

Panasonic

NEW COMMERCIAL
RANGE
EXTREMELY
EFFICIENT

2013 / 2014



PACi STANDARD



PACi ELITE

NEW COMMERCIAL AIR TO AIR 2013 / 2014

heatingandcoolingsystems

PACi | PACi
STANDARD | ELITE

heating and cooling systems

NEW 2013 / 2014

COMMERCIAL RANGE

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ISO 9000 Series Certification

CERTIFIED TO MS ISO 9002:1994
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAAM)
(Formerly known as Matsushita Industrial Corp. Sdn. Bhd.)
Registration No.: AR 0866



Environment Management Systems Approval Certificate

CERTIFIED TO MS ISO 14001:1997
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAAM)
(Formerly known as Matsushita Industrial Corp. Sdn. Bhd.)
Certification No.: M015802127

NEW

**PACi STANDARD
LINE UP**



PG 10

NEW

**5kW PACi ELITE SUPER
EFFICIENT OUTDOOR UNIT**



PG 10

NEW

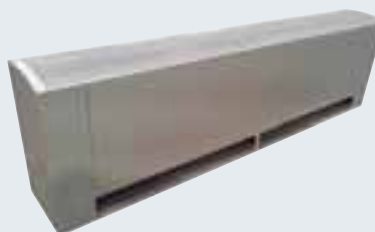
**WALL MOUNTED PKEA FOR
SERVER ROOM APPLICATIONS**



PG 24

NEW

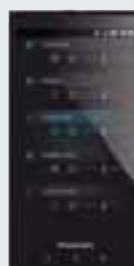
**AIR CURTAIN CONNECTED TO
PACi OUTDOOR UNITS**



PG 48

NEW

CONNECTIVITY SOLUTIONS



PG 64



Panasonic – leading the way in Heating & Cooling

With more than 30 years of experience, selling to more than 120 countries around the world, Panasonic is unquestionably one of the leaders in the heating and cooling sector.

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

History of Air Conditioning Group

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



- 1936**
First electric Fan with Automatic Oscillation (36 cm table top model).
- 1958**
First room air conditioner launched for domestic installation. Prior to this date, air conditioners were large and only for commercial use. Panasonic developed the first compact air conditioner for windows; it was lightweight and easy to install, improving the quality of life in Japanese homes. 1,100 units were sold in Japan in the first year, and just two years later, in 1960, this figure rose to 230,000.
- 1973**
Panasonic launches the first highly efficient air-to-water heat pump in Japan.
- 1975**
Panasonic becomes the first Japanese air conditioner manufacturer in Europe.
- 2002**
The Ion and Oxygen Generator — two of the most important contributions to air conditioning systems.
- 2008**
Etherea new concept of air conditioning systems: high efficiency and high performances with a great design. Etherea also includes a very innovative air quality sensor and air purifier in order to enjoy healthy air at home at all times.
- 2010**
New Aquarea. Panasonic has created Aquarea, an innovative new, low-energy system, designed to help you enjoy ideal temperatures and hot water in your home, even with extreme outdoor temperatures. Aquarea cools or heats to ensure maximum comfort. Aquarea is far cleaner, safer, cheaper and environmentally friendly than alternatives using gas, oil and other electrical systems.
- 2011**
New Eco i VRF solution. The new Panasonic VRF solution for big buildings is the most efficient in the industry in more than 74% of combinations. ECO i satisfies the most demanding standards required by design offices, architects, owners and installers.
- 2012**
New GHP units. Panasonic's gas-driven VRF systems are ideal for projects where power restrictions apply. In 2012, Panasonic extends the Gas Heat Pump range with a new GHP line-up, new GHP G Power (electricity production) and the new Chiller Units.
- 2013**
New ECOi 3-Pipes. The best efficiency for your building. Our New 6 Series 3-Pipes is achieving a COP of 4.77 at full load, and even more when recovering heat from the building. There is no doubt, Panasonic is reducing environmental impact!



Panasonic Europe

Panasonic is committed to offering our customers innovative products in the heating and cooling market across Europe, which not only meet but exceed their requirements. Key to success is Panasonic's investment in R&D, manufacture and training to ensure innovative, cutting edge products and investment in our distribution channels and partners so that these products are accessible in Europe. Panasonic has developed a comprehensive network across Europe of training centers and training academies for installers, design offices and service teams in all major countries.



Panasonic Factories and R&D Department

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

We control the process

The company is also a world leader in innovation as it has filed more than 91,539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's heat pumps. This wish to excel has made Panasonic the international leader in heating and turn-key air conditioning solutions for homes, medium-sized buildings such as offices and restaurants, and large-scale buildings. These offer maximum effectiveness, comply with the strictest environmental standards and meet the most avant-garde construction requirements of our time. At Panasonic we know what a great responsibility it is to install heating and cooling systems. Because offering you the best solutions in heating and cooling matters.

PRODUCTION 100% PANASONIC



SERVICE PROVIDER



RESEARCH & DEVELOPMENT AND DESIGN



TESTING AND QUALITY INSURANCE

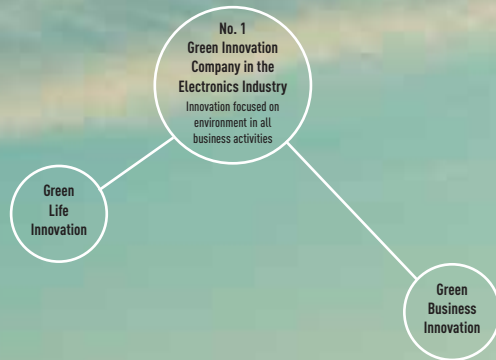


100%
Panasonic

eco
ideas

Eco & smart ideas for a sustainable lifestyle

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



Exemplary sustainable projects



Blackfriars Bridge
London, UK
with Panasonic solar panels.



Skolkovo City
Moscow, Russia
with Panasonic energy saving concept.

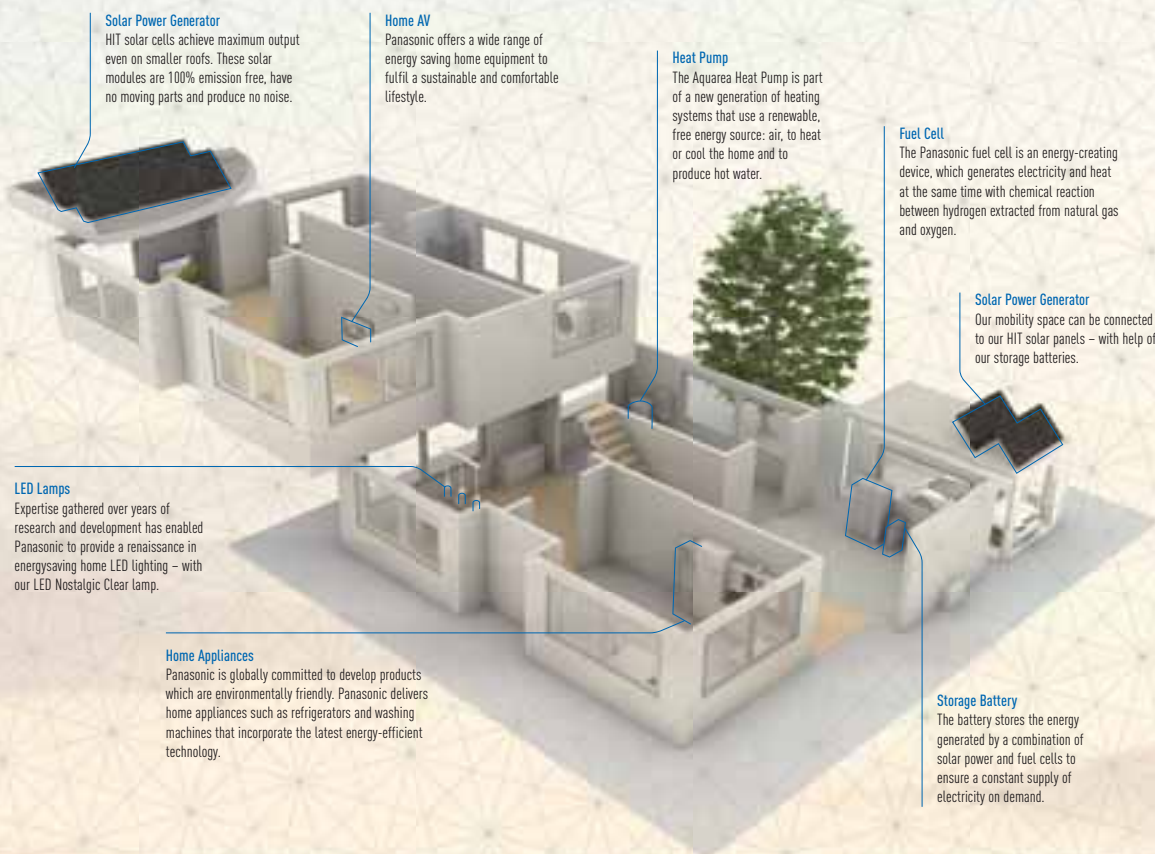


Photosynthesis
Milano Salone, Milano, Italy
with Panasonic LED light bulbs and HIT solar power generators.



Siestorage
Modular energy storage solution with Panasonic lithium ion batteries.

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





Panasonic Professional

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





Panasonic

PRO Club 

Panasonic PRO Club

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

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

www.panasonicproclub.com

or connect simply with your Smartphone to the proclub using this QR:



Panasonic

PRO Academy 

The Panasonic PRO-Academy opens its doors

Panasonic takes its responsibility to its distributors, specifiers and installers seriously and has developed a comprehensive Training Programme. The Panasonic Pro-Academy encompasses the traditional hands-on approach, as well as embracing today's technology to offer an eLearning facility available 24 hours, 7 days a week!

New training courses cover three levels

Design, installation, and commissioning & trouble-shooting

Training courses include:

- Domestic applications Air to Air
- Aquarea air source heat pumps
- VRF ECOi

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



WELCOME TO THE COMMERCIAL RANGE

Here are some of your new air conditioner's major features.

Panasonic has developed an impressive range of highly efficient Commercial Air Conditioners. This range confirms our commitment to the environment. Our Inverter compressors optimise performance and thus reduce energy costs.



PACi
STANDARD

PACi
ELITE

PACi Standard for economy and value

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

PACi Elite, Newly designed next generation commercial!

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

A class energy saving

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

6.8 A++ SEER

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

4.0 A+ SCOP*

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

Down to -15 °C in cooling mode

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

Down to -20 °C in heating mode

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

Environmentally friendly refrigerant

R410A. Environmentally friendly refrigerant.

Easy control by BMS

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

Internet Control Ready

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

5 year compressor warranty

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



A class
energy saving

INVERTER+

PACi
STANDARD

PACi
ELITE

PACi Standard and Elite

Newly designed next generation Commercial Range!

New PACi Standard

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

PACi Elite

DC Inverter can attain both comfort and energy-saving operation.

SEASONAL EFFICIENCY (SCOP)

PRODUCT FOLLOWS THE NEW ECODESIGN REQUIREMENTS

PACi STANDARD
SEER/SCOP

A++/A+

NEW



SEASONAL EFFICIENCY (SCOP)

PRODUCT FOLLOWS THE NEW ECODESIGN REQUIREMENTS

PACi ELITE
SEER/SCOP

A++/A+

NEW



PACi Standard, Improved energy saving

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

PACi Elite

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





PACi Standard: outdoor unit

More compact

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

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

CURRENT MODEL
(1170 x 900 x 320)

**-15%
SMALLER**

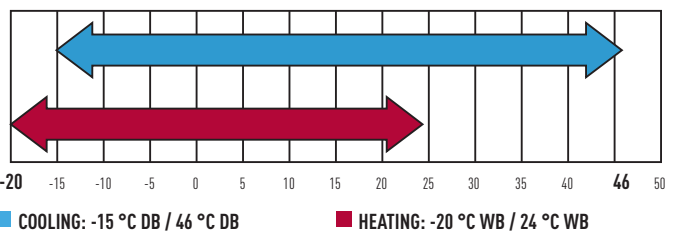


NEW. ON THE 12.5 kW
(996 x 940 x 340)

PACi Elite: outdoor unit

Wide operating range

- Cooling operation is possible when outdoor temperature as low as -15 °C
 - Cooling operation is possible when outdoor temperature as high as 46 °C
 - Heating operation is possible when outdoor temperature as low as -20 °C
- The remote control temperature setting offers a range from 18 °C to 30 °C.



Product Quality and Safety

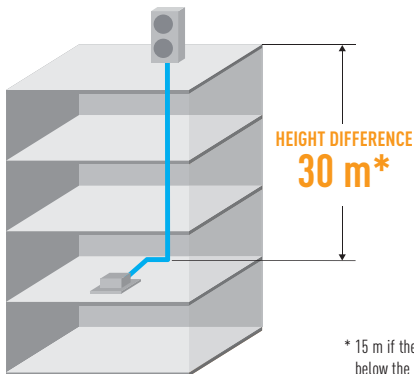
All Panasonic air conditioners undergo strict quality and safety tests before sale. This rigorous process includes obtaining all necessary safety approvals, to ensure that all air conditioners we sell are not only built to the highest market standards, but are also completely safe.

PACi Elite: outdoor unit

Increased Piping Length for Greater Design Flexibility

Adaptable to various building types and sizes.

Max. piping length: 75 m (10.0, 12.5, 14.0 kW). 50m (6.0, 7.1 kW).



* 15 m if the outdoor unit is below the indoor unit.

Compact and Lightweight

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



Quiet mode

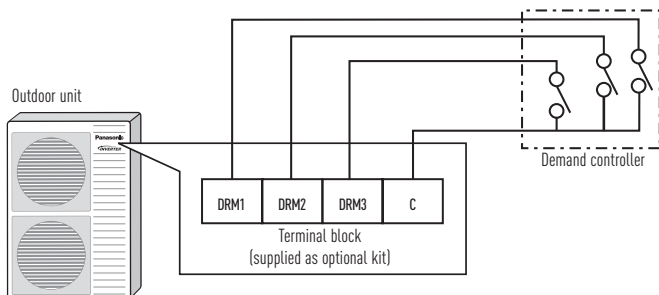
5 dB can be reduced by setting. External input signal is also available.

Demand Response Compliant (CZ-CAPDC3)

This optional part allows demand control of the outdoor unit.

Several level of settings are available:

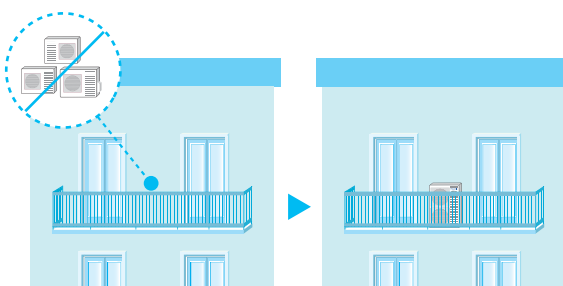
- Level-1, 2, 3 : 75 / 50 / 0 %
- Level-1, 2 can be set in 40 - 100% (40, 45, 50...95, 100: each 5%)



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

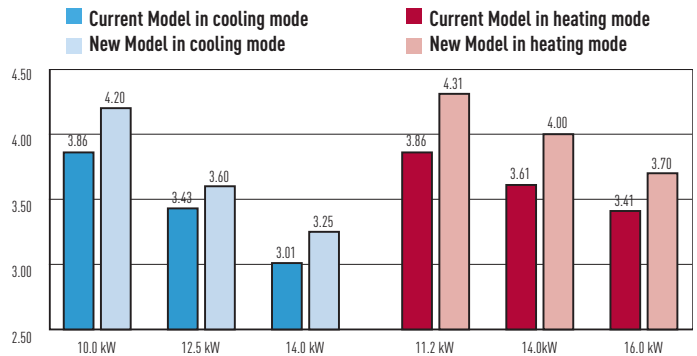
Compact & Flexible-design

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

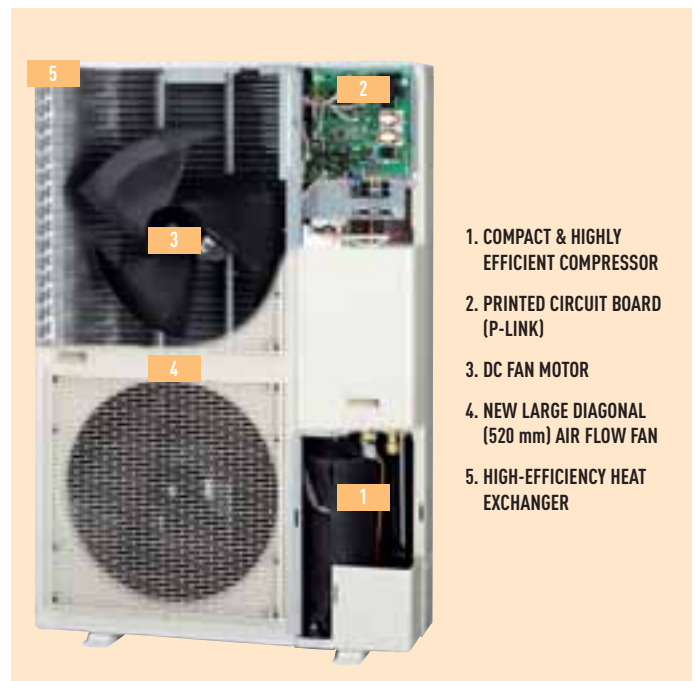


Improved energy saving

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



4 / 5 / 6 HP



Energy saving concept

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

1. Compact & Highly Efficient Compressor. Large-capacity inverter compressor has been adopted. The inverter compressor is superior in performance with improved partial-load capacity.
2. Printed Circuit Board (P-LINK). To improve maintenance, the number of PCBs have been reduced to two.
3. DC fan motor. Considering load and outside temperature, the DC motor is controlled for optimum air volume.
4. New Large Diagonal (520 mm) Air Flow Fan. The fan has been designed to reduce air turbulence and increase efficiency. As fan diameter has been increased to 520 mm, the air volume has been increased by 12% whilst maintaining a low sound level.
5. High-Efficiency Heat Exchanger. The heat exchanger size and the copper tube sizes in the heat exchanger have been redesigned to increase efficiency.



360° Air Flow 4 Way 90x90 Cassette PACi Standard and Elite

4 Way 90x90 Cassette. Wide & Comfortable Airflow

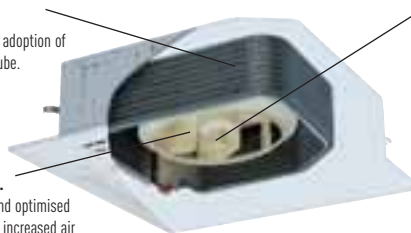
This proprietary design provides a wide and very comfortable airflow. The cassette's wide-angle discharge outlets and flaps are larger in the middle, featuring a shape that was selected based on geometrics and testing of actual prototype units. Air coming out of the center of the discharge outlets travels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

HIGHER EFFICIENCY SPLIT FIN.

Improved heat-transfer coefficient due to adoption of high efficiently grooved heat exchanger tube.

HIGH-EFFICIENT & SILENT TURBO FAN.

The newly developed larger fan chassis and optimised design of the airflow path has resulted in increased air volume and quieter performance.



NEW DC-FAN MOTOR.

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

INDIVIDUAL FLAP CONTROL.

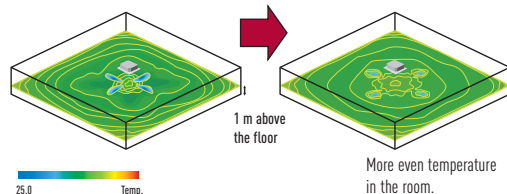
Flexible Air flow direction control by individual flap control is possible. 4 Flaps can be controlled individually by setting on wired timer remote controller. It can make more flexible Air-flow control to be matched to several demands in a room.

New 360° Air Flow for improved comfort

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

CURRENT MODEL

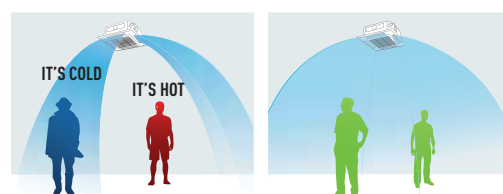
360° AIR FLOW

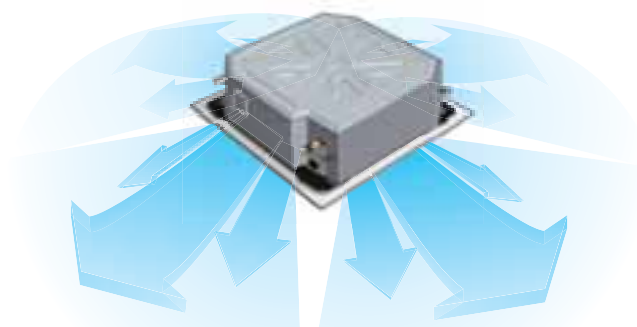


Simulated condition: Floor area: 225 m². Ceiling height: 3 m, Unit 12.5 kW type.

CURRENT MODEL

360° AIR FLOW



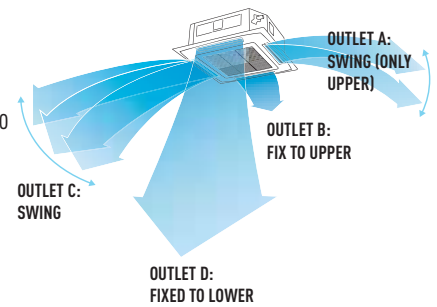


Ample airflow: 36 m³/min
Industry's highest in the 140 PU class.

Flexible 3D air-flow control

Comfort air flow control & proper energy use. Flexible Air flow direction control by individual flap control:

- 4 Flaps can be controlled individually (by standard wired remote controller*).
- Versatile air flow control to cover a wide variety of demands.

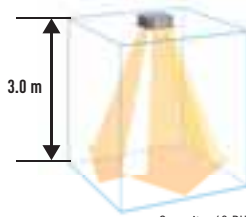


* Pre-setting is required for this function at System Test-run procedure.

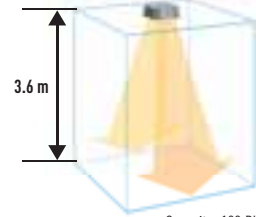
High-Ceiling Installation (Up to 5 m for 100 PU and higher models)

The units can be installed in rooms with high ceilings, where they provide ample floor-level heating in the winter. (See ceiling height guidelines below.)

HIGH CEILING (FACTORY SETTINGS)



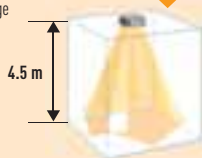
Capacity: 60 PU, 71 PU



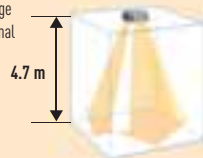
Capacity: 100 PU, 125 PU, 140 PU

INDUSTRY'S TOP-CLASS

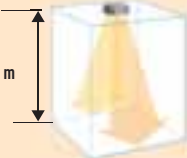
4-way discharge high ceiling settings²



3-way discharge with the optional air-blocking materials



2-way discharge with the optional air-blocking materials



Ceiling height guidelines

Settings ¹	4-way discharge		3-way discharge (optional air-blocking materials)		2-way discharge (optional air-blocking materials) ²
	Factory settings ¹	High ceiling setting ¹	High ceiling setting ²		
Indoor unit: 60PU-71PU	3.0	3.3	3.6	3.8	4.2
Indoor unit: 100PU, 125PU, 140PU	3.6	3.9	4.5	4.7	5.0

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

Easy Maintenance and Cleaning

The flap can be removed easily for washing with water.

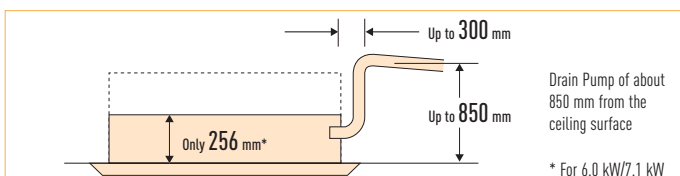


Lighter and Slimmer, Easier Installation

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

A Drain Height of Approx. 850 mm from the Ceiling Surface

The drain height can be increased by approximately 350 mm over the conventional value by using a high-lift drain pump, and long horizontal piping is possible.



Low-Profile 33.5 mm Panel

The square panel integrates seamlessly with the ceiling. Discharge outlets close when the unit is stopped.

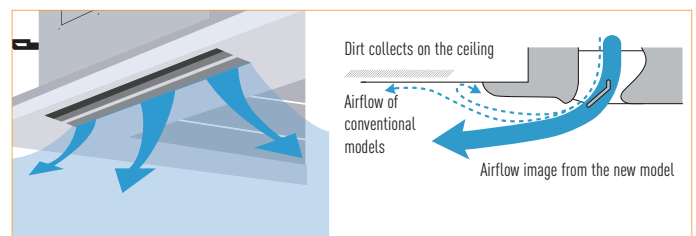
ONE OF THE INDUSTRY'S THINNEST PANELS



New design

Wide direction air discharge by outlet design.

The Circle Flow Flap and re-designed air-outlet eliminate airflow along recessed parts of the ceiling which reduces contamination. If air flows only along these recessed parts, they will quickly become dirty. The new, improved air outlet design therefore greatly reduces dirt accumulation.



PACi Standard and Elite: indoor units

4-Way 60x60 Cassette

Lighter and slimmer, easier installation

Lightweight and very slim which makes installation possible even in narrow ceilings.

A drain height of approx. 850 mm from the ceiling surface

The drain height can be increased by approx. 350 mm over the conventional value by using a high-lift drain pump, and long horizontal piping is possible.

Significant reduction of power consumption by using highly developed DC fan motors with variable speed, special heat exchangers, etc.

Convenient cleaning. The flap can be removed easily for washing.

Wall Mounted

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



Washable front panel.

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



Closed discharge port

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

Quiet operation

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

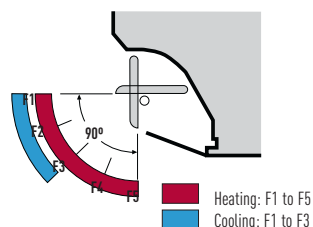
Smooth and durable design

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

Piping outlet in three directions

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

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



Low Static Pressure Hide Away (PN Type)

Ultra-slim profile: 250 mm height for all models.



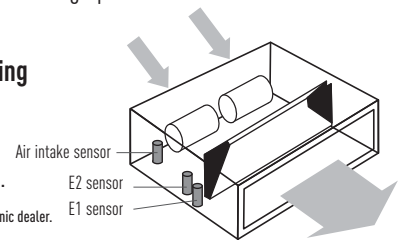
Discharge air temperature control

• Possible to reduce cold drafts at heating operation.

Cold Drafts Reduction at Heating

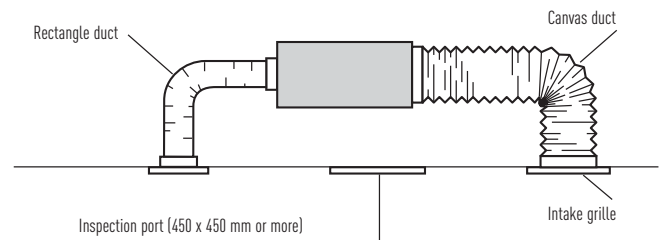
• Accurate temperature measurement by E1/E2 sensor to reduce cold drafts at heating.

Before spec-in, please consult with an authorized Panasonic dealer.



System Example

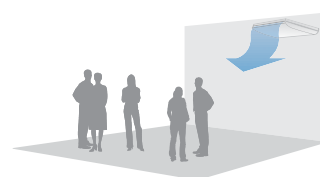
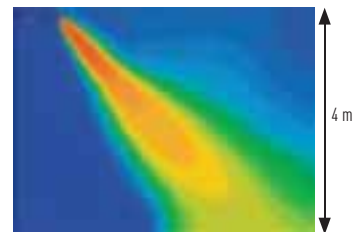
An inspection port (450 mm x 450 mm or more) is required at the control-box side of the indoor unit body.



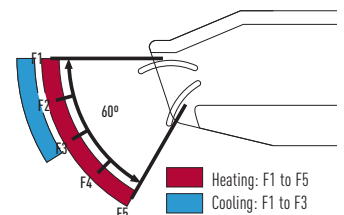
Ceiling

Further comfort improvement

The wide air discharge opening expands the air flow to the left and the right. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, so that the degree of comfort is increased.

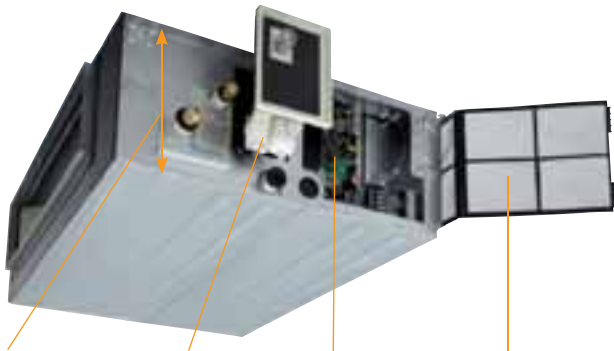


Further comfort improvement with airflow distribution



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

High Static Pressure Hide Away (PF Type)



STANDARDIZED HEIGHT OF 290 mm FOR ALL MODELS

Height standardization enables easy and uniform installation for models with different capacities.

Built-in Drain pump (DC motor pump)

EXTERNAL ELECTRICAL EQUIPMENT BOX MAKES MAINTENANCE EASY
P-link PCB

- Built-in filter
- Side removable filter

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

Type	60	71	100	125	140
Standard	70 Pa	70 Pa	100 Pa	100 Pa	100 Pa
Max. available setting	150 Pa	150 Pa	150 Pa	150 Pa	150 Pa

More powerful drain pump

Using a high-lift drain pump, drain piping can be elevated up to 785 mm from the base of the unit.

Air inlet

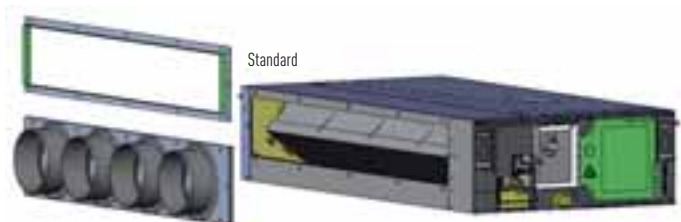
The unit features air inlet on one side, air outlet on the other side. The air inlet filter can be pulled out from the side of the unit and can be folded. Easy access if through the maintenance opening.



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

Air outlet site

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



Round flange : CZ-160DAF2 □200 outlet frange x 4 ports

Circle duct flange (option)

Model	N. of exits with diameters	Model Code
	2 x Ø 200	CZ-56DAF2 (2 SA outlet)
	3 x Ø 200	CZ-90DAF2 (3 SA outlet)
	4 x Ø 200	CZ-160DAF2 (4 SA outlet)

AIRZONE



Control of the PACi Hide Aways by Airzone

Airzone has developed interfaces to easily connect to Panasonic PACi Hide Away units. Ensuring optimum performance, comfort and energy savings, the new system is efficient and easy to install. Interface dimensions: 120 x 25 x 65 cm (W x H x D). Interfaces must be purchased direct from Airzone.

Airzone full range of accessories for any duct project



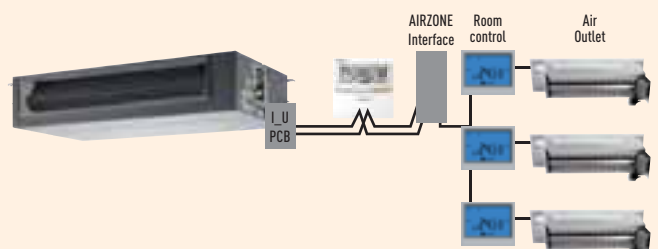
Different type of outlets



Also plenum automatic doors





Full range of RC (wired/wireless, ...)



