



Solutions for server rooms

Effectively protect your IT related spaces, 24/7, with a complete range of solutions offering redundancy control.



A wide range of solutions for 24h/7d a week operation

Offering a wide range of solutions for server room applications, with high efficiency products which can provide reliable cooling all year round.

Find your perfect server room solution.

Choose from our wall-mounted professional inverter solution specifically designed for sever room applications, or our flexible PACi range providing a variety of indoor units to suit any space.



YKEA server room solution.

- Perfect solution for smaller server rooms
- Compact design
- High efficiency
- High seasonal performance
- Range of capacities available
- Operation down to -25 °C ambient



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-PACR3 only. 2) For Big PACi 20 kW unit.

YKEA series

Designed for 24/7 operation, with improved SEER and SCOP to achieve top class energy efficiency and aerowings 2.0 technology for enhanced airflow distribution.



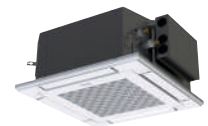
Wall-mounted Professional unit -25 °C

PACi NX series

A wide range of indoor units providing more flexibility and scalability to your installation.



Wall-mounted unit - PK3



4 way 60x60 cassette - PY3



4 way 90x90 cassette - PU3



Ceiling unit - PT3

Big PACi

Providing higher capacities for larger server room applications.



High static pressure hide-away unit - PE3
(20,0 - 25,0 kW)



Adaptive ducted unit - PF3

Redundancy for computer and server rooms

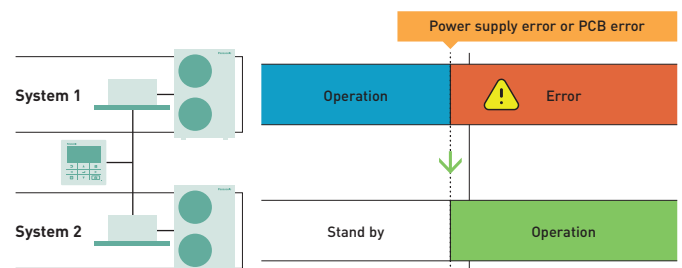
Computer and server rooms are very sensitive areas of application. Any downtime caused by high room temperatures must be avoided by any means. Air conditioner redundancy is one of the key points to ensure a reliable nonstop cooling operation.

Redundancy is mainly ensured by three different functionalities, which are provided by all redundancy solutions offered by Panasonic.



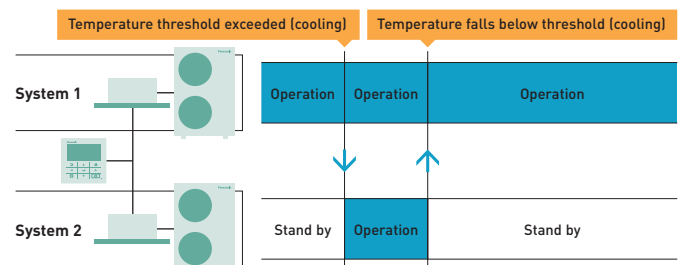
1 Backup operation

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



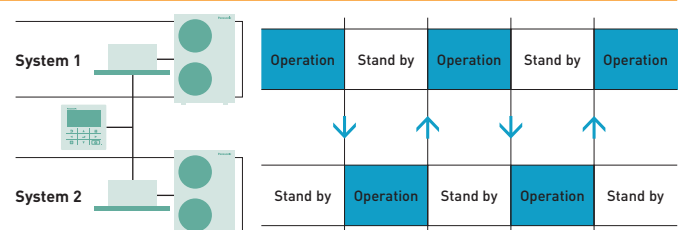
2 Support operation

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.



3 Rotation operation

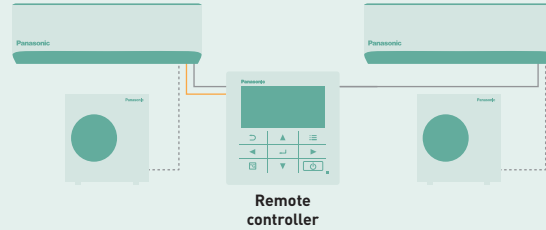
Backup and support operation are key functions for a redundant operation in computer rooms. This concept implies a main system and a sub system. In order to avoid an imbalance of the operating hours of the systems, the redundancy control equalises the operation time by rotating the main and the sub systems,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



