 (3,41 - 6,52)	4,29 (3,38 - 6,52)	3,94 (2,91 - 7,50)	3,61 (2,86 - 7,60)
SCOP [2]			4,6 A++	4,3 A+	4,4 A+	4,2 A+
Pdesign at -10 °C		kW	2,8	2,8	4,0	4,6
Input power	Nominal (Min - Max)	kW	0,72 (0,23 - 1,35)	0,84 (0,23 - 1,36)	1,27 (0,20 - 2,20)	1,66 (0,24 - 2,45)
Annual energy consumption [3]		kWh/a	850	912	1264	1500
Indoor unit			S-25PY3E	S-36PY3E	S-50PY3E	S-60PY3E
Air flow	Hi / Med / Lo	m³/min	8,5 / 7,0 / 6,0	9,5 / 7,0 / 6,0	12,0 / 9,5 / 6,5	14,0 / 10,5 / 8,0
Moisture removal volume		L/h	0,7	1,5	2,3	2,8
Sound pressure [4]	Hi / Med / Lo	dB(A)	31 / 28 / 25	34 / 30 / 25	39 / 34 / 27	43 / 37 / 31
Sound power	Hi / Med / Lo	dB(A)	46 / 43 / 40	49 / 45 / 40	54 / 49 / 42	58 / 52 / 46
Dimension	Indoor (H x W x D)	mm	243 x 575 x 575	243 x 575 x 575	243 x 575 x 575	243 x 575 x 575
	Panel (H x W x D)	mm	30 x 625 x 625	30 x 625 x 625	30 x 625 x 625	30 x 625 x 625
Net weight	Indoor / Panel	kg	15 / 2,8	15 / 2,8	15 / 2,8	15 / 2,8
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-25PZ3E5	U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	2,65 - 2,55 - 2,45	4,20 - 4,05 - 3,85	6,65 - 6,35 - 6,10	8,20 - 7,85 - 7,55
	Heat	A	3,40 - 3,25 - 3,10	3,95 - 3,75 - 3,60	5,695 - 5,70 - 5,45	7,70 - 7,35 - 7,05
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,6 / 34,0	32,7 / 31,9	42,6 / 41,5
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 47	46 / 48	47 / 48
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 66	64 / 64	64 / 65
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320
Net weight		kg	32	32	35	46
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 20	3 ~ 40
Elevation difference (in / out) [7]		m	15 / 15	15 / 15	15 / 15	15 / 30
Pre-charged pipe length		m	7,5	7,5	7,5	30
Additional gas amount		g/m	10	10	15	15
Refrigerant (R32) / CO₂ Eq.		kg / T	0,87 / 0,59	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRY3	Infrared remote controller and receiver

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

R32

A++ 7,3 SEER

A++ 4,6 SCOP

28% ECONAVI

INVERTER+

-10 °C COOLING MODE

-15 °C HEATING MODE

nanoeX

DC FAN

R22 R410A / R32 R22 / R410A RENEWAL

OPTIONAL WI-FI

BMS CONNECTIVITY

5 YEARS COMPRESSOR WARRANTY

SEER: For S-50PY3E + U-50PZ3E5. SCOP: For S-25PY3E + U-25PZ3E5. ECONAVI and INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

PACi NX Series Elite 4 way 90x90 cassette - PU3 · R32

4 way 90x90 cassette - PU3.
Powerful turbo fan and intelligent Econavi sensor ensure high energy efficiency, and nanoe™ X, which is equipped as standard, provides an exceptional level of indoor air quality.

nanoe™ X as a standard.

			Single phase						
			3,6 kW	**5,0 kW**	**6,0 kW**	**7,1 kW**	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			KIT-36PU3ZH5	KIT-50PU3ZH5	KIT-60PU3ZH5	KIT-71PU3ZH45	KIT-100PU3ZH45	KIT-125PU3ZH45	KIT-140PU3ZH45
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,0 (1,2 - 7,1)	7,1 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,5 (3,2 - 14,0)	13,4 (3,3 - 16,0)
EER [1]	Nominal (Min - Max)	W/W	5,45 (4,60 - 5,45)	4,31 (3,86 - 5,45)	4,05 (3,02 - 5,45)	4,06 (2,69 - 5,79)	4,42 (3,42 - 5,34)	3,80 (3,08 - 5,33)	3,60 (2,74 - 5,32)
SEER / $\eta_{s,c}$ [2]			8,9 A+++	8,6 A+++	8,0 A++	7,7 A++	7,8 A++	304,3%	286,6%
Pdesign		kW	3,6	5,0	6,0	7,1	9,5	12,5	13,4
Input power	Nominal (Min - Max)	kW	0,66 (0,22 - 0,87)	1,16 (0,22 - 1,45)	1,48 (0,22 - 2,35)	1,75 (0,38 - 3,35)	2,15 (0,58 - 3,65)	3,29 (0,60 - 4,55)	3,72 (0,62 - 5,85)
Annual energy consumption [3]		kWh/a	142	203	263	323	426	—	—
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]	Nominal (Min - Max)	W/W	5,41 (4,55 - 5,45)	4,24 (4,19 - 5,45)	4,02 (3,40 - 5,45)	4,30 (3,16 - 5,56)	5,00 (3,64 - 5,54)	4,61 (3,37 - 5,52)	4,30 (3,27 - 5,50)
SCOP / $\eta_{s,h}$ [2]			5,1 A+++	4,9 A++	4,8 A++	4,8 A++	4,9 A++	186,0%	181,2%
Pdesign at -10 °C		kW	3,6	4,5	4,7	5,2	8,0	9,5	10,6
Input power	Nominal (Min - Max)	kW	0,74 (0,22 - 1,10)	1,32 (0,22 - 1,55)	1,74 (0,22 - 2,35)	1,86 (0,36 - 2,85)	2,24 (0,56 - 3,85)	3,04 (0,58 - 4,75)	3,72 (0,60 - 5,50)
Annual energy consumption [3]		kWh/a	988	1286	1371	1517	2286	—	—
Indoor unit			S-3650PU3E	S-3650PU3E	S-6071PU3E	S-6071PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E
Air flow	Hi / Med / Lo	m³/min	14,5 / 13,0 / 11,5	16,5 / 13,5 / 11,5	21,0 / 16,0 / 13,0	22,0 / 16,0 / 13,0	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	0,7	1,6	1,7	2,5	1,9	4,8	4,9
Sound pressure [4]	Hi / Med / Lo	dB(A)	30 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	45 / 43 / 42	47 / 44 / 42	51 / 46 / 43	52 / 46 / 43	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	19 / 5	19 / 5	20 / 5	20 / 5	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-100PZH4E5	U-125PZH4E5	U-140PZH4E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,25 - 3,10 - 3,00	5,50 - 5,25 - 5,05	6,95 - 6,65 - 6,35	8,85 - 8,45 - 8,10	10,06 - 10,02 - 9,75	16,10 - 15,40 - 14,70	18,20 - 17,40 - 16,70
	Heat	A	3,60 - 3,45 - 3,30	6,25 - 6,00 - 5,75	8,05 - 7,70 - 7,40	9,40 - 9,00 - 8,60	10,90 - 10,60 - 10,10	14,90 - 14,20 - 13,60	18,20 - 17,40 - 16,70
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	42	42	43	66	84	86	86
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +52	-20 [8] ~ +52	-20 [8] ~ +52	-20 [8] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

· High performance turbo fan
· 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 plus dry operation

· Lower noise in low fan operation
· Light weight, easy piping and integrated drain pump for quick installation
· Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
· High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3+CZ-ATU2)

Standard panel.
CZ-KPU3W

Optional Econavi panel (CZ-RTC5B is required).
CZ-KPU3AW

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white.
CZ-RTC6W/BL/BLW

CONEX wired remote controller, black.
CZ-RTC6/BL/BLW

Infrared remote controller.
CZ-RWS3 + CZ-RWRU3W

			Three phase			
			7,1 kW	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			KIT-71PU3ZH48	KIT-100PU3ZH48	KIT-125PU3ZH48	KIT-140PU3ZH48
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	7,1 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,5 (3,2 - 14,0)	13,4 (3,3 - 16,0)
EER [1]	Nominal (Min - Max)	W/W	4,06 (2,69 - 5,79)	4,42 (3,42 - 5,34)	3,80 (3,08 - 5,33)	3,60 (2,74 - 5,32)
SEER / $\eta_{s,c}$ [2]			**7,7 A++**	**7,2 A++**	**303,0%**	**286,6%**
Pdesign		kW	7,1	9,5	12,5	13,4
Input power	Nominal (Min - Max)	kW	1,75 (0,38 - 3,35)	2,15 (0,58 - 3,65)	3,29 (0,60 - 4,55)	3,72 (0,62 - 5,85)
Annual energy consumption [3]		kWh/a	323	426	—	—
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]	Nominal (Min - Max)	W/W	4,30 (3,16 - 5,56)	5,00 (3,64 - 5,54)	4,61 (3,37 - 5,52)	4,30 (3,27 - 5,50)
SCOP / $\eta_{s,h}$ [2]			**4,8 A++**	**4,9 A++**	**186,0%**	**181,1%**
Pdesign at -10 °C		kW	5,2	8,0	9,5	10,6
Input power	Nominal (Min - Max)	kW	1,86 (0,36 - 2,85)	2,24 (0,56 - 3,85)	3,04 (0,58 - 4,75)	3,72 (0,60 - 5,50)
Annual energy consumption [3]		kWh/a	1517	2286	—	—
Indoor unit			S-6071PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E
Air flow	Hi / Med / Lo	m³/min	22,0 / 16,0 / 13,0	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	2,5	1,9	4,8	4,9
Sound pressure [4]	Hi / Med / Lo	dB(A)	37 / 31 / 28	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	52 / 46 / 43	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	20 / 5	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit			U-71PZH4E8	U-100PZH4E8	U-125PZH4E8	U-140PZH4E8
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	2,95 - 2,80 - 2,70	3,60 - 3,40 - 3,25	5,45 - 5,15 - 5,00	6,15 - 5,85 - 5,65
	Heat	A	3,15 - 3,00 - 2,90	3,75 - 3,55 - 3,40	5,10 - 4,80 - 4,65	6,20 - 5,90 - 5,65
Air flow	Cool / Heat	m³/min	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	66	82	84	84
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30
Additional gas amount		g/m	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-20 [8] ~ +52	-20 [8] ~ +52	-20 [8] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. 8) Pipe length up to 30 m. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRU3W	Infrared remote controller and receiver

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
CZ-KPU3AW	Econavi exclusive panel
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-FDU3+CZ-ATU2	Fresh air-intake kit

R32   A+++ 8,9 SEER   A+++ 5,1 SCOP   28% ECONAVI   INVERTER+   -15 °C COOLING MODE   -20 °C HEATING MODE   nanoeX   DC FAN   R22 R410A / R32 R22 / R410A RENEWAL   OPTIONAL WI-FI   BMS CONNECTIVITY   5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-3650PU3E + U-36PZH3E5. ECONAVI and INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

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PACi NX Series Standard 4 way 90x90 cassette - PU3 · R32

4 way 90x90 cassette - PU3.
Powerful turbo fan and intelligent Econavi sensor ensure high energy efficiency, and nanoe™ X, which is equipped as standard, provides an exceptional level of indoor air quality.

nanoe X

nanoe™ X as a standard.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PU3Z5	KIT-50PU3Z5	KIT-60PU3Z5	KIT-71PU3Z5	KIT-100PU3Z5	KIT-125PU3Z5	KIT-140PU3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min-Max)	kW	3,6 (1,5-4,0)	5,0 (1,5-5,6)	6,0 (2,0-7,1)	7,1 (2,6-7,7)	10,0 (3,0-11,5)	12,5 (3,2-13,5)	14,0 (3,3-15,0)
EER [1]	Nominal (Min-Max)	W/W	4,34 (5,88-3,81)	3,91 (6,25-3,20)	3,73 (6,90-3,01)	3,27 (5,00-2,77)	3,82 (2,88-5,36)	3,58 (2,81-5,33)	3,23 (2,73-5,32)
SEER / $\eta_{s,c}$ [2]			8,1 A++	8,0 A++	7,8 A++	6,8 A++	6,8 A++	267,0%	257,0%
Pdesign		kW	3,6	5,0	6,0	7,1	10,0	12,5	14,0
Input power	Nominal (Min-Max)	kW	0,83 (0,25-1,05)	1,28 (0,24-1,75)	1,61 (0,29-2,36)	2,17 (0,52-2,78)	2,62 (0,56-4,00)	3,49 (0,60-4,80)	4,34 (0,62-5,50)
Annual energy consumption [3]		kWh/a	156	219	269	365	515	—	—
Heating capacity	Nominal (Min-Max)	kW	3,6 (1,5-4,6)	5,0 (1,5-6,4)	6,0 (1,8-7,0)	7,1 (2,1-8,1)	10,0 (3,0-14,0)	12,5 (3,3-15,0)	14,0 (3,4-16,0)
COP [1]	Nominal (Min-Max)	W/W	5,07 (4,32-6,52)	4,63 (3,48-7,50)	4,48 (3,18-7,50)	4,23 (3,38-6,36)	4,93 (3,59-5,36)	4,43 (3,57-5,50)	4,18 (3,33-5,48)
SCOP / $\eta_{s,h}$ [2]			4,8 A++	4,7 A++	4,9 A++	4,6 A++	4,4 A+	157,0%	152,2%
Pdesign at -10 °C		kW	2,8	4,0	4,6	5,2	10,0	12,5	14,0 (at -7 °C)
Input power	Nominal (Min-Max)	kW	0,71 (0,23-1,06)	1,08 (0,20-1,84)	1,34 (0,24-2,20)	1,68 (0,33-2,40)	2,03 (0,56-3,90)	2,82 (0,60-4,20)	3,35 (0,62-4,80)
Annual energy consumption [3]		kWh/a	817	1191	1314	1583	3182	—	—
Indoor unit			S-3650PU3E	S-3650PU3E	S-6071PU3E	S-6071PU3E	S-1014PU3E	S-1014PU3E	S-1014PU3E
Air flow	Hi / Med / Lo	m³/min	14,5/13,0/11,5	16,5/13,5/11,5	21,0/16,0/13,0	22,0/16,0/13,0	36,0/26,0/18,0	37,0/27,0/19,0	38,0/29,0/20,0
Moisture removal volume		L/h	0,7	1,6	1,7	2,5	2,7	4,8	6,0
Sound pressure [4]	Hi / Med / Lo	dB(A)	30/28/27	32/29/27	36/31/28	37/31/28	45/38/32	46/39/33	47/40/34
Sound power	Hi / Med / Lo	dB(A)	45/43/42	47/44/42	51/46/43	52/46/43	60/53/47	61/54/48	62/55/49
Dimension	Indoor (H x W x D)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	19/5	19/5	20/5	20/5	25/5	25/5	25/5
nanoe X Generator			Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-125PZ3E5	U-140PZ3E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,85 - 3,70 - 3,55	5,95 - 5,70 - 5,45	7,45 - 7,15 - 6,85	10,00 - 9,65 - 9,25	13,10-12,50-12,00	16,90-16,10-15,40	21,00-20,00-19,20
	Heat	A	3,35 - 3,20 - 3,05	5,05 - 4,85 - 4,65	6,20 - 5,95 - 5,70	7,80 - 7,45 - 7,15	10,10-9,70-9,30	13,60-13,00-12,50	16,20-15,50-14,80
Air flow	Cool / Heat	m³/min	33,6/34,0	32,7/31,9	42,6/41,5	44,7/45,9	73,0/73,0	82,0/80,0	84,0/82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46/47	46/46	47/48	48/49	52/52	55/55	56/56
Sound power	Cool / Heat (Hi)	dB(A)	64/66	64/64	64/65	66/68	70/70	73/73	74/74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3~15	3~20	3~40	3~40	5~50	5~50	5~50
Elevation difference (in / out) [7]		m	15/15	15/15	15/30	20/30	15/30	15/30	15/30
Pre-charged pipe length		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87/0,59	1,14/0,77	1,15/0,78	1,32/0,89	2,40/1,62	2,80/1,89	2,80/1,89
Operating range	Cool Min ~ Max	°C	-10~+43	-10~+43	-10~+43	-10~+43	-10~+43	-10~+43	-10~+43
	Heat Min ~ Max	°C	-15~+24	-15~+24	-15~+24	-15~+24	-15~+24	-15~+24	-15~+24

Technical focus

· High performance turbo fan
· 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 plus dry operation

· Lower noise in low fan operation
· Light weight, easy piping and integrated drain pump for quick installation
· Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
· High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3+CZ-ATU2)

Standard panel.
CZ-KPU3W

Optional Econavi panel
(CZ-RTC5B is required).
CZ-KPU3AW

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white.
CZ-RTC6W/BL/BLW

CONEX wired remote controller, black.
CZ-RTC6/BL/BLW

Infrared remote controller.
CZ-RWS3 + CZ-RWRU3W

			Three phase		
			10,0 kW	**12,5 kW**	**14,0 kW**
Kit			KIT-100PU3Z8	KIT-125PU3Z8	KIT-140PU3Z8
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,82 (2,88 - 5,36)	3,58 (2,81 - 5,33)	3,23 (2,73 - 5,32)
SEER / $\eta_{s,c}$ [2]			**6,7 A++**	**265,8%**	**256,2%**
Pdesign		kW	10,0	12,5	14,0
Input power	Nominal (Min - Max)	kW	2,62 (0,56 - 4,00)	3,49 (0,60 - 4,80)	4,34 (0,62 - 5,50)
Annual energy consumption [3]		kWh/a	521	—	—
Heating capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,93 (3,59 - 5,36)	4,43 (3,57 - 5,50)	4,18 (3,33 - 5,48)
SCOP / $\eta_{s,h}$ [2]			**4,4 A+**	**157,0%**	**152,2%**
Pdesign at -10 °C		kW	10,0	12,5	14,0 (at -7 °C)
Input power	Nominal (Min - Max)	kW	2,03 (0,56 - 3,90)	2,82 (0,60 - 4,20)	3,35 (0,62 - 4,80)
Annual energy consumption [3]		kWh/a	3182	—	—
Indoor unit			S-1014PU3E	S-1014PU3E	S-1014PU3E
Air flow	Hi / Med / Lo	m³/min	36,0 / 26,0 / 18,0	37,0 / 27,0 / 19,0	38,0 / 29,0 / 20,0
Moisture removal volume		L/h	2,7	4,8	6,0
Sound pressure [4]	Hi / Med / Lo	dB(A)	45 / 38 / 32	46 / 39 / 33	47 / 40 / 34
Sound power	Hi / Med / Lo	dB(A)	60 / 53 / 47	61 / 54 / 48	62 / 55 / 49
Dimension	Indoor (H x W x D)	mm	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
	Panel (H x W x D)	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Net weight	Indoor / Panel	kg	25 / 5	25 / 5	25 / 5
nanoe X Generator			Mark 1	Mark 1	Mark 1
Outdoor unit			U-100PZ3E8	U-125PZ3E8	U-140PZ3E8
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,35 - 4,15 - 4,00	5,65 - 5,35 - 5,15	7,00 - 6,65 - 6,40
	Heat	A	3,40 - 3,20 - 3,10	4,55 - 4,35 - 4,15	5,40 - 5,15 - 4,95
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRU3W	Infrared remote controller and receiver

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
CZ-KPU3AW	Econavi exclusive panel
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-FDU3+CZ-ATU2	Fresh air-intake kit

R32 | A++ 8,1 SEER | A++ 4,9 SCOP | 28% ECONAVI | INVERTER+ | -10 °C COOLING MODE | -15 °C HEATING MODE | nanoeX | DC FAN | R22 R410A / R22 / R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER: For S-3650PU3E + U-36PZ3E5. SCOP: For S-6071PU3E + U-60PZ3E5A. ECONAVI and INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

PACi NX Series Elite ceiling - PT3 · R32

Ceiling mounted units provide large and wide air distribution which is ideal for large rooms.
The height and depth of all capacities are the same for unified appearance in mixed installations.

nanoeX

nanoe™ X as a standard.

			Single phase						
			3,6 kW	**5,0 kW**	**6,0 kW**	**7,1 kW**	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			KIT-36PT3ZH5	KIT-50PT3ZH5	KIT-60PT3ZH5	KIT-71PT3ZH45	KIT-100PT3ZH45	KIT-125PT3ZH45	KIT-140PT3ZH45
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,5 (1,2 - 4,0)	5,0 (1,2 - 5,6)	6,0 (1,2 - 7,1)	6,8 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,1 (3,2 - 14,0)	13,4 (3,3 - 16,0)
EER [1]	Nominal (Min - Max)	W/W	4,86 (4,55 - 5,45)	4,03 (3,57 - 5,45)	3,82 (3,02 - 5,45)	3,91 (2,69 - 5,79)	4,06 (3,29 - 5,34)	3,46 (3,01 - 5,33)	3,21 (2,67 - 5,32)
SEER / $\eta_{s,c}$ [2]			7,7 A++	7,4 A++	7,5 A++	7,3 A++	7,3 A++	278,4%	263,3%
Pdesign		kW	3,5	5,0	6,0	6,8	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	0,72 (0,22 - 0,88)	1,24 (0,22 - 1,57)	1,57 (0,22 - 2,35)	1,74 (0,38 - 3,35)	2,34 (0,58 - 3,80)	3,50 (0,60 - 4,65)	4,17 (0,62 - 6,00)
Annual energy consumption [3]		kWh/a	160	237	280	326	456	—	—
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]	Nominal (Min - Max)	W/W	5,00 (4,17 - 5,45)	4,03 (3,94 - 5,45)	4,14 (3,40 - 5,45)	3,96 (3,16 - 5,56)	4,00 (3,54 - 5,54)	3,78 (3,20 - 5,52)	3,38 (3,10 - 5,50)
SCOP / $\eta_{s,h}$ [2]			4,9 A++	4,8 A++	4,8 A++	4,7 A++	4,5 A+	175,6%	169,3%
Pdesign at -10 °C		kW	3,1	4,0	4,6	4,7	7,8	9,5	10,2
Input power	Nominal (Min - Max)	kW	0,80 (0,22 - 1,20)	1,39 (0,22 - 1,65)	1,69 (0,22 - 2,35)	2,02 (0,36 - 2,85)	2,80 (0,56 - 3,95)	3,70 (0,58 - 5,00)	4,74 (0,60 - 5,80)
Annual energy consumption [3]		kWh/a	886	1167	1342	1400	2426	—	—
Indoor unit			S-3650PT3E	S-3650PT3E	S-6071PT3E	S-6071PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E
Air flow	Hi / Med / Lo	m³/min	14,0 / 12,0 / 10,5	15,0 / 12,5 / 10,5	20,0 / 17,0 / 14,5	21,0 / 18,0 / 15,5	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	0,8	2,0	2,1	2,7	3,6	5,4	6,4
Sound pressure [4]	Hi / Med / Lo	dB(A)	36 / 32 / 28	37 / 33 / 28	38 / 34 / 29	39 / 35 / 30	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	54 / 50 / 46	55 / 51 / 46	56 / 52 / 47	57 / 53 / 48	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 960 x 690	235 x 960 x 690	235 x 1275 x 690	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	26	26	34	34	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-100PZH4E5	U-125PZH4E5	U-140PZH4E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,55 - 3,40 - 3,25	5,85 - 5,60 - 5,40	7,35 - 7,05 - 6,75	8,80 - 8,40 - 8,05	11,60 - 11,10 - 10,60	17,10 - 16,40 - 15,70	20,40 - 19,50 - 18,70
	Heat	A	3,90 - 3,75 - ,360	6,60 - 6,30 - 6,05	7,85 - 7,50 - 7,20	10,20 - 9,75 - 9,35	13,70 - 13,20 - 12,70	18,10 - 17,30 - 16,60	23,20 - 22,20 - 21,20
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	42	42	43	66	84	86	86
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	30	40	40	40
Refrigerant (R32) / CO$_2$ Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +52	-20 [8] ~ +52	-20 [8] ~ +52	-20 [8] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

· Wide air distribution for large rooms
· Horizontal air flow reaches maximum 9,5 m
· Fresh air connection available on the unit
· Slim design with 235 mm height fits narrow space
· Silent operation
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
· Wired remote control CZ-RTC6WBL and 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 air flow distribution

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms.
The wide air discharge opening expands the air flow to the left and 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, increasing the degree of comfort.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

CZ-RTC5B

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3 + CZ-RWRT3

Econavi sensor. CZ-CENSC1

			Three phase			
			7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-71PT3ZH48	KIT-100PT3ZH48	KIT-125PT3ZH48	KIT-140PT3ZH48
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	6,8 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,1 (3,2 - 14,0)	13,4 (3,3 - 16,0)
EER [1]	Nominal (Min - Max)	W/W	3,91 (2,69 - 5,79)	4,06 (3,29 - 5,34)	3,46 (3,01 - 5,33)	3,21 (2,67 - 5,32)
SEER / $\eta_{s,c}$ [2]			**7,2 A++**	**7,2 A++**	**277,3%**	**262,4%**
Pdesign		kW	6,8	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	1,74 (0,38 - 3,35)	2,34 (0,58 - 3,80)	3,50 (0,60 - 4,65)	4,17 (0,66 - 6,00)
Annual energy consumption [3]		kWh/a	331	462	—	—
Heating capacity	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)
COP [1]	Nominal (Min - Max)	W/W	3,96 (3,16 - 5,56)	4,00 (3,54 - 5,54)	3,78 (3,20 - 5,52)	3,38 (3,10 - 5,50)
SCOP / $\eta_{s,h}$ [2]			**4,7 A++**	**4,5 A+**	**175,6%**	**169,3%**
Pdesign at -10 °C		kW	4,7	7,8	9,5	10,2
Input power	Nominal (Min - Max)	kW	2,02 (0,36 - 2,85)	2,80 (0,56 - 3,95)	3,70 (0,58 - 5,00)	4,74 (0,60 - 5,80)
Annual energy consumption [3]		kWh/a	1400	2427	—	—
Indoor unit			S-6071PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E
Air flow	Hi / Med / Lo	m³/min	21,0 / 18,0 / 15,5	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	2,7	3,6	5,4	6,4
Sound pressure [4]	Hi / Med / Lo	dB(A)	39 / 35 / 30	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	57 / 53 / 48	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	34	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-71PZH4E8	U-100PZH4E8	U-125PZH4E8	U-140PZH4E8
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	2,95 - 2,80 - 2,70	3,60 - 3,40 - 3,25	5,45 - 5,15 - 5,00	6,15 - 5,85 - 5,65
	Heat	A	3,15 - 3,00 - 2,90	3,75 - 3,55 - 3,40	5,10 - 4,80 - 4,65	6,20 - 5,90 - 5,65
Air flow	Cool / Heat	m³/min	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	66	82	84	84
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30
Additional gas amount		g/m	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-20 [8] ~ +52	-20 [8] ~ +52	-20 [8] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. 8) Pipe length up to 30 m. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRT3	Infrared remote controller and receiver

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

R32 — A++ 7,7 SEER — A++ 4,9 SCOP — INVERTER+ — -15 °C COOLING MODE — -20 °C HEATING MODE — nanoeX — R22 R410A / R22 R410A RENEWAL — OPTIONAL WI-FI — BMS CONNECTIVITY — 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-3650PT3E + U-36PZH3E5. INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

PACi NX Series Standard ceiling - PT3 · R32

Ceiling mounted units provide large and wide air distribution which is ideal for large rooms.
The height and depth of all capacities are the same for unified appearance in mixed installations.

nanoeX

nanoe™ X as a standard.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PT3Z5	KIT-50PT3Z5	KIT-60PT3Z5	KIT-71PT3Z5	KIT-100PT3Z5	KIT-125PT3Z5	KIT-140PT3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,5 (1,5 - 4,0)	5,0 (1,5 - 5,2)	6,0 (2,0 - 7,1)	6,8 (2,6 - 7,7)	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	4,14 (3,69 - 5,17)	3,03 (2,86 - 5,00)	3,59 (2,90 - 6,90)	3,24 (2,75 - 4,91)	3,64 (2,80 - 5,36)	3,32 (2,77 - 5,33)	2,98 (2,73 - 5,32)
SEER / $\eta_{s,c}$ [2]			7,2 A++	6,7 A++	7,3 A++	5,9 A+	6,6 A++	241,7%	228,8%
Pdesign		kW	3,5	5,0	6,0	6,8	10,0	12,5	14,0
Input power	Nominal (Min - Max)	kW	0,85 (0,29 - 1,10)	1,65 (0,30 - 1,82)	1,67 (0,29 - 2,45)	2,10 (0,53 - 2,80)	2,75 (0,56 - 4,10)	3,76 (0,60 - 4,88)	4,70 (0,62 - 5,50)
Annual energy consumption [3]		kWh/a	171	262	288	404	531	—	—
Heating capacity	Nominal (Min - Max)	kW	3,5 (1,5 - 4,6)	5,0 (1,5 - 6,4)	6,0 (1,8 - 7,0)	6,8 (2,1 - 8,1)	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,61 (3,51 - 5,70)	3,73 (3,12 - 6,25)	4,11 (2,92 - 6,67)	4,20 (3,06 - 5,68)	4,24 (3,30 - 5,36)	3,89 (3,41 - 4,52)	3,70 (3,08 - 5,48)
SCOP / $\eta_{s,h}$ [2]			4,4 A+	4,1 A+	4,6 A++	4,3 A+	4,2 A+	147,4%	145,3%
Pdesign at -10 °C		kW	2,8	4,0	4,6	4,7	10,0	12,5	13,6
Input power	Nominal (Min - Max)	kW	0,76 (0,26 - 1,31)	1,34 (0,24 - 2,05)	1,46 (0,27 - 2,40)	1,62 (0,37 - 2,65)	2,36 (0,56 - 4,00)	3,21 (0,73 - 4,40)	3,78 (0,62 - 5,20)
Annual energy consumption [3]		kWh/a	891	1365	1399	1529	3331	—	—
Indoor unit			S-3650PT3E	S-3650PT3E	S-6071PT3E	S-6071PT3E	S-1014PT3E	S-1014PT3E	S-1014PT3E
Air flow	Hi / Med / Lo	m³/min	14,0 / 12,0 / 10,5	15,0 / 12,5 / 10,5	20,0 / 17,0 / 14,5	21,0 / 18,0 / 15,5	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	0,8	2,0	2,1	2,7	4,1	5,7	6,9
Sound pressure [4]	Hi / Med / Lo	dB(A)	36 / 32 / 28	37 / 33 / 28	38 / 34 / 29	39 / 35 / 30	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	54 / 50 / 46	55 / 51 / 46	56 / 52 / 47	57 / 53 / 48	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 960 x 690	235 x 960 x 690	235 x 1275 x 690	235 x 1275 x 690	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	26	26	34	34	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-125PZ3E5	U-140PZ3E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	3,90 - 3,75 - 3,60	7,65 - 7,30 - 7,00	7,75 - 7,40 - 7,10	9,75 - 9,30 - 8,95	13,70 - 13,10 - 12,60	18,20 - 17,40 - 16,70	22,70 - 21,70 - 20,80
	Heat	A	3,55 - 3,40 - 3,25	6,30 - 6,00 - 5,75	6,75 - 6,50 - 6,20	7,50 - 7,20 - 6,90	11,80 - 11,30 - 10,80	15,50 - 14,80 - 14,20	18,30 - 17,50 - 16,80
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [5]	1/4 (6,35) [5]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [6]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [7]		m	15 / 15	15 / 15	15 / 30	20 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

· Wide air distribution for large rooms
· Horizontal air flow reaches maximum 9,5 m
· Fresh air connection available on the unit
· Slim design with 235 mm height fits narrow space
· Silent operation
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
· Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
· Single and Twin options
· Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Further comfort improvement with air flow distribution

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms.
The wide air discharge opening expands the air flow to the left and 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, increasing the degree of comfort.

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3 + CZ-RWRT3

Econavi sensor. CZ-CENSC1

			Three phase		
			10,0 kW	**12,5 kW**	**14,0 kW**
Kit			KIT-100PT3Z8	KIT-125PT3Z8	KIT-140PT3Z8
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,64 (3,50 - 5,36)	3,32 (2,77 - 5,33)	2,98 (2,73 - 5,32)
SEER / $\eta_{s,c}$ [2]			6,5 A++	241,7%	228,8%
Pdesign		kW	10,0	12,5	14,0
Input power	Nominal (Min - Max)	kW	2,75 (0,56 - 4,10)	3,76 (0,60 - 4,88)	4,70 (0,62 - 5,50)
Annual energy consumption [3]		kWh/a	537	—	—
Heating capacity	Nominal (Min - Max)	kW	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,24 (3,50 - 5,36)	3,89 (3,41 - 4,52)	3,70 (3,08 - 5,48)
SCOP / $\eta_{s,h}$ [2]			4,2 A+	147,4%	145,3%
Pdesign at -10 °C		kW	10,0	12,5	13,6
Input power	Nominal (Min - Max)	kW	2,36 (0,56 - 4,00)	3,21 (0,73 - 4,40)	3,78 (0,62 - 5,20)
Annual energy consumption [3]		kWh/a	3331	—	—
Indoor unit			S-1014PT3E	S-1014PT3E	S-1014PT3E
Air flow	Hi / Med / Lo	m³/min	30,0 / 25,0 / 23,0	34,0 / 28,0 / 24,0	35,0 / 29,0 / 25,0
Moisture removal volume		L/h	4,1	5,7	6,9
Sound pressure [4]	Hi / Med / Lo	dB(A)	42 / 37 / 34	46 / 40 / 35	47 / 41 / 36
Sound power	Hi / Med / Lo	dB(A)	60 / 55 / 52	64 / 58 / 53	65 / 59 / 54
Dimension	H x W x D	mm	235 x 1590 x 690	235 x 1590 x 690	235 x 1590 x 690
Net weight		kg	40	40	40
nanoe X Generator			Mark 2	Mark 2	Mark 2
Outdoor unit			U-100PZ3E8	U-125PZ3E8	U-140PZ3E8
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,60 - 4,35 - 4,20	6,10 - 5,75 - 5,55	7,60 - 7,20 - 6,95
	Heat	A	3,95 - 3,75 - 3,60	5,20 - 4,95 - 4,75	6,10 - 5,80 - 5,60
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [7]		m	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,8 / 1,89	2,8 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1 m in front of the main body and 1 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 6) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 7) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRT3	Infrared remote controller and receiver

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

R32 | A++ 7,3 SEER | A++ 4,6 SCOP | INVERTER + | -10 °C COOLING MODE | -15 °C HEATING MODE | nanoeX | R22 R410A / R22 / R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-6071PT3E + U-60PZ3E5A. INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

PACi NX Series Elite adaptive ducted unit - PF3 · R32

Adaptive ducted unit - PF3.
2 installation possibilities (horizontal / vertical) with high ESP 150Pa allows flexible installation.

nanoe X

nanoe™ X as a standard.

			Single phase						
			3,6 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW
Kit			KIT-36PF3ZH5	KIT-50PF3ZH5	KIT-60PF3ZH5	KIT-71PF3ZH45	KIT-100PF3ZH45	KIT-125PF3ZH45	KIT-140PF3ZH45
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,6 (1,2 - 4,0)	5,0 (1,2 - 5,6)	5,7 (1,2 - 6,3)	6,8 (2,2 - 7,8)	9,5 (3,1 - 11,4)	12,1 (3,2 - 13,6)	13,4 (3,3 - 15,3)
EER [1]	Nominal (Min - Max)	W/W	4,24 (3,57 - 5,45)	3,42 (3,11 - 5,45)	3,68 (3,15 - 5,45)	3,74 (2,41 - 5,64)	4,09 (2,82 - 5,08)	3,53 (3,00 - 5,00)	3,38 (2,59 - 4,18)
SEER / $\eta_{s,c}$ [2]			6,8 A++	6,1 A++	7,1 A++	7,1 A++	7,4 A++	281,7%	275,9%
Pdesign		kW	3,6	5,0	5,7	6,8	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	0,85 (0,22 - 1,12)	1,46 (0,22 - 1,80)	1,55 (0,22 - 2,00)	1,82 (0,39 - 3,24)	3,23 (0,61 - 4,04)	3,43 (0,64 - 4,54)	3,96 (0,79 - 5,90)
Annual energy consumption [3]		kWh/a	185	287	281	332	447	—	—
Heating capacity	Nominal (Min - Max)	kW	4,0 (1,2 - 5,0)	5,6 (1,2 - 6,5)	7,0 (1,2 - 8,0)	7,5 (2,0 - 9,0)	10,8 (3,1 - 13,5)	13,5 (3,2 - 15,4)	15,5 (3,3 - 17,4)
COP [1]	Nominal (Min - Max)	W/W	4,17 (3,23 - 5,45)	3,61 (2,97 - 5,45)	3,74 (3,33 - 5,45)	4,03 (3,16 - 5,41)	3,88 (3,07 - 5,25)	3,46 (3,06 - 5,16)	3,33 (3,14 - 4,29)
SCOP / $\eta_{s,h}$ [2]			4,5 A+	4,2 A+	4,4 A+	4,7 A++	4,3 A+	165,0%	162,6%
Pdesign at -10 °C		kW	3,6	4,0	4,7	4,7	7,8	9,3	9,5
Input power	Nominal (Min - Max)	kW	0,96 (0,22 - 1,55)	1,55 (0,22 - 2,19)	1,87 (0,22 - 2,40)	1,86 (0,37 - 2,85)	2,78 (0,59 - 4,40)	3,90 (0,62 - 5,04)	4,65 (0,77 - 5,55)
Annual energy consumption [3]		kWh/a	1120	1333	1495	1393	2540	—	—
Indoor unit			S-3650PF3E	S-3650PF3E	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E
External static pressure [4]	Nominal (Min - Max)	Pa	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	14,0 / 13,0 / 10,0	16,0 / 15,0 / 12,0	21,0 / 19,0 / 15,0	21,0 / 19,0 / 15,0	20,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	0,9	1,9	1,7	2,7	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	30 / 27 / 22	34 / 30 / 25	30 / 26 / 23	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 50 / 45	57 / 53 / 48	53 / 49 / 46	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	25	25	30	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-100PZH4E5	U-125PZH4E5	U-140PZH4E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,20 - 4,00 - 3,85	6,90 - 6,60 - 6,35	7,25 - 6,95 - 6,65	9,20 - 8,80 - 8,45	11,50 - 11,00 - 10,50	16,80 - 16,00 - 15,40	19,40 - 18,50 - 17,70
	Heat	A	4,70 - 4,50 - 4,30	7,35 - 7,00 - 6,75	8,65 - 8,30 - 7,95	9,40 - 9,00 - 8,60	13,60 - 13,10 - 12,60	19,10 - 18,20 - 17,50	22,70 - 21,70 - 20,80
Air flow	Cool / Heat	m³/min	34,1 / 36,4	42,0 / 42,0	42,0 / 42,0	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	43 / 44	46 / 48	47 / 50	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	62 / 64	64 / 67	65 / 69	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	42	42	42	66	84	86	86
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35) [6]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70) [7]	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [8]		m	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30	30	30	30
Additional gas amount		g/m	15	15	15	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,13 / 0,76	1,13 / 0,76	1,15 / 0,78	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +52	-20 [9] ~ +52	-20 [9] ~ +52	-20 [9] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

Technical focus

· 2 installation possibilities (horizontal / vertical)
· Maximum external static pressure: 150 Pa
· Selectable inlet air position (rear / bottom entry)
· Improved drain pan suitable for both horizontal / vertical installation
· Drain pump included
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
· **New** BION air pollutant filter for certain types of pollutants, such as nitrogen dioxide (NO_2), nitrogen oxides (NO_x) and Ozone (O_3) (optional)
· Wired remote control CZ-RTC6WBL and 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.
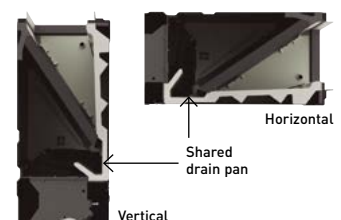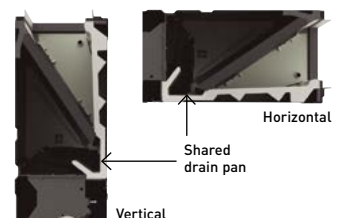
2 installation possibilities (horizontal / vertical)

Vertical installation is 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 modify the unit.

Horizontal
Shared drain pan
Vertical

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3 + CZ-RWRC3

Econavi sensor. CZ-CENSC1

			Three phase			
			7,1 kW	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			KIT-71PF3ZH48	KIT-100PF3ZH48	KIT-125PF3ZH48	KIT-140PF3ZH48
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	6,8 (2,2 - 7,8)	9,5 (3,1 - 11,4)	12,1 (3,2 - 13,6)	13,4 (3,3 - 15,3)
EER [1]	Nominal (Min - Max)	W/W	3,74 (2,41 - 5,64)	4,09 (2,82 - 5,08)	3,53 (3,00 - 5,00)	3,38 (2,59 - 4,18)
SEER / $\eta_{s,c}$ [2]			7,1 A++	7,4 A++	281,0%	275,2%
Pdesign		kW	6,8	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	1,82 (0,39 - 3,24)	2,32 (0,61 - 4,04)	3,43 (0,64 - 4,54)	3,96 (0,79 - 5,90)
Annual energy consumption [3]		kWh/a	332	447	—	—
Heating capacity	Nominal (Min - Max)	kW	7,5 (2,0 - 9,0)	10,8 (3,1 - 13,5)	13,5 (3,2 - 15,4)	15,5 (3,3 - 17,4)
COP [1]	Nominal (Min - Max)	W/W	4,03 (3,16 - 5,41)	3,88 (3,07 - 5,25)	3,46 (3,06 - 5,16)	3,33 (3,14 - 4,29)
SCOP / $\eta_{s,h}$ [2]			4,7 A++	4,3 A+	165,0%	162,6%
Pdesign at -10 °C		kW	4,7	7,8	9,3	9,5
Input power	Nominal (Min - Max)	kW	1,86 (0,37 - 2,85)	2,78 (0,59 - 4,40)	3,90 (0,62 - 5,04)	4,65 (0,77 - 5,55)
Annual energy consumption [3]		kWh/a	1394	2540	—	—
Indoor unit			S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E
External static pressure [4]	Nominal (Min - Max)	Pa	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	2,7	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-71PZH4E8	U-100PZH4E8	U-125PZH4E8	U-140PZH4E8
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	3,05 - 2,90 - 2,80	3,85 - 3,70 - 3,50	5,65 - 5,40 - 5,20	6,55 - 6,20 - 6,00
	Heat	A	3,15 - 3,00 - 2,90	4,65 - 4,40 - 4,20	6,50 - 6,20 - 5,95	7,75 - 7,40 - 7,05
Air flow	Cool / Heat	m³/min	62,0 / 66,0	76,0 / 70,0	86,0 / 78,0	89,0 / 83,0
Sound pressure	Cool / Heat (Hi)	dB(A)	48 / 50	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	65 / 67	69 / 69	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	66	82	84	84
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100
Elevation difference (in / out) [8]		m	15 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30	30
Additional gas amount		g/m	30	40	40	40
Refrigerant (R32) / CO_2 Eq.		kg / T	1,95 / 1,32	2,70 / 1,82	3,00 / 2,03	3,00 / 2,03
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-20 [9] ~ +52	-20 [9] ~ +52	-20 [9] ~ +52
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) Medium external static pressure setting from factory. 5) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 6) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 7) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. 9) Pipe length up to 30 m. * Recommended fuse for the indoor 3 A. ** Above values are in the case of standard installation(horizontal installation in the celling, rear side air intake) and nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E
PAW-APF800F	NEW BION air pollutant filter for S-3650PF3E
PAW-APF1000F	NEW BION air pollutant filter for S-6071PF3E
PAW-APF1400F	NEW BION air pollutant filter for S-1014PF3E

R32 | A++ 7,1 SEER | A++ 4,7 SCOP | INVERTER+ | -15 °C COOLING MODE | -20 °C HEATING MODE | nanoeX | 22 dB(A) | DC FAN | FILTER INCLUDED | R22 R410A / R22 / R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For S-6071PF3E + U-71PZH4E5. SUPER QUIET: For S-3650PF3E + U-36PZH3E5. INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

PACi NX Series Standard adaptive ducted unit – PF3 · R32

Adaptive ducted unit – PF3.
2 installation possibilities (horizontal / vertical) with high ESP 150Pa allows flexible installation.

nanoeX

nanoe™ X as a standard.

