Panasonic

NEW COMMERCIAL RANGE EXTREMELY EFFICIENT

2014 - 2015

WIRED REMOTE CONTROLLER
WITH ECONAVI

PACi STANDARD

PACi ELITE

heatingandcoolingsystems

PACi STANDARD | PACi ELITE

Panasonic

NEW 2014 / 2015
COMMERCIAL RANGE

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CE

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Quality Management System Certificate

Certified to ISO 9001: 2008
Panasonic Appliances Air-Conditioning Malaysia. Sdn.Bhd.
Cert. No.: MY-AR 1010

Certified to ISO 9001: 2008
Panasonic Appliances Air-Conditioning (GuangZhou) Co., Ltd.
Registration Number: 01209Q20645R5L

Environmental Management System Certificate

Certified to ISO 14001: 2004
Panasonic Appliances Air-Conditioning Malaysia Sdn.Bhd.
Cert. No.: MY-ER0112

Certified to ISO 14001: 2004
Panasonic Appliances Air-Conditioning (GuangZhou) Co., Ltd.
Registration Number: 02110E10562R4L

NEW

PACi Elite line up.
With energy display function and demand control function.

PG 14

SEASONAL EFFICIENCY

PRODUCT FOLLOWS THE NEW ECODESIGN REQUIREMENTS

SEER A++ SCOP A+

NEW

New Econavi for PACi! Analyses activity of the room and modifies the capacity to adapt in real time to the needs of the room.

PG 20

NEW

New 10kW Wall mounted.
More efficiency, more capacity.

PG 30

NEW

New Remote Controller touch screen with power consumption monitor.

PG 58

NEW

New Server room controller.
Control up to 3 indoor units: Redundancy, Backup, alternative run, error manage.

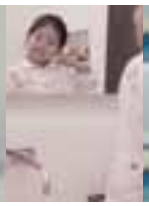
PG 18

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.

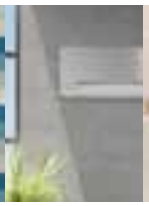
1936
First electric Fan with Automatic Oscillation (36 cm table top model).

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.

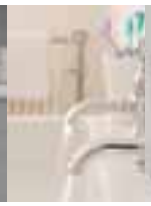


1973
Panasonic launches the first highly efficient air-to-water heat pump in Japan.

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



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.
Pansonic'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!

2014
New Aquarea 16kW T-CAP. Improvements deliver impressive, high efficiencies at low ambient temperatures. T-CAP stands for Total Capacity and is capable of maintaining the same nominal capacity even at -15°C without the help of an electric boostser heater.
Ideal for retrofit and commercial applications.

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.

100% Panasonic: 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

RELIABILITY FACTS

Reliable comfort comes from reliable technologies

Today, Panasonic air conditioners have earned widespread acclaim throughout the world.
A rugged design ensures that the air conditioner will continue to keep the room comfortable, and operate trouble-free for many years. Panasonic believes this is the true value of an air conditioner. And this is why we subject them to a wide range of stringent tests.

Durability. 10,000 Hour Continuous Operation Simulation.

Long - term Durability Test
The air conditioner's main mission is to provide a level of durability that allows it to operate stably for years. In order to achieve this, we conduct an accelerated test for 10,000 hours of continuous operation. The results of this test, which is conducted under conditions that are much more severe than actual operating conditions, prove the rugged strength of Panasonic air conditioners.

Compressor Disassembly Test
After a test with 10,000 hours of continuous operation, we remove the compressor from a randomly selected outdoor unit, disassemble it, then examine the internal mechanisms and parts for possible failure. Panasonic air conditioners continue to provide their designed performance for many years even after prolonged operation under harsh conditions.

Operating Test in Harsh Conditions
In addition to normal operating conditions, an operating durability test is conducted in a high-temperature, high humidity test chamber at a temperature of 55 °C. For use in cold climates, the test is also conducted in a low temperature test chamber at -20 °C. This test assures that the oil inside the compressor will not freeze during use and interrupt operation.

Checking the oil inside the compressor under extremely cold conditions.

Waterproof Test
The outdoor unit, which is subject to rain and wind, is provided with IPX4 waterproof compliance.
Contact sections on printed circuit boards are also resin-potted to prevent adverse effects caused by an unlikely exposure to droplets of water.

A resin-potted circuit board.

No Breaking. When Dropped onto Sides or Corners.

Shock Resistance
Panasonic simulates impacts, vibrations and other environmental conditions that air conditioners might be subjected to during transport. We promise that the quality and performance at the time of the final product inspection are unchanged when the product reaches the user's home.

Drop Test
Even with the large impacts that may occur due to improper handling during transportation, the product packaging has been strengthened to prevent it from being damaged. In addition to conventional vertical dropping, more severe conditions in which the sides or corners hit the floor first are carefully tested to ensure that the product's rigidity and shock-absorbing materials work to prevent problems.

Vibration Test
Preventing damage that would hinder the product's performance due to vibration during transport is a major role of the packaging. Panasonic confirms that the product operates properly even after applying vibrations in both horizontal and vertical directions.

Warehouse Storage Test
During distribution, products may be subjected to extended warehouse storage under unfavourable conditions. To simulate these conditions, we place a weight equal to a stack of five product packages on top of the test package, and leave it in that condition in a room at a temperature of 27°C and a humidity level of 85%. Then, the product is checked for proper operation.

Silence. That Does Not Disturb You.

Comfort
Air conditioners should keep each person in the room comfortable without making their presence known. They should work totally in the background, using their strength to create and maintain a relaxing environment. We build this hidden strength into our air conditioners, and test them repeatedly from this viewpoint.

Noise Test
The operating noise of the indoor and outdoor units is measured in an echo-free chamber. The noise test verifies that the operating noise is low enough so that the product operation will not disturb daily activities including conversations and sleep.

Sunshine simulation.

Amenity Test
An actual air conditioner is operated in a test room that simulates an ordinary living room. Conditions such as the amount of sunlight entering the room from outside are changed while measuring a variety of parameters, such as cooling speed, cooling efficiency, and temperature and humidity differences throughout the room. This makes it possible to confirm whether the air conditioner is operating at its designed performance level under ordinary conditions.

EMC (Electromagnetic Compatibility) Test
This test determines whether electromagnetic waves emitted during operation are sufficiently low to prevent adverse effects, i.e., electrical noise, on signals such as TV and radio broadcasts.