Range of Commercial units

NEW




WALL-MOUNTED FOR PROFESSIONAL APPLICATIONS	2.8 kW	3.2 kW	4.5 kW	5.0 kW
WALL MOUNTED PKEA*	 CS-E9PKEA	 CS-E12PKEA	 CS-E15PKEA	 CS-E918PKEA

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














INDOOR UNITS PACi STANDARD AND ELITE	3.6 kW	4.6 kW	5.0 kW	6.0 kW
WALL PACi INVERTER+	 S-36PK1E5	 S-45PK1E5	 S-50PK1E5	 S-60PK1E5
4-WAY 60x60 CASSETTE PACi INVERTER+ (FOR TWIN COMBINATIONS)	 S-36PY1E5	 S-45PY1E5	 S-50PY1E5	
4 WAY 90x90 CASSETTE PACi INVERTER+	 S-36PU1E5	 S-45PU1E5	 S-50PU1E5	 S-60PU1E5
LOW STATIC PRESSURE HIDE AWAY PACi INVERTER+	 S-36PN1E5	 S-45PN1E5	 S-50PN1E5	 S-60PN1E5
HIGH STATIC PRESSURE HIDE AWAY PACi INVERTER+	 S-36PF1E5	 S-45PF1E5	 S-50PF1E5	 S-60PF1E5
CEILING PACi INVERTER+	 S-36PT1E5	 S-45PT1E5	 S-50PT1E5	 S-60PT1E5
HIGH STATIC PRESSURE HIDE AWAY 20.0-25.0 kW PACi INVERTER+				
AHU Kit			 CZ-280PAH1	 CZ-280PAH1
AIR CURTAIN JET-FLOW WITH HEX ¹				
AIR CURTAIN STANDARD WITH HEX ¹				











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

NEW

OUTDOOR UNITS PACi STANDARD AND ELITE	5.0 kW	6.0 kW
PACi STANDARD		 U-60PE1E5 ¹
PACi ELITE	 U-50PE1E5 ¹	 U-60PE1E5 ¹

¹ Single Phase ^{III} Three Phase

7.1 kW	10.0 kW	12.5 kW	14.0 kW	20.0 kW	25.0 kW
 S-71PK1E5					
 S-71PU1E5	 S-100PU1E5	 S-125PU1E5	 S-140PU1E5		
 S-71PN1E5	 S-100PN1E5	 S-125PN1E5	 S-140PN1E5		
 S-71PF1E5	 S-100PF1E5	 S-125PF1E5	 S-140PF1E5		
 S-71PT1E5	 S-100PT1E5	 S-125PT1E5	 S-140PT1E5		
				 S-200PE1E8A	 S-250PE1E8
 CZ-280PAH1	 CZ-280PAH1	 CZ-280PAH1	 CZ-280PAH1	 CZ-280PAH1	 CZ-280PAH1
		 PAW-10PAIRC-MJ		 PAW-15PAIRC-MJ	 PAW-20PAIRC-MJ
		 PAW-10PAIRC-MS			 PAW-20PAIRC-MS

7.1 kW	10.0 kW	12.5 kW	14.0 kW	20.0 kW	25.0 kW
 U-71PE1E5 ¹	 U-100PE1E5 ¹ // U-100PE1E8 ^{III}	 U-125PE1E5 ¹ // U-125PE1E8 ^{III}	 U-140PE1E8 ^{III}		
 U-71PE1E5 ¹ // U-71PE1E8 ^{III}	 U-100PE1E5 ¹ // U-100PE1E8 ^{III}	 U-125PE1E5 ¹ // U-125PE1E8 ^{III}	 U-140PE1E5 ¹ // U-140PE1E8 ^{III}	 U-200PE1E8 ^{III}	 U-250PE1E8 ^{III}

WALL MOUNTED PKEA

Complete line-up with high efficiency even at -15 °C

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

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER

7.1 A++ SEER

SEASONAL ENERGY EFFICIENCY RATIO

4.4 A+ SCOP

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -15 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -15 °C in heating mode

OUTDOOR TEMPERATURE

Easy control by BMS

CONNECTIVITY

5 year compressor warranty

INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-E9-PKEA.

			Single Phase			
			2.8 kW	3.2 kW	4.5 kW	5.0 kW
KIT			KIT-E9-PKEA	KIT-E12-PKEA	KIT-E15-PKEA	KIT-E18-PKEA
Indoor			CS-E9PKEA	CS-E12PKEA	CS-E15PKEA	CS-E18PKEA
Outdoor			CU-E9PKEA	CU-E12PKEA	CU-E15PKEA	CU-E18PKEA
Cooling capacity	Nominal (Min-Max)	kW	2.50 (0.85-3.00)	3.50 (0.85-4.00)	4.20 (0.98-5.00)	5.00 (0.98-6.00)
	Nominal (Min-Max)	kCal/h	2,150 (730-2,580)	3,010 (730-3,440)	3,610 (840-4,300)	4,300 (840-5,160)
EER ¹⁾	Nominal (Min-Max)	Energy Saving	4.85 (4.23-5.00) ◀A	4.02 (3.57-5.00) ◀A	3.50 (3.50-3.16) ◀A	3.47 (3.50-3.02) ◀A
SEER	Nominal	Energy Saving	7.1 ◀A++	6.7 ◀A++	6.3 ◀A++	6.9 ◀A++
	Pdesign	kW	2.5	3.5	4.2	5.0
Power input Cooling	Nominal (Min-Max)	kW	0.515 (0.170-0.710)	0.870 (0.170-1.120)	1.200 (0.280-1.580)	1.440 (0.280-1.990)
Annual Energy Consumption (cooling)		kWh/a	123	183	233	254
Heating capacity	Nominal (Min-Max)	kW	3.40 (0.85-5.40)	4.00 (0.85-6.60)	5.40 (0.98-7.10)	5.80 (0.98-8.00)
	Nominal (Min-Max)	kCal/h	2,920 (730-4,640)	3,440 (730-5,680)	4,640 (840-6,110)	4,990 (840-6,880)
Heating capacity at -7°C	Nominal	kW	3.91	4.78	5.14	5.80
COP 1)	Nominal (Min-Max)	Energy Saving	4.86 (4.12-5.15) ◀A	4.35 (3.63-5.15) ◀A	3.75 (2.88-3.24) ◀A	3.82 (2.88-3.11) ◀A
	SCOP	Energy Saving	4.4 ◀A+	4.1 ◀A+	3.9 ◀A	4.2 ◀A+
Pdesign at -10 °C		kW	2.8	3.6	3.6	4.4
Power input Heating	Nominal (Min-Max)	kW	0.700 (0.165-1.310)	0.920 (0.1650-1.820)	1.440 (0.340-2.190)	1.520 (0.340-2.570)
Annual Energy Consumption (heating)		kWh/a	891	1229	1292	1467
Indoor Unit						
Power source	V		230	230	230	230
Recommended Fuse	A		16	16	16	16
Connection indoor / outdoor	mm		4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5
Current (Nominal)	Cooling / Heating	A	2.5 / 3.3	4.0 / 4.2	5.4 / 6.5	6.4 / 6.8
Max. Current		A	7.8	8.4	9.6	11.3
Air Volume	Cooling / Heating	m³/h	798 / 876	816 / 882	846 / 900	1074 / 1158
Moisture removal volume		l/h	1.5	2.0	2.4	2.8
Sound pressure Level ²⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 26 / 23	42 / 29 / 26	43 / 32 / 29	44 / 37 / 34
	Heating (Hi / Lo / S-Lo)	dB(A)	40 / 27 / 24	42 / 33 / 30	43 / 35 / 32	44 / 37 / 34
Sound power level	Cooling / Heating (Hi)	dB	55 / 56	58 / 58	59 / 59	60 / 60
Dimensions ³⁾	H x W x D	mm	295 x 870 x 255	295 x 870 x 255	295 x 870 x 255	295 x 1070 x 255
Net weight		kg	10	10	10	13
Air purifier filter						
Outdoor Unit						
Air Volume	Cooling / Heating	m³/h	1878 / 1782	1974 / 1926	2052 / 1980	2352 / 2274
Sound pressure Level ²⁾	Cooling / Heating (Hi)	dB(A)	46 / 47	48 / 50	46 / 46	47 / 47
Sound power level	Cooling / Heating (Hi)	dB	61 / 62	63 / 65	61 / 61	61 / 61
Dimensions ³⁾	H x W x D	mm	622 x 824 x 299	622 x 824 x 299	695 x 875 x 320	695 x 875 x 320
Net weight		kg	36	36	45	46
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.70)
Refrigerant loading	R410A	kg	1,100	1,100	1.060	1.240
Elevation difference (in/out) ⁴⁾	Max	m	5	5	15	15
	Min / Max	m	3-15	3-15	3-15	3-20
Piping length		m	7.5	7.5	7.5	7.5
Precharge length	Max	m	7.5	7.5	7.5	7.5
Additional charge		g/m	20	20	20	20
Operating range	Cooling Min / Max	°C	-15 / +43	-15 / +43	-15 / +43	-15 / +43
	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit.

Recommended fuse for the indoor 3A.

Specifications subject to change without notice.

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



INCLUDED ON THE KIT

Timer remote controller



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

Technical Focus

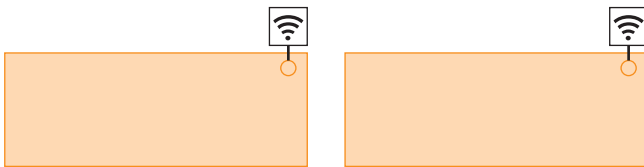
- DESIGNED FOR FOR 24H/7D A WEEK OPERATION
- HIGHLY EFFICIENT EVEN AT -15 °C

Outdoor

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

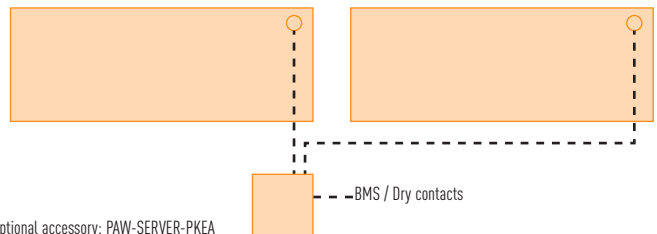
2 INTERFACE OPTIONS TO MANAGE SERVER ROOM OPERATION

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



2 Interface options to manage server room operation: PA-AC-WIFI-1

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



CU-E9PKEA
CU-E12PKEA



CU-E15PKEA
CU-E18PKEA

WALL PACi STANDARD AND ELITE INVERTER+

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

Technical Focus

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



STANDARD

NEW

				Single Phase	
				6.0 kW	7.1 kW
KIT				KIT-60PYK1E5*	KIT-71PYK1E5*
Indoor				S-60PK1E5	S-71PK1E5
Outdoor				U-60PEY1E5	U-71PEY1E5
Cooling capacity	Nom. (Min-Max)	kW	6.0 (2.0-7.0)		7.1 (2.0-7.7)
EER ¹⁾	Nom. (Min-Max)	W/W	3.23 (6.15-2.55) ◀ A		2.90 (6.15-2.57) ◀ D
SEER		W/W	5.4 ◀ A		5.1 ◀ A
Pdesign		kW	6.0		7.1
Power input Cooling	Nom. (Min-Max)	kW	1.860 (0.325-2.750)		2.450 (0.325-3.000)
Annual Energy Consumption ^{2-a)}		kWh/a	930		1225
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	389		487
Heating capacity	Nom. (Min-Max)	kW	6.0 (1.8-7.0)		7.1 (1.8-8.1)
COP ¹⁾	Nom. (Min-Max)	W/W	4.00 (6.55-3.18) ◀ A		3.74 (6.55-3.18) ◀ A
SCOP		W/W	3.9 ◀ A		3.9 ◀ A
Pdesign at -10 °C		kW	6.0		6.0
Power input Heating	Nom. (Min-Max)	kW	1.500 (0.275-2.200)		1.900 (0.275-2.550)
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	2154		2154
Indoor unit					
Air Volume	Cool / Heat	m ³ /h	1080 / 1080		1080 / 1080
Moisture removal volume		U/h	4.2		4.2
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A)	47 / 44 / 40		47 / 44 / 40
	Heat (Hi/Me/Lo)	dB(A)	47 / 44 / 40		47 / 44 / 40
Sound power level	Cool (Hi)	dB	64		64
	Heat (Hi)	dB	64		64
Dimensions	H x W x D	mm	300 x 1065 x 230		300 x 1065 x 230
Net weight		kg	14.5		14.5
Outdoor unit					
Power source		V	220 / 230 / 240		220 / 230 / 240
Recommended fuse		A	20		20
Connection		mm ²	2.5		2.5
Current Cooling		A	8.80 / 8.50 / 8.25		11.70 / 11.30 / 10.90
Current Heating		A	7.05 / 6.80 / 6.60		9.00 / 8.70 / 8.40
Air Volume	Cool / Heat	m ³ /h	1800 / 2100		2340
Sound pressure Level ³⁾	Cool / Heat (Hi)	dB(A)	46 / 50		50 / 52
Sound power level	Cool / Heat (Hi)	dB	65 / 69		70 / 70
Dimensions	H x W x D	mm	569 x 790 x 285		569 x 790 x 285
Net weight		kg	42		42
Piping connections	Liquid pipe	Inch (mm)	3/8 (9.52)		3/8 (9.52)
	Gas pipe	Inch (mm)	5/8 (15.88)		5/8 (15.88)
Refrigerant loading	R410A	kg	1.7		1.7
Elevation dif. (in/out) ⁴⁾	Max	m	30		30
Piping length	Min/Max	m	50		50
Precharge length	Max	m	20		20
Additional charge		g/m	40		40
Operating range	Cool Min/Max	°C	-10 / 43		-10 / 43
	Heat Min/Max	°C	-15 / 24		-15 / 24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

STANDARD

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER+

5.4 A SEER

SEASONAL ENERGY EFFICIENCY RATIO

3.9 A SCOP

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -10 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -15 °C in heating mode

OUTDOOR TEMPERATURE

Easy control by BMS

CONNECTIVITY

Possible to use on R22 pipings

R22 RENEWAL

5 year compressor warranty



U-60PEY1E5
U-71PEY1E5

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

OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2



Wireless control
CZ-RWSK2



Simplified remote controller
CZ-RE2C2



COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



ELITE

		Single Phase		6.0 kW		7.1 kW		Three Phase	
		5.0 kW		6.0 kW		7.1 kW		7.1 kW	
KIT		KIT-50PEK1E5*		KIT-60PEK1E5		KIT-71PEK1E5		KIT-71PEK1E8	
Indoor		S-50PK1E5		S-60PK1E5		S-71PK1E5		S-71PK1E5	
Outdoor		U-50PE1E5		U-60PE1E5		U-71PE1E5		U-71PE1E8	
Cooling capacity	Nom. (Min-Max)	kW	5.0 (1.5-5.6)	6.0 (2.5-7.1)		7.1 (2.5-8.0)		7.1 (3.2-8.0)	
EER ¹⁾	Nom. (Min-Max)	kW	3.21 (5.77-2.49) ◀A	3.85 (5.56 - 3.55) ◀A		3.40 (5.56 - 3.02) ◀A		3.40 (5.71 - 3.02) ◀A	
SEER		W/W	6.0 ◀A+	6.6 ◀A++		6.6 ◀A++		6.1 ◀A++	
Pdesign		kW	5.0	6.0		7.1		7.1	
Power input Cooling	Nom. (Min-Max)	kW	1.560 (0.260-2.250)	1.560 (0.450-2.000)		2.090 (0.450-2.650)		2.090 (0.560-2.650)	
Annual Energy Consumption ^{2-a)}		kWh/a	780	780		1045		1045	
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	292	318		376		407	
Heating capacity	Nom. (Min-Max)	kW	5.6 (1.5-6.5)	7.0 (2.0-8.0)		8.0 (2.0-9.0)		8.0 (2.8-9.0)	
COP ¹⁾	Nom. (Min-Max)	W/W	3.73 (6.82-2.65) ◀A	3.85 (5.00 - 3.23) ◀A		3.76 (5.00-3.10) ◀A		3.76 (5.60-3.10) ◀A	
SCOP		W/W	3.9 ◀A	3.9 ◀A		3.9 ◀A		3.8 ◀A	
Pdesign at -10 °C		kW	4.0	6.0		7.1		7.1	
Power input Heating	Nom. (Min-Max)	kW	1.500 (0.220-2.450)	1.820 (0.400-2.480)		2.130 (0.400-2.900)		2.070	
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	1436	2154		2548		2616	
Indoor unit									
Air Volume	Cool / Heat	m³/h	840 / 840	1080 / 1080		1080 / 1080		1080 / 1080	
Moisture removal volume		U/h	2.8	3.4		4.2		4.2	
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A)	40 / 36 / 32	47 / 44 / 40		47 / 44 / 40		47 / 44 / 40	
	Heat (Hi/Me/Lo)	dB(A)	40 / 36 / 32	47 / 44 / 40		47 / 44 / 40		47 / 44 / 40	
Sound power level	Cool (Hi)	dB	57	64		64		64	
	Heat (Hi)	dB	57	64		64		64	
Dimensions	H x W x D	mm	300 x 1065 x 230	300 x 1065 x 230		300 x 1065 x 230		300 x 1065 x 230	
Net weight		kg	13.0	14.5		14.5		14.5	
Outdoor unit									
Power source		V	220 / 240	220 / 240		220 / 240		380 / 415	
Recommended fuse		A	16	20		20		16	
Connection		mm²	2.5	2.5		2.5		2.5	
Current Cooling		A	7.25 / 7.00 / 6.80	7.15		9.40		3.15	
Current Heating		A	6.95 / 6.75 / 6.50	8.15		9.50		3.20	
Air Volume	Cool / Heat	m³/h	1800 / 2100	3600 / 3600		3600 / 3600		3600 / 3600	
Sound pressure Level ³⁾	Cool / Heat (Hi)	dB(A)	46 / 50	48 / 50		48 / 50		48 / 50	
Sound power level	Cool / Heat (Hi)	dB	65 / 69	65 / 67		65 / 67		65 / 67	
Dimensions	H x W x D	mm	569 x 790 x 285	996 x 940 x 340		996 x 940 x 340		996 x 940 x 340	
Net weight		kg	42	68		69		71	
Piping connections	Liquid pipe	Inch (mm)	1/4 (6.35)	3/8 (9.52)		3/8 (9.52)		3/8 (9.52)	
	Gas pipe	Inch (mm)	1/2 (12.7)	5/8 (15.88)		5/8 (15.88)		5/8 (15.88)	
Refrigerant loading	R410A	kg	1.65	2		2.35		2.35	
Elevation dif. (in/out) ⁴⁾	Max	m	30	30		30		30	
Piping length	Min/Max	m	40	5-50		5-50		5-50	
Precharge length	Max	m	30	30		30		30	
Additional charge		g/m	20	50		50		50	
Operating range	Cool Min/Max	°C	-15 / 46	-15 / 46		-15 / 46		-15 / 46	
	Heat Min/Max	°C	-20 / 24	-20 / 24		-20 / 24		-20 / 24	

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

ELITE

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER+

6.6 A++ SEER*

SEASONAL ENERGY EFFICIENCY RATIO

3.9 A SCOP

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -15 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -20 °C in heating mode

OUTDOOR TEMPERATURE

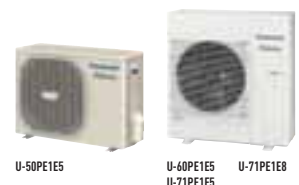
Easy control by BMS

CONNECTIVITY

Possible to use on R22 pipings

R22 RENEWAL

5 year compressor warranty



INTERNET CONTROL READY: Optional.

4 WAY 60x60 CASSETTE PACi STANDARD AND ELITE INVERTER+

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

Technical Focus

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



STANDARD

NEW

			5.0 kW
Indoor			S-50PY1E5*
Panel			CZ-KPY21
Cooling capacity	Nominal	kW	5.0
Heating capacity	Nominal	kW	5.6
Air Volume	Cool/Heat	m ³ /h	750 / 750
Moisture removal volume		l/h	2.8
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A)	41 / 37 / 33
	Heat (Hi/Me/Lo)	dB(A)	41 / 37 / 33
Sound power Level	Cool (Hi)	dB	58 / 54 / 50
	Heat (Hi)	dB	58 / 54 / 50
Dimensions indoor	H x W x D	mm	283 x 575 x 575
Dimensions panel	H x W x D	mm	30 x 625 x 625
Net weight	Indoor (Panel)	kg	16 (2.4)

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) Only for multi combinations.
Recommended fuse for the indoor 3A.
* Available from April 2013.

STANDARD

PANEL

CZ-KPY21



OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2Wireless remote controller
CZ-RWSY2Simplified remote controller
CZ-RE2C2

COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



ELITE

			5.0 kW
KIT			
Indoor			S-50PY1E5*
Outdoor			U-50PE1E5
Panel			CZ-KPY21
Cooling capacity	Nom. (Min-Max)	kW	5.0 (1.5 - 5.6)
EER ¹⁾	Nom. (Min-Max)	W/W	3.04 (5.58 - 2.29) ◀ B
SEER		W/W	5.90 ◀ A+
Pdesign		kW	5.0
Power input Cooling	Nom. (Min-Max)	kW	1.64 (0.260 - 2.45)
Annual Energy Consumption ^{2-a)}		kWh/a	820
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	297
Heating capacity	Nom. (Min-Max)	kW	5.6 (1.5 - 6.3)
COP ¹⁾	Nom. (Min-Max)	W/W	3.12 (6.82 - 2.45) ◀ D
SCOP		W/W	3.80 ◀ A
Pdesign at -10 °C		kW	4.0
Power input Heating	Nom. (Min-Max)	kW	1.79 (0.22 - 2.57)
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	1474
Indoor unit			
Air Volume	Cooling/Heating	m³/h	750 / 750
Moisture removal volume		l/h	2.8
Sound pressure Level	Cooling (Hi/Me/Lo)	dB(A)	41 / 37 / 33
	Heating (Hi/Me/Lo)	dB(A)	41 / 37 / 33
Sound power Level	Cooling (Hi)	dB	58 / 54 / 50
	Heating (Hi)	dB	58 / 54 / 50
Dimensions	H x W x D	mm	283 x 575 x 575
Dimensions panel	H x W x D	mm	30 x 625 x 625
Net weight		kg	16
Outdoor unit			
Power source	V		220 - 240
Recommended fuse	A		16
Connection	mm²		2.5
Current Cooling	Nom. (Min-Max)	A	7.5
Current Heating	Nom. (Min-Max)	A	8.2
Air Volume	Cooling/Heating	m³/h	1800 / 2100
Sound pressure Level ³⁾	Cooling/Heating (Hi)	dB(A)	46 / 50
Sound power Level	Cooling/Heating (Hi)	dB	65 / 69
Dimensions	H x W x D	mm	569 x 790 x 285
Net weight		kg	42
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	1/4 (6.35) / 1/2 (12.7)
Refrigerant Loading	R410A	kg	1.65
Elevation dif. (in/out) ⁴⁾	Max	m	30
Piping length	Min/Max	m	5 - 40
Precharge length	Max	m	30
Additional gas		g/m	20
Operating range	Cooling Min/Max	°C	-15 / 46
	Heating Min/Max	°C	-20 / 24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220-240 V (380-415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220-240 V (380-415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) The sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. Recommended fuse for the indoor 3A. * Available from April 2013. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

ELITE

Internet Control Ready INTERNET CONTROL	A class energy saving INVERTER+	5.9 A+ SEER SEASONAL ENERGY EFFICIENCY RATIO	3.8 A SCOP SEASONAL COEFFICIENT OF PERFORMANCE	Down to -15 °C in cooling mode OUTDOOR TEMPERATURE	Down to -20 °C in heating mode OUTDOOR TEMPERATURE	Easy control by BMS CONNECTIVITY	Possible to use on R22 pipings R22 RENEWAL	5 year compressor warranty
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INTERNET CONTROL READY: Optional.



U-50PE1E5

4 WAY 90x90 CASSETTE PACi STANDARD AND ELITE INVERTER+

The 4 Way 90x90 Cassette incorporates many new benefits thanks to advances in design and technology.

Technical Focus

- New Circle Flow Flap for more even temp. distribution
- Higher efficiency split fin
- New DC fan motor
- Highly efficient and silent turbo fan
- Individual flap control for flexible air flow direction
- Easy to clean suction grill & flap
- Special adjustment for high ceiling application
- DC FAN for better efficiency and control



AIR INTAKE CHAMBER

1. Air intake box CZ-BCU2 for main unit.
 2. Air intake box CZ-ATU2* for Air intake plenum.
- * When using Air intake box (CZ-ATU2), Air intake plenum // (CZ-FDU2) is required.

**360°
air flow**



STANDARD

NEW

		Single Phase				Three Phase			
		6.0 kW	7.1 kW	10.0 kW	12.5 kW	10.0 kW	12.5 kW	14.0 kW	
KIT		KIT-60PUY1E5*	KIT-71PUY1E5*	KIT-100PUY1E5**	KIT-125PUY1E5**	KIT-100PUY1E8**	KIT-125PUY1E8**	KIT-140PUY1E8***	
Indoor		S-60PU1E5	S-71PU1E5	S-100PU1E5	S-125PU1E5	S-100PU1E5	S-125PU1E5	S-140PU1E5	
Outdoor		U-60PEY1E5	U-71PEY1E5	U-100PEY1E5	U-125PEY1E5	U-100PEY1E8	U-125PEY1E8	U-140PEY1E8	
Panel		CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	
Cooling capacity	Nom. (Min-Max)	kW	6.0 (2.0-7.0)	7.1 (2.0-7.7)	10.0	12.5 (3.8-13.5)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	14.0 (3.3-15.5)
EER¹⁾	Nom. (Min-Max)	W/W	3.55 (6.15-2.80) ◀A	3.24 (6.15-2.75) ◀A	3.11 ◀B	3.11 (4.22-2.70) ◀B	3.11 (5.09-2.74) ◀B	3.11 (4.22-2.70) ◀B	3.21 (3.93 - 2.58) ◀A
SEER		W/W	6.8 ◀A++	6.3 ◀A++	6.4 ◀A++	—	6.2 ◀A++	—	
Pdesign		kW	6.0	7.1	10	—	10.0	—	
Power input Cooling	Nom. (Min-Max)	kW	1.690 (0.325-2.500)	2.190 (0.325-2.800)	3.220 (0.530-4.200)	4.020 (0.900-5.000)	3.220 (0.530-4.200)	4.020 (0.900-5.000)	4.36 (0.84 - 6.00)
Annual Energy Consumption^{2-a)}		kWh/a	845	1095	1610	2010	1610	2010	2155
Annual Energy Consumption (ErP)^{2-b)}		kWh/a	309	394	547	—	564	—	
Heating capacity	Nom. (Min-Max)	kW	6.0 (1.8-7.0)	7.1 (1.8-8.1)	10.0	12.5 (3.4-15.0)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	14.0 (4.1-16.0)
COP¹⁾	Nom. (Min-Max)	W/W	4.05 (6.55-3.25) ◀A	3.78 (6.55-3.23) ◀A	3.80 ◀A	3.80 (4.66-3.41) ◀A	3.80 (5.12-3.45) ◀A	3.80 (4.66-3.41) ◀A	3.89 (4.56 - 3.08) ◀A
SCOP		W/W	4.0 ◀A+	4.0 ◀A+	4.0 ◀A+	—	4.0 ◀A+	—	
Pdesign at -10 °C		kW	6.0	6.0	10.0	—	10.0	—	
Power input Heating	Nom. (Min-Max)	kW	1.480 (0.275-2.155)	1.880 (0.275-2.510)	2.630 (0.410-4.000)	3.290 (0.730-4.400)	2.630 (0.410-4.000)	3.290 (0.730-4.400)	3.60 (0.90 - 5.20)
Annual Energy Consumption (ErP)^{2-b)}		kWh/a	2100	2100	3500	—	3500	—	
Indoor unit									
Air Volume	Cool / Heat	m³/h	960 / 960	1320 / 1320	1980 / 1980	2060 / 2060	1980 / 1980	2060 / 2060	2160 / 2160
Moisture removal volume		U/h	3.0	4.2	6.0	7.9	6.0	7.9	9.0
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A)	32 / 29 / 27	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34
	Heat (Hi/Me/Lo)	dB(A)	32 / 29 / 27	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34
Sound power level	Cool (Hi/Me/Lo)	dB	49 / 46 / 44	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51
	Heat (Hi/Me/Lo)	dB	49 / 46 / 44	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51
Dimensions H x W x D	Indoor	mm	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	319 x 840 x 840	319 x 840 x 840
	Panel	mm	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950
Net weight	Indoor (Panel)	kg	24 (4)	24 (4)	27 (4)	27 (4)	27 (4)	27 (4)	27 (4)
Outdoor unit									
Power source		V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 415
Recommended fuse		A	20	20	25	30	16	16	16
Connection		mm²	2.5	2.5	4	6	2.5	2.5	2.5
Current Cooling		A	8.30 / 7.90 / 7.60	10.70 / 10.30 / 9.80	15.10 / 14.40 / 13.80	19.2 / 18.4 / 17.6	5.10 / 4.85 / 4.70	6.35 / 6.05 / 5.80	5.15
Current Heating		A	7.20 / 6.90 / 6.60	9.10 / 8.70 / 8.30	12.00 / 11.60 / 11.20	15.4 / 14.8 / 14.2	4.15 / 3.95 / 3.80	5.15 / 4.90 / 4.70	5.20
Air Volume	Cool / Heat	m³/h	1800 / 2100	2340	4560 / 4020	4800 / 4380	4560 / 4020	4800 / 4380	8100 / 6600
Sound pressure Level³⁾	Cool / Heat (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53
Sound power level	Cool / Heat (Hi)	dB	65 / 69	70 / 70	70 / 70	73 / 73	70 / 70	73 / 73	71 / 70
Dimensions	H x W x D	mm	569 x 790 x 285	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340
Net weight		kg	42	42	73	85	73	85	98
Piping connections	Liquid / Gas pipe	Inch (mm)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)
Refrigerant loading	R410A	kg	1.7	1.7	2.60	3.20	2.60	3.20	3.4
Elevation dif. (in/out)⁴⁾	Max	m	30	30	30	30	30	30	30
Piping length	Min/Max	m	50	50	5 / 50	5 / 50	5 / 50	5 / 50	5-75
Precharge length	Max	m	20	20	30	30	30	30	30
Additional charge		g/m	40	40	50	50	50	50	50
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

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. ** Available from January 2013. *** TBC. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

STANDARD

Internet Control Ready
INTERNET CONTROL

A class energy saving
INVERTER+

6.8 A++ SEER
SEASONAL ENERGY EFFICIENCY RATIO

4.0 A+ SCOP*
SEASONAL COEFFICIENT OF PERFORMANCE

Down to -10 °C in cooling mode
OUTDOOR TEMPERATURE

Down to -15 °C in heating mode
OUTDOOR TEMPERATURE

Easy control by BMS
CONNECTIVITY

Possible to use on R22 pipings
R22 RENEWAL

5 year compressor warranty



INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-60PUY1E5.