			Single phase						
			3,6 kW	**5,0 kW**	**6,0 kW**	**7,1 kW**	**10,0 kW**	**12,5 kW**	**14,0 kW**
Kit			KIT-36PF3Z5	KIT-50PF3Z5	KIT-60PF3Z5	KIT-71PF3Z5	KIT-100PF3Z5	KIT-125PF3Z5	KIT-140PF3Z5
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	3,4 (1,5 - 4,0)	5,0 (1,5 - 5,3)	5,7 (2,0 - 6,3)	6,8 (2,6 - 7,7)	9,5 (3,0 - 11,4)	12,1 (3,2 - 13,5)	13,4 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,78 (3,51 - 5,00)	2,78 (2,76 - 4,63)	3,54 (2,63 - 5,88)	3,18 (2,69 - 4,56)	3,57 (2,36 - 5,08)	3,40 (2,76 - 5,08)	3,16 (2,56 - 5,08)
SEER / $\eta_{s,c}$ [2]			6,0 A+	6,5 A++	6,4 A++	6,0 A+	6,6 A++	257,4%	252,2%
Pdesign		kW	3,4	5,0	5,7	6,8	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	0,90 (0,30 - 1,14)	1,80 (0,32 - 1,92)	1,61 (0,34 - 2,40)	2,14 (0,57 - 2,86)	2,66 (0,59 - 4,84)	3,56 (0,63 - 4,90)	4,24 (0,65 - 5,86)
Annual energy consumption [3]		kWh/a	198	267	310	391	502	—	—
Heating capacity	Nominal (Min - Max)	kW	3,4 (1,5 - 4,6)	5,0 (1,5 - 5,9)	5,7 (1,8 - 7,0)	6,8 (2,1 - 8,1)	9,5 (3,0 - 13,5)	12,1 (3,3 - 15,0)	13,4 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,15 (3,51 - 5,36)	3,62 (3,06 - 5,36)	4,04 (2,82 - 6,21)	4,00 (3,03 - 5,68)	4,09 (3,00 - 5,08)	3,56 (3,16 - 5,24)	3,76 (3,03 - 5,23)
SCOP / $\eta_{s,h}$ [2]			4,0 A+	4,0 A+	4,4 A+	4,1 A+	3,9 A	142,6%	140,6%
Pdesign at -10 °C		kW	2,4	3,8	4,4	4,7	7,8	9,3	9,5
Input power	Nominal (Min - Max)	kW	0,82 (0,28 - 1,31)	1,38 (0,28 - 1,73)	1,41 (0,29 - 2,48)	1,70 (0,37 - 2,67)	2,32 (0,59 - 4,50)	3,40 (0,63 - 4,74)	3,56 (0,65 - 5,28)
Annual energy consumption [3]		kWh/a	839	1303	1376	1591	2795	—	—
Indoor unit			S-3650PF3E	S-3650PF3E	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E	S-1014PF3E
External static pressure [4]	Nominal (Min - Max)	Pa	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	30 (10 - 150)	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	14,0 / 13,0 / 10,0	16,0 / 15,0 / 12,0	21,0 / 19,0 / 15,0	21,0 / 19,0 / 15,0	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	0,9	1,9	1,7	2,7	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	30 / 27 / 22	34 / 30 / 25	30 / 26 / 23	30 / 26 / 23	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	53 / 50 / 45	57 / 53 / 48	53 / 49 / 46	53 / 49 / 46	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 800 x 730	250 x 800 x 730	250 x 1000 x 730	250 x 1000 x 730	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	25	25	30	30	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-125PZ3E5	U-140PZ3E5
Power supply		V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240
Current	Cool	A	4,15-4,00-3,85	8,35-8,00-7,65	7,45-7,15-6,85	9,95-9,50-9,10	13,30-12,70-12,20	17,20-16,40-15,80	20,50-19,60-18,8
	Heat	A	3,85-3,70-3,50	6,45-6,20-5,95	6,55-6,25-6,00	7,90-7,55-7,25	11,60-11,10-10,60	16,40-15,70-15,00	17,20-16,40-15,80
Air flow	Cool / Heat	m³/min	33,6 / 34,0	32,7 / 31,9	42,6 / 41,5	44,7 / 45,9	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	46 / 47	46 / 46	47 / 48	48 / 49	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	64 / 66	64 / 64	64 / 65	66 / 68	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	619 x 824 x 299	619 x 824 x 299	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	32	35	42	50	83	87	87
Piping diameter	Liquid	Inch (mm)	1/4 (Ø6,35)	1/4 (Ø6,35)	1/4 (Ø6,35) [6]	1/4 (Ø6,35) [6]	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	1/2 (Ø12,7)	1/2 (Ø12,7)	1/2 (Ø12,7) [7]	5/8 (Ø15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	3 - 15	3 - 20	3 - 40	3 - 40	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [8]		m	15 / 15	15 / 15	15 / 30	20 / 30	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	7,5	7,5	30	30	30	30	30
Additional gas amount		g/m	10	15	15	17	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	0,87 / 0,59	1,14 / 0,77	1,15 / 0,78	1,32 / 0,89	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

Technical focus

· 2 installation possibilities (horizontal / vertical)
· Maximum external static pressure: 150 Pa
· Selectable inlet air position (rear / bottom entry)
· Improved drain pan suitable for both horizontal / vertical installation
· Drain pump included
· nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
· **New** BION air pollutant filter for certain types of pollutants, such as nitrogen dioxide (NO_2), nitrogen oxides (NO_x) and Ozone (O_3) (optional)
· Wired remote control CZ-RTC6WBL and 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 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 modify the unit.

Horizontal
Shared drain pan
Vertical

CZ-RTC5B

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3 + CZ-RWRC3

Econavi sensor. CZ-CENSC1

			Three phase		
			10,0 kW	12,5 kW	14,0 kW
Kit			KIT-100PF3Z8	KIT-125PF3Z8	KIT-140PF3Z8
Remote controller			CZ-RTC5B	CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	9,5 (3,0 - 11,4)	12,1 (3,2 - 13,5)	13,4 (3,3 - 15,0)
EER [1]	Nominal (Min - Max)	W/W	3,57 (2,36 - 5,08)	3,40 (2,76 - 5,08)	3,16 (2,56 - 5,08)
SEER / $\eta_{s,c}$ [2]			6,5 A++	256,2%	251,4%
Pdesign		kW	9,5	12,1	13,4
Input power	Nominal (Min - Max)	kW	2,66 (0,59 - 4,84)	3,56 (0,63 - 4,90)	4,24 (0,65 - 5,86)
Annual energy consumption [3]		kWh/a	508	—	—
Heating capacity	Nominal (Min - Max)	kW	9,5 (3,0 - 13,5)	12,1 (3,3 - 15,0)	13,4 (3,4 - 16,0)
COP [1]	Nominal (Min - Max)	W/W	4,09 (3,00 - 5,08)	3,56 (3,16 - 5,24)	3,76 (3,03 - 5,23)
SCOP / $\eta_{s,h}$ [2]			3,9 A	142,6%	140,6%
Pdesign at -10 °C		kW	7,8	9,3	9,5
Input power	Nominal (Min - Max)	kW	2,32 (0,59 - 4,50)	3,40 (0,63 - 4,74)	3,56 (0,65 - 5,28)
Annual energy consumption [3]		kWh/a	2795	—	—
Indoor unit			S-1014PF3E	S-1014PF3E	S-1014PF3E
External static pressure [4]	Nominal (Min - Max)	Pa	40 (10 - 150)	50 (10 - 150)	50 (10 - 150)
Air flow	Hi / Med / Lo	m³/min	32,0 / 26,0 / 21,0	34,0 / 29,0 / 23,0	36,0 / 32,0 / 25,0
Moisture removal volume		L/h	3,2	4,1	4,9
Sound pressure [5]	Hi / Med / Lo	dB(A)	33 / 29 / 25	35 / 31 / 27	39 / 35 / 29
Sound power	Hi / Med / Lo	dB(A)	56 / 52 / 48	58 / 54 / 50	62 / 58 / 52
Dimension	H x W x D	mm	250 x 1400 x 730	250 x 1400 x 730	250 x 1400 x 730
Net weight		kg	39	39	39
nanoe X Generator			Mark 2	Mark 2	Mark 2
Outdoor unit			U-100PZ3E8	U-125PZ3E8	U-140PZ3E8
Power supply		V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Current	Cool	A	4,45 - 4,20 - 4,05	5,75 - 5,45 - 5,25	6,85 - 6,50 - 6,30
	Heat	A	3,85 - 3,70 - 3,55	5,50 - 5,20 - 5,05	5,75 - 5,45 - 5,25
Air flow	Cool / Heat	m³/min	73,0 / 73,0	82,0 / 80,0	84,0 / 82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52 / 52	55 / 55	56 / 56
Sound power	Cool / Heat (Hi)	dB(A)	70 / 70	73 / 73	74 / 74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range		m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [8]		m	15 / 30	15 / 30	15 / 30
Pre-charged pipe length		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO_2 Eq.		kg / T	2,40 / 1,62	2,80 / 1,89	2,80 / 1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) Medium external static pressure setting from factory. 5) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 6) Connect the liquid socket tube (Ø6,35-Ø9,52) to the liquid tubing side indoor unit. 7) Connect the gas socket tube (Ø12,70-Ø15,88) to the gas tubing side indoor unit. 8) Outdoor unit located lower / outdoor unit located higher. * Recommended fuse for the indoor 3 A. ** Above values are in the case of standard installation(horizontal installation in the celling, rear side air intake) and nanoe™ X OFF.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3+CZ-RWRC3	Infrared remote controller and receiver
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run

Accessories	
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E
PAW-APF800F	NEW BION air pollutant filter for S-3650PF3E
PAW-APF1000F	NEW BION air pollutant filter for S-6071PF3E
PAW-APF1400F	NEW BION air pollutant filter for S-1014PF3E

R32 | A++ 6,6 SEER | A+ 4,4 SCOP | INVERTER+ | -10 °C COOLING MODE | -15 °C HEATING MODE | nanoeX | 22 dB(A) | DC FAN | FILTER INCLUDED | R22 R410A / R22 / R410A RENEWAL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER: For S-1014PF3E + U-100PZ3E8. SCOP: For S-6071PF3E + U-60PZ3E5A. SUPER QUIET: For S-3650PF3E + U-36PZ3E5. INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

NEW Big PACi NX high static pressure hide-away 20,0-25,0 kW · R32

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

CZ-RTC5B

New 2024

nanoeX

nanoe™ X as a standard.

Optional:

CONEX
CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX
CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Infrared remote controller. CZ-RWS3 + CZ-RWRC3

Econavi sensor. CZ-CENSC1

			Three phase	
			20,0 kW	25,0 kW
Kit			KIT-200PE4ZH8	KIT-250PE4ZH8
Remote controller			CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	19,0 (5,7 - 20,0)	22,0 (6,1 - 25,6)
EER [1]	Nominal (Min - Max)	W/W	3,20 (2,78 - 4,60)	2,74 (2,49 - 4,88)
SEER / $\eta_{s,c}$ [2]			237,8%	213,0%
Pdesign		kW	19,0	22,0
Input power	Nominal (Min - Max)	kW	5,93 (1,24 - 7,20)	8,04 (1,25 - 10,30)
Heating capacity	Nominal (Min - Max)	kW	22,4 (5,0 - 24,5)	24,0 (5,5 - 27,6)
COP [1]	Nominal (Min - Max)	W/W	3,55 (3,27 - 4,76)	3,55 (3,07 - 4,78)
SCOP / $\eta_{s,h}$ [2]			146,0%	145,0%
Pdesign at -10 °C		kW	16,0	17,2
Input power	Nominal (Min - Max)	kW	6,31 (1,05 - 7,50)	6,76 (1,15 - 9,00)
Indoor unit			S-200PE4E	S-250PE4E
Power supply		V / ph / Hz	220 - 230 - 240 / 1 / 50	220 - 230 - 240 / 1 / 50
External static pressure at shipment (adjustable)		Pa	75 [3] (120 / 180)	75 [3] (130 / 200)
Air flow	Hi / Med / Lo	m³/min	72/63/53	84/72/59
Sound pressure [4]	Hi / Med / Lo	dB(A)	46/44/41	47/45/42
Dimension / Net weight	H x W x D	mm / kg	486 x 1456 x 916 / 83	486 x 1456 x 916 / 87
Outdoor unit			U-200PZH4E8	U-250PZH4E8
Power supply		V / ph / Hz	380 - 400 - 415 / 3 / 50	380 - 400 - 415 / 3 / 50
Recommended fuse		A	30	30
Air flow	Cool / Heat	m³/min	116/136	116/148
Sound pressure	Cool / Heat (Hi)	dB(A)	57/61	57/63
Sound power	Cool / Heat (Hi)	dB(A)	76/80	76/82
Dimension [5] / Net weight	H x W x D	mm / kg	996 x 1140 x 460 / 109	996 x 1140 x 460 / 109
Piping diameter	Liquid / Gas	Inch (mm)	1/2 (12,7) / 7/8 (22,22)	1/2 (12,7) / 7/8 (22,22)
Pipe length range / Elevation difference (in / out)		m / m	5 ~ 100 / 30	5 ~ 100 / 30
Pre-charged pipe length / Additional gas amount		m / g/m	30 / 80	30 / 80
Refrigerant (R32) / CO_2 Eq.		kg / T	4,8 / 3,24	4,8 / 3,24
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-15 ~ +52
	Heat Min ~ Max	°C	-20 ~ +35	-20 ~ +35

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver

Accessories	
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-GRDSTD1100	Outdoor ground stand
PAW-GRDSTDHTR1100	Outdoor base pan heater
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
CZ-CENSC1	Econavi energy saving sensor

Demand response compliant as a standard function

Several setting levels are available:
· Level-1, 2, 3: 75 / 50 / 0%
· Level-1, 2 can be set in 40 - 100% (40, 45, 50...95, 100: each 5%)
It allows for forced stop which can be used for fire-alarm connection on LV3.

* PAW-OPT-NX is required.

OPT
COM
LV1
LV2
LV3
Indoor unit control PCB
Demand controller

R32

INVERTER+

HIGH EFFICIENCY COMPRESSOR

-15 °C COOLING MODE

-20 °C HEATING MODE

nanoeX

BLUEFIN

LARGE FAN

R22 R410A / R22 / R410A RENEWAL R32

OPTIONAL WI-FI

BMS CONNECTIVITY

5 YEARS COMPRESSOR WARRANTY
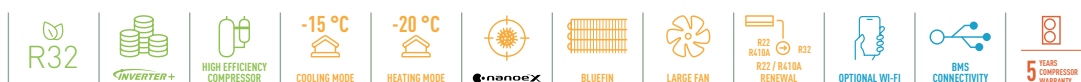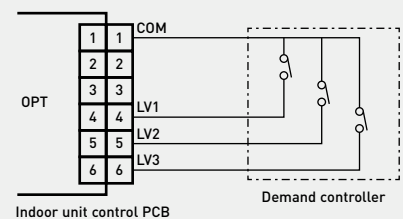
INTERNET CONTROL: Optional.

Big PACi high static pressure hide-away 20,0-25,0 kW · R32

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL

CONEX wired remote controller, black. CZ-RTC6/BL

Infrared remote controller. CZ-RWS3 + CZ-RWRC3

Econavi sensor. CZ-CENSC1

CZ-RTC5B

			Three phase	
			20,0 kW	**25,0 kW**
Kit			KIT-200PE3ZH8	KIT-250PE3ZH8
Remote controller			CZ-RTC5B	CZ-RTC5B
Cooling capacity	Nominal (Min - Max)	kW	19,5 (5,7 - 21,0)	23,2 (6,1 - 27,0)
EER [1]	Nominal (Min - Max)	W/W	3,22 (3,09 - 4,52)	3,11 (2,93 - 4,59)
SEER / $\eta_{s,c}$ [2]			**207,0%**	**190,6%**
Pdesign		kW	19,5	23,2
Input power	Nominal (Min - Max)	kW	6,06 (1,26 - 6,80)	7,46 (1,33 - 9,20)
Heating capacity	Nominal (Min - Max)	kW	22,4 (5,0 - 25,0)	28,0 (5,5 - 29,0)
COP [1]	Nominal (Min - Max)	W/W	3,61 (3,16 - 4,76)	3,41 (3,05 - 5,00)
SCOP / $\eta_{s,h}$ [2]			**141,3%**	**142,7%**
Pdesign at -10 °C		kW	17,0	20,0
Input power	Nominal (Min - Max)	kW	6,21 (1,05 - 7,90)	8,21 (1,10 - 9,50)
Indoor unit			**S-200PE3E5B**	**S-250PE3E5B**
Power supply		V / ph / Hz	220 - 230 - 240 / 1 / 50	220 - 230 - 240 / 1 / 50
External static pressure at shipment (adjustable)		Pa	75 [3] (120 / 180)	75 [3] (130 / 200)
Air flow	Hi / Med / Lo	m³/min	72 / 63 / 53	84 / 72 / 59
Sound pressure [4]	Hi / Med / Lo	dB(A)	46 / 44 / 41	47 / 45 / 42
Dimension / Net weight	H x W x D	mm / kg	486 x 1456 x 916 / 86	486 x 1456 x 916 / 88
Outdoor unit			**U-200PZH2E8**	**U-250PZH2E8**
Power supply		V / ph / Hz	380 - 400 - 415 / 3 / 50	380 - 400 - 415 / 3 / 50
Recommended fuse		A	30	30
Air flow	Cool / Heat	m³/min	164 / 164	160 / 160
Sound pressure	Cool / Heat (Hi)	dB(A)	59 / 61	59 / 63
Sound power	Cool / Heat (Hi)	dB(A)	77 / 79	78 / 82
Dimension [5] / Net weight	H x W x D	mm / kg	1500 x 980 x 370 / 117	1500 x 980 x 370 / 128
Piping diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 1 (25,40)	1/2 (12,70) / 1 (25,40)
Pipe length range / Elevation difference (in / out)		m / m	5 ~ 90 / 30	5 ~ 60 / 30
Pre-charged pipe length / Additional gas amount		m / g/m	30 / 60	30 / 80
Refrigerant (R32) / CO_2 Eq.		kg / T	4,20 / 2,835	5,20 / 3,51
Operating range	Cool Min ~ Max	°C	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24

1) EER and COP calculation is based in accordance to EN14511. 2) For models below 12 kW, the SEER and SCOP is calculated based on values of EU/626/2011. For models above 12 kW, the $\eta_{s,c}$ / $\eta_{s,h}$ values is calculated based on EN 14825. 3) Factory setting. 4) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port. * No filter included.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function and datanavi
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver

Accessories	
CZ-CAPDC3	Demand control for PACi and Mini ECOi outdoor units
CZ-CAPWFC1	Commercial Wi-Fi Adaptor
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

Demand response compliant as a standard function

CZ-CAPDC3. This terminal allows demand control of the outdoor unit.
Several setting levels are available:
· Level-1, 2, 3: 75 / 50 / 0%
· Level-1, 2 can be set in 40 - 100% (40, 45, 50...95, 100: each 5%)
CZ-CAPDC3 also allows for forced stop which can be used for fire-alarm connection on LV3.
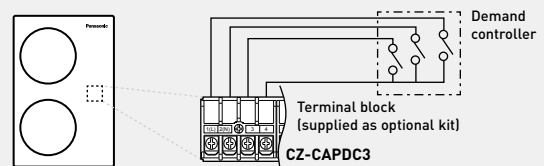
Demand controller

Terminal block (supplied as optional kit)

CZ-CAPDC3

R32   INVERTER+   HIGH EFFICIENCY COMPRESSOR   -15 °C COOLING MODE   -20 °C HEATING MODE   BLUEFIN   LARGE FAN   R22 R410A / R22 / R410A RENEWAL R32   OPTIONAL WI-FI   BMS CONNECTIVITY   5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Commercial twin, triple and double-twin systems · R32

With this system, a single outdoor unit can split its capacity simultaneously across up to 4 indoor units, for better distribution within the space. This makes the system particularly apt for common areas. It reduces noise concentration and enables the same temperature to be reached around the room. A wide variety of the same type of indoor units can be connected in multi combinations (including wall-mounted, cassette, hide-away and ceiling).
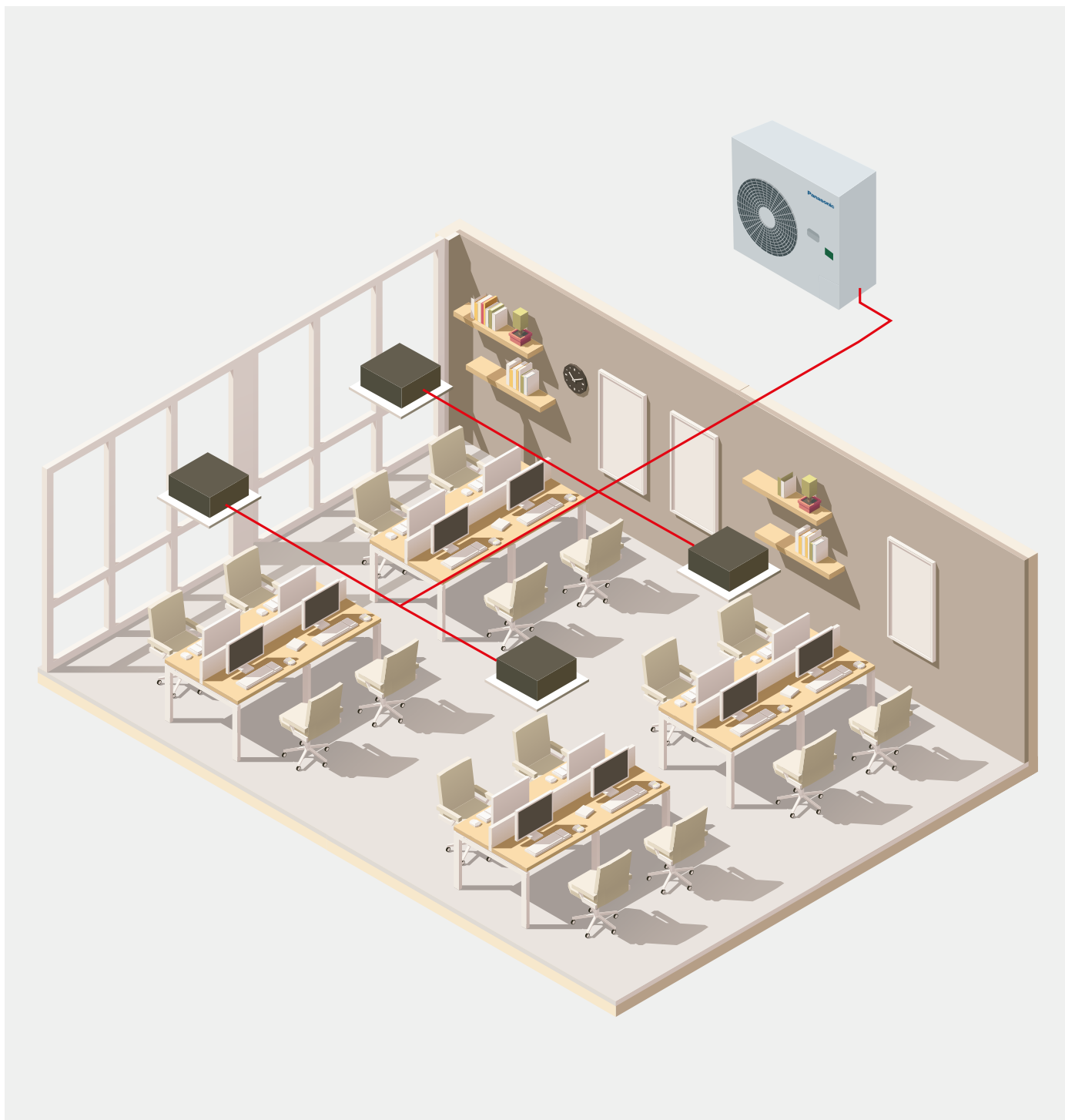
1 **PACi NX Elite from 7,1 to 14,0 kW**

Up to 4 indoor units can be connected to the same outdoor unit. Panasonic's Elite units 7,1, 10,0, 12,0 and 14,0 can be installed as twin, triple and double-twin systems. The indoor units can be combined as per the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

2 **PACi NX Standard from 10,0 to 14,0 kW**

Up to 2 indoor units connectable on the same outdoor. Panasonic's Standard units can be installed as single and twin systems. The indoor units can be combined following the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

3 **Big PACi NX and Big PACi Elite from 20,0 to 25,0 kW**

Up to 4 indoor units can be connected to the same outdoor unit. Panasonic's PACi units 20,0 and 25,0 can be installed as twin, triple and double-twin systems. The indoor units can be combined as per the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

Commercial twin, triple and double-twin systems · R32

New 2023

PACi NX Elite and PACi Elite outdoor units · R32

			PACi NX				Big PACi NX		Big PACi	
			7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW	20,0 kW	25,0 kW
Outdoor unit single phase			U-71PZH4E5	U-100PZH4E5	U-125PZH4E5	U-140PZH4E5	—	—	—	—
Outdoor unit three phase			U-71PZH4E8	U-100PZH4E8	U-125PZH4E8	U-140PZH4E8	U-200PZH4E8	U-250PZH4E8	U-200PZH2E8	U-250PZH2E8
Cooling capacity [1]	Nominal (Min - Max)	kW	7,1 (2,2 - 9,0)	9,5 (3,1 - 12,5)	12,5 (3,2 - 14,0)	13,4 (3,3 - 16,0)	19,0 (5,7 - 20,0)	22,0 (6,1 - 25,6)	20,0 (5,7 - 22,4)	25,0 (6,1 - 28,0)
Heating capacity [1]	Nominal (Min - Max)	kW	8,0 (2,0 - 9,0)	11,2 (3,1 - 14,0)	14,0 (3,2 - 16,0)	16,0 (3,3 - 18,0)	22,4 (5,0 - 24,5)	24,0 (5,5 - 27,6)	22,4 (5,0 - 25,0)	28,0 (5,5 - 31,5)
Power supply	Single phase	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	—	—	—	—
	Three phase	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Connection indoor / outdoor		mm²	2x1,5 or 2,5	2x1,5 or 2,5	2x1,5 or 2,5	2x1,5 or 2,5	—	—	—	—
Air flow	Cool / Heat	m³/min	62,0/66,0	76,0/70,0	86,0/78,0	89,0/83,0	164/164	160/160	164/164	160/160
Sound pressure	Cool / Heat (Hi)	dB(A)	48/50	52/52	55/55	56/56	59/61	59/63	59/61	59/63
Sound power	Cool / Heat (Hi)	dB(A)	65/67	69/69	73/73	74/74	77/79	78/82	77/79	78/82
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 1140 x 460	996 x 1140 x 460	1500 x 980 x 370	1500 x 980 x 370
Net weight	1ph / 3ph	kg	66	84/82	86/84	86/84	190	190	117	128
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	3/8 (9,52)	1/2 (12,70)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	7/8 (22,22)	7/8 (22,22)	1 (25,40)	1 (25,40)
Pipe length range	Min ~ Max	m	5 ~ 60	5 ~ 100	5 ~ 100	5 ~ 100	5 ~ 100	5 ~ 100	5 ~ 90	5 ~ 60
Elevation difference (in / out)	Max	m	15/30 [2]	15/30 [2]	15/30 [2]	15/30 [2]	30	30	30	30
Pre-charged pipe length		m	30	30	30	30	30	30	30	30
Additional gas amount		g/m	30	40	40	40	80	80	60	80
Refrigerant (R32) / CO$_2$ Eq.		kg / T	1,95/1,32	2,70/1,82	3,00/2,03	3,00/2,03	4,80/3,24	4,80/3,24	4,20/2,835	5,20/3,51
Operating range	Cool Min ~ Max	°C	-15 ~ +52	-20 [3] ~ +52	-20 [3] ~ +52	-20 [3] ~ +52	-15 ~ +52	-15 ~ +52	-15 ~ +46	-15 ~ +46
	Heat Min ~ Max	°C	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +35	-20 ~ +35	-20 ~ +24	-20 ~ +24

1) 7,1 - 14,0 kW with 4 way 90x90 cassette. 20,0 - 25,0 kW with high static pressure hide-away. 2) Outdoor unit located lower / outdoor unit located higher. 3) Pipe length up to 30 m.

PACi NX Standard outdoor units · R32

			10,0 kW	12,5 kW	14,0 kW
Outdoor unit single phase			U-100PZ3E5	U-125PZ3E5	U-140PZ3E5
Outdoor unit three phase			U-100PZ3E8	U-125PZ3E8	U-140PZ3E8
Cooling capacity [1]	Nominal (Min - Max)	kW	10,0 (3,0 - 11,5)	12,5 (3,2 - 13,5)	14,0 (3,3 - 15,0)
Heating capacity [1]	Nominal (Min - Max)	kW	10,0 (3,0 - 14,0)	12,5 (3,3 - 15,0)	14,0 (3,4 - 16,0)
Power supply	Single phase	V	220-230-240	220-230-240	220-230-240
	Three phase	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Connection indoor / outdoor		mm²	2x1,5 or 2,5	2x1,5 or 2,5	2x1,5 or 2,5
Air flow	Cool / Heat	m³/min	73,0/73,0	82,0/80,0	84,0/82,0
Sound pressure	Cool / Heat (Hi)	dB(A)	52/52	55/55	56/56
Sound power	Cool / Heat (Hi)	dB(A)	70/70	73/73	74/74
Dimension	H x W x D	mm	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
Net weight		kg	83	87	87
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)
	Gas	Inch (mm)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)
Pipe length range	Min ~ Max	m	5 ~ 50	5 ~ 50	5 ~ 50
Elevation difference (in / out) [2]	Max	m	15/30	15/30	15/30
Pre-charged pipe length		m	30	30	30
Additional gas amount		g/m	45	45	45
Refrigerant (R32) / CO$_2$ Eq.		kg / T	2,4/1,62	2,8/1,89	2,8/1,89
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24

1) With 4 way 90x90 cassette. 2) Outdoor unit located lower / outdoor unit located higher.

Compatible indoor units for multi combinations

Optional:

CONEX wired remote controller, white. CZ-RTC6W/BL/BLW

CONEX wired remote controller, black. CZ-RTC6/BL/BLW

Wired remote controller. CZ-RTC5B

Econavi sensor. CZ-CENSC1

PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

R32 | INVERTER+ | nanoeX | DC FAN | R32 R410A RENEWAL R22 / R410A | PANASONIC AC SMART CLOUD | PANASONIC AC SERVICE CLOUD | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY
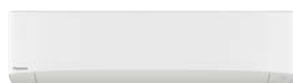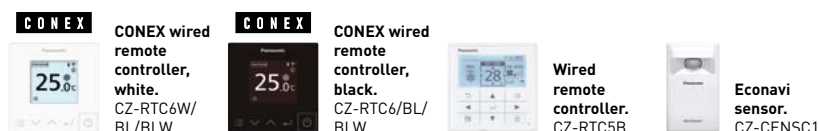
Wall-mounted	Indoor unit	Cooling capacity	Heating capacity	Dimension	Sound pressure [1]	Air flow [2]
				H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	dB(A)	m³/min
3,6 - 5,0 kW	S-3650PK3E	3,6 - 5,0	4,0 - 5,6	302 x 1120 x 236	35 / 31 / 27 - 40 / 36 / 32	13,0 / 11,0 / 9,0 - 16,0 / 13,5 / 11,0
6,0 - 7,1 kW	S-6010PK3E	6,1 - 7,1	7,0 - 8,0	302 x 1120 x 236	47 / 44 / 40 - 47 / 44 / 40	20,0 / 17,5 / 14,5 - 20,0 / 17,5 / 14,5
10,0 kW	S-6010PK3E	9,5	9,5	302 x 1120 x 236	49 / 45 / 41	22,0 / 18,5 / 15,0

Panel (sold separately).
CZ-KPY4

PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

R32 | ECONAVI 28% | INVERTER+ | nanoeX | DC FAN | R32 R410A RENEWAL R22 / R410A | PANASONIC AC SMART CLOUD | PANASONIC AC SERVICE CLOUD | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

4 way 60x60 cassette	Indoor unit (panel CZ-KPY4)	Cooling capacity	Heating capacity	Dimension indoor / panel	Sound pressure [1]	Air flow [2]
				H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	dB(A)	m³/min
2,5 kW	S-25PY3E	2,5	3,2	243 x 575 x 575 / 30 x 625 x 625	31 / 28 / 25	8,5 / 7,0 / 6,0
3,6 kW	S-36PY3E	3,6	4,0	243 x 575 x 575 / 30 x 625 x 625	34 / 30 / 25	9,5 / 7,5 / 6,0
5,0 kW	S-50PY3E	5,0	5,6	243 x 575 x 575 / 30 x 625 x 625	39 / 34 / 27	12,0 / 9,5 / 6,5
6,0 kW	S-60PY3E	6,0	7,0	243 x 575 x 575 / 30 x 625 x 625	43 / 37 / 31	14,0 / 10,5 / 8,0

PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

R32 | ECONAVI 28% | INVERTER+ | nanoeX | DC FAN | R32 R410A RENEWAL R22 / R410A | PANASONIC AC SMART CLOUD | PANASONIC AC SERVICE CLOUD | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

4 way 90x90 cassette	Indoor unit (panels CZ-KPU3W/3AW)	Cooling capacity	Heating capacity	Dimension indoor / panel	Sound pressure [1]	Air flow [2]
				H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	dB(A)	m³/min
3,6 - 5,0 kW	S-3650PU3E	3,6 - 5,0	4,0 - 5,6	256 x 840 x 840 / 33,5 x 950 x 950	30 / 28 / 27 - 32 / 29 / 27	14,5 / 13,0 / 11,5 - 16,5 / 13,5 / 11,5
6,0 - 7,1 kW	S-6071PU3E	6,0 - 7,1	7,0 - 8,0	256 x 840 x 840 / 33,5 x 950 x 950	36 / 31 / 28 - 37 / 31 / 28	21,0 / 16,0 / 13,0 - 22,0 / 16,0 / 13,0
10,0 - 12,5 kW	S-1014PU3E	10,0 - 12,5	11,2 - 14,0	319 x 840 x 840 / 33,5 x 950 x 950	45 / 38 / 32 - 46 / 39 / 33	36,0 / 26,0 / 18,0 - 37,0 / 27,0 / 19,0
14,0 kW	S-1014PU3E	14,0	16,0	319 x 840 x 840 / 33,5 x 950 x 950	47 / 40 / 34	38,0 / 29,0 / 20,0

PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

R32 | INVERTER+ | nanoeX | DC FAN | R32 R410A RENEWAL R22 / R410A | PANASONIC AC SMART CLOUD | PANASONIC AC SERVICE CLOUD | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

Ceiling	Indoor unit	Cooling capacity	Heating capacity	Dimension	Sound pressure [1]	Air flow [2]
				H x W x D	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	dB(A)	m³/min
3,6 - 5,0 kW	S-3650PT3E	3,5 - 5,0	4,0 - 5,6	235 x 960 x 690	36 / 32 / 28 - 37 / 33 / 28	14,0 / 12,0 / 10,5 - 15,0 / 12,5 / 10,5
6,0 - 7,1 kW	S-6071PT3E	6,0 - 6,8	7,0 - 8,0	235 x 1275 x 690	38 / 34 / 29 - 39 / 35 / 30	20,0 / 17,0 / 14,5 - 21,0 / 18,0 / 15,5
10,0 - 12,5 kW	S-1014PT3E	9,5 - 12,1	11,2 - 14,0	235 x 1590 x 690	42 / 37 / 34 - 46 / 40 / 35	30,0 / 25,0 / 23,0 - 34,0 / 28,0 / 24,0
14,0 kW	S-1014PT3E	13,4	16,0	235 x 1590 x 690	47 / 41 / 36	35,0 / 29,0 / 25,0

PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

R32 | INVERTER+ | nanoeX | 22 dB(A) | DC FAN | FILTER INCLUDED | R32 R410A RENEWAL R22 / R410A | PANASONIC AC SMART CLOUD | PANASONIC AC SERVICE CLOUD | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

Adaptive ducted unit	Indoor unit	Cooling capacity	Heating capacity	Dimension	External static pressure	Sound pressure [1]	Air flow [2]
				H x W x D	Nominal (Min - Max)	Hi / Med / Lo	Hi / Med / Lo
		kW	kW	mm	Pa	dB(A)	m³/min
3,6 - 5,0 kW	S-3650PF3E	3,6 - 5,0	4,0 - 5,6	250 x 800 x 730	30 (10 - 150) - 30 (10 - 150)	30 / 27 / 22 - 34 / 30 / 25	14,0 / 13,0 / 10,0 - 16,0 / 15,0 / 12,0
6,0 - 7,1 kW	S-6071PF3E	5,7 - 6,8	7,0 - 7,5	250 x 1000 x 730	30 (10 - 150) - 30 (10 - 150)	30 / 26 / 23 - 30 / 26 / 23	21,0 / 19,0 / 15,0 - 21,0 / 19,0 / 15,0
10,0 - 12,5 kW	S-1014PF3E	9,5 - 12,1	10,8 - 13,5	250 x 1400 x 730	40 (10 - 150) - 50 (10 - 150)	33 / 29 / 25 - 35 / 31 / 27	32,0 / 26,0 / 21,0 - 34,0 / 29,0 / 23,0
14,0 kW	S-1014PF3E	13,4	15,5	250 x 1400 x 730	50 (10 - 150)	39 / 35 / 29	36,0 / 32,0 / 25,0

* The data shown in these tables are based on PACi NX Elite combinations. 1) The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 2) Factory setting.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Simultaneous operation system combinations

PACi NX Elite from 7,1 to 14,0 kW simultaneous operation system combinations · R32

Capacity	Indoor	Outdoor			
		7,1 kW	10,0 kW	12,5 kW	14,0 kW
2,5 kW	S-25PY3E	Triple U-71 [2,5 2,5 2,5]	Double-twin U-100 [2,5 2,5 2,5 2,5]		
3,6 kW	S-36PY3E S-3650PF3E S-3650PK3E S-3650PT3E S-3650PU3E	Twin U-71 [3,6 3,6]	Triple U-100 [3,6 3,6 3,6]	Double-twin U-125 [3,6 3,6 3,6 3,6]	
4,5 kW	S-3650PF3E S-3650PK3E S-3650PT3E S-3650PU3E			Triple U-125 [4,5 4,5 4,5]	
5,0 kW	S-50PY3E S-3650PF3E S-3650PK3E S-3650PT3E S-3650PU3E		Twin U-100 [5,0 5,0]		Triple U-140 [5,0 5,0 5,0]
6,0 kW	S-60PY3E S-6071PF3E S-6010PK3E S-6071PT3E S-6071PU3E			Twin U-125 [6,0 6,0]	
7,1 kW	S-6071PF3E S-6010PK3E S-6071PT3E S-6071PU3E				Twin U-140 [7,1 7,1]

PACi NX Standard from 10,0 to 14,0 kW simultaneous operation system combinations · R32

Capacity	Indoor	Outdoor		
		10,0 kW	12,5 kW	14,0 kW
5,0 kW	S-50PY3E S-3650PF3E S-3650PK3E S-3650PT3E S-3650PU3E	Twin U-100 [5,0 5,0]		
6,0 kW	S-60PY3E S-6071PF3E S-6010PK3E S-6071PT3E S-6071PU3E		Twin U-125 [6,0 6,0]	
7,1 kW	S-6071PF3E S-6010PK3E S-6071PT3E S-6071PU3E			Twin U-140 [7,1 7,1]

Big PACi NX and Big PACi from 20,0 to 25,0 kW simultaneous operation system combinations · R32

Capacity	Indoor	Outdoor	
		20,0 kW	25,0 kW
5,0 kW	S-3650PF3E* S-3650PU3E	Double-twin U-200 [5,0 5,0 5,0 5,0]	
6,0 kW	S-6071PF3E* S-6071PU3E		Double-twin U-250 [6,0 6,0 6,0 6,0]
7,1 kW	S-6071PF3E* S-6071PU3E	Triple U-200 [7,1 7,1 7,1]	
10,0 kW	S-1014PF3E* S-1014PU3E	Twin U-200 [10,0 10,0]	
12,5 kW	S-1014PF3E* S-1014PU3E		Twin U-250 [12,5 12,5]

* Available with Big PACi NX (PZH4).

Refrigerant piping arrangements

Single
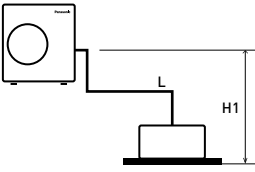
Twin
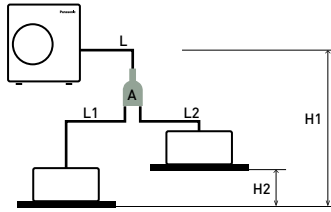
Triple
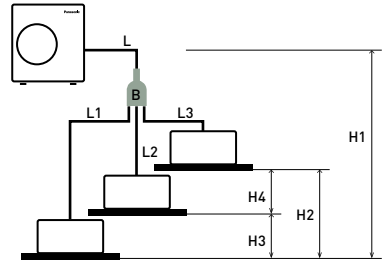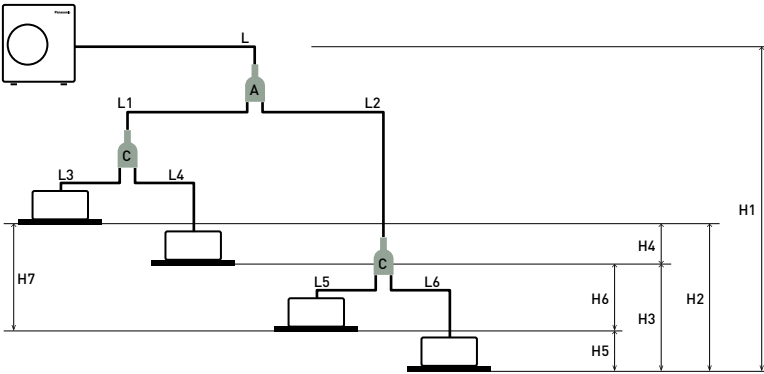
Double-twin

PACi NX Elite twin, triple and double-twin system from 7,1 to 14,0 kW
Joint distribution (sold separately)
A= CZ-P224BK2BM
B= CZ-P3 HPC2BM
C= CZ-P224BK2BM

PACi NX Standard twin system from 10,0 to 14,0 kW
Joint distribution (sold separately)
A= CZ-P224BK2BM

PACi Elite twin, triple and double-twin system from 20,0 to 25,0 kW
Joint distribution (sold separately)
A= CZ-P680BK2BM
B= CZ-P3 HPC2BM
C= CZ-P224BK2BM

Twin System	PACi NX Standard single and twin system from 7,1 to 14,0 kW			PACi NX Elite and PACi Elite twin, triple and double-twin system from 7,1 to 25 kW					
	Indoor unit combinations (see examples above)		Equivalent lengths and height differences (m) for outdoor unit sizes...	Indoor unit combinations (see examples above)				Equivalent lengths and height differences (m) for outdoor unit sizes from 7,1 to 14,0 kW	Equivalent lengths and height differences (m) for outdoor unit sizes from 20,0 to 25,0 kW
	Single	Twin		Single	Twin	Triple	Double-Twin		
Total pipe length	L	L + L1 + L2	≤ 50 m	L	L + L1 + L2	L + L1 + L2 + L3	L + L1 + L2 + L3 + L4 + L5 + L6	U-60/U-71: ≤ 50 m U-100/125/140: ≤ 75 m	U-200: ≤ 100 m U-250: ≤ 80 m
Maximum pipe length from outdoor unit to most distant indoor unit	–	–	–	–	L + L1 or L + L2	L + L1 or L + L2 or L + L3	L + L1 + L3 or L + L1 + L4 or L + L2 + L5 or L + L2 + L6	–	U-200: 90 m U-250: 60 m
Maximum branch pipe length	–	L1 L2	≤ 15	–	L1 or L2	L1 or L2 or L3	L1 + L3 or L1 + L4 or L2 + L5 or L2 + L6	≤ 15 m	≤ 20 m
Maximum branch pipe length differences	–	L1 > L2 L1 - L2	≤ 10	–	L1 > L2: L1 - L2	L1 > L2 > L3: L1 - L2 L2 - L3 L1 - L3	L2 + L6 (Max.) L1 + L3 (Min.): (L2 + L6) - (L1 + L3)	≤ 10 m	≤ 10 m
Maximum pipe length differences after first branch (Double-Twin)	–	–	–	–	–	–	L2 > L1: L2 - L1	≤ 10 m	≤ 10 m
Maximum pipe length differences after second branch (Double-Twin)	–	–	–	–	–	–	L4 > L3: L4 - L3 L6 > L5: L6 - L5	≤ 10 m	≤ 10 m
Height difference (outdoor unit located higher)	H1	H1	≤ 30	H1	H1	H1	H1	≤ 30 m	≤ 30 m
Height difference (outdoor unit located lower)	H1	H1	≤ 15	H1	H1	H1	H1	≤ 15 m	≤ 15 m
Height difference between indoor units	–	H2	≤ 0,5	–	H2	H2 or H3 or H4	H2 or H3 or H4 or H5 or H6	≤ 0,5 m	≤ 0,5 m

Twin System	PACi NX Standard single and twin system from 7,1 to 14,0 kW				PACi NX Elite twin, triple and double-twin system from 7,1 to 14,0 kW						Big PACi NX twin, triple and double-twin system from 20,0 to 25,0 kW				
	Outdoor unit main piping diameter (L)		Indoor unit connection tube (L1, L2)		Outdoor unit main piping diameter (L)	Indoor unit connection piping diameter (L1, L2, L3, L4) (mm)					Outdoor unit main piping diameter (L) (mm)		Double-Twin distribution pipe (L1, L2) [1]	Indoor unit connection piping diameter [2]	
Unit type capacity	100	125	50	60	71 - 140	36	45	50	60	71	200	250	100 - 125	50	60 - 125
Liquid (mm)	Ø 9,52	Ø 12,70	Ø 6,35	Ø 9,52	Ø 9,52	Ø 6,35	Ø 6,35	Ø 6,35	Ø 9,52	Ø 9,52	Ø 12,70	Ø 12,70	Ø 9,52	Ø 6,35	Ø 9,52
Gas (mm)	Ø 15,88	Ø 15,88	Ø 12,70	Ø 15,88	Ø 15,88	Ø 12,70	Ø 12,70	Ø 12,70	Ø 15,88	Ø 15,88	Ø 22,22	Ø 22,22	Ø 15,88	Ø 12,70	Ø 15,88
Additional gas amount (g/m)	50	50	20	50	50	20	20	20	50	50	60	80	40	20	40

1) Total capacity of indoor unit connected after the branch. 2) 4 way cassette type.

Make additional charges by adding up tube length in an order of main tube (L) > branch tube (L1 > L2 > L3 wide diameter) and then selecting the amount of refrigerant corresponding to the remaining (after charge-less tube length: 30 m) liquid tube diameter and tube length from the above table.

Panasonic PACi with Water Heat Exchanger for chilled and hot water production

Introducing a highly-efficient Water Heat Exchanger for PACi Series.
This ground-breaking product provides further possibilities by adding hydronic options.

Water outlet temperature:
Cooling: 5 ~ 15 °C
Heating: 30 ~ 55 °C

Highly-efficient Water Heat Exchanger for PACi Series.

System example.