Remote Control Dropping Test
Because the remote control is the main interface between people and the air conditioner, it is naturally subjected to frequent impacts-such as drops and bumps-when it is passed from person to person during normal operation. Panasonic drops the remote control from a height of 1.5 metres at various angles to ensure that no problems in basic performance will result from accidental dropping.

Quality. Is at the Core of All Our Manufacturing.

World Standard Quality
Over the years, Panasonic air conditioners have continued to offer the highest possible quality with the lowest environmental impact worldwide. Naturally, the fundamental production principles that are common to all Panasonic products apply to air conditioners as well. The fact that these principles actively support every product, rather than simply serving as slogans, is the result of the endless repetition of challenges and trial-and-error efforts that are conducted at our production bases all over the world.

Reliable Parts with Major Standards Approval
Panasonic air conditioners comply with all of the major standards that maintain high reliability in the countries and regions where they are marketed. To ensure this, we conduct a variety of tests to examine the quality of materials used in parts.

The strength of the resin material used in the propeller fan is confirmed by the tension test.

RoHS/REACH Compliant Parts
All parts and materials comply with RoHS/REACH, Europe's world-leading environmental regulations. Stringent inspections of more than 100 materials are conducted to ensure that no hazardous substances are included during parts development.

Sophisticated Production Process
The air conditioner production line uses advanced, state-of-the-art factory automation technologies to produce products with higher reliability. Products are efficiently manufactured with high and uniform quality.

Eco Activities
Panasonic has set up eco ideas factories around the globe. While developing and manufacturing energy-saving products based on original environmental technologies, these factories reduce CO_2 emissions from manufacturing processes and conduct regional-based environmental communication activities to contribute to both the global environment and the local communities that they serve.

Panasonic Europe announces Sustainability Declaration

Panasonic establishes new targets for the business' environmental performance and CSR initiatives

Best Global Green Brand 2013

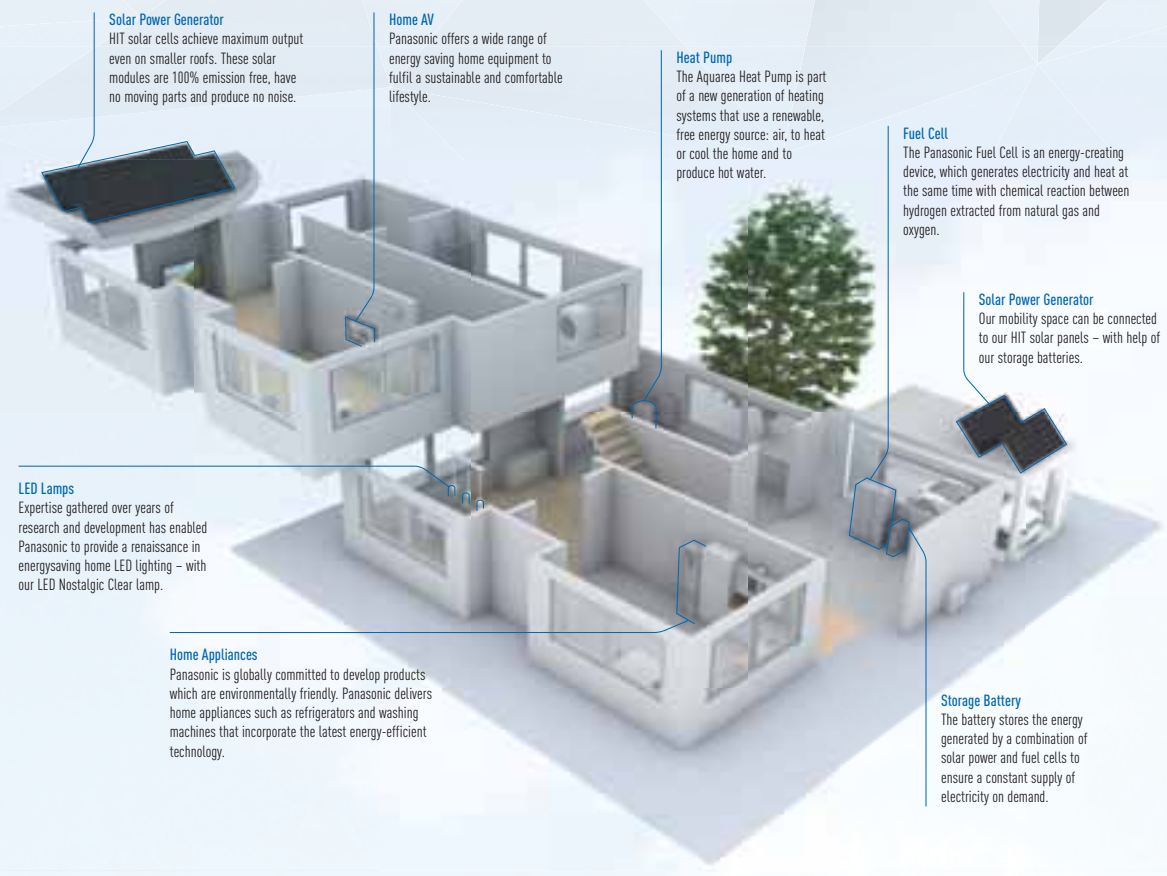
We were recently awarded Interbrand's 4th Best Global Green Brand 2013 – the highest of any consumer electronics brands. This is the result of our commitment to energy efficient products, reduction in CO_2 emissions, kids school 'eco learning' programme and much more.

Sustainability Declaration. Berlin, Germany, 4th September 2013

Panasonic Europe announces today its new Sustainability Declaration for Europe and CIS, extending its current initiatives to ensure all business activities lead to a more sustainable society.

The Sustainability Declaration unites Panasonic's new brand direction towards 'A Better Life, A Better World' with a series of environment and CSR initiatives contributing to the progress and development of society. Recognising the impact on the environment and society through its products and practices, Panasonic aims to deliver on specified targets by March 2016. The European Sustainability Declaration is in accordance with Panasonic's Global Sustainability Policy, which has been rolled out globally in recent weeks.

We aim to realize a lifestyle with virtually zero CO_2 emissions throughout the entire home



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

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

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

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

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

LED Lamps
Expertise gathered over years of research and development has enabled Panasonic to provide a renaissance in energysaving home LED lighting – with our LED Nostalgic Clear lamp.

Home Appliances
Panasonic is globally committed to develop products which are environmentally friendly. Panasonic delivers home appliances such as refrigerators and washing machines that incorporate the latest energy-efficient technology.