PANEL

CZ-KPU2



OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2



Wireless remote controller
CZ-RWSU2



Simplified remote controller
CZ-REZC2



COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



ELITE

		Single Phase								Three Phase			
		5.0 kW	6.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW		
KIT		KIT-50PU1E5*	KIT-60PU1E5	KIT-71PU1E5	KIT-100PU1E5	KIT-125PU1E5	KIT-140PU1E5	KIT-PE71U1E8	KIT-100PU1E8	KIT-125PU1E8	KIT-140PU1E8		
Indoor		S-50PU1E5	S-60PU1E5	S-71PU1E5	S-100PU1E5	S-125PU1E5	S-140PU1E5	S-71PU1E5	S-100PU1E5	S-125PU1E5	S-140PU1E5		
Outdoor		U-50PE1E5	U-60PE1E5	U-71PE1E5	U-100PE1E5	U-125PE1E5	U-140PE1E5	U-71PE1E8	U-100PE1E8	U-125PE1E8	U-140PE1E8		
Panel		CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2	CZ-KPU2		
Cooling capacity	Nom. (Min-Max)	kW 5.0 (1.5-5.6)	6.0 (2.5-7.1)	7.1 (2.5-8.0)	10.0 (3.3-12.5)	12.5 (3.3-14.0)	14.0 (3.3-15.5)	7.1 (2.5-8.0)	10.0 (3.3-12.5)	12.5 (3.3-14.0)	14.0 (3.3-15.5)		
EER ¹⁾	Nom. (Min-Max)	kW 3.70 (5.77-2.80) A	4.05 (5.56-3.55) A	3.94 (5.56-3.02) A	4.20 (3.93-3.38) A	3.60 (3.93-3.04) A	3.25 (3.93-2.58) A	3.94 (5.56-3.02) A	4.20 (3.93-3.38) A	3.60 (3.93-3.04) A	3.25 (3.93-2.58) A		
SEER	W/W	6.5 A++	7.4 A++	7.4 A++	6.6 A++	—	—	6.8 A++	6.5 A++	—	—		
Pdesign	kW	5.0	6.0	7.1	10.0	—	—	7.1	10.0	—	—		
Power input Cooling	Nom. (Min-Max)	kW 1.350 (0.260-2.000)	1.480 (0.450-2.000)	1.800 (0.450-2.650)	2.380 (0.840-3.700)	3.470 (0.840-4.600)	4.310 (0.840-6.000)	1.800 (0.450-2.650)	2.380 (0.840-3.700)	3.470 (0.840-4.600)	4.310 (0.840-6.000)		
Annual Energy Consumption ^{2-a)}	kWh/a	675	740	900	1190	1735	2155	900	1190	1735	2155		
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	269	284	336	530	—	—	365	538	—	—		
Heating capacity	Nom. (Min-Max)	kW 5.6 (1.5-6.5)	7.0 (2.0-8.0)	8.0 (2.0-9.0)	11.2 (4.1-14.0)	14.0 (4.1-16.0)	16.0 (4.1-18.0)	8.0 (2.0-9.0)	11.2 (4.1-14.0)	14.0 (4.1-16.0)	16.0 (4.1-18.0)		
COP ¹⁾	Nom. (Min-Max)	W/W 3.92 (6.82-2.83) A	3.87 (5.00-3.23) A	4.00 (5.00-3.10) A	4.31 (4.56-3.18) A	4.00 (4.56-3.08) A	3.70 (4.56-3.05) A	4.00 (5.00-3.10) A	4.31 (4.56-3.18) A	4.00 (4.56-3.08) A	3.70 (4.56-3.05) A		
SCOP	W/W	3.8 A	4.1 A+	4.1 A+	4.2 A+	—	—	4.0 A+	4.2 A+	—	—		
Pdesign at -10 °C	kW	4.0	6.0	7.1	10.0	—	—	7.1	10.0	—	—		
Power input Heating	Nom. (Min-Max)	kW 1.430 (0.220-2.300)	1.810 (0.400-2.480)	2.000 (0.400-2.900)	2.600 (0.900-4.400)	3.500 (0.900-5.200)	4.330 (0.900-5.900)	2.000 (0.400-2.900)	2.600 (0.900-4.400)	3.500 (0.900-5.200)	4.330 (0.900-5.900)		
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	1474	2047	2424	1190	—	—	2485	1190	—	—		
Indoor unit													
Air Volume	Cool / Heat	m ³ /h 960 / 960	1260 / 1260	1320 / 1320	1980 / 1980	2100 / 2100	2160 / 2160	1320 / 1320	1980 / 1980	2100 / 2100	2160 / 2160		
Moisture removal volume	l/h	2.8	3.4	4.2	6.0	7.9	9.0	4.2	6.0	7.9	9.0		
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A) 32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34		
	Heat (Hi/Me/Lo)	dB(A) 32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34		
Sound power level	Cool (Hi/Me/Lo)	dB 49 / 46 / 44	53 / 48 / 45	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51		
	Heat (Hi/Me/Lo)	dB 49 / 46 / 44	53 / 48 / 45	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51		
Dimensions H x W x D	Indoor	mm 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	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840		
	Panel	mm 33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950	33.5 x 950 x 950		
Net weight	Indoor (Panel)	kg 24 (4)	24 (4)	24 (4)	27 (4)	27 (4)	27 (4)	24 (4)	27 (4)	27 (4)	27 (4)		
Outdoor unit													
Power source	V	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	380/415	380 / 415	380 / 415	380 / 415		
Recommended fuse	A	16	20	20	25	30	16	16	16	16	16		
Connection	mm ²	2.5	2.5	2.5	4	6	2.5	2.5	2.5	2.5	2.5		
Current	Cool / Heat	A 6.5 / 6.90	6.90 / 8.20	8.10 / 9.00	10.30 / 11.40	15.30 / 15.40	19.00 / 19.20	2.70 / 3.00	3.50 / 3.85	5.15 / 5.20	6.45 / 6.50		
Air Volume	Cool / Heat	m ³ /h 1800 / 2100	3600 / 3600	3600 / 3600	6600 / 5700	7800 / 6600	8100 / 7200	3600 / 3600	6600 / 5700	7800 / 6600	8100 / 7200		
Sound pressure Level ³⁾	Cool / Heat (Hi)	dB(A) 46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55		
Sound power level	Cool / Heat (Hi)	dB 65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71		
Dimensions	H x W x D	mm 569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340		
Net weight	kg	42	68	69	98	98	98	69	98	98	98		
Piping connections	Liquid pipe	Inch (mm) 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)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)		
	Gas pipe	Inch (mm) 1/2 (12.7)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)		
Refrigerant loading	R410A	kg 1.65	2	2.35	3.4	3.4	3.4	2.35	3.4	3.4	3.4		
Elevation dif. (in/out) ⁴⁾	Max	m 30	30	30	30	30	30	30	30	30	30		
Piping length	Min/Max	m 40	5-50	5-50	5-75	5-75	5-75	5-50	5-75	5-75	5-75		
Precharge length	Max	m 30	30	30	30	30	30	30	30	30	30		
Additional charge	g/m	20	50	50	50	50	50	50	50	50	50		
Operating range	Cool Min/Max	°C -15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46		
	Heat Min/Max	°C -20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24		

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

ELITE

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER+

7.4 A+++ SEER

SEASONAL ENERGY EFFICIENCY RATIO

4.1 A+ SCOP

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -15 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -20 °C in heating mode

OUTDOOR TEMPERATURE

Easy control by BMS

CONNECTIVITY

Possible to use on R22 pipings

R22 RENEWAL

5 year compressor warranty

INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-60PU1E5 and KIT-71PU1E5.



LOW STATIC PRESSURE HIDE AWAY PACi STANDARD AND ELITE INVERTER+

The depth of only 250mm provides greater installation flexibility and the unit can be used in more applications. Ideal for sites with narrow ceiling voids.

Technical Focus

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



STANDARD

NEW

		Single Phase				Three Phase			
		6.0 kW	7.1 kW	10.0 kW	12.5 kW	10.0 kW	12.5 kW	14.0 kW	
KIT		KIT-60PNY1E5*	KIT-71PNY1E5*	KIT-100PNY1E5**	KIT-125PNY1E5**	KIT-100PNY1E8**	KIT-125PNY1E8**	KIT-140PNY1E8***	
Indoor		S-60PN1E5	S-71PN1E5	S-100PN1E5	S-125PN1E5	S-100PN1E5	S-125PN1E5	S-140PN1E5	
Outdoor		U-60PEY1E5	U-71PEY1E5	U-100PEY1E5	U-125PEY1E5	U-100PEY1E8	U-125PEY1E8	U-140PEY1E8	
Cooling capacity	Nom. (Min-Max) kW	6.0 (2.0-7.0)	7.1 (2.0-7.7)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	14.0 (3.3-15.5)	
EER ¹⁾	Nom. (Min-Max) W/W	3.02 (6.15-2.38) ◀ C	2.76 (6.15-2.38) ◀ D	2.81 (4.74-2.67) ◀ C	2.81 (4.00-2.60) ◀ C	2.81 (4.74-2.67) ◀ C	2.81 (4.00-2.60) ◀ C	3.01 (3.30-2.50) ◀ B	
SEER	W/W	4.7 ◀ B	5.0 ◀ B	5.3 ◀ A	—	5.2 ◀ A	—	—	
Pdesign	kW	6.0	7.1	10.0	—	10.0	—	—	
Power input Cooling	Nom. (Min-Max) kW	1.99 (0.325-2.94)	2.57 (0.325-3.23)	3.550 (0.570-4.300)	4.445 (0.95-5.20)	3.550 (0.570-4.300)	4.445 (0.95-5.20)	4.650 (1.000-6.200)	
Annual Energy Consumption ^{2-a)}	kWh/a	995	1265	1775	2223	1775	2223	2325	
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	444	496	660	—	673	—	—	
Heating capacity	Nom. (Min-Max) kW	6.0 (1.8-7.0)	7.1 (1.8-8.1)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	14.0 (4.1-16.0)	
COP ¹⁾	Nom. (Min-Max) W/W	3.61 (6.55-2.89) ◀ B	3.41 (6.55-2.91) ◀ B	3.41 (4.67-3.37) ◀ B	3.41 (4.36-3.26) ◀ B	3.41 (4.67-3.37) ◀ B	3.41 (4.36-3.26) ◀ B	3.61 (3.90-2.96) ◀ A	
SCOP	W/W	3.8 ◀ A	3.8 ◀ A	3.8 ◀ A	—	3.8 ◀ A	—	—	
Pdesign at -10 °C	kW	4.8	5.3	7.6	—	7.6	—	—	
Power input Heating	Nom. (Min-Max) kW	1.66 (0.275-2.42)	2.08 (0.275-2.78)	2.935 (0.450-4.100)	3.665 (0.780-4.600)	2.935 (0.450-4.100)	3.665 (0.78-4.60)	3.880 (1.050-5.400)	
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	1757	1952	2800	—	2800	—	—	
Indoor unit									
External static pressure ³⁾	Nom. (Min-Max) Pa	50 (10-80)	50 (10-80)	50 (10-80)	50 (10-80)	50 (10-80)	50 (10-80)	50 (10-80)	
Air Volume	Cool / Heat m ³ /h	1320 / 1320	1320 / 1320	2160 / 2160	2280 / 2280	2160 / 2160	2280 / 2280	2400 / 2400	
Moisture removal volume	U/h	3.4	4.2	6.0	7.9	6.0	7.9	9.0	
Sound pressure Level	Cool (Hi/Me/Lo) dB(A)	43 / 41 / 36	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39	
	Heat (Hi/Me/Lo) dB(A)	43 / 41 / 36	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39	
Sound power level	Cool (Hi/Me/Lo) dB	60 / 58 / 53	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60	
	Heat (Hi/Me/Lo) dB	60 / 58 / 53	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60	
Dimensions	H x W x D mm	250 x 1000 (+100) x 650	250 x 1000 (+100) x 650	250 x 1200 (+100) x 650	250 x 1200 (+100) x 650	250 x 1200 (+100) x 650	250 x 1200 (+100) x 650	250 x 1200 (+100) x 650	
Net weight	kg	32	32	41	41	41	41	41	
Outdoor unit									
Power source	V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 415	
Recommended fuse	A	20	20	25	30	16	16	16	
Connection	mm ²	2.5	2.5	4	6	2.5	2.5	2.5	
Current Cooling	A	9.1/8.7/8.4	12.0/11.5/11.0	16.0 / 15.3 / 14.8	20.1 / 19.3 / 18.7	5.45 / 5.20 / 5.05	6.85 / 6.50 / 6.25	6.60	
Current Heating	A	7.5/7.2/6.9	9.6/9.2/8.9	13.0 / 12.5 / 12.1	16.5 / 15.8 / 15.2	4.45 / 4.25 / 4.10	5.55 / 5.30 / 5.10	6.65	
Air Volume	Cool / Heat m ³ /h	1800/2100	2340	4560 / 4020	4800 / 4380	4560 / 4020	4800 / 4380	8100 / 6600	
Sound pressure Level ⁴⁾	Cool / Heat (Hi) dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53	
	Cool / Heat (Lo) dB(A)	65 / 69	70 / 70	70 / 70	73 / 73	70 / 70	73 / 73	71 / 70	
Dimensions	H x W x D mm	569 x 790 x 285	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	
Net weight	kg	42	42	73	85	73	85	98	
Piping connections	Liquid / Gas pipe Inch (mm)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	
Refrigerant loading	R410A kg	1.7	1.7	2.60	3.20	2.60	3.20	3.4	
Elevation dif. (in/out) ⁵⁾	m	30	30	30	30	30	30	30	
Piping length	Min/Max m	50	50	5 / 50	5 / 50	5 / 50	5 / 50	5-75	
Precharge length	Max m	20	20	30	30	30	30	30	
Additional charge	g/m	40	40	50	50	50	50	50	
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	

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.
 1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Medium External static pressure setting from factory. The specification listed on the table indicates values under the condition of 50 Pa (5.1 mmHg) which are applied for factory default setting. 4) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 4/C/006-97 specification. 5) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. ** Available from January 2013. *** TBC.
 For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

STANDARD

Internet Control Ready
INTERNET CONTROL

A class energy saving
INVERTER+

5.3 A SEER
SEASONAL ENERGY EFFICIENCY RATIO

3.8 A SCOP
SEASONAL COEFFICIENT OF PERFORMANCE

Down to -10 °C in cooling mode
OUTDOOR TEMPERATURE

Down to -15 °C in heating mode
OUTDOOR TEMPERATURE

Easy control by BMS
CONNECTIVITY

Possible to use on R22 pipings
R22 RENEWAL

5 year compressor warranty



OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2



Wireless remote controller
CZ-RWSC2



Simplified remote controller
CZ-RE2C2



COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



ELITE

		Single Phase						Three Phase					
		5.0 kW	6.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW		
KIT		KIT-50PN1E5*	KIT-60PN1E5	KIT-71PN1E5	KIT-100PN1E5	KIT-125PN1E5	KIT-140PN1E5	KIT-71PN1E8	KIT-100PN1E8	KIT-125PN1E8	KIT-140PN1E8		
Indoor		S-50PN1E5	S-60PN1E5	S-71PN1E5	S-100PN1E5	S-125PN1E5	S-140PN1E5	S-71PN1E5	S-100PN1E5	S-125PN1E5	S-140PN1E5		
Outdoor		U-50PE1E5	U-60PE1E5	U-71PE1E5	U-100PE1E5	U-125PE1E5	U-140PE1E5	U-71PE1E8	U-100PE1E8	U-125PE1E8	U-140PE1E8		
Cooling capacity	Nom. (Min-Max)	kW	5.0 (1.5 - 5.6)	6.0 (2.5-7.1)	7.1 (2.5-8.0)	10.0 (3.3-12.5)	12.5 (3.3-14.0)	14.0 (3.3-15.5)	7.1 (2.5-8.0)	10.0 (3.3-12.5)	12.5 (3.3-14.0)	14.0 (3.3-15.5)	
EER ¹⁾	Nom. (Min-Max)	kW	3.21 (5.77 - 2.42) A	3.24 (4.55-3.37) A	3.30 (4.55-2.91) A	3.75 (3.79-3.29) A	3.16 (3.90-2.96) A	3.01 (3.30-2.50) A	3.30 (4.55-2.91) A	3.75 (3.79-3.29) A	3.21 (3.30-2.92) A	3.01 (3.30-2.50) A	
SEER		W/W	4.6 B	5.5 A+	5.5 A+	6.0 A+	—	—	5.2 A+	5.8 A+	—	—	
Pdesign		kW	5.0	6.0	7.1	10.0	—	—	7.1	10.0	—	—	
Power input Cooling	Nom. (Min-Max)	kW	1.56 (0.26 - 2.31)	1.850 (0.550-2.100)	2.150 (0.550-2.150)	2.670 (0.870-3.800)	3.890 (1.000-4.800)	4.650 (1.000-6.200)	2.150 (0.550-2.150)	2.670 (0.870-3.800)	3.890 (1.000-4.800)	4.650 (1.000-6.200)	
Annual Energy Consumption ^{2-a)}		kWh/a	780	925	1075	1335	1945	2325	1335	1945	2325	2325	
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	380	382	452	583	—	—	477	603	—	—	
Heating capacity	Nom. (Min-Max)	kW	5.6 (1.5 - 6.3)	7.0 (2.0-8.0)	8.0 (2.0-9.0)	11.2 (4.1-14.0)	14.0 (4.1-16.0)	16.0 (4.1-18.0)	8.0 (2.0-9.0)	11.2 (4.1-14.0)	14.0 (4.1-16.0)	16.0 (4.1-18.0)	
COP ¹⁾	Nom. (Min-Max)	kW	3.22 (6.82 - 2.50) A	3.61 (4.00-3.09) A	3.54 (4.00-3.08) B	3.80 (4.18-3.11) A	3.61 (3.90-2.96) A	3.41 (3.90-2.95) B	3.54 (4.00-3.08) B	3.80 (4.18-3.11) A	3.61 (3.90-2.96) A	3.41 (3.90-2.95) B	
SCOP		W/W	3.8 A	3.8 A	3.7 A	5.3 A+++	—	—	3.7 A	5.2 A+++	—	—	
Pdesign at -10 °C		kW	3.8	5.6	6.5	7.6	—	—	6.5	7.6	—	—	
Power input Heating	Nom. (Min-Max)	kW	1.74 (0.22 - 2.52)	1.940 (0.500-2.500)	2.260 (0.500-2.820)	2.950 (0.980-4.500)	3.880 (1.050-5.400)	4.690 (1.050-6.100)	2.260 (0.500-2.820)	2.950 (0.980-4.500)	3.880 (1.050-5.400)	4.690 (1.050-6.100)	
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	1400	2061	2458	3590	—	—	2458	3684	—	—	
Indoor unit													
External static pressure ³⁾	Hi/Me/Lo	Pa	50 (10 - 80)	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	
Air Volume	Cool / Heat	m³/h	960 / 960	1320 / 1320	1320 / 1320	2160 / 2160	2280 / 2280	2400 / 2400	1320	2160 / 2160	2280 / 2280	2400 / 2400	
Moisture removal volume		l/h	2.8	3.4	4.2	6.0	7.9	9.0	4.2	6.0	7.9	9.0	
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A)	41 / 39 / 35	43 / 41 / 36	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39	
	Heat (Hi/Me/Lo)	dB(A)	41 / 39 / 35	43 / 41 / 36	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39	
Sound power level	Cool (Hi/Me/Lo)	dB	58 / 56 / 52	60 / 58 / 53	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60	
	Heat (Hi/Me/Lo)	dB	58 / 56 / 52	60 / 58 / 53	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60	
Dimensions	H x W x D	mm	250x1000+100x650	250x1000+100x650	250x1000+100x650	250x1200+100x650	250x1200+100x650	250x1200+100x650	250x1000+100x650	250x1200+100x650	250x1200+100x650	250x1200+100x650	
Net weight		kg	32	32	32	41	41	41	32	41	41	41	
Outdoor unit													
Power source		V	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	380 / 415	380 / 415	380 / 415	380 / 415	
Recommended fuse		A	16	20	20	25	30	16	16	16	16	16	
Connection		mm²	2.5	2.5	2.5	4	6	2.5	2.5	2.5	2.5	2.5	
Current	Cool / Heat	A	7.1 / 8.0	8.00 / 8.40	9.40 / 9.90	11.20 / 12.50	16.90 / 16.80	20.10 / 20.20	3.10 / 3.20	3.75 / 4.15	5.50 / 5.50	6.60 / 6.65	
Air Volume	Cool / Heat	m³/h	1800 / 2100	3600 / 3600	3600 / 3600	6600 / 5700	7800 / 6600	8100 / 7200	3600 / 3600	6600 / 5700	7800 / 6600	8100 / 7200	
Sound pressure Level ⁴⁾	Cool / Heat (Hi)	dB(A)	46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55	
Sound power level	Cool / Heat (Hi)	dB	65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71	
Dimensions	H x W x D	mm	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	
Net weight		kg	42	68	69	98	98	98	98	98	98	98	
Piping connections	Liquid pipe	Inch (mm)	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)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	
	Gas pipe	Inch (mm)	1/2 (12.7)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	
Refrigerant loading	R410A	kg	1.65	2	2.35	3.4	3.4	3.4	2.35	3.4	3.4	3.4	
Elevation dif. (in/out) ⁵⁾	Max	m	30	30	30	30	30	30	30	30	30	30	
Piping length	Min/Max	m	5 - 40	5-50	5-50	5-75	5-75	5-75	5-50	5-75	5-75	5-75	
Precharge length	Max	m	30	30	30	30	30	30	30	30	30	30	
Additional charge		g/m	20	50	50	50	50	50	50	50	50	50	
Operating range	Cool Min/Max	°C	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	
	Heat Min/Max	°C	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.
 1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Medium External static pressure setting from factory. The specification listed on the table indicates values under the condition of 50 Pa (5.1 mmAq) which are applied for factory default setting. 4) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 4/C006-97 specification. 5) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port. 6) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013.
 For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

ELITE

Internet Control Ready
 A class energy saving
 6.0 A+ SEER
 5.3 A+++ SCOP
 Down to -15 °C in cooling mode
 Down to -20 °C in heating mode
 Easy control by BMS
 Possible to use on R22 pipings
 5 year compressor warranty



INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-100PN1E5.

HIGH STATIC PRESSURE HIDE AWAY PACi STANDARD AND ELITE INVERTER+

The ducted systems are the ideal solution for flexible, concealed air conditioning and the optional 200 mm spigots ensure simple, hassle-free connection to spiral ductwork.

Technical Focus

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



S-100PF1E5 // S-125PF1E5 // S-140PF1E5



S-60PF1E5 // S-71PF1E5

STANDARD

NEW

		Single Phase				Three Phase			
		6.0 kW	7.1 kW	10.0 kW	12.5 kW	10.0 kW	12.5 kW	14.0 kW	
KIT		KIT-60PFY1E5*	KIT-71PFY1E5*	KIT-100PFY1E5**	KIT-125PFY1E5**	KIT-100PFY1E8**	KIT-125PFY1E8**	KIT-140PFY1E8***	
Indoor		S-60PF1E5	S-71PF1E5	S-100PF1E5	S-125PF1E5	S-100PF1E5	S-125PF1E5	S-140PF1E5	
Outdoor		U-60PEY1E5	U-71PEY1E5	U-100PEY1E5	U-125PEY1E5	U-100PEY1E8	U-125PEY1E8	U-140PEY1E8	
Cooling capacity	Nom. (Min-Max)	kW	6.0 (2.0-7.0)	7.1 (2.0-7.7)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	14.0 (3.3-15.5)
EER ¹⁾	Nom. (Min-Max)	W/W	3.11 (6.15-2.46) ◀B	2.76 (6.15-2.35) ◀D	3.01 (5.09-2.74) ◀B	3.05 (4.22-2.70) ◀B	3.01 (5.09-2.74) ◀B	3.05 (4.22-2.70) ◀B	3.21 (3.93-2.58) ◀A
SEER		W/W	5.4 ◀A	5.3 ◀A	5.4 ◀A	—	5.2 ◀A	—	
Pdesign		kW	6.0	7.1	10.0	—	10.0	—	
Power input Cooling	Nom. (Min-Max)	kW	1.930 (0.325-2.850)	2.570 (0.325-3.270)	3.320 (0.530-4.200)	4.100 (0.900-5.000)	3.320 (0.530-4.200)	4.100 (0.900-5.000)	4.360 (0.840-6.000)
Annual Energy Consumption ²⁻³⁾		kWh/a	965	1285	1660	2050	2050	2155	
Annual Energy Consumption (ErP) ²⁻³⁾		kWh/a	389	469	648	—	673	—	
Heating capacity	Nom. (Min-Max)	kW	6.0 (1.8-7.0)	7.1 (1.8-8.1)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	14.0 (4.1-16.0)
COP ¹⁾	Nom. (Min-Max)	W/W	4.26 (6.55-3.41) ◀A	3.94 (6.55-3.40) ◀A	3.80 (5.12-3.45) ◀A	3.82 (4.66-3.41) ◀A	3.80 (5.12-3.45) ◀A	3.82 (4.66-3.41) ◀A	3.89 (4.56-3.08) ◀A
SCOP		W/W	3.8 ◀A	3.8 ◀A	3.8 ◀A	—	3.8 ◀A	—	
Pdesign at -10 °C		kW	5.0	5.5	9.5	—	9.5	—	
Power input Heating	Nom. (Min-Max)	kW	1.410 (0.275-2.055)	1.800 (0.275-2.380)	2.630 (0.410-4.000)	3.270 (0.730-4.400)	2.630 (0.410-4.000)	3.270 (0.730-4.400)	3.600 (0.900-5.200)
Annual Energy Consumption (ErP) ²⁻³⁾		kWh/a	1842	2026	3500	—	3500	—	
Indoor unit									
External static pressure ³⁾	Nom. (Min-Max)	Pa	70 (10-150)	70 (10-150)	100 (10-150)	100 (10-150)	100 (10-150)	100 (10-150)	
Air Volume	Cool / Heat	m ³ /h	1260 / 1260	1260 / 1260	1920 / 1920	2040 / 2040	1920 / 1920	2040 / 2040	2160 / 2160
Moisture removal volume		U/h	3.4	4.2	6.0	7.9	6.0	7.9	9.0
Sound pressure Level	Cool (Hi/Me/Lo)	dB(A)	35 / 32 / 26	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33
	Heat (Hi/Me/Lo)	dB(A)	35 / 32 / 26	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33
Sound power level	Cool (Hi/Me/Lo)	dB	57 / 54 / 48	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55
	Heat (Hi/Me/Lo)	dB	57 / 54 / 48	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55
Dimensions	H x W x D	mm	290 x 1000 x 700	290 x 1000 x 700	290 x 1400 x 700	290 x 1400 x 700	290 x 1400 x 700	290 x 1400 x 700	290 x 1400 x 700
Net weight		kg	33	33	45	45	45	45	
Outdoor unit									
Power source		V	220 / 240	220 / 240	220 / 240	220 / 240	380 / 415	380 / 415	380 / 415
Recommended fuse		A	20	20	25	30	16	16	16
Connection		mm ²	2.5	2.5	4	6	2.5	2.5	2.5
Current Cooling		A	8.6	11.7	15.1 / 14.5 / 13.9	18.8 / 18.0 / 17.2	5.10 / 4.85 / 4.70	6.20 / 5.90 / 5.70	6.60
Current Heating		A	6.1	7.9	11.8 / 11.2 / 10.7	14.6 / 14.0 / 13.4	4.05 / 3.80 / 3.65	4.90 / 4.65 / 4.50	6.65
Air Volume	Cool / Heat	m ³ /h	1800 / 2100	2340 / 2340	4560 / 4020	4800 / 4380	4560 / 4020	4800 / 4380	8100 / 6600
Sound pressure Level ⁴⁾	Cool / Heat (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53
Sound power level	Cool / Heat (Hi)	dB	66 / 69	70 / 70	70 / 70	73 / 73	70 / 70	73 / 73	71 / 70
Dimensions	H x W x D	mm	569 x 790 x 285	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340
Net weight		kg	42	42	73	85	73	85	98
Piping connections	Liquid / Gas pipe	Inch (mm)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)
Refrigerant loading	R410A	kg	1.7	1.7	2.60	3.20	2.60	3.20	3.4
Elevation dif. (in/out) ⁵⁾	Max	m	30	30	30	30	30	30	30
Piping length	Min/Max	m	5 - 50	5 - 50	5 / 50	5 / 50	5 / 50	5 / 50	5-75
Precharge length	Max	m	20	20	30	30	30	30	30
Additional charge		g/m	40	40	50	50	50	50	50
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

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 3) Medium External static pressure setting from factory. 4) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. ** Available from January 2013. *** TBC. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

STANDARD

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER+

5.4 A SEER

SEASONAL ENERGY EFFICIENCY RATIO

3.8 A SCOP

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -10 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -15 °C in heating mode

OUTDOOR TEMPERATURE

Easy control by BMS

CONNECTIVITY

Possible to use on R22 pipings

R22 RENEWAL

5 year compressor warranty



INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-60PFY1E5 and KIT-100PFY1E5.

PLENUMS



Air Outlet Plenum (without regulation adaptor)		
	Diameters	Model
60 & 71	3 x ø 200	CZ-90DAF2
100, 125 & 140	4 x ø 200	CZ-160DAF2
Air Inlet Plenum		
60 & 71	2 x ø 250	CZ-DUMPA90MF2
100, 125 & 140	4 x ø 200	CZ-DUMPA160MF2

OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2



Wireless remote controller
CZ-RWSC2



Simplified remote controller
CZ-REZC2



COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



ELITE

		Single Phase						Three Phase					
		5.0 kW	6.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW		
KIT		KIT-50PF1E5*	KIT-60PF1E5	KIT-71PF1E5	KIT-100PF1E5	KIT-125PF1E5	KIT-140PF1E5	KIT-71PF1E8	KIT-100PF1E8	KIT-125PF1E8	KIT-140PF1E8		
Indoor		S-50PF1E5	S-60PF1E5	S-71PF1E5	S-100PF1E5	S-125PF1E5	S-140PF1E5	S-71PF1E5	S-100PF1E5	S-125PF1E5	S-140PF1E5		
Outdoor		U-50PE1E5	U-60PE1E5	U-71PE1E5	U-100PE1E5	U-125PE1E5	U-140PE1E5	U-71PE1E8	U-100PE1E8	U-125PE1E8	U-140PE1E8		
Cooling capacity	Nom. (Min-Max)	5.0 (1.5-5.6)		6.0 (2.5-7.1)		7.1 (2.5-8.0)		10.0 (3.3-12.5)		12.5 (3.3-14.0)			
EER1)	Nom. (Min-Max)	3.70(5.58-2.80) A		3.90(4.72-3.55) A		3.84(4.72-3.02) A		4.10(3.93-3.38) A		3.50(3.93-3.04) A			
SEER	W/W	5.7 A+		6.4 A++		6.4 A++		5.8 A+		6.0 A+			
Pdesign	kW	5.0		6.0		7.1		10.0		14.0			
Power input Cooling	Nom. (Min-Max)	1.350 (0.260-2.000)		1.540 (0.530-2.000)		1.850 (0.530-2.650)		2.440 (0.840-3.700)		3.570 (0.840-4.600)			
Annual Energy Consumption 2-a)	kWh/a	675		770		925		1220		1785			
Annual Energy Consumption (ErP) 2-a)	kWh/a	307		328		388		603		—			
Heating capacity	Nom. (Min-Max)	5.6 (1.5-6.5)		7.0 (2.0-8.0)		8.0 (2.0-9.0)		11.2 (4.1-14.0)		14.0 (4.1-16.0)			
COP1)	Nom. (Min-Max)	3.73(6.82-2.71) A		3.87(4.17-3.23) A		3.85(4.17-3.10) A		4.31(4.56-3.18) A		4.02(4.56-3.08) A			
SCOP	W/W	3.8 A		3.9 A		4.0 A+		3.8 A		3.9 A			
Pdesign at -10 °C	kW	4.0		6.0		7.1		10.0		14.0			
Power input Heating	Nom. (Min-Max)	1.500 (0.220-2.400)		1.810 (0.480-2.480)		2.080 (0.480-2.900)		2.600 (0.90-4.400)		3.480 (0.900-5.200)			
Annual Energy Consumption (ErP) 2-b)	kWh/a	1474		2154		2485		3684		—			
Indoor unit													
External static pressure ³⁾	Nom. (Min-Max)	70 (10-150)		70 (10-150)		70 (10-150)		100 (10-150)		100 (10-150)			
Air Volume	Cool / Heat	960 / 960		1260 / 1260		1260 / 1260		1920 / 1920		2040 / 2040			
Moisture removal volume	l/h	2.8		3.4		4.2		6.0		7.9			
Sound pressure Level	Cool (Hi/Me/Lo)	34 / 30 / 26		35 / 32 / 26		35 / 32 / 26		38 / 34 / 31		39 / 35 / 32			
	Heat (Hi/Me/Lo)	34 / 30 / 26		35 / 32 / 26		35 / 32 / 26		38 / 34 / 31		39 / 35 / 32			
Sound power level	Cool (Hi/Me/Lo)	56 / 52 / 48		57 / 54 / 48		57 / 54 / 48		60 / 56 / 53		61 / 57 / 54			
	Heat (Hi/Me/Lo)	56 / 52 / 48		57 / 54 / 48		57 / 54 / 48		60 / 56 / 53		61 / 57 / 54			
Dimensions	H x W x D	290 x 800 x 700		290 x 1000 x 700		290 x 1000 x 700		290 x 1400 x 700		290 x 1400 x 700			
Net weight	kg	28		33		33		45		45			
Outdoor unit													
Power source	V	220 / 240		220 / 240		220 / 240		220 / 240		220 / 240			
Recommended fuse	A	16		20		25		30		30			
Connection	mm ²	2.5		2.5		2.5		4		6			
Current	Cool / Heat	5.85 / 6.55		7.40 / 8.40		8.60 / 9.50		10.60 / 11.20		15.90 / 15.80			
Air Volume	Cool / Heat	1800 / 2100		3600 / 3600		3600 / 3600		6600 / 5700		7800 / 6600			
Sound pressure Level ⁴⁾	Cool / Heat (Hi)	46 / 50		48 / 50		48 / 50		52 / 52		53 / 53			
Sound power level	Cool / Heat (Hi)	65 / 69		65 / 67		65 / 67		69 / 69		70 / 70			
Dimensions	H x W x D	569 x 790 x 285		996 x 940 x 340		996 x 940 x 340		1416 x 940 x 340		1416 x 940 x 340			
Net weight	kg	42		68		69		98		98			
Piping connections	Liquid pipe	Inch (mm) 1/4 (6.35)		3/8 (9.52)		3/8 (9.52)		3/8 (9.52)		3/8 (9.52)			
	Gas pipe	Inch (mm) 1/2 (12.7)		5/8 (15.88)		5/8 (15.88)		5/8 (15.88)		5/8 (15.88)			
Refrigerant loading	R410A	kg 1.65		2		2.35		3.4		3.4			
Elevation dif. (in/out) ⁵⁾	Max	m 30		30		30		30		30			
Piping length	Min/Max	m 5-40		5-50		5-50		5-75		5-75			
Precharge length	Max	m 30		30		30		30		30			
Additional charge	g/m	20		50		50		50		50			
Operating range	Cool Min/Max	°C -15 / 46		-15 / 46		-15 / 46		-15 / 46		-15 / 46			
	Heat Min/Max	°C -20 / 24		-20 / 24		-20 / 24		-20 / 24		-20 / 24			

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Medium External static pressure setting from factory. 4) The Sound pressure level of the units shows the value measured at a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 5) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

ELITE

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER+

6.4 A++ SEER

SEASONAL ENERGY EFFICIENCY RATIO

4.0 A+ SCOP*

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -15 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -20 °C in heating mode

OUTDOOR TEMPERATURE

Easy control by BMS

CONNECTIVITY

Possible to use on R22 pipings

R22 RENEWAL

5 year compressor warranty



INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-71PF1E5.