Water Heat Exchanger with simple and user friendly controller

Buffer tank*

External pump

Fan coil unit

Water piping

Refrigerant piping

Underfloor

PACi outdoor unit

* Minimum buffer tank volume: 10 L/kW. ** Diagram is for illustrative purpose only.
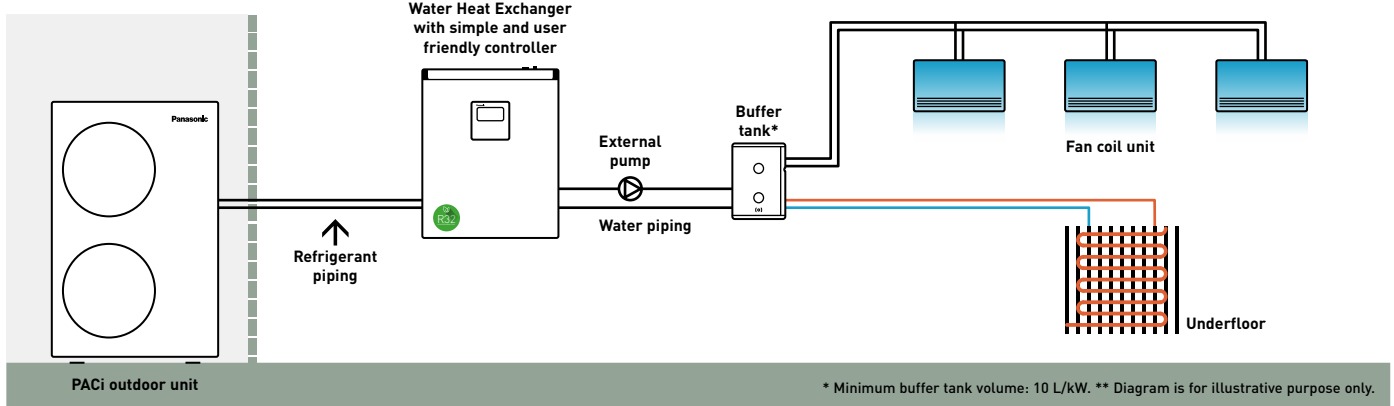
1 Cost saving solution
· A+++ Energy efficiency class (scale from A+++ to D)
· Cost effective water projects thanks to lower cost for PACi compared to VRF
· Reducing the amount of HFC refrigeration in the project

2 Flexible and space saving system
· 2 installation possibilities (wall-mounted / floor-standing)
· Compact, lightweight unit design, only 27 kg

3 Easy installation, maintenance
· Quick mounting process
· Flow switch kit is included as a standard
· Direct access to electrical box
· Operation down to -20 °C ambient without the need for glycol

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Flexible and space saving system

Compact and light unit.
· Only 205 mm depth fits within a limited space
· Lightweight design at only 27 kg, makes it easy to maneuver and position
· Maximum total refrigerant piping length: 90 m*

* 90 m for PAW-200W5APAC-1.

Only **205 mm** depth

Light weight **27 kg**

Piping length **90 m**

205 mm

550 mm

455 mm

2 installation options.
· Wall-mounted and floor-standing installation options are available. Free-up floor space by using the wall-mounted installation
· Quick mounting process with its lightweight compact design
Make fixing holes **>** Fix 2 screws **>** Hang the unit **>** Finish

Quick simple Install

Installer friendly

Wall-mounted.   **Floor-standing.**

* Support feet included.
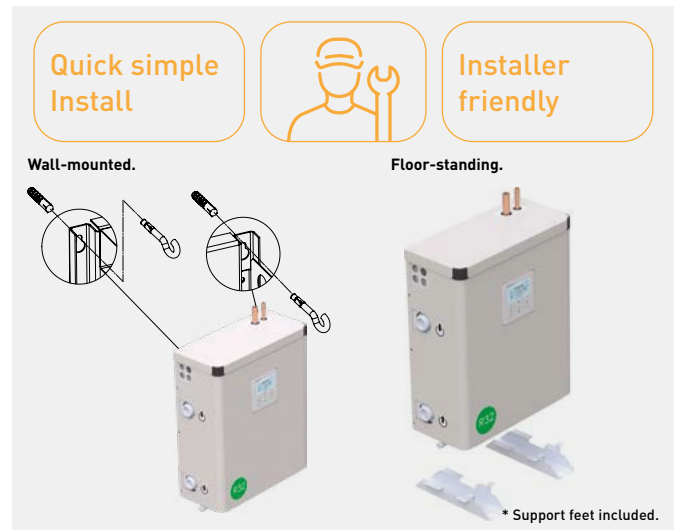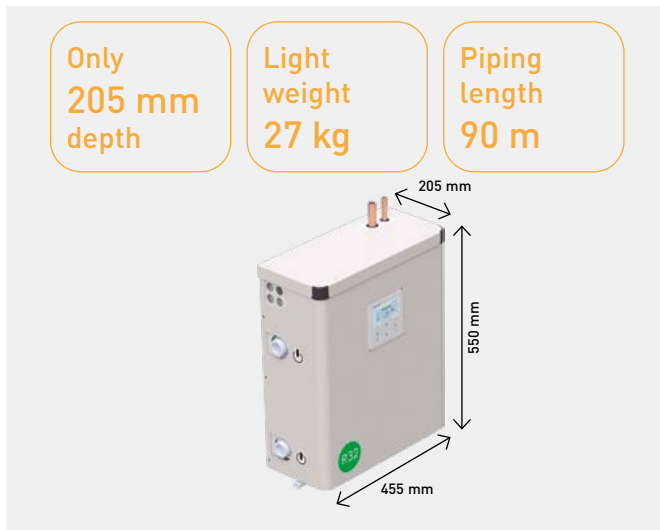
Foodchain/Small office application
· Fulfilling R32 refrigerant needs to follow environmental perspective, Company policy
· Hydraulic system to reduce total amount of HFC refrigeration
· Water solution to substitute electric heating system
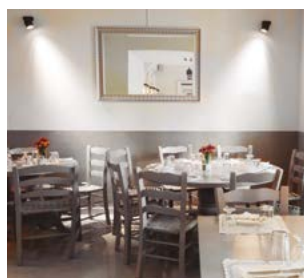
Foodchain.

Residential/Commercial retail application
· Water solution to substitute existing boiler system
· For heating projects with longer than 50 m piping

Commercial retail.

PACi Water Heat Exchanger (WHE) is the ideal solution for residential and commercial applications; the investment costs can be amortised in a short period.

Easy maintenance operation from two points of access

Removable lid for electrical installation

Electrical Box

Integrated Control display

Rear differential pressure switch for BPHE safety

Plate heat exchanger with optimised distributor for R32 refrigerant

Antifreeze Sensor

Completely removable metallic case: full access for maintenance
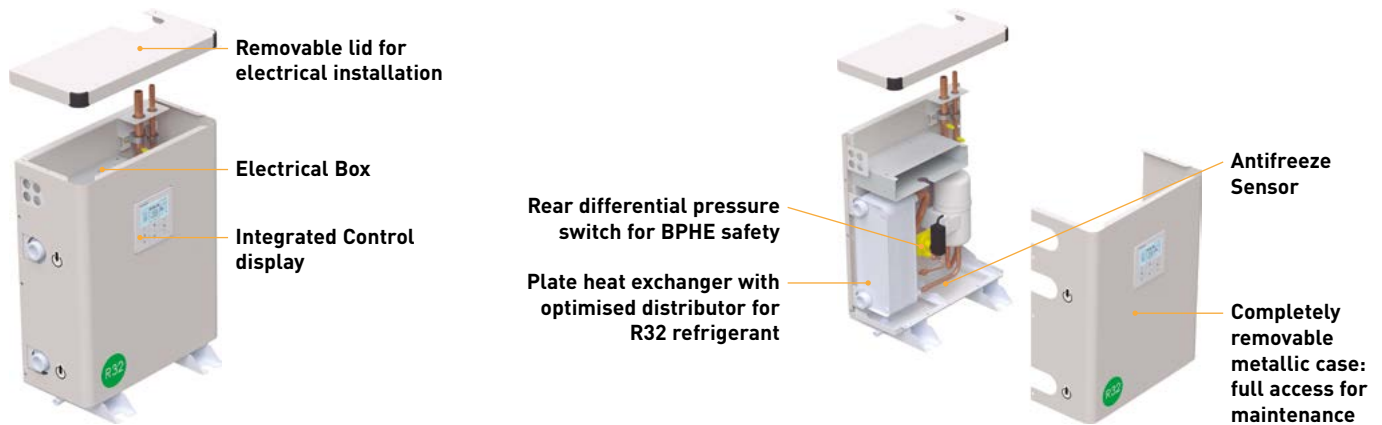
Integrated cascade control as standard for maximum ease and flexibility

Built-in cascade control for 2 units.

The control of 2 refrigerant systems can be combined together in a cascade. This option is included in the standard scope of delivery on the WHE. It is activated using the one of the CZ-RTC5B remote controllers on the units as master. Rotation and Backup operation modes can be selected.

System 1

System 2

| Operation | Stand by | Operation | Stand by | Operation |
| Stand by | Operation | Stand by | Operation | Stand by |

System 1 — Operation
System 2 — Stand by

Power supply error or PCB error

System 1 — Operation — Error

System 2 — Stand by — Operation

System 1

System 2

* One of built-in controllers should be deactivated.
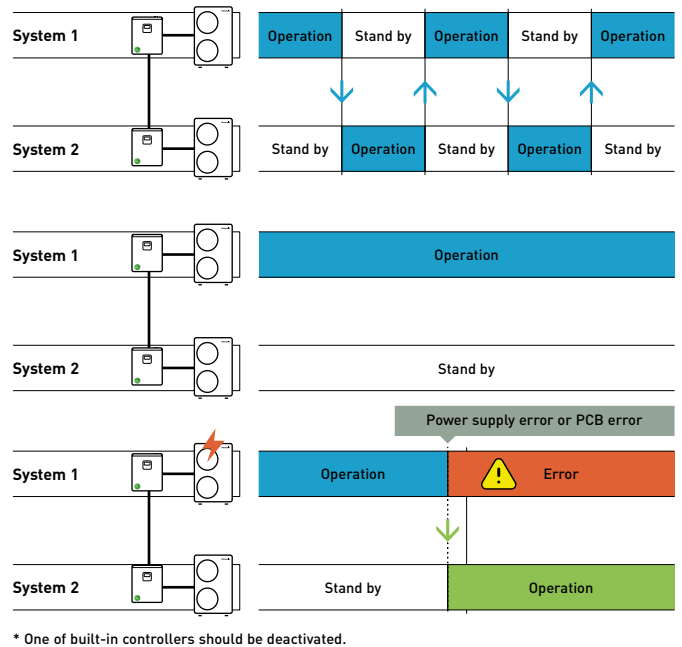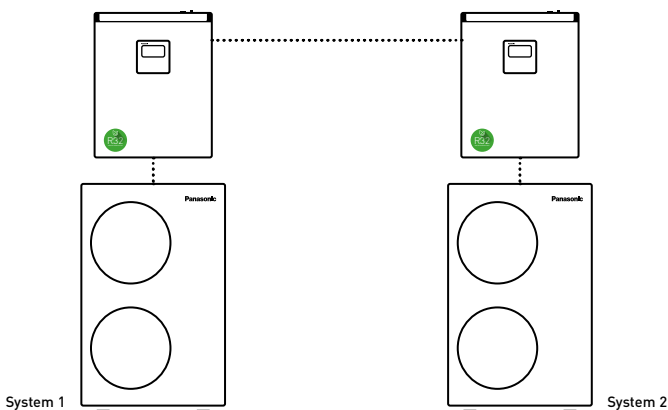
PACi Water Heat Exchanger can be connected as a cascade with up to 4 groups of 8 units, reaching up to 800 kW

Optional PAW-PACR4 cascade controller allows up to four groups, with each group containing between 1-8 units, to be combined into a cascade for failure substitution or temperature assist.

· Maximum 4 groups (up to 8 units per group)
· Rotation
· Failure substitution
· Temperature assist
· Operation output signal
· Alarm output signal

Example: 4 x groups.
Maximum available capacity per group: 8 x 25 kW = 200 kW.
Total maximum available capacity: 4 x 200 kW = 800 kW.

Group 1 — 8 units
Group 2 — 8 units
Group 3 — 8 units
Group 4 — 8 units

Temperature sensor
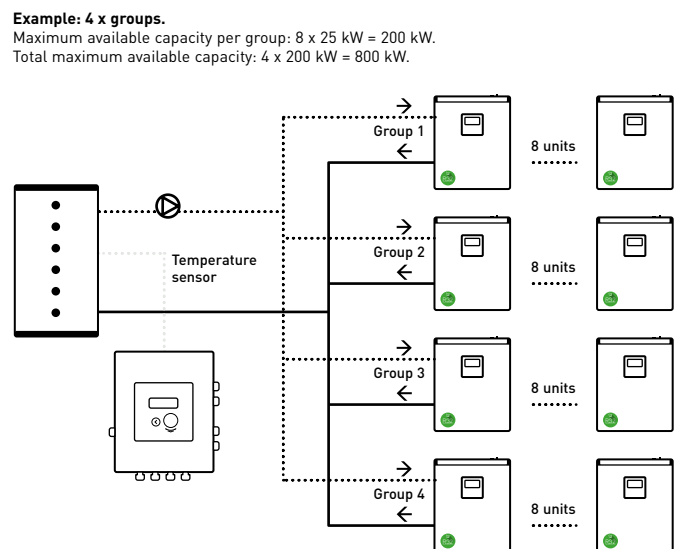
PACi with Water Heat Exchanger for chilled and hot water production
Constant 55 °C flow available.

Short-term investment recovery.
PACi Water Heat Exchanger is ideal for small offices and retails. The investment costs can be amortised within a very short period. This solution allows investors and operators to save money.

Water Heat Exchanger			PAW-200W5APAC-1	PAW-250W5APAC-1
Cooling capacity [1]		kW	20,0	26,0
EER [1]		W/W	3,03	2,89
Heating capacity [2]		kW	26,5	31,6
COP [2]		W/W	3,34	3,31
Energy efficiency class (Scale A+++ to D) [3]	35 °C (low temperature HP)		A+++	A+++
	55 °C (low temperature HP)		A+	A+
$\eta_{s,h}$ (LOT1) [4]		%	178	178
Dimension	H x W x D	mm	550 x 455 x 205	550 x 455 x 205
Net weight		kg	27	27
Water pipe connector		Inch	Male Thread 1 ¼	Male Thread 1 ¼
Cooling water flow (ΔT=5 K. 35 °C)		m³/h	3,45	4,30
Heating water flow (ΔT=5 K. 35 °C)		m³/h	4,15	4,85
Flow switch			Included	Included
Water filter			Included	Included
Outdoor unit			**U-200PZH2E8**	**U-250PZH2E8**
Sound pressure	Cool / Heat (Hi)	dB(A)	59 / 61	59 / 63
Dimension	H x W x D	mm	1500 x 980 x 370	1500 x 980 x 370
Net weight		kg	117	128
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	1/2 (12,70)
	Gas	Inch (mm)	1 (25,40)	1 (25,40)
Pipe length range		m	5~90	5~60
Elevation difference (in / out)		m	30	30
Pre-charged pipe length		m	30	30
Additional gas amount		g/m	60	80
Water outlet temperature range	Cool Min ~ Max	°C	+5~+15	+5~+15
	Heat Min ~ Max	°C	+30~+55	+30~+55
Operating range	Cool Min ~ Max	°C	-15~+46	-15~+46
	Heat Min ~ Max	°C	-20~+24	-20~+24

1) Data refers to 7 °C leaving chilled water temperature and 35 °C ambient air temperature, according to EN14511 standard. 2) Data refers to 35 °C leaving warm water temperature and 7 °C ambient air temperature according to EN14511 standard. 3) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D. 4) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps.

Professional solution

Water heat exchanger is compatible with R32 PACi.
Many air conditioning manufacturers are selling R32 systems and it is becoming the standard refrigerant for split type air conditioning, because R32 has a much lower global warming potential than R410A, and can also provide higher efficiency.

Quick installation with pre-assembled flow switch

The flow switches come pre-assembled with pipe fittings for ease of installation.
Operation down to -20 °C with no glycol as the heat exchanger is installed indoors.

R32   A++ ErP 35°C   -20 °C HEATING MODE   46 °C COOLING MODE   ADVANCED CONTROL   5 YEARS COMPRESSOR WARRANTY

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.com.

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AHU connection kit PAH3M for PACi NX and PACi

CONEX Bluetooth® version (CZ-RTC6BL) is built-in.
Easy connection and set-up is possible via Bluetooth®.
0-10 V demand control.

CONEX

CONEX Bluetooth®
control built-in.
CZ-RTC6BL

PAC _i_

PAW-280PAH3M-1			2,5 kW	3,6 kW	5,0 kW	6,0 kW	7,5 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
Dimension	H x W x D	mm	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150
Net weight		kg	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	1 (25,40)	1 (25,40)
Intake temperature of AHU connection kit	Cool Min ~ Max	°C DB	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32
	Cool Min ~ Max	°C WB	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	—	—
	Heat Min ~ Max	°C	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30
With PACi NX Elite												
Cooling capacity		kW	—	3,6	5,0	6,0	7,1	10,0	12,5	14,0	19,5	23,2
Heating capacity		kW	—	4,0	5,6	7,0	8,0	11,2	14,0	16,0	22,4	28,0
Air flow	Min / Max	m³/h	—	540 / 870	630 / 990	780 / 1320	780 / 1320	900 / 2160	1140 / 2280	1200 / 2400	2160 / 4320	2280 / 5040
Pipe length range		m	—	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85	5 ~ 90	5 ~ 60
Elevation difference (in / out)	Max	m		30	30	30	30	30	30	30	30	30
Ambient temperature of outdoor unit	Cool Min ~ Max	°C	—	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-20 ~ +48	-20 ~ +48	-20 ~ +48	-20 ~ +48	-20 ~ +48
	Heat Min ~ Max	°C	—	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24
With PACi NX Standard												
Cooling capacity		kW	2,5	3,6	5,0	6,0	7,1	10,0	12,5	14,0	—	—
Heating capacity		kW	3,2	4,0	5,0	6,0	7,1	10,0	12,5	14,0	—	—
Air flow	Min / Max	m³/h	360 / 570	540 / 870	630 / 990	780 / 1320	780 / 1320	900 / 2160	1140 / 2280	1200 / 2400	—	—
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 50	5 ~ 50	—	—
Elevation difference (in / out)	Max	m	30	30	30	30	30	30	30	30	—	—
Ambient temperature of outdoor unit	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	—	—
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	—	—

Control options

Control option 1.
· The system's control is simple: control of actual suction temperature vs. set point
· Control works in the same way as that of any indoor unit
· Fan signal issued by the PCB (OFF while defrosting, for instance)

Control option 2.
· System control by a 0-10 V control working from an external BMS that manages the set point for temperature or capacity. Enhances efficiency by adjusting capacity and enhances comfort as well
· All signals as standard

System and regulations. System overview.
1 | AHU equipment (field supplied)
2 | AHU system controller (field supplied)
3 | AHU connection kit controller box (with control PCB)
4 | Thermistor for gas pipe (E2)
5 | Thermistor for liquid pipe (E1)
6 | Thermistor for suction air
7 | Inter-unit wiring
8 | Outdoor unit

0-10 V control

With the 0-10 V demand control the capacity of the outdoor unit can be controlled by 20 steps.

Input voltage* (V)	0	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5	7,0	7,5	8,0	8,5	9,0	9,5
Demand (% of nominal current)	No cut [1]	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	No limit / Full capacity [2]
Indoor unit start / stop	Stop [1]										Start								

1) No cut / stop: AHU system / indoor unit is completely switched OFF.
2) No limit: No restrictions applied by BMS to AHU system / indoor unit performance (equivalent to "full-load operation" of AHU system / indoor unit).

AHU connection kit.

PCB, power trans, terminal block.

Thermistor x2 (refrigerant: E1, E2).

Thermistor (air: TA; 1 sensor).

Wired remote controller.
CZ-RTC6BL.

Optional controller.

Timer remote controller.
CZ-RTC5B.

Electric air curtain

The Panasonic range of air curtains is designed for smooth operation and efficient performance. Air curtains produce a continuous stream of air blown from the top to the bottom of an open doorway and create a barrier that people and products can flow across, but air cannot.

			FY-3009U1	FY-3012U1	FY-3015U1
Width		mm	900	1200	1500
Voltage		V	220	220	220
Air flow	Hi / Lo	m³/h	1100 / 920	1400 / 1270	2000 / 1800
Consumption	Hi / Lo	W	76 / 70	94 / 85	131 / 110
Current	Hi / Lo	A	0,35 / 0,32	0,43 / 0,40	0,59 / 0,50
Air speed	Hi / Lo	m/s	10,50 / 8,50	9,50 / 8,00	10,50 / 9,50
Sound pressure	Hi / Lo	dB(A)	48,5 / 45,0	48,5 / 44,5	51,5 / 48,0
Dimension	H x W x D	mm	900 x 231,5 x 212	1200 x 231,5 x 212	1500 x 231,5 x 212
Net weight		kg	12,0	14,5	18,0

1 **Designed to maximize performance**
High air flow upgraded 145% compared to conventional model (in the case of FY-3009U1).

2 **Comprehensive product line up**
1,5 m wide model added in the line up.

3 **Easier installation and maintenance**
Simple structure for easy installation and maintenance.

Air curtain with DX coil, connected to PACi NX and PACi

Comfort: Easy redirection of air flow by means of manual deflector.

Ease of use: Speed selector (high and low) on the unit itself.

Easy installation and maintenance: Easy installation / Compact dimensions improve installation and positioning / Easy cleaning of grid without opening of the unit.

Outdoor unit capacity			7,1 kW	10,0 kW	14,0 kW	20,0 kW
Air outlet height 2,7 m			PAW-10PAIRC-LS-1	PAW-15PAIRC-LS-1	PAW-20PAIRC-LS-1	PAW-25PAIRC-LS-1
Cooling capacity [1]	Max	kW	6,1	9,7	13,0	17,0
Heating capacity [2]	Max	kW	7,9	12,0	15,0	19,0
Air flow	High	m³/h	1800	2700	3600	4500
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,03
Electric consumption fan	230 V / 50 Hz	kW	0,30	0,50	0,60	0,80
Current	230 V / 50 Hz	A	2,10	3,10	4,10	5,10
Sound pressure [3]	Max	dB(A)	65	66	67	69
Air outlet height 3,0 m			PAW-10PAIRC-HS-1	PAW-15PAIRC-HS-1	PAW-20PAIRC-HS-1	PAW-25PAIRC-HS-1
Cooling capacity [1]	Max	kW	9,1	13,0	19,5	23,7
Heating capacity [2]	Max	kW	11,8	15,8	23,6	27,6
Air flow	High	m³/h	2700	3600	5400	6300
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,12
Electric consumption fan	230 V / 50 Hz	kW	0,75	1,00	1,50	1,75
Current	230 V / 50 Hz	A	4,10	5,50	8,20	9,60
Sound pressure [3]	Max	dB(A)	66	67	68	68
Common data						
Dimension [4]	H x W x D	mm	260 (+140) x 1000 x 460	260 (+140) x 1500 x 460	260 (+140) x 2000 x 460	260 (+140) x 2500 x 460
Net weight	Air outlet height 2,7 m	kg	50	65	80	95
	Air outlet height 3,0 m	kg	55	65	85	110
Fan type			EC	EC	EC	EC
Piping diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 3/4 (19,05)	3/8 (9,52) / 7/8 (22,22)	3/8 (9,52) / 7/8 (22,22)
Door width		m	1,0	1,5	2,0	2,5
Refrigerant			R32	R32	R32	R32

LS / PACi outdoor combination*	PACi Elite			PACi Standard		
Operation until	40 °C	35 °C	30 °C	40 °C	35 °C	30 °C
PAW-10PAIRC-LS-1	U-100	U-100	U-50	U-100	U-100	U-60
PAW-15PAIRC-LS-1	U-100	U-100	U-100	—	U-100	U-100
PAW-20PAIRC-LS-1	U-200	U-140	U-100	—	—	U-100
PAW-25PAIRC-LS-1	U-250	U-200	U-125	—	—	U-125

HS / PACi outdoor combination*	PACi Elite			PACi Standard		
Operation until	40 °C	35 °C	30 °C	40 °C	35 °C	30 °C
PAW-10PAIRC-HS-1	U-200	U-100	U-100	—	U-100	U-100
PAW-15PAIRC-HS-1	U-200	U-100	U-100	—	U-200	U-100
PAW-20PAIRC-HS-1	—	U-250	U-200	—	U-250	—
PAW-25PAIRC-HS-1	—	U-250	U-200	—	U-250	—

1) Cooling capacity DX coil, air temperature in / out +27 / +18 °C, R32 and R410. 2) Heating capacity condenser, air temperature in / out +20 / +33 °C, R32 and R410. In the case of lower outdoor temperatures, an outdoor model with higher capacity may be necessary. 3) Measured in distance up to 5,0 m, direction factor 2, absorbing surfaces 200 m², Min / Max air flow. 4) 140 mm is the height of an electrical box if it is installed on the top. * Available with PZH2 and PZ2. PZH3 and PZ3 will be compatible from Spring 2024.

Technical focus

· Now compatible with PACi NX Series
· Save up to 40% energy costs by use of the integrated EC fan technology (higher efficiency than conventional AC fan, soft start and longer motor duration)
· 4 length of air curtain LS and HS are available 1,0, 1,5, 2,0 and 2,5 m
· Installation height up to 3,0 m
· Outlet grilles can be adjusted in five positions, to suite different indoor and installation requirements
· Control with Panasonic remote control systems (optional)
· Direct integration to BMS via optional Panasonic interfaces
· Drip tray included in all DX air curtains
· Drain pump included

How does it work?

Stale air from the room is taken in and ejected near the door. This creates a 'roll of air' that shields the door area, mixing with the colder incoming air. It then turns away from the door, back into the room and toward the intake screen, where it is partly drawn in again. This flow of air helps to create a barrier for heat loss yet at the same time refreshes room air

Maximum installation high:
HS: 3,0 m
LS: 2,7 m

Rating Conditions: Cooling Outdoor +35 °C DB Indoor +27 °C DB / +19 °C WB, Discharge temperature 16 °C. All combinations under rated conditions: Heating Outdoor +7 °C DB/+6 °C WB Indoor +20 °C DB. In case of lower outdoor temperatures a higher capacity outdoor unit model may be necessary. Specifications subject to change without notice. For detailed information about ErP, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Ceiling mounted air-e nanoe X Generator

· nanoe™ X technology
  (Generator Mark 1: 4,8 trillion hydroxyl radicals/sec)
· Silent operation. Whisper quiet at 25,5 dB(A)*
· Low power consumption 4 W
· Easy installation
· Compact and modern design

* 230 V.

Model			FV-15CSD1G		
Power supply	Voltage	V	220	230	240
	Frequency	Hz	50	50	50
Air flow	m³/h		15	16	17
	CFM		8,8	9,4	10,0
Consumption	W		4	4	4
Sound pressure	dB(A)		23,5	25,5	27,0
Net weight	kg			1,1	

* The value of air volume, power consumption and noise are specified at static pressure 0 Pa. The value of air volume is the mean value and a tolerance of +-10% is allowed. The value of noise level is a weighted average sound pressure level, the mean value is measured by Panasonic. A tolerance of +3 dB/-7 dB is allowed. The noise is measure at 1 m apart from the left, the front and below of the tested product. Conditions of generating nanoe™ X: room temperature: about 5 °C ~ 40 °C (dew point temperature more than 2 °C), relative humidity: about 30% ~ 85%. nanoe™ X is generated using the air in the room, and its amount is subject to the temperature and humidity in the air.

One device is suitable for around 20 m² (with a ceiling height 3 m)

Ex. 3 air-e devices are required for the room size 60 m².

60 m²

3 m

3 air-e devices

Concentration simulator is ready

See how nanoe™ X fills space.

The air-e is a stand alone device which is an easy and simple choice to improve indoor air quality. It can be easily installed to various commercial projects including refurbishments.

The tested effects of nanoe™ X

Bacteria and viruses.
SARS-CoV-2: 99,9% % inhibited [1].
Influenza virus H1N1 subtype: 99,9 % inhibited [2].

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

1) Novel coronavirus (SARS-CoV-2) > [Test organization] Texcell (France) [Test subject] Adhered novel coronavirus (SARS-CoV-2) [Test volume] 45 L enclosed box [Test result] Inhibited 99,9% in 2 hours [Test report] 1140-01 A1.
2) Adhered virus (Influenza virus H1N1 subtype) > [Test organization] Kitasato Research Center for Environmental Science [Test subject] Influenza virus (H1N1 subtype) [Test volume] 1000 L enclosed box [Test result] Inhibited 99,9% in 2 hours [Test report] 21_0084_1.
3) Deodorisation effect for adhering odour (cigarette smoke) > [Test organization] Panasonic Product Analysis Center [Test subject] Adhered cigarette smoke odour [Test volume] Approx. 24 m³ laboratory [Test result] Odour intensity reduced 2,4 levels in 0,2 hours [Test report] 4AA33-160615-N04.

Performance of nanoe™ X might differ in real life environment and is only expected in the same room as where the unit is placed. 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 a medical device.

Deodorisation effect for adhering odour (cigarrette smoke) [3].

6 Level Odour Intensity

Intensely disagreeable	5
Strong	4
Immediately noticeable	3
Identifiable weak	2
Hardly noticeable	1
Odourless	0

Natural reduction

nanoe™ X can reduce odour intensity by 2,4 in 12 minutes

nanoeX

12   60   120
Minutes

For further details and validation data, please refer to the following website.

R22 Renewal. Fast, easy to install and cost effective

An important drive to further reduce the potential damage to our ozone.
It is often said that legislation is ruling our lives but sometimes it is there to help save lives. R22 phase out can be described as one of these and from Jan 1st 2010 the use of Virgin R22 refrigerant was banned within the European Union.

Panasonic is doing its part.

We at Panasonic are also doing our part – recognising that all finances are under pressure at the moment. Panasonic has developed a clean and cost effective solution to enable this latest legislation to offer less financial impact on your business.
The Panasonic renewal system allows good quality existing R22 or R410A pipe work to be re-used whilst installing high efficiency R32 systems.
By bringing a simple solution to the problem Panasonic can renew all Split Systems and PACi systems; and depending upon certain restrictions we don't even limit the manufacturer's equipment we are replacing.

By installing a high efficiency Panasonic R32 system you can benefit from around 30% running cost saving compared to the R22 system.

Yes...
1. Check the capacity of the system you wish to replace
2. Select from the Panasonic range the best system to replace it with
3. Follow the procedure detailed in the brochure and technical data
Simple...

Why renewal?

Unique R22 Renewal from Panasonic: Fast, easy to install and cost effective.
· Panasonic refrigerant oil doesn't react to the most common oil types used in air-conditioning systems. This ensures the mix of oil does not damage the units. Therefore installations are easier

· All Panasonic PACi units can be installed in R22 pipings, no specific models are available
· Up to 33 Bar! When there is any doubt about the strength of the piping, the maximum working pressure can be reduced to 33 Bar with a setting in the software of the outdoor unit

Reuse of existing piping (renewal design and installation)

Notes on reuse of existing refrigerant piping.
It is possible for each series of PZH and PZ series outdoor unit to reuse the existing refrigerant piping without cleaning when obtained under certain conditions. Make sure that the requirements under the section "Notes on reuse of existing refrigerant piping", "Measurement procedure for renewal" and "Refrigerant piping size and allowable piping length" will be satisfied in order to carry out.
Also, check the items with regard to section "Safety" and "Cleaning".

1. Prerequisite.
· If the refrigerant used for the existing unit is other than R22, R407C and R410A / R32, the existing refrigerant piping cannot be used.
· If the existing unit has another use than air conditioning, then existing refrigerant piping cannot be used.

2. Safety.
· If there is a hollow, crack or corrosion on the piping, make sure to install new piping.
· If the existing piping is other than capable of reuse of piping as shown in the flowchart, make sure to install new piping.
· In case of multiple operation, use our genuine branch piping for refrigerant R32.

A local supplier shall assume responsibility for the defects and hollows on the reuse of existing piping surface and recognition of reliability of the piping strength. There is no guarantee that we take responsibility for such damages.
The operational pressure of the refrigerant R32 becomes higher compared to R22 or R410A. In the worst case, a lack of compressive strength may lead to piping explosion.

3. Cleaning.
· When the refrigerant oil used for the existing unit is other than the listed below, make sure to install new piping or wash it thoroughly before reusing it.
[Mineral Oil] SUNISO, FIORE S, MS
[Synthesized oil] alkyl benzene oil (HAB, parallel freeze), ester oil, ether oil (PVE only)

If the existing unit is GHP type, it is necessary to wash the piping thoroughly.

· If the existing pipes in the outdoor and indoor units remain disconnected, make sure to install a new piping or wash it thoroughly before reusing it.
· If the discoloured oil or residue remains in the existing piping, make sure to install a new piping or wash it thoroughly before reusing it. See "Deterioration Criteria for Refrigerant Oil" in table 3.
· If the compressor of the existing air conditioner has a failure history, make sure to install a new piping or wash it through thoroughly before reusing it.

When reusing the existing piping as it is without removing dirt and dust, inadequate piping could result a renewal appliance in failure.

Notes on renewal for simultaneous operation of multiple units.
Only main pipe is applicable for using the different diameter size.
In case of different diameter size for the branch pipes, a new installation work for a standard size is necessary.
Be sure to use our genuine branch piping for refrigerant R32.

· Only the main pipe L can be used among different diameter's existing piping
· Installation work as a standard size is capable for L1, L2, ℓ1 - ℓ4 piping
· Be sure to use our genuine branch piping for refrigerant R32

1. In case of single unit:
   It is not necessary to charge with additional refrigerant until the chargeless pipe length in the table 2.
   If the pipe length is exceeding the charge less pipe length, charge with additional refrigerant amount per 1 m according to the equivalent length.

2. In case of simultaneous operation of multiple units:
   Calculate the refrigerant charging amount according to the calculating method of the standard piping diameter.
   As to the additional refrigerant charging amount per 1 m, refer to the additional amount in the table 2.

Notes on renewal for simultaneous operation of multiple units

Capacity class	Standard liquid pipe size	Standard gas pipe size
Type 50	Ø 6,35	Ø 12,70
Type from 60 to 140	Ø 9,52	Ø 15,88
Type 200	Ø 12,70	Ø 22,22
Type 250	Ø 12,70	Ø 22,22

Measurement procedure for renewal

Observe the following procedure when reusing the existing piping or carrying out renewal installation work.
Flowchart of existing piping measures criteria for PZH and PZ series outdoor unit.

Flare nut size (mm)

Piping size	Ø6,35	Ø9,52	Ø12,70	Ø15,88	Ø19,05
For R32 / R410A	17	22	26	29	36
For R22 / R407C	17	22	24	27	36

See Table 3.
Level "3 Over" according to colour scale level

· Use our genuine branch piping for refrigerant R32
· Re-process the flare of existing piping for R410A and use the flare nut attached to the service valve of the outdoor unit (for R32)

* Please do not reuse the existing flare to prevent gas leak.
* Please make sure to install new flare.

Start

Do existing piping size and piping length satisfy the standard under the conditions? — **N** → Existing refrigerant piping cannot be used as is. Make sure to install a new piping.

See Table 1 – 2

Y

Can existing air conditioner run in the cooling mode?

Y

Perform the test operation in cooling mode for over 30 minutes and collect the remaining refrigerant without stopping operation. — **N** → **Collect the refrigerant by the refrigerant recovery equipment.**

Remove existing indoor and outdoor units. / Remove existing indoor and outdoor units.

Check inside the piping from the pipe end. — **N** →

Is the oil remained inside the piping transparent? — **N** →

Y

Is the residue inside the piping removed? — **N** →

Y

Has the compressor in existing air conditioner been operated without any trouble?

Y

Wash it thoroughly or make sure to install a new piping.
Existing refrigerant piping cannot be used as is.

Carry out the installation work according to Installation Instructions.

Refrigerant piping size and allowable piping length.

Check if reuse of existing refrigerant piping is possible based on the following chart.
The standards other than this one (difference of elevation, etc.) are identical to the requirements of ordinary refrigerant piping.

Table 1 - Reusable existing piping (mm)

Material	O				1/2 H, H*			
External diameter	Ø6,35	Ø9,52	Ø12,70	Ø15,88	Ø19,05	Ø22,22	Ø25,40	Ø28,58
Thickness	0,80	0,80	0,80	1,00	1,00	1,00	1,00	1,00

* It is impossible to reuse the size of Ø19.05, Ø22.22, Ø25.4 and Ø28.58 for material O. Change to material 1/2H or material H.

Table 2 – 1 Refrigerant piping size: 2,5 – 14,0 kW type (mm)

Liquid pipe			Ø6,35			Ø9,52		Ø12,70	
Gas pipe			Ø9,52	Ø12,70	Ø15,88	Ø12,70	Ø15,88	Ø19,05	Ø15,88	Ø19,05
PZH3	Type 36 ~ 60	Additional gas 15 g/m	✖	Standard 40 m (30 m)	✖	✖	✖	✖	✖	✖
PZ3	Type 25		Tentative data							
	Type 36	Additional gas 10 g/m	✖	Standard 15 m (7,5 m)	✖	✖	✖	✖	✖	✖
	Type 50	Additional gas 15 g/m	✖	Standard 20 m (7,5 m)	✖	✖	✖	✖	✖	✖
	Type 60	Additional gas 15 g/m	✖	Standard 30 m (7,5 m)	✖	✖	✖	✖	✖	✖
	Type 71	Additional gas 17 g/m	✖	✖	Standard 40 m (10 m)	✖	✖	✖	✖	✖

Liquid pipe		Ø6,35			Ø9,52			Ø12,70	
Gas pipe		Ø9,52	Ø12,70	Ø15,88	Ø12,70	Ø15,88	Ø19,05	Ø15,88	Ø19,05
PZH3	Type 71	✖	□ 10 m (10 m)	□ 10 m (10 m)	▽ 30 m (30 m)	Standard 50 m (30 m)	✖	□ 25 m (15 m)	✖
	Type 100 ~ 140	✖	✖	✖	✖	Standard 85 m (30 m)	◎ 85 m (30 m)	□ 35 m (15 m)	□ 35 m (15 m)
Additional gas		20 g/m				45 g/m		80 g/m	
PZ3	Type 100 ~ 140	✖	✖	✖	✖	Standard 50 m (30 m)	◎ 50 m (30 m)	□ 25 m (15 m)	□ 25 m (15 m)
Additional gas						45 g/m		80 g/m	
PZH2	Type 50	✖	Standard 40 m (30 m)	◎ 40 m (30 m)	□ 20 m (15 m)	□ 20 m (15 m)	✖	✖	✖
PZ2	Type 60 ~ 71	✖	▽ 10 m (10 m)	□ 10 m (10 m)	▽ 30 m (20 m)	Standard 50 m (20 m)	✖	□ 25 m (10 m)	✖
Additional refrigerant charging amount per 1 m		20 g/m				40 g/m		80 g/m	
PZH2	Type 60 ~ 71	✖	▽ 10 m (10 m)	□ 10 m (10 m)	▽ 30 m (30 m)	Standard 50 m (30 m)	✖	□ 25 m (15 m)	✖
	Type 100 ~ 140	✖	✖	✖	✖	Standard 75 m (30 m)	◎ 75 m (30 m)	□ 35 m (15 m)	□ 35 m (15 m)
PZ2	Type 100 ~ 140	✖	✖	✖	✖	Standard 50 m (30 m)	◎ 50 m (30 m)	□ 25 m (15 m)	□ 25 m (15 m)
Additional refrigerant charging amount per 1 m		20 g/m				50 g/m		80 g/m	

How to see table definition (example):
In case of type 71, standard size is liquid pipe Ø9,52 / gas pipe Ø15,88.
There is a limitation to liquid pipe Ø9,52 / gas pipe Ø12,70 and to liquid pipe Ø12,70 / gas pipe Ø15,88.
However, they are applicable for different diameter's pipes.

Table 2 – 2 Refrigerant piping size: 20,0 – 25,0 kW type (mm)

Liquid pipe		Ø9,52			Ø12,70			Ø15,88		
Gas pipe		Ø19,05	Ø22,22	Ø25,40	Ø19,05	Ø22,22	Ø25,40	Ø19,05	Ø22,22	Ø25,40
PZH4	Type 200 ~ 250	✖	✖	✖	▽ 100 m (30 m)	Standard 100 m (30 m)	◎ 100 m (30 m)	▽ 65 m (20 m)	□ 65 m (20 m)	□ 65 m (20 m)
Additional refrigerant charging amount per 1 m		✖	✖	✖	80 g/m	80 g/m	80 g/m	120 g/m	120 g/m	120 g/m

◎ Allowable
▽ Cooling capacity down
□ Limited piping length
✖ Unallowable
50 m Maximum piping length
(50 m) Charge less piping length in a single connection

Table 3 - Deterioration Criteria for Refrigerant Oil

| 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 |
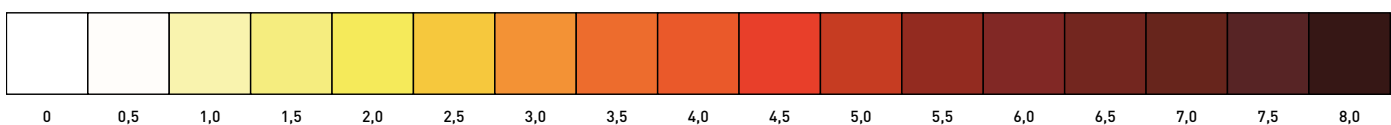
Accessories and control

Drain kits

Drain kit to suit outdoor units from 5,0 to 7,1 kW.
————
CZ-50DRS1

Drain kit to suit outdoor units from 10,0 to 25 kW.
————
CZ-140DRS1

Branch Pipes, Header

Branch pipe.
————
CZ-P224BK2BM

Branch pipe (from 22,4 kW to 68 kW).
————
CZ-P680BK2BM

Header.
————
CZ-P3HPC2BM

Special outdoor supports

Tray for condenser water compatible with outdoor elevation platform.

————
PAW-WTRAY

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

————
PAW-GRDSTD40

Outdoor base ground support for noise and vibration absorption.
Dimension (H x W x D): 600 x 95 x 130 mm
Safe working load: 500 kg
————
PAW-GRDBSE20

Panels

Panel for 4 way 60x60 cassette - PY3.
————
CZ-KPY4

Standard panel for 4 way 90x90 cassette.
————
CZ-KPU3W

Econavi panel for 4 way 90x90 cassette.
————
CZ-KPU3AW

Sensors

Econavi energy saving sensor.
————
CZ-CENSC1

Remote temperature sensor.
————
CZ-CSRC3

Fresh air-intake kit
————
CZ-FDU3+CZ-ATU2

NEW IAQ filter for adaptive ducted unit

BION air pollutant filter for S-3650PF3E.
————
PAW-APF800F

BION air pollutant filter for S-6071PF3E.
————
PAW-APF1000F

BION air pollutant filter for S-1014PF3E.
————
PAW-APF1400F

Plenums
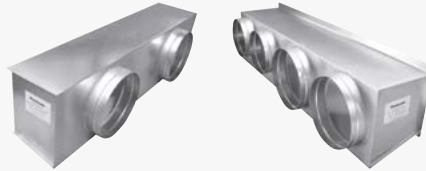
Air outlet plenum for S-3650PF3E.

————
CZ-56DAF2

Air outlet plenum for S-6071PF3E.

————
CZ-90DAF2

Air outlet plenum for S-1014PF3E.

————
CZ-160DAF2

Air outlet plenum for S-200PE4E and S-200PE3E5B.

————
CZ-TREMIESPW705

Air outlet plenum for S-250PE4E and S-250PE3E5B.

————
CZ-TREMIESPW706

VRF Smart Connectivity+

Remote controller Panasonic Net Con, RH, No PIR, R1/R2.
————
SER8150R0B1194

Remote controller Panasonic Net Con, RH, PIR, R1/R2.
————
SER8150R5B1194

Wireless ZigBee® Pro module / Green Com card.
————
VCM8000V5094P

Hotel room expansion module 14 indoor units.
————
HRCEP14R

Hotel room controller 28 indoor units.
————
HRCPBG28R

Hotel room controller w/Display 42 indoor units.
————
HRCPDG42R

Door/window wireless sensor.
————
SED-WDC-G-5045

Wall/ceiling motion/ temperature/humidity sensor.
————
SED-MTH-G-5045

CO_2 sensor.
————
SED-CO2-G-5045

Sensor with room temperature and humidity.
————
SED-TRH-G-5045

Water leakage sensor.
————
SED-WLS-G-5045

Cover frame. Silver.

————

FAS-00

Cover frame. White.

————

FAS-01

Cover frame. Glossy translucent white.

————

FAS-03

Cover frame. Light tan wood.

————

FAS-05

Cover frame. Dark brown wood.

————

FAS-06

Cover frame. Dark black wood.

————

FAS-07

Cover frame. Brushed steel finish.

————

FAS-10

Controller and touch controllers for hotels with dry contacts

Modbus RS-485 touch room controller with I/O, white.

————

PAW-RE2C4-MOD-WH

Touch display control with 2 digital inputs, white.

————

PAW-RE2D4-WH

Modbus RS-485 touch room controller with I/O, black.

————

PAW-RE2C4-MOD-BK

Touch display control with 2 digital inputs, black.

————

PAW-RE2D4-BK

Hotel sensors for dry contacts

Wall silent motion sensor 24 V.

————

PAW-WMS-DC

Wall silent motion sensor 240 V AC.

————

PAW-WMS-AC

Ceiling silent motion sensor 24 V.

————

PAW-CMS-DC

Ceiling silent motion sensor 240 V AC.

————

PAW-CMS-AC

Power supply 24 V.

————

PAW-24DC

Door or window contact.

————

PAW-DWC

Centralised controls

System controller for 64 indoor units with weekly timer.

————

CZ-64ESMC3

Central ON / OFF controller, up to 16 groups, 64 indoor units.

————

CZ-ANC3

Intelligent controller (touch screen/web server) to control up to 256 indoors with included load distribution ratio (LDR).

————

CZ-256ESMC3

Panasonic AC Smart Cloud

Panasonic AC Smart Cloud. Cloud internet control. Up to 128 groups. Controls 128 units.
————
CZ-CFUSCC1

NEW BMS interface with S-Link

A unified interface supporting Modbus, BACnet, and KNX protocols for up to 16 indoor units.
————
PAW-AC2-BMS-16

A unified interface supporting Modbus, BACnet, and KNX protocols for up to 64 indoor units.
————
PAW-AC2-BMS-64

A unified interface supporting Modbus, BACnet, and KNX protocols for up to 128 indoor units.
————
PAW-AC2-BMS-128

Accessories interfaces

Commercial Wi-Fi Adaptor.
————
CZ-CAPWFC1

KNX interface (Intesis).
————
PAW-RC2-KNX-1i

Modbus RTU interface (Intesis).
————
PAW-RC2-MBS-1

Modbus RTU interface to control 4 indoor/ groups (Intesis).
————
PAW-RC2-MBS-4

BACnet IP and MSTP (Intesis).
————
PAW-RC2-BAC-1

KNX interface (Airzone).
————
PAW-AZRC-KNX-1

Modbus RTU interface (Airzone).
————
PAW-AZRC-MBS-1

BACnet IP and MSTP interface (Airzone).
————
PAW-AZRC-BAC-1

RAC interface adapter for integration into S-Link, plus external input and alarm/ status output (for YKEA units).
————
CZ-CAPRA1

Centralised controls. Connection with general equipment

Adaptor for ON / OFF control of external devices.