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

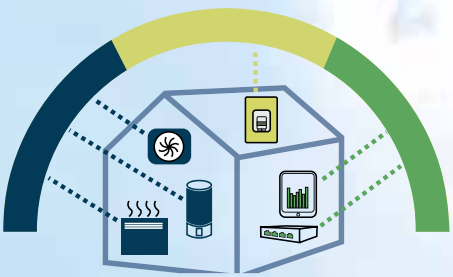
Exemplary sustainable projects

Fujisawa Sustainable Smart Town
Homes will employ the full range of Panasonic's most advanced systems for energy production, storage and management.
In this project, a new concept and process will be adopted to build the town by designing spaces first with a primary focus on services based on people's lifestyles and creating an optimal smart infrastructure. In Fujisawa SST, Panasonic will offer its unique solutions from an Eco & Smart perspective. With bringing energy to life for residents as the town concept, we will provide services that enhance people's lives with photovoltaic power, security, mobility, community, and healthcare.
The unparalleled town building, where as many as 1,000 families will live, will serve as a new business model both within Japan and overseas.

SMART ELECTRIC LYON

Panasonic joins Smart Electric Lyon consortium
What is Smart Electric Lyon?
Smart Electric Lyon is a project that looks at electricity consumption as a key part of the building energy solutions of tomorrow. The project aims to develop a wide range of innovative facilities and services through real-life experiments to test energy saving technologies and to measure how consumers can control energy consumption.
This experiment, unprecedented in scale in Europe, will be conducted for four years in more than 25,000 homes, businesses and communities of Grand Lyon. It is intended to test innovative solutions that will consume less and better.

Panasonic will provide the project with a variety of its energy efficient heating and cooling products, including the Aquarea Air Source Heat Pump – a super-efficient system for providing heating and / or cooling facilities, as well as the production of domestic hot water. These heat pumps are especially equipped with connectivity solutions from Panasonic to ensure the systems are easy to use, and collect the vital, accurate data. The company will also integrate other home equipment solutions such as LED white lighting products to optimize the overall energy management of the project's properties.
This project is particularly apt for Panasonic, as heating and hot water occupy a prominent place in household energy consumption. Panasonic plans to make its European and French resources available for Smart Electric Lyon. The company has involved for the project a dedicated and experienced R&D team from Panasonic's European technical centre in Frankfurt.



The connected home of the future

PRO Club: the professional website of Panasonic

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

Panasonic announces a new initiative for all professionals involved in the heating and cooling businesS-the Panasonic PRO Club (www.panasonicproclub.com). Panasonic PRO Club is the online tool which makes your life easier! You just have to register and a lot of functionalities are freely available to you, where ever you are, from your computer or smart phone!

- **Print your energy label from all the combinations you need**
- **Print catalogues with your logo and your address**
- **Get Documents of conformity and all other documents you may need**
- **Download the latest VRF designer with PACi units and Autocad reader**
- **Download all the service manuals, end user manuals and installation manuals**
- **Know hat to do with error codes**
- **Know before anybody the latest's news**
- **Register on trainings and online trainings**

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

Highlighted Features

- Extensive library of resources
- Tools & Apps for end users. Check availability in your country:
  - My Home: sizing wizard for domestic and A2W range
  - My Project: Contact form to Panasonic team
  - iFinder: Lists of installers displayed by postcode
- Special offers & promotions
- Training PRO Academy
- Catalogues (Commercial documentation)
- Marketing (Images in high resolution, advertisements, deco guidelines)
- Tools (Professional software, sizing tools...)

NEW Highlighted Features

- NEW! Installers customize leaflets in PDF format with their logo & contact details
- NEW! Energy label generator. Download energy labels of any device in PDF format
- NEW! Heating calculator demand
- NEW! Noise calculator for outdoor unit
- NEW! Aquarea Radiator calculator
- NEW! Error Code Search by error code or unit ref. Compatible with smartphone and tablet computer
- NEW! Revit / CAD Images / Spec texts
- NEW! Access to Pananet, online library of technical documentation
- NEW! Download Documents of Conformity and other Certifications
- NEW! Commissioning online

NEW! Easy download Panasonic professional documentation and brochures

NEW! Customize leaflets with your logo & contact details. Save and print the PDF

NEW! Energy label generator. Download Energy labels of any device in PDF format

NEW! Error Code on your smartphone and your PC: Search by error code or model reference. Online version + downloadable version for offline use

Panasonic PRO Club is fully compatible with tablet computer and smartphone

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.

Internet Control Ready
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.

Energy saving
INVERTER+

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.

Up to 28% energy savings (cooling)
ECONAVI

Econavi features intelligent Human Activity Sensor and new Sunlight Sensor technologies that can detect and reduce waste by optimising air conditioner operation according to room conditions. With just one touch of a button, you can save energy efficiently with uninterrupted cooling, comfort and convenience.

6,80 A++ SEER
SEASONAL ENERGY EFFICIENCY RATIO

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

4,00 A+ SCOP*
SEASONAL COEFFICIENT OF PERFORMANCE

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
OUTDOOR TEMPERATURE

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

Down to -20°C in heating mode
OUTDOOR TEMPERATURE

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

Easy control by BMS
CONNECTIVITY

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.

Environmentally friendly refrigerant
R410A

R410A. Environmentally friendly refrigerant.