Redundancy control options

YKEA integral solution

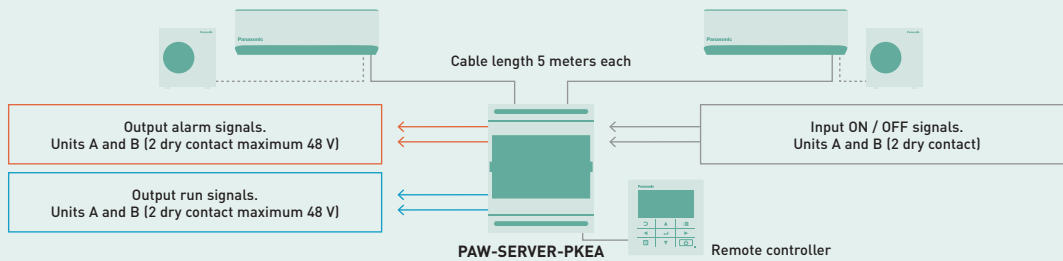
- Ideal solution for small server rooms, providing full redundancy functionality integrated in YKEA's remote controller (requires optional CZ-RCC5 cable set)
- Up to 2 YKEA systems connectable to 1 remote controller
- Individual alarm display for each system
- Operation can be monitored by H&C Controls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



Optional interface for YKEA units

PAW-SERVER-PKEA

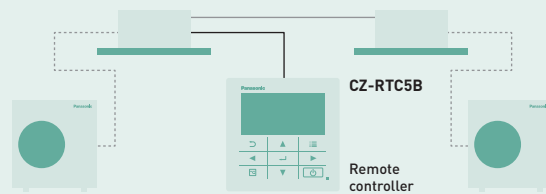
- Ideal solution for small server rooms, providing full redundancy functionality
- Up to 2 YKEA systems connectable to PAW-SERVER-PKEA
- Additional benefits: Operation and alarm outputs for each system, ON / OFF inputs for each system for connection to external BMS



PACi integral solution

CZ-RTC5B / CZ-RTC6BL / CZ-RTC6BLW

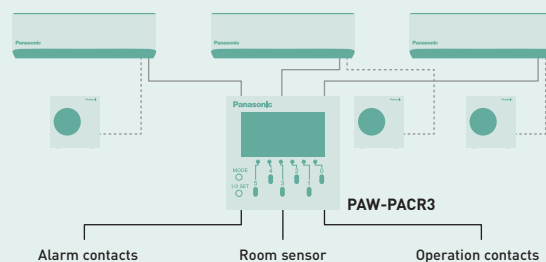
- Full redundancy functionality
- Quick and easy installation using PACi group control
- Up to 2 PACi systems connectable to 1 remote controller
- Delta T setting for support operation selectable from 4 to 10 K
- Connectable to Panasonic centralised control systems
- Optional interfaces for connection to external BMS (Modbus, Bacnet, KNX)



Optional interface for 2 or 3 PACi NX systems

PAW-PACR3

- Redundancy control of 2 or 3 PACi NX systems with up to 8 indoors per group
- Operation and alarm status digital outputs for each unit
- Common digital alarm status output
- For each support operation level, individual temperature thresholds can be set
- Alarms can be output when a temperature threshold is exceeded
- Room temperature display (by device's own temperature sensor)



Central control options

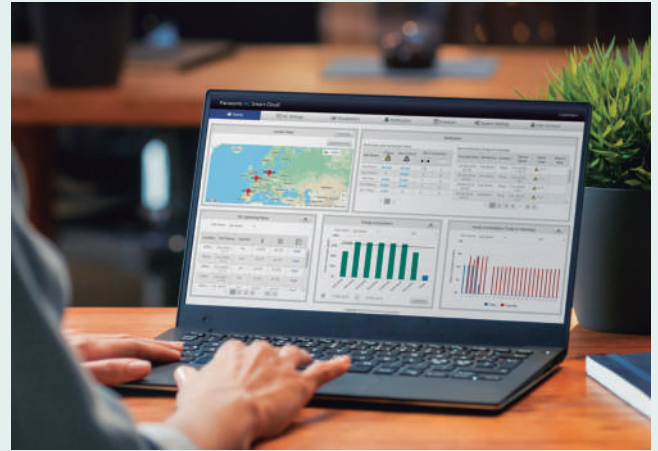
Smart multi-site control solution



Panasonic AC Smart Cloud.
Centralise control of your business premises, from wherever you are, 24/7/365. Offering you complete control of all your installations from your tablet or computer. In a simple click, receive status updates from your installations wherever the location, reducing potential breakdowns and optimising costs.