————

CZ-CAPC3

Demand control for PACi and Mini ECOi outdoor units.

————

CZ-CAPDC3

Mini series parallel device controlling indoor units, maximum 1 group and 8 indoor unit.

————

CZ-CAPBC2

Communication Adaptor. Up to 128 groups. Controls 128 units.

————

CZ-CFUNC2

Individual controls

CONEX wired remote controller (non-wireless), white.

————

CZ-RTC6W

CONEX wired remote controller with Bluetooth®, white.

————

CZ-RTC6WBL

CONEX wired remote controller with Wi-Fi and Bluetooth®, white.

————

CZ-RTC6WBLW

CONEX wired remote controller (non-wireless), black.

————

CZ-RTC6

CONEX wired remote controller with Bluetooth®, black.

————

CZ-RTC6BL

CONEX wired remote controller with Wi-Fi and Bluetooth®, black.

————

CZ-RTC6BLW

Design wired remote controller with Econavi function and datanavi.

————

CZ-RTC5B

Infrared remote controller for wall-mounted.

————

CZ-RWS3

Infrared remote controller and receiver for 4 way 60x60 cassette - PY3 with panel.

————

CZ-RWS3 + CZ-RWRY3

Infrared remote controller and receiver for 4 way 90x90 cassette.

————

CZ-RWS3 + CZ-RWRU3W

Infrared remote controller and receiver for ceiling.

————

CZ-RWS3 + CZ-RWRT3

Infrared remote controller and receiver for all indoor units.

————

CZ-RWS3 + CZ-RWRC3

Accessories PCB

T10 interface PCB with digital and relay connections.

————

PAW-T10

PCB for server room application, control up to 4 indoor unit groups, redundancy, backup, etc.

————

PAW-PACR4

Connector to PACi NX indoor unit's PCB to provide OPT functions.

————

PAW-OPT-NX

Redundancy of 2 units YKEA.

————

PAW-SERVER-PKEA-1

Accessories cables
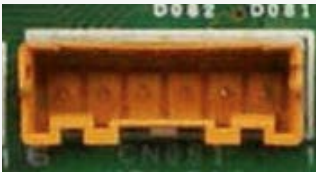
Cable for all the T10 functions.

————

CZ-T10

Cable to operate external EC fan.

————

PAW-FDC

Cable for all option monitoring signals.

————

PAW-OCT

Cable with force thermo OFF/ leakage detection.

————

PAW-EXCT

Eurovent certified technical data

Panasonic's PACi and VRF systems are now certified by Eurovent*. The Eurovent certification verifies the performance ratings of heating and cooling systems following European standards. Data provides products efficiency with full transparency, for the benefit of customers and professionals.

Eurovent AC1 certified technical data: Wall-mounted Professional YKEA· R32

Kit			KIT-Z25-YKEA	KIT-Z35-YKEA	KIT-Z42-YKEA	KIT-Z50-YKEA	KIT-Z71-YKEA
Outdoor unit			CU-Z25YKEA	CU-Z35YKEA	CU-Z42YKEA	CU-Z50YKEA	CU-Z71YKEA
Indoor unit			CS-Z25YKEA	CS-Z35YKEA	CS-Z42YKEA	CS-Z50YKEA	CS-Z71YKEA
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	2,50	3,50	4,20	4,70	7,10
	SEER		9,50	9,60	8,60	8,60	6,50
	Qce	kWh/annum	92,00	128,00	171,00	191	382,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	2,50	3,50	4,20	4,7	7,10
	Input power (Pec)	kW	0,51	0,85	1,10	1,12	2,20
	EER		4,90	4,12	3,82	4,2	3,23
Heating average climate (SEASHAvg)	Pdesignh	kW	2,70	3,20	3,60	4,20	5,50
	SCOP		4,60	4,60	4,50	4,60	4,10
	Qhe	kWh/annum	822,00	974,00	1120,00	1278,00	1878,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	3,40	4,00	5,30	5,80	8,20
	Input power (Peh)	kW	0,70	0,90	1,35	1,42	2,21
	COP		4,86	4,44	3,93	4,08	3,71
Acoustic (sound)	LwO env	dB(A)	61	63	64	63	66

Commercial air to air - PACi

Eurovent AC1 certified technical data: PACi NX Series Elite wall-mounted - PK3 · R32

Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-71PZH4E8	U-100PZH4E5	U-100PZH4E8
Indoor unit			S-3650PK3E	S-3650PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,60	5,00	6,10	7,10	7,10	9,50	9,50
	SEER		8,40	8,00	7,20	6,80	6,70	6,40	6,30
	Qce	kWh/annum	150,00	219,00	297,00	365,00	370,00	520,00	526,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,60	5,00	6,10	7,10	7,10	9,50	9,50
	Input power (Pec)	kW	0,73	1,18	1,58	2,03	2,03	2,96	2,96
	EER		4,93	4,24	3,86	3,50	3,50	3,21	3,21
Heating average climate (SEASHAvg)	Pdesignh	kW	3,60	4,50	4,60	5,20	5,20	8,00	8,00
	SCOP		4,90	4,70	4,80	4,70	4,70	3,90	3,90
	Qhe	kWh/annum	1029,00	1341,00	1342,00	1549,00	1549,00	2871,00	2871,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	4,00	5,60	7,00	8,00	8,00	9,50	9,50
	Input power (Peh)	kW	0,83	1,35	1,67	2,00	2,00	2,45	2,45
	COP		4,82	4,15	4,19	4,00	4,00	3,88	3,88
Acoustic (sound)	LwO env	dB(A)	62	64	65	65	65	69	69

Eurovent AC1 certified technical data: PACi NX Series Elite 4 way 60x60 cassette - PY3 · R32

Outdoor unit			U-36PZH3	U-50PZH3	U-60PZH3
Indoor unit			S-36PY3E	S-50PY3E	S-60PY3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,60	4,7	6,00
	SEER		7,30	7,00	6,70
	Qce	kWh/annum	171,00	235	314,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,60	4,7	6,00
	Input power (Pec)	kW	0,80	1,25	1,75
	EER		4,50	3,76	3,43
Heating average climate (SEASHAvg)	Pdesignh	kW	3,60	4,50	4,60
	SCOP		4,70	4,60	4,30
	Qhe	kWh/annum	1073,00	1370,00	1498,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	4,00	5,60	7,00
	Input power (Peh)	kW	0,97	1,66	2,06
	COP		4,12	3,37	3,40
Acoustic (sound)	LwO env	dB(A)	62	64	65

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Eurovent AC1 certified technical data: PACi NX Series Elite 4 way 90x90 cassette - PU3 · R32

Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-71PZH4E8	U-100PZH4E8	U-100PZH4E5
Indoor unit			S-3650PU3E	S-3650PU3E	S-6071PU3E	S-6071PU3E	S-6071PU3E	S-1014PU3E	S-1014PU3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,60	5,00	6,00	7,10	7,10	9,50	9,50
	SEER		8,90	8,60	8,00	7,70	7,70	7,80	7,80
	Qce	kWh/annum	142,00	203,00	263,00	323,00	323,00	426,00	426,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,60	5,00	6,00	7,10	7,10	9,50	9,50
	Input power (Pec)	kW	0,66	1,16	1,48	1,75	1,75	2,15	2,15
	EER		5,45	4,31	4,05	4,06	4,06	4,42	4,42
Heating average climate (SEASHAvg)	Pdesignh	kW	3,60	4,50	4,70	5,20	5,20	8,00	8,00
	SCOP		5,10	4,90	4,80	4,80	4,80	4,90	4,90
	Qhe	kWh/annum	988,00	1286,00	1371,00	1517,00	1517,00	2286,00	2286,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	4,00	5,60	7,00	8,00	8,00	11,20	11,20
	Input power (Peh)	kW	0,74	1,32	1,74	1,86	1,86	2,24	2,24
	COP		5,41	4,24	4,02	4,30	4,30	5,00	5,00
Acoustic (sound)	LwO env	dB(A)	62	64	65	65	65	69	69

Eurovent AC1 certified technical data: PACi NX Series Elite ceiling - PT3 · R32

Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-71PZH4E8	U-100PZH4E5	U-100PZH4E8
Indoor unit			S-3650PT3E	S-3650PT3E	S-6071PT3E	S-6071PT3E	S-6071PT3E	S-1014PT3E	S-1014PT3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,50	5,00	6,00	6,80	6,80	9,50	9,50
	SEER		7,70	7,40	7,50	7,30	7,20	7,30	7,20
	Qce	kWh/annum	160,00	237,00	280,00	326,00	331,00	456,00	462,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,50	5,00	6,00	6,80	6,80	9,50	9,50
	Input power (Pec)	kW	0,72	1,24	1,57	1,74	1,74	2,34	2,34
	EER		4,86	4,03	3,82	3,91	3,91	4,06	4,06
Heating average climate (SEASHAvg)	Pdesignh	kW	3,10	4,00	4,60	4,70	4,70	7,80	7,80
	SCOP		4,90	4,80	4,80	4,70	4,70	4,50	4,50
	Qhe	kWh/annum	886,00	1167,00	1342,00	1400,00	1400,00	2426,00	2427,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	4,00	5,60	7,00	8,00	8,00	11,20	11,20
	Input power (Peh)	kW	0,80	1,39	1,69	2,02	2,02	2,80	2,80
	COP		5,00	4,03	4,14	3,96	3,96	4,00	4,00
Acoustic (sound)	LwO env	dB(A)	62	64	65	65	65	69	69

Eurovent AC1 certified technical data: PACi NX Series Elite adaptive ducted unit - PF3 · R32

Outdoor unit			U-36PZH3E5	U-50PZH3E5	U-60PZH3E5	U-71PZH4E5	U-71PZH4E8	U-100PZH4E5	U-100PZH4E8
Indoor unit			S-3650PF3E	S-3650PF3E	S-6071PF3E	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,60	5,00	5,70	6,80	6,80	9,50	9,50
	SEER		6,80	6,10	7,10	7,10	7,10	7,40	7,40
	Qce	kWh/annum	185,00	287,00	281,00	332,00	332,00	447,00	447,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,60	5,00	5,70	6,80	6,80	9,50	9,50
	Input power (Pec)	kW	0,85	1,46	1,55	1,82	1,82	2,32	2,32
	EER		4,24	3,42	3,68	3,74	3,74	4,09	4,09
Heating average climate (SEASHAvg)	Pdesignh	kW	3,60	4,00	4,70	4,70	4,70	7,80	7,80
	SCOP		4,50	4,20	4,40	4,70	4,70	4,30	4,30
	Qhe	kWh/annum	1120,00	1333,00	1495,00	1393,00	1394,00	2540,00	2540,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	4,00	5,60	7,00	7,50	7,50	10,80	10,80
	Input power (Peh)	kW	0,96	1,55	1,87	1,86	1,86	2,78	2,78
	COP		4,17	3,61	3,74	4,03	4,03	3,88	3,88
Acoustic (sound)	LwO env	dB(A)	62	64	65	65	65	69	69

* Please refer an official website (https://www.eurovent-certification.com/en) for each test condition.

Eurovent certified technical data

Commercial air to air – PACi

Eurovent AC1 certified technical data: PACi NX Series Standard wall-mounted – PK3 · R32

Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-100PZ3E8
Indoor unit			S-3650PK3E	S-3650PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E	S-6010PK3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,60	5,00	6,10	7,10	9,00	9,00
	SEER		7,60	7,40	7,00	5,80	6,50	6,50
	Qce	kWh/annum	166,00	237,00	305,00	429,00	485,00	485,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,60	5,00	6,10	7,10	9,00	9,00
	Input power (Pec)	kW	0,87	1,42	1,66	2,25	2,59	2,59
	EER		4,14	3,52	3,67	3,16	3,47	3,47
Heating average climate (SEASHAvg)	Pdesignh	kW	2,80	4,00	4,60	5,20	9,00	9,00
	SCOP		4,50	4,40	4,70	4,40	3,90	3,90
	Qhe	kWh/annum	872,00	1273,00	1370,00	1653,00	3231,00	3231,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	3,60	5,00	6,10	7,10	9,00	9,00
	Input power (Peh)	kW	0,78	1,19	1,39	1,68	2,29	2,29
	COP		4,62	4,20	4,39	4,23	3,93	3,93
Acoustic (sound)	Lw0 env	dB(A)	64	64	64	66	70	70

Eurovent AC1 certified technical data: PACi NX Series Standard 4 way 60x60 cassette – PY3 · R32

Outdoor unit			U-25PZ3	U-36PZ3	U-50PZ3	U-60PZ3E
Indoor unit			S-25PY3E	S-36PY3E	S-50PY3E	S-60PY3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	2,50	3,60	4,7	6,00
	SEER		6,50	6,70	7,30	6,80
	Qce	kWh/annum	134,00	188,00	226	305,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	2,50	3,60	4,7	6,00
	Input power (Pec)	kW	0,56	0,91	1,34	1,77
	EER		4,46	3,96	3,51	3,39
Heating average climate (SEASHAvg)	Pdesignh	kW	2,80	2,80	4,00	4,60
	SCOP		4,60	4,30	4,40	4,20
	Qhe	kWh/annum	850,00	912,00	1264,00	1500,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	3,20	3,60	5,00	6,00
	Input power (Peh)	kW	0,72	0,84	1,27	1,66
	COP		4,44	4,29	3,94	3,61
Acoustic (sound)	Lw0 env	dB(A)	64	64	64	64

Eurovent AC1 certified technical data: PACi NX Series Standard 4 way 90x90 cassette – PU3 · R32

Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-100PZ3E8
Indoor unit			S-3650PU3E	S-3650PU3E	S-6071PU3E	S-6071PU3E	S-1014PU3E	S-1014PU3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,60	5,00	6,00	7,10	10,00	10,00
	SEER		8,10	8,00	7,80	6,80	6,80	6,70
	Qce	kWh/annum	156,00	219,00	269,00	365,00	515,00	521,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,60	5,00	6,00	7,10	10,00	10,00
	Input power (Pec)	kW	0,83	1,28	1,61	2,17	2,62	2,62
	EER		4,34	3,91	3,73	3,27	3,82	3,82
Heating average climate (SEASHAvg)	Pdesignh	kW	2,80	4,00	4,60	5,20	10,00	10,00
	SCOP		4,80	4,70	4,90	4,60	4,40	4,40
	Qhe	kWh/annum	817,00	1191,00	1314,00	1583,00	3182,00	3182,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	3,60	5,00	6,00	7,10	10,00	10,00
	Input power (Peh)	kW	0,71	1,08	1,34	1,68	2,03	2,03
	COP		5,07	4,63	4,48	4,23	4,93	4,93
Acoustic (sound)	Lw0 env	dB(A)	64	64	64	66	70	70

Eurovent AC1 certified technical data: PACi NX Series Standard ceiling – PT3 · R32

Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-100PZ3E8
Indoor unit			S-3650PT3E	S-3650PT3E	S-6071PT3E	S-6071PT3E	S-1014PT3E	S-1014PT3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,50	5,00	6,00	6,80	10,00	10,00
	SEER		7,20	6,70	7,30	5,90	6,60	6,50
	Qce	kWh/annum	171,00	262,00	288,00	404,00	531,00	537,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,50	5,00	6,00	6,80	10,00	10,00
	Input power (Pec)	kW	0,85	1,65	1,67	2,10	2,75	2,75
	EER		4,14	3,03	3,59	3,24	3,64	3,64
Heating average climate (SEASHAvg)	Pdesignh	kW	2,80	4,00	4,60	4,70	10,00	10,00
	SCOP		4,40	4,10	4,60	4,30	4,20	4,20
	Qhe	kWh/annum	891,00	1365,00	1399,00	1529,00	3331,00	3331,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	3,50	5,00	6,00	6,80	10,00	10,00
	Input power (Peh)	kW	0,76	1,34	1,46	1,62	2,36	2,36
	COP		4,61	3,73	4,11	4,20	4,24	4,24
Acoustic (sound)	Lw0 env	dB(A)	64	64	64	66	70	70

Eurovent AC1 certified technical data: PACi NX Series Standard adaptive ducted unit – PF3 · R32

Outdoor unit			U-36PZ3E5	U-50PZ3E5	U-60PZ3E5A	U-71PZ3E5A	U-100PZ3E5	U-100PZ3E8
Indoor unit			S-3650PF3E	S-3650PF3E	S-6071PF3E	S-6071PF3E	S-1014PF3E	S-1014PF3E
Seasonal efficiency in cooling (SEASC)	Pdesignc	kW	3,40	5,00	5,70	6,80	9,50	9,50
	SEER		6,00	6,50	6,40	6,00	6,60	6,50
	Qce	kWh/annum	198,00	267,00	310,00	391,00	502,00	508,00
Standard cooling PL Condition A (STD cooling)	Nominal cooling capacity (Pc)	kW	3,40	5,00	5,70	6,80	9,50	9,50
	Input power (Pec)	kW	0,90	1,80	1,61	2,14	2,66	2,66
	EER		3,78	2,78	3,54	3,18	3,57	3,57
Heating average climate (SEASHAvg)	Pdesignh	kW	2,40	3,80	4,40	4,70	7,80	7,80
	SCOP		4,00	4,00	4,40	4,10	3,90	3,90
	Qhe	kWh/annum	839,00	1303,00	1376,00	1591,00	2795,00	2795,00
Standard heating (STD heating)	Nominal heating capacity (Pc)	kW	3,40	5,00	5,70	6,80	9,50	9,50
	Input power (Peh)	kW	0,82	1,38	1,41	1,70	2,32	2,32
	COP		4,15	3,62	4,04	4,00	4,09	4,09
Acoustic (sound)	Lw0 env	dB(A)	64	64	64	66	70	70

* Please refer an official website (https://www.eurovent-certification.com/en) for each test condition.

Panasonic ventilation solutions

Panasonic ventilation solutions for maximum savings and easy integration.

Air handling unit kit

AHU connection kits connect outdoor units to air handling systems. Combines air conditioning and fresh air in just one solution.
Application: Hotels, offices, server rooms or all large buildings where air quality control, such as humidity control and fresh air, is needed.

AHU connection kit PAH3M-1 for PACi NX and PACi (2,5 - 23,2 kW*).

· Durable metal casing (IP 65) allows external installation
· 0-10 V demand control
· CONEX Bluetooth® control built-in (CZ-RTC6BL)
· Panasonic H&C Control App via Bluetooth®
· Easy integration to BMS

* Nominal cooling capacity.

CONEX Bluetooth® control built-in.

NEW AHU connection kit MAH4M for ECOi 2-Pipe (16 - 45 kW*).

· Space-saving compact casing
· 0-10 V demand control
· Built-in controller for daily functions and service levels
· Direct Modbus communication without an additional interface
· Easy integration to BMS
· Accurate control with a pressure transducer

* Nominal cooling capacity.

Built-in controller.

AHU connection kit MAH3M for ECOi and ECO G (14 - 224 kW*).

· Durable metal casing (IP 65) allows external installation
· 0-10 V demand control
· CONEX Bluetooth® control built-in (CZ-RTC6BL)
· Panasonic H&C Control App via Bluetooth®
· Easy integration to BMS

* Nominal cooling capacity.

CONEX Bluetooth® control built-in.

AHU connection kit line-up.

AHU connection kit	Reference	Casing	Controller	0–10 V demand control	Compatible outdoor units
PAH3M	PAW-280PAH3M-1	Durable metal casing (IP 65)	CONEX Bluetooth® control (CZ-RTC6BL)	Yes	PACi NX and PACi
NEW MAH4M	PAW-P+100MAH4M	Durable metal casing (IP 65)	Built-in c.pCO controller	Yes	Mini ECOi and ECOi EX 2-Pipe
MAH3M	PAW-160MAH3M PAW-280MAH3M PAW-560MAH3M	Durable metal casing (IP 65)	CONEX Bluetooth® control (CZ-RTC6BL)	Yes	Mini ECOi, all ECOi EX and all ECO G

AHU connection kit PAH3M for PACi NX and PACi

Compatible with R32 or R410A outdoor units.
The Panasonic AHU connection kits offer a wealth of connectivity possibilities, integrating easily into many systems.

Besides the advantages in terms of indoor air quality, air conditioning offers also an energy saving potential. For example, uncontrolled ventilation through open windows leads to large amounts of heat being lost to the outside during the heating season or gained from the outside during the cooling season. Whereas, combining heat recovery with air conditioning can allow for a high level of comfort whilst reducing the overall operating costs of running air conditioning alone.
The larger area of the comfort range, the better the energy saving opportunities.

System example with AHU connection kit PAH3M and PACi NX or PACi outdoor unit
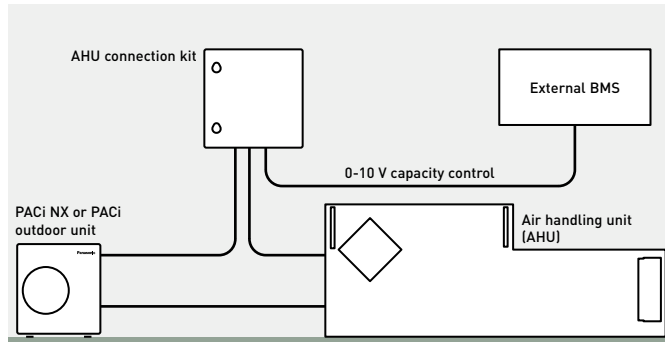
Demand control on the outdoor unit managed by external 0-10 V signal.

· AHU connection kit contains: IP 65 box with PCBs and terminal connections mounted inside, expansion valve and sensors
· Heat exchanger, fan and fan motor to be mounted in the AHU itself are field supplied

Main components of mechanical ventilation systems
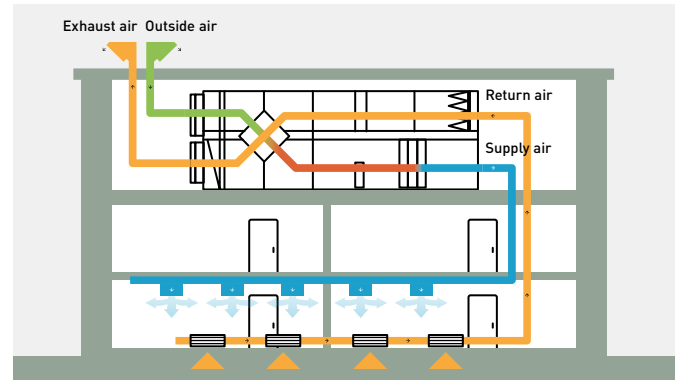
· Air handling unit (AHU)
· Air ducts
· Air distribution elements

Control options

Control option 1.
· The system's control is simple: control of actual suction temperature vs. set point
· Control works in the same way as that of any indoor unit
· Fan signal issued by the PCB (OFF while defrosting, for instance)

Control option 2.
· System control by a 0-10 V control working from an external BMS that manages the set point for temperature or capacity. Enhances efficiency by adjusting capacity and enhances comfort as well
· All signals as standard

0-10 V control

With the 0-10 V demand control the capacity of the outdoor unit can be controlled by 20 steps.

Input voltage* (V)	0	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5	7,0	7,5	8,0	8,5	9,0	9,5
Demand (% of nominal current)	No cut [1]	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	No limit / Full capacity [2]
Indoor unit start / stop	Stop [1]									Start									

[1] No cut / stop: AHU system / indoor unit is completely switched OFF.
[2] No limit: No restrictions applied by BMS to AHU system / indoor unit performance (equivalent to "full-load operation" of AHU system / indoor unit).

AHU connection kit.

PCB, power trans, terminal block.

Thermistor x2 (refrigerant: E1, E2).

Thermistor (air: TA; 1 sensor).

Wired remote controller.
CZ-RTC6BL.

Optional controller.

Timer remote controller.
CZ-RTC5B.

AHU connection kit PAH3M for PACi NX and PACi

CONEX

CONEX Bluetooth® control built-in.
CZ-RTC6BL

Panasonic

PAC*i*

PAW-280PAH3M-1			2,5 kW	3,6 kW	5,0 kW	6,0 kW	7,5 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
Dimension	H x W x D	mm	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150
Net weight		kg	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)
	Gas	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	5/8 (15,88)	1 (25,40)	1 (25,40)
Intake temperature of AHU connection kit	Cool Min ~ Max	°C DB	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32	18 ~ 32
	Cool Min ~ Max	°C WB	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	14 ~ 25	—	—
	Heat Min ~ Max	°C	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30	16 ~ 30
With PACi NX Elite												
Cooling capacity		kW	—	3,6	5,0	6,0	7,1	10,0	12,5	14,0	19,5	23,2
Heating capacity		kW	—	4,0	5,6	7,0	8,0	11,2	14,0	16,0	22,4	28,0
Air flow	Min / Max	m³/h	—	540 / 870	630 / 990	780 / 1320	780 / 1320	900 / 2160	1140 / 2280	1200 / 2400	2160 / 4320	2280 / 5040
Pipe length range		m	—	3 ~ 40	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 85	5 ~ 85	5 ~ 85	5 ~ 90	5 ~ 60
Elevation difference (in / out)	Max	m		30	30	30	30	30	30	30	30	30
Ambient temperature of outdoor unit	Cool Min ~ Max	°C	—	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-20 ~ +48	-20 ~ +48	-20 ~ +48	-20 ~ +48	-20 ~ +48
	Heat Min ~ Max	°C	—	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24
With PACi NX Standard												
Cooling capacity		kW	2,5	3,6	5,0	6,0	7,1	10,0	12,5	14,0	—	—
Heating capacity		kW	3,2	4,0	5,0	6,0	7,1	10,0	12,5	14,0	—	—
Air flow	Min / Max	m³/h	360 / 570	540 / 870	630 / 990	780 / 1320	780 / 1320	900 / 2160	1140 / 2280	1200 / 2400	—	—
Pipe length range		m	3 ~ 15	3 ~ 15	3 ~ 20	3 ~ 40	3 ~ 40	5 ~ 50	5 ~ 50	5 ~ 50	—	—
Elevation difference (in / out)	Max	m	30	30	30	30	30	30	30	30	—	—
Ambient temperature of outdoor unit	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	—	—
	Heat Min ~ Max	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	—	—

System and regulations. System overview.

1 | AHU equipment (field supplied)
2 | AHU system controller (field supplied)
3 | AHU connection kit controller box (with control PCB)
4 | Thermistor for gas pipe (E2)
5 | Thermistor for liquid pipe (E1)
6 | Thermistor for suction air
7 | Inter-unit wiring
8 | Outdoor unit

Air flow volume table — Outdoor unit compatibility by Air flow volume m³/min (columns: 360, 510, 540, 570, 630, 720, 780, 870, 900, 960, 990, 1.080, 1.170, 1.200, 1.320, 1.450, 1.500, 1.600, 1.740, 1.800, 1.900, 2.000, 2.160, 2.280, 2.300, 2.400, 2.520, 2.610, 2.640, 2.800, 2.970, 3.000, 3.480, 3.600)

PACi NX Elite: U-36PZH3E5, U-50PZH3E5, U-60PZH3E5, U-71PZH4E5/8, U-100PZH4E5/8, U-125PZH4E5/8, U-140PZH4E5/8

PACi NX Standard: U-25PZ3E5, U-36PZ3E5, U-50PZ3E5, U-60PZ3E5, U-71PZ3E5, U100-PZ3E5/8, U125-PZ3E5/8, U140-PZ3E8

█ Maximum allowed air volume flow under "Standard conditions".

█ Higher maximum allowed air volume flow under "Special conditions" [1]: Maximum allowed air intake temperature at AHU DX coil heat exchanger in cooling mode is restricted to 30 °C DB.

1) Using an AHU unit with a higher maximum allowed air volume flow is subject to a restriction of the "Air intake temperature" to 30 °C DB (instead of 32 °C WB under standard conditions).

New AHU connection kit MAH4M for ECOi 2-Pipe

System example with AHU connection kit MAH4M and Mini ECOi outdoor unit.

· AHU connection kit in an IP 65 casing, contains PCBs and terminal connections mounted inside
· Select the size of the expansion valve pack based on the capacity
· Direct Modbus communication with a built-in Modbus S-Link interface
· The heat exchanger, fan, and fan motor to be mounted in the AHU are field-supplied

AHU connection kit + explanation valve pack

2 options for external BMS connection

Modbus: RS485

Other BMS: Hardwired

Mini ECOi or ECOi EX 2-Pipe outdoor unit

Air handling unit (AHU)
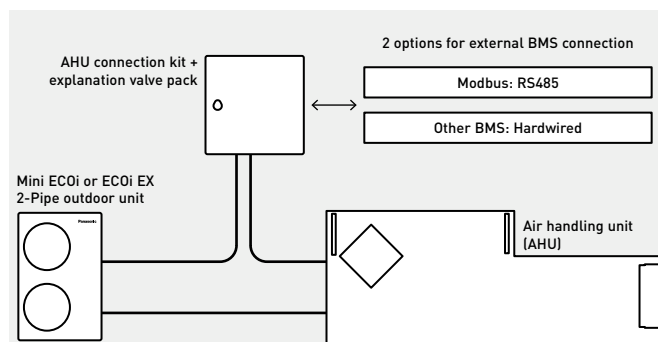
Demand control on the outdoor unit managed by external 0-10 V signal.

0-10 V control

With 0-10 V demand control, the outdoor unit capacity can be adjusted in each 5% demand step. Temperature set control (default discharge temperature control) is also available in each 0,5 K step.

Input voltage* (V)	0	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5	7,0	7,5	8,0	8,5	9,0	9,5
Demand (% of nominal current)	No cut [1]	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	No limit / Full capacity [2]
Indoor unit start / stop	Stop [1]										Start								

1) No cut / stop: AHU system / indoor unit is completely switched OFF.
2) No limit: No restrictions applied by BMS to AHU system / indoor unit performance (equivalent to "full-load operation" of AHU system / indoor unit).

Accessories highlights.

Remote control pack.
PAW-P+100PGNEPACK.
Graphic display remote control, managing both icons and international fonts.

EEV (Electric expansion valve) pack.
EEV controls refrigerant circuit superheat (or subcooling), directly managed by the c.pCO mini controller. Different sizes based on capacity.

EEV pack 1 ≤ 16 kW	PAW-P+116EEVPACK
EEV pack 2 ≤ 33 kW	PAW-P+133EEVPACK
EEV pack 3 ≤ 45 kW	PAW-P+145EEVPACK

* Example image.

NEW AHU connection kit MAH4M for ECOi 2-Pipe

Space-saving compact casing.
Direct Modbus communication without the need for an additional interface.
Accurate control with a pressure transducer.

New
2024

Built-in controller.

ECOi EX / ECOi

PAW-P+100MAH4M			6 HP	12 HP	16 HP
Cooling capacity	Nominal	kW	16,0	33,5	45,0
Heating capacity	Nominal	kW	17,0	37,5	50,0
Air flow	Min / Max	m³/h	1800 / 4400	2000 / 10000	3500 / 12000
Dimension	H x W x D	mm	300 x 400 x 150	300 x 400 x 150	300 x 400 x 150
Weight		kg	11	11	11
Pipe length range		m	10 ~ 100	10 ~ 100	10 ~ 100
Elevation difference (in / out)		m	10	10	10
Piping diameter ≤ 90 m	Liquid	Inch (mm)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)
	Gas	Inch (mm)	5/8 (15,88)	1 (25,40)	1 1/8 (28,57)
Piping diameter > 90 m [1]	Liquid	Inch (mm)	—	5/8 (15,88)	5/8 (15,88)
	Gas	Inch (mm)	—	1 1/8 (28,57)	1 1/4 (31,75)

1) For R410A models only.

AHU connection kit / system combination					
Cooling capacity	Mini VRF		2-Pipe VRF	AHU connection kit	EEV pack
	Mini ECOi LZ2 Series (R32)	Mini ECOi LE2 Series (R410A)	ECOi EX ME2 Series		
6 HP 16,0 kW	U-5LZ2E5(8) U-6LZ2E5(8)	U-5LE2E5(8) U-6LE2E5(8)	—	PAW-P+100MAH4M	PAW-P+116EEVPACK
12 HP 33,5 kW	U-8LZ2E8 U-10LZ2E8	U-8LE1E8 U-10LE1E8	U-8ME2E8 U-10ME2E8 U-12ME2E8	PAW-P+100MAH4M	PAW-P+133EEVPACK
16 HP 45,0 kW	—	—	U-14ME2E8 U-16ME2E8	PAW-P+100MAH4M	PAW-P+145EEVPACK

Accessories	
PAW-P+102SENSPACK	AHU connection kit sensor pack 1 (2 pcs of SENSOR PT1000 HT IP67 -50/250 CABLE 6 m PCK)
PAW-P+116EEVPACK	EEV pack 1 (1 pc of expansion valve ≤ 16 kW (R410A / R32) and 1 pc of UNIPOLAR stator)
PAW-P+133EEVPACK	EEV pack 2 (1 pc of expansion valve ≤ 33 kW (R410A / R32) and 1 pc of UNIPOLAR stator)

Accessories	
PAW-P+145EEVPACK	EEV pack 3 (1 pc of expansion valve ≤ 45 kW (R410A / R32) and 1 pc of UNIPOLAR stator)
PAW-P+100PGNEPACK	Remote control pack (1 pc of PGNE 132 x 64 mm, mounting panel and 1 pc of cable L= 1,5 m, telephone connectors)

Technical focus

· Maximum capacity / system: 16 HP (45 kW*)
· Selectable expansion valve packs depending on the capacity
· DC 12 V outlet available without optional interface
· Maximum elevation difference indoor/outdoor unit: 10 m
· Elevation difference (indoor unit / indoor unit): 4 m
· In / out connection capacity ratio: 50~100%
· Maximum number of AHU connection kits: 1 unit
· Outdoor temperature range in heating: -20 ~ +15 °C
· Available temperature range for the suction air at AHU connection kit: cool: +18 ~ +32 °C / heat: +16 ~ +30 °C
· The system's set temperature can be selected either as the default setting discharge air temperature (supply room temperature) or the suction air set temperature (or room return air temperature)
· Accurate control with a pressure transducer
· Direct Modbus communication with a built-in Modbus S-Link interface
· Various technical parameters available with Modbus
· SG ready fulfilled. Demand input can be set Thermostat OFF or 40 – 200% by the user
· Defrost operation signal, compressor status ON / OFF output
· Display an error message concerning drain water overflow

· Connectable with S-Link system. Special care for electrical noise may be necessary depending on the on-site system
· Fan control signal output to manage the air flow (ON / OFF)
· Alarm status monitoring output

* Nominal cooling capacity.
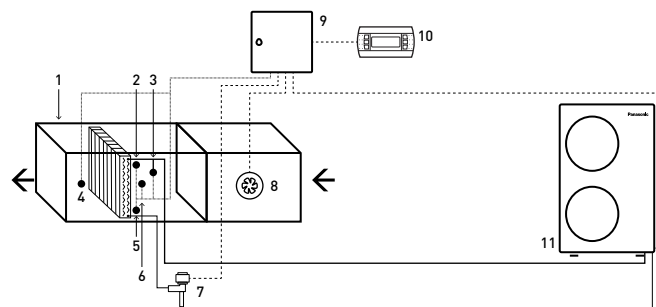
System and regulations. System overview.
1 | AHU Unit equipment (field supplied)
2 | Thermistor for gas pipe (E3)
3 | Pressure transductor
4 | Thermistor for discharge air (BL)
5 | Thermistor for liquid pipe (E1)
6 | Thermistor for suction air (TA)
7 | Expansion valve (accessorie part)
8 | Fan (field supplied)
9 | AHU connection kit controller box
10 | Optional remote controller
11 | Outdoor unit Mini ECOi and 2-Pipe ECOi EX

AHU connection kit MAH3M for ECOi and ECO G

With ECOi outdoor units

ECOi outdoor units shall be used for AHU connection kit. 3 models for VRF system: 5 HP (PAW-160MAH3M), 10 HP (PAW-280MAH3M) and 20 HP (PAW-560MAH3M).

With ECO G outdoor units

· One AHU connection kit may be used for one ECO G unit. Multiple AHU connection kits cannot be used
· Mixed with standard indoor units is not allowed
· Power specifications are single phase 220 V to 240 V

System example for large capacity (more than 56,0 kW).
3 x [PCB, transformer, solenoid control valve, thermistor x 4 pcs, terminal base and electrical component box].
Example 140 kW system.
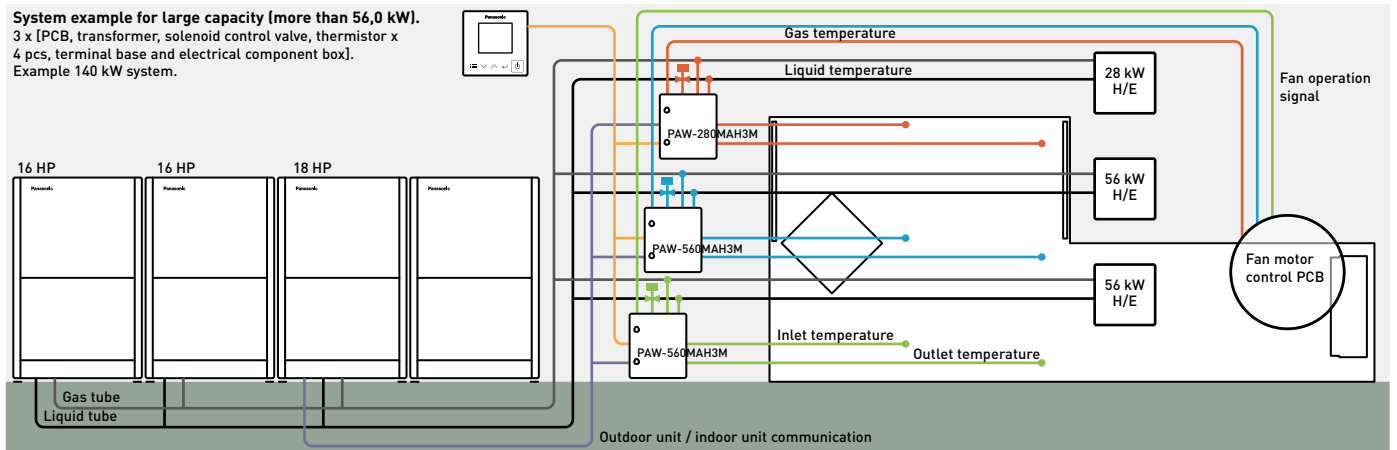
AHU connection kit MAH3M for ECOi and ECO G

CONEX

CONEX Bluetooth® control built-in.
CZ-RTC6BL

Panasonic

ECO i EX / ECO i / ECO G

			5 HP	10 HP	20 HP	30 HP	40 HP	50 HP	60 HP	70 HP	80 HP
Reference		PAW-	160MAH3M	280MAH3M	560MAH3M	280MAH3M 560MAH3M	560MAH3M 560MAH3M	560MAH3M 560MAH3M 280MAH3M	560MAH3M 560MAH3M 560MAH3M	560MAH3M 560MAH3M 560MAH3M 280MAH3M	560MAH3M 560MAH3M 560MAH3M 560MAH3M
Cooling capacity		kW	14,0	28,0	56,0	84,0	112,0	140,0	168,0	196,0	224,0
Heating capacity		kW	16,0	31,5	63,0	95,0	127,0	155,0	189,0	219,0	252,0
Air flow	Cool Min / Max	m³/h	2598 / 1140	4998 / 3498	10002 / 7002	15000 / 10500	19998 / 13998	24996 / 17496	30000 / 21000	24000 / 35000	28000 / 40000
Bypass factor recommended			0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9
Dimension	H x W x D	mm	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150	500 x 400 x 150
Net weight		kg	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5	11,5
Pipe length range		m	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100
Elevation difference (in / out)	Max	m	10	10	10	10	10	10	10	10	10
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)	3/8 (9,52)	5/8 (15,88)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)	3/4 (19,05)	7/8 (22,22)	7/8 (22,22)
	Gas	Inch (mm)	5/8 (15,88)	7/8 (22,22)	1 1/8 (28,58)	1 1/4 (31,75)	1 1/2 (38,15)	1 1/2 (38,15)	1 1/2 (38,15)	1 5/8 (41,28)	1 3/4 (44,45)
Intake temperature of AHU connection kit	Cool Min ~ Max	°C DB	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32	+18 ~ +32
	Cool Min ~ Max	°C WB	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23	+13 ~ +23
	Heat Min ~ Max	°C	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30	+16 ~ +30
Ambient temperature of outdoor unit	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15	-20 ~ +15

AHU connection kit / system combination

Capacity		ECOi Series			AHU kit			
5 HP	**16 kW**	All ECOi			160MAH3M	—	—	—
10 HP	**28 kW**	U-10ME2E8	—	—	280MAH3M	—	—	—
20 HP	**56 kW**	U-20ME2E8	—	—	560MAH3M	—	—	—
30 HP	**84 kW**	U-16ME2E8	U-14ME2E8	—	560MAH3M	280MAH3M	—	—
40 HP	**112 kW**	U-20ME2E8	U-20ME2E8	—	560MAH3M	560MAH3M	—	—
50 HP	**140 kW**	U-18ME2E8	U-16ME2E8	U-16ME2E8	560MAH3M	560MAH3M	280MAH3M	—
60 HP	**168 kW**	U-20ME2E8	U-20ME2E8	U-20ME2E8	560MAH3M	560MAH3M	560MAH3M	—
70 HP	**196 kW**	U-20ME2E8	U-20ME2E8	U-20ME2E8	560MAH3M	560MAH3M	560MAH3M	280MAH3M
80 HP	**224 kW**	U-20ME2E8	U-20ME2E8	U-20ME2E8	560MAH3M	560MAH3M	560MAH3M	560MAH3M

Capacity		ECO G Series	AHU kit
5 HP	**16 kW**	All ECO G	160MAH3M
10 HP	**28 kW**	All ECO G	280MAH3M
20 HP	**56 kW**	U-20GE3E5	560MAH3M

Technical focus

· Maximum capacity / system: 80 HP (224 kW)
· Maximum piping length: 100 m (120 m equivalent)
· Elevation difference (indoor unit / indoor unit): 4 m
· In / out capacity ratio: 50~100%
· Maximum number of AHU connection kits: 4 units*
· Outdoor temperature range in heating: -20 ~ +15 °C
· Available temperature range for the suction air at AHU connection kit: cool: +18 ~ +32 °C / heat: +16 ~ +30 °C
· The systems is controlled by the suction air (or room return air) temperature (same as standard indoor unit)
· The discharge air temperature is also controlled to prevent too-low air discharge in cooling or too-high air discharge in heating (in case of VRF)
· Demand control (forcible thermostat-OFF control by operating current)
· Defrost operation signal, Thermo-ON / OFF states output
· Drain pump control (drain pump and the float switch to be supplied in local)
· External target temperature setting via indoor / outdoor signal interface is available with CZ-CAPBC2 (Ex. 0-10 V)
· Demand control 40% to 120% (5% steps) by 0-10 V input signal
· Connectable with S-Link system. Special care for electrical noise may be necessary depending on the on-site system

· Fan control signal from the PCB can be used to control the air flow (high / mid / low and LL for Th-OFF). Need to change the fan control circuit wiring at field

* To be simultaneous operation controlled by one remote controller sensor.
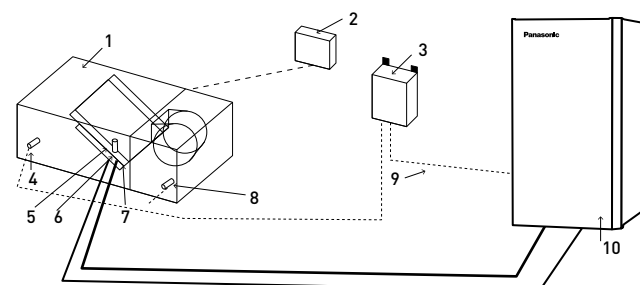
System and regulations. System overview.
1 | AHU Unit equipment (field supplied)
2 | AHU Unit system controller (field supplied)
3 | AHU connection kit controller box (with control PCB)
4 | Thermistor for discharge air
5 | Electronic expansion valve
6 | Thermistor for gas pipe (E3)
7 | Thermistor for liquid pipe (E1)
8 | Thermistor for suction air
9 | Inter-unit wiring
10 | ECOi or ECOi G outdoor unit

Optional controller.

Timer remote controller.
CZ-RTC5B.

Energy recovery ventilation

Indoor air quality (IAQ) is a key consideration for any business owner looking to create a healthy and comfortable environment. An energy recovery ventilator (ERV) provides balanced, energy-efficient ventilation by transferring heat and moisture between incoming fresh filtered air and outgoing stale air. In the winter, an ERV keeps heat and moisture inside the building. During hot, humid summer months, it maintains cool, dry indoor air.

Advanced ERV ZY Series.

· Extended 9 model line-up including 2000 m³/h model
· DC motors
· ESP up to 150 Pa
· F7 grade filter built-in as a standard
· New intuitive remote controller
· BMS integration with RS485

ERV ZDY Series.

· Simple 5 line-up
· AC motor
· A nonwoven cloth filter
· Simple wired remote controller with black panel

Advanced energy recovery ventilation - ZY Series

Recovers up to 83% of the heat in the outgoing air

ZY Series achieves more than 80% of heat exchange efficiency in all the line-up [1]. The high recovery rate optimizes operation cost and can be considered as a sustainable solution.

1) Heating operation, H1 speed setting.

Heat exchange efficiency (%).
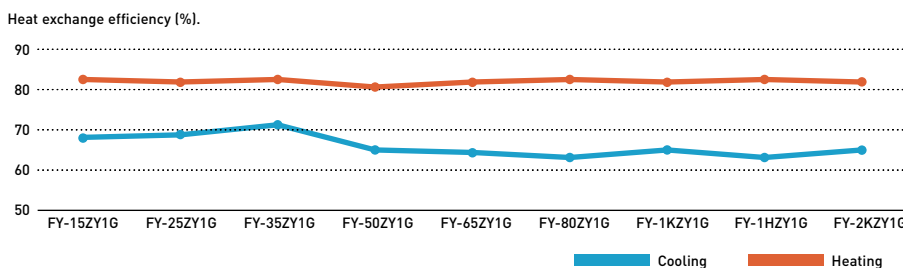
Ventilation volume setting PQ curve example.
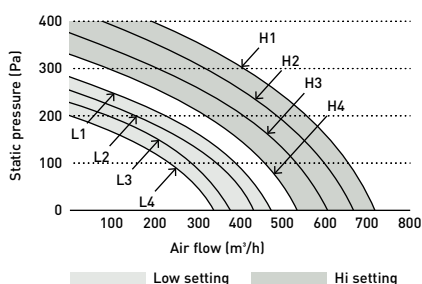
Easy adjust for air volume balance

DC motors are equipped with independent control settings for air supply and exhaust. Air volume balance can be easily adjusted with 4 speeds settings for each Hi / Low operation.