Possible to use on R22 pipings
R22 RENEWAL

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

5 year compressor warranty

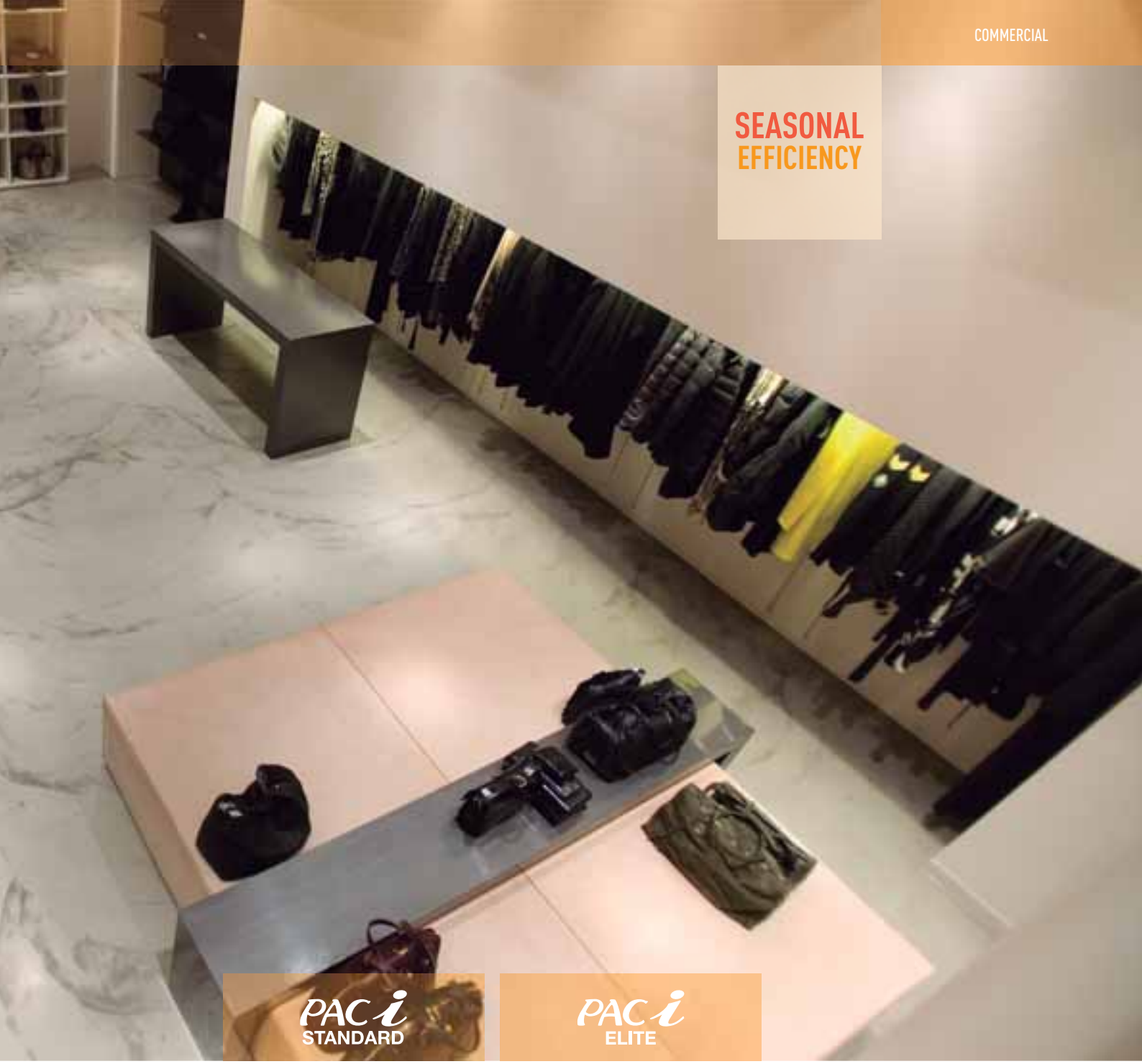
5 years warranty.
We guarantee the compressors in the entire range for five years.

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 CO_2 emission and lowers operating costs.



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.

Energy saving

INVERTER +

PAC i STANDARD

PAC i 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 of commercial air conditionning

Energy-saving concept. The use of energy saving design for the structure of fans, fan motors, compressors and heat exchangers resulted in high COP value which ranked as one the top class in the industry. In addition, use of highly efficient R410A refrigerant reduces CO_2 emission and lowers operating costs.

SEASONAL EFFICIENCY

PRODUCT FOLLOWS THE NEW ECODESIGN REQUIREMENTS

PACi Standard

- Good balance, system cost vs energy efficiency
- Top class ESEER/SCOP as a Standard Inverter category ESEER: A++ / SCOP: A+ at 10.0 kW (in Cassette 90x90)
- Interchangeable controller with ECOi
- Compact outdoor units
- Twin connection possible
- Cooling operation up to -15°C
- Heating operation up to -10°C

New PACi Elite

- Meeting all necessary safety approvals to ensure quality and safety
- Top-class ESEER: 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
- Twin, Triple and Doble-Twin connection possible

PACi Standard: outdoor unit

More compact

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

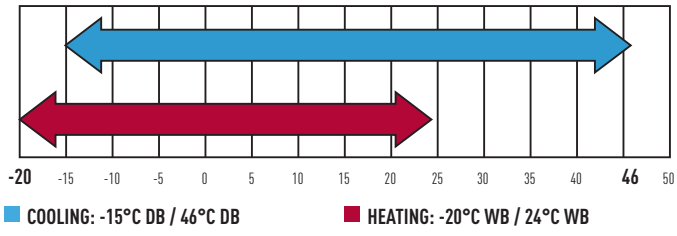
* Only for U-100PEY1E8, U-125PEY1E8, U-100PEY1E5 and U-125PEY1E5.

PACi Elite: outdoor unit

Wide operating range

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

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



Product Quality and Safety

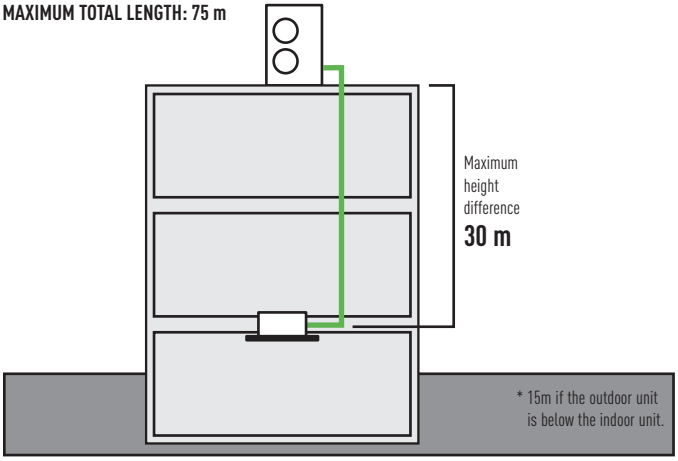
All Panasonic air conditioners undergo strict quality and safety tests before sale. This rigorous process includes obtaining all necessary safety approvals, to ensure that all air conditioners we sell are not only built to the highest market standards, but are also completely safe.

Quiet mode

2, 4 or 6 dB can be reduced by different setting on your choice. External input signal is also available.