Panasonic AC Service Cloud.
New solution for service and maintenance companies. 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.



Installation



Connectivity



Reliability



Use



Roles and permission



Security

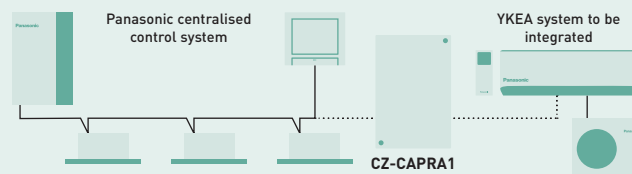
Integrating YKEA room air conditioners to Panasonic centralised control

CZ-CAPRA1

This interface allows the central control of YKEA air conditioners via the Panasonic S-Link communication bus line.

Panasonic centralised controllers are connected to the S-Link communication bus line which is inherent in Panasonic commercial systems like PACi or ECOi. YKEA air conditioners, however, cannot be connected directly to S-Link. They require the optional interface CZ-CAPRA1 to allow control by centralised controllers. Apart from functions like ON / OFF, operation mode, set temperature, fan speed, flap position etc., this interface also provides digital inputs and outputs*.

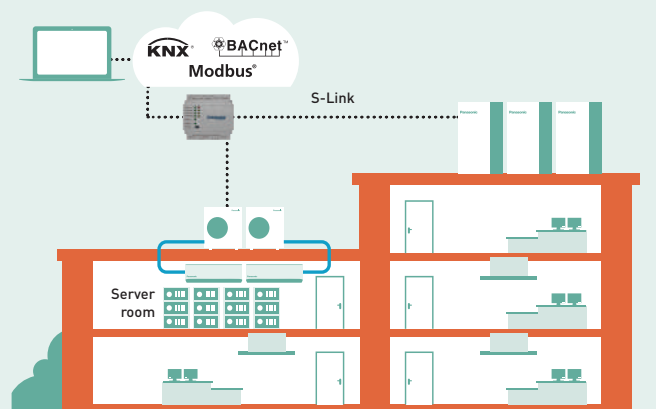
* CZ-CAPRA1 cannot be used when 2 YKEA units are connected for redundancy operation.



BMS connectivity

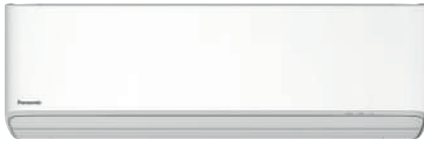
Interfaces between BMS and the Panasonic S-Link communication bus line allow the control of up to 128 indoor units.

PAW-AC2-BAC-16P	BACnet IP and MSTP interface for 16 indoor units
PAW-AC2-BAC-64P	BACnet IP and MSTP interface for 64 indoor units
PAW-AC2-BAC-128P	BACnet IP and MSTP interface for 128 indoor units
PAW-AC2-MBS-16P	Modbus RTU and TCP interface for 16 indoor units
PAW-AC2-MBS-64P	Modbus RTU and TCP interface for 64 indoor units
PAW-AC2-MBS-128P	Modbus RTU and TCP interface for 128 indoor units
PAW-AC2-KNX-16P	KNX interface for 16 indoor units
PAW-AC2-KNX-64P	KNX interface for 64 indoor units



The BMS interface is connected directly to S-Link and can control up to 128 indoor units.

Wall-mounted Professional



Wall-mounted Professional Inverter -25 °C			KIT-Z25-YKEA	KIT-Z35-YKEA	KIT-Z42-YKEA	KIT-Z50-YKEA	KIT-Z71-YKEA
Kit							
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		mm ²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Air flow	Cool / Heat	m ³ /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	m ³ /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 pipe	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
	Gas pipe	Inch (mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	5/8 (15,88)
Pipe length range		m	3~20	3~20	3~20	3~30	3~30
Elevation difference (in / out)		m	15	15	15	15	20
Pipe length for additional gas		m	7,5	7,5	7,5	7,5	10
Additional gas amount		g/m	10	10	10	15	25
Refrigerant (R32) / CO ₂ Eq.		kg / T	0,89/0,60	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. * Available in February 2022. ** 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, back-up, 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.