Highly efficient filter for better air supply

An effective EN F7 grade filter is built-in as a standard.
Expected cleaning maintenance cycle is once per month, with an average of 4-6 months for replacement in high demand environments.
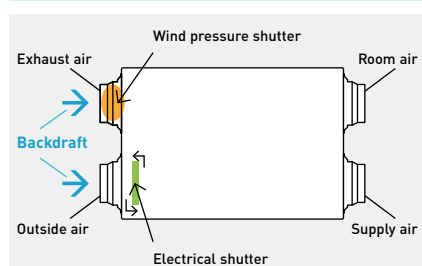
Backdraft shutters equipped as standard

A backdraft shutter prevents air flowing in the wrong direction when the ERV system is not in operation.
The shutter at OA (outside air intake) side is inter-locked with ON / OFF switch.
The shutter at EA (exhaust air outlet) side opens with the pressure generated by air stream then closes automatically.

Intuitive remote controller with RS485 connection

· Simple and clean screen with white back light panel
· RS485 terminal equipped to integrate with Building Management Systems
· Metal switch box is included in the package

Energy recovery ventilation – ZDY Series

Energy efficiency and ecology

Energy consumption is dramatically reduced by using a counter-flow heat-exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings.

11,870 kJ/h

59,470 kJ/h
When a regular ventilation fan is used [1]

47,600 kJ/h
When a Energy Recovery Ventilator is used [2]

Approximately 20% reduction
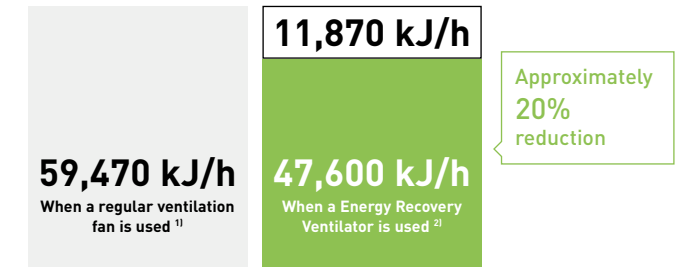
1) Two FY-27FPK7 units. 2) One FY-500ZDY8R unit.

Comparison of former and current elements

With the counter-flow element, air flows through the element for a longer time (longer distance) than the former cross-flow element, so the heat-exchange effect remains unchanged even if the element is made thinner.

Former (cross-flow element)

ZDY (counter-flow element)
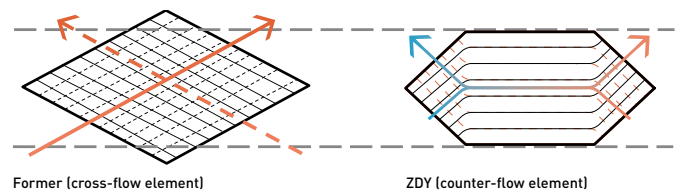
More comfort

Quiet operation.

Low noise operation results in noticeably quieter units. All models with capacities below 500 m³/h run at noise levels below 32 dB (high setting) and even our largest 1000 m³/h-capacity model runs at only 37,5 dB (high setting).

Long service life of heat-exchange element

A nonwoven cloth filter has a high dust collection efficiency and redesigned the air flow passages to achieve a durable heat-exchange element.
Cleaning can be reduced to every 6 months.

Reverse mountable direct air supply / exhaust system

Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.
Since each unit can be mounted in reverse position, only one inspection hole is needed for two units: Two units can share one inspection hole so duct work is easier and more flexible.

Room air   Supply air   Inspection cover   Supply air   Room air

Straight unit   Reverse mounted unit

Inspection hatch

Exhaust air   Outside air   Outside air   Exhaust air
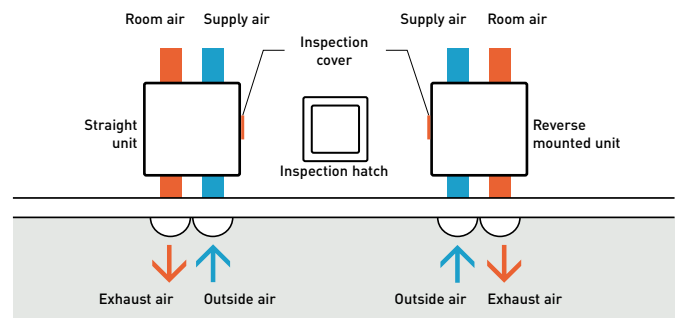
A intuitive and stylish control

· Wire controller included as standard
· Compact and flat front panel
· Filter cleaning support
   - Signal alert for clearing
   - Filter usage condition by 1/2/3/4 months
· Size (W x H x D) 116 x 120 x 40 mm

Panasonic
FY-EB90S1

Advanced energy recovery ventilation - ZY Series

15ZY1G ~ 1KZY1G [1]

1HZY1G / 2KZY1G [1]

Rated flow rate			150 m³/h	250 m³/h	350 m³/h	500 m³/h	650 m³/h	800 m³/h	1000 m³/h	1500 m³/h	2000 m³/h
Indoor unit			FV-15ZY1G	FV-25ZY1G	FV-35ZY1G	FV-50ZY1G	FV-65ZY1G	FV-80ZY1G	FV-1KZY1G	FV-1HZY1G	FV-2KZY1G
Power supply	Voltage	V	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50	50	50	50	50	50
Motor type			DC	DC	DC	DC	DC	DC	DC	DC	DC
ERV											
Air flow	Max	m³/h	150	250	350	500	650	800	1000	1500	2000
External static pressure	Max	Pa	100	120	140	130	150	150	150	130	130
Sound power [2]	Max	dB(A)	37	38	39	43	45	45	46	49	51
Input power	Max	W	76~84	106~117	141~155,5	180~198	420~462	470~517	550~605	940~1034	1100~1210
Heat exchange efficiency [3]											
Cooling	Max	%	68,0	69,0	71,0	65,0	64,0	63,0	65,0	63,0	65,0
Heating	Max	%	83,0	82,0	83,0	81,0	82,0	83,0	82,0	83,0	82,0
Enthalpy exchange efficiency											
Cooling	Max	%	66,0	66,0	67,0	62,5	62,5	63,5	63,0	63,5	63,0
Heating	Max	%	76,0	74,0	75,0	73,0	72,0	73,0	74,0	73,0	74,0
Adapter diameter		mm	100	150	150	200	200	250	250	250	250
Dimension	H x W x D	mm	289 x 610 x 860	289 x 735 x 860	331 x 874 x 968	331 x 1016 x 968	404 x 954 x 1008	404 x 1004 x 1224	404 x 1231 x 1224	808 x 1004 x 1224	808 x 1231 x 1224
Net weight		kg	23	27	37	40	48	60	64	119	142

1) Different dimensions depending on models. 2) Measurement of noise 1,5 m below the center of the main unit (anechoic chamber). 3) Heat exchange efficiency measurement standard JIS B 8628 (2003).
* JIS B 8628 (2017) is used in the measurement environment. * A remote controller is included.

Accessories	
FV-FP15ZY1G	Replacement high efficiency filter for FV-15ZY1G
FV-FP25ZY1G	Replacement high efficiency filter for FV-25ZY1G
FV-FP35ZY1G	Replacement high efficiency filter for FV-35ZY1G
FV-FP50ZY1G	Replacement high efficiency filter for FV-50ZY1G

Accessories	
FV-FP65ZY1G	Replacement high efficiency filter for FV-65ZY1G
FV-FP80ZY1G	Replacement high efficiency filter for FV-80ZY1G and FV-1HZY1G*
FV-FP1KZY1G	Replacement high efficiency filter for FV-1KZY1G and FV-2KZY1G*

* 2 sets of filters required for those models.

Energy recovery ventilation - ZDY Series

FY-250ZDY8R   FY-350ZDY8R   FY-500ZDY8R   FY-800ZDY8R   FY-01KZDY8R
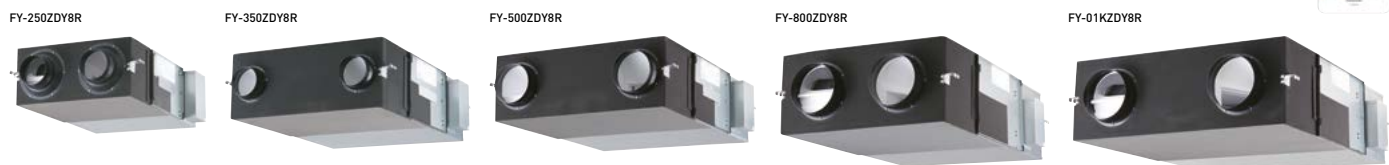
Rated flow rate			250 m³/h			350 m³/h			500 m³/h			800 m³/h			1000 m³/h		
Indoor unit			FY-250ZDY8R			FY-350ZDY8R			FY-500ZDY8R			FY-800ZDY8R			FY-01KZDY8R		
Power supply	Voltage	V	220 - 240			220 - 240			220 - 240			220 - 240			220 - 240		
	Phase		Single phase			Single phase			Single phase			Single phase			Single phase		
	Frequency	Hz	50			50			50			50			50		
Notch			Extra high	High	Low	Extra high	High	Low	Extra high	High	Low	Extra high	High	Low	Extra high	High	Low
Input power		W	112,0 - 128,0	108,0 - 123,0	87,0 - 96,0	182,0 - 190,0	178,0 - 185,0	175,0 - 168,0	263,0 - 289,0	204,0 - 225,0	165,0 - 185,0	387,0 - 418,0	360,0 - 378,0	293,0 - 295,0	437,0 - 464,0	416,0 - 432,0	301,0 - 311,0
Air flow		m³/h	250	250	190	350	350	240	500	500	440	800	800	630	1000	1000	700
External static pressure		Pa	105	95	45	140	60	45	120	60	35	140	110	55	105	80	75
Sound power	Heat exchange	dB(A)	30,0 - 31,5	29,5 - 30,5	23,5 - 26,5	32,5 - 33,0	30,5 - 31,0	22,5 - 25,5	36,5 - 37,5	34,5 - 35,5	31,0 - 32,5	37,0 - 37,5	36,5 - 37,0	33,5 - 34,5	37,5 - 38,5	37,0 - 37,5	33,5 - 34,5
	Normal	dB(A)	30,0 - 31,5	29,5 - 30,5	23,5 - 26,5	32,5 - 33,0	30,5 - 31,0	22,5 - 25,5	37,5 - 38,5	37,0 - 38,0	31,0 - 32,5	37,0 - 37,5	36,5 - 37,0	33,5 - 34,5	39,5 - 40,5	39,0 - 39,5	35,5 - 36,5
Temperature exchange efficiency		%	75	75	77	75	75	78	75	75	76	75	75	76	75	75	79
Dimension	H x W x D	mm	270 x 599 x 882			317 x 804 x 1050			317 x 904 x 1090			388 x 884 x 1322			388 x 1134 x 1322		
Net weight		kg	29			49			57			71			83		

The noise level was measured within an acoustic chamber. Due to installation arrangement and surfaces within the space, actual noise levels may increase. The input, the current and the exchange efficiency are values relevant to the indicated air flows. The noise level is measured 1,5 m below the centre of the unit. The temperature exchange efficiency is an average of both cooling and heating operation.

New energy recovery ventilation with DX coil – HRPT Series for VRF

The HPRT Series is specifically designed for commercial applications or collective residential buildings, offering highly efficient heat recovery of up to 86,6%.
It's an ideal solution to achieve the highest energy certification for buildings in the tertiary, industrial and collective residential sectors including centralized condominium systems.

Highly efficient and flexible

The HRPT Series is a dual-flow ventilation with an EC fan, ensuring high-efficiency heat recovery (>85% η). The series includes five models with air flow rates from 500 to 2450 m³/h. Two types of polypropylene heat exchangers (high efficiency and sensible) are provided to meet a range of requirements.

HRPT Series line-up

High-efficiency heat recovery >85% η

| PAW-HRPT40HX | PAW-HRPT80HX | PAW-HRPT120HX | PAW-HRPT160/200HX |

Air flow rate

| 500 m³/h | 800 m³/h | 1500 m³/h | 1700 / 2450 m³/h |
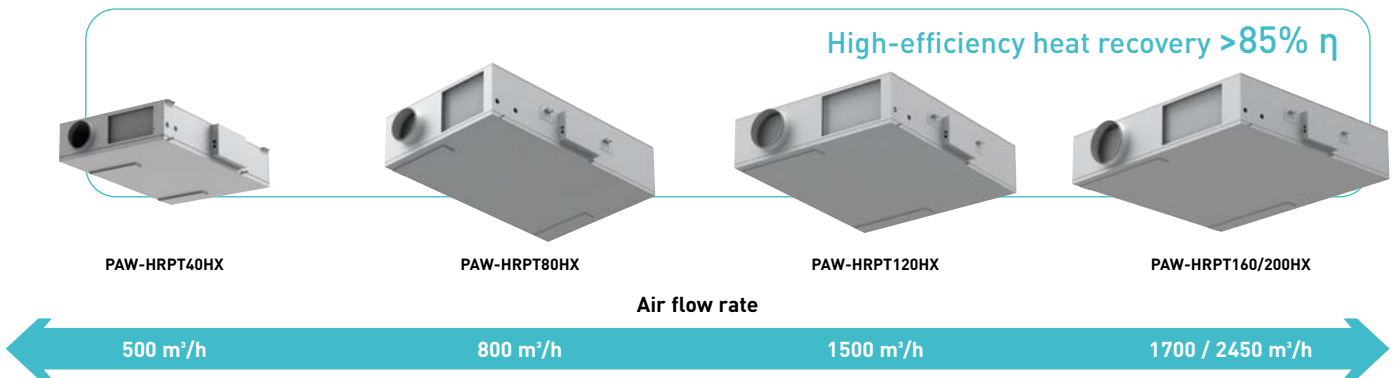
Quality meets efficiency. Explore the HPRT Series

Reverse blade radial fans with low-consumption and low-noise electronic motor

Two filters with low pressure drop: F7 (ePM1) on the fresh air and M5 (ePM10) on the ambient air

Highly efficient polypropylene heat exchanger with counter-current flows and integrated bypass as standard

Structure with high thermal insulation
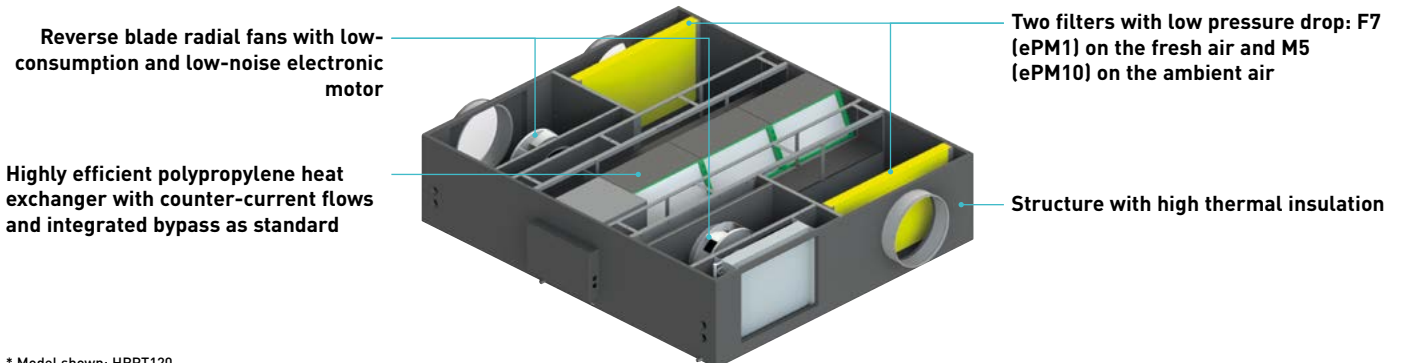
* Model shown: HRPT120.

NEW energy recovery ventilation with DX coil - HRPT Series · R32 / R410A

· Dual flow ventilation with EC fan, featuring high efficiency heat recovery (>85% η)
· 2 types of polypropylene heat exchanger (high efficiency and sensible) with counter-current flows and integrated bypass as standard
· Modbus connection available

New
2024

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Indoor unit with high-efficiency heat exchanger			PAW-HRPT40HX		PAW-HRPT80HX		PAW-HRPT120HX		PAW-HRPT160HX		PAW-HRPT200HX	
Power supply	Voltage	V	230		230		230		230		380	
	Phase		Single phase		Single phase		Single phase		Single phase		Three phase	
	Frequency	Hz	50		50		50		50		50	
Heat recovery ventilation [1]			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Temperature efficiency		%	60,9	49,5	59,2	47,6	60,3	48,8	61,0	49,6	59,2	47,6
Enthalpy efficiency		%	75,7	51,6	73,1	48,9	73,6	50,7	74,3	50,8	73	48,8
Weight		kg	70		120		135		150		180	

Indoor unit with sensible heat exchanger			PAW-HRPT40		PAW-HRPT80		PAW-HRPT120		PAW-HRPT160		PAW-HRPT200	
Power supply	Voltage	V	230		230		230		230		380	
	Phase		Single phase		Single phase		Single phase		Single phase		Three phase	
	Frequency	Hz	50		50		50		50		50	
Heat recovery ventilation [1]			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Temperature efficiency		%	86,1	86,6	84,3	84,7	82,9	83,5	83,9	84,2	81,3	82,0
Weight		kg	67		117		132		147		177	

Common data												
DX coil			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Total / Sensible capacity		kW	2,5	3,0	5,0	6,0	7,0	8,1	10,0	12,5	12,5	14,0
Maximum input current		A	1,5		2,2		4,1		4,4		3,3	
Sound pressure @1 m / @3 m		dB(A)	41 / 35		51 / 43		42 / 36		49 / 41		57 / 49	
Air flow	High	m³/h	500		800		1500		1700		2450	
External static pressure	High	Pa	150		150		150		150		150	
Dimension	H x W x D	mm	283 x 975 x 1400		408 x 1180 x 1720		408 x 1580 x 1720		408 x 1980 x 1720		408 x 1980 x 1720	
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)		3/8 (9,52)		3/8 (9,52)		3/8 (9,52)		3/8 (9,52)	
	Gas	Inch (mm)	1/2 (12,70)		5/8 (15,88)		5/8 (15,88)		5/8 (15,88)		5/8 (15,88)	

1) Data refers to the following conditions (UNI EN 13141-7): nominal air flow, external air 5 °C with 72% r. / expelled air 25 °C with 28% r. * Image is for PAW-HRPT40.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function

Accessories	
PAW-RE2C4-MOD-WH	Room controller for hotel rooms, white
PAW-RE2C4-MOD-BK	Room controller for hotel rooms, black
PAW-RE2D4-WH	Display control for hotel rooms, white
PAW-RE2D4-BK	Display control for hotel rooms, black

Technical focus

· Dual flow ventilation with EC fan, featuring high efficiency heat recovery (>85% η)
· 5 model line-up is available with air flow rates of 500, 800, 1200, 1600 and 2000 m³/h
· 2 types of polypropylene heat exchanger (high efficiency and sensible) with counter-current flows and integrated bypass as standard
· Automatic defrosting of the exchanger
· Low consumption and EC motors with electronic speed control ensure high useful static pressure for circular inlet connection to air ducts
· Wide ambient temperature range up to +50 ° C and down to -15 °C
· Modbus connection available

Interconnection to outdoor / indoor units

S-link communication line
ERV + DX
CZ-RTC6W
Indoor terminal units
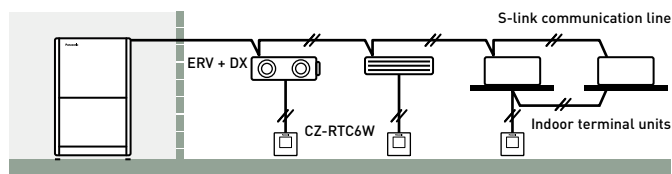
Aeraulic performance

EC motors with electronic speed control ensure high values of effective static pressure for ducting.

AUTOMATIC FAN   HUMIDITY CONTROL DRY   AUTOMATIC RESTART   BUILT-IN DRAIN PUMP   PANASONIC AC SMART CLOUD   BMS CONNECTIVITY
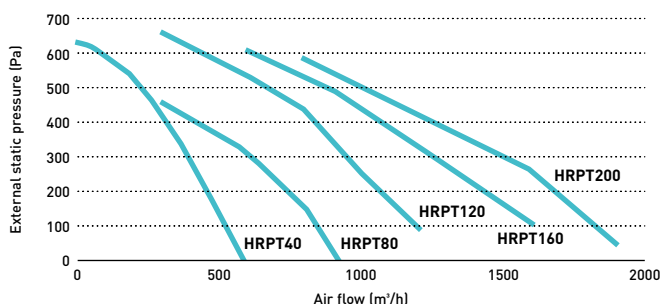
Heat recovery with DX coil - ZDX Series for VRF

Panasonic heat recovery solution for greater energy efficiency.
Performing well in extreme weather conditions, it can achieve up to 77% efficiency (63% in enthalpy efficiency).

The counter-flow heat exchanger reduces the air conditioning load, enabling customers – typically owners of hotels, restaurants and other large commercial buildings – to reduce their energy consumption and save on the cost of maintaining comfortable room temperatures.

Energy efficiency

These heat recovery devices are an example of Panasonic's continued commitment to developing unbeatable, energy-efficient air conditioning technologies for commercial applications.
The unit features a DX coil, and is designed to recover up to 77% of the heat from outgoing air, and an air purifying system which helps to improve air quality.
In even the most demanding commercial applications, business owners will benefit from the unit's ability to by-pass the heat exchange process when the outside air temperature is cool enough for fresh air to be drawn directly inside (free cooling). This alleviates the load on the air conditioning equipment and consequently reduces energy bills.

Supply section complete

The supply section comes complete with the DX coil (using R410A refrigerant) – fitted with a solenoid control valve, freon filter, contact temperature sensors on the liquid and gas line, and NTC sensors on the upstream and downstream air flows. The built-in electric box is equipped with a PCB to control the internal fan speed and to interconnect the outdoor and indoor units, and the ducts are connected by circular plastic collars.

Characteristic curves

The following curves show the unit external static pressure at maximum fan speed for each model.
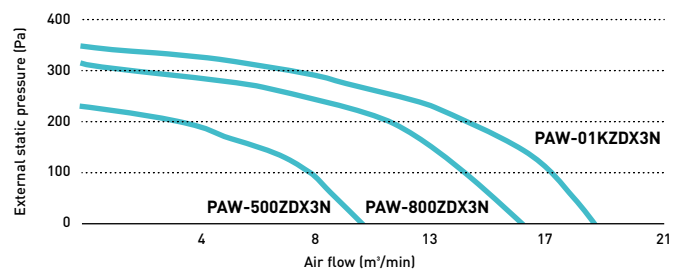
Balanced ventilation
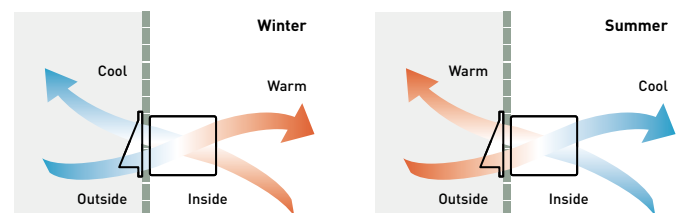
Heat recovery with DX coil - ZDX Series · R410A

Motorised heat recovery by-pass device automatically controlled to use fresh air free-cooling when convenient.

> COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Indoor unit			PAW-500ZDX3N		PAW-800ZDX3N		PAW-01KZDX3N	
Power supply	Voltage	V	230		230		230	
	Phase		Single phase		Single phase		Single phase	
	Frequency	Hz	50		50		50	
Air flow		m³/min	8,3		13,3		16,7	
External static pressure 1)		Pa	90		120		115	
Maximum current	Total full load	A	0,6		1,4		2,1	
Input power		W	150		320		390	
Sound pressure 2)		dB(A)	39		42		43	
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)		1/4 (6,35)		1/4 (6,35)	
	Gas	Inch (mm)	1/2 (12,70)		1/2 (12,70)		1/2 (12,70)	
Heat recovery			Cooling	Heating	Cooling	Heating	Cooling	Heating
Temperature efficiency		%	76	76	76	76	76	76
Enthalpy efficiency		%	63	67	63	65	60	62
Saved power summer mode or winter mode*		kW	1,70	4,30 (4,80)	2,50	6,50 (7,30)	3,20	8,20 (9,00)
DX coil								
Total / Sensible capacity		kW	3,00 / 2,10	2,50 / 2,70	5,10 / 3,50	4,40 / 4,80	5,80 / 4,10	5,20 / 6,70
OFF temperature		°C	15,9	28,0 (27,3)	15,5	29,6 (29,0)	16,2	28,5 (27,8)
OFF relative humidity		%	90	16 (15)	90	14 (13)	89	15 (14)

Nominal summer conditions: Outside air: 32 °C DB, RH 50%. Ambient air: 26 °C DB, RH 50%. Nominal winter conditions: Outside air: -5 °C DB, RH 80%. Ambient air: 20 °C DB, RH 50%. Cooling mode air inlet condition: 28,5 °C DB, RH 50%; evaporating temperature 7 °C. Heating mode air inlet condition: 13 °C DB, RH 40% (11 °C DB, RH 45%); condensating temperature 40 °C. DB: Dry Bulb; RH: Relative Humidity. 1) Referred to the nominal air flow after filter and plate heat exchanger. 2) Sound pressure level calculated at 1 m far from: ducted supply exhaust air ducted return - first air intake / service side, at normal condition. * Tentative data.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function

Accessories	
PAW-RE2C4-MOD-WH	Room controller for hotel rooms, white
PAW-RE2C4-MOD-BK	Room controller for hotel rooms, black
PAW-RE2D4-WH	Display control for hotel rooms, white
PAW-RE2D4-BK	Display control for hotel rooms, black

Technical focus

· Galvanized steel self-supporting panels, internally and externally insulated
· High efficiency static cross-flow heat recovery, made by membrane with high moisture permeability, good air tightness, excellent tear, and aging resistance, structure consisting of flat and corrugated plates. Total heat exchange with temperature efficiency up to 76% and enthalpy efficiency up to 67%, also at high level during summer season
· ISO16890 ePm2,5 95% (F9 EN 779) efficiency class filter with synthetic cleanable media and COARSE 50% (G3 EN 779) pre-filter ON fresh air, COARSE 50% filter on return air intake
· Removable side panel to access filters and heat recovery in the event of scheduled maintenance
· Low consumption, low noise, high efficiency direct driven fans

· Supply section complete with DX coil (R410A) fitted with solenoid control valve, freon filter, contact temperature sensors on liquid and gas line, NTC sensors upstream and downstream of air flow
· Built-in electric box equipped with PCB to control internal fan speed and to interconnect outdoor / indoor units
· Duct connection by circular plastic collars

Interconnection to outdoor / indoor units
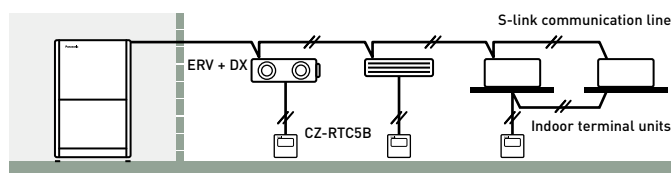
INTERNET CONTROL: Optional.

Electric air curtains

The Panasonic range of air curtains is designed for smooth operation and efficient performance. Air curtains produce a continuous stream of air blown from the top to the bottom of an open doorway and create a barrier that people and products can flow across, but air cannot.

Electric air curtain

1 **Designed to maximize performance**
High air flow upgraded 145% compared to conventional model (in the case of FY-3009U1).

2 **Comprehensive product line up**
1,5 m wide model added in the line up.

3 **Easier installation and maintenance**
Simple structure for easy installation and maintenance.

			FY-3009U1	FY-3012U1	FY-3015U1
Width		mm	900	1200	1500
Voltage		V	220	220	220
Air flow	Hi / Lo	m³/h	1100 / 920	1400 / 1270	2000 / 1800
Consumption	Hi / Lo	W	76 / 70	94 / 85	131 / 110
Current	Hi / Lo	A	0,35 / 0,32	0,43 / 0,40	0,59 / 0,50
Air speed	Hi / Lo	m/s	10,50 / 8,50	9,50 / 8,00	10,50 / 9,50
Sound pressure	Hi / Lo	dB(A)	48,5 / 45,0	48,5 / 44,5	51,5 / 48,0
Dimension	H x W x D	mm	900 x 231,5 x 212	1200 x 231,5 x 212	1500 x 231,5 x 212
Net weight		kg	12,0	14,5	18,0

Electric air curtain with DX coil

Designed to improve energy efficiency, minimise heat loss from a building, and allow retailers to keep doors open to encourage customers, our air curtains are suitable for connection to both PACi and VRF Systems.

Highly efficient heating effect

The combined air stream, which has a desirable low air current induction factor (mixing factor), can carry the selected initial temperature effect over long distances, and will reach the floor area while still at room temperature. This is necessary to avoid cooling down the interior spaces.

Available in different lengths to suit requirements between 1 and 2,5 m, both air curtains have outlet grilles that can be adjusted to five different positions. The HS model can be installed up to a height of 3,0 m with the LS model up to 2,7 m. The outlet grilles can be easily adjusted into five positions to suit different installation requirements and the air filter can be accessed without the need for specialist tools.

· High performance with EC fan motor (40% lower running costs compared to a standard AC fan motor)
· Easy Cleaning and Servicing
· Can be connected to either Panasonic VRF or PACi systems
· Drain pump for cooling operation included
· HS and LS models can be controlled via Panasonic's range of remote internet controls

Heating capacity comparison: Electrical air curtain / Panasonic air curtain.

80%
more efficient

Electric air curtain | Panasonic air curtain

* With the U-100PZH2E5 on the PAW-20PAIRC-LS. Calculation method: Taking as consideration SCOP of the Panasonic combination of 6,0. If 100 is the energy needed for a air curtain, Panasonic air curtain will need 1/(1-6)*100=20.
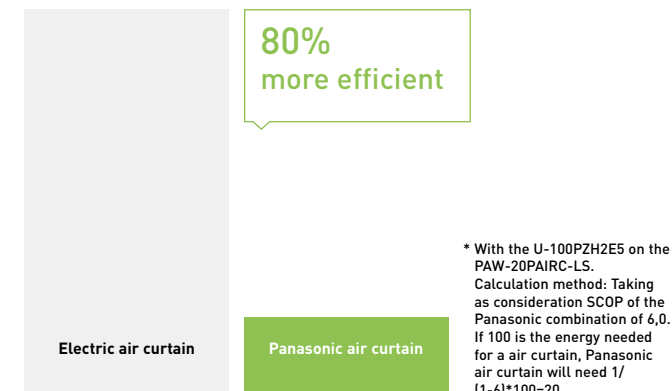
The HS and LS models are ideal for connection to a ECOi or PACi system. With simple "Plug & Play" installation, both are fitted with an EC fan motor for a smooth operation and efficient performance. This fan guarantees 40% lower running cost than with a standard AC fan motor. Air curtains run approximately 12 hours per day at shops, and efficient performance contributes to energy savings.

Optimised air flow velocity

1 | Energy losses, no air curtain installed
2 | Too low velocity air curtain – air curtain not efficient

3 | Too high velocity air curtain – considerable turbulence, energy lost to the outside, air curtain not efficient
4 | Optimum results with the Frico air curtain connected to Panasonic VRF

21-22	20-21	19-20	18-19	17-18
16-17	15-16	14-15	13-14	12-13	11-12
10-11	9-10	8-9	7-8	6-7
5-6	4-5	3-4	2-3	1-2

Opening without air curtain.
In an unprotected opening the cold air flows out and the cold storage room becomes much too warm.

Opening with air curtain, wrong angle.
If the angle is too small the hot air is blown into the cold storage room.

Opening with air curtain, too high speed.
Excessive speed creates turbulence, which causes energy loss and increases the cold storage temperature.

Opening with correctly adjusted air curtain.
With a correctly set air curtain unit there is a sharp separation between the different temperature zones.

Intelligent operation

Our air curtains combine air flow and heating / cooling technology to ensure optimum comfort and energy efficiency whilst also creating an effective barrier between indoor and outdoor environments. Design and installation is key to achieving the correct height / temperature settings to achieve optimum performance. Our air curtains are designed to answer the demands of the retail, commercial and industrial markets.

Heating mode.
Indoor temperature 20 °C.

Height

Cooling mode.
Indoor temperature 27 °C.

Heating mode	Height	Cooling mode
33 °C	0,0 m	18 °C
30 °C	0,5 m	18 °C
26 °C	1,0 m	18,5 °C
23 °C	1,5 m	19 °C
21 °C	2,0 m	19,5 °C
20 °C	2,5 m	20 °C

Air curtain with DX coil, connected to PACi NX and PACi

Comfort: Easy redirection of air flow by means of manual deflector.

Ease of use: Speed selector (high and low) on the unit itself.

Easy installation and maintenance: Easy installation / Compact dimensions improve installation and positioning / Easy cleaning of grid without opening of the unit.

Outdoor unit capacity			7,1 kW	10,0 kW	14,0 kW	20,0 kW
Air outlet height 2,7 m			**PAW-10PAIRC-LS-1**	**PAW-15PAIRC-LS-1**	**PAW-20PAIRC-LS-1**	**PAW-25PAIRC-LS-1**
Cooling capacity [1]	Max	kW	6,1	9,7	13,0	17,0
Heating capacity [2]	Max	kW	7,9	12,0	15,0	19,0
Air flow	High	m³/h	1800	2700	3600	4500
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,03
Electric consumption fan	230 V / 50 Hz	kW	0,30	0,50	0,60	0,80
Current	230 V / 50 Hz	A	2,10	3,10	4,10	5,10
Sound pressure [3]	Max	dB(A)	65	66	67	69
Air outlet height 3,0 m			**PAW-10PAIRC-HS-1**	**PAW-15PAIRC-HS-1**	**PAW-20PAIRC-HS-1**	**PAW-25PAIRC-HS-1**
Cooling capacity [1]	Max	kW	9,1	13,0	19,5	23,7
Heating capacity [2]	Max	kW	11,8	15,8	23,6	27,6
Air flow	High	m³/h	2700	3600	5400	6300
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,12
Electric consumption fan	230 V / 50 Hz	kW	0,75	1,00	1,50	1,75
Current	230 V / 50 Hz	A	4,10	5,50	8,20	9,60
Sound pressure [3]	Max	dB(A)	66	67	68	68
Common data						
Dimension [4]	H x W x D	mm	260 (+140) x 1000 x 460	260 (+140) x 1500 x 460	260 (+140) x 2000 x 460	260 (+140) x 2500 x 460
Net weight	Air outlet height 2,7 m	kg	50	65	80	95
	Air outlet height 3,0 m	kg	55	65	85	110
Fan type			EC	EC	EC	EC
Piping diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 3/4 (19,05)	3/8 (9,52) / 7/8 (22,22)	3/8 (9,52) / 7/8 (22,22)
Door width		m	1,0	1,5	2,0	2,5
Refrigerant			R32	R32	R32	R32

LS / PACi outdoor combination*	PACi Elite			PACi Standard		
Operation until	**40 °C**	**35 °C**	**30 °C**	**40 °C**	**35 °C**	**30 °C**
PAW-10PAIRC-LS-1	U-100	U-100	U-50	U-100	U-100	U-60
PAW-15PAIRC-LS-1	U-200	U-100	U-100	—	U-100	U-100
PAW-20PAIRC-LS-1	U-200	U-140	U-100	—	—	U-100
PAW-25PAIRC-LS-1	U-250	U-200	U-125	—	—	U-125

HS / PACi outdoor combination*	PACi Elite			PACi Standard		
Operation until	**40 °C**	**35 °C**	**30 °C**	**40 °C**	**35 °C**	**30 °C**
PAW-10PAIRC-HS-1	U-200	U-100	U-100	—	U-100	U-100
PAW-15PAIRC-HS-1	U-200	U-200	U-100	—	U-200	U-100
PAW-20PAIRC-HS-1	—	U-250	U-200	—	U-250	—
PAW-25PAIRC-HS-1	—	U-250	U-200	—	U-250	—

1) Cooling capacity DX coil, air temperature in / out +27 / +18 °C, R32 and R410. 2) Heating capacity condenser, air temperature in / out +20 / +33 °C, R32 and R410. In the case of lower outdoor temperatures, an outdoor model with higher capacity may be necessary. 3) Measured in distance up to 5,0 m, direction factor 2, absorbing surfaces 200 m², Min / Max air flow. 4) 140 mm is the height of an electrical box if it is installed on the top. * Available with PZH2 and PZ2. PZH3 and PZ3 will be compatible from Spring 2024.

Technical focus

· Now compatible with PACi NX Series
· Save up to 40% energy costs by use of the integrated EC fan technology (higher efficiency than conventional AC fan, soft start and longer motor duration)
· 4 length of air curtain LS and HS are available 1,0, 1,5, 2,0 and 2,5 m
· Installation height up to 3,0 m
· Outlet grilles can be adjusted in five positions, to suite different indoor and installation requirements
· Control with Panasonic remote control systems (optional)
· Direct integration to BMS via optional Panasonic interfaces
· Drip tray included in all DX air curtains
· Drain pump included

How does it work?

Stale air from the room is taken in and ejected near the door. This creates a 'roll of air' that shields the door area, mixing with the colder incoming air. It then turns away from the door, back into the room and toward the intake screen, where it is partly drawn in again. This flow of air helps to create a barrier for heat loss yet at the same time refreshes room air

Maximum installation high:
HS: 3,0 m
LS: 2,7 m

Air curtain with DX coil, connected to VRF systems

Comfort: Easy redirection of air flow by means of manual deflector.

Ease of use: Speed selector (high and low) on the unit itself.

Easy installation and maintenance: Easy installation / Compact dimensions improve installation and positioning / Easy cleaning of grid without opening of the unit.

Outdoor unit capacity			4 HP	4 HP	5 HP	8 HP
Air outlet height 2,7 m			**PAW-10EAIRC-LS**	**PAW-15EAIRC-LS**	**PAW-20EAIRC-LS**	**PAW-25EAIRC-LS**
Cooling capacity [1]	Max	kW	6,1	9,7	13,0	17,0
Heating capacity [2]	Max	kW	7,9	12,0	15,0	19,0
Air flow	High	m³/h	1800	2700	3600	4500
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,03
Electric consumption fan	230 V / 50 Hz	kW	0,30	0,50	0,60	0,80
Current	230 V / 50 Hz	A	2,10	3,10	4,10	5,10
Sound pressure [3]	Max	dB(A)	65	66	67	69
Air outlet height 3,0 m			**PAW-10EAIRC-HS**	**PAW-15EAIRC-HS**	**PAW-20EAIRC-HS**	**PAW-25EAIRC-HS**
Cooling capacity [1]	Max	kW	9,1	13,0	19,5	23,7
Heating capacity [2]	Max	kW	11,8	15,8	23,6	27,6
Air flow	High	m³/h	2700	3600	5400	6300
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,12
Electric consumption fan	230 V / 50 Hz	kW	0,75	1,00	1,50	1,75
Current	230 V / 50 Hz	A	4,10	5,50	8,20	9,60
Sound pressure [3]	Max	dB(A)	66	67	68	68
Common data						
Dimension [4]	H x W x D	mm	260 (+140) x 1000 x 460	260 (+140) x 1500 x 460	260 (+140) x 2000 x 460	260 (+140) x 2500 x 460
Net weight	Air outlet height 2,7 m	kg	50	65	80	95
	Air outlet height 3,0 m	kg	55	65	85	110
Fan type			EC	EC	EC	EC
Piping diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 3/4 (19,05)	3/8 (9,52) / 7/8 (22,22)	3/8 (9,52) / 7/8 (22,22)
Door width		m	1,0	1,5	2,0	2,5
Refrigerant			R32 / R410A	R32 / R410A	R32 / R410A	R32 / R410A

LS / VRF outdoor combination			
Operation until	40 °C	35 °C	30 °C
PAW-1EAIRC-LS	U-4	U-4	U-4
PAW-15EAIRC-LS	U-6	U-5	U-4
PAW-20EAIRC-LS	U-8	U-6	U-4
PAW-25EAIRC-LS	U-8	U-8	U-5

HS / VRF outdoor combination			
Operation until	40 °C	35 °C	30 °C
PAW-10EAIRC-HS	U-6	U-5	U-4
PAW-15EAIRC-HS	U-8	U-6	U-4
PAW-20EAIRC-HS	U-8	U-8	U-8
PAW-25EAIRC-HS	U-12	U-10	U-8

1) Cooling capacity DX coil, air temperature in / out +27 / +18 °C, R32 and R410. 2) Heating capacity condenser, air temperature in / out +20 / +33 °C, R32 and R410. In the case of lower outdoor temperatures, an outdoor model with higher capacity may be necessary. 3) Measured in distance up to 5,0 m, direction factor 2, absorbing surfaces 200 m², Min / Max air flow. 4) 140 mm is the height of an electrical box if it is installed on the top. * Also compatible with ECO G Series (GE3 and GF3) and Hybrid Serie.

Technical focus

· Compatible with R32 and R410A refrigerant
· Save up to 40% energy costs by use of the integrated EC fan technology (higher efficiency than conventional AC fan, soft start and longer motor duration)
· 4 length of air curtain LS and HS are available 1,0, 1,5, 2,0 and 2,5 m
· Installation height up to 3,0 m
· Outlet grilles can be adjusted in five positions, to suite different indoor and installation requirements
· Control with Panasonic remote control systems (optional)
· Direct integration to BMS via optional Panasonic interfaces
· Drip tray included in all DX air curtains
· Drain pump included

Internet control

An app added to your tablet or smartphone or via the Internet allows you to control and manage the system remotely. There is also the option to integrate into existing BMS systems by using other Panasonic interfaces.

Rating Conditions: Cooling Outdoor +35 °C DB Indoor +27 °C DB / +19 °C WB, Discharge temperature 16 °C. All combinations under rated conditions: Heating Outdoor +7 °C DB/+6 °C WB Indoor +20 °C DB. In case of lower outdoor temperatures a higher capacity outdoor unit model may be necessary. Specifications subject to change without notice. For detailed information about ErP, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

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

The E2 range of ducted units offers improved design flexibility for extended duct layouts as a result of their increased external static pressures whilst reducing energy consumption, while providing fresh air to larger spaces.

E2 type high static pressure hide-away · R410A
High pressure duct and 100% fresh air duct function.

COMPATIBLE WITH ALL PANASONIC CONNECTIVITY SOLUTIONS. FOR DETAILED INFORMATION GO TO THE CONTROL SYSTEMS SECTION

Type			100% Fresh air duct function (by using Kit for 100% fresh air)				High pressure duct			
Indoor unit			S-224ME2E5		S-280ME2E5		S-224ME2E5		S-280ME2E5	
			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	22,4	21,2	28,0	26,5	22,4	25,0	28,0	31,5
Input power		W	290,00	290,00	350,00	350,00	440,00	440,00	715,00	715,00
Current		A	1,85	1,85	2,20	2,20	2,45	2,45	3,95	3,95
Air flow	Hi / Med / Lo	m³/min	28,3 / — / —		35,0 / — / —		56,0 / 51,0 / 44,0		72,0 / 63,0 / 53,0	
External static pressure		Pa	200		200		140 (60 - 270) [1]		140 (72 - 270) [1]	
Sound pressure [2]	Hi / Med / Lo	dB(A)	43 / — / —		44 / — / —		45 / 43 / 41		49 / 47 / 43	
Sound power	Hi / Med / Lo	dB(A)	75 / — / —		76 / — / —		77 / 75 / 73		81 / 79 / 75	
Dimension	H x W x D	mm	479 x 1453 x 1205		479 x 1453 x 1205		479 x 1453 x 1205		479 x 1453 x 1205	
Net weight		kg	102		106		102		106	
Piping diameter	Liquid	Inch (mm)	3/8 (9,52)		3/8 (9,52)		3/8 (9,52)		3/8 (9,52)	
	Gas	Inch (mm)	3/4 (19,05)		7/8 (22,22)		3/4 (19,05)		7/8 (22,22)	

Rating Conditions for 100% Fresh air duct function: Cooling Outdoor 33 °C DB / 28 °C WB. Heating Outdoor 0 °C DB / -2,9 °C WB.
1) Available to select the setting by initial setup. 2) Values with 140 Pa setting. * No filter included. ** No compatible with 3-Pipe ECO G GF3.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver

Accessories	
PAW-RE2C4-MOD-WH	Room controller for hotel rooms, white
PAW-RE2C4-MOD-BK	Room controller for hotel rooms, black
PAW-RE2D4-WH	Display control for hotel rooms, white
PAW-RE2D4-BK	Display control for hotel rooms, black
CZ-CENSC1	Econavi energy saving sensor

Technical focus

· No need of rap valves for standard operation
· 100% fresh air duct function*
· DC fan motor for more savings
· Complete flexibility for ductwork design
· Can be located wihtin a weatherproof housing for external installation
· Air OFF sensor avoids cold air dumping
· Configurable air temperature control

* Rap valves required, see 100% fresh air duct function below.

System example

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

Inspection port (450 x 450 mm or more)

100% fresh air duct function

The E2 duct with 100% fresh air duct function have exceptional discharge temperature.