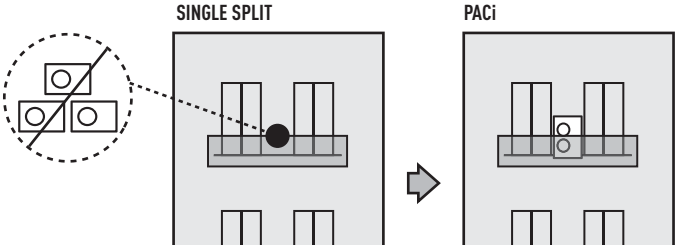
Increased Piping Length for Greater Design Flexibility

Adaptable to various building types and sizes.
Maximum piping length: 75m (10.0, 12.5, 14.0kW). 50m (6.0, 7.1kW).



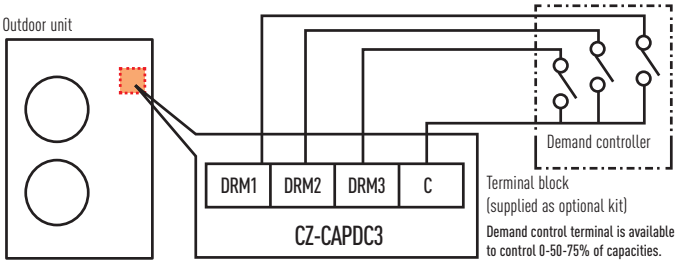
Compact & Flexible-design

The slim and lightweight design means the PACi outdoor unit can be installed in a number of compact situations.
As the unit only weighs 98 kg, it is easy to carry and easy to install.



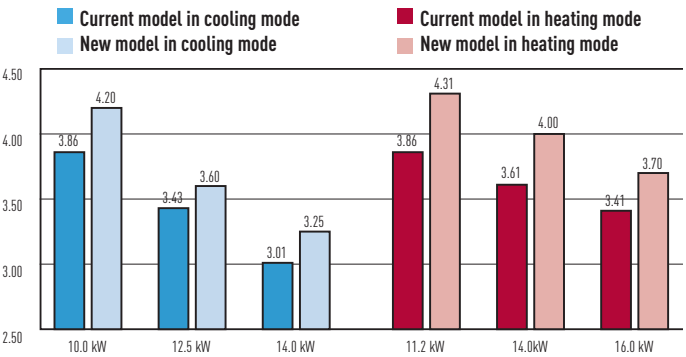
Demand Response Compliant (CZ-CAPDC3)

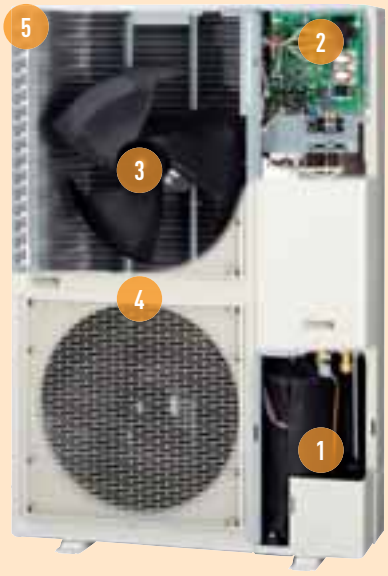
This optional part allows demand control of the outdoor unit.
Several level of settings are available:
- Level-1, 2, 3 : 75 / 50 / 0 %
- Level-1, 2 can be set in 40 - 100% (40, 45, 50...95, 100: each 5%)



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.





1. Compact & highly efficient compressor
2. Printed circuit board (P-LINK)
3. DC fan motor
4. New large diagonal (520 mm) air flow fan
5. High-efficiency heat exchanger

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 CO_2 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.

Excellent ESEER and SCOP

ESEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit ESEE R=a(EER25)+b(EER50)+c(EER75)+d(EER100) where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively.
a, b, c and d are values assigned for an office type. These values are given as a=0,2, b=0,36, c=0,32 and d=0,03.
The internal temperatures are taken at 27°C DB and 19°C WB.

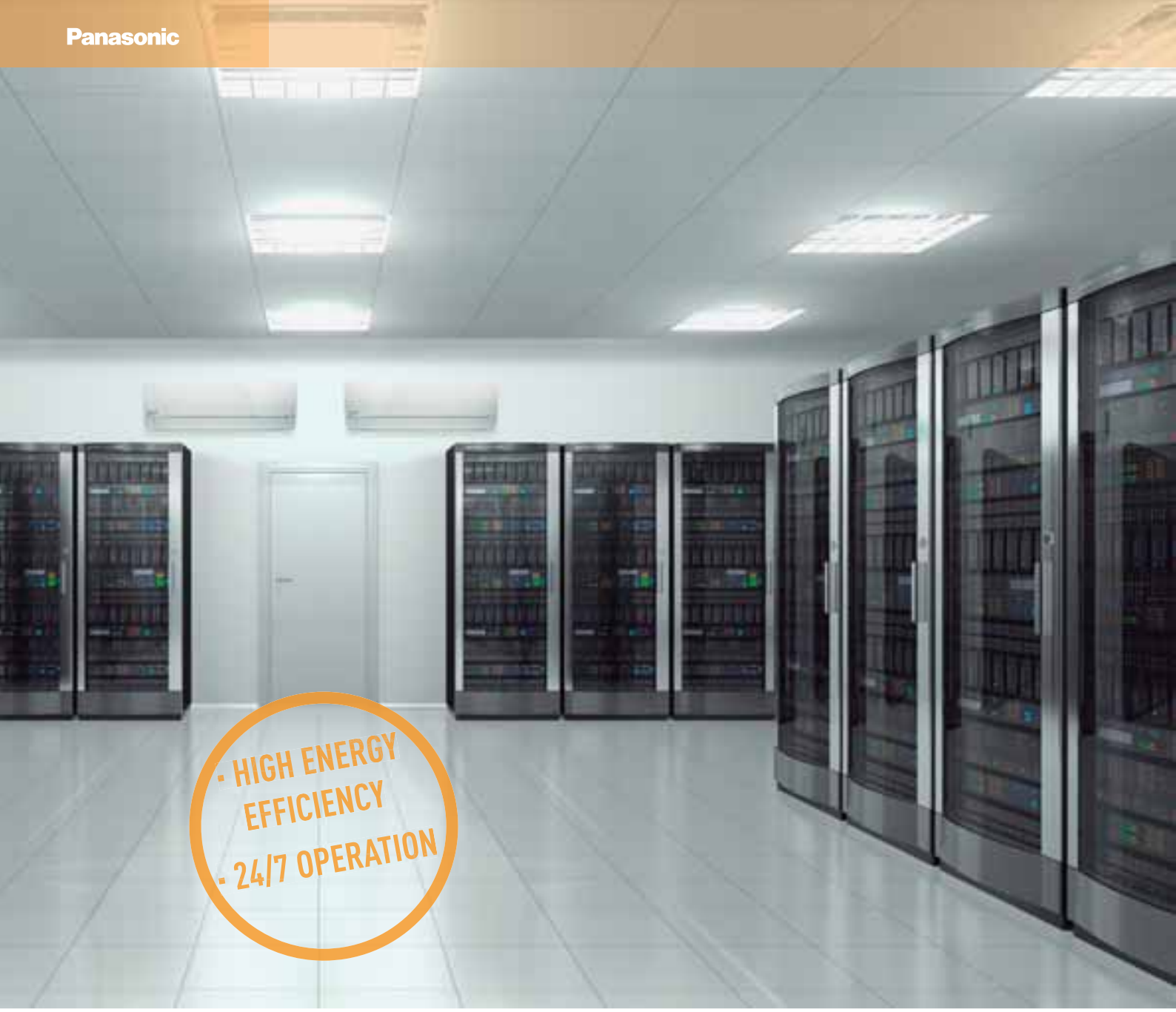
ESEER - Seasonal Energy Efficiency Rating				
Part Load COP	25%	50%	75%	100%
Ambient conditions	20°C	25°C	30°C	35°C
Weighting factor	0,23	0,41	0,33	0,03