CEILING

PACi STANDARD AND ELITE INVERTER+

This range of ceiling mounted units feature a DC fan motor for increased efficiency and reduced operating sound levels. All the units are the same height and depth for a uniform appearance in mixed installations. A knock out is provided to allow for supplementary fresh air for improved air quality.

Technical Focus

- All units just 210 mm high
- Twin rotary compressor dramatically reduces vibration and noise during operation
- DC inverter control
- Large and wide air distribution
- Industry-leading low sound levels
- Twin, Triple and Double-twin split options



STANDARD

NEW

		Single Phase				Three Phase			
		6.0 kW	7.1 kW	10.0 kW	12.5 kW	10.0 kW	12.5 kW	14.0 kW	
KIT		KIT-60PTY1E5*	KIT-71PTY1E5*	KIT-100PTY1E5**	KIT-125PTY1E5**	KIT-100PTY1E8**	KIT-125PTY1E8**	KIT-140PTY1E8***	
Indoor									
Outdoor		U-60PEY1E5	U-71PEY1E5	U-100PEY1E5	U-125PEY1E5	U-100PEY1E8	U-125PEY1E8	U-140PEY1E8	
Cooling capacity	Nom. (Min-Max)	kW 6.0 (2.0-7.0)	7.1 (2.0-7.7)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	10.0 (2.7-11.5)	12.5 (3.8-13.5)	14.0 (3.3-15.5)	
EER ¹⁾	Nom. (Min-Max)	W/W 2.90 (6.15-2.41) ◀ C	2.63 (6.15-2.33) ◀ D	2.90 (5.09-2.74) ◀ C	2.90 (4.22-2.70) ◀ C	2.90 (5.09-2.74) ◀ C	2.90 (4.22-2.70) ◀ C	2.92 (3.93-2.58) ◀ C	
SEER	W/W	5.5 ◀ B	5.1 ◀ B	6.2 ◀ A++	—	6.0 ◀ A+	—	—	
Pdesign	kW	6	7.1	10.0	—	10.0	—	—	
Power input Cooling	Nom. (Min-Max)	kW 2.070 (0.325-2.900)	2.700 (0.325-3.300)	3.450 (0.530-4.200)	4.310 (0.900-5.000)	3.450 (0.530-4.200)	4.310 (0.900-5.000)	4.800 (0.840-6.000)	
Annual Energy Consumption ^{2-a)}	kWh/a	1035	1350	1725	2155	1725	2155	2400	
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	382	487	564	—	583	—	—	
Heating capacity	Nom. (Min-Max)	kW 6.0 (1.8-7.0)	7.1 (1.8-8.1)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	10.0 (2.1-13.8)	12.5 (3.4-15.0)	14.0 (4.1-16.0)	
COP ¹⁾	Nom. (Min-Max)	W/W 4.05 (6.55-3.25) ◀ A	3.60 (6.55-3.12) ◀ A	3.70 (5.12-3.45) ◀ A	3.70 (4.66-3.41) ◀ A	3.70 (5.12-3.45) ◀ A	3.70 (4.66-3.41) ◀ A	3.83 (4.56 - 3.08) ◀ A	
SCOP	W/W	3.8 ◀ A	3.8 ◀ A	3.8 ◀ A	—	3.8 ◀ A	—	—	
Pdesign at -10 °C	kW	6.0	6.0	10.0	—	10.0	—	—	
Power input Heating	Nom. (Min-Max)	kW 1.480 (0.275-2.155)	1.970 (0.275-2.600)	2.700 (0.410-4.000)	3.380 (0.730-4.400)	2.700 (0.410-4.000)	3.380 (0.730-4.400)	3.660 (0.900-5.200)	
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	2210	2210	3684	—	3684	—	—	
Indoor unit									
Air Volume	Cool / Heat	m ³ /h 1140 / 1140	1140 / 1140	1980 / 1980	2100 / 2100	1980 / 1980	2100 / 2100	2160 / 2160	
Moisture removal volume	U/h	3.4	4.2	6.0	7.9	6.0	7.9	9.0	
Sound pressure Level	Cooling (Hi / Lo)	dB(A) 39 / 36 / 33	39 / 36 / 33	42 / 38 / 35	45 / 40 / 37	42 / 38 / 35	45 / 40 / 37	46 / 41 / 38	
	Heating (Hi / Lo)	dB(A) 40 / 36 / 33	40 / 36 / 33	42 / 38 / 35	45 / 40 / 37	42 / 38 / 35	45 / 40 / 37	47 / 43 / 39	
Sound power level	Cool (Hi)	dB 58	58	62 / 56 / 53	64 / 58 / 55	62 / 56 / 53	64 / 58 / 55	64	
	Heat (Hi)	dB 58	58	62 / 56 / 53	64 / 58 / 55	62 / 56 / 53	64 / 58 / 55	65	
Dimensions	H x W x D	mm 210 x 1180 x 680	210 x 1180 x 680	210 x 1595 x 680	210 x 1595 x 680	210 x 1595 x 680	210 x 1595 x 680	210 x 1595 x 680	
Net weight	kg	25	25	33	33	33	33	33	
Outdoor unit									
Power source	V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 415	
Recommended fuse	A	20	20	25	30	16	16	16	
Connection	mm ²	2.5	2.5	4	6	2.5	2.5	2.5	
Current Cooling	A	9.75 / 9.4 / 9.1	12.8 / 12.4 / 12.0	16.2 / 15.5 / 14.6	20.4 / 19.5 / 18.7	5.45 / 5.20 / 4.95	6.75 / 6.45 / 6.20	6.60	
Current Heating	A	6.9 / 6.65 / 6.45	9.3 / 9.0 / 8.7	12.6 / 12.0 / 11.5	15.8 / 15.1 / 14.4	4.30 / 4.05 / 3.90	5.25 / 5.00 / 4.80	6.65	
Air Volume	Cool / Heat	m ³ /h 1800 / 2100	2340	4560 / 4020	4800 / 4380	4560 / 4020	4800 / 4380	8100 / 6600	
Sound pressure Level ³⁾	Cool / Heat (Hi)	dB(A) 46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53	
Sound power level	Cool / Heat (Hi)	dB 65 / 69	70 / 70	70 / 70	73 / 73	70 / 70	73 / 73	71 / 70	
Dimensions	H x W x D	mm 569 x 790 x 285	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	
Net weight	kg	42	42	73	85	73	85	98	
Piping connections	Liquid pipe	Inch (mm) 3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	
	Gas pipe	Inch (mm) 5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	
Refrigerant loading	R410A	kg 1.7	1.7	2.60	3.20	2.60	3.20	3.4	
Elevation dif. (in/out) ⁴⁾	Max	m 30	30	30	30	30	30	30	
Piping length	Min/Max	m 50	50	5 / 50	5 / 50	5 / 50	5 / 50	5-75	
Precharge length	Max	m 20	20	30	30	30	30	30	
Additional charge	g/m	40	40	50	50	50	50	50	
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	

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. ** Available from January 2013. *** TBC. For detailed information about ErP, please visit our page <http://www.doc.panasonic.de>

STANDARD

Internet Control Ready

A class energy saving

6.2 A++ SEER

3.8 A SCOP

Down to -10 °C in cooling mode

Down to -15 °C in heating mode

Easy control by BMS

Possible to use on R22 pipings

5 year compressor warranty



INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-100PTY1E5.

OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2



Wireless remote controller
CZ-RWSC2 / CZ-RWST2



Simplified remote controller
CZ-RE2C2



COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



ELITE

		Single Phase						Three Phase					
		5.0 kW	6.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW		
KIT		KIT-50PT1E5*	KIT-60PT1E5	KIT-71PT1E5	KIT-100PT1E5	KIT-125PT1E5	KIT-140PT1E5	KIT-71PT1E8	KIT-100PT1E8	KIT-125PT1E8	KIT-140PT1E8		
Indoor		S-50PT1E5	S-60PT1E5	S-71PT1E5	S-100PT1E5	S-125PT1E5	S-140PT1E5	S-71PT1E5	S-100PT1E5	S-125PT1E5	S-140PT1E5		
Outdoor		U-50PE1E5	U-60PE1E5	U-71PE1E5	U-100PE1E5	U-125PE1E5	U-140PE1E5	U-71PE1E8	U-100PE1E8	U-125PE1E8	U-140PE1E8		
Cooling capacity	Nom. (Min-Max)	kW		5.0 (1.5-5.6)	6.0 (2.5-7.1)	7.1 (2.5-8.0)	10.0 (3.3-12.5)	12.5 (3.3-14.0)	14.0 (3.3-15.5)	14.0 (3.3-15.5)	14.0 (3.3-15.5)		
EER ¹⁾	Nom. (Min-Max)	kW		2.99 (5.77-2.38) C	3.75 (5.56-3.55) A	3.24 (5.56-3.02) A	3.70 (3.93-3.38) A	3.24 (3.93-3.04) A	2.92 (3.93-2.58) C	3.24 (3.93-3.04) A	2.92 (3.93-2.58) C		
SEER	W/W	kW		5.2 A+	6.4 A++	6.0 A+	6.3 A++	—	5.5 A	6.2 A++	—		
Pdesign	kW	kW		5.0	6.0	7.1	10.0	—	7.1	10.0	—		
Power input Cooling	Nom. (Min-Max)	kW		1.670 (0.260-2.350)	1.600 (0.450-2.00)	2.190 (0.450-2.650)	2.700 (0.840-3.700)	3.860 (0.840-4.600)	4.800 (0.840-6.00)	2.190 (0.450-2.650)	2.700 (0.840-3.700)	3.860 (0.840-4.600)	4.800 (0.840-6.00)
Annual Energy Consumption ^{2-a)}	kWh/a	kWh/a		835	800	1095	1350	1930	2400	1095	1350	1930	2400
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	kWh/a		336	328	414	555	—	—	452	564	—	—
Heating capacity	Nom. (Min-Max)	kW		5.6 (1.5-6.5)	7.0 (2.0-8.0)	8.0 (2.0-9.0)	11.2 (4.1-14.0)	14.0 (4.1-16.0)	16.0 (4.1-18.0)	8.0 (2.0-9.0)	11.2 (4.1-14.0)	14.0 (4.1-16.0)	16.0 (4.1-18.0)
COP ¹⁾	Nom. (Min-Max)	W/W		3.39 (6.82-2.50) C	3.80 (5.00-3.23) A	3.45 (5.00-3.10) B	4.18 (4.56-3.18) A	3.83 (4.56-3.08) A	3.45 (4.56-3.05) B	3.45 (5.00-3.10) B	4.18 (4.56-3.18) A	3.83 (4.56-3.08) A	3.45 (4.56-3.05) B
SCOP	W/W	W/W		3.5 A	3.8 A	3.5 A	4.1 A+	—	3.4 A	4.1 A+	—	—	
Pdesign at -10 °C	kW	kW		4.0	6.0	7.1	10.0	—	7.1	10.0	—	—	
Power input Heating	Nom. (Min-Max)	kW		1.650 (0.220-2.600)	1.840 (0.400-2.480)	2.320 (0.400-2.900)	2.680 (0.900-4.400)	3.660 (0.900-5.200)	4.640 (0.900-5.900)	2.320 (0.400-2.900)	2.680 (0.900-4.400)	3.660 (0.900-5.200)	4.640 (0.900-5.900)
Annual Energy Consumption (ErP) ^{2-b)}	kWh/a	kWh/a		1600	2210	2840	3415	—	—	2923	3415	—	—
Indoor unit													
Air Volume	Cool / Heat	m³/h		780 / 780	1140 / 1140	1140 / 1140	1980 / 1980	2100 / 2100	2160 / 2160	1140 / 1140	1980 / 1980	2100 / 2100	2160 / 2160
Moisture removal volume	l/h	l/h		2.8	3.4	4.2	6.0	7.9	9.0	4.2	6.0	7.9	9.0
Sound pressure Level	Cooling (Hi / Lo)	dB(A)		36 / 33 / 30	39 / 36 / 33	39 / 36 / 33	42 / 38 / 35	45 / 40 / 37	46 / 41 / 38	39 / 36 / 33	42 / 38 / 35	45 / 40 / 37	46 / 41 / 38
	Heating (Hi / Lo)	dB(A)		36 / 33 / 30	40 / 36 / 33	40 / 36 / 33	44 / 39 / 36	46 / 41 / 38	47 / 43 / 39	40 / 36 / 33	44 / 39 / 36	46 / 41 / 38	47 / 43 / 39
Sound power level	Cool (Hi)	dB		47	58	58	61	63	64	58	61	63	64
	Heat (Hi)	dB		47	58	58	62	64	65	58	62	64	65
Dimensions	H x W x D	mm		210 x 910 x 680	210 x 1180 x 680	210 x 1180 x 680	210 x 1595 x 680	210 x 1595 x 680	210 x 1595 x 680	210 x 1180 x 680	210 x 1595 x 680	210 x 1595 x 680	210 x 1595 x 680
Net weight	kg	kg		21	25	25	33	33	33	25	33	33	
Outdoor unit													
Power source	V	V		220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	380 / 415	380 / 415	380 / 415	380 / 415
Recommended fuse	A	A		16	20	20	25	30	16	16	16	16	
Connection	mm²	mm²		2.5	2.5	2.5	4	6	2.5	2.5	2.5	2.5	
Current Cooling	Nom. (Min-Max)	A		7.70 / 7.45 / 7.20	7.40	9.90	11.90	17.10	21.30	3.30	4.05	5.80	7.25
Current Heating	Nom. (Min-Max)	A		7.60 / 7.35 / 7.15	8.30	10.40	11.80	16.20	20.60	3.45	4.00	5.50	7.00
Air Volume	Cool / Heat	m³/h		1800 / 2100	3600 / 3600	3600 / 3600	6600 / 5700	7800 / 6600	8100 / 7200	3600 / 3600	6600 / 5700	7800 / 6600	8100 / 7200
Sound pressure Level ³⁾	Cool / Heat (Hi)	dB(A)		46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55
Sound power level	Cool / Heat (Hi)	dB		65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71
Dimensions	H x W x D	mm		569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	996 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340	1416 x 940 x 340
Net weight	kg	kg		42	68	69	98	98	98	98	98	98	
Piping connections	Liquid pipe	Inch (mm)		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)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
	Gas pipe	Inch (mm)		1/2 (12.7)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)	5/8 (15.88)
Refrigerant loading	R410A	kg		1.65	2	2.35	3.4	3.4	3.4	2.35	3.4	3.4	
Elevation dif. (in/out) ⁴⁾	Max	m		30	30	30	30	30	30	30	30	30	
Piping length	Min/Max	m		40	5-50	5-50	5-75	5-75	5-75	5-50	5-75	5-75	
Precharge length	Max	m		30	30	30	30	30	30	30	30	30	
Additional charge	g/m	g/m		20	50	50	50	50	50	50	50	50	
Operating range	Cool Min/Max	°C		-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46
	Heat Min/Max	°C		-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb). // Specifications subject to change without notice.

1) EER and COP, Energy Saving Classification, is at 220 / 240 V (380 / 415 V) only in accordance with EU directive 2002/31/EC. 2-a) The annual consumption is calculated by multiplying the input power at 220 / 240 V (380 / 415 V) by an average of 500 hours per year in cooling mode. 2-b) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2013. For detailed information about ErP, please visit our page <http://www.doc.panasonic.eu>

ELITE

Internet Control Ready

INTERNET CONTROL

A class energy saving

INVERTER+

6.4 A++ SEER

SEASONAL ENERGY EFFICIENCY RATIO

3.8 A SCOP

SEASONAL COEFFICIENT OF PERFORMANCE

Down to -15 °C in cooling mode

OUTDOOR TEMPERATURE

Down to -20 °C in heating mode

OUTDOOR TEMPERATURE

Easy control by BMS

CONNECTIVITY

Possible to use on R22 pipings

R22 RENEWAL

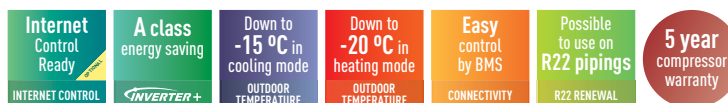
5 year compressor warranty



INTERNET CONTROL READY: Optional. SEER and SCOP: For KIT-60PT1E5.

**HIGH STATIC PRESSURE
HIDE AWAY 20.0-25.0 kW
PACi INVERTER+**

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



INTERNET CONTROL READY: Optional.

			Three Phase	
			20.0 kW	25.0 kW
KIT			KIT-200PE1E8	KIT-250PE1E8
Indoor			S-200PE1E8A	S-250PE1E8
Outdoor			U-200PE1E8	U-250PE1E8
Cooling capacity	Nom. (Min-Max)	kW	20.0 (6.0-22.4)	25.0 (6.0-28.0)
EER ¹⁾	Nominal	W/W	2.62 D	2.62 D
SEER		W/W	—	—
Pdesign		kW	—	—
Power input Cooling	Nominal	kW	7.640	9.550
Running amperes		A	11.8	14.8
Annual Energy Consumption ^{2-a)}		kWh/a	3820	4775
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	—	—
Heating capacity	Nom. (Min-Max)	kW	21.8 (6.0-22.4)	28.0 (6.0-31.5)
COP ¹⁾	Nominal	W/W	3.54 B	3.41 B
SCOP		W/W	—	—
Pdesign at -10 °C		kW	—	—
Power input Heating	Nominal	kW	6.150	8.200
Running amperes		A	9.5	12.6
Annual Energy Consumption (ErP) ^{2-b)}		kWh/a	—	—
Indoor unit				
Power source		V / ph / Hz	220 / 240 / 1 / 50	220 / 240 / 1 / 50
External static pressure ³⁾	With booster cable	Pa	216 (235)	216 (235)
Air volume	Cooling/Heating	m ³ /h	4320	4320
Moisture removal volume	Cooling	l/h	11.1	13.9
Sound pressure level ⁴⁾	(H/M/L)	dB(A)	51 / 50 / 49	51 / 50 / 49
Sound power level		dB(A)	82	82
Dimensions / Net weight	H x W x D	mm / kg	479 x 1428 x 1230 / 120	479 x 1428 x 1230 / 120
Outdoor unit				
Power source		V / ph / Hz	380 / 415 / 3+N / 50/60	380 / 415 / 3+N / 50/60
Recommended fuse		A	15	20
Air Volume	Cooling/Heating	m ³ /h	7740	7080
Sound pressure level ⁴⁾	Cooling / Heating (Hi)	dB(A)	57 / 57	57 / 58
Sound power level	(Hi)	dB	72	73
Dimensions ⁵⁾	H x W x D	mm	1526 x 940 x 340	1526 x 940 x 340
Net weight		kg	118	128
Piping connections	Liquid pipe	mm (Inch)	9.52 (3/8)	12.7 (1/2)
	Gas pipe	mm (Inch)	25.4 (1)	25.4 (1)
Refrigerant loading			5.3	6.5
Elevation dif. (in/out) ⁶⁾	Max	m	30	30
Piping length	Min-Max	m	5-100	5-100
Precharge length	Max	m	30	30
Additional charge		g/m	40	80
Operating range	Cool Min/Max	°C	-15 / 43	-15 / 43
	Heat Min/Max	°C	-20 / 15	-20 / 15

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Heating Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)

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



OPTIONAL CONTROLLERS

Timer remote controller
CZ-RTC2



Wireless remote controller
CZ-RWSC2



Simplified remote controller
CZ-RE2C2



KIT-200PE1E8 // KIT-250PE1E8

Technical Focus

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

COMPATIBLE WITH ALL ECOi CONNECTIVITY SOLUTIONS



U-200PE1E8
U-250PE1E8

Features

ENERGY EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT

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

EASE OF USE

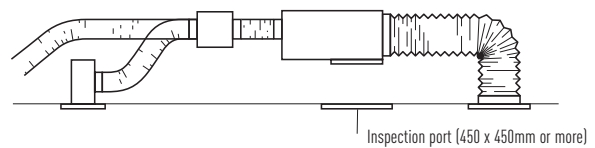
- Weekly On/Off timer (6 settings per day and 42 per week)
- Selection of wired / Wireless and simplified wired remote controller

EASY INSTALLATION AND MAINTENANCE

- High static pressure units ideal for shops and offices

System example

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



Plenums

Air Outlet Plenum (suitable for rigid + flexible duct)		
	N. of exits with diameters	Model
S-200PE1E8A / S-250PE1E8	1 x 500 mm	CZ-TREMIESPW706

PACi Standard Single and Twin System

Up to 2 indoor units connectable on the same outdoor.

Panasonic's PACi units can be installed as single and twin systems. The indoor units can be combined following the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

SINGLE

TWIN

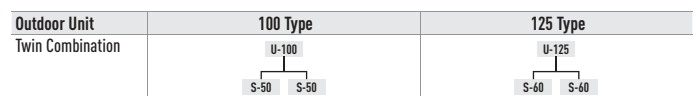
Joint distribution (sold separately) A= CZ-P155BK1

Item		Contents		Symbol		Actual length (m)
				Single	Twin	
Allowable tubing lengths	Maximum distribution tubing length	Maximum branch pipe length		-	L1 L2	≤ 15
	Sum Total Length	Maximum allowable tubing length and the sum total of other tubing		L	L + L1 > L2	≤ 50 m
Maximum branch tubing length		Maximum branch pipe length difference		-	L1 > L2 L1-L2	≤ 10
Maximum allowable height difference	Maximum indoor-outdoor height difference	If outdoor unit is higher		H1		≤ 30
		If outdoor unit is lower				≤ 15
	Maximum height difference between indoor units				-	H2

	Main tubing (L)		Indoor unit connection tube (L1, L2)	
Type capacity of indoor unit	50 - 60		60	50
Gas tube	Ø15.88		Ø15.88	Ø12.7
Liquid tube	Ø9.52	Ø12.7	Ø9.52	Ø6.35
Amount of additional change per 1 m	50 g	50 g	50 g	20 g

Single/Simultaneous operation system combinations

Indoor size	Outdoor size	
	10.0 kW	12.5 kW
5.0 kW	Twin	
6.0 kW		Twin
10.0 kW	Single	
12.5 kW		Single



Compatible Outdoor Units

			10.0 kW	10.0 kW	12.5 kW	12.5 kW
			U-100PEY1E5	U-100PEY1E8	U-125PEY1E5	U-125PEY1E8
Cooling capacity	Nom. (Min-Max)	kW	10	10.0 (2.7-11.5)	12.5 (3.8-13.5)	12.5 (3.8-13.5)
Heating capacity	Nom. (Min-Max)	kW	10	10.0 (2.1-13.8)	12.5 (3.4-15.0)	12.5 (3.4-15.0)
Power source	V		220 / 230 / 240	380 / 400 / 415	220 / 230 / 240	380 / 400 / 415
Connection		mm ²				
Air Volume	Cooling/Heating	m ³ /h	4560 / 4020	4560 / 4020	4800 / 4380	4800 / 4380
Sound pressure Level	Cooling/Heating (Hi)	dB(A)	54 / 54	54 / 54	56 / 56	56 / 56
Sound power Level	Cooling/Heating (Hi)	dB	70 / 70	70 / 70	73 / 73	73 / 73
Dimensions (Net weight)	H x W x D	mm (kg)	996 x 940 x 340 (73)	996 x 940 x 340 (73)	996 x 940 x 340 (85)	996 x 940 x 340 (85)
Piping connections	Liquid pipe / Gas pipe	Inch (mm)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)	3/8 (9.52) / 5/8 (15.88)
Refrigerant Loading	R410A	kg	2.60	2.60	3.20	3.20
Elevation dif. (in/out)	Max	m	30	30	30	30
Piping length	Min/Max	m	5 - 50	5 - 50	5 - 50	5 - 50
Operating range	Cooling Min/Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43
	Heating Min/Max	°C	-15 / 24	-15 / 24	-15 / 24	-15 / 24

U-__PEY1E5 Single Phase // U-__PEY1E8 Three Phase

Compatible Indoor Units



S-50PK1E5 / S-60PK1E5



S-50PY1E5



S-50PU1E5 / S-60PU1E5



S-50PT1E5 / S-60PT1E5



S-50PN1E5 / S-60PN1E5



S-50PF1E5 / S-60PF1E5

Compatible Outdoor Units



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

Compatible Indoor Units

			5.0 kW	6.0 kW
Wall			S-50PK1E5	S-60PK1E5
Capacity	Cooling	kW	5.0	6.0
	Heating	kW	5.6	6.0
Dimensions	H x W x D	mm	300 x 1065 x 230	300 x 1065 x 230
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	40 / 36 / 32	47 / 44 / 40
	Heating (Hi / Me / Lo)	dB(A)	40 / 36 / 32	47 / 44 / 40
Air Volume	Cooling / Heating	m ³ /h	840 / 840	1080 / 1080
4 Way 60x60 Cassette			S-50PY1E5	
Capacity	Cooling	kW	5.0	
	Heating	kW	5.6	
Dimensions	Indoor H x W x D	mm	283 x 575 x 575	
	Panel H x W x D	mm	30 x 625 x 625	
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	41 / 37 / 33	
	Heating (Hi / Me / Lo)	dB(A)	41 / 37 / 33	
Air Volume	Cooling / Heating	m ³ /h	750 / 750	
4 Way 90x90 Cassette			S-50PU1E5	S-60PU1E5
Capacity	Cooling	kW	5.0	6.0
	Heating	kW	5.6	6.0
Dimensions	Indoor H x W x D	mm	256 x 840 x 840	256 x 840 x 840
	Panel H x W x D	mm	33.5 x 950 x 950	33.5 x 950 x 950
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	32 / 29 / 27	32 / 29 / 27
	Heating (Hi / Me / Lo)	dB(A)	32 / 29 / 27	32 / 29 / 27
Air Volume	Cooling / Heating	m ³ /h	960 / 960	960 / 960
Low Static Pressure Hide Away			S-50PN1E5	S-60PN1E5
Capacity	Cooling	kW	5.0	6.0
	Heating	kW	5.6	7.0
Dimensions	H x W x D	mm	250 x 780 (+100) x 650	250 x 1000 (+100) x 650
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	35 / 39 / 41	43 / 41 / 36
	Heating (Hi / Me / Lo)	dB(A)	35 / 39 / 41	43 / 41 / 36
External static pressure	Nominal (Min-Max)	Pa	80 / 50 / 10	50 (10-80)
Air Volume	Cooling / Heating	m ³ /h	960 / 960	1320 / 1320
Hide Away High Static Pressure			S-50PF1E5	S-60PF1E5
Capacity	Cooling	kW	5.0	6.0
	Heating	kW	5.6	6.0
Dimensions	H x W x D	mm	290 x 800 x 700	290 x 1000 x 700
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	34 / 30 / 26	35 / 32 / 26
	Heating (Hi / Me / Lo)	dB(A)	34 / 30 / 26	35 / 32 / 26
External static pressure	High / Medium / Low	Pa	150 / 70 / 10	70 (10-150)
Air Volume	Cooling / Heating	m ³ /h	960 / 960	1260 / 1260
Ceiling			S-50PT1E5	S-60PT1E5
Capacity	Cooling	kW	5.0	6.0
	Heating	kW	5.6	6.0
Dimensions	H x W x D	mm	210 x 910 x 680	210 x 1180 x 680
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	38 / 33 / 30	39 / 36 / 33
	Heating (Hi / Me / Lo)	dB(A)	39 / 34 / 30	40 / 36 / 33
Air Volume	Cooling / Heating	m ³ /h	840 / 840	1140 / 1140

PACi Elite Single, Twin, Triple and Double-Twin System from 7.1 to 14.0 kW

SINGLE

TWIN

TRIPLE

DOUBLE-TWIN

Joint distribution (sold separately)

A= CZ-P155BK1
B= CZ-P3HPC2BM

Item	Indoor unit combinations (see examples above)				Equivalent lengths and height differences (m) for outdoor unit sizes...	
	Single	Twin	Triple	Double-Twin	50 - 71	100 - 140
Total pipe length	L	L + L1 + L2	L + L1 + L2 + L3	L + L1 + L2 + L3 + L4 + L5 + L6	≤ 50 m	≤ 75 m
Maximum branch pipe length	-	L1 or L2	L1 or L2 or L3	L1 + L3 or L1 + L4 or L2 + L5 or L2 + L6	≤ 15 m	
Maximum branch pipe length differences	-	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	
Maximum pipe length after first branch (Double-Twin)	-	-	-	L2 > L1: L2 - L1	≤ 10 m	
Maximum pipe length differences after second branch (Double-Twin)	-	-	-	L4 > L3: L4 - L3 L6 > L5: L6 - L5	≤ 10 m	
Height difference (O/U located higher)	H1	H1	H1	H1	≤ 30 m	
Height difference (O/U located lower)	H1	H1	H1	H1	≤ 15 m	
Height difference between indoor units	-	H2	H2 or H3 or H4	H2 or H3 or H4 or H5 or H6	≤ 0,5 m	

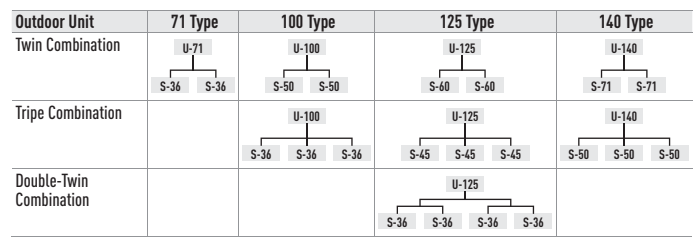
	Outdoor unit main pipe diameter (L) (mm)		Indoor unit connection pipe diameter (L1, L2, L3, L4) (mm)				
	S-36	S-50	S-36	S-45	S-50	S-60	S-71
Liquid pipe (mm)	Ø 9.52	Ø 9.52	Ø 6.35	Ø 6.35	Ø 6.35	Ø 9.52	Ø 9.52
Gas pipe (mm)	Ø 15.88	Ø 15.88	Ø 12.70	Ø 12.70	Ø 12.70	Ø 15.88	Ø 15.88
Branch pipe kit (option)	Twin, Double-Twin	Twin, Double-Twin	CZ-P155BK1				
		Triple	CZ-P3HPC2BM				