	Discharge Range		
	Min	Max	Default
Cooling	15 °C	24 °C	18 °C
Heating	17 °C	**45 °C**	40 °C
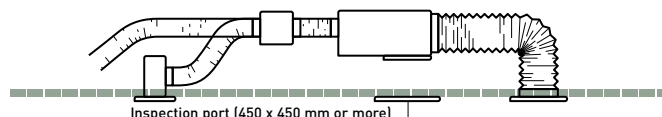
Plenums

Air outlet plenum (suitable for rigid + flexible duct)		
	Number of exits with diameters	Model
S-224ME2E5	1 x 500 mm	CZ-TREMIESPW705
S-280ME2E5	1 x 500 mm	CZ-TREMIESPW706

Kit for 100% fresh air function

Kit for 2 way systems	
2x CZ-P160RVK2	Rap valve kit
2x CZ-CAPE2	3 way control PCB
CZ-P680BK2BM	Distribution joint kit
	1x remote controller

Kit for 3 way systems	
2x CZ-P160HR3	3 way valve kit
2x CZ-CAPE2	3 way control PCB
CZ-P680BH2BM	Distribution joint kit
	1x remote controller

28% ECONAVI · SELF-DIAGNOSING · AUTOMATIC FAN · HUMIDITY CONTROL DRY · AUTOMATIC RESTART · BUILT-IN DRAIN PUMP · OPTIONAL WI-FI · BMS CONNECTIVITY

ECONAVI and INTERNET CONTROL: Optional.

Ceiling mounted air-e nanoe X Generator

nanoe X

Bringing nature's balance indoors with Panasonic's unique nanoe™ X technology built into the air-e.

Deodorises and inhibits certain bacteria, viruses, mould, pollens and allergens for better indoor air quality.

The air-e is a stand alone device which is an easy and simple choice to improve indoor air quality. It can be easily installed to various commercial projects including refurbishments.

The tested effects of nanoe™ X

Bacteria and viruses.
SARS-CoV-2: 99,9% % inhibited [1].
Influenza virus H1N1 subtype: 99,9 % inhibited [2].

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

1) Novel coronavirus (SARS-CoV-2) > [Test organization] Texcell (France) [Test subject] Adhered novel coronavirus (SARS-CoV-2) [Test volume] 45 L enclosed box [Test result] Inhibited 99,9% in 2 hours [Test report] 1140-01 A1.
2) Adhered virus (Influenza virus H1N1 subtype) > [Test organization] Kitasato Research Center for Environmental Science [Test subject] Influenza virus (H1N1 subtype) [Test volume] 1000 L enclosed box [Test result] Inhibited 99,9% in 2 hours [Test report] 21_0084_1.
3) Deodorisation effect for adhering odour (cigarette smoke) > [Test organization] Panasonic Product Analysis Center [Test subject] Adhered cigarette smoke odour [Test volume] Approx. 24 m³ laboratory [Test result] Odour intensity reduced 2,4 levels in 0,2 hours [Test report] 4AA33-160615-N04.

Performance of nanoe™ X might differ in real life environment and is only expected in the same room as where the unit is placed. 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 a medical device.

Deodorisation effect for adhering odour (cigarrette smoke) [3].

6 Level Odour Intensity

Intensely disagreeable	5
Strong	4
Immediately noticeable	3
Identifiable weak	2
Hardly noticeable	1
Odourless	0

Natural reduction

nanoe™ X can reduce odour intensity by 2,4 in 12 minutes

nanoe X

12   60   120
Minutes

For further details and validation data, please refer to the following website.

Ceiling mounted air-e nanoe X Generator

· nanoe™ X technology
  (Generator Mark 1: 4,8 trillion hydroxyl radicals/sec)
· Silent operation. Whisper quiet at 25,5 dB(A)*
· Low power consumption 4 W
· Easy installation
· Compact and modern design

* 230 V.

air-e™

Model			FV-15CSD1G		
Power supply	Voltage	V	220	230	240
	Frequency	Hz	50	50	50
Air flow	m³/h		15	16	17
	CFM		8,8	9,4	10,0
Consumption	W		4	4	4
Sound pressure	dB(A)		23,5	25,5	27,0
Net weight	kg			1,1	

* The value of air volume, power consumption and noise are specified at static pressure 0 Pa. The value of air volume is the mean value and a tolerance of +-10% is allowed. The value of noise level is a weighted average sound pressure level, the mean value is measured by Panasonic. A tolerance of +3 dB/-7 dB is allowed. The noise is measure at 1 m apart from the left, the front and below of the tested product. Conditions of generating nanoe™ X: room temperature: about 5 °C ~ 40 °C (dew point temperature more than 2 °C), relative humidity: about 30% ~ 85%. nanoe™ X is generated using the air in the room, and its amount is subject to the temperature and humidity in the air.

One device is suitable for around 20 m² (with a ceiling height 3 m)

Ex. 3 air-e devices are required for the room size 60 m².

60 m²

3 m

3 air-e devices

Concentration simulator is ready

See how nanoe™ X fills space.

170
Ø145
128
18
When install plate open 1)

LED light (blue)
Limiting screw

Ø200

147,5

① ② ③
④
⑤
⑥
⑦
⑧ ⑨

1: Louvre. 2: Frame. 3: Electric case assy. 4: Motor. 5: Fan. 6: Orifice assy. 7: nanoe™ X unit. 8: Install screw.
9: Install plate.
1) Initial position of install plate is closed.
Unit: mm

Projects with nanoe™ X.

Cabinet Dental. France.
The request by a customer to manage the indoor air quality in order to ensure irreproachable hygiene and odour control.

Mercat d'autors shop. Spain.
The nanoe™ X was chosen to ensure a cleaner air supply at a food market.

Heat recovery ventilation unit

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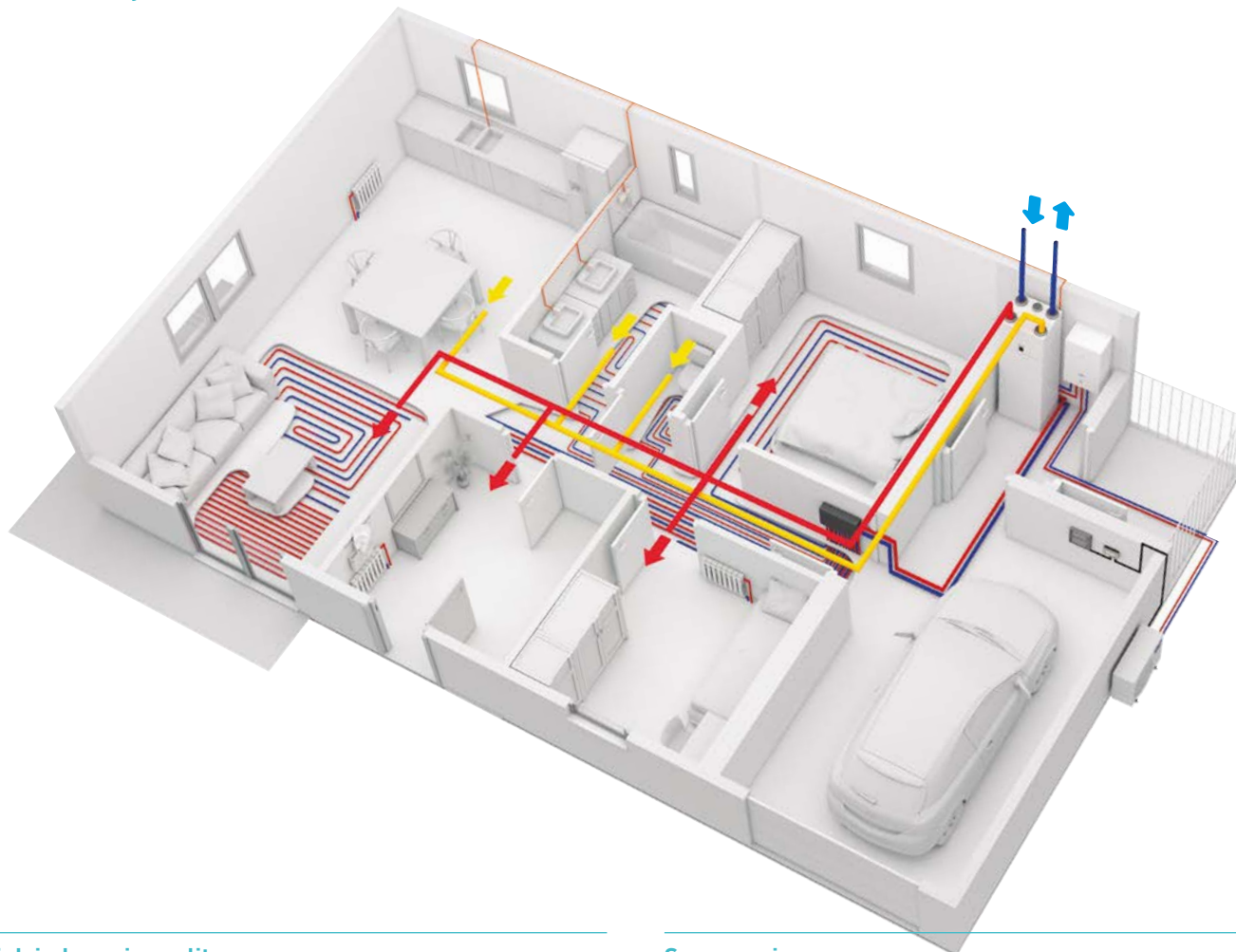
High indoor air quality

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

Energy saving

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

Space saving

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

Better user interface

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

AQUAREA

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

Heat Recovery Ventilation + Aquarea All in One Compact

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

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

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

Heat recovery ventilation unit

PAW-A2W-VENTA-R   PAW-A2W-VENTA-L

CERTIFIED COMPONENT
Passive House Institute
cool, temperate climate

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

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

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

Accessories	
PAW-VEN-DPLBOX	HRV touch control panel wall-mounted kit
PAW-VEN-S-CO2RH-W	CO_2 RH wall-mounted sensor
PAW-VEN-S-CO2-W	CO_2 wall-mounted sensor
PAW-VEN-S-CO2-D	CO_2 duct sensor
PAW-VEN-WBRK	Wall bracket kit for stand-alone installation on the wall
PAW-VEN-HTR06	Electrical duct heater 0,6 kW (includes relay)
PAW-VEN-HTR12	Electrical duct heater 1,2 kW (includes relay)

Main features of the residential ventilation unit

· Designed for areas up to approximately 140 m²
· High energy-efficiency rotary heat exchanger with EC - technology fans
· Moisture transfer function to minimize condensation in supply air during wintertime
· The built in humidity sensor in extract air can be used for demand control

· Control via touch display and Startup Wizard for easy commissioning
· Modbus communication via RS-485
· Option to control an Aquarea H Series onwards heat pump from PAW-A2W-VENTA control panel (PAW-AW-MBS-H and PAW-VEN-ACCPCB required)

Control user-friendly interface

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

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

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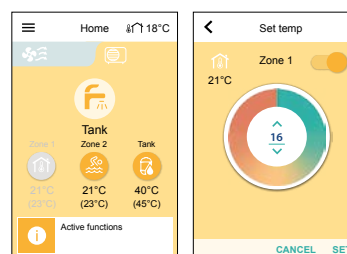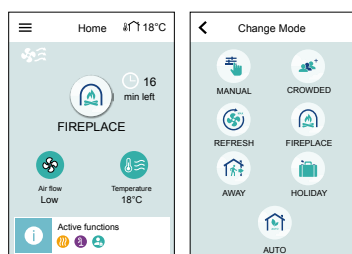
Counter flow ventilation

**Controlled mechanical ventilation ensures the supply of fresh air
inside a building in order to guarantee a good indoor air quality.**

Counter flow ventilation units are equipped with two fans to supply and extract air. A cross-flow heat exchanger recovers the energy contained in the extracted air and transfers it to the supplied air. This significantly reduces the building's energy consumption, while at the same time keeping a good quality of the indoor air.

Balanced ventilation

Fresh air
-12 °C →

Extract air
← **22 °C**

-9 °C ←
Exhaust air

→ **19 °C**
Supply air
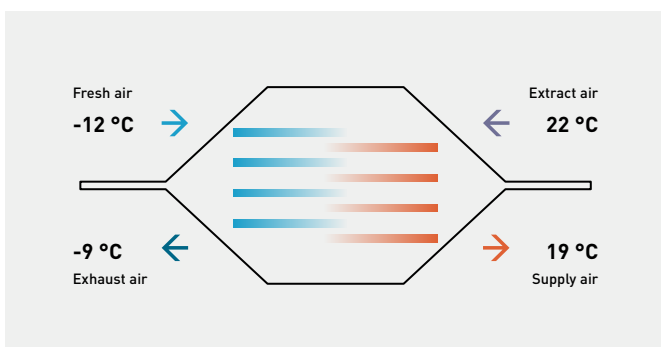
· Suitable for single family houses or apartments with low energy requirements
· High-efficiency sensible heat recovery, thanks to polypropylene counter-flow heat exchanger with large exchange surface and low pressure drop
· High comfort and quiet operation, by using brushless fans with electronic motor and modulating control
· Highly efficient air renewal and filtration, with 80% ePM1 filters
· 3 unit types: compact universal mounting (Z), horizontal mounting (H) and vertical mounting (V)
· Compact dimensions for simplified installation and panel easily accessible for maintenance and inspection

Counter flow ventilation

PAW-VENTX10-15-20-25Z-1

PAW-VENTX20-30-40-50V-1

PAW-VENTX20-30-40-50H-1

PAW-	Air flow Nominal / Max m³/h	Static pressure Nominal / Max Pa	Type of HEX	Recovery efficiency %	Energy class	Power supply Voltage / Phase / Frequency	Power consumption Nominal W	Sound power LWA dB(A)	Dimension H x W x D mm	Weight kg	Mounting position	Filter class	Duct connection mm
VENTX10Z-1	91 / 130	50 / 100	Counter flow HRV	87	A	230 V / Single phase / 50 Hz	80	48	255 x 580 x 580	19	Horizontal / Vertical	ePM1 80%	160
VENTX15Z-1	147 / 210	50 / 100	Counter flow HRV	85	A	230 V / Single phase / 50 Hz	140	51	255 x 580 x 580	19	Horizontal / Vertical	ePM1 80%	160
VENTX20Z-1	140 / 200	50 / 100	Counter flow HRV	87	A	230 V / Single phase / 50 Hz	120	48	313 x 580 x 580	21	Horizontal / Vertical	ePM1 80%	160
VENTX20H-1	109 / 155	50 / 100	Counter flow HRV	86	A	230 V / Single phase / 50 Hz	110	49	270 x 480 x 800	26	Horizontal	ePM1 80%	160
VENTX20V-1	112 / 170	50 / 100	Counter flow HRV	86	A	230 V / Single phase / 50 Hz	110	48	510 x 625 x 430	32	Vertical	ePM1 80%	160
VENTX25Z-1	224 / 320	50 / 100	Counter flow HRV	85	A	230 V / Single phase / 50 Hz	180	52	313 x 580 x 580	21	Horizontal / Vertical	ePM1 80%	160
VENTX30H-1	210 / 300	50 / 100	Counter flow HRV	85	A	230 V / Single phase / 50 Hz	180	50	295 x 795 x 795	31	Horizontal	ePM1 70%	160
VENTX30V-1	210 / 300	50 / 100	Counter flow HRV	86	A	230 V / Single phase / 50 Hz	180	50	590 x 785 x 575	38	Vertical	ePM1 70%	160
VENTX40H-1	238 / 340	50 / 100	Counter flow HRV	89	A	230 V / Single phase / 50 Hz	350	52	290 x 1150 x 1150	39	Horizontal	ePM1 70%	160
VENTX40V-1	266 / 380	50 / 100	Counter flow HRV	87	A	230 V / Single phase / 50 Hz	350	51	590 x 785 x 735	42	Vertical	ePM1 70%	160
VENTX50H-1	288 / 455	50 / 100	Counter flow HRV	88	A	230 V / Single phase / 50 Hz	420	56	290 x 1150 x 1150	40	Horizontal	ePM1 70%	160
VENTX50V-1	315 / 450	50 / 100	Counter flow HRV	86	A	230 V / Single phase / 50 Hz	420	54	590 x 785 x 735	43	Vertical	ePM1 70%	160

Remote control (sold separately).

Digital remote control with built-in air quality, temperature and humidity sensors (black).
PAW-VEN-CTRLB.

Digital remote control with built-in air quality, temperature and humidity sensors (white).
PAW-VEN-CTRLW.

Accessories	
PAW-VEN-HTR05	Electrical duct heater 0,5 kW, DN160 mm
PAW-VEN-HTR10	Electrical duct heater 1,0 kW, DN160 mm
PAW-VEN-FLT1	Spare F7 filter kit (2 pcs) for models 10Z, 15Z, 20H and 20V
PAW-VEN-FLT2	Spare F7 filter kit (2 pcs) for models 30H
PAW-VEN-FLT3	Spare F7 filter kit (2 pcs) for models 40H
PAW-VEN-FLT4	Spare F7 filter kit (2 pcs) for models 40V
PAW-VEN-FLT5	Spare F7 filter kit (2 pcs) for models 30V

Accessories	
PAW-VEN-ACFLT1	Activated carbon filter (1 pc) for models 10Z, 15Z, 20H and 20V
PAW-VEN-ACFLT2	Activated carbon filter (1 pc) for models 30H
PAW-VEN-ACFLT3	Activated carbon filter (1 pc) for models 40H
PAW-VEN-ACFLT4	Activated carbon filter (1 pc) for models 40V
PAW-VEN-ACFLT5	Activated carbon filter (1 pc) for models 30V

Control and connectivity

Panasonic has developed a wide range of control systems to offer the best options for commercial and residential needs, from th´e individual remote controllers, to the newest technology capable of controlling your building anywhere in the world. The simple to use cloud software can even be used from a portable device.
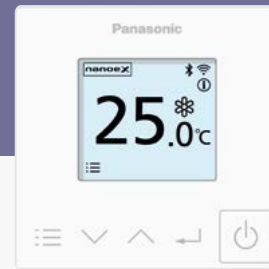
Control and connectivity map for Panasonic business areas

A wide range of control and connectivity solutions to suit a variety of applications. Integration capability, scalable solutions and smart connectivity offer a unique portfolio to meet every customer's needs.

Integration with Home Automation or KNX.

Simple and flexible solution to integrate Panasonic heating and cooling systems into smart home energy solutions.

Luxury housing estates

Condominiums
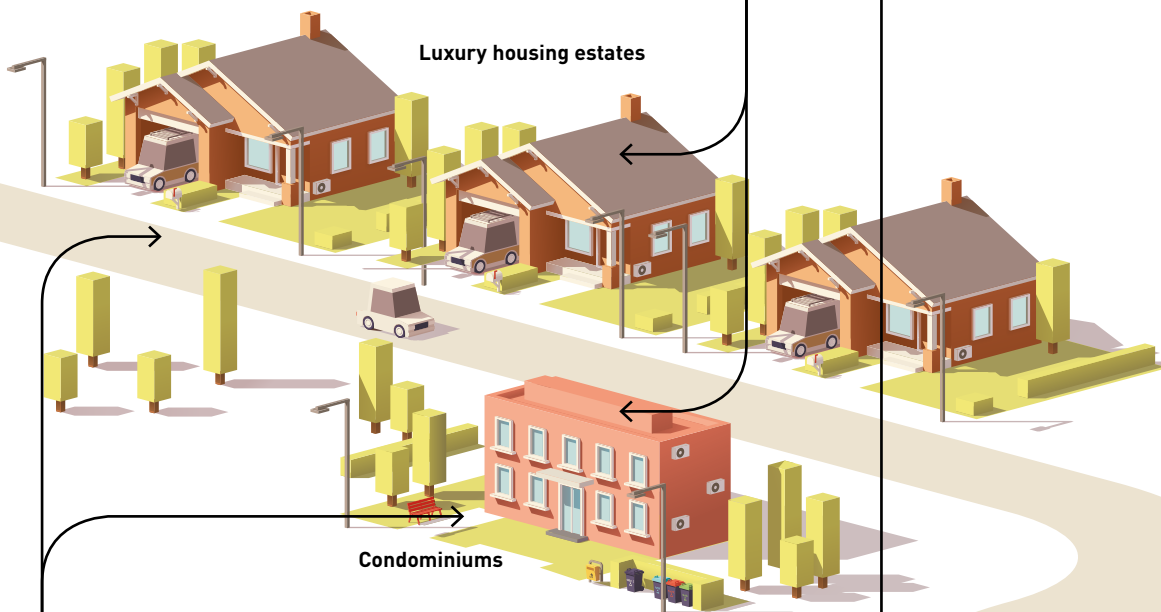
CONEX.

Simple and intuitive control with smart apps availability [1]. Each of the specialized apps, for owners or HVAC&R professionals, support daily operation. Allows connection of one, or a group of indoor units, to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling and error alerts.
Compatible with Voice Control [2].

REFER TO PAGE 402 FOR MORE DETAILS

Small retails

1) App connectivity available with CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW and CZ-RTC6BLW.
2) Alexa, Google Home.... Giving indication of compatible options.
3) Panasonic AC Smart Cloud connection required to access Panasonic AC Service Cloud.
4) 2 DI on standard version and 4 DI/DO available on Modbus version.
5) 128 indoor units as standard, additional communication adaptor required for 256 units.

Panasonic AC Smart / Service Cloud.

Smart multi-site solution provides users with complete scalable control for all business installations, 24/7, from any connected location.
Panasonic AC Smart Cloud for business owners and Panasonic AC Service Cloud [3] for HVAC service/maintenance companies.

REFER TO PAGE 394 FOR MORE DETAILS

Hotels

VRF Smart Connectivity+.

Control the air quality of guest rooms utilising CO_2 and humidity sensors. Easy BMS integration for entire building management.

REFER TO PAGE 388 FOR MORE DETAILS

Controller for hotel application.

Intuitive controller allowing up to 4 digital inputs and outputs [4]. Perform the most common operations in hotel rooms, such as key cards and window contacts.

REFER TO PAGE 414 FOR MORE DETAILS

Intelligent controller.

Centralized controller with large LCD touch screen display. Maximum 256 [5] indoor units connectable, ideal for larger buildings.

REFER TO PAGE 410 FOR MORE DETAILS
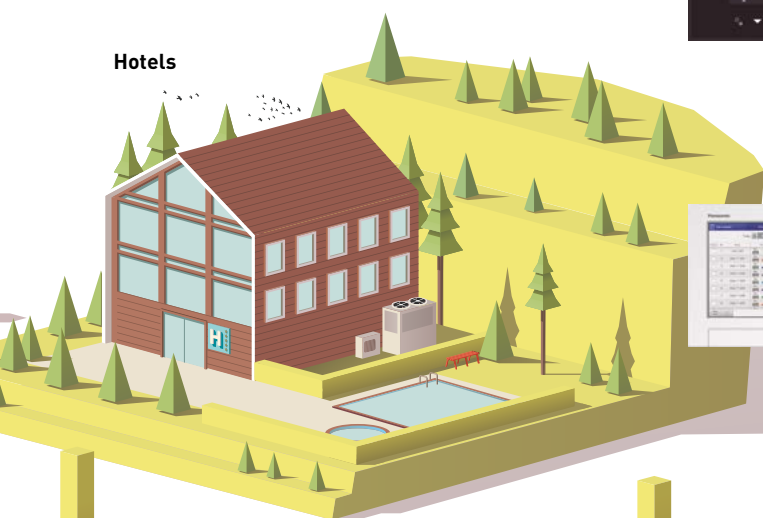
Offices / Large buildings
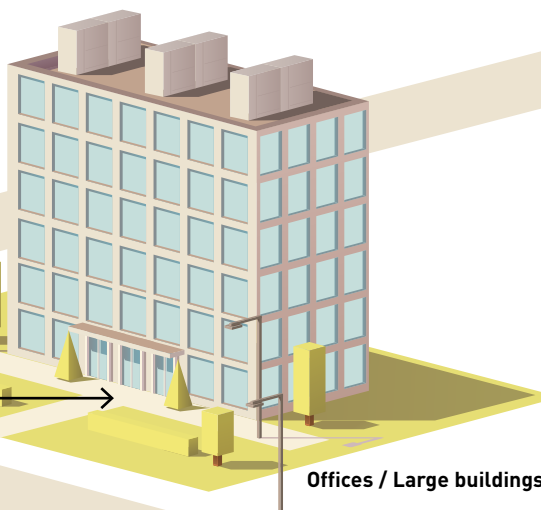
Supermarkets

Integration with BACnet or Modbus.

Easy and reliable solution to integrate Panasonic heating and cooling systems into the building management systems in your business.

387

VRF Smart Connectivity+

Through thorough energy management, Panasonic's VRF Smart Connectivity+ is a state-of-the-art solution providing energy saving and comfort as well as simple installation, operation and running.

VRF Smart Connectivity+ solution offers efficient energy management, high IAQ (indoor air quality), and air conditioning control.

Panasonic **Schneider Electric**

Dramatic reduction of OpEx with outstanding IAQ.

3 built-in sensors:
Temperature, RH and occupancy.
ZigBee wireless sensors:
CO_2 / temperature / RH%, window / door,
ceiling / wall / water leakage.
Relay Pack, Hotel room controller.

Ultimate customisation.

Customisable colour background.
Custom display/icons, messages.
Programmable logic (also stand alone).
Various controls and various external connection devices.

User-/owner-friendly.

Colour touch screen.
Simple and easy to use.
22 languages.
Easy-to-understand error description.
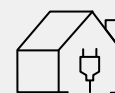
Easy design and Plug & Play to reduce CapEx.

Simple Plug & Play VRF connection to Building Energy Management System (BEMS).
Stand alone or BEMS connected.
Easy installation of ZigBee sensors.

Energy management system for rooms.

Each room is monitored by precision sensors, making it possible to provide high comfort levels without wasting energy.

Management system for the entire building.

A Building Energy Management System (BEMS) can also be connected with Plug & Play centralised control of the entire building's energy consumption.

**VRF Smart Connectivity+:
SER8150.**

1 Air quality control

Optimum IAQ is realized using the CO_2 and humidity sensors. The interior environment remains comfortable, while heating and cooling costs are minimized.
The CO_2 sensor can control ventilation systems, which contribute to improving the room's air quality.

2 Easy installation and integration

A single device is all that's required for occupancy and optimum automatic indoor air quality (IAQ) control. Simple operation with an interface that it is not an owned device contributes to increased energy efficiency and productivity for reduced capital expenditure (CapEx) and operating expense (OpEx).

3 Other equipment control

One room controller manages various devices including lighting and the blinds.
Control ventilation systems and other external connection devices with this BEMS.

Door/window wireless sensor.
Door and window contact detection sensor to monitor opening and closing.

Wall/ceiling motion/ temperature/humidity sensor.
Wall and ceiling sensor to detect the presence or absence of occupants.

CO_2 /temperature/humidity sensor.
Monitor indoor air quality, review data on interfacing devices, and control fresh air inside customisable zones.

Water leakage sensor.
Two sensing pads under the body activate when water is present between the two pads. Detecting the water, the sensor reports the event to the controller (and BEMS).

Hotel room controller (HRC).
The Hotel room controller controls connected guest room devices and aggregates data, making it visible to guest room and property management systems.

VRF Smart Connectivity+

Energy management system for rooms.

By installing a wall/ceiling motion temperature sensor, window/door sensor, and CO_2 sensor in the room, ideal, waste-free air conditioning is achieved.

PACi or VRF

R1 / R2 — **Wired connection** — **SER8150** — **Hotel room controller (HRC)**

R1 / R2 — **Wired connection** — **SER8150**

EcoStruxure — Ready for **BEMS**

ASHRAE **BACnet**

Modbus

ZigBee

Wall/ceiling motion/ temperature/humidity sensor

Door/window wireless sensor

CO_2 /temperature/ humidity sensor

Water leakage sensor
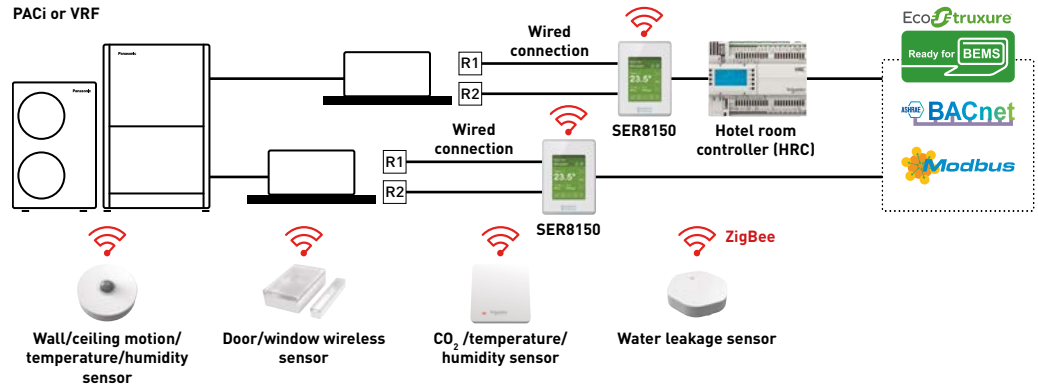
Sensing and control technology

Using sensors from Schneider Electric, high-quality occupancy and automatic IAQ control are realised. The sensors detect the presence or absence of occupants, and the opening and closing of doors and windows to achieve the most efficient energy management and exceptional air-conditioned comfort.
Flexible installation is possible to match different applications and building features such as walls, ceilings and proximity to doors and windows. No wiring means extra installation versatility.

Batteries last for up to five years (10-year battery for CO_2 sensor) and are easy to install and replace.

ZigBee

Built in PIR, humidity
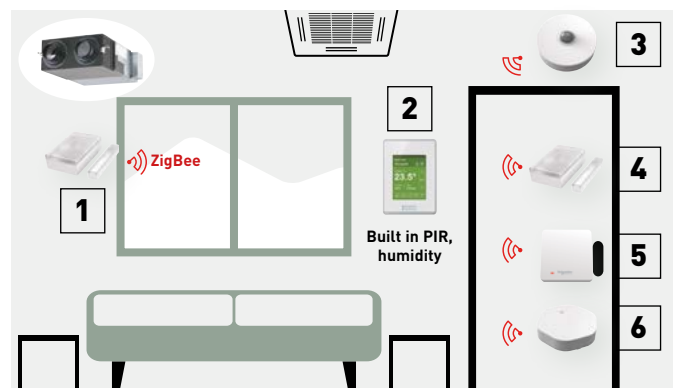
1 | Window sensor (option).
2 | Room controller.
3 | Ceiling motion sensor (option).
4 | Door sensor (option).
5 | CO_2 sensor (option).
6 | Water leakage sensor (option).

Pana Net Con, RH, No PIR, SE Brand, R1R2.
SER8150R0B1194

Pana Net Con, RH, PIR, SE Brand, R1R2.
SER8150R5B1194

Wireless ZigBee® Pro communication card.
VCM8000V5094P

Hotel room expansion module 14 indoor units.
HRCEP14R

Hotel room controller 28 indoor units.
HRCPBG28R

Hotel room controller w/display 42 indoor units.
HRCPDG42R

* Those accessories require system integrator support on site.

Sensor with room CO_2, temperature and humidity.
SED-CO2-G-5045

Sensor with room temperature and humidity.
SED-TRH-G-5045

Door/window sensor.
SED-WDC-G-5045

Wall/ceiling motion/ temperature/humidity sensor.
SED-MTH-G-5045

Water leakage sensor.
SED-WLS-G-5045

Cover frame. Silver.
FAS-00

Cover frame. White.
FAS-01

Cover frame. Glossy translucent white.
FAS-03

Cover frame. Light tan wood.
FAS-05

Cover frame. Dark brown wood.
FAS-06

Cover frame. Dark black wood.
FAS-07

Cover frame. Brushed steel finish.
FAS-10

Up to 5 year battery life (batteries included). Battery life of CO_2 sensor up to 10 years. Battery level is a data point.

VRF Smart Connectivity+

Smart management solutions.

1 **Hotels**

Room key card or key cardless solutions for hotels.
The SER8150 and ZigBee sensor automatic detection function offer optimal air conditioning regardless of whether there is a hotel room key or not. Sensors detect the presence or absence of occupants and the opening and closing of doors and windows for the optimum air-conditioned environment guests expect. Automatic control ensures the most efficient operation when guests are away or when windows are open. This contributes to an appreciable reduction in operating costs.

2 **Small and medium offices**

CO_2 sensors (option) and humidity sensors.
CO_2 sensors take measurements in units of ppm, and humidity sensors enable fine air quality control. This creates the most comfortable space for occupants while contributing to improved employee satisfaction.

3 **Super markets**

Humidity sensors.
Humidity sensors enable automatic dehumidification for the optimum IAQ regardless of climatic conditions. This creates an even more comfortable environment for customers and employees.

Innovative and unrivalled advantages
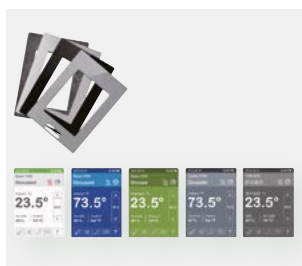
Colour and design to match office interiors.
Colour combinations and design can be set to match different facilities.

Easy-to-understand error description.
Error description during an emergency is easy to understand, enabling staff to respond quickly.

Customisation in 22 languages possible.
The display can be customised to match the native languages of guests to enable smooth, stress-free communication for hospitality at its finest.

Programmable logic.
Full customisation and updating of remote controller logic to match conditions.

Smart multi-site control solution

Modern and scalable energy management for your Heating & Cooling Solutions.
Smart multi-site control solution. One screen with endless possibilities.
The smart multi-site control solution from Panasonic allows you to have complete control of all your installations. With a simple click, all your units from several locations receive status updates in real-time, preventing breakdowns and optimising costs.
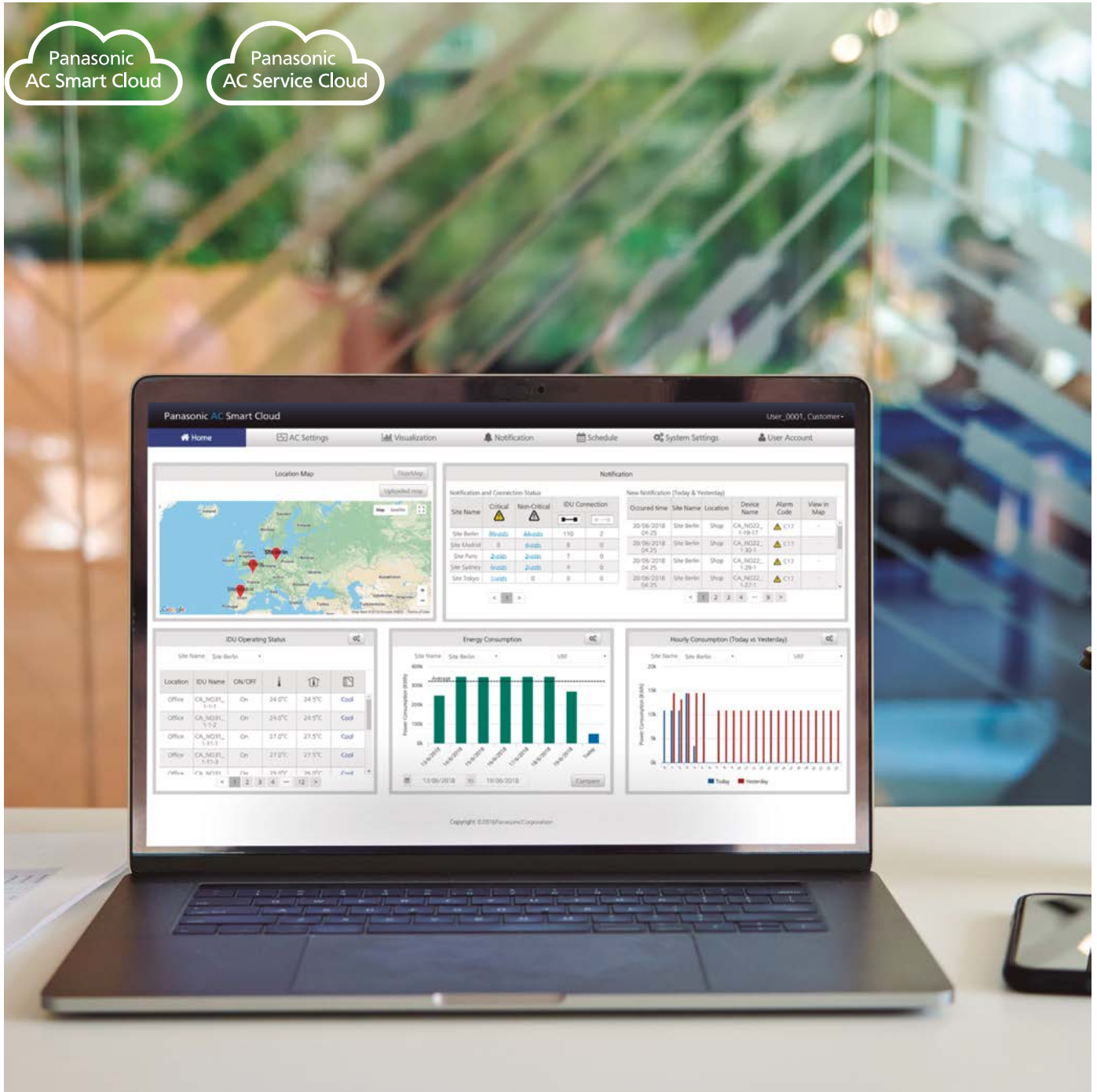
Installation.
Easy installation and configuration.

Connectivity.
A standard LAN connection with internet access (fibre or mobile).

Reliability.
24/7/365 days connection.

Use.
Real-time control from anywhere.

Roles and permission.
Easily configure different access roles for each user.

Security.
Highly secure communication and complaint with GDPR.

What Panasonic provides you?

Energy savings.

AC can be between 40-60% of the total electricity bill.
Even small setting changes can provide a huge impact in energy savings for your buildings. Panasonic AC Smart Cloud provides you energy consumption data of your site(s) and energy saving functions such as control setting limitation, auto off, scheduling, temperature range limits, etc.

Healthy comfort.

How to secure a comfortable environment by avoiding incorrect AC operation?
Incorrect temperature settings can create discomfort for users as well as and unhealthy environment for employees, visitors or customers. Analyse the set point and room temp history, and fix the right mode and temperature for each room.

Service speed.

On average, 2-3 AC technician' visits are required on site when an error/issue appears in an AC system.
Avoid wasted site visits, analysing the behavior of the AC system remotely without the need of a technician visit on site.

Downtime.

System "downtime" can impact the customers buying experience / productivity.
Keep your business running, reducing the risk of system downtime. Detect potential failures in advance or fixing them swiftly should issues occur.

Maintenance.

A proper maintenance schedule prevents future malfunctions and reduces energy consumption.
Remotely check all the advanced parameters of the system and plan the maintenance properly. Assign the right engineer for the required task.

Life of system.

Replacing HVAC is a huge impact on investment.
Making good use of the system, taking earlier action when abnormal signal occurs and keeping regular maintenance will expand the life your system, but will also keep the expected performance operation.

Full multi-site and user control

Panasonic Smart and Service Cloud is based on location. Each location can allow access for multiple users whether in the same building or via remote access. The scalability allows addition of multiple sites and customise the access of your team and the access of your trusted service partner.

Panasonic AC Smart Cloud

Owner.
Easy management of roles and access permissions.

Panasonic AC Service Cloud

Maintenance.
Maintenance companies can get access to each site after owners allow permission with a simple click.

Owner.
Manage all sites.

Country/region manager.
Manage all the sites within a region.

Country/region manager.
Manage all the sites within a region.

Site manager.
Manage specific site.

Site manager.
Manage specific site.

Site manager.
Manage specific site.

Other user.
Limited access.

Other user.
Limited access.

Other user.
Limited access.

Other user.
Limited access.

Other user.
Limited access.

Other user.
Limited access.

Maintenance.

Site — **Owner 1** — Panasonic AC Smart Cloud

Site — **Owner 2** — Panasonic AC Smart Cloud

Site — **Owner N** — Panasonic AC Smart Cloud

Panasonic AC Smart Cloud

Centralise control of your business premises, from wherever you are, 24/7/365.

The AC Smart Cloud system from Panasonic allows you to have complete control of all your installations from your tablet or from your computer. In a simple click, receive status updates, from all of your installations wherever the location, reducing potential breakdowns and optimising costs.

Panasonic
AC Smart Cloud

1 Comfort
Keep the comfort of workers, visitors, and customers to increase satisfaction and productivity.

2 Return on investment
Optimising the operation of your heating and cooling system and the possibility to monitor remotely can expand the life of your assets.

3 Lower running cost
Controlling settings in real-time and monitoring energy consumption contributes to reducing your energy bill.

Flexible solution for your business
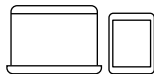
| Anytime | Anywhere | Multiplatform | Internet browser |

Scalable solution for your business
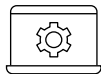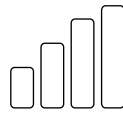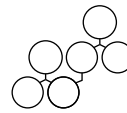
| Small to large | 1 to multi-sites | Upgrade features [1] | RAC[2]/PACi/ECOi/ECO G |
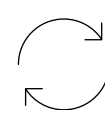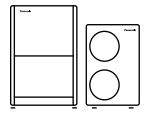
1) Customized to meet user demand / Continuous upgrades: new functions and product introductions / IT smart management. 2) CZ-CAPRA1 is required.

Key functions and uniqueness

Multi-site monitoring.
· It doesn't matter how many sites you have. It is easy to manage, operate, compare sites, locations and rooms.

Powerful statistics for energy savings.
· Power consumption, capacity and efficiency level can be compared with different parameters (yearly / monthly / weekly / daily basis)

Schedule setting.
· Set yearly / weekly / holidays timers as you please

Maintenance notification.
Receive an error notification by email with floor layout:
· Maintenance notification of ECOi / ECO G outdoor units
· Remote service checker function

Controller multi-site.

Including all advantages for single site, the scalability of AC Smart Cloud offers you an excellent toll for multi-site management.

Panasonic AC Smart Cloud

Users and profiles.
The flexibility of defining profiles and assign users to different sites.

Panasonic AC Service Cloud

Your maintenance partner.
You might have different maintenance partners depending on the regions or sites. Give access to your preferred maintenance partner for each site to AC Service Cloud for highest class service.
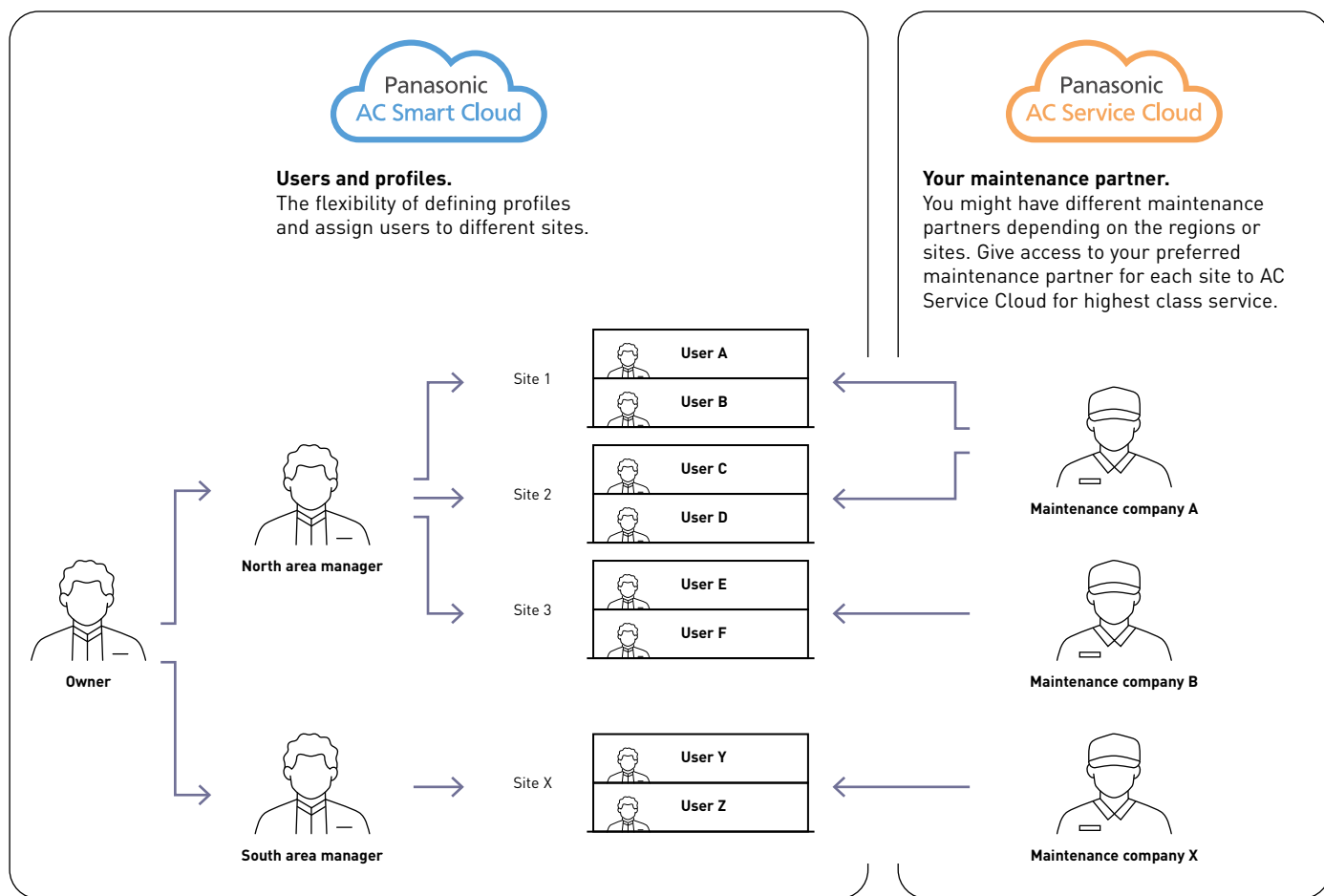
List of features

Panasonic AC Smart Cloud	Functionalities
Home screen	Overview of: operating status, location map, weather information, notification, energy consumption, efficiency, eco-friendly building list
AC settings	Indoor unit monitoring and remote control, outdoor unit details, cloud adapter details, floor map view, maintenance notification (installer)
Visualization	Statistical data regarding energy consumption, capacity and efficiency ranking; per indoor unit, unit group or refrigerant circuit
Notification	Warnings and alarms, maintenance intervals
Schedule	Schedule settings and results
Energy saving	Temperature range limits, unattended auto shutoff, temperature auto return, energy saving timer, demand/peak shaving
Demand control	Indoor unit and outdoor unit demand settings
Event control	Control inputs: alarms, digital inputs, indoor units. Control outputs: digital outputs, indoor units
System settings	CO_2 factor, distribution groups, area allocation, cut-off requests, site management, group display, site location, software version
User account	New user registration, updating users, user lists, user roles
Floor map Editor	Floor map import and unit assignment
Help	Installer information, alarm mail setting, user data, account management, company / customer information, terms of use, privacy notice, cookie policy, user manual, FAQ. For installers: user manual, technical data, installation instructions
Additional functions for installers	Cloud adapter installation process, remote service checker data recording and download, remote cloud adapter firmware update

Panasonic AC Service Cloud

Panasonic AC Service Cloud provides maintenance companies a unique tool to deliver advanced service and maintenance features, decreasing response times, reduce sites visits and better allocate resources.