UK summer 21°C DB (outdoor temperature), 16°C WB (indoor temperature)

SCOP is calculated in base Eurovent IPLV for SBEM with U1 indoor unit including defrost correction factor

SCOP - Seasonal Coefficient of Performance				
Part Load COP	25%	50%	75%	100%
Ambient conditions	15°C	7°C	1°C	-5°C
Weighting factor	0,20 (a)	0,36 (b)	0,32 (c)	0,12 (d)

UK winter -5°C DB (outdoor temperature), 20°C WB (indoor temperature)



Solutions for server rooms

High efficiency products for 24/7 applications

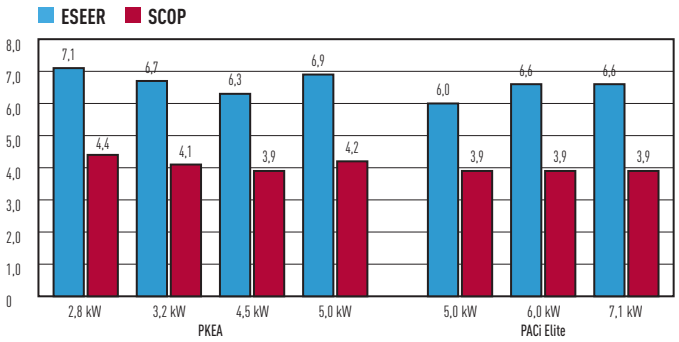
Panasonic has developed a complete range of solutions for server rooms which efficiently protect your servers, keeping them at an appropriate temperature even when the outdoor temperature is below -20°C.

Key points

- From 2,5 kW to 5 kW with PKEA units
- From 5 kW to 25 kW with PACi units
- Backup function
- Redundancy function
- Alternative run function
- Error information by dry contact
- Operation even at -20°C outdoor temperature
- Excellent performance with excellent ESEER
- Product design for 24/7 operation

High efficiency all the year

On 24/7 operation, the performance of the air conditioning is a key factor. When the efficiency is high, the return on investment of such units is quickly reached.



High durability for 24/7 operation

Indoor Fan. Cross-Flow-Fan

- High durability rolling bearings, large size (φ105mm) fan
- High efficiency blade
- Random pitch blade (low sound)

Compressor

DC2P Panasonic original compressor, with high efficiency and reliability.

Why is the Panasonic R2 Rotary Compressor so efficient?

1. **High Efficiency Motor** The premium silicon steel motor meets industry efficiency requirements.
2. **Improved Lubrication of High Volume Oil Pump** The extended, high volume oil pump in conjunction with a larger capacity oil reservoir provides superior lubrication.
3. **Accumulator has Larger Refrigerant Capacity** The larger accumulator accommodates generous refrigerant amounts needed in longer line length installations.

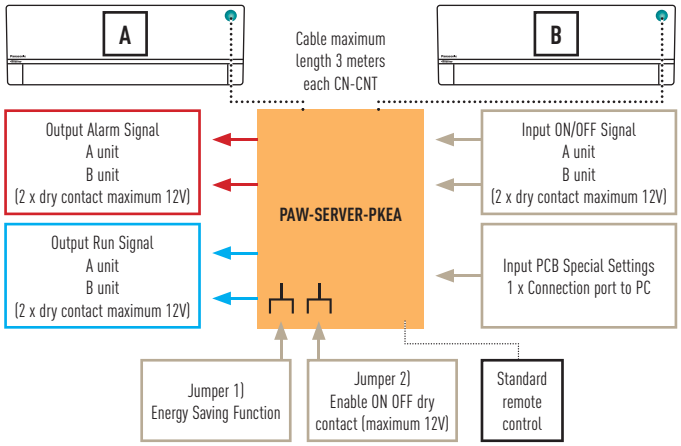
Interfaces to run 2 (for PKEA) or up to 3 (for PACi) units on Backup and alternative run

PAW-SERVER-PKEA for PKEA

The PAW-SERVER-PKEA server room interface manages redundancy and backup of two PKEA units with two different selectable modes:

- Plug and play by embedded redundancy and backup algorithm (no external signal needed. Further details please refer to operation manual)
- External (third party PLC) redundancy and backup management by dry contact

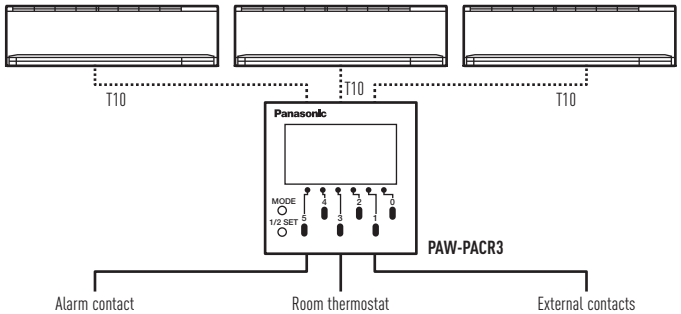
All settings are possible without the need for a computer connection. A special Energy Saving Mode is selectable by deep switch (available only in plug and play mode). The level of remote control input prohibition can be set when external management is by dry contact.