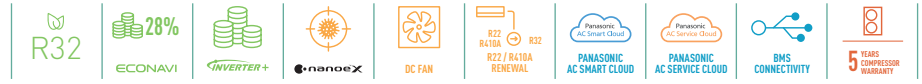
PACi indoor units range*

Dimension indoor



PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

Wall-mounted	Indoor unit	Cooling capacity	Heating capacity	Dimension	Sound pressure ¹⁾	Air flow ²⁾
		kW	kW	H x W x D mm	Hi / Med / Lo dB(A)	Hi / Med / Lo m ³ /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



PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

4 way 60x60 cassette	Indoor unit (panel CZ-KPY4)	Cooling capacity	Heating capacity	Dimension	Panel dimension	Sound pressure ¹⁾	Air flow ²⁾
		kW	kW	H x W x D mm	H x W x D mm	Hi / Med / Lo dB(A)	Hi / Med / Lo m ³ /min
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.

4 way 90x90 cassette	Indoor unit (panels CZ-KPU3W / CZ-KPU3AW)	Cooling capacity	Heating capacity	Dimension	Panel dimension	Sound pressure ¹⁾	Air flow ²⁾
		kW	kW	H x W x D mm	H x W x D mm	Hi / Med / Lo dB(A)	Hi / Med / Lo m ³ /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.

Ceiling	Indoor unit	Cooling capacity	Heating capacity	Dimension	Sound pressure ¹⁾	Air flow ²⁾
		kW	kW	H x W x D mm	Hi / Med / Lo dB(A)	Hi / Med / Lo m ³ /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.

Adaptive ducted unit	Indoor unit	Cooling capacity	Heating capacity	Dimension	External static pressure	Sound pressure ¹⁾	Air flow ²⁾
		kW	kW	H x W x D mm	Nominal (Min - Max) Pa	Hi / Med / Lo dB(A)	Hi / Med / Lo m ³ /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



PANASONIC AC SMART CLOUD and AC SERVICE CLOUD: Optional.

High static pressure hide-away 20,0-25,0 kW	Indoor unit	Cooling capacity	Heating capacity	Dimension	External static pressure at shipment (adjustable)	Sound pressure ¹⁾	Air flow ²⁾
		kW	kW	H x W x D mm	Pa	Hi / Med / Lo dB(A)	Hi / Med / Lo m ³ /min
20,0 kW	S-200PE3E5B	19,5	22,4	486 x 1456 x 916	75 ²⁾ - 120 - 180	46 / 44 / 41	72 / 63 / 53
25,0 kW	S-250PE3E5B	23,2	28,0	486 x 1456 x 916	75 ²⁾ - 130 - 200	47 / 45 / 42	84 / 72 / 59

*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.

Energy saving



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



9,6 SEER

Exceptional Seasonal Cooling Efficiency based on the new ErP regulation. Higher SEER ratings mean greater efficiency - year-round cooling savings!



4,6 SCOP

Exceptional Seasonal Heating Efficiency based on the new ErP regulation. Higher SCOP ratings mean greater efficiency - year-round heating savings!



ECONAVI

Commercial Econavi. Intelligent Human Activity Sensor and new 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+

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



INVERTER

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.



R2 ROTARY COMPRESSOR

Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, it delivers high performance and efficiency.



HIGH EFFICIENCY COMPRESSOR

High efficiency compressor. Compressors that operate with a wider Hz range realize a more efficient operation throughout the year. For Big PACi Series.

High performance and indoor air quality



nanoeX

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



21 dB(A)

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



AEROWINGS

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



FILTER INCLUDED

Filter included. Hide-away with filter included.



BLUEFIN

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



LARGE FAN

Large fan provides larger air flow rate and very quiet operation at low speed.



DC FAN

DC fan: Safe and precise.



R22 R410A R22 / R410A RENEWAL

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

High connectivity



INTEGRATION TO S-LINK

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



OPTIONAL WI-FI

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



BMS CONNECTIVITY

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



PANASONIC AC SMART CLOUD

Panasonic AC Smart Cloud and AC Service Cloud. The AC Smart Cloud 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.



PANASONIC AC SERVICE CLOUD



5 YEARS COMPRESSOR WARRANTY

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

Panasonic®

To find out how Panasonic cares for you, log on to: www.aircon.panasonic.eu

Panasonic Marketing Europe GmbH
Panasonic Heating & Ventilation Air-conditioning Europe
Hagenauer Strasse 43, 65203 Wiesbaden, Germany

heating & cooling solutions