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

Liquid pipe diameter	Addition amount of refrigerant (g/m)
Ø 6.35	20
Ø 9.52	50

Single/Simultaneous operation system combinations

Indoor size \ Outdoor size	6.0 kW	7.1 kW	10.0 kW	12.5 kW	14.0 kW
3.6 kW					
4.5 kW		Twin	Triple	Double-twin	
5.0 kW			Triple		
5.0 kW			Twin		Triple
6.0 kW	Single			Twin	
7.1 kW		Single			Twin
10.0 kW			Single		
12.5 kW				Single	
14.0 kW					Single



Compatible Outdoor Units

		7.1 kW	7.1 kW	10.0 kW	10.0 kW	12.5 kW	12.5 kW	14.0 kW	14.0 kW
Outdoor		U-71PE1E5	U-71PE1E8	U-100PE1E5	U-100PE1E8	U-125PE1E5	U-125PE1E8	U-140PE1E5	U-140PE1E8
Cooling capacity	Nom. (Min-Max)	kW 7.1 (2.5 - 8.0)		kW 10.0 (3.3 - 12.5)		kW 12.5 (3.3 - 14.0)		kW 14.0 (3.3 - 15.5)	
Heating capacity	Nom. (Min-Max)	kW 8.0 (2.0 - 9.0)		kW 11.2 (4.1 - 14.0)		kW 14.0 (4.1 - 16.0)		kW 16.0 (4.1 - 18.0)	
Power source	V	220 - 240		380 - 415		220 - 240		380 - 415	
Connection	mm ²	2 x 1.5 or 2.5		2 x 1.5 or 2.5		2 x 1.5 or 2.5		2 x 1.5 or 2.5	
Air Volume	Cooling/Heating	m ³ /h 3600 / 3600		6600 / 5700		7800 / 6600		8100 / 7200	
Sound pressure Level	Cooling/Heating (Hi)	dB(A) 48 / 50		52 / 52		53 / 53		54 / 55	
Sound power Level	Cooling/Heating (Hi)	dB 65 / 67		69 / 69		70 / 70		71 / 71	
Dimensions (Net weight)	H x W x D	mm (kg) 996 x 940 x 340 (69)		1416 x 940 x 340 (98)		1416 x 940 x 340 (98)		1416 x 940 x 340 (98)	
Piping connections	Liquid pipe / Gas pipe	Inch (mm) 3/8 (9.52) / 5/8 (15.88)		3/8 (9.52) / 5/8 (15.88)		3/8 (9.52) / 5/8 (15.88)		3/8 (9.52) / 5/8 (15.88)	
Refrigerant Loading	R410A	kg 2.35		3.4		3.4		3.4	
Elevation dif. (in/out)	Max	m 30		30		30		30	
Piping length	Min/Max	m 5 - 50		5 - 75		5 - 75		5 - 75	
Operating range	Cooling Min/Max	°C -15 / 46		-15 / 46		-15 / 46		-15 / 46	
	Heating Min/Max	°C -20 / 24		-20 / 24		-20 / 24		-20 / 24	

U_- _E1E5 Single Phase // U_- _E1E8 Three Phase

Compatible Indoor Units



S-36PK1E5 / S-45PK1E5 / S-50PK1E5 / S-60PK1E5 / S-71PK1E5



S-36PU1E5 / S-45PU1E5 / S-50PU1E5 / S-60PU1E5 / S-71PU1E5



S-36PN1E5 / S-45PN1E5 / S-50PN1E5 / S-60PN1E5 / S-71PN1E5



S-36PY1E5 / S-45PY1E5 / S-50PY1E5



S-36PT1E5 / S-45PT1E5 / S-50PT1E5 / S-60PT1E5 / S-71PT1E5



S-36PF1E5 / S-45PF1E5 / S-50PF1E5 / S-60PF1E5 / S-71PF1E5

Compatible Outdoor Units



U-71PE1E5 / U-71PE1E8



U-100PE1E5 / U-100PE1E8 / U-125PE1E5 / U-125PE1E8 / U-140PE1E5 / U-140PE1E8

Compatible Indoor Units

			3.6 kW	4.6 kW	5.0 kW	6.0 kW	7.1 kW
Wall			S-36PK1E5	S-45PK1E5	S-50PK1E5	S-60PK1E5	S-71PK1E5
Capacity	Cooling	kW	3.6	4.5	5.0	6.0	7.1
	Heating	kW	4.2	5.2	5.6	7.0	8.0
Dimensions	H x W x D	mm	300 x 1065 x 230	300 x 1065 x 230	300 x 1065 x 230	300 x 1065 x 230	300 x 1065 x 230
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	35 / 31 / 27	38 / 34 / 30	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40
	Heating (Hi / Me / Lo)	dB(A)	35 / 31 / 27	38 / 34 / 30	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40
Air Volume	Cooling / Heating	m ³ /h	660 / 660	720 / 720	840 / 840	1080 / 1080	1080 / 1080
4 Way 60x60 Cassette			S-36PY1E5	S-45PY1E5	S-50PY1E5		
Capacity	Cooling	kW	3.6	4.5	5.0		
	Heating	kW	4.2	5.2	5.6		
Dimensions	Indoor H x W x D	mm	283 x 575 x 575	283 x 575 x 575	283 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		
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	32 / 29 / 26	36 / 32 / 28	41 / 37 / 33		
	Heating (Hi / Me / Lo)	dB(A)	32 / 29 / 26	36 / 32 / 28	41 / 37 / 33		
Air Volume	Cooling / Heating	m ³ /h	540 / 540	636 / 636	750 / 750		
4 Way 90x90 Cassette			S-36PU1E5	S-45PU1E5	S-50PU1E5	S-60PU1E5	S-71PU1E5
Capacity	Cooling	kW	3.6	4.5	5.0	6.0	7.1
	Heating	kW	4.2	5.2	5.6	7.0	8.0
Dimensions	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	256 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
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	30 / 28 / 27	31 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28
	Heating (Hi / Me / Lo)	dB(A)	30 / 28 / 27	31 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28
Air Volume	Cooling / Heating	m ³ /h	840 / 840	900 / 900	960 / 960	1260 / 1260	1320 / 1320
Low Static Pressure Hide Away			S-36PN1E5	S-45PN1E5	S-50PN1E5	S-60PN1E5	S-71PN1E5
Capacity	Cooling	kW	3.6	4.5	5.0	6.0	7.1
	Heating	kW	4.2	5.2	5.6	7.0	8.0
Dimensions	H x W x D	mm	250 x 780(+100) x 650	250 x 780(+100) x 650	250 x 780(+100) x 650	250 x 1000(+100) x 650	250 x 1000(+100) x 650
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	40 / 38 / 35	41 / 39 / 35	41 / 39 / 35	43 / 41 / 36	43 / 41 / 36
	Heating (Hi / Me / Lo)	dB(A)	40 / 38 / 35	41 / 39 / 35	41 / 39 / 35	43 / 41 / 36	43 / 41 / 36
External static pressure	High / Medium / Low	Pa	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10
Air Volume	Cooling / Heating	m ³ /h	840 / 840	960 / 960	960 / 960	1320 / 1320	1320 / 1320
Hide Away High Static Pressure			S-36PF1E5	S-45PF1E5	S-50PF1E5	S-60PF1E5	S-71PF1E5
Capacity	Cooling	kW	3.6	4.5	5.0	6.0	7.1
	Heating	kW	4.2	5.2	5.6	7.0	8.0
Dimensions	H x W x D	mm	290 x 800 x 700	290 x 800 x 700	290 x 800 x 700	290 x 1000 x 700	290 x 1000 x 700
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	33 / 29 / 25	34 / 30 / 26	34 / 30 / 26	35 / 32 / 26	35 / 32 / 26
	Heating (Hi / Me / Lo)	dB(A)	33 / 29 / 25	34 / 30 / 26	34 / 30 / 26	35 / 32 / 26	35 / 32 / 26
External static pressure	High / Medium / Low	Pa	150 / 70 / 10	150 / 70 / 10	150 / 70 / 10	150 / 70 / 10	150 / 70 / 10
Air Volume	Cooling / Heating	m ³ /h	840 / 840	840 / 840	960 / 960	1260 / 1260	1260 / 1260
Ceiling			S-36PT1E5	S-45PT1E5	S-50PT1E5	S-60PT1E5	S-71PT1E5
Capacity	Cooling	kW	3.6	4.5	5.0	6.0	7.1
	Heating	kW	4.2	5.2	5.6	7.0	8.0
Dimensions	H x W x D	mm	210 x 910 x 680	210 x 910 x 680	210 x 910 x 680	210 x 1180 x 680	210 x 1180 x 680
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	35 / 32 / 30	38 / 33 / 30	38 / 33 / 30	39 / 36 / 33	39 / 36 / 33
	Heating (Hi / Me / Lo)	dB(A)	36 / 32 / 30	39 / 34 / 30	39 / 34 / 30	40 / 36 / 33	40 / 36 / 33
Air Volume	Cooling / Heating	m ³ /h	720 / 720	840 / 840	840 / 840	1140 / 1140	1140 / 1140

PACi Elite Single, Twin, Triple and Double-Twin System from 20 to 25 kW

Up to 4 indoor units can be connected to the same outdoor unit. Panasonic's PACi units 200 and 250 can be installed as twin, triple and double-twin systems. The indoor units can be combined as per the selection table. The operation will always be simultaneous. All the indoor units will work with the same settings.

SINGLE

TWIN

TRIPLE

DOUBLE-TWIN

Joint distribution (sold separately)

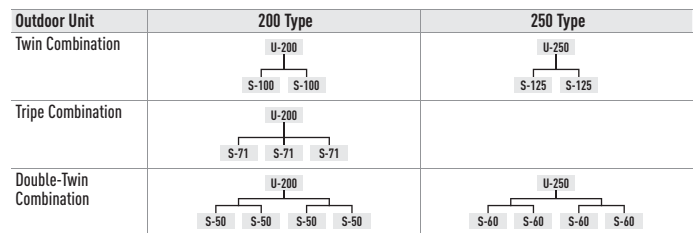
A = CZ-P680BK2BM
 B = CZ-P3HPC2BM
 C = CZ-P155BK1

Item	Indoor unit combinations (see examples above)				Equivalent lengths and height differences (m) for outdoor unit sizes...
	Single	Twin	Triple	Double-Twin	
Total pipe length	L	L + L1 + L2	L + L1 + L2 + L3	L + L1 + L2 + L3 + L4 + L5 + L6	≤ 100 m
Maximum pipe length from O/U to most distant I/U	-	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	≤ 100 m
Maximum branch pipe length	-	L1 or L2	L1 or L2 or L3	L1 + L3 or L1 + L4 or L2 + L5 or L2 + L6	≤ 20 m
Maximum branch pipe length differences	-	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
Maximum pipe length after first branch (Double-Twin)	-	-	-	L2 > L1: L2 - L1	≤ 10 m
Maximum pipe length differences after second branch (Double-Twin)	-	-	-	L4 > L3: L4 - L3 L6 > L5: L6 - L5	≤ 10 m
Height difference (O/U located higher)	H1	H1	H1	H1	≤ 30 m
Height difference (O/U located lower)	H1	H1	H1	H1	≤ 15 m
Height difference between indoor units	-	H2	H2 or H3 or H4	H2 or H3 or H4 or H5 or H6	≤ 0,5 m

	Outdoor unit main pipe diameter (L) (mm)		Double-twin distribution pipe (L1, L2) (mm)		Indoor unit connection pipe diameter	
	20.0	25.0	Total capacity of indoor unit connected after the branch		200 and 250	3.6 - 5.0
Indoor unit capacity (kW)	20.0	25.0	10.0 - 14.0		6.0 - 14.0	3.6 - 5.0
Gas pipe (mm)	Ø 25.4	Ø 25.4	Ø 15.88		Ø 15.88	Ø 12.7
Liquid pipe (mm)	Ø 9.52	Ø 12.7	Ø 9.52		Ø 9.52	Ø 6.35
Additional amount of refrigerant (g/m)	40	80	40		40	20

Single/Simultaneous operation system combinations

Indoor size	Outdoor size	20.0 kW	25.0 kW
3.6 kW			
4.5 kW			
5.0 kW		Double-twin	
6.0 kW			Double-twin
7.1 kW		Triple	
10.0 kW		Twin	
12.5 kW			Twin
14.0 kW			
20.0 kW		Single	
25.0 kW			Single



Compatible Outdoor Units

			20.0 kW	25.0 kW
Outdoor			U-200PE1E8	U-250PE1E8
Cooling capacity	Nom. (Min-Max)	kW	20.0 (6.0-22.4)	25.0 (6.0-28.0)
Heating capacity	Nom. (Min-Max)	kW	21.8 (6.0-22.4)	28.0 (6.0-31.5)
Power source		V / ph / Hz	380 / 415 / 3+N / 50/60	380 / 415 / 3+N / 50/60
Recommended fuse			15A	20A
Recommended cable size		m	14	14
Air Volume	Cooling/Heating	m³/h	7740	7080
Sound pressure level	Cooling / Heating (Hi)	dB(A)	57 / 57	57 / 58
Sound power level	(Hi)	dB	72	73
Dimensions / Net weight	H x W x D	mm / kg	1526 x 940 x 340 / 118	1526 x 940 x 340 / 128
Refrigerant circuit				
Tube diameter Narrow/Wide	mm (inch)		9.52 (3/8) / 25.4 (1)	12.7 (1/2) / 25.4 (1)
Max piping length	m		100	100
Amount of additional refrigerant	g/m		40	80
Piping connections	Liquid / Gas pipe	mm (Inch)	9.52 (3/8) / 25.4 (1)	12.7 (1/2) / 25.4 (1)
Refrigerant loading			5.3	6.5
Elevation dif. (in/out)	Max	m	30	30
Piping length	Min-Max	m	5-100	5-100
Operating range	Cooling Min/Max	°C	-15 / 43	-15 / 43
	Heating Min/Max	°C	-20 / 15	-20 / 15

Compatible Indoor Units



S-50PK1E5 / S-60PK1E5 / S-71PK1E5



S-50PY1E5



S-50PU1E5 / S-60PU1E5 / S-71PU1E5 / S-100PU1E5 / S-125PU1E5



S-50PT1E5 / S-60PT1E5 / S-71PT1E5 / S-100PT1E5 / S-125PT1E5



S-50PN1E5 / S-60PN1E5 / S-71PN1E5 / S-100PN1E5 / S-125PN1E5



S-50PF1E5 / S-60PF1E5 / S-71PF1E5 / S-100PF1E5 / S-125PF1E5

Compatible Outdoor Units



U-200PE1E8 / U-250PE1E8

Compatible Indoor Units

			5.0 kW	6.0 kW	7.1 kW	10.0 kW	12.5 kW
Wall			S-50PK1E5	S-60PK1E5	S-71PK1E5		
Capacity	Cooling	kW	5.0	6.0	7.1		
	Heating	kW	5.6	7.0	8.0		
Dimensions	H x W x D	mm	300 x 1065 x 230			300 x 1065 x 230	
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	40 / 36 / 32			47 / 44 / 40	
	Heating (Hi / Me / Lo)	dB(A)	40 / 36 / 32			47 / 44 / 40	
Air Volume	Cooling / Heating	m ³ /h	840 / 840			1080 / 1080	
4 Way 60x60 Cassette			S-50PY1E5				
Capacity	Cooling	kW	5.0				
	Heating	kW	5.6				
Dimensions	Indoor H x W x D	mm	283 x 575 x 575				
	Panel H x W x D	mm	30 x 625 x 625				
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	41 / 37 / 33				
	Heating (Hi / Me / Lo)	dB(A)	41 / 37 / 33				
Air Volume	Cooling / Heating	m ³ /h	750 / 750				
4 Way 90x90 Cassette			S-50PU1E5	S-60PU1E5	S-71PU1E5	S-100PU1E5	S-125PU1E5
Capacity	Cooling	kW	5.0	6.0	7.1	10.0	12.5
	Heating	kW	5.6	7.0	8.0	11.2	14.0
Dimensions	Indoor H x W x D	mm	256 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	
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	32 / 29 / 27			44 / 38 / 32	
	Heating (Hi / Me / Lo)	dB(A)	32 / 29 / 27			44 / 38 / 32	
Air Volume	Cooling / Heating	m ³ /h	960 / 960			1.980 / 1.980	
Low Static Pressure Hide Away			S-50PN1E5	S-60PN1E5	S-71PN1E5	S-100PN1E5	S-125PN1E5
Capacity	Cooling	kW	5.0	6.0	7.1	10.0	12.5
	Heating	kW	5.6	7.0	8.0	11.2	14.0
Dimensions	H x W x D	mm	250 x 780(+100) x 650			250 x 1000(+100) x 650	
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	41 / 39 / 35			44 / 42 / 37	
	Heating (Hi / Me / Lo)	dB(A)	41 / 39 / 35			44 / 42 / 37	
External static pressure	High / Medium / Low	Pa	80 / 50 / 10			80 / 50 / 10	
Air Volume	Cooling / Heating	m ³ /h	960 / 960			2160 / 2160	
Hide Away High Static Pressure			S-50PF1E5	S-60PF1E5	S-71PF1E5	S-100PF1E5	S-125PF1E5
Capacity	Cooling	kW	5.0	6.0	7.1	10.0	12.5
	Heating	kW	5.6	7.0	8.0	11.2	14.0
Dimensions	H x W x D	mm	290 x 800 x 700			290 x 1000 x 700	
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	34 / 30 / 26			38 / 34 / 31	
	Heating (Hi / Me / Lo)	dB(A)	34 / 30 / 26			38 / 34 / 31	
External static pressure	High / Medium / Low	Pa	150 / 70 / 10			150 / 100 / 10	
Air Volume	Cooling / Heating	m ³ /h	960 / 960			1920 / 1920	
Ceiling			S-50PT1E5	S-60PT1E5	S-71PT1E5	S-100PT1E5	S-125PT1E5
Capacity	Cooling	kW	5.0	6.0	7.1	10.0	12.5
	Heating	kW	5.6	7.0	8.0	11.2	14.0
Dimensions	H x W x D	mm	210 x 910 x 680			210 x 1180 x 680	
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	38 / 33 / 30			42 / 38 / 35	
	Heating (Hi / Me / Lo)	dB(A)	39 / 34 / 30			42 / 38 / 35	
Air Volume	Cooling / Heating	m ³ /h	840 / 840			1980 / 1980	

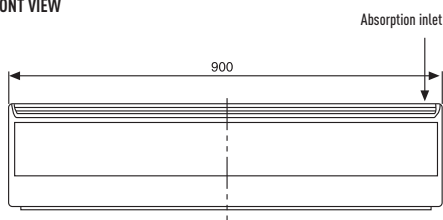
ELECTRIC AIR CURTAIN

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

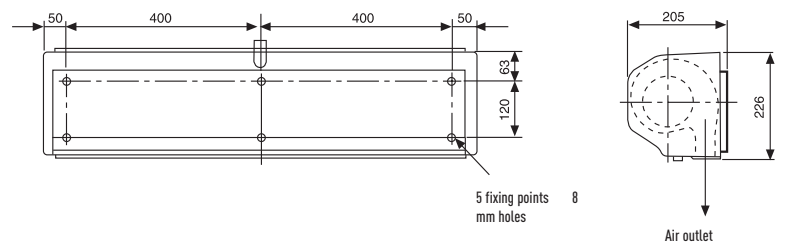
			FY-10ESPNAH	FY-10ELPNAH
Width			900	1.200
Watts	Hi	W	71,5	96
	Lo	W	61,5	74
Current	Hi	A	0,40	0,54
	Lo	A	0,29	0,35
Air speed	Hi	m/s	13,0	13,1
	Lo	m/s	11,1	11,0
Air volume	Hi	m ³ /h	750	1.000
	Lo	m ³ /h	630	830
Noise lever	Hi	dB(A)	46	46
	Lo	dB(A)	42	41
Weight		kg	11	14

INDOOR UNIT DIMENSIONS FY-10ESPNAH

FRONT VIEW

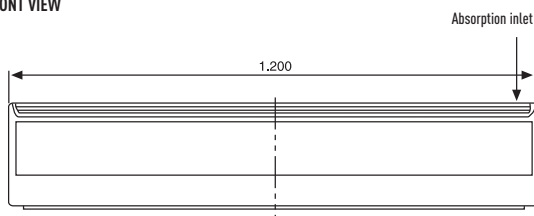


BACK VIEW

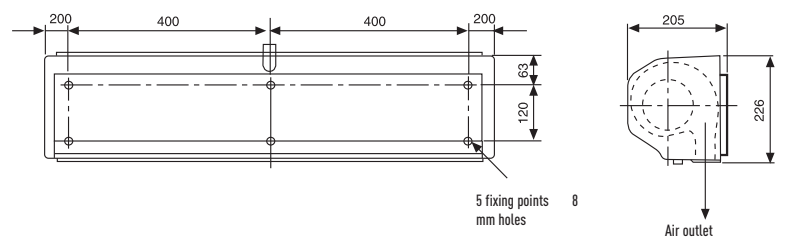


INDOOR UNIT DIMENSIONS FY-10ELPNAH

FRONT VIEW



BACK VIEW





FY-10ESPNAH // FY-10ELPNAH

Technical Focus

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

Features

COMFORT

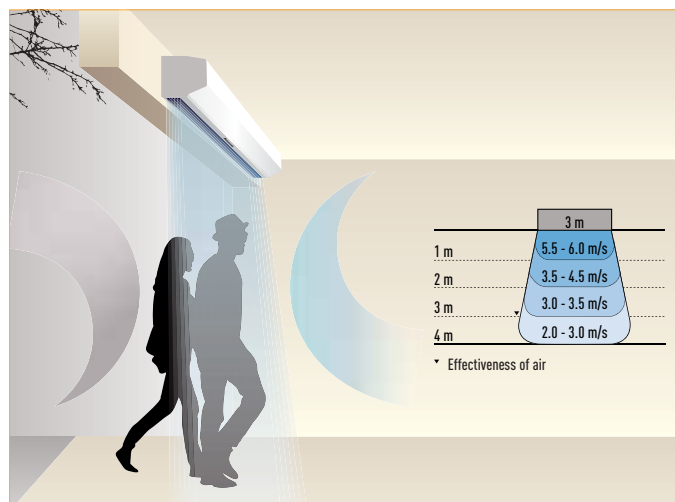
- Easy redirection of airflow by means of the manual deflector

EASE OF USE

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

EASY INSTALLATION AND MAINTENANCE

- Simple installation
- Compact dimensions improve installation and positioning in any space



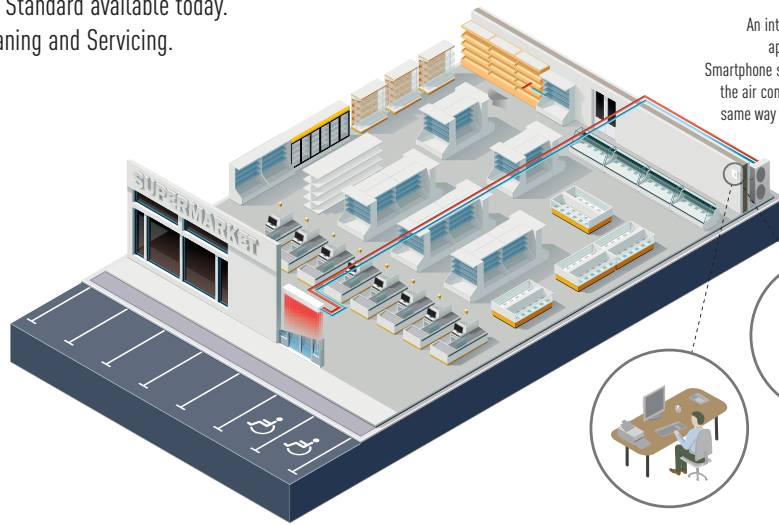
AIR CURTAIN
WITH HEX

High efficiency Air curtain connected to your PACi installation on 1x1 connection!

EC Fan motor for a smooth operation and efficient performance.
2 types of Air flow available: Jet-Flow and Standard.
2015 Fan Standard available today.
Easy Cleaning and Servicing.

INTERNET CONTROL

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

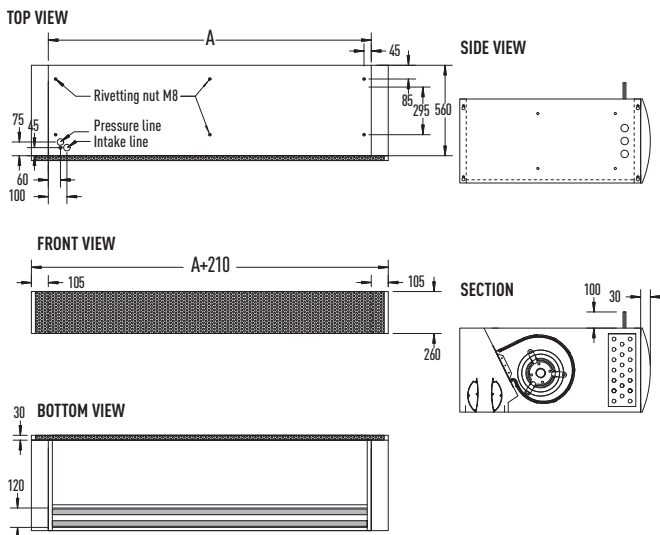


HP	4		8		10		4		10	
Air Curtain	PAW-10PAIRC-MJ*		PAW-15PAIRC-MJ*		PAW-20PAIRC-MJ*		PAW-10PAIRC-MS*		PAW-20PAIRC-MS*	
Air flow type	Jetflow		Jetflow		Jetflow		Standard		Standard	
Air Volume	High / Med / Low	m ³ /h	2700 / 1900 / 1200	3600 / 2500 / 1600	5400 / 3800 / 2400	2700 / 1900 / 1200	5400 / 3800 / 2400			
Air flow length (A)		m	1.0	1.5	2.0	1.0	2.0			
Heating capacity max (at air in 20 °C)		kW	12.47	19.55	29.99	12.47	29.99			
Max Installation high		m	2.7	2.7	2.7	2.4	2.4			
Refrigerant			R410A	R410A	R410A	R410A	R410A			
Tubing Gas		mm	16	18	22	16	22			
Tubing Liquid		mm	10	10	10	10	10			
Fan		-	230 V / 50 Hz / 1 / N / PE	230 V / 50 Hz / 1 / N / PE	230 V / 50 Hz / 1 / N / PE	230 V / 50 Hz / 1 / N / PE	230 V / 50 Hz / 1 / N / PE			
Fan type			EC	EC	EC	EC	EC			
Currency	High / Med / Low	A	2.1 / 0.8 / 0.3	2.8 / 1.1 / 0.4	4.2 / 1.6 / 0.6	2.1 / 0.8 / 0.3	4.2 / 1.6 / 0.6			
Electrical Consumption	High / Med / Low	kW	0.44 / 0.17 / 0.06	0.59 / 0.23 / 0.08	0.89 / 0.34 / 0.12	0.44 / 0.17 / 0.06	0.89 / 0.34 / 0.12			
Protecting Fuse		A	M16A	M16A	M16A	M16A	M16A			
Noise		dB(A)	40-55	40-56	40-57	40-55	40-57			
Dimensions	L x H x D	mm	1210 x 260 x 590	1710 x 260 x 590	2210 x 260 x 590	1210 x 260 x 490	2210 x 260 x 490			
Weight		kg	70	100	138	60	128			

Outdoor combination with PACi Elite unit	U-100PE1E5/8	U-200PE1E8	U-250PE1E8	U-100PE1E5/8	U-250PE1E8
Outdoor combination with PACi Standard unit	U-100PEY1E5/8			U-100PEY1E5/8	

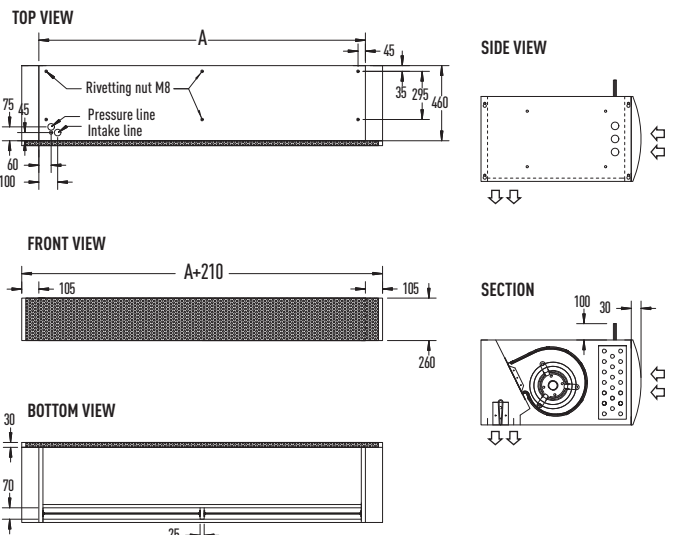
* Available from April 2013.

JETFLOW DIMENSIONS



	PAW-10PAIRC-MJ	PAW-15PAIRC-MJ	PAW-20PAIRC-MJ
A	1000	1500	2000

STANDARD DIMENSIONS



	PAW-10PAIRC-MS	PAW-20PAIRC-MS
A	1000	2000



JET-FLOW: PAW-10PAIRC-MJ // PAW-15PAIRC-MJ // PAW-20PAIRC-MJ

Technical Focus

- SAVE UP TO 40% ENERGY COSTS BY USE OF THE INTEGRATED EC FAN TECHNOLOGY
 - HIGHER EFFICIENCY THAN CONVENTIONAL AC FAN
 - SOFTSTART
 - LONGER MOTOR DURATION
- 3 LENGTHS OF AIR CURTAINS, FROM 1,0 TO 2,0 m
- INSTALLATION HEIGHT UP TO 2,7 m
- OUTLET GRILLES CAN BE ADJUSTED IN FIVE POSITIONS, TO SUITE DIFFERENT INDOOR AND INSTALLATION REQUIREMENTS
- CONTROL WITH PANASONIC REMOTE CONTROL SYSTEMS (OPTIONAL)
- DIRECT INTEGRATION TO BMS BY OPTIONAL PANASONIC INTERFACES
- DRAIN INCLUDED FOR COOLING OPERATION

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

Technical Focus

- SAVE UP TO 40% ENERGY COSTS BY USE OF THE INTEGRATED EC FAN TECHNOLOGY
 - HIGHER EFFICIENCY THAN CONVENTIONAL AC FAN
 - SOFTSTART
 - LONGER MOTOR DURATION
- 2 LENGTHS OF AIR CURTAINS, 1,0 AND 2,0 m
- INSTALLATION HEIGHT UP TO 2,4 m
- CONTROL WITH PANASONIC REMOTE CONTROL SYSTEMS (OPTIONAL)
- DIRECT INTEGRATION TO BMS BY OPTIONAL PANASONIC INTERFACES
- DRAIN INCLUDED FOR COOLING OPERATION

Features

COMFORT

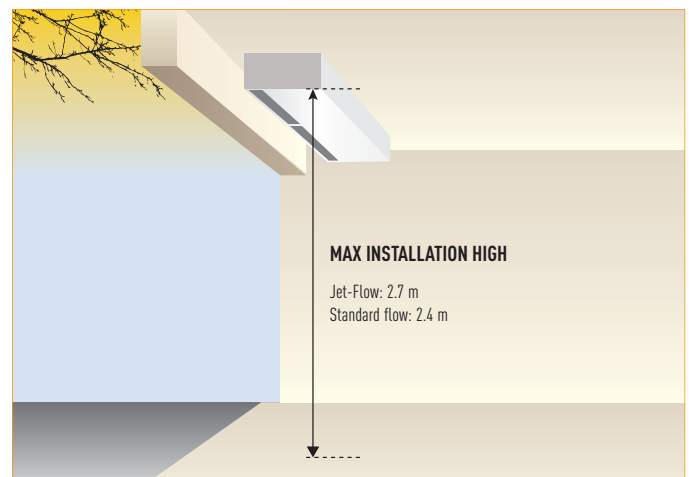
- Easy redirection of Air-Flow by means of manual deflector (Jet-Flow)

EASE OF USE

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

EASY INSTALLATION AND MAINTENANCE

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





AIR HANDLING UNIT Kit 5-25 kW for PACi

NEW AHU KIT CONNECTS PACi OUTDOOR UNITS TO
AIR HANDLING UNITS SYSTEM.



The Panasonic AHU Kits offer a wealth of connectivity possibilities so can be easily integrated into many systems.
Application: Hotels, offices, server rooms or all large buildings where air quality control such as humidity control and fresh air and is needed.