1 Response time and zero down time

Providing technical information about abnormalities and checker functions enables the AC installer and maintainer to remotely identify and fix issues more quickly, even before they occurs.

2 Reduce unnecessary trips

It reduces the cost of unnecessary trips, reducing the CO_2 emissions associated with transport.

3 Maintenance planning

With a simple click, easily identify the nature of potential issues, enabling issue classification, prioritisation of resources and better planned site visits, assigning the right engineer for the job.

4 All at a glance with scalability

Remotely view all sites requiring maintenance of Panasonic HVAC. Increase the number of sites maintained, taking advantage of future updates and features of the Panasonic AC Service Cloud.

Key functions
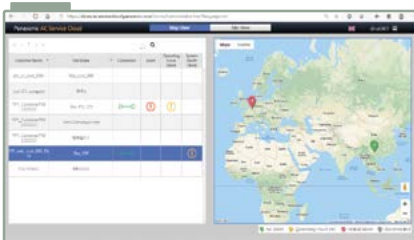
All sites at a glance.

Topology.
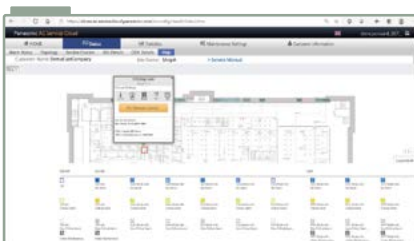
Floor map view.
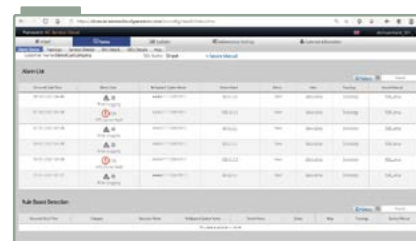
Alarm status.

Owners can manage different maintenance companies for each site, enabling or disabling access with just one click. Maintenance companies can have access to all sites where different owners allow permissions.

System health check function

Self diagnosis function is available in the AC Service Cloud. It automatically predicts potential malfunctions and helps to speed up your service process.
· Consecutive automatic monitoring at 15 minute intervals
· Key notifications in the event potential malfunction is detected
· 2D graph display to help with detailed analysis
· Threshold values can be easily adjusted

* For compatible models, please contact an authorized Panasonic dealer.

Panasonic AC Service Cloud

Malfunction   Monitoring

Scheme example.

Panasonic AC Smart Cloud

Panasonic AC Service Cloud

Panasonic Cloud Server

Internet (cable or 4G router)

AC Smart Cloud adapter (CZ-CFUSCC1)

CZ-CAPC3

Example ERV.
Individual indoor units or any external electrical device up to 250 V AC, 10 A.

* All data are protected with our secure network.
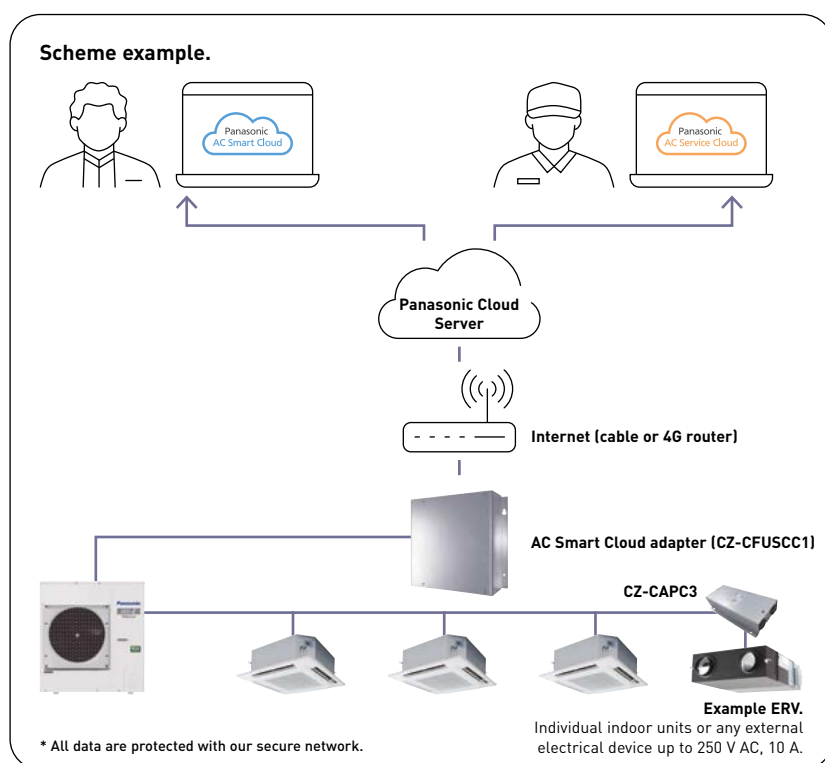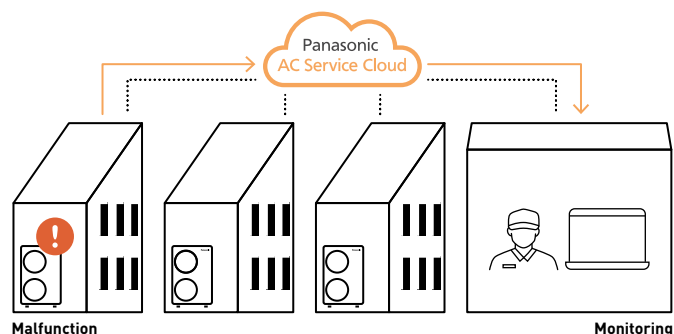
Technical requirements:
· CZ-CFUSCC1 – AC Smart Cloud adaptor
· Internet connection via: LAN with access to internet

Optional hardware:
· CZ-CAPRA1 – integration of RAC systems
· Pulse meters (supplied by others): up to 3 pulse meters (gas or power meters) can be connected to the cloud adapter, extendable by additional communication adapters (CZ-CFUSCC2)
· CZ-CAPC3 - ON / OFF monitor and control

Systems supported by AC Smart Cloud adapter:
· ECOi
· ECO G
· PACi / PACi NX
· RAC (CZ-CAPRA1 interface is required)
· ERV (CZ-CAPC3 interface is required)

List of features

Panasonic AC Service Cloud	Functionalities
Home screen	Map view and site view with site names, connection status and alarm status
Status	Alarm status, site topology, remote service checker, indoor unit monitoring and remote control, outdoor unit details, floor map view with service manual download
Statistics	Refrigerant circuit view (current data and recorded data), data table view, 2D graph view
Maintenance settings	Notifications and alarms, maintenance intervals setting (operating hours)
Customer list	List of connected customers, requests to access customer sites
Cloud adapter	Cloud adapter installation wizard, remote firmware update
Floor map editor	Floor map import and unit assignment
Help	Alarm mail setting, user data, account management, company / customer information, terms of use, privacy notice, cookie policy, user manual, user manual, technical data, installation instructions, FAQ
System health check function*	Self diagnosis function is available in the Panasonic AC Service Cloud. It automatically predicts potential malfunctions and helps to speed up your service process

* Optional.

1 Panasonic AC Smart Cloud packages

Get the cloud base kit (CZ-CFUSCC1 + start up) and register to one of the subscription periods with or without data connectivity.

The selection of the right Panasonic AC Smart Cloud package depends on the size of the installation.

	Product	Reference	Items included in a kit	Description
Up to 32 indoor units	Cloud base kit	KIT-ACSCBASE32	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART32	AC Smart Cloud start up to 32 indoor units
	AC Smart Cloud access fee	SR-ACSC1Y32		AC Smart Cloud access fee for 1 year
	AC Smart Cloud access fee with data connectivity	SR-ACSC1Y32CNT		AC Smart Cloud access fee for 1 year with data connectivity
Up to 64 indoor units	Cloud base kit	KIT-ACSCBASE64	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART64	AC Smart Cloud start up to 64 indoor units
	AC Smart Cloud access fee	SR-ACSC1Y64		AC Smart Cloud access fee for 1 year
	AC Smart Cloud access fee with data connectivity	SR-ACSC1Y64CNT		AC Smart Cloud access fee for 1 year with data connectivity
Up to 128 indoor units	Cloud base kit	KIT-ACSCBASE128	CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART128	AC Smart Cloud start up to 128 indoor units
	AC Smart Cloud access fee	SR-ACSC1Y128		AC Smart Cloud access fee for 1 year
	AC Smart Cloud access fee with data connectivity	SR-ACSC1Y128CNT		AC Smart Cloud access fee for 1 year with data connectivity
Up to 512 indoor units	Cloud base kit	KIT-ACSCBASE512	4x CZ-CFUSCC1	Cloud adapter for PACi, ECOi and ECO G [1]
			SR-ACSCSTART512	AC Smart Cloud start up to 512 indoor units
	AC Smart Cloud access fee	SR-ACSC1Y512		AC Smart Cloud access fee for 1 year
	AC Smart Cloud access fee with data connectivity	SR-ACSC1Y512CNT		AC Smart Cloud access fee for 1 year with data connectivity

1) The adapter has to be sold always together with start up. * One cloud adapter is required per 128 indoor units. ** Model references up to 192/256/320 indoor units are also available.

2 Panasonic AC Service Cloud

	Product	Reference	Description
Service function	Panasonic AC Service Cloud	SR-ACSC1Y32M	AC Service Cloud access for 1 year up to 32 indoor units
	System Health Check [2]	SR-ACSC1Y32SHC	System Health Check access for 1 year up to 32 indoor units

2) AC Service Cloud is required to use this function.

3 Optional services

Product	Reference	Items included in a kit	Description
Floor map [3]	SR-ACSC1FLRUP		Upload 1 floor map or maximum 32 units
Floor map [3]	SR-ACSC1FLRCP		Create 1 floor map or maximum 32 units
Indoor assign [3]	SR-ACSC32ASSIGN		Assign indoors up to 32 units
4G connectivity kit [4]	KIT-ACSC4GCNT	PAW-ACSCRTR4G	AC Smart Cloud 4G connection kit including 4G router and SIM card
		PAW-ACSCSIM	
4G Router	PAW-ACSCRTR4G		4G Router for Panasonic AC Smart Cloud
SIM card	PAW-ACSCSIM		SIM card without data amount

3) Floor map and indoor assignments can be done by customer without additional charge. 4) Data amount of SIM card is not included.

Selection steps

What service do you need? There are 2 options as follows.

AC Smart Cloud only.

Panasonic
AC Smart Cloud

Please follow step: **1**

AC Smart Cloud + AC Service Cloud.

Panasonic
AC Smart Cloud

+

Panasonic
AC Service Cloud

Please follow step: **1** **2**

* AC Smart Cloud is always required to use Panasonic AC Service Cloud.

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1 **Setup for AC Smart Cloud.**

Panasonic
AC Smart Cloud

Cloud adapter.
(CZ-CFUSCC1)

+

Start up.
Depending on the size of the installation.
SR-ACSCSTART

**Annual
access fee**

1 | **Determine your
number of indoor units.**

2 | **Select the appropriate cloud base kit.**

3 | **Select your annual
access fee options with and
without data connectivity.**

* One cloud adapter (CZ-CFUSCC1) is required per site.

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2 **Setup AC Service
Cloud**

Panasonic
AC Service Cloud

The service cloud
subscription (SR-ACSC1Y32M) is for
up to 32 indoor units as standard.
For larger systems exceeding this
indoor unit quantity, multiple
packages are required.
For example, please order 2 units of
SR-ACSC1Y32M if the number of
indoor units is from 33 to 64.
If system health check function is
required in AC Service Cloud,
choose SR-ACSC1Y32SHC.

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3 **Choose optional services to suit your needs.**
· Floor map upload
· Floor map creation
· Indoor assign
· Power meter
· 4G connectivity

Commercial Wi-Fi Adaptor

Panasonic CZ-CAPWFC1 interface adaptor, allows connection of one or a group of indoor units to Panasonic Comfort Cloud App, which provides control, monitoring, scheduling, and error alerts. Control PACi, ECOi, and ECO G indoor units with your smartphone whenever and wherever you are, by using Panasonic Comfort Cloud App and Commercial Wi-Fi Adaptor.
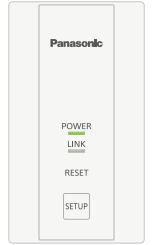
1 From 1 to 200 units
User can control up to 10 different sites, with up to 20 units / groups per site.
Additionally, one adaptor can be connected to 1 indoor or to a group of up to 8 indoors.

2 Voice control compatible
Registering the unit to Panasonic Comfort Cloud App makes it compatible with the most popular voice assistants.

3 Multi user
The Panasonic Comfort Cloud App allows multi-user access control, whilst allowing user restriction to specific units.

4 Easy scheduling
Complex weekly scheduling made simple. Not only for one unit, but across multiple sites, and from a smartphone.

5 Energy monitor
See the estimated power consumption and compare with other periods, to see how energy consumption can be further reduced. Check list of units that provides consumption*.

* Function available depending on the model.

6 Error codes
Error code notification through the App, provides early notification and allows for faster repair.

Advanced smartphone control

This scalable solution is ideal for one system, one site or multiple locations. Coupling the adapter with the already feature rich systems, makes it an ideal solution for residential and commercial applications.

Home screen	Basic settings	Statistics	Weekly timer	nanoe™ X simulation

Connection Diagram

Commercial Wi-Fi Adaptor wiring length is 1,9 m and connects to indoor unit via T10 connector and R1/R2 terminal connectors.

RC Terminal (R1,R2)
T10
Communication line: 1,9 m
Wireless LAN

Download free app:
Panasonic Comfort Cloud App.

Other hardware requirements: Router and Internet (purchase and subscribe separately).

Panasonic Cloud Server is designed, operated and managed by Panasonic.
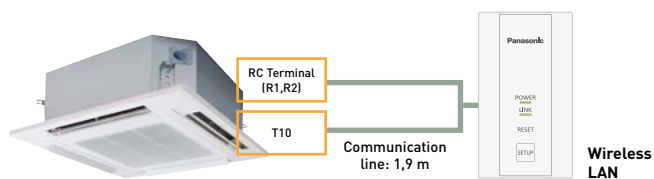
Input Voltage	12 V DC (supplied from T10 connector)
Power Consumption	Maximum 2,4 W
Size (H x W x D)	120 x 70 x 25 mm
Weight	190 g (including communications lines)
Interface	1 x Wireless LAN
Wireless LAN Standard	IEEE 802,11 b/g/n
Frequency Range	2,4 GHz band
Operating range	0 ~ 55 °C, 20 ~ 80 RH%
Connectable indoor unit	1 unit
Length of communication line	1,9 m (included)

CONEX. Devices and apps

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

Intuitive operation with simple and modern design panel. Sophisticated design with white or black flat panel and compact body. From residential to commercial, the wired remote controller series perfectly matches with all kinds of modern building. It enables user to recognize each function with a simple glance.

1 Intuitive control with stylish design
· Simple operation at a glance
· Clean face with full flat and LCD display
· Compact body, only 86x86 mm

2 Control comfort with your smartphone
· Flexible control options with IoT integration
· Panasonic H&C Control App for daily remote control operation
· Panasonic Comfort Cloud App for remote operation 24/7/365

3 Easy maintenance with service support app
· Quick and easy app set-up for system setting
· Panasonic H&C Diagnosis App enables the user to obtain detailed system operation data*

* The use of apps depends on the remote controller model.

CONEX with IoT integration

C O N E X

The wired remote controller series is fully integrated with IoT solutions developed by Panasonic.
Detailed operation, maintenance setting and service operation are all possible with smartphone or tablet.

PACi SYSTEMS

Service checker interface

Wired remote controller

Bluetooth®

Bluetooth®

Wi-Fi

Panasonic service and installer

End user

End user

IoT SOLUTIONS BY PANASONIC

Panasonic H&C Diagnosis App [1]. Service checker function (detailed operation data etc…).

Panasonic H&C Control App [2]. Detailed operation setting. Detailed maintenance setting.

Panasonic Comfort Cloud App [3]. Detailed operation setting. Remote operation via Wi-Fi.

1) A service checker interface is required when this app is used from outdoor location. Wired remote controller (CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW) is required when this app is used from indoor location. Compatible with PZ3 and PZH3 outdoor units. 2) CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW required. 3) CZ-RTC6WBLW or CZ-RTC6BLW required.

Service checker interface.

The service checker interface provides easy access to service parameters and service checker data via Bluetooth®.
· A Service checker interface for PACi NX Series*
· Bluetooth® connection
· Panasonic H&C Diagnosis App

* Available as a spare part, compatible with PACi NX Series.

Input voltage	220-240 V ~ 50-60 Hz (supplied from outdoor unit)
Power consumption	Maximum 2,4 W (including outdoor units)
Size (H x W x D)	175 x 125 x 50 mm
Weight	—
Interface	Bluetooth® 4.2 or later
Frequency range	2,4 GHz band*
Operating range - Temperature / Humidity	0 ~ 40 °C / 20 ~ 80% (no condensation)

* Frequency band in which the radio equipment operates; 2402 - 2480 MHz.
* Maximum radio-frequency power transmitted in the frequency bands in which the radio equipment operates; +0 dBm.
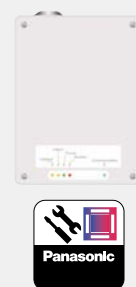
CONEX. Devices and apps

Flexible control options with IoT integration. 3 different apps for individual usage.

Panasonic H&C Diagnosis App for service and installer

Tool for diagnosis and troubleshooting.

Available functions:
· AC control
  - System view
  - Refrigerant circuit view
· Real-time data
  - Indoor unit
  - Outdoor unit
· Refrigerant cycle diagram and graph
· Data recording
· History data
· Error code tables

Main   **Operation data**   **History data**   **Equipment control**
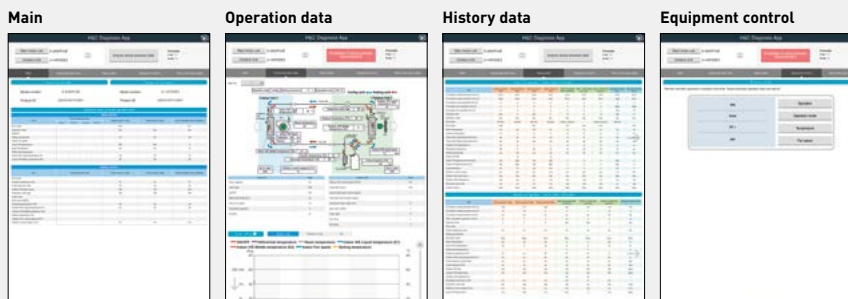
Panasonic H&C Control App for end user, service and installer

Detailed operation setting. Detailed maintenance setting.

Available functions:
· ON / OFF, mode, temperature, air flow volume, air flow direction
· Weekly timer
· All energy saving functions
· Alarm display and history
· Filter sign
· Test run
· Sensor value monitor
· Simple setting mode
· Detailed setting mode
· Key lock
· Ventilation fan control
· Display contrast adjustment
· Rotation, redundancy
· Quiet mode
· nanoe™ X
· Power consumption
· Unit naming

Home screen   **Basic settings**   **Statistics**   **Weekly timer**   **Advanced settings**

Panasonic Comfort Cloud App for end user

Remote operation via Wi-Fi.

Available functions:
· ON / OFF
· Mode
· Temperature
· Air flow volume
· Air flow direction
· Weekly timer
· Temperature setting range limitation
· Energy monitoring
· Alarm display
· nanoe™ X

Home screen   **Basic settings**   **Statistics**   **Weekly timer**   **nanoe™ X simulation**
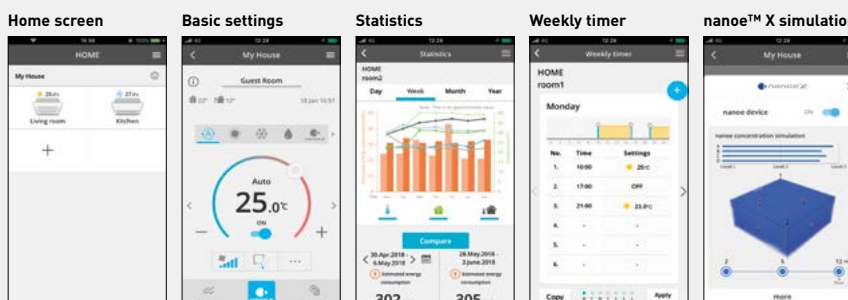
Connectivity matrix.

White model	CZ-RTC6W	CZ-RTC6WBL	CZ-RTC6WBLW
Black model	CZ-RTC6	CZ-RTC6BL	CZ-RTC6BLW
Wired connection compatible with	PACi, PACi NX, ECOi, GHP	PACi, PACi NX, ECOi, GHP	PACi NX only
Wireless functions	No wireless capability	Bluetooth®	Bluetooth® + Wi-Fi
App compatibility			
Panasonic Comfort Cloud App	—	—	✔
Panasonic H&C Control App	—	✔ PACi, PACi NX, ECOi, GHP	✔ PACi NX only
Panasonic H&C Diagnosis App [1]	—	✔ PACi NX only [2]	✔ PACi NX only [2]
Outdoor unit settings (remote controller connected to indoor unit)	✔ PACi NX only [2]	✔ PACi NX only [2]	✔ PACi NX only [2]

1) Compatible with U–71/100/125/140PZH3E5/8 and U–100/125/140PZ3E5/8. 2) When connected to PACi NX indoor and outdoor unit combination.

Function comparison

This shows the functions provided: a) by the remote controllers b) by the apps		Remote controller functionalities		Panasonic H&C Control App	Panasonic Comfort Cloud App	
		CZ-RTC5B	CZ-RTC6W / CZ-RTC6	CZ-RTC6WBL(W) / CZ-RTC6BL(W) + app	CZ-CAPWFC1 + app	CZ-RTC6WBLW / CZ-RTC6BLW + app
Basic operation	ON / OFF, mode, temperature, air flow volume, air flow direction	✔	✔	✔	✔	✔
Timer functions	Time display	✔	—	✔	✔	✔
	Easy ON / OFF timer	✔	—	✔	—	—
	Weekly program timer	✔	—	✔	✔	✔
Energy saving	Outing function	✔	✔	✔	—	—
	Temperature auto return	✔	—	✔	—	—
	Temperature setting range limitation	✔	—	✔	✔	✔
	OFF reminder	✔	—	✔	—	—
	Energy saving mode	✔	—	✔	—	—
	Schedule demand control	✔	—	✔	—	—
	Energy monitoring	✔	—	✔	✔	✔
	Econavi	✔	✔	✔	✔	✔
Maintenance	System failure information (alarm history)	✔	✔	✔	—	—
	Alarm display	✔	✔	✔	✔	✔
	Service contact registration	✔	—	✔	—	—
	Filter sign	✔	✔	✔	—	—
	Test run	✔	✔	✔	—	—
	Sensor value monitor	✔	✔	✔	—	—
	Simple setting mode	✔	✔	✔	—	—
	Detailed setting mode	✔	✔	✔	—	—
Others	Key lock	✔	✔	✔	—	—
	Ventilation fan control	✔	—	✔	—	—
	Display contrast adjustment	✔	✔	✔	—	—
	Rotation	✔	—	✔	—	—
	Quiet operation mode	✔	—	✔	—	—
	nanoe™ X	✔	✔	✔	✔	✔

Remote controller with Econavi

Easy to use, attractive, clear design, with demand control functions and energy consumption display! This useful feature makes this remote controller unique!

1 **Design**
The CZ-RTC5B wired remote controller is ideal for integration into the most demanding interior architectures.
The touch panel features a very sleek and easy to use display, which with its compact display is only 120 x 120 x 16 mm.

2 **Key functions**
· Easy setup of the timer and settings of the indoor unit
· Energy consumption display (for all R32 PACi line-up)
· Limitation of the energy consumption (Demand control) by timer.

3 **Display of information**
The information is mainly based on pictograms to ensure easy understanding. The minimal amount of text is available in 6 languages (English / German / French / Spanish / Italian / Polish).
The screen is back lit to enable reading even during the night.

4 **Easy access to the menus**
With the pictograms, the navigation, the selection and the settings are simple and easy to follow.

Basic function (operation display and indication).

All functions are easily available on the remote controller.

· ON / OFF timer
· Weekly timer
· Quiet operation
· Remote controller sensor
· Operation prohibit
· Filter sign
· Energy saving
· Centralized control
  indication

· Mode change prohibit
· Automatic temperature
  return
· Temperature range
  limitation
· OFF remind
· Schedule demand control
· Ventilation
· Out Function

1 | Name of the room (maximum 16 characters)
2 | Time and Day of the week
3 | Mode: Hot / Cool / Dry / Fan Auto
4 | Status: Heating stand-by / Defrost operation / Stand-by (GHP system)
5 | Set temperature
6 | Flap setting
7 | Fan speed: L-H / Auto
8 | nanoe™ X setting
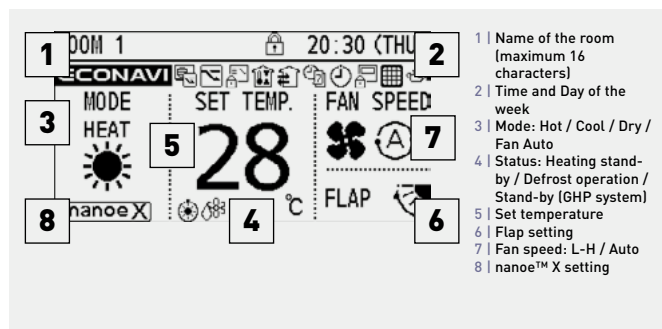
Easy operation and quick access to all menus

1 | Set temperature will be selected, when any arrow button is touched
2 | Select the item (Mode or Fan speed) by left/right ◀▶ key
3 | Change the setting by up/down ▲▼ key
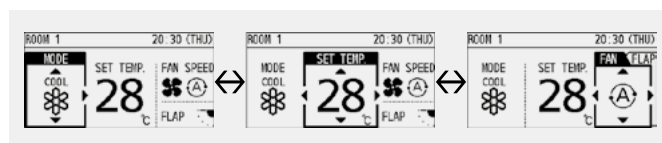
Example of easy access to the functions: air direction setting

1 | Select "Air direction" and press "Enter" key
2 | Select the unit number by up/down ▲▼ key
3 | Select the flap position by up/down ▲▼ key
4 | Press "Return" key to go back the Menu display
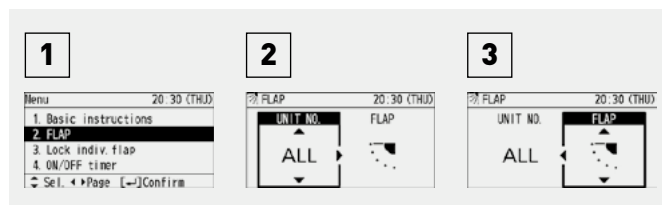
Backup control by using CZ-RTC5B

Group wiring of 2 systems of PACi can do auto individual control: Rotation operation, backup operation and support operation.

System 1   CZ-RTC5B   System 2
Remote controller
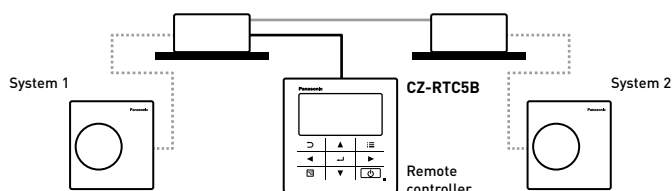
Functions available on the CZ-RTC5B

Control item	Controllability	Indoor units	
		PACi	VRF
Basic operation	Operation, Mode, Temperature setting, Air flow volume, Air flow direction	✔	✔
Timer function	Time display	✔	✔
	Easy ON / OFF timer	✔	✔
	Weekly program timer	✔	✔
Energy saving	Outing function	✔	✔
	Temperature auto return	✔	✔
	Temperature setting range limitation	✔	✔
	OFF remind	✔	✔
	Energy saving mode	✔	✔
	Schedule demand control	✔ [1]	✔
	Energy monitoring - R32	✔	—

Control item	Controllability	Indoor units	
		PACi	VRF
Maintenance	System failure information	✔	✔
	Service contact registration	✔	✔
	Filter sign (rest time display) and reset	✔	✔
	Auto-address, Test run	✔	✔
	Sensor value monitor	✔	✔
	Simple / Detail setting mode	✔	✔
Others	Key lock	✔	✔
	Ventilation fan control	✔	✔
	Display contrast adjustment	✔	✔
	Remote controller sensor	✔	✔
	Quiet operation mode	✔ [1]	—
	Prohibit setting control from central controller	✔	✔

1) Not available with PACi Standard R410A line up.
* All specifications subject to change without notice.

Datanavi

Datanavi, a simple way to connect.
Simple and easy support tool with your smartphone.

datanavi

Overview of datanavi system.

Just holding up your smartphone to the LED display on a remote controller (CZ-RTC5B) to receive useful AC system information super fast by Panasonic Light ID Technology. Datanavi also connects to Panasonic Cloud Server for the quick view of manuals, saving data received by Light ID.

PACi

Panasonic unique Light ID technology

Panasonic Cloud Server

User

| Fast and intuitive | Easy access to manual database | Accurate service data on your smartphone |

Key functions.

· Scan and Save AC system info
· Easy access to manual database
· Commissioning, F-Gas check data history

What is the Light ID technology developed by Panasonic?
Visible light transmission technology, which enables to transmit information by high-speed and invisible flashing of an LED light source.

User / administrator (person in charge of AC) functions

· **Fast and intuitive.** Regular operation data, energy consumption data display
· **Easy access to data base.** Getting manuals related on demand
· **No idea what to do when an error happens?** You can share error information and contact service easily

Installer / service company functions

· **Getting technical data depends on your need**
  Service manual. Q and A list. Test run information
· **Acurate error information**

Regular operation

Energy management

Malfunction notice
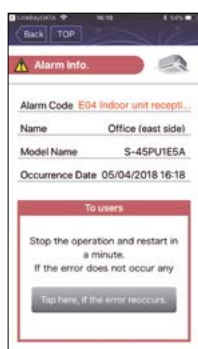
Operating manual

Test run info

Service data

* User interface image may be updated without notification.

· Simple F-gas regulation check list
· Repair speed check list

Download free apps, try datanavi!

App Store

Google Play

409

Intelligent controller

This controller is the smart solution for your advanced requirement in buildings.

Intuitive operation.

The screens used for operations all follow a common pattern, with the screens being easy to read and easy to use.
· Enlarged screen (10,4 inch) with colour LCD
· Smartphone-like gestures (flick, swipe, touch)

Large screen display. Enlarged by 60%.

10,4 inch

Easy swipe or flick operation.

Swipe.
This is an operation where the finger is slid in a direction (up or down) on the touch panel. This is used to scroll slowly.
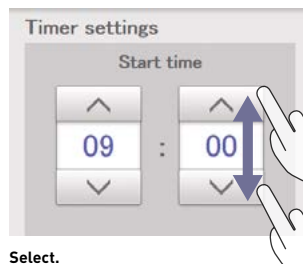
Select.
This is an up and down movement of the finger touching the screen, used to pick settings in elements such as spin boxes.
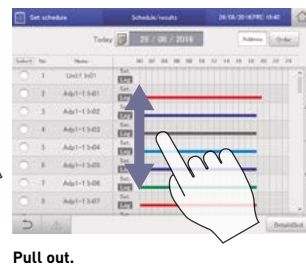
Pull out.
This is an operation where the finger on the touch panel is flicked in a direction (up or down). This is used to scroll quickly.

Enhanced functions for energy saving as standards

· Set temperature auto return settings, Auto shut OFF, set temperature range limit settings
· Demand control function

Screen of set temperature auto return setting.
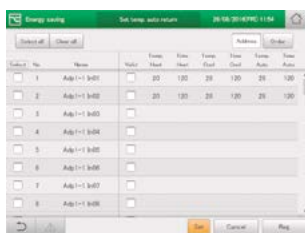
Auto shut OFF.

Screen of outdoor demand control.
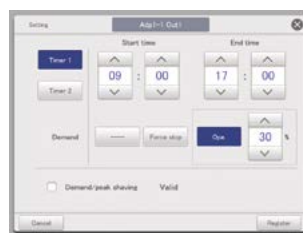
· Outdoor demand input and timer settings possible
· Indoor can be set at ±1 °C/ ±2 °C or thermostat OFF
· Indoor units controlled in sequence at 10-minute intervals

Energy visualization

· Energy saving plans are supported with graph display function
· Displays electricity and gas usage distribution

Screen of graph display.
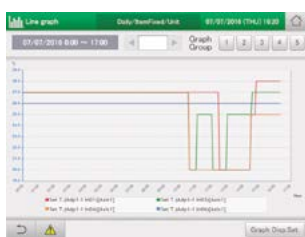
Useful parameters are shown for your better energy saving.
Ex.) Bar graph:

Indoor unit: Total operating time, thermostat ON operation time (Min.)
Amount used (electricity, gas)
Electricity or gas charges

Outdoor unit: Outdoor unit operation cycles (# cycles)
Engine time in operation (Hrs.)
Cumulative Inverter power output
Cumulative PV power output

Pulse value selection per different data intervals 1 hour/1 day/ 1 month compared with last year.

Main function

Gesture function (flick, swipe, touch)	✔
Graph display (trends, comparisons)	✔
Web functions (maximum 64 users)	✔
Recipient setting for warning email	✔ (Maximum 8)
Automatic return to setting temperature	✔
Limitation of setting temperature range	✔
Left-on prevention	✔
Quiet operation of outdoor unit	✔
Occupant sensor linkage	✔
Demand function	✔
Charge calculation	✔
Log display	✔ Warning 10000 items. Status change 50000 items
Linked control (event definition 50 events, input: 32, output: 32)	✔
Under maintenance (under inspection registration)	✔

Econavi Sensor

The Econavi sensor detects presence in the room, and quietly adapts the PACi or VRF air conditioning system in order to improve comfort and energy savings.

· Detects human activity and adjusts temperature by 2 degrees (up or down) to optimise comfort and efficiency
· If there is no activity detected for a set time period, the Econavi will stop the unit or move to a temperature previously set
· The Econavi device is installed independently of the indoor unit, and is located in the area best suited for detection

Applications

Saving energy for offices: If the air conditioning is left on after the last employee leaves the office, Econavi will automatically react, reducing or stopping the system. Increased comfort in hotel rooms: When presence is detected in the room, the temperature is automatically adjusted to achieve best comfort.

Key points

· Compatible with cassette, wall-mounted, hide-away and Ceiling units
· Improves efficiency
· Better comfort
· Can be installed in the best location within the room for detection purposes

Sensor location image.

Human detection area (2,5 m height angle 30°)
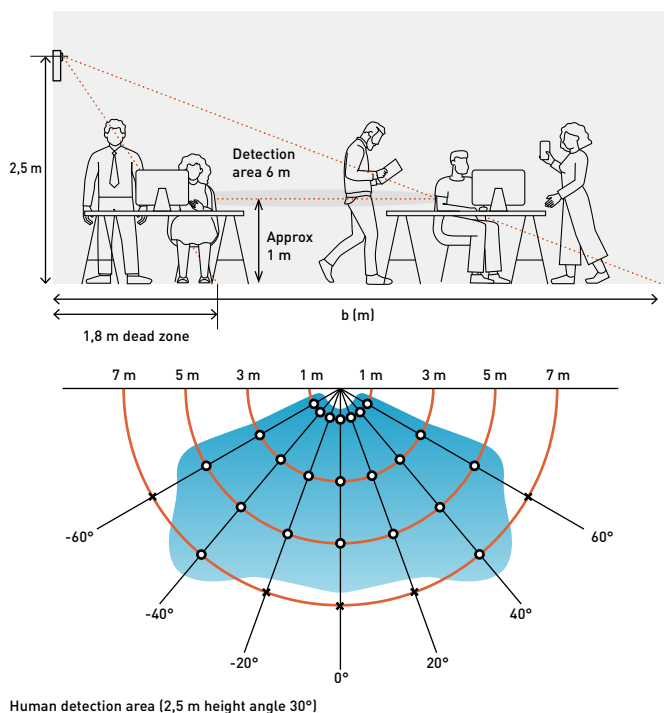
Providing outstanding energy saving performance, Panasonic's Inverter system can be connected to Econavi to detect when energy is being wasted. Econavi senses the presence or absence of people and the level of activity in each area of an office. When unnecessary heating or cooling is detected, indoor units are individually controlled to match office conditions for energy saving operation.

Detection of the level of activity enables precise power saving.
Presence or absence of people at their desks and the level of activity in the office are detected in real time. Set temperature is automatically adjusted to optimise the lower power consumption.

Remote Econavi sensor allows optimum energy operation.
Pillars, walls, cabinets and other fittings obstruct the sensor, reducing the area of detection and lowering the energy saving effect. Taking into consideration blind spots, Panasonic enables the optimum layout for sensors in any office.

Econavi sensor: CZ-CENSC1
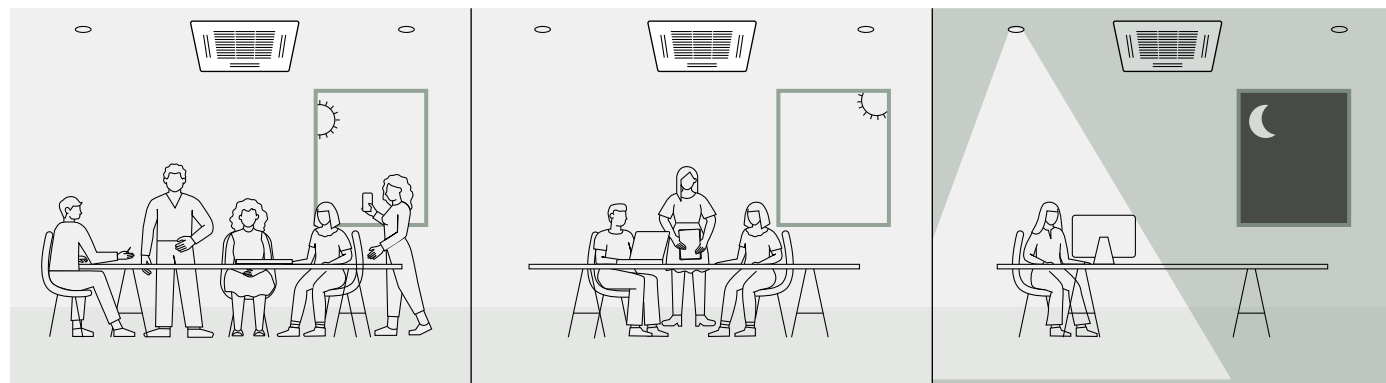
In the morning.
Thorough cooling when there is a high level of activity

In the afternoon.
Reduced cooling when there are fewer people

At night.
Automatic Thermo OFF depending on conditions at the end of the day

Controller for hotel application

Innovative line up of room controllers specially designed for hotel applications. With a modern cosmetic that match room interiors and simple operation for hotel guests.
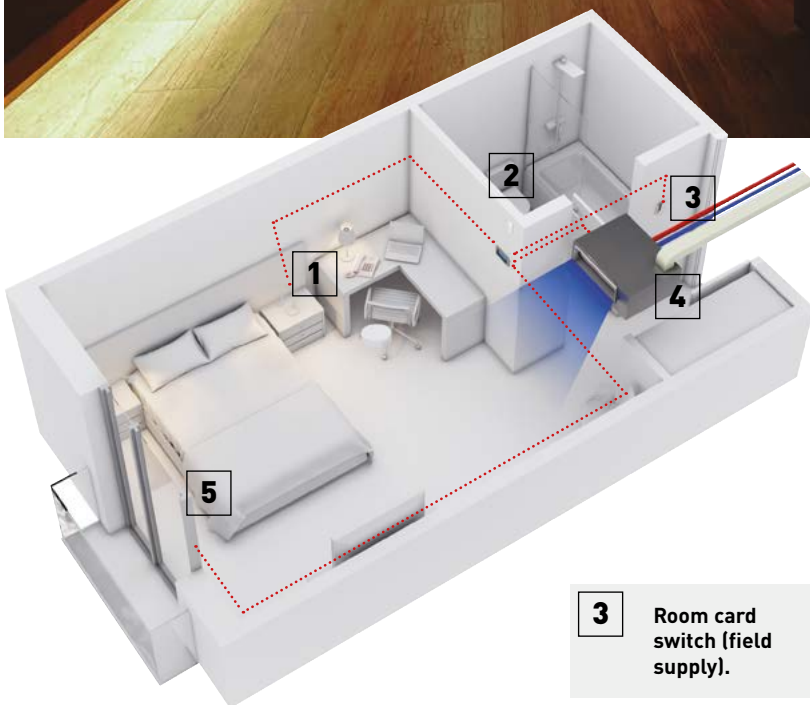
3 Room card switch (field supply).

Controller to integrate all room hotel needs in one device.
Card switch. Heating and cooling control. Light control. Window control. Possible to connect to Modbus.

1 Lighting control.

2 Wall silent motion sensor PAW-WMS-AC (-DC).

4 Indoor unit. Variable static pressure hide-away.

5 Door or window contact PAW-DWC.
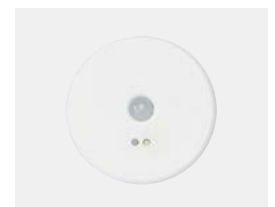
Ceiling silent motion sensor PAW-CMS-AC (-DC).

· Easy to install
· Cost effective installation as all electrical cables are centralized on the remote: The lighting, card contact, motion detector, window contact and the air conditioning are controlled
· Architect inspired attractive design with 2 colors: black or white
· Stand alone and Modbus
· Bespoke finish by special order

Energy saving functions included on the device.
Turns OFF air conditioning and lighting when room is unoccupied. Disables air conditioning when window is open. Configurable maximum/minimum setpoint temperature.

Easy remote controller.
The hotel guest will have access to limited functions to control the air conditioning: ON / OFF, Temperature and Fan speed.

Easy set up.
Stand alone model with easy configuration menu to access all parameters. A pre-define scenario can be uploaded on the remote controller connected to a computer to make installation on site Plug & Play (only on the Modbus models).

NFC fast set up.
With the touch display control and touch room controller setting are quicker than ever. Just touching smartphone with NFC capability the settings will be saved. This function is also possible even when the control is not wired. Giving flexibility to save the setting even before installation.
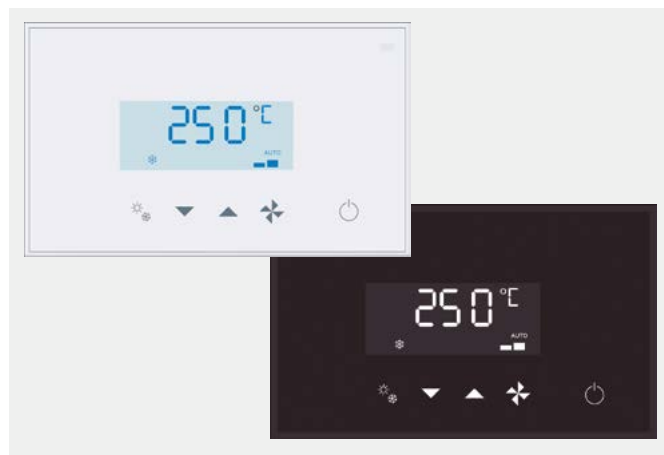
Type	Model	Colors	Digital inputs	Digital output	BMS	Inst. set up	T. sensor
Touch display controller	PAW-RE2D4-WH	White	2			NFC	Built-in
	PAW-RE2D4-BK	Black	2			NFC	Built-in
Touch room controller	PAW-RE2C4-MOD-WH	White	4	4	Modbus	NFC	Built-in
	PAW-RE2C4-MOD-BK	Black	4	4	Modbus	NFC	Built-in

Room controller: 4 digital inputs and 4 digital output

Room controller offers flexibility and easy installation thanks to 4 preconfigured options. This is available in Modbus type. Modbus references: PAW-RE2C4-MOD-WH, PAW-RE2C4-MOD-BK.

Wiring configuration example for option 2 in Modbus type.
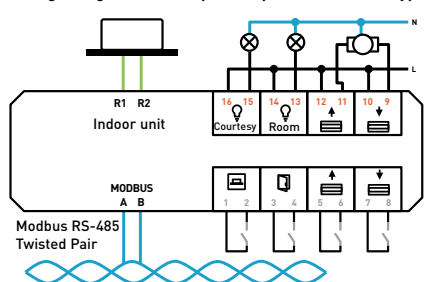
Configurations	4 options available I/O configurations: Inputs				Available I/O Configurations: Outputs			
	Digital	Digital	Digital	Analog	Relay	Relay	Relay	Relay
	1-2	3-4	5-6	7-8	15-16	13-14	11-12	9-10
Option 1	Card	Window	Lighting	Temperature	Courtesy	Lighting	Not used	Valve actuator
Option 2	Card	Window	Blinds up	Blinds down	Courtesy	Lighting	Blinds up	Blinds down
Option 3	Motion sensor	Window	Door contact	Temperature	Courtesy	Lighting	Not used	Valve actuator
Option 4	Lighting	Window	Blinds up	Blinds down	Not used	Lighting	Blinds up	Blinds down

Display: 2 digital inputs

Display control allows to handle 2 inputs to perform most common operation in room hotels.
References: PAW-RE2D4-WH, PAW-RE2D4-BK.