PAW-PACR3 for PACi and ECOi Range

PAW-PACR3, in combination with one PAW-T10V on each indoor unit, allows the redundant operation of 2 (or 3) PAC-i or VRF indoor units.
All units will be operated by programmable turns in order to achieve the same operating time (example turn every 8 hours with 24 hours).
If the room temperature exceeds a freely set value, the 2nd (or 3rd) unit will be switched ON and an alarm will be activated.
In combination with 1x PAW-T10V on each indoor unit, 2 or 3 PACi of ECOi can be programmed to run redundant.
Display and Settings:

- Possible to select next unit manually
- Possible to reset operation
- LED display shows operation status of the 2 or 3 units
- Operation status output
- Alarm LED and alarm output
- Temperature limit can be set
- Temperature hysteresis can be set
- Room temperature is displayed
- Time counter displayed



New wired remote controller with Econavi function control

Easy to use, attractive, clear design, with new demand control functions and energy consumption display! This useful feature makes this remote control unique!

Design
The new CZ-RTC3 wired remote control is ideal for integration into the most demanding interior architectures.
The touch panel features a very sleek and easy to use display, which with its compact display is only 120mm x 120mm x 16mm.

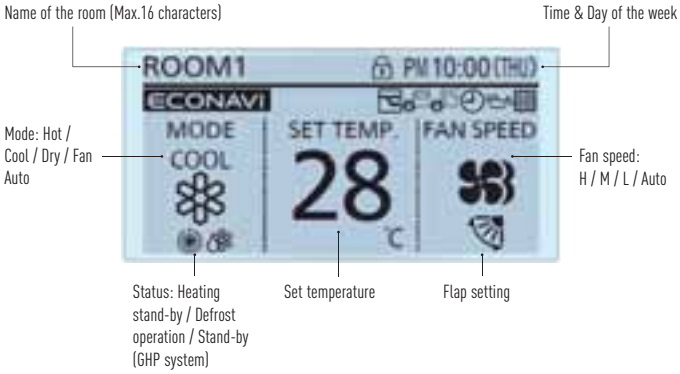
Display of information
The information is mainly based on pictograms to ensure easy understanding.
The minimal amount of text is available in 4 languages (English / German / French / Spanish / Italian).
The screen is back lit to enable reading even during the night.

Easy Access to the menus
With the new pictograms, the navigation, the selection and the settings are simple and easy to follow.

Key Functions
- Easy setup of the timer and settings of the indoor unit
- Energy consumption display (only available with PACi units with the reference ending with A)
- Limitation of the energy consumption (Demand control) by timer.

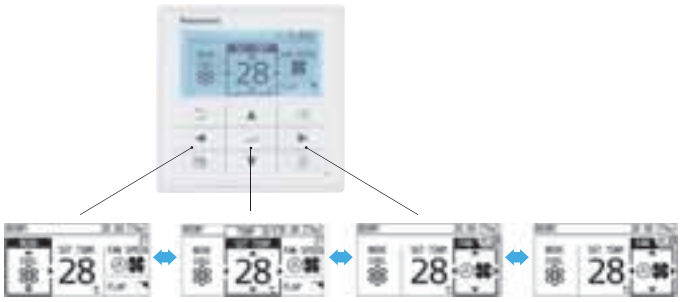
Basic function (Operation display & indication)

All functions are easily available on the remote controll.
• OFF/ON timer • Weekly timer • Quiet operation • Remote control sensor • Operation prohibit • Filter sign • Energy saving • Centralized control indication • Mode change prohibit • Automatic temperature return • Temperature range limitation • OFF remind • Schedule demand control • Ventilation • Out Function



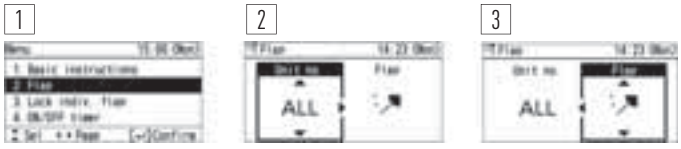
Easy operation and quick access to all menus

1. Set temperature will be selected, when any arrow button is touched.
2. Select the item (Mode or Fan speed) by left/right ◄► key.
3. Change the setting by up/down ▲▼ key.



Example of easy access to the functions: Air direction setting

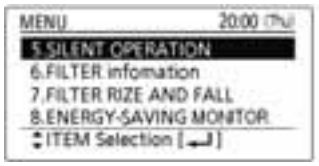
1. Select "Air direction" and press "determine" key.
2. Select the unit No. by up/down key.
3. Select the flap position by up/down key.
4. Press "Return" key to go back the Menu display.



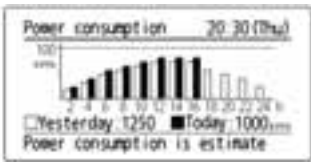
Example of easy access to the functions : Weekly timer setting

8 actions available per day. Total 56 actions per week can be set.
1. Weekly timer menu display
2. Setting for each day of the week
3. Timer program setting of the day

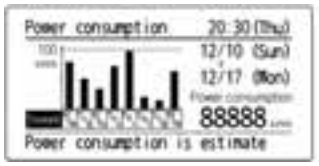
Example of easy access to the functions: Energy consumption monitoring display per day, week, month and year (only available with PACi units)



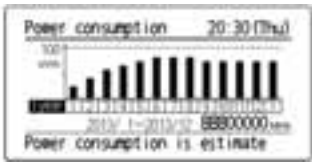
Menu selection: 3 types (Day/Week/Year)of display are available.



Daily Energy consumption: Data is shown with Yesterday's record.(Graph starts from 0 o'clock to 24 o'clock only.)



Weekly Energy consumption: Power consumption of each day of the week can be checked.



Annual Energy consumption: Power consumption of each month can be checked.

Functions available on the CZ-RTC3

Control item	Controllability	Indoor Units	
		All PACi	Only PACi ending on A
Basic Operation	Operation, Mode, Temperature setting, Airflow volume, Airflow direction	✔	✔
Timer function	Time display	✔	✔
	Easy ON/OFF timer	✔	✔
	Weekly Program timer	✔	✔
Energy saving	Outing function	✔	✔
	Temperature auto return	✔	✔
	Temperature setting range limitation	✔	✔
	OFF remind	✔	✔
	Energy saving mode	✔	✔
	Schedule demand control	–	✔
	Energy monitoring	–	✔
Maintenance	System failure information	–	✔
	Service contact registration	✔	✔
	Filter sign (rest time display) & Reset	✔	✔
	Auto-address, Test run	✔	✔
	Sensor value monitor	✔	✔
	Simple/Detail setting mode	✔	✔
Others	Key lock	✔	✔
	Ventilation fan control	✔	✔
	Display contrast adjustment	✔	✔
	Remote controller sensor	✔	✔
	Quiet operation mode	–	✔
	Prohibit setting control from Central controller	✔	✔

All specifications subject to change without notice.