AHU CONNECTION KIT



PCB, Power trans,
Terminal block



Remote control can be
easily installed on the AHU
box. Remote control must
be purchase separately.



Thermistor x2
(Refrigerant: E1, E2)



Thermistor x1
(Air: Tf)

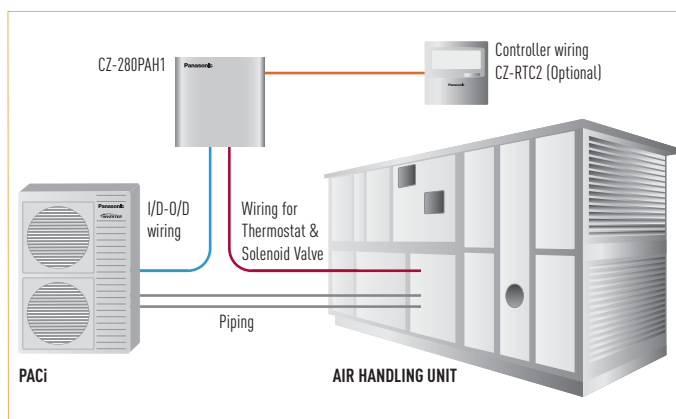
REMOTE CONTROLLER



Standard wired remote
controller. Optional

Panasonic AHU Kit, 5-25 kW connected to PACi outdoor unit

PCB, Transformer, Thermistor x 3 pcs, Terminal Base and Electrical Component Box.



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

CZ-RTC2 Wired remote controller

- Operation-ON/OFF
- Mode select
- Temperature setting

* Fan operation signal can be taken from the PCB.

CZ-T10 terminal

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

PAW-OCT, DC12 V outlet. OPTION terminal

- Output signal= Cool / Heat/Fan status
- Defrost
- Thermostat-ON

CZ-CAPBC2 Mini seri-para I/O unit

- Temperature setting by 0-10 V or 0-140 \square input signal
- Room (inlet air) temp outlet by 4-20 mA
- Mode select or/and ON/OFF control
- Fan operation control
- Operation status output/ Alarm output






COMBINATION TABLE FOR PACi SINGLE OUTDOOR UNIT

Combination shown in below table is available for PACi single system

Power	Size	PACi Standard	PACi Elite	AHU kit
Single phase	5.0 kW		U-50PE1E5	CZ-280PAH1 (Common use for all outdoor units. Only 1 by 1 connection is allowed.)
	6.0 kW	U-60PEY1E5	U-60PE1E5	
	7.1 kW	U-71PEY1E5	U-71PE1E5	
	10.0 kW	U-100PEY1E5	U-100PE1E5	
	12.5 kW	U-125PEY1E5	U-125PE1E5	
	14.0 kW		U-140PE1E5	
Three phase	7.1 kW		U-71PE1E8	
	10.0 kW	U-100PEY1E8	U-100PE1E8	
	12.5 kW	U-125PEY1E8	U-125PE1E8	
	14.0 kW	U-140PEY1E8	U-140PE1E8	
	20.0 kW		U-200PE1E8	
	25.0 kW		U-250PE1E8	

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








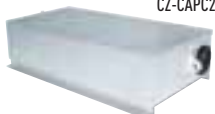




OPERATION SYSTEM	INDIVIDUAL CONTROL SYSTEMS				TIMER OPERATION
Requirements	Normal operation	Operation from each seat	Quick and easy operation		Daily and weekly program
External appearance					
Type, model name	Timer Remote Controller (Wired) CZ-RTC2	Wireless Remote Controller CZ-RWSU2 CZ-RWSY2 CZ-RWSL2 CZ-RWSC2 CZ-RWST2 CZ-RWSK2	Simplified Remote Controller CZ-RE2C2	Backlight remote controller CZ-RELC2	Schedule Timer CZ-ESWC2
Built-in Thermostat	✗	✗	✗		
N. of I/O which can be controlled	1 group, 8 units	1 group, 8 units	1 group, 8 units		64 groups, max. 64 units
Use limitations	· Up to 2 controllers can be connected per group.	· Up to 2 controllers can be connected per group.	· CZ-RE2C2: up to 2 controllers can be connected per group. · CZ-RELC2: can not operate other (SUB) remo-con.		· Required power supply from the system controller · When there is no system controller, connection is possible to the T10 terminal of an indoor unit.
Function ON/OFF	✗	✗	✗		—
Mode setting	✗	✗	✗		—
Fan speed setting	✗	✗	✗		—
Temperature setting	✗	✗	✗		—
Air flow direction	✗	✗ ¹	✗ ¹		—
Permit/Prohibit switching	—	—	—		—
Weekly program	✗	—	—		✗

1. Setting is not possible when a remote control unit is present. (Use the remote control for setting.)
All specifications subject to change without notice.

Control Systems for PACi

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

CENTRALIZED CONTROL SYSTEMS

Operation with various function from center station	Only ON/OFF operation from center station	Simplified load distribution ratio (LDR) for each tenant	BMS System. PC Base	Connection with 3rd Party Controller
				
System Controller	ON/OFF Controller	Intelligent Controller (Touch screen panel)	P-AIMS. Basic Software	Seri-Para I/O unit for outdoor unit CZ-CSWKC2
CZ-64ESMC2	CZ-ANC2	CZ-256ESMC2 (CZ-CFUNC2)	CZ-CSWKC2	
—	—	—	Optional software	
64 groups, max. 64 units	16 groups, max. 64 units	64 units x 4 systems, max. 256 units		
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Up to 8 controllers (4 main units + 4 sub units) can be connected to one system. Use without remote controller is impossible. 	<ul style="list-style-type: none"> A communication adaptor (CZ-CFUNC2) must be installed for three or more systems. 	CZ-CSWAC2 for Load distribution. CZ-CSWWC2 for Web application. CZ-CSWGC2 for Object layout display. CZ-CSWBC2 for BAC net software interface. *PC required (field supply)	MINI Seri-Para I/O Unit CZ-CAPBC2 *PC required (field supply)
X	X	X	Web Interface Systems CZ-CWEBC2 *PC required (field supply)	
X	—	X		
X	—	X		
X	—	X		
X ¹	—	X ¹		
X	X	X		
—	—	X		

Individual Control Systems

Timer remote controller (CZ-RTC2)



Dimensions
H 120 x W 120 x D 16 mm

Basic remote controller ON/OFF

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

Time Function 24 hours real time clock

- Week day indicator.

Weekly Programme Function

- A maximum of 6 actions can be programmed for each day.

Outing Function

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

Sleeping Function

- This function controls the room temperature for comfortable sleeping.

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

Remote control by main remote controller and sub controller is possible

Max. 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit.

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

Wireless remote controller



Y1 TYPE

CZ-RWSY2



U1 TYPE

CZ-RWSU2



L1 TYPE

CZ-RWSL2



K1 TYPE

CZ-RWSK2



D1 AND T1 TYPE

CZ-RWST2



WIRELESS REMOTE CONTROL FOR ALL INDOOR UNITS

CZ-RWSC2

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

24 hour timer function

Remote control by main remote controller and sub controller is possible

- Max. 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit.

When CZ-RWSC2 is used, wireless control becomes possible for all indoor units

- When a separate receiver is set up in a different room, control from that room also becomes possible.
- Automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted.

Operation of separate energy recovery ventilators

When commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote control (interlocked operation with the indoor unit or independent ventilation ON/OFF).

Simplified remote controller (CZ-RE2C2)



Dimensions
H 120 x W 70 x D 16 mm

A remote controller with simple functions and basic operation

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

Backlight remote controller (CZ-RELC2)



Dimensions
H 120 x W 70 x D 16 mm

Backlight remote controller with simple and friendly operation

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

Remote sensor (CZ-CSRC2)



- This remote sensor can be connected to any indoor unit. Please use it to detect the room temperature when no remote controller sensor or body sensor is used. (connection to a system without a remote controller is possible).
- For joint use with a remote control switch, use the remote control switch as main remote controller.
- Batch group control for up to 8 indoor units.

CONTROL CONTENTS	PART NAME, MODEL NO.	QUANTITY
Standard Control <ul style="list-style-type: none"> • Control of the various operations of the indoor unit by wired or wireless remote controller. • Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller. • Switching between remote controller sensor and body sensor is possible. 	Timer remote controller CZ-RTC2 // CZ-RE2C2 // CZ-RELC2 Wireless remote controller CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2 CZ-RWSK2 // CZ-RE2C2	1 unit each
(1) Group control <ul style="list-style-type: none"> • Batch remote control on all indoor units. • Operation of all indoor cells in the same mode. • Up to 8 units can be connected. 	Timer remote controller CZ-RTC2 // CZ-RE2C2 Wireless remote controller CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2 CZ-RWSK2 // CZ-RE2C2	1 unit
(2) Main/sub remote control <ul style="list-style-type: none"> • Max 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. Timer remote controller CZ-RTC2 Wireless remote controller CZ-RWSY2 // CZ-RWSU2 // CZ-RWSL2 // CZ-RWSG2 CZ-RWSK2 // CZ-RE2C2	As required

Centralised Control Systems

Schedule timer (CZ-ESWC2)



Dimensions
H 120 x W 120 x D 16 mm

The power supply for the schedule timer is taken from one of the following.

1. Control circuit board (T10) of a nearby indoor unit (power supply wiring length: within 200 m from the indoor unit).
2. System controller (power supply wiring length: within 100 m from the indoor unit).

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

controller, etc. Also, as it does not have an address setting function, the control function of a system controller etc. must be used for address setting.

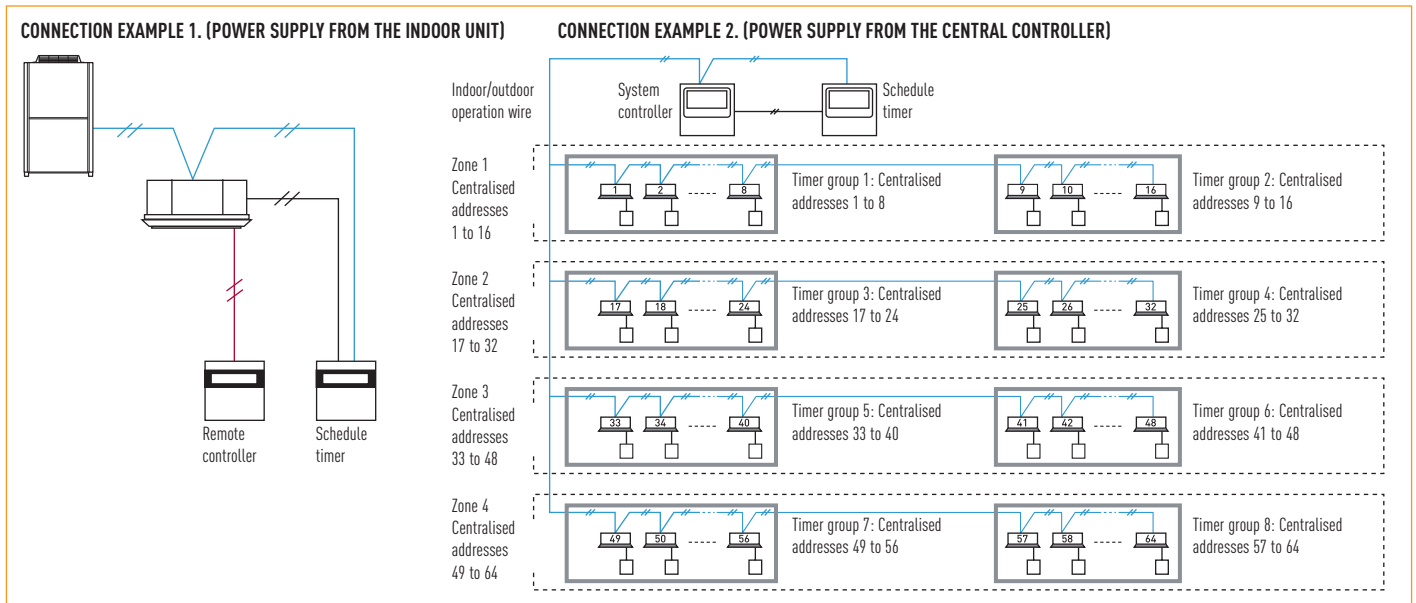
Up to 64 groups (max. 64 indoor units) can be controlled divided into 8 timer groups

Six program operations (Operation/Stop/Local permission/ Local prohibition) per day can be set in a program for one week

- Only operation or stop, remote controller local permission or remote controller local prohibition, and their respective combinations are possible. (Operation + local permission, stop + local prohibition, only local permission, etc.)
- Local prohibition and the combination of the three items of temperature setting, mode change, and operation/stop can be set at the time of installation.

A function for pausing the timer in case of national holidays has been added, and timer operation also can be stopped for a long time

- By setting holidays or operation stop within one week, the timer can be paused just for that week.
- All timer settings can be stopped with the timer "ON/OFF effective" button. (Return to timer operation is made by pressing the button again.)



ON/OFF controller (CZ-ANC2)



Dimensions
H 121 x W 122 x D 14 + 52
(embedding dimension mm)

Power supply: AC 220 to 240 V
I/O part: Remote input (effective voltage: within DC 24 V): All ON/OFF
Remote output (allowable voltage: within DC 30 V): All ON, All alarm

- 16 groups of indoor units can be controlled.
- Collective control and individual group (unit) control can also be performed.
- Up to 8 ON/OFF controller (4 main, 4 sub) can be installed in one link system.
- The operation status can be determined immediately.

Note: As operation mode and temperature settings are not possible with the ON/OFF controller, it must be used together with a remote controller, a system controller etc.

System controller (CZ-64ESMC2)



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

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

Individual control is possible for max. 64 groups, 64 indoor units.

Control of 64 indoor units divided into 4 zones. (One zone can have up to 16 groups, and one group can have up to 8 units.)

Control is possible for ON/OFF, operation mode, fan speed, air flow direction (only when used without a remote controller), operation monitoring, alarm monitoring, ventilation, remote controller local operation prohibition, etc.

- Individual All operations are possible from the remote controller. However, the contents will be changed to the last settings used on the controller.
- Central 1 The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)
- Central 3 The remote controller cannot be used for mode change or temperature setting change. (All other operations are possible from the remote controller.)
- Central 4 The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

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

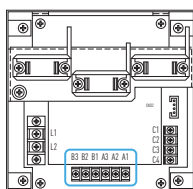
(The maximum number of connectable system controllers is 10, including other central controllers on the same circuit.)
(In case of joint use with a wireless remote controller, there are limitations for the control mode. Please use only with "Individual" and "Central 1".)

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

External Contacts On Central Controllers

Terminals for remote monitoring:

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



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

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

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

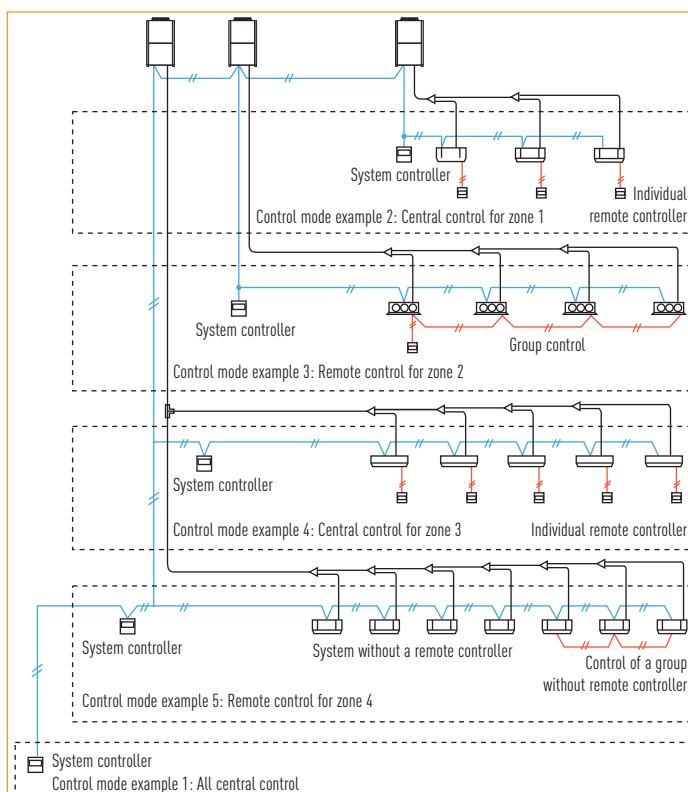
Remote control mode: The system controller is used as a remote controller. (Setting from the system controller can be prohibited by prohibiting local operation from another central control unit.)

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

All mode: All, zone, or group unit can be selected.

Zone 1, 2, 3, 4 mode: Setting is possible only for the indoor units of zone 1, 2, 3, or 4.

CONNECTION EXAMPLE		A Operation mode	
		Central control mode	Remote control mode
B Controlled unit number mode	All mode	All central control Example 1	All remote control
	Zone 1 mode	Zone 1 central control Example 2	Zone 1 remote control
	Zone 2 mode	Zone 2 central control	Zone 2 remote control Example 3
	Zone 3 mode	Zone 3 central control Example 4	Zone 3 remote control
	Zone 4 mode	Zone 4 central control	Zone 4 remote control Example 5



Intelligent controller (CZ-256ESMC2)



Touch panel

Dimensions
H 240 x W 280 x D 138 mm

Power supply AC 100 to 240 V (50 Hz), 30 W
(separate power supply)

I/O part Remote in put (voltage-free contact): All ON/OFF
Remote output (voltage-free contact): All ON, All alarm (external power supply within DC 30 V, 0.5 A)

Total wiring length: 1 km for each system
Only for embedding in the panel

Limitation contents for prohibited operation

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

Limitation contents (Limitations can be user defined)

- Individual No limits are set for the remote controller operation. However, the contents will be changed to the controller's last settings. (Last-pressed priority.)
- Prohibition 1 The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)
- Prohibition 2 The remote controller cannot be used for ON/OFF, operation mode change and temperature setting. (All other operations are possible from the remote controller.)
- Prohibition 3 The remote controller cannot be used for operation mode change and temperature setting. (All other operations are possible from the remote controller.)
- Prohibition 4 The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

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

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

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

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

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

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

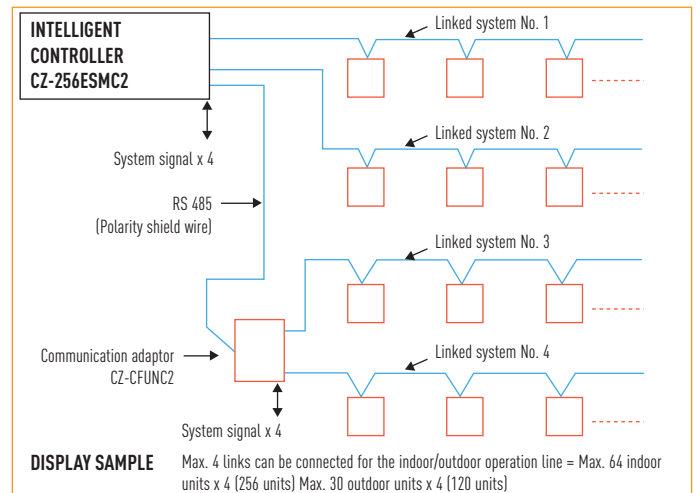
Proportional distribution of the air conditioning energy is possible. Including csv-file export via CF-card (supplementary accessory)

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

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



Web application



Web Interface / CZ-CWEBC2

Functions

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



(HxWxD): 248x185x80 mm
AC 100 to 240 V (50/60Hz), 17 W
(separate power supply)

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

Easy to set to every room by recognizable icon and user-friendly remote control window

- If any of the indoor units is selected, the remote control window shown will be displayed for detailed setting modifications.

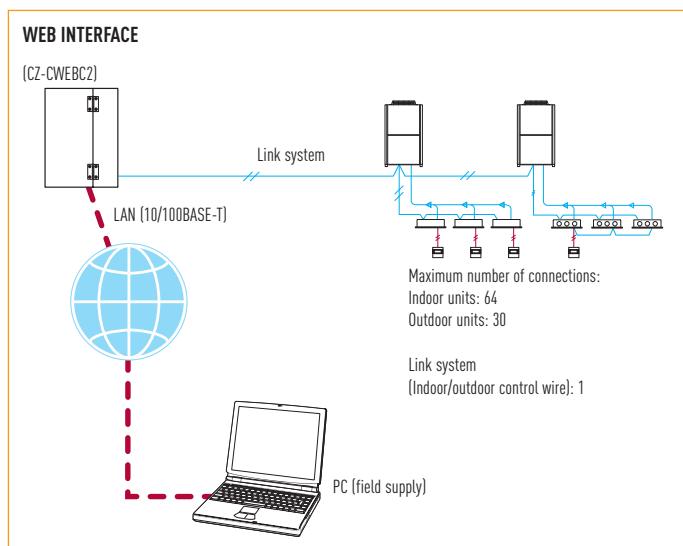
Easy to manage and monitor each tenant use*

- Each floor or tenant, otherwise each zone can be displayed and controlled.
- All unit statuses can also be displayed on one screen.

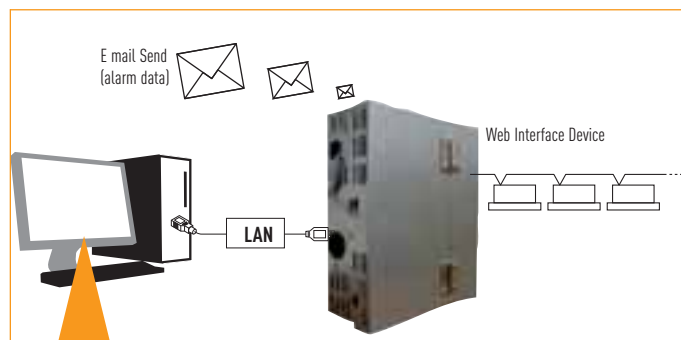
Program Timer set

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

* Web interface system not applicable for load distribution.



Web Interface Device (CZ-CWEBC2)



Functions

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

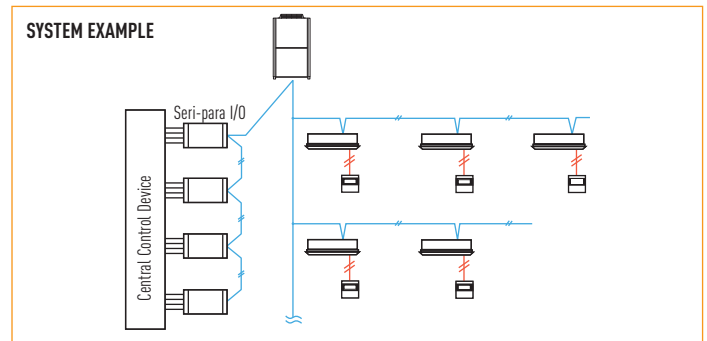
Note: it is recommended to install a remote controller or a system controller on site to enable local control if IT network experience a problem.

Seri-Para I/O unit for outdoor unit (CZ-CAPDC2 for ECOi, CZ-CAPDC3 for Mini ECOi and PACi)



Dimensions	H 80 x W 290 x D 260 mm
Power supply	Single phase 100/200 V (50/60 Hz), 18 W
Input	Batch operation/Batch stop (non-voltage contact/DC 24 V, pulse signal). Cool / Heat (non-voltage contact/static signal). Demand 1/2 (non-voltage contact/static signal) (Local stop by switching)
Output	Operation output (non-voltage contact). Alarm output (non-voltage contact)
Wiring length	Indoor/Outdoor operation lines: Total length 1 km. Digital signal: 100 m or shorter

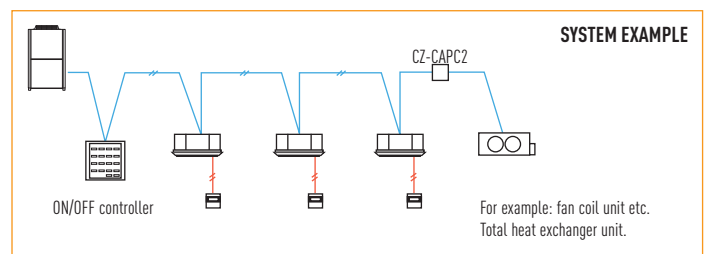
- This unit can control up to 4 outdoor units.
- From the central control device, mode changing and batch operation/batch stop are possible.
- Required for demand control.



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



- Control and status monitoring is possible for individual indoor unit (or any external electrical device up to 250 V AC, 10 A) by contact signal.

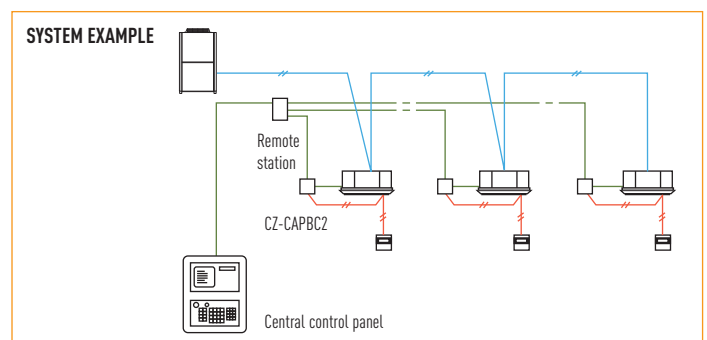


CZ-CAPBC2 Parallel interface 0 - 10 V



- Control and status monitoring is possible for individual indoor unit (1 group).
- In addition to operation and stop, there is a digital input function for air speed and operation mode.
- Temperature setting and measuring of the indoor suction temperature can be performed from central monitoring.
- The analog input for temperature setting is 0 to 10 V, or 0 to 140 Ohm.

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



P-AIMS. Panasonic Total Air Conditioning Management System

P-AIMS Basic software / CZ-CSWK2

/ Up to 1024 indoor units can be controlled by one PC /

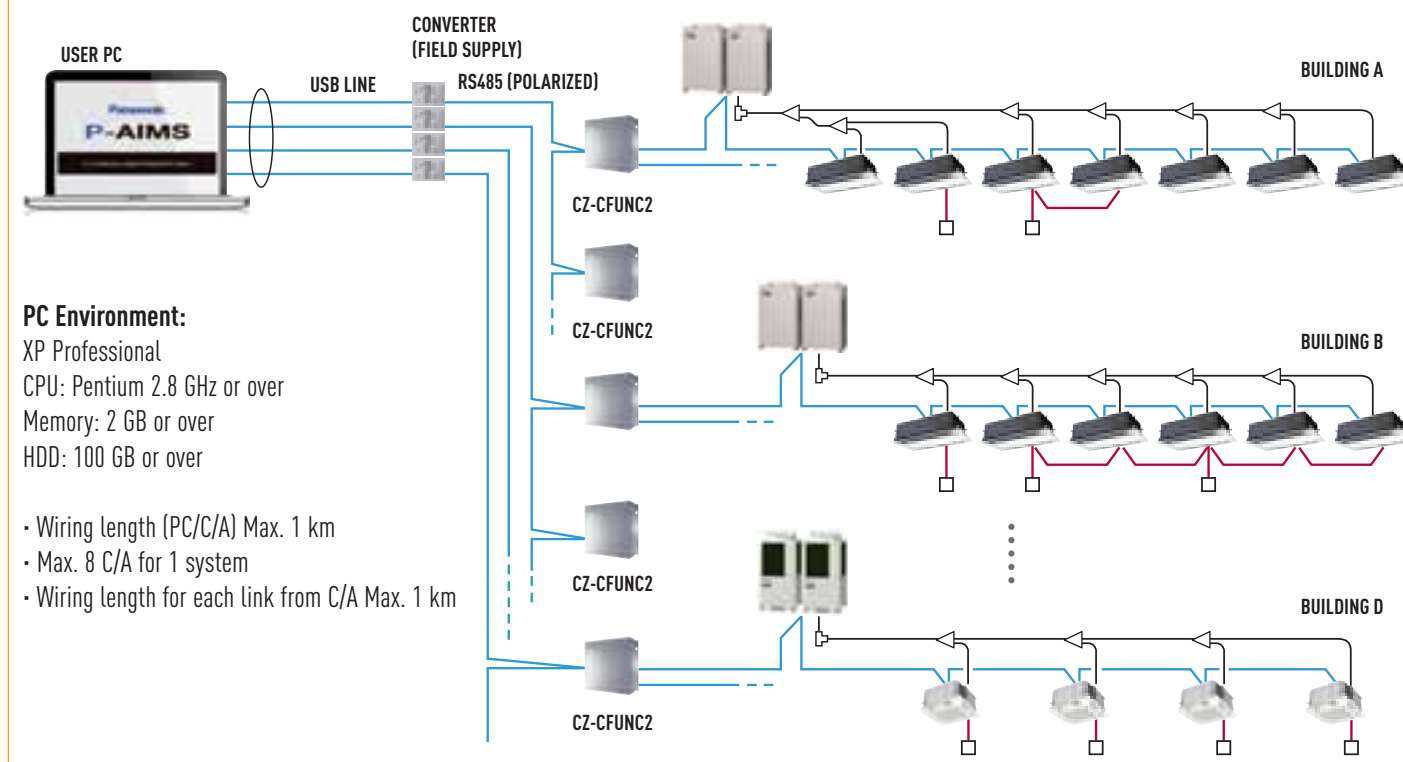
Functions of basic software

- Standard remote control for all indoor units.
- Many timer schedule programs can be set on the calendar.
- Detailed information display for alarms.
- CSV file output with alarm history, operating status.
- Automatic data backup to HDD.



With 4 upgrade packages the basic software can be upgraded to suit individual requirements

P-AIMS is suitable for large shopping centers and universities with many areas/ buildings. 1 "P-AIMS" PC can have 4 independent systems at once. Each system can have max. 8 C/A units, and control max. 512 units. In total, 1024 indoor units can be controlled by 1 "P-AIMS" PC.



P-AIMS optional software CZ-CSWAC2 for Load distribution

Load distribution calculation for each tenant

- Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m³, kWh).
- Calculated data is stored as a CSV type file.
- Data from the last 365 days is stored.

P-AIMS optional software CZ-CSWWC2 for Web application

Web access & control from remote station

- Accessing P-AIMS software from remote PC.
- You can monitor/operate ECOi 6N system by using Web browser (Internet Explorer).

P-AIMS optional software CZ-CSWGC2 for Object layout display

Whole system can be controlled visually

- Operating status monitor is available on the layout display.
- Object's layout and indoor unit's location can be checked at once.
- Each unit can be controlled by virtual remote controller on the display.
- Max. 4 layout screens are shown at once.

P-AIMS optional software CZ-CSWBC2 for BACnet software interface

Connectable to BMS system

- Can communicate with other equipment by BACnet protocol.
- ECOi 6N system can be controlled by both BMS and P-AIMS.
- Max. 255 indoor units can be connected to 1 PC (that has P-AIMS basic & BACnet software).

INTERNET CONTROL. CONTROL YOUR AIR CONDITIONING SYSTEM WITH YOUR SMART DEVICE -SMARTPHONE & INTERNET FOR PACI



Control your comfort and efficiency with the lowest energy consumption

What's Internet Control?

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

Simple Installation

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

Internet Control. Easy to install. Maximum benefit

Internet Control is underlined with the slogan "Your home in the cloud", meaning a simple and easy to handle solution has been considered for every user to manage the device, not requiring any communication or computer skills.

No servers. No adaptors. No wires. Just a small box is needed to be connected and placed close to the air conditioning indoor unit... and your Smartphone, tablet or PC.

Start the App from your Smartphone device, your tablet or your computer, and enjoy a new experience in comfort. An intuitive and user-friendly application on the screen of your Smartphone or PC that lets you manage the air conditioning unit in the same way you do with the remote controller. Internet Control can be downloaded in Apple's AppStore and Android's PlayStore.