Wiring example for display controller.
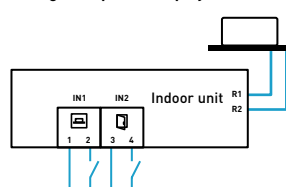
Configurations	3 options available: Inputs	
	IN1 (1-2)	IN2 (3-4)
Option 1	Card	Window
Option 2	Motion sensor	Window
Option 3	Motion sensor	Door contact

Hotel room controller	
PAW-RE2C4-MOD-WH	Modbus RS-485 touch room controller with I/O, white
PAW-RE2C4-MOD-BK	Modbus RS-485 touch room controller with I/O, black
PAW-RE2D4-WH	Touch display control with 2 digital inputs, white
PAW-RE2D4-BK	Touch display control with 2 digital inputs, black

Accessories sensors	
PAW-WMS-DC	Wall silent motion sensor 24 V
PAW-WMS-AC	Wall silent motion sensor 240 V AC
PAW-CMS-DC	Ceiling silent motion sensor 24 V
PAW-CMS-AC	Ceiling silent motion sensor 240 V AC
PAW-24DC	Power supply 24 V
PAW-DWC	Door or window contact

A united BMS interface with S-Link

Introducing a unified BMS interface, compatible with Modbus, BACnet, and KNX protocols. PAW-AC2-BMS-16, 64, 128.
BMS interface with Panasonic communication bus helps you to get significant savings.
Easy to use and reliable interfaces for a straightforward integration.

New
2024

KNX®   **Modbus**®   **Home automation**   **BACnet**™
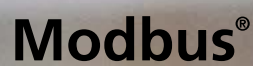
1 Direct connection to S-Link communication bus

The interface can provide faster, cheaper, easier solution in your projects!
· No need for additional gateway (CZ-CFUNC2)
· Significant 50% cost saving for BMS interface*
· Avoid mistakes and reduce configuration time.

* In the case of PAW-AC2-BMS-16 by Panasonic calculation.
** One BMS protocol is available per one interface.

System example with the unified BMS interface.

U1U2 link is connected directly to IntesisBox. Support from 16 to 128 per each interface.
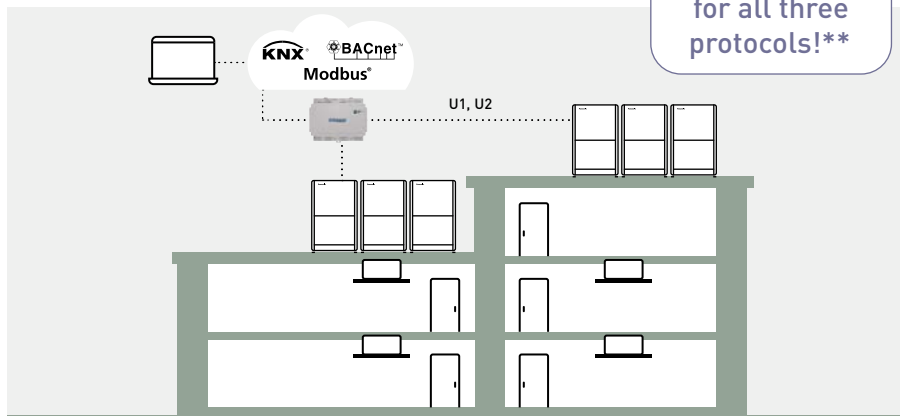
One interface for all three protocols!**

2 Easy configuration

· A single device supporting all Modbus, BACnet, and KNX protocols
· Dedicated configuration support tool (MAPs for Panasonic)
· Firmware updates with improvements and features
· Scan: Automatic identification of the units present in the VRF system
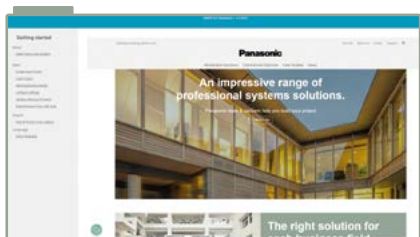
Screen examples of MAPs for Panasonic.
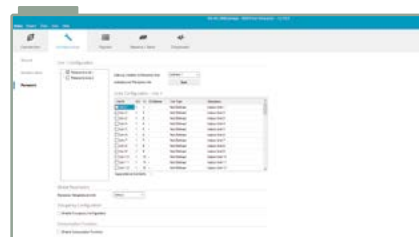
3 Upgraded specifications

· Electricity consumption calculation using three inputs from pulse meters or Modbus meters
· BACnet: Version 14 and BTL Certified
· Modbus and BACnet 128 units now supports IP and RTU/MSTP

Home automation compatibility for Smart Home systems for PAW-AC2-BMS-**

Drivers available for:
· AMX
· Control4
· eedomus
· Elan
· Fibaro
· iRidium
· Eedom
· RTI
· Savant
· Creston
· Kuju
· Vera

Low powered: 24 V DC

Ethernet port

Multifunctional communication ports

USB storage port

PAW-AC2-BMS-16	A unified interface supporting Modbus, BACnet, and KNX protocols for up to 16 indoor units
PAW-AC2-BMS-64	A unified interface supporting Modbus, BACnet, and KNX protocols for up to 64 indoor units
PAW-AC2-BMS-128	A unified interface supporting Modbus, BACnet, and KNX protocols for up to 128 indoor units

Version	Connectable indoor units	Connectable outdoor units	Number of S-Link communication bus port
16	1-16	1-16	1
64	1-64	1-30	1
128	128 (1-64 / S-Link communication bus port)	60 (1-30 / S-Link communication bus port)	2

Control and connectivity

A wide variety of control options to meet the requirements of different applications.

Centralized control systems

Centralised control.

P-AIMS core software.
Up to 1024 indoor units.
CZ-CSWKC2

Intelligent controller.

Intelligent controller.
Up to 256 indoor units touch screen with web server.
CZ-256ESMC3

Panasonic AC Smart Cloud.

Cloud internet control.
Up to 128 groups. Controls 128 units.
CZ-CFUSCC1

Connection with general equipment.

ON / OFF control for external devices such as ERV.
Controls 1 unit.
CZ-CAPC3

Demand control for PACi and Mini ECOi outdoor units.
Up to 4 outdoor units.
CZ-CAPDC3

Mini Seri-Para I/O Unit 0 - 10 V.
Controls 1 indoor unit or a group of 8 indoor units.
CZ-CAPBC2

Communication Adaptor.
Up to 128 groups. Controls 128 units.
CZ-CFUNC2

Domestic integration to S-Link - CZ-CAPRA1

Can connect RAC range to S-Link. Full control is now possible.

Integrates any unit in big system control.
· YKEA server room integration [1]
· Small offices with domestic indoors
· Tender for refurbishment (old system Domestic and VRF in one installation)

[1] When duty rotation using the remote controller is set up, CZ-CAPRA1 cannot be connected.

Current control area

Need to control RAC by central controllers

CZ-CAPRA1
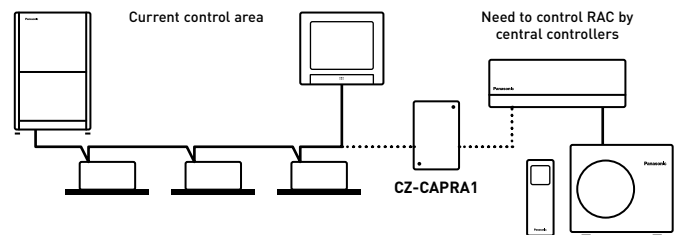
Current system for PACi / VRF. Central controller can connect to S-Link line to control units directly.

RAC units cannot connect directly to S-Link to be managed by Central Controllers.

It's necessary to have interface between S-Link and RAC protocol to cover basic operating items.

Centralized Control Systems: 64 indoor units

Intelligent controller / Web Server: 256 indoor units

Panasonic AC Smart Cloud

Basic operation items: ON / OFF, Mode select, Temperature setting, Fan speed, Flap setting, Remote control prohibit.
External input: ON / OFF control signal, Abnormal stop signal.
External output for Relay [1]: Operation status (ON / OFF), Alarm status output.

[1] Because current CN-CNT connector can not provide the power for external output relay, additional 12 V DC power supply for external relay is necessary.

Easy connection to KNX, Modbus, Lonworks, BACnet and Propietary Home Automation Systems

Easy and reliable solution to integrate your Panasonic heating and cooling systems into any B.M.S or E.M.S. Fully bi-directional communications with all necessary parameters.

For more information, contact Panasonic.

KNX Modbus®
BACnet Home Automation

Interface

LONMARK INTERNATIONAL

CZ-CLNC2
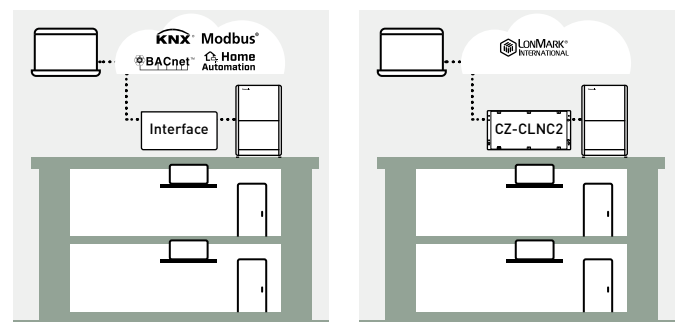
		Econavi control	Built-in thermostat	Indoor units which can be controlled	Use limitations	Function ON / OFF	Mode setting	Fan speed setting	Temperature setting	Air flow direction	Permit/Prohibit switching	Weekly program	BMS protocol
Individual controllers													
Design wired remote controller	CZ-RTC5B	✔	✔	1 group, 8 units	· Up to 2 controllers can be connected per group	✔	✔	✔	✔	✔	—	✔	—
CONEX Wired remote controller	CZ-RTC6W CZ-RTC6 Non-wireless	✔	✔	1 group, 8 units	· Up to 2 controllers can be connected per group	✔	✔	✔	✔	✔	—	—	—
	CZ-RTC6WBL CZ-RTC6BL With Bluetooth®	✔	✔	1 group, 8 units	· Up to 1 controller can be connected per group	✔	✔	✔	✔	✔	—	✔	—
	CZ-RTC6WBLW CZ-RTC6BLW With Wi-Fi and Bluetooth®	✔	✔	1 group, 8 units	· Up to 1 controller can be connected per group	✔	✔	✔	✔	✔	—	✔	—
Touch room controller for hotel with Dry Contact and Modbus	PAW-RE2C4-MOD-WH PAW-RE2C4-MOD-BK WH: White, BK: Black. Bespoke finish available on request.	—	✔	1 indoor unit	—	✔	✔	✔	✔	—	✔	—	Modbus + 4 digital I/O signals
Touch display control for hotel with Dry Contacts	PAW-RE2D4-WH PAW-RE2D4-BK WH: White, BK: Black. Bespoke finish available on request.	—	✔	1 indoor unit	—	✔	✔	✔	✔	—	✔	—	Stand Alone + 2 digital inputs
Infrared remote controller	CZ-RWS3 + CZ-RWRU3W CZ-RWS3 + CZ-RWRY3 CZ-RWS3 CZ-RWS3 + CZ-RWRL3 CZ-RWS3 + CZ-RWRD3 CZ-RWS3 + CZ-RWRT3 CZ-RWS3 + CZ-RWRC3	✔	—	1 group, 8 units	· Up to 2 controllers can be connected per group	✔	✔	✔	✔	✔ [1]	—	—	—
Centralized controllers													
System controller with weekly timer	CZ-64ESMC3	✔	—	64 groups, maximum 64 units	· Up to 10 controllers, can be connected to one system · Main unit/sub unit (1 main unit + 1 sub unit) connection is possible · Use without remote controller is possible	✔	✔	✔	✔	✔ [1]	✔	✔	—
Central ON / OFF controller	CZ-ANC3	—	—	16 groups, maximum 64 units	· Up to 8 controllers (4 main units + 4 sub units) can be connected to one system · Use without remote controller is impossible	✔	—	—	—	—	✔	—	—
Intelligent controller (touch screen/ web server)	CZ-256ESMC3	✔	—	Main unit: 128. Up to 256 units can be expanded	· Communication adaptor CZ-CFUNC2 is necessary for connection with more than 128 units	✔	✔	✔	✔	✔ [1]	✔	✔	—

1. Setting is not possible when a remote controller unit is present (use the remote controller for setting). * All specifications subject to change without notice.

Individual controllers wired

CONEX wired remote controller

CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW [1]
· 3 line-up: - CZ-RTC6W // CZ-RTC6: Non-wireless
     - CZ-RTC6WBL // CZ-RTC6BL: Bluetooth®
     - CZ-RTC6WBLW // CZ-RTC6BLW: Wi-Fi and Bluetooth®
· Colours: 6W: White. 6: Black
· Intuitive control with stylish design profile
· Clean face with full flat and LCD display
· Dimension (H x W x D): 86 x 86 x 25 mm

Panasonic H&C Control App [2].
· Daily remote control operation via Bluetooth®
· Quick and easy App set-up for system setting

Panasonic H&C Diagnosis App [3].
· Easy access to service parameters and service checker data via Bluetooth®

Panasonic Comfort Cloud App
· Especially designed for end users
· Remote operation via Wi-Fi

Basic operation.
· Mode setting: Heat / Cool / Dry / Fan / Auto
· Temperature setting
· Fan speed: 5 levels
· Air flow direction
· nanoe™ X and Econavi setting
· Weekly program [4]

1) Compatible with PACi NX Series.
2) CZ-RTC6WBL, CZ-RTC6BL, CZ-RTC6WBLW or CZ-RTC6BLW required.
3) A service checker interface is required. Compatible with PACi NX Series.
4) Can be set from Panasonic H&C Control App.

Design wired remote controller

CZ-RTC5B
· Power consumption monitor (only for PACi)
· Flat face design and touch sensor switch for stylish design and operating usability
· Functions such as for energy saving and monitoring and for service use are available on the full dot LCD (3,5" display)
· Improved illumination
· White LED backlit
· Blink when alarm occurs

Datanavi.
· Scan and save AC system info
· Easy access to manual database
· Commissioning, F-Gas check data history

* Panasonic App is required on your smartphone.

Basic Operation.
· Operation
· Mode
· Temperature setting
· Air flow volume
· Air flow direction

Timer function.
· Outing function
· Weekly program timer
· Easy ON / OFF timer
· Time display

Energy saving.
· Outing function
· Temperature setting range limitation
· Temperature auto return
· OFF remind
· Schedule demand control
· Energy saving mode
· Energy monitoring

Others.
· Key lock
· Ventilation fan control
· Display contrast adjustment
· Remote controller sensor
· Quiet operation mode
· Prohibit setting control from central controller
· Rotation / backup control

* Power consumption monitoring is available for all PACi systems except R410A PACi Standard.
* Rotation and backup control with CZ-RTC5B is available for all PACi systems.

Room controller for hotel rooms

PAW-RE2C4-MOD-WH // PAW-RE2C4-MOD-BK
· Easy to install
· Cost effective installation as all electrical cables are centralised on this remote
· Architect inspired attractive design
· Direct connection to the Indoor unit with all primary functions of indoor unit available
· 2 options available: Stand alone and Modbus communication
· Colours: WH: White. BK: Black
· Room controller: 4 digital inputs and 4 digital outputs

From this remote controller.
The lighting, card contact, motion detector, window contact and the air conditioning are controlled.

Energy saving functions included on the device.
· Turns OFF air conditioning and lighting when room is unoccupied
· Disables air conditioning when window is open
· Maximum/minimum setpoint temperature configurable

Fast and simple set up.
Set up is simple and easy for room controllers. It is extremely easy and quick with touch models, which can be set up by using smartphone with NFC technology, even when control is not yet installed / powered.
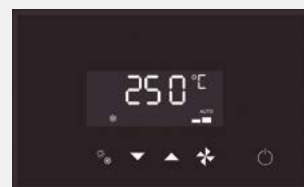
Display control for hotel rooms

PAW-RE2D4-WH // PAW-RE2D4-BK
· Easy to install
· Cost effective installation as all electrical cables are centralised on this remote
· Architect inspired attractive design
· Direct connection to the Indoor unit with all primary functions of indoor unit available
· Stand alone communication
· Colours: WH: White. BK: Black
· Basic hotel function: 2 digital inputs

From this remote controller.
The card contact, motion detector, window contact and the air conditioning are controlled.

Energy saving functions included on the device.
· Disables air conditioning when window is open
· Maximum/minimum setpoint temperature configurable

Fast and simple set up.
Set up with smartphone with NFC technology, even when control is not yet installed/powered.
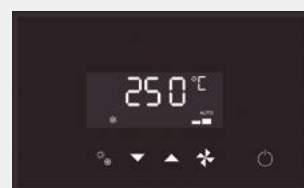
Individual wireless controllers

Infrared remote controller

CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 //
CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3
· Easy installation for the 4 Way Cassette type by simply replacing the corner part
· 24 hour timer function
· Remote controller by main remote controller and sub controller is possible (maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit)
· When CZ-RWS3 is used, infrared control becomes possible for all indoor units (1: when a separate receiver is set up in a different room, control from that room also becomes possible. 2: automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted)
· Operation of separate energy recovery ventilators (when commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote controller (interlocked operation with the indoor unit or independent ventilation ON / OFF)

Infrared remote controller and receiver for 4 way 90x90 cassette. CZ-RWS3 + CZ-RWRU3W

Infrared remote controller and receiver for 4 Way 60x60 cassette PY3 (with a panel). CZ-RWS3 + CZ-RWRY3

Infrared remote controller for wall-mounted, 4 way 60x60 with panel and floor console. CZ-RWS3

Infrared remote controller and receiver for 2 way cassette. CZ-RWS3 + CZ-RWRL3

Infrared remote controller and receiver for 1 way cassette. CZ-RWS3 + CZ-RWRD3

Infrared remote controller and receiver for ceiling. CZ-RWS3 + CZ-RWRT3

Infrared remote controller and receiver for all indoor units. CZ-RWS3 + CZ-RWRC3

Remote sensor

CZ-CSRC3
· This remote sensor can be connected to any PACi or VRF unit. Use it to detect the room temperature when no remote controller sensor or body sensor is used (connection to a system without a remote controller is possible)
· For joint use with a remote controller switch, use the remote controller switch as main remote controller
· Batch group control for up to 8 indoor units
· Appearance design based on simplified remote controller chassis
· Dimensions (H x W x D): 120 x 70 x 17 mm
· Weight: 70 g
· Temperature/Humidity range: 0 °C to 40 °C / 20% to 80% (no condensation) (indoor use only)
· Power supply: 16 V DC (supplied from indoor unit)
· Maximum number of connectable indoor units: Up to 8 units

Control contents		Part name, model No.	Quantity
Standard control	· Control of the various operations of the indoor unit by wired or infrared remote controller · Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller · Switching between remote controller sensor and body sensor is possible	High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3	1 unit each
(1) Group control	· Up to 8 units can be connected to 1 remote controller · Operation of all indoor units in the same mode	High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3	8 units
(2) Main/ sub. remote controller	· Maximum 2 remote controllers per indoor unit · The button pressed last has priority · Timer setting is possible even with the sub remote controller	Main or sub.: High spec wired remote controller: CZ-RTC5B CONEX wired remote controller: CZ-RTC6W // CZ-RTC6 // CZ-RTC6WBL // CZ-RTC6BL // CZ-RTC6WBLW // CZ-RTC6BLW Infrared remote controller: CZ-RWS3 + CZ-RWRU3W // CZ-RWS3 + CZ-RWRY3 // CZ-RWS3 // CZ-RWS3 + CZ-RWRL3 // CZ-RWS3 + CZ-RWRD3 // CZ-RWS3 + CZ-RWRT3 // CZ-RWS3 + CZ-RWRC3	As required

Centralised controllers

System controller with schedule timer

CZ-64ESMC3
Operation with various functions from central station.
Panasonic unveils state-of-the-art digital controller.
Panasonic's innovative and easy to use interface that offers full functionality with an integrated schedule timer and system controller, making managing heating and cooling systems easier than ever before. The CZ-64ESMC3 includes Panasonic's popular schedule timer, which gives users full flexibility over when they want their property heated or cooled. Users can adjust the system for holidays, pausing operations for long periods of time so that energy isn't wasted heating or cooling an empty home or office. The controller also allows six operations per day to be programmed.

Mix of current 2 controllers: System controller + schedule timer.
System controller will be designed by taking priority on these 2 operations with following technical key points:
· Same operation feeling as wired remote controller by touch-key panel
· High visibility and usability by full-dot LCD
· Based on high wired remote controller
· Maximum 64 group of indoor units, individual control for 64 units
· 4 zone control; 1 zone = maximum 16 groups
· Several energy saving function (based on CZ-RTC5B)
· 6 timer program per day for 1 week (7 days) operation (total 6 x 7= 42 programs)
· Basic setting items (Temperature, Mode, Fan speed, Flap position) can be set by same manner as CZ-RTC5B

Function list:
Central control functions:
· Central control / individual setting
  - Start-stop prohibition for remote controller
  - Start-stop / Mode change / Temperature setting prohibition for remote controller
  - Mode change / Temperature setting prohibition for remote controller
  - Mode change prohibition for remote controller
  - Select items for prohibition
· Filter information
  - Filter sign
  - Filter sign reset
· Ventilation setting

Timer functions and external I/O:
· Weekly timer
  - Timer setting enable / disable
  - Copy of timer setting
· Maintenance
  - External signal (Start / Stop) (Demand control)
  - Centralized control master-slave setting
  - Alarm history
· Initial setting
  - Clock

Energy saving, maintenance and operating functions:
· Energy saving control
  - Econavi ON / OFF
· Filter information
  - Filter sign and hour counter display
· Maintenance
  - Service contact
· Initial setting
  - Clock display setting
  - Name Setting
  - Operation lock setting
  - Operation sound setting
  - LCD contrast setting
  - LCD backlight setting
  - Select displayed language (EN/FR/IT/ES/DE)
  - Administrator password
· Setting information list

ECONAVI

Sample display image / Operation status display

Operation Status ALL

Operation Status ZONE

Operation Status GROUP

ON / OFF controller

CZ-ANC3
Only ON / OFF operation from central station.
· 16 groups of indoor units can be controlled
· Collective control and individual group (unit) control can also be performed
· Up to 8 ON / OFF controller (4 main, 4 sub) can be installed in one link system
· The operation status can be determined immediately
· Dimensions (H x W x D): 121 x 122 x 14 + 52 mm (embedding dimension)

Power supply: 220 to 240 V AC.
I/O part: Remote input (effective voltage: within 24 V DC): All ON / OFF.
          Remote output (allowable voltage: within 30 V DC): ON, Alarm.

Note: As operation mode and temperature settings are not possible with the ON / OFF controller, it must be used together with a remote controller, a system controller etc.
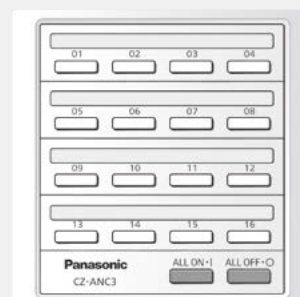
Centralised controllers

Intelligent controller (touch screen panel)

CZ-256ESMC3
Simplified load distribution ratio (LDR) for each tenant.
· Dimensions (H x W x D): 240 x 280 x 20 (+60) mm
· Power supply: Single phase 100-240 V ~ 50/60 Hz
· Maximum number of connectable indoor units: 256 units (maximum per link: 64 units)
· Maximum number of connectable outdoor units: 120 units (maximum per link: 30 units)
· Central control device: Up to 10 units
· Enlarged display screen: 10,4 inch touch-panel colour LCD. Pursuing visibility, ease of use. Retrieve
  data from USB memory: Place the USB port inside the panel (USB memory available in stores)
· Communication adaptor: CZ-CFUNC2*

* CZ-CFUNC2 is required to connect more than 128 indoor units.

ECONAVI

Functions:
· Graph display (trends, comparisons)
· Econavi ON / OFF
· Outdoor unit quiet operation ON / OFF
· Energy saving functions: Set temperature auto return settings,
  Auto shut OFF, Set temperature range limit settings, Energy
  saving for PAC current value,etc.
· Event control (such as equipment linkage)
· Performs closing at end of any period

Operation and status.
You can check to operational status (ON / OFF, operating mode,
alarms, etc.) of all indoor units and outdoor units in real time.
You can also select indoor units to change their settings.

Operation scheduling.
You can register daily operation schedules (ON / OFF time,
operating modes, set temperatures, etc.) for individual indoor
units or groups of indoor units.
Operations can be schedule for up to 2 years in advance.

Load distribution calculation for each tenant.
· Air-conditioner load distribution ratio is calculated for each unit
  (tenant) with used energy consumption data (m³, kWh)
· Calculated data is stored as a CSV type file
· Data from the last 365 days is stored

Web application. Web access and control from remote station.
· Accessing from remote PC
· You can monitor/operate system by using web browser

Remote controller.
The LAN terminal on this unit enables you connect it to a network.
Connecting to Internet will enable you to operate the unit and
check the status using a PC from a remote location*.

* Remote access rights and additional IT infrastructure / programming may be required.
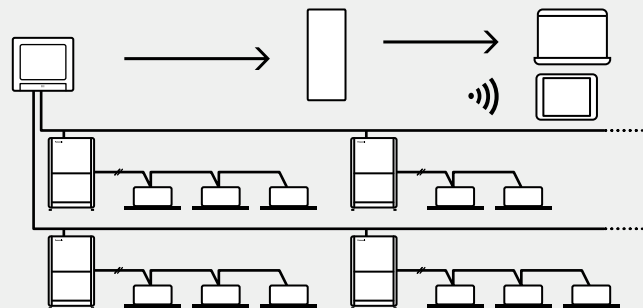
Backup tool to save your commissioning time.
Various data such as distribution, setting, log history etc. can be
saved by CSV file.
Setting data of CSV file is available to edit and import to the
controller again.
You can save time for commissioning and change setting flexibly
and easily by your PC.
· Customize data
· Data recovery
Data can be imported again by
general USB.
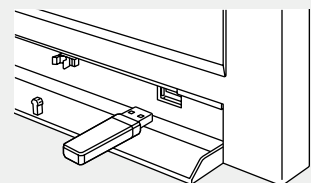
System configuration example.

Intelligent controller
Inter-unit control wiring (no polarity)
Inter-unit control wiring (no polarity)
Pulse meter x 3
Signal input x 3
Signal output x 2
Communication adaptor control wiring (RS-485 (polarity present))
Communication adaptor
Inter-unit control wiring (no polarity)
Pulse meter x 3
Inter-unit control wiring (no polarity)
Communication adaptor control wiring (RS-485 (polarity present))
Signal input x 3
Signal output x 2

Linked systems #1
Linked systems #2
Linked systems #3
Linked systems #4
Distribution group
Area group

P-AIMS core software

CZ-CSWKC2 / P-AIMS core software.
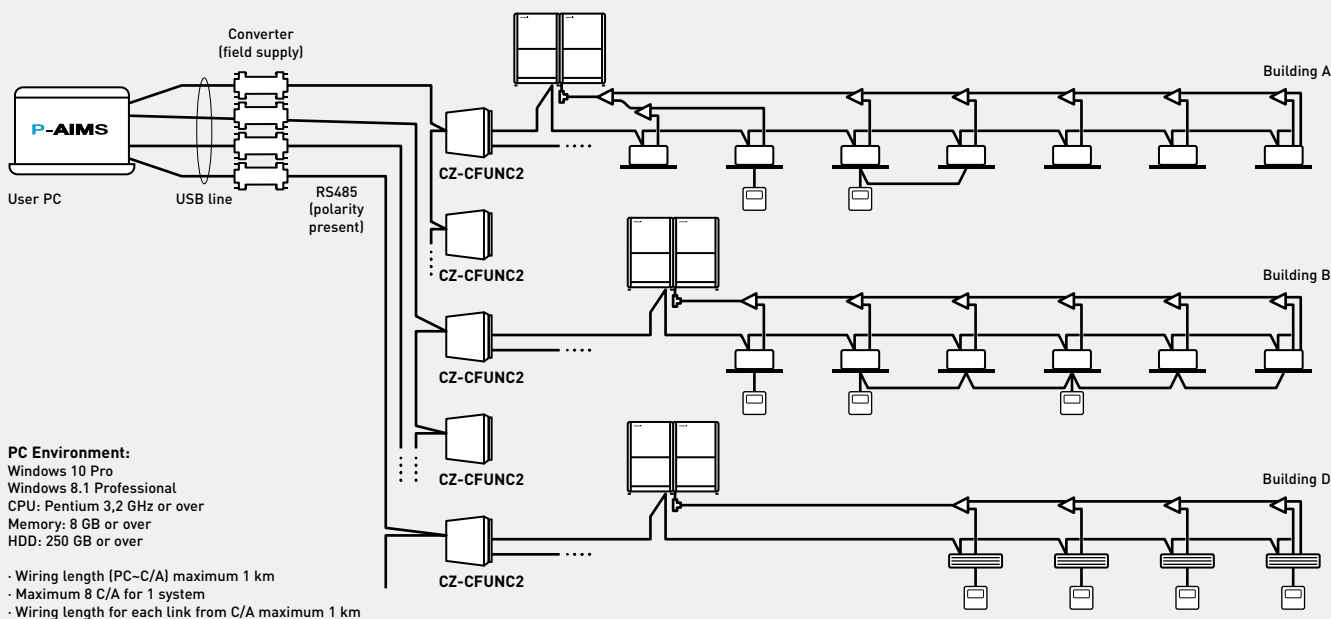Centralised software to control up to 1024 indoor units.

Functions of basic software.
· Standard remote controller for all indoor units.
· Many timer schedule programs can be set on the calender.
· Detailed information display for alarms.
· CSV file output with alarm history, operating status.
· Automatic data backup to HDD.
P-AIMS is suitable for large shopping centers and universities with many areas/ buildings. 1 "P-AIMS"
PC can have 4 independent systems at once.
Each system can have maximum 8 C/A units, and control maximum 512 units. In total, 1024 indoor units
can be controlled by 1 "P-AIMS" PC.

PC Environment:
Windows 10 Pro
Windows 8.1 Professional
CPU: Pentium 3,2 GHz or over
Memory: 8 GB or over
HDD: 250 GB or over

· Wiring length (PC~C/A) maximum 1 km
· Maximum 8 C/A for 1 system
· Wiring length for each link from C/A maximum 1 km

P-AIMS optional software CZ-CSWAC2 / P-AIMS consumption calculation extension.
· Air-conditioner load distribution ratio is calculated for each unit
  (tenant) with used energy consumption data (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 / P-AIMS web application extension.
· Accessing P-AIMS software from remote PC
· You can monitor/operate ECOi System by using web browser
  (Internet Explorer)

P-AIMS optional software CZ-CSWGC2 / P-AIMS layout display extension.
· Operating status monitor is available on the layout display
· Object's layout and indoor unit's location can be checked at once
· Each unit can be controlled by virtual remote controller on the
  display
· Maximum 4 layout screens are shown at once

P-AIMS optional software CZ-CSWBC2 / P-AIMS BACnet extension.
· Can communicate with other equipment by BACnet protocol
· ECOi System can be controlled by both BMS and P-AIMS
· Maximum 255 indoor units can be connected to 1 PC (that has
  P-AIMS basic and BACnet software).

With 4 upgrade packages the basic software can be upgraded to suit individual requirements.

Centralised controllers

Local adaptor for ON / OFF control

CZ-CAPC3
Connection with general equipment.
· Control and status monitoring is possible for individual indoor unit (or any external electrical device up
  to 250 V AC, 10 A) by contact signal

CZ-CAPC3

ON / OFF controller

For example: fan coil unit etc. Total heat exchanger unit.
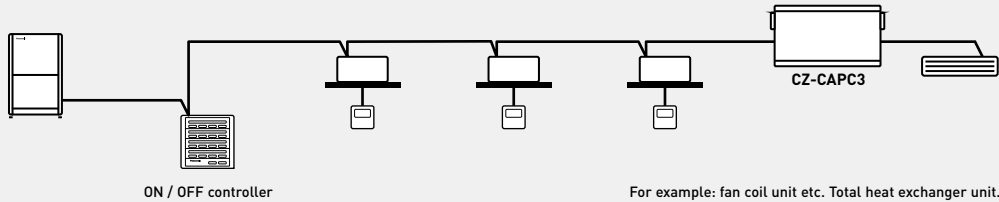
Demand control for PACi and Mini ECOi outdoor units

CZ-CAPDC3
Connection with general equipment.
· Control of both PACi and Mini ECOi outdoor units
· From the central control device, demand control and forced stop are possible

Input: Demand (non-voltage contact / 24 V DC / 2 mA, static signal).
Input: Forced stop operation (non-voltage contact / 24 V DC / 10 mA, static signal).
Forced stop input for fire alarm input control.
3 step demand control for staged control of outdoor unit capacity.

Demand control.

Demand controller

CZ-CAPDC3

Forced stop.

Fire alarm device

CZ-CAPDC3

Central control
device.
Fire alarm device

CZ-CAPDC3

CZ-CAPDC3

CZ-CAPDC3
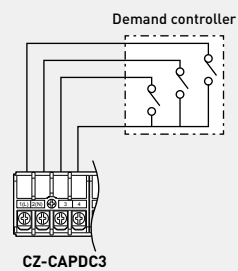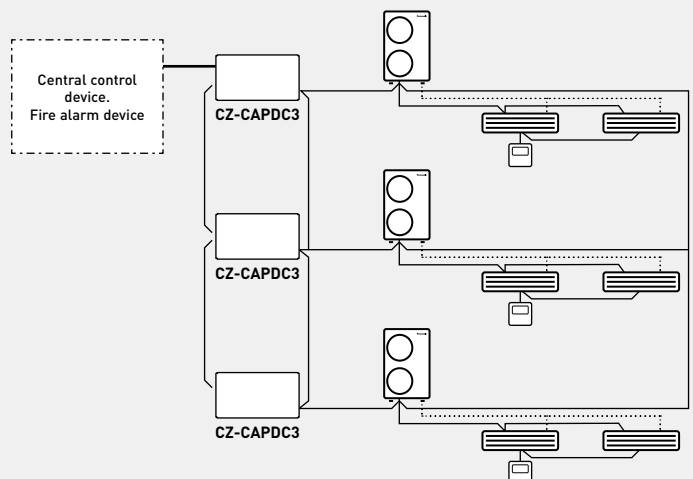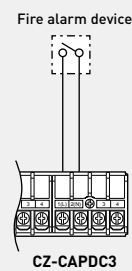
Mini Seri-Para I/O Unit 0 -10 V

CZ-CAPBC2
Connection with general equipment.
· Control and status monitoring is possible for individual indoor unit (1 group)
· In addition to operation and stop, there is a digital input function for air speed and operation mode
· Temperature setting and measuring of the indoor suction temperature can be performed from central monitoring
· Power is supplied from the T10 terminal of the indoor units
· The analog input for demand of the outdoor capacity by 20 steps (from 40% to 120%) by 0-10 V
· The analog input for temperature setting is 0 to 10 V, or 0 to 140 Ohm
· Separate power supply also is possible (in case of suction temperature measuring)

* Ask to your distributor.

Remote station

CZ-CAPBC2

Central control panel
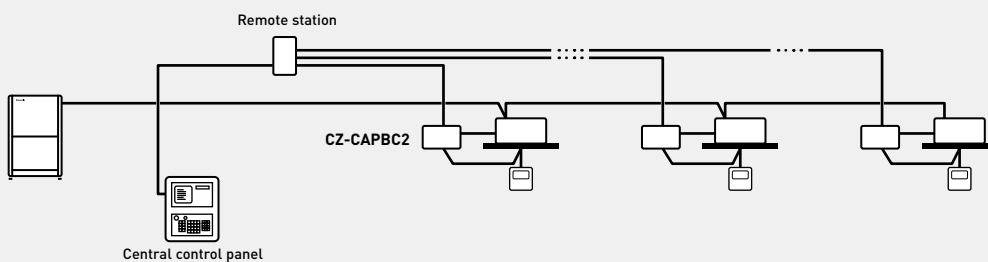
Communication adaptor for VRF connectivity

CZ-CFUNC2
This communication interface is required to connect a ECOi and GHP systems to a BMS. CZ-CFUNC2 is very easy to operate and to connect to the Panasonic S-Link, which is the ECOi bus. From the CZ-CFUNC2, all the indoor and outdoor units of the installation can be easily control. Two linked wiring systems can be connected to one CZ-CFUNC2.
Dimensions (H x W x D): 260 x 200 x 68 mm

* As this is not a splash-proof design, it must be installed indoors or in the control panel, etc.

PACi and VRF connectivity

Controls and connectivities are the key to offer better comfort and price. Panasonic offers its customers cutting-edge technology, specially designed to ensure our air conditioning systems deliver optimal performance.

BMS CONNECTIVITY

PACi, ECOi and ECO G connectivity.

The interface has been designed specifically for Panasonic and provides complete monitoring, control and full functionality of the line-up from IntesisHome, KNX, Modbus, BACnet and LonWorks installations.
This connectivity solution with "PAW" model names is made by a third party company, please contact Panasonic for more information.

	Room controller	Interface	BMS Type	Maximum number of indoor units connected
PACi / ECOi indoor units	SER8150R0B1194 / SER8150R5B1194		Modbus / BACnet	1 unit/group
	PAW-RE2C4-MOD-WH / PAW-RE2C4-MOD-BK		Modbus	1 unit/group
		PAW-RC2-KNX-1i	KNX	1 (1 group of indoor units)
		PAW-RC2-MBS-1	Modbus RTU [1]	1 (1 group of indoor units)
		PAW-RC2-MBS-4	Modbus	4 Indoor/groups
		PAW-RC2-BAC-1	BACnet	1
		PAW-AZRC-KNX-1	KNX	1 (1 group of indoor units)
		PAW-AZRC-MBS-1	Modbus RTU [1]	1 (1 group of indoor units)
		PAW-AZRC-BAC-1	BACnet	1
PACi / ECOi / ECO G S-Link		**NEW** PAW-AC2-BMS-16	KNX, Modbus and BACnet	16
		NEW PAW-AC2-BMS-64	KNX, Modbus and BACnet	64
		NEW PAW-AC2-BMS-128	KNX, Modbus and BACnet	128
		CZ-CLNC2	LonWorks	16 groups of maximum 8 indoor units, in total maximum 64 indoor units

1) Interface Modbus RTU/TCP is needed in case if Modbus TCP connection. PAW-MBS-TCP2RTU (ModBus RTU Slave devices).

Airzone. Control of the hide-aways

Airzone has developed interfaces to easily connect to Panasonic Commercial hide-away units. Ensuring optimum performance, comfort and energy savings, the system is efficient and easy to install.

Airzone full range of accessories for any duct project.

Different type of outlets

Also plenum automatic doors

Full range of remote controls (wired / Infrared, …)

AIRZONE

Airzone interface   Room control   Air outlet
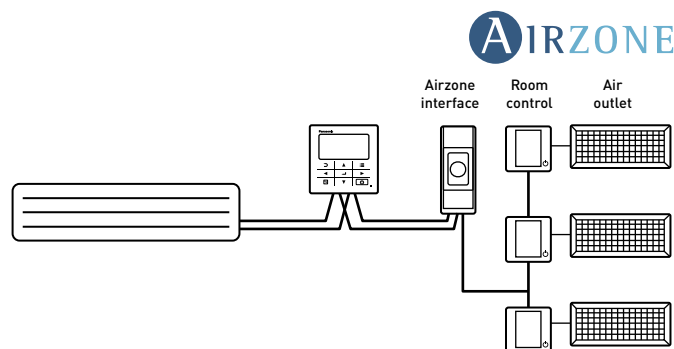
PACi, ECOi and ECO G connectivity indoor units

PCB's and cables for PACi, ECOi and ECO G indoor units.

Name of the cables	Function	Comment
CZ-T10	All T10 functions	Requires field supplied accessory
PAW-FDC	Operate external fan	Requires field supplied accessory
PAW-OCT	All option monitoring signals	Requires field supplied accessory
CZ-CAPE2	3-Pipe control PCB	Requires additional wires from spare part supply
PAW-EXCT	Forced Thermo OFF/Leakage D.	Requires field supplied accessory

Name of the PBC	Function	Comment
PAW-T10	All T10 functions	Allows easy connection "Plug & Play"
PAW-PACR4	PCB for server room application. Available for PACi, ECOi or ECO G.	Interface for redundant operation up to 4 indoor unit groups

T10 connector (CN061)

CZ-T10
Panasonic has developed an optional accessory (consisting of plug + wires) called CZ-T10 to enable an easy connection to this T10 connector.

Connecting an ECOi indoor unit to an external device is easy. The T10 terminal featured in the electronic circuit board of all indoor units enables digital connection to external devices.

T10 terminal specification (T10: CN061 at indoor unit PCB).
· Control items: 1. Start / stop input
　　　　　　　2. Remote controller prohibit input
　　　　　　　3. Start signal output
　　　　　　　4. Alarm signal output
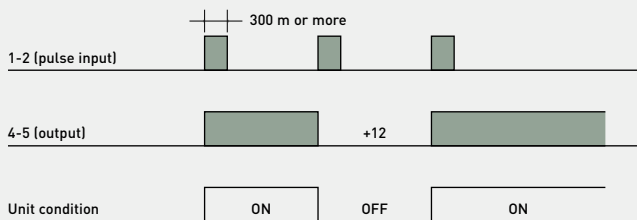
NOTE: The wire length from indoor unit to the relay must be within 2,0 m. Pulse signal changeable to static by cutting jumper JP001.

· Condition:
1. 1-2 (pulse input): Unit ON / OFF condition switching with a pulse signal. (1 pulse signal: shortage status more than 300 msec. or more)
2. 2-3 (static input): open / operation with remote is permitted (normal condition) close / remote controller is prohibited
3. 4-5 (static output): 12 V output during the unit ON / no output at OFF
4. 5-6 (static output): 12 V output when some errors occur / no output at normal
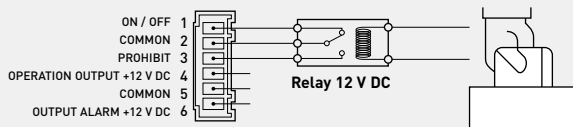· Example of wiring:
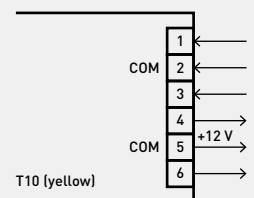
Usage example.
Forced OFF control.
Term 1 and 2: Free contact for ON / OFF signal (cut *JP1* for static signal) when the hotel card is it connected the contact must be close (the unit can be used).
Term 2 and 3: Free contact to prohibit all function in the remote controller install in the room when the hotel card is it removed the contact must be closed (the unit can not work).
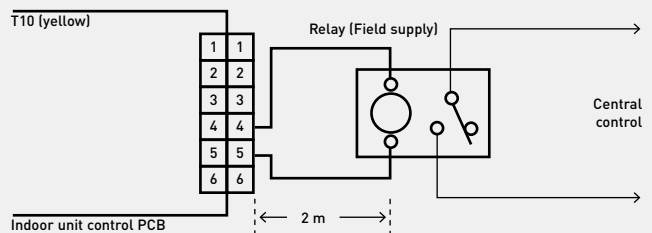
Terminal = T10

Operation ON / OFF signal output.
· Condition:
　4-5 (static output): 12 V output during the unit ON / no output at OFF
· Example of wiring:

Note: The wire length from indoor unit to the Relay must be within 2,0 m. Pulse signal changeable to static by cutting jumper JP001.
* PACi NX Series is not compatible.

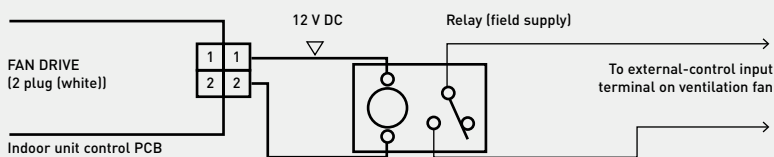# Fan drive connector (CN032)

PAW-FDC
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-FDC to enable an easy connection to this fan drive connector (CN032).

Operating the ventilation fan from the remote controller
· Start / stop of external ventilation and total heat exchanger fans
· Works even if indoor unit is stopped
· In case of group control > all fans will operate; no individual control
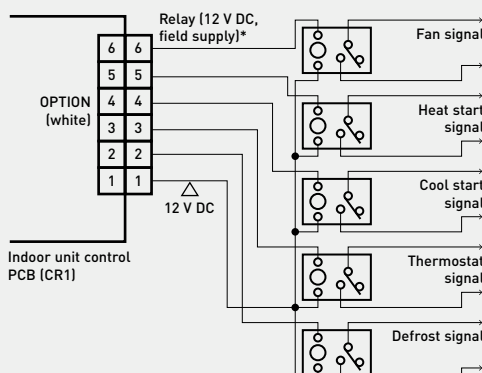
External fan ON / OFF

Option connector (CN060) output external signals

PAW-OCT
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-OCT to enable an easy connection to this Option Connector (CN060).

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

6P (white): Outputs external signals as shown in the figure below.

* The relay must be installed at a distance of 2 m or less from the PCB.

EXCT connector (CN073)

PAW-EXCT
Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-EXCT to enable an easy connection to this EXCT Connector (CN073).

A) With static input.
**> STATIC INPUT > THERMO OFF > ENERGY SAVING**
2P plug (red): Can be used for demand control. When input is present, forces the unit to operate with the thermostat OFF.

Note: The length of the wiring from the indoor unit control PCB to the relay must be 2 m or less.

· Examples of wiring:

B) Example: In connection with a refrigerant sensor.
· Signal from leakage detector: non voltage, static.
· Indoor unit setting: Code 0b > 1
· Connector for leak detector: EXCT
· Outdoor unit setting:
  Code C1 > 1 power output if alarm from O2 connector 230 V
  Code C1 > 2 power output if alarm from O2 connector 0 V
· Displayed alarm message P14
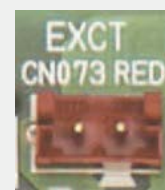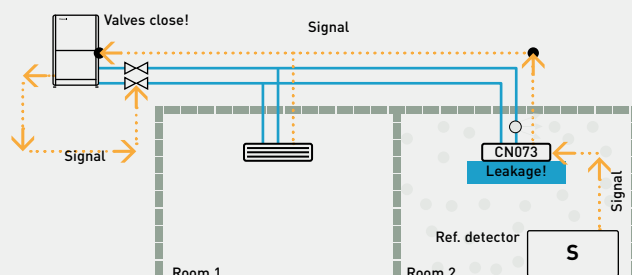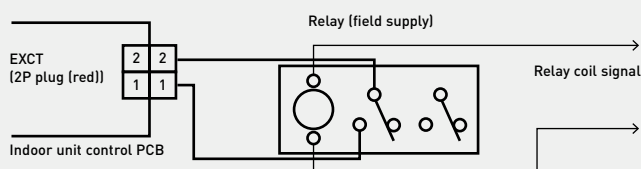
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⚠ Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of the other refrigerant.
The outdoor units in this catalogue contains fluorinated greenhouse gases with a GWP higher than 150.

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