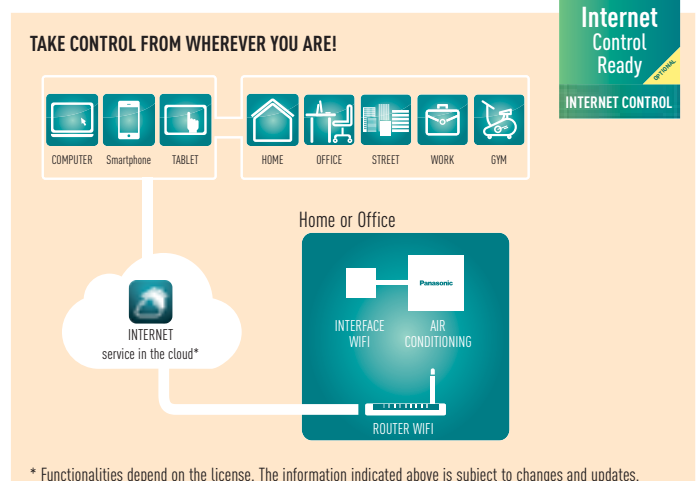
Control your air conditioning with the smart internet control device via Smartphones, tablet, PC and smart desktop phone via internet

Offering the same functions as if you were at home or office: start/stop, Mode Operation, Set Temperature, Room Temperature etc as well as the new, advanced functionality provided by Internet Control to achieve the best comfort and efficiency with the lowest energy consumption.



Study Case. Alice, Shop Owner

"I want maximum comfort and the best savings for my shop. And I manage to get these in the easiest and most natural way possible. From my Smartphone, something I always carry with me, I can control the temperature of my shop and in this way, as well as maintaining an ideal temperature I also save a small fortune in electricity at the end of the year."



* Functionalities depend on the license. The information indicated above is subject to changes and updates.

PACi CONNECTIVITY. EASY CONNECTION TO KNX, ENOCEAN, MODBUS, LONWORKS AND BACNET



Easy control by BMS

CONNECTIVITY

Panasonic Partners have designed solutions specifically for Panasonic air conditioners, and provide complete monitoring, control and full functionality of the entire Commercial line-up from KNX / EnOcean / Modbus / LonWorks / BACnet installations.

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

For more information, contact Panasonic.



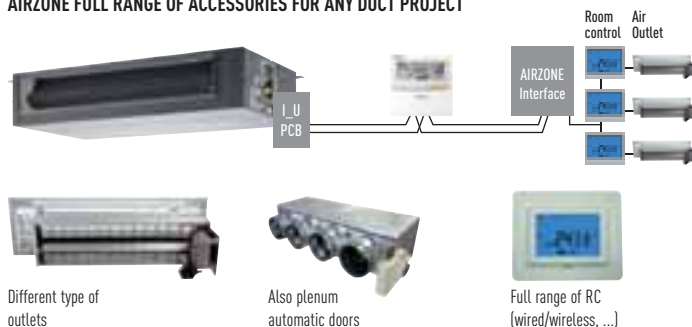
	PANASONIC MODEL NAME	INTERFACE	CONNECTED ON THE INDOOR UNIT	MAX NUMBER OF INDOOR UNITS CONNECTED
ECOi / PACi indoor units	PAW-RC2-KNX-1i	KNX	Indoor unit	1 (1 Group of Indoor units)
	PAW-RC2-MBS-1	Modbus RTU*	Indoor unit	1 (1 Group of Indoor units)
	PAW-RC2-ENO-1i	EnOcean	Indoor unit	1 (1 Group of Indoor units)
	PA-RC2-WIFI-1	IntesisHome	Indoor unit	1 (1 Group of Indoor units.)

* Interface Modbus RTU/TCP is needed

AIRZONE. CONTROL OF THE PACi HIDE AWAYS

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

AIRZONE FULL RANGE OF ACCESSORIES FOR ANY DUCT PROJECT

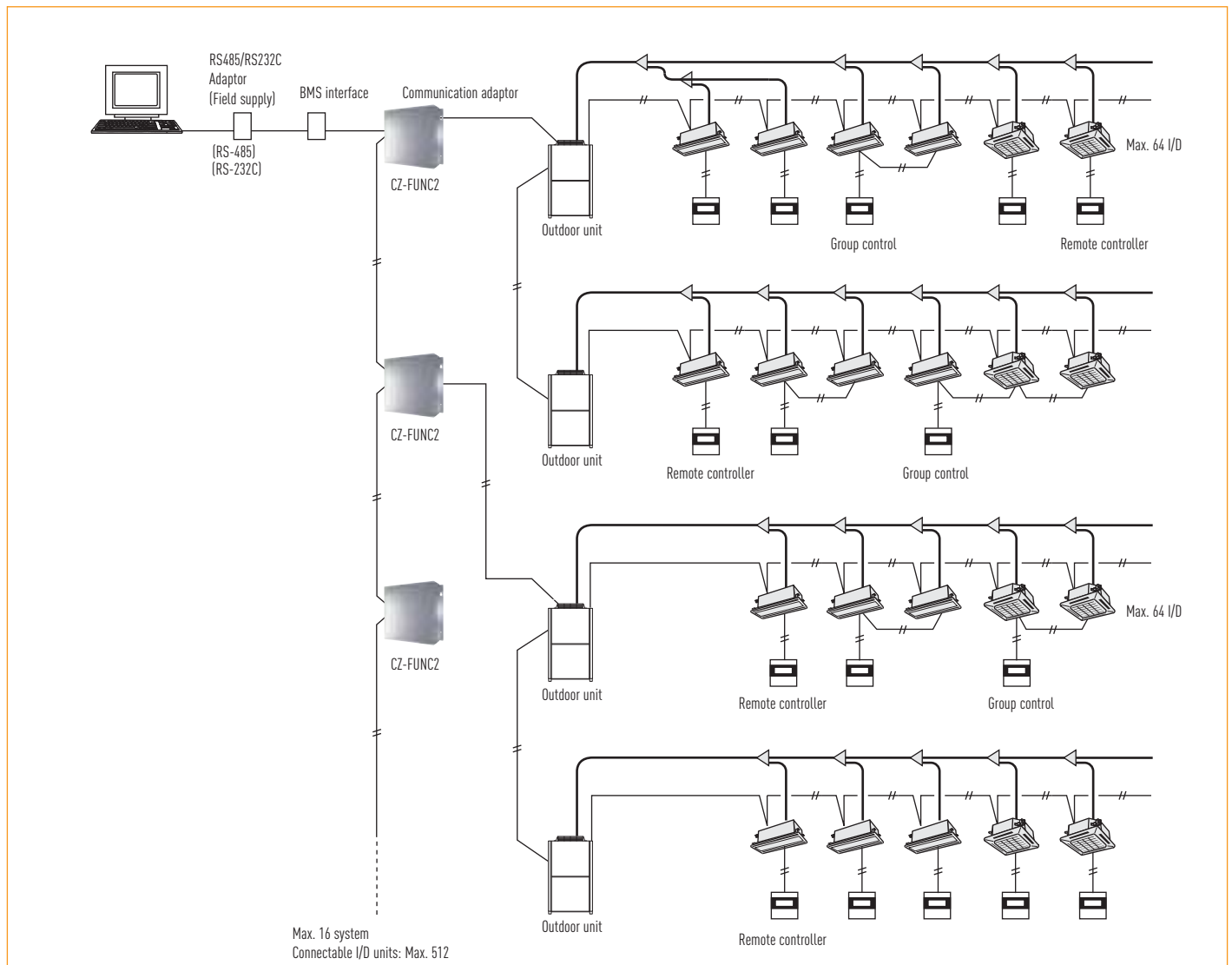


Interface dimensions: 120 x 25 x 65 cm (W x H x D). Interfaces must be purchased direct from Airzone.

AIRZONE



Example of BMS connection for air conditioner central control system



A/C unit settings	Unit ON/OFF
	Mode-change
	Room temperature setting
	Fan speed setting
	Flap setting
	Central control setting
	Filter-sign clear
	Alarm reset
A/C unit status	Unit ON/OFF status
	Operation mode
	Setting temperature
	Fan speed status
	Flap status
	Central control setting
	Filter-sign situation
	Correct/incorrect status
Alarm code	

PACi Connectivity indoor units

T10 connector (CN015)

PCB'S AND CABLES FOR PACi/VRF INDOOR UNITS		
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
PAW-EXCT	Forced Thermo OFF/Leakage D.	Requires field supplied accessory
NAME OF THE PCB	FUNCTION	COMMENT
PAW-T10	All T10 functions	Allows easy connection "Plug & Play"
PAW-T10V	All T10 functions + powermonitoring	Same like PAW-T10 + monitoring the power supply of indoor unit
PAW-T10H	ON/OFF; Prohibit 5VDC & 230VAC	Specials for single hotel card or window contact
PAW-T10HW	ON/OFF; Prohibit 5VDC	For hotel card + window contact at same time
PAW-PACR2	Redundancy of 2 systems; T monitor	Redundancy of 2 PACi systems including temperature monitoring an equal operating time
PAW-PACR3	Redundancy of 3 systems; T monitor	Redundancy of 3 PACi systems including temperature monitoring an equal operating time
PAW-ECF	Fan speed control external EC fan	For external production Air Curtain units allow the EC fan control by standard VRF IU PCB

CZ-T10: Panasonic has developed an optional accessory (consisting of plug + wires) called CZ-T10 to enable an easy connection to this T10 connector.



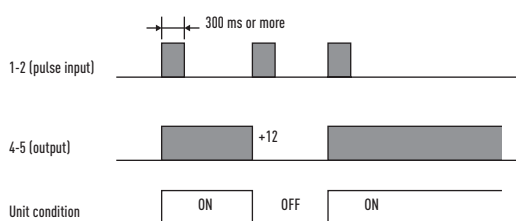
Connecting an ECOi indoor unit to an external device is easy. The T10 terminal featured in the electronic circuit board of all indoor units enables digital connection to external devices.

EXAMPLE OF APPLICATIONS



T10 terminal Specification (T10: CN015 at indoor unit PCB)

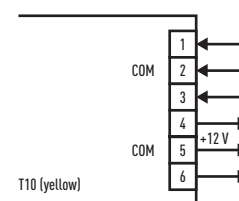
- Control items: 1. Start/stop input
- 2. Remote controller prohibit input
- 3. Start signal output
- 4. Alarm signal output



NOTE: The wire length from indoor unit to the Relay must be within 2.0 m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

- Condition
- 1. 1-2 (Pulse input): Unit ON/OFF condition switching with a pulse signal. (1 pulse signal: shortage status more than 300 msec. or more)
- 2. 2-3 (Static input): Open / Operation with Remote is permitted. (Normal condition) Close / Remote controller is prohibited.
- 3. 4-5 (Static output): 12 V output during the unit ON. / No output at OFF.
- 4. 5-6 (Static output): 12 V output when some errors occur / No output at normal.

Example of wiring

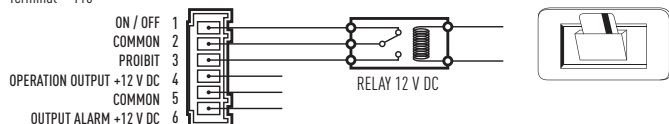


Usage Example Forced OFF control

Term 1 & 2: Free contact for ON/OFF signal (cut *JP1* for static signal) when the hotel card is it connected the contact must be close (the unit can be used).

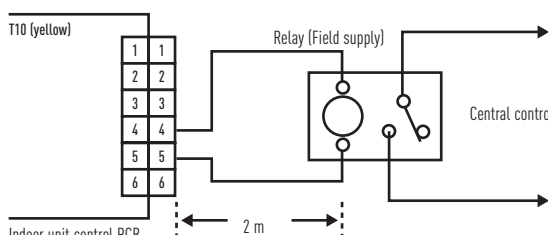
Term 2 & 3: Free contact to prohibit all function in the remote controller install in the room when the hotel card is it removed the contact must be closed (the unit can not work).

Terminal = T10



Operation ON/OFF signal output

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



NOTE: The wire length from indoor unit to the Relay must be within 2.0 m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

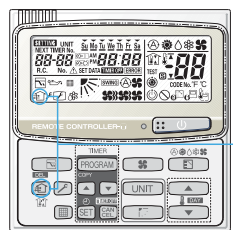
Fan Drive Connector (CN017)

PAW-FDC: Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-FDC to enable an easy connection to this Fan Drive Connector (CN017).



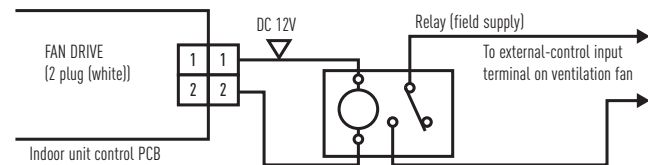
Operating the ventilation fan from the remote controller

- Start / stop of external ventilation and total heat exchanger fans
- Works even if indoor unit is stopped
- In case of group control → all fans will operate; no individual control



EXTERNAL FAN ON / OFF

Ventilation button



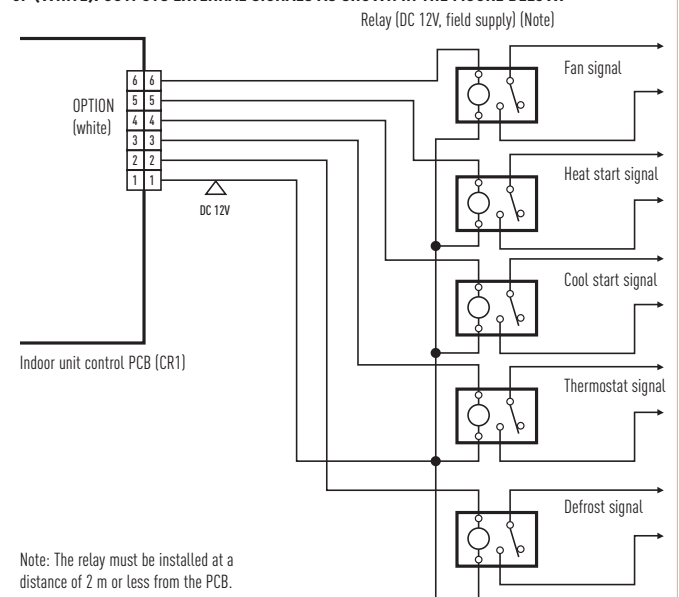
Option Connector (CN060) Output external signals



PAW-OCT: Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-OCT to enable an easy connection to this Option Connector (CN060).

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

6P (WHITE): OUTPUTS EXTERNAL SIGNALS AS SHOWN IN THE FIGURE BELOW.



EXCT Connector (CN009)

PAW-EXCT: Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-EXCT to enable an easy connection to this EXCT Connector (CN009).

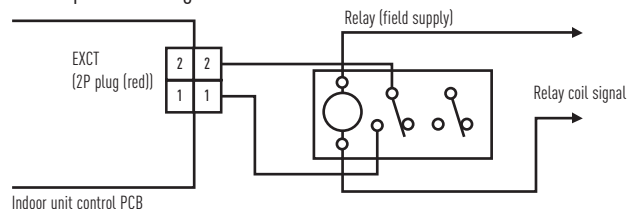
A) With static input

→ **STATIC INPUT → THERMO OFF → ENERGY SAVING**

2P plug (red): Can be used for demand control. When input is present, forces the unit to operate with the thermostat OFF.

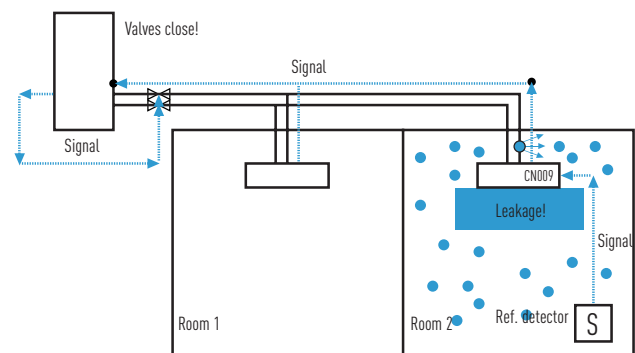
Note: The length of the wiring from the indoor unit control PCB to the relay must be 2m or less.
* Lead wire with 2P plug (special—order part: WIRE K/854 05280 75300)

• 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



R22 RENEWAL

Possible
to use on
R22 pipings

R22 RENEWAL

Why renewal?

An important drive to further reduce the potential damage to our ozone

It is often said that legislation is ruling our lives but sometimes it is there to help save lives. R22 phase out can be described as one of these and from Jan 1st 2010 the use of Virgin (new) R22 refrigerant was banned within the European Community.

Panasonic are doing our part

We at Panasonic are also doing our part – recognising that all finances are under pressure at the moment. Panasonic has developed a clean and cost effective solution to enable this latest legislation to be introduced with as minimum an effect on businesses and cash reserves as possible.

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

By bringing a simple solution to the problem Panasonic can renew all Split Systems and PACi systems; and depending upon certain restrictions we don't even limit the manufacturer's equipment we are replacing.

By installing a new high efficiency Panasonic R410A system you can benefit from around 30% running cost saving compared to the R22 system. The installation can also qualify for the government's ECA (Enhanced Capital Allowance Scheme) which enables you to offset the cost against your Capital Gains Tax.

Yes...

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

R22 - The reduction of Chlorine critical for a cleaner future

Reuse of existing piping (Renewal Design & Installation)

Notes on Reuse of Existing Refrigerant Piping

It is possible for each series of PE1 type and PEY1 type outdoor unit to reuse the existing refrigerant piping without cleaning when obtained a

certain condition. Make sure that the requirements under the section "Notes on Reuse of Existing Refrigerant Piping", "Measurement Procedure for Renewal" and "Refrigerant Piping Size and Allowable Piping Length" will be satisfied in order to carry out .

Also, check the items with regard to section "Safety" and "Cleaning".

1. Prerequisite

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

2. Safety

- If there is a hollow, crack or corrosion on the piping, make sure to install new piping.
- If the existing piping is other than capable of reuse of piping as shown in the flowchart, make sure to install new piping.
- In case of multiple operation type, use our genuine branch piping for refrigerant R410A.

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

3. Cleaning

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

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

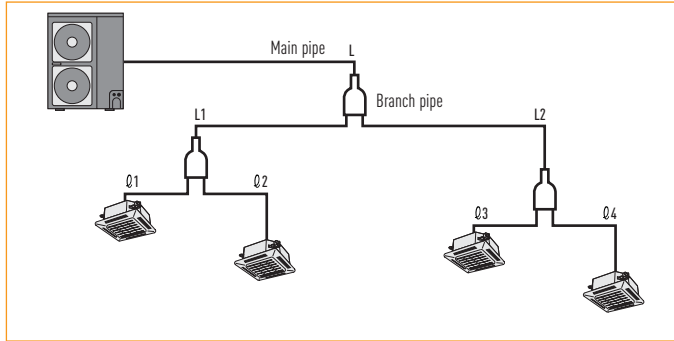
- If the existing pipes in the outdoor and indoor units remain disconnected, make sure to install a new piping or wash it thoroughly before reusing it.
- If the discolored oil or residue remains in the existing piping, make sure to install a new piping or wash it thoroughly before reusing it. See "Deterioration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

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

Notes on Renewal for Simultaneous Operation of Multiple Units

Only main pipe is applicable for using the different diameter size. In case of different diameter size for the branch pipes, a new installation work for a standard size is necessary.

Be sure to use our genuine branch piping for refrigerant R410A.



NOTES ON RENEWAL FOR SIMULTANEOUS OPERATION OF MULTIPLE UNITS

Capacity class	Standard piping size	
	Liquid pipe	Gas pipe
Type 50	Ø6.35	Ø12.7
Type from 60 to 140	Ø9.52	Ø15.88
Type 200	Ø9.52	Ø25.4
Type 250	Ø12.7	

- Only the main pipe L can be used among different diameter's existing piping.
- Installation work as a standard size is capable for L1, L2, L1 - L4 piping.
- Be sure to use our genuine branch piping for refrigerant R410A.

1. In case of single unit

It is not necessary to charge with additional refrigerant until the charge less pipe length in the table 2.

If the pipe length is exceeding the charge less pipe length, charge with additional refrigerant amount per 1 m according to the equivalent length.

2. In case of simultaneous operation of multiple units

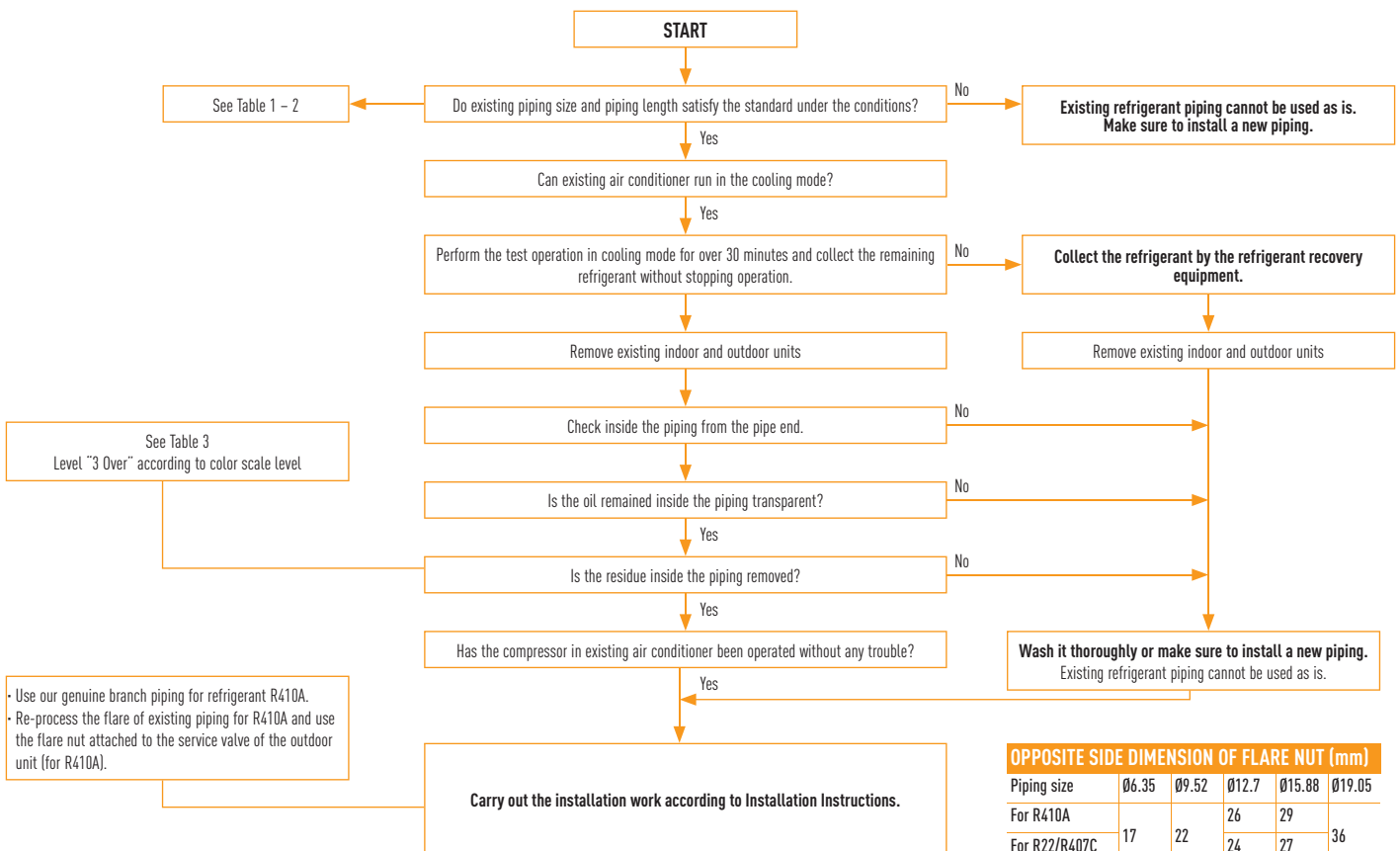
Calculate the refrigerant charging amount according to the calculating method of the standard piping diameter.

As to the additional refrigerant charging amount per 1 m, refer to the additional amount in the table 2.

Measurement Procedure for Renewal

Observe the following procedure when reusing the existing piping or carrying out renewal installation work.

Flowchart of Existing Piping Measures Criteria for PE1 Type and PEY1 Type Outdoor Unit



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	0				1/2 H, H*			
External diameter	Ø6.35	Ø9.52	Ø12.7	Ø15.88	Ø19.05	Ø22.22	Ø25.4	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: 3.6 - 14.0 kW TYPE (mm)									
Liquid pipe		Ø6.35			Ø9.52			Ø12.7	
Gas pipe		Ø9.52	Ø12.7	Ø15.88	Ø12.7	Ø15.88	Ø19.05	Ø15.88	Ø19.05
PE	Type 50	✗	Standard 40 m (30 m)	⊙ 40 m (30 m)	□ 20 m (15 m)	□ 20 m (15 m)	✗	✗	✗
PEY	Type 60 Type 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	
PE	Type 60 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 Type 125 Type 140	✗	✗	✗	✗	Standard 75 m (30 m)	⊙ 75 m (30 m)	□ 35 m (15 m)	□ 35 m (15 m)
PEY	Type 100 Type 125 Type 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):

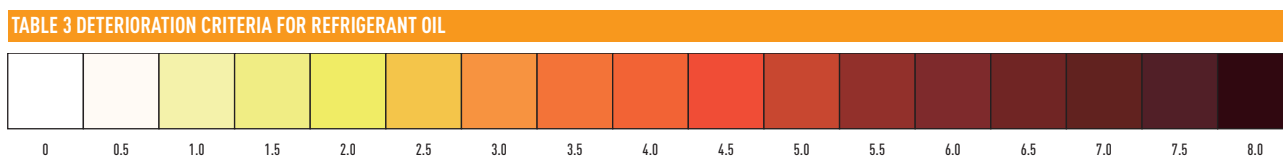
In case of type 71, standard size is liquid pipe Ø9.52 / gas pipe Ø15.88.

There is a limitation to liquid pipe Ø9.52 / gas pipe Ø12.7 and to liquid pipe Ø12.7 / 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			Ø12.7			Ø15.88		
Gas pipe		Ø22.22	Ø25.4	Ø28.58	Ø22.22	Ø25.4	Ø28.58	Ø22.22	Ø25.4	Ø28.58
PE	Type 200	▽ 80 m (30 m)	Standard 100 m (30 m)	⊙ 100 m (30 m)	▽ 50 m (15 m)	□ 50 m (15 m)	□ 50 m (15 m)	✗	✗	✗
	Type 250	✗	✗	✗	▽ 80 m (30 m)	Standard 100 m (30 m)	⊙ 100 m (30 m)	▽ 65 m (20 m)	□ 65 m (20 m)	□ 65 m (20 m)
Additional refrigerant charging amount per 1 m		40 g/m			80 g/m			120 g/m		

- ⊙ Allowable
- ▽ Cooling capacity down
- Limited piping length
- ✗ Unallowable
- 50 m Maximum piping length
- (50 m) Charge less piping length in a single connection



PKEA dimensions

Wall Mounted PKEA

TOP VIEW



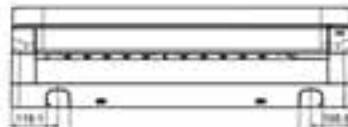
FRONT VIEW



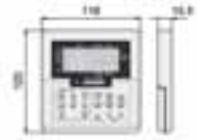
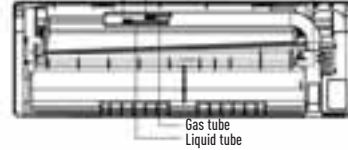
SIDE VIEW



BOTTOM VIEW

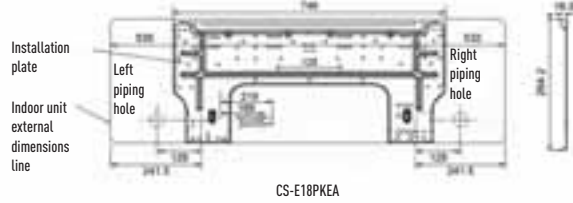
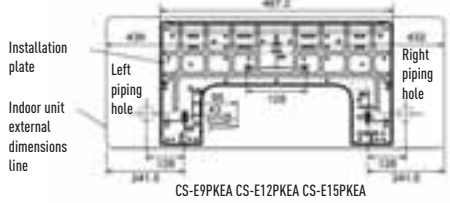


REAR VIEW

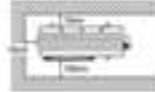


	A
CS-E9PKEA / CS-E12PKEA / CS-E15PKEA	870
CS-E18PKEA	1070

RELATIVE POSITION BETWEEN THE INDOOR UNIT AND THE INSTALLATION PLATE (FRONT VIEW)



Space necessary for installation



Anchor Bolt Pitch 330 x 540

SIDE VIEW



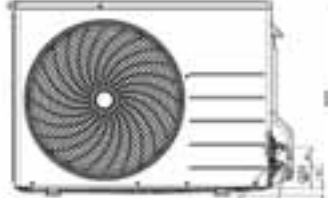
TOP VIEW



SIDE VIEW



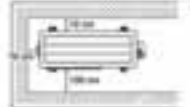
FRONT VIEW



2-way valve at liquid side (High Pressure)

3-way valve at gas side (Low Pressure)

Space necessary for installation



Anchor Bolt Pitch 383 x 612.5

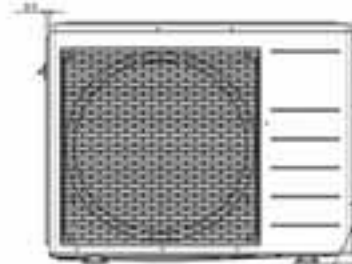
SIDE VIEW



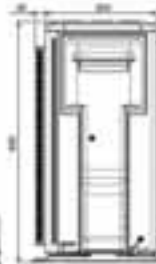
TOP VIEW



FRONT VIEW



SIDE VIEW



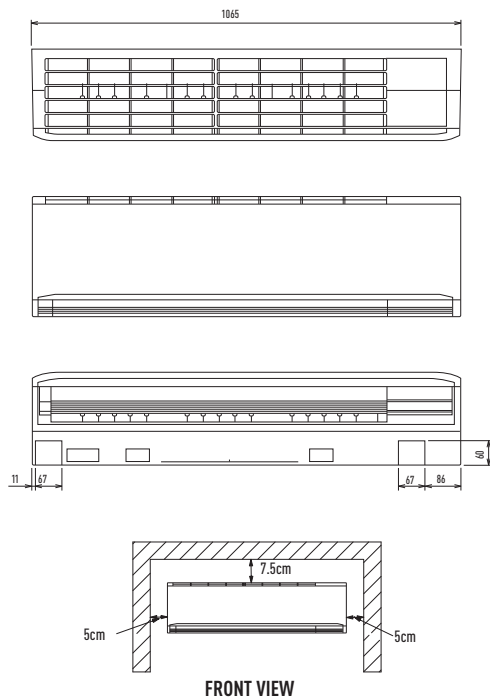
2-way valve at liquid side (High Pressure)

3-way valve at gas side (Low Pressure)

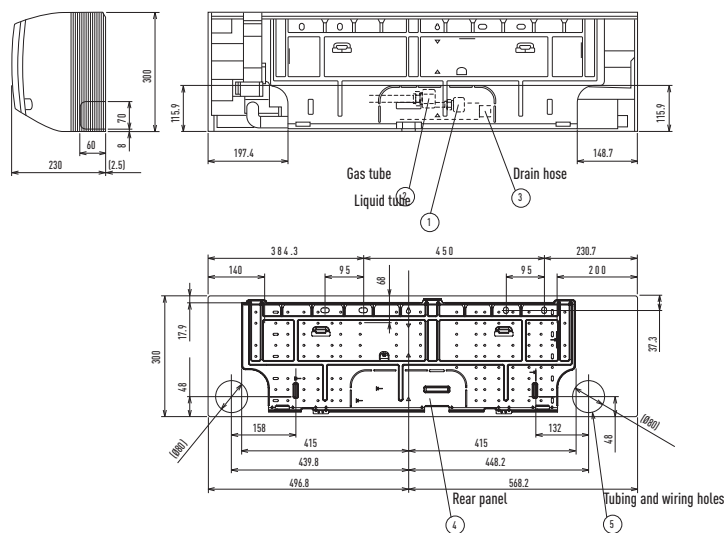
Unit: mm

PACi Standard and Elite dimensions

Wall

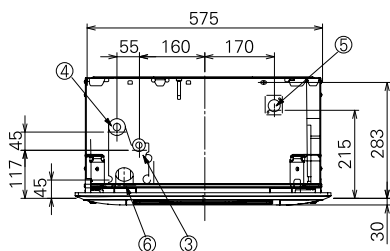
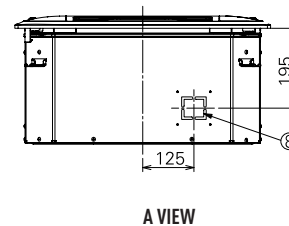
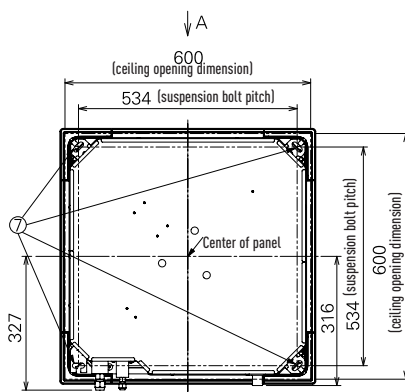
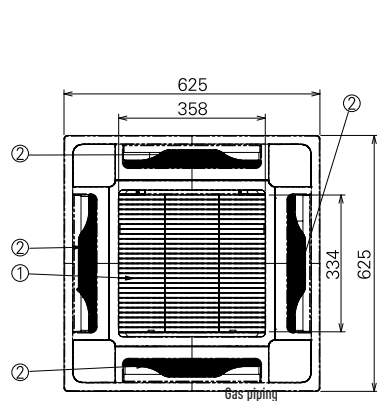


Type	36-50	60-71
Refrigerant tubing (liquid tube)	Ø6.35 (flared)	Ø9.52 (flared)
Refrigerant tubing (gas tube)	Ø12.7 (flared)	Ø15.88 (flared)
Drain hose VP13	outer dia. Ø18	
Rear panel	PL BACK	
Tubing and wiring holes	Ø80	



Unit: mm

4-Way 60x60 Cassette



- 1 Air intake
- 2 Discharge outlet
- 3 Refrigerant tubing (liquid tube) Ø6.35 (flared)
- 4 Refrigerant tubing (gas tube) Ø12.7 (flared)
- 5 Drain tube connection port VP20 (outer dia. Ø26)
- 6 Power supply port
- 7 Suspension bolt hole (4-12 x 30 hole)
- 8 Fresh air intake duct connection port (Ø100)

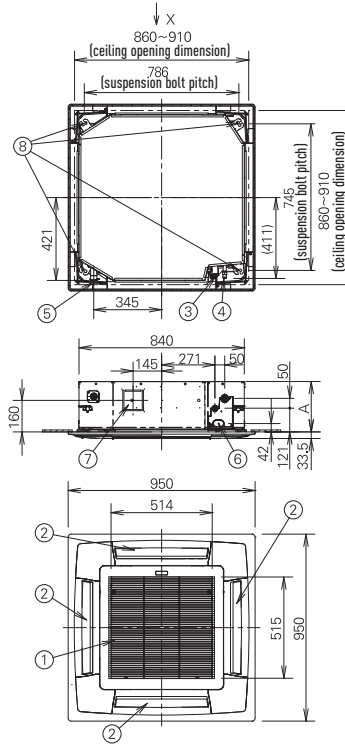
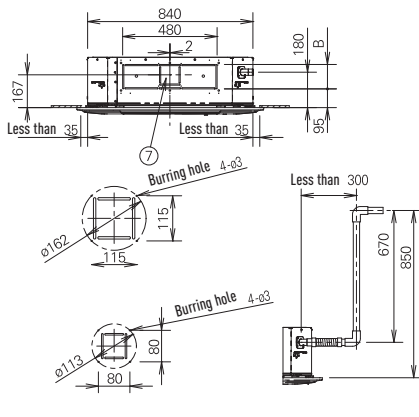
Unit: mm

PACi Standard and Elite dimensions

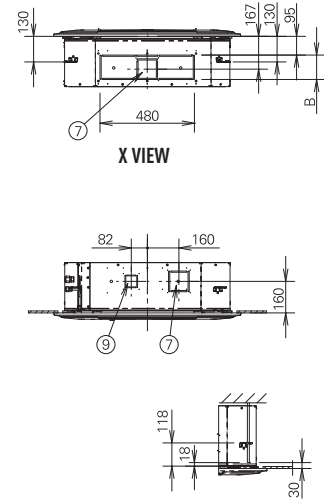
4 Way 90x90 Cassette

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

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



Type	36-71	100-140
A	256	319
B	124	187



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

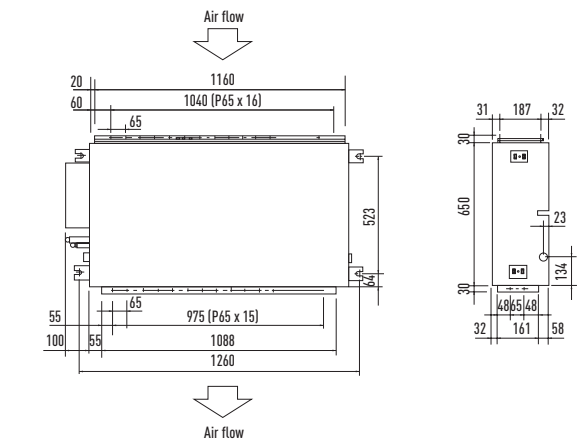
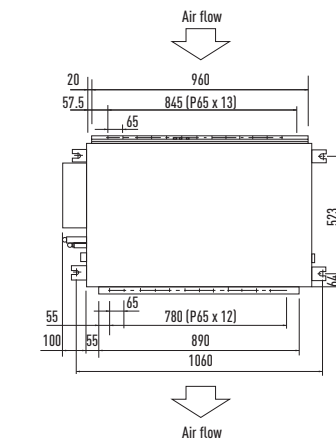
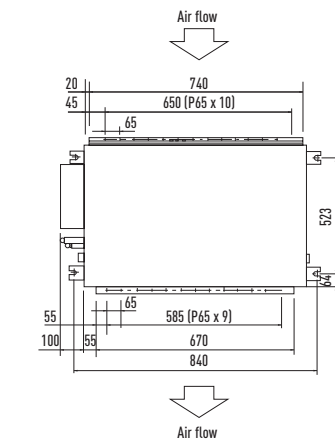
Unit: mm

Low Static Pressure Hide Away

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

S-60PN1E5 // S-71PN1E5

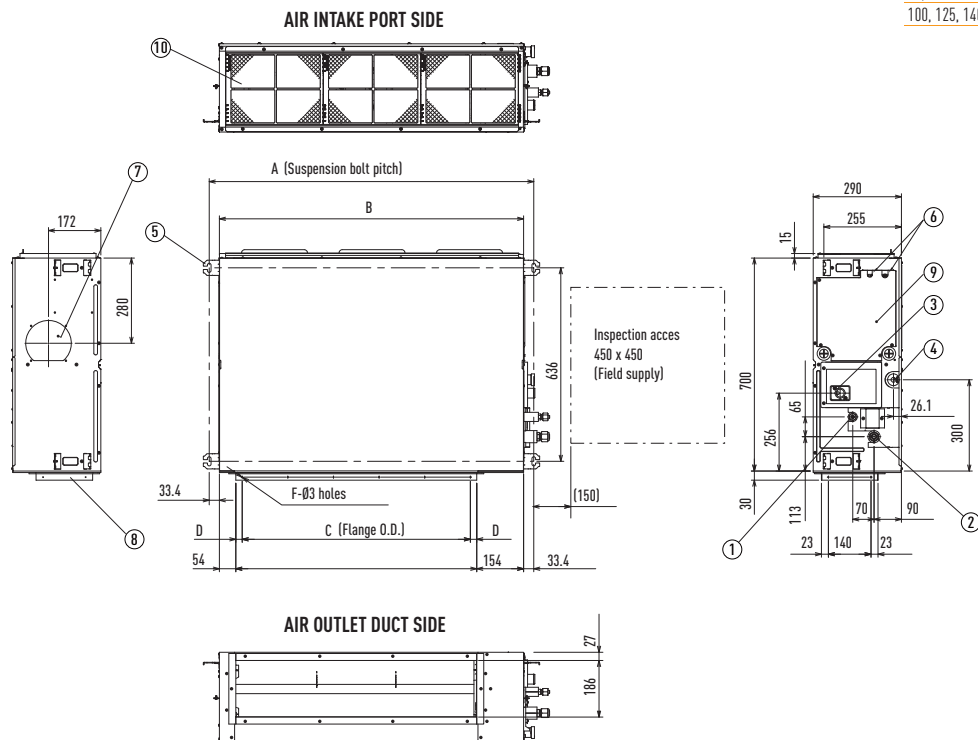
S-100PN1E5 // S-125PN1E5 // S-140PN1E5



Unit: mm

High Static Pressure Hide Away

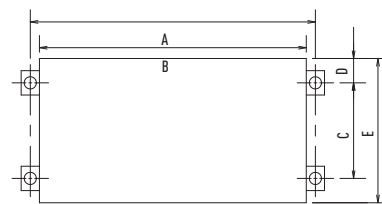
Type	A	B	C	D	E	F
36, 45, 50	867	800	450 (Pitch 150 × 3)	71	592	12
60, 71	1,067	1,000	750 (Pitch 150 × 5)	21	792	16
100, 125, 140	1,467	1,400	1,050 (Pitch 150 × 7)	71	1,192	20



- 1 Refrigerant tubing joint (liquid tube)
- 2 Refrigerant tubing joint (gas tube)
- 3 Upper drain port VP25 (O.D. 32 mm)
2 200 flexible hose supplied
- 4 Bottom drain port VP25 (O.D. 32 mm)
- 5 Suspension lug (4 - 12 × 30 mm)
- 6 Power supply outlet
- 7 Fresh air intake port (Ø150 mm)
- 8 Flange for flexible air outlet duct
- 9 Electrical component box
- 10 Filter

POSITION OF SUSPENSION BOLT

TYPE	A	B	C	D	E
36, 45, 50	840	780	523	64	650
60, 71	1060	1000	523	64	650
100, 125, 140	1260	1200	523	64	650



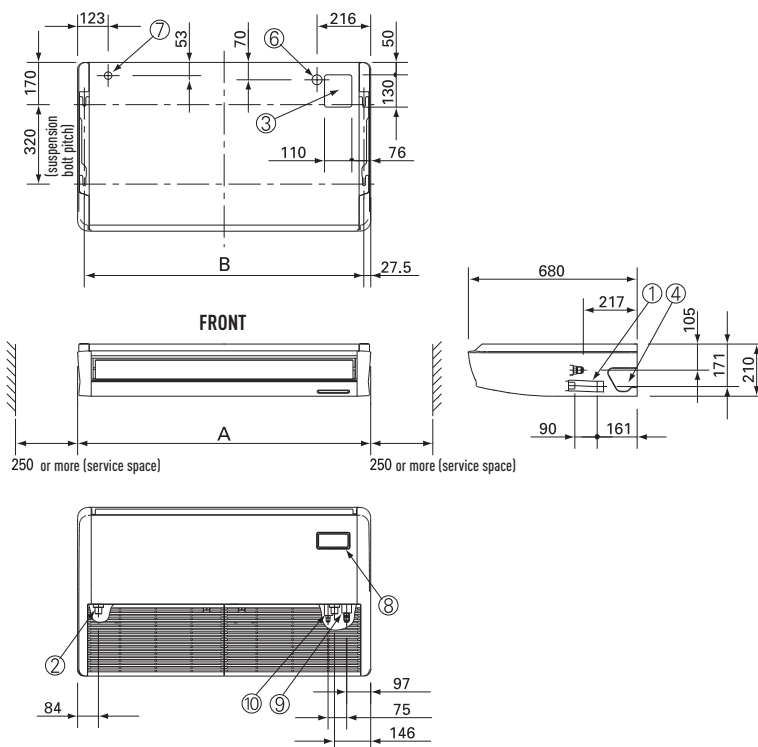
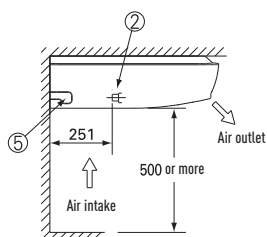
Unit: mm

Ceiling

- 1 Drain port VP20 (inner Ø26, hose accessory)
- 2 Drain for left piping
- 3 Upper piping outlet port (knock-out hole)
- 4 Right piping outlet port (knock-out hole)
- 5 Drain left piping outlet port (knock-out hole)
- 6 Power supply entry port (knock-out hole Ø40)
- 7 Remote controller wiring inlet port
- 8 Wireless remote control receiver mounting part

Type	36-50	60-71	100-140
A (body)	910	1,180	1,595
B (suspension bolt pitch)	855	1,125	1,540

- 9 Refrigerant gas piping
Type 36 to 50: Ø12.7
Type 60 to 140: Ø15.88
- 10 Refrigerant liquid piping
Type 36 to 50: Ø6.35
Type 60 to 140: Ø9.52

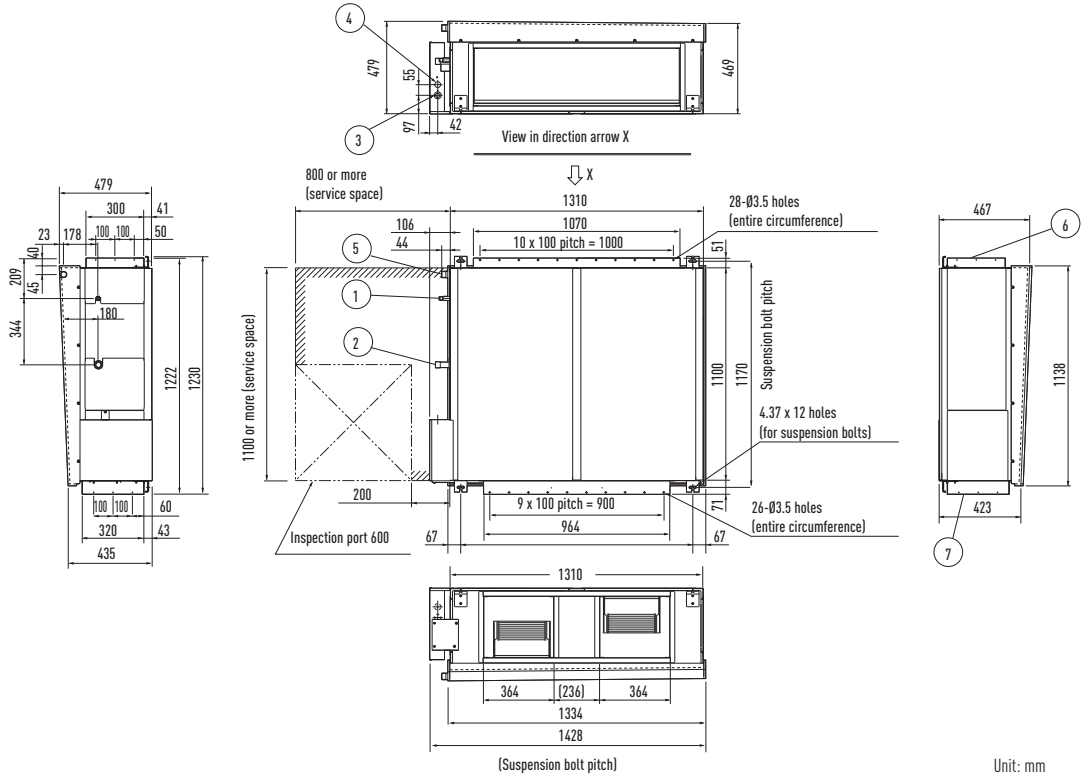


Unit: mm

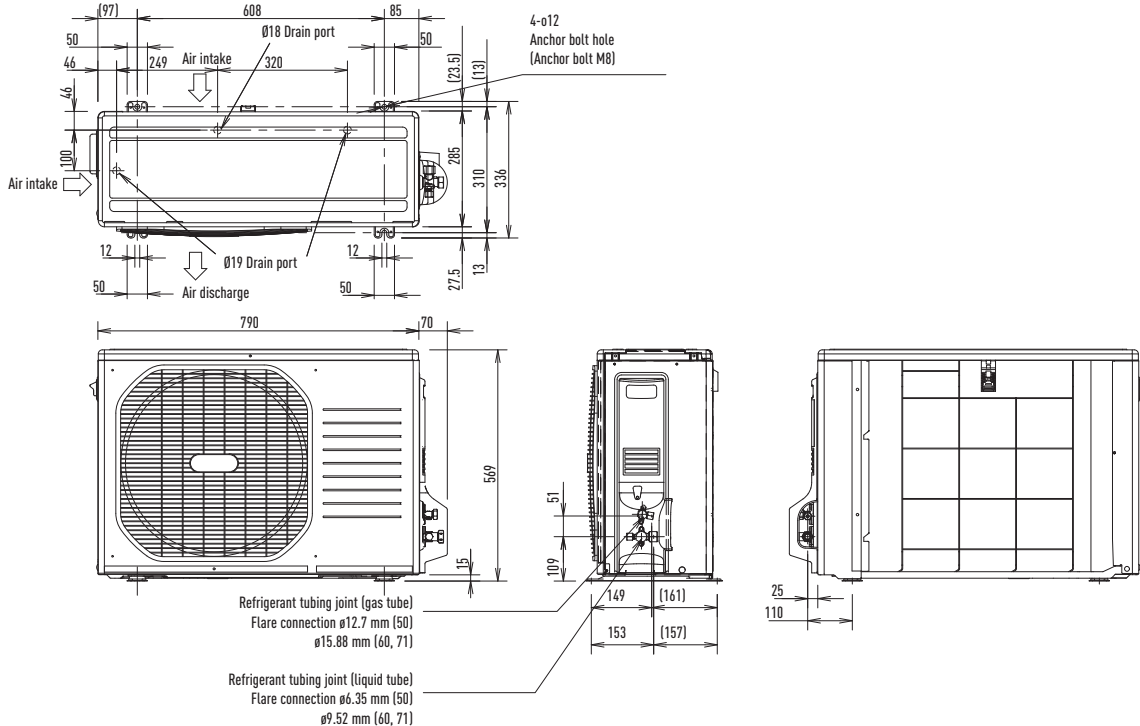
PACi Standard and Elite dimensions

High Static Pressure Hide Away 20.0-25.0 kW

- 1 Refrigerant piping (liquid pipes)
20.0 kW type: Ø9.52(With reducer Ø12.7-Ø9.52)
25.0 kW type: Ø12.7
- 2 Refrigerant piping (gas pipes) Ø25.4
- 3 Power supply outlet
(Ø25 grommet, rubber)
- 4 Power supply outlet (spare) (Ø30 knock-out)
- 5 Drain port 25 A, male thread
- 6 Duct connection for suction
- 7 Duct connection for discharge

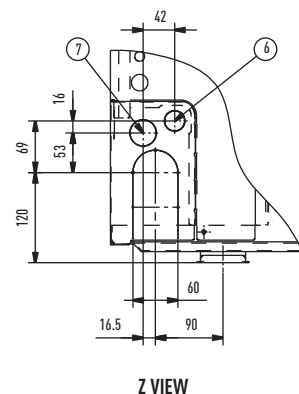
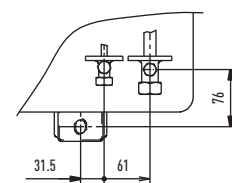
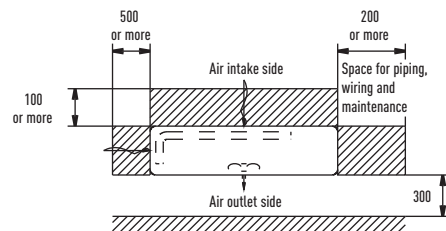
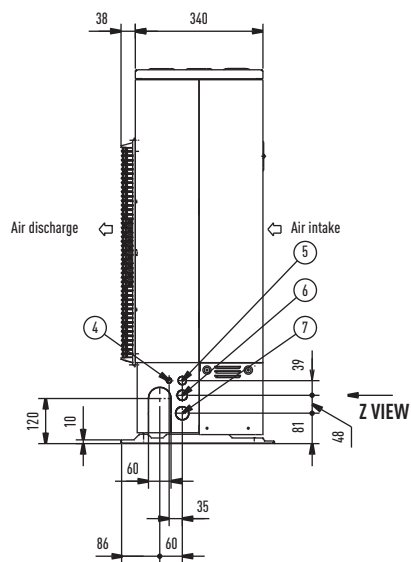
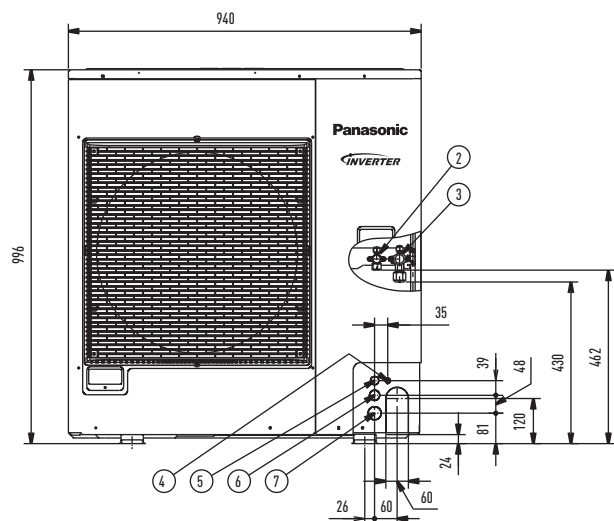
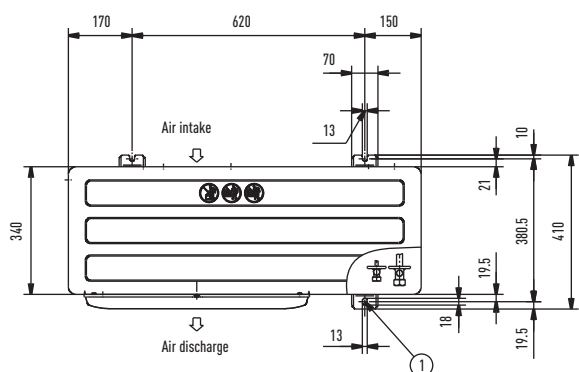


Outdoor Unit PACi Standard 6.0 and 7.1 kW and PACi Elite 5.0 kW



Outdoor unit PACi Standard 10.0 and 12.5 kW and PACi Elite 6.0 and 7.1 kW

- 1 Mounting hole (4-R6.5), anchor bolt : M10
- 2 Refrigerant piping (liquid pipe), flared connection (Ø9.52)
- 3 Refrigerant piping (gas pipe), flared connection (Ø15.88)
- 4 Electrical wiring port (Ø13)
- 5 Electrical wiring port (Ø22)
- 6 Electrical wiring port (Ø27)
- 7 Electrical wiring port (Ø35)

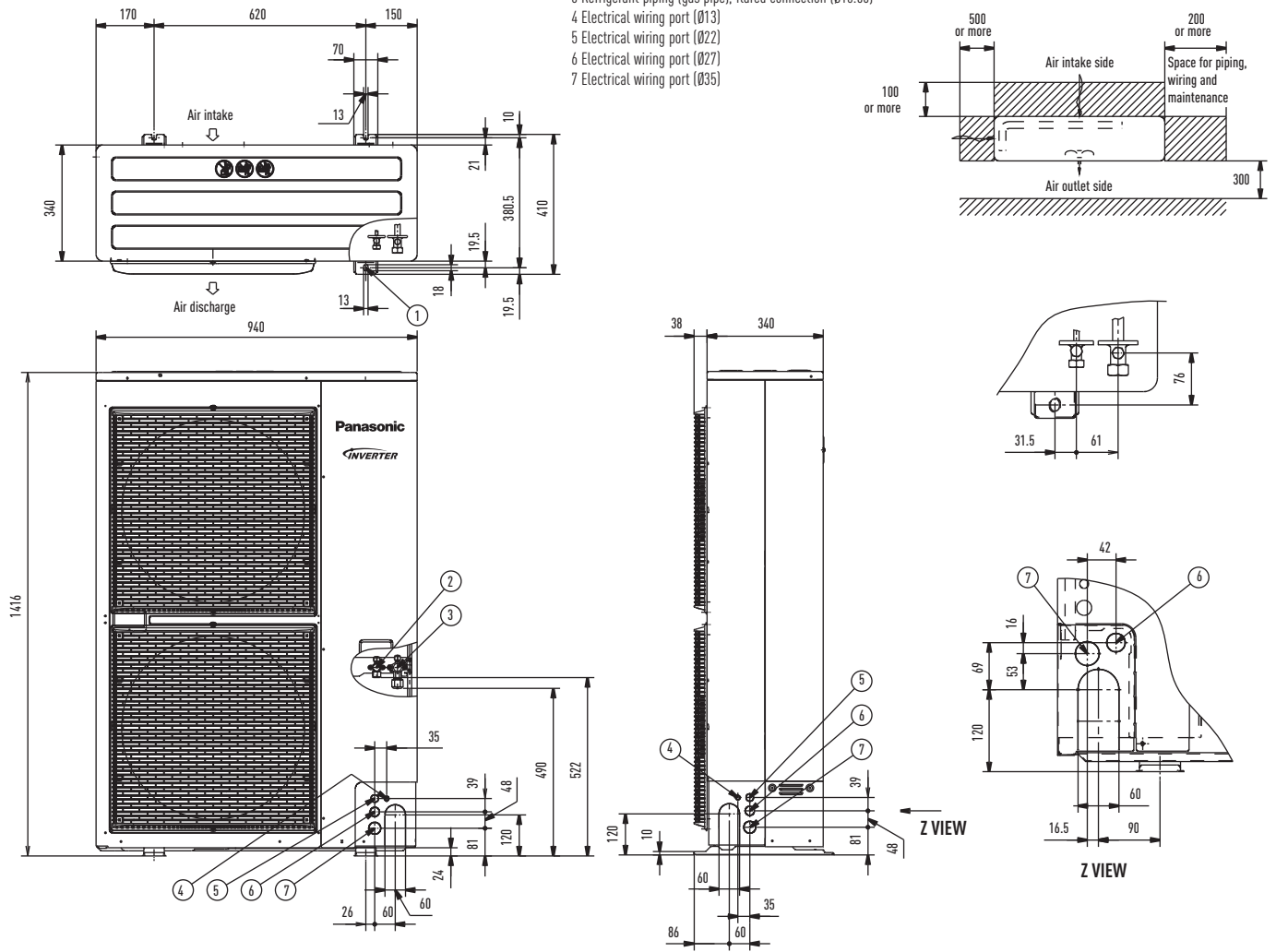


Unit: mm

PACi Standard and Elite dimensions

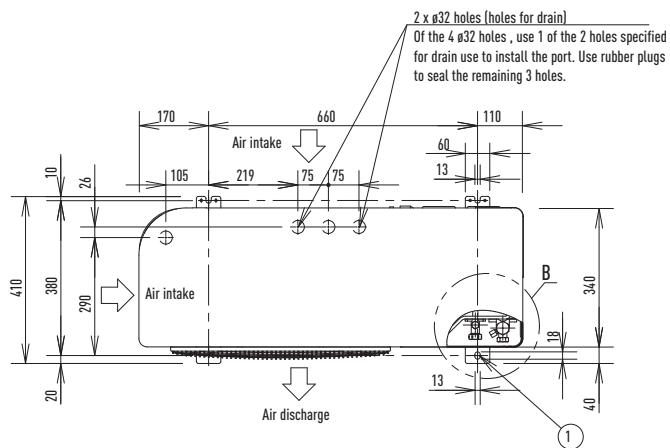
Outdoor unit PACi Standard 14.0 kW and PACi Elite from 10.0 to 14.0 kW

- 1 Mounting hole (4-R6.5), anchor bolt : M10
- 2 Refrigerant piping (liquid pipe), flared connection (Ø9.52)
- 3 Refrigerant piping (gas pipe), flared connection (Ø15.88)
- 4 Electrical wiring port (Ø13)
- 5 Electrical wiring port (Ø22)
- 6 Electrical wiring port (Ø27)
- 7 Electrical wiring port (Ø35)



Unit: mm

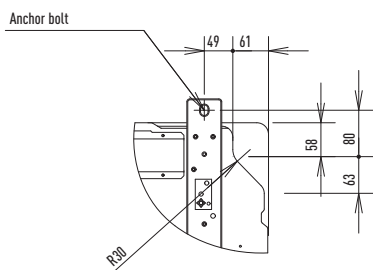
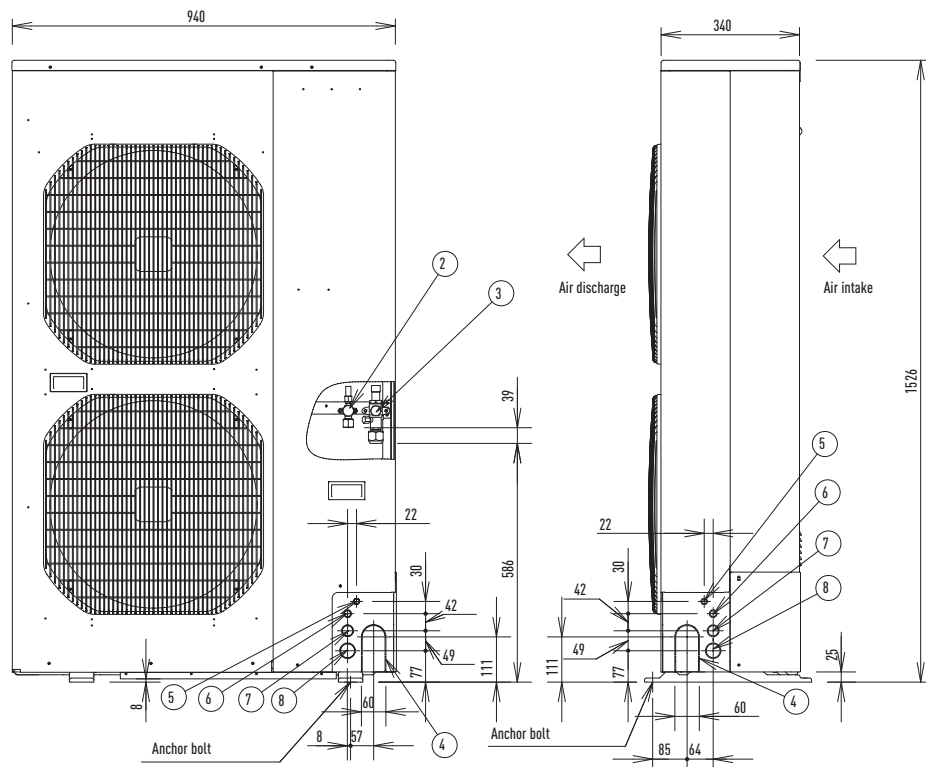
Outdoor unit PACi Elite 20.0 and 25.0 kW



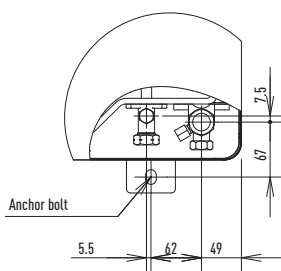
- 1 Mounting hole (4-R6.5), anchor bolt : M10
- 2 Refrigerant tubing (liquid tube), flared connection (20kW: $\phi 9.52$, 25kW: $\phi 12.7$)
- 3 Refrigerant tubing (gas tube), flared connection ($\phi 19.05$)
- 4 Refrigerant tubing port
- 5 Electrical wiring port ($\phi 16$)
- 6 Electrical wiring port ($\phi 19$)
- 7 Electrical wiring port ($\phi 29$)
- 8 Electrical wiring port ($\phi 38$)

Name	Figure	Q'ty
Reducing Joint Tube ($\phi 19.05 \rightarrow \phi 25.4$)		1
Joint Tube ($\phi 19.05$)		1

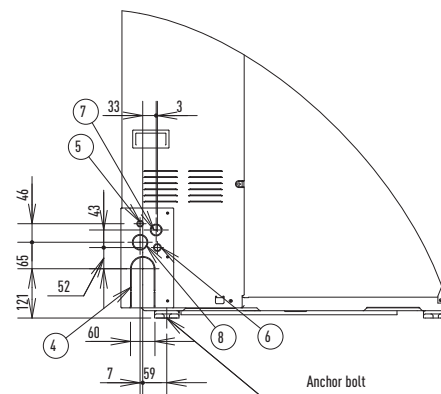
Remark:
There are two types of supplied tubings. The one tubing port $\phi 19.05$ (flare process) is connected to the flared connection of the gas port side's service valve. The other "L" shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing ($\phi 25.4$).



VIEW A
Bottom removable connection port



VIEW B
Refrigerant tubing connection port



Unit: mm

Panasonic

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