Wired remote controller CZ-RTC3
with Econavi Sensor Control

Up to 28% energy savings (cooling)
ECONAVI

INCREASE EFFICIENCY BY 28%
INCREASE COMFORT

New Econavi Sensor

The all new Econavi Sensor detects presence in the room, and quietly adapts the PACi or VRF air conditioning system in order to improve comfort and maximise energy savings.

- Detects human activity and adjusts temperature by 2 degrees (up or down) to optimize comfort and efficiency
- If there is no activity detected for a set time, the Econavi will stop the unit or move to a new temperature previously set
- The Econavi device is installed independently of the indoor unit, and is located in the area best suited for detection

Applications

Saving Energy for Offices: if the air conditioning is left on after the last employee leaves the office, Econavi will automatically react, reducing or stopping the system.
Increased comfort in hotel rooms: when presence is detected in the room, the temperature is automatically adjusted to achieve best comfort.

Econavi function

- Analyses room activity: Human activities and human heat
- Modifies the capacity to adapt in real-time to the needs of the room

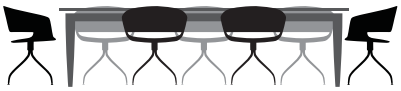
Key points

- Compatible with Cassette, Wall Mounted, Hide Away and Ceiling - Sensor - Improves efficiency - Better Comfort - Can be installed in the best place of the room for detection purposes.

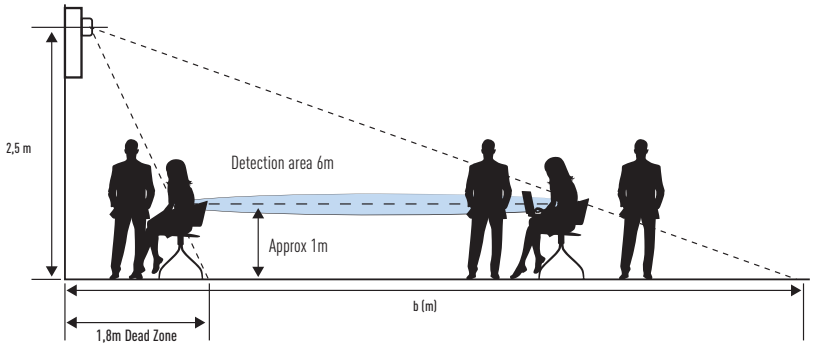
Available in October 2014.

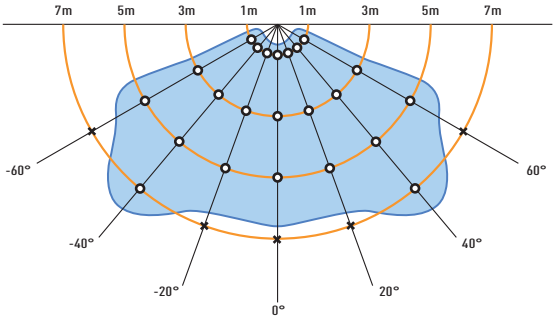
Human activity and presence detection

Activity detection		Presence detection	
HIGHER ACTIVITY	LOWER ACTIVITY	After 20 mins absence	After 3 hours absence
Cooling Set Temp. +/-0°C	Cooling Set Temp. +1°C	Cooling Set Temp. +2°C	Cooling Thermo OFF
Heating Set Temp. -1°C	Heating Set Temp. +/-0 °C	Heating Set Temp. -2°C	Heating Thermo OFF
	Each 2 min		After 3 hours set up can be change to stop or temp shift



Sensor location image





Human detection area (2,5m height angle 30°)

Model Evaluation (Laboratory Testing/Cooling Operation)

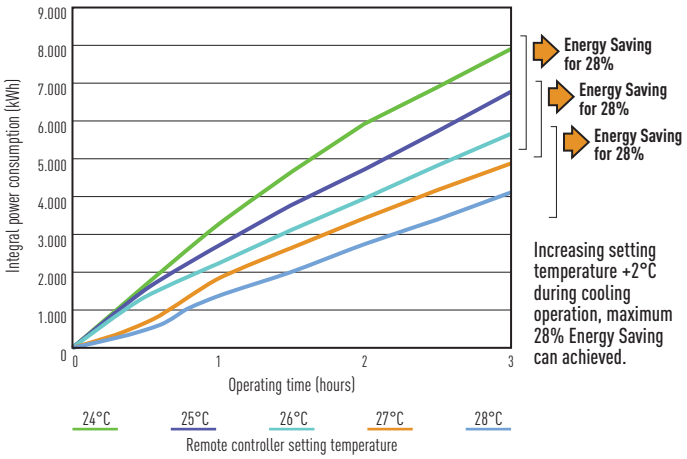
28% ENERGY SAVING

Test Method

To establish conditions for our field tests, because human movements and door open/close are random, we did not test on set conditions. To replicate typical conditions, we have fixed variable numbers (see below) and tested how ECONAVI's temperature control function contributes to energy efficiency level.

For each temperature setting, we have tested and compared power consumption at three-hourly intervals.

INTEGRAL POWER CONSUMPTION COOLING OPERATION

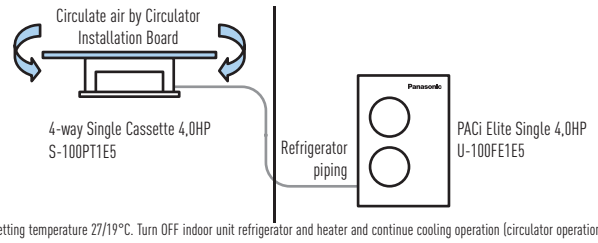


Increasing setting temperature +2°C during cooling operation, maximum 28% Energy Saving can achieved.

Test Condition

- Testing location: New 6,0HP testing room / 29m²
- Test sample remote controller setting: Setting temperature: Cooling 24 ~28°C / Fan Speed: Hi
- Measured integral power consumption every 30 minutes and compare (including thermo OFF period)
- Room temperatures / 19°C, outdoor temperature 35/24°C (cooling nominal capacity) cool down the room for 1 hour and keep the room temperature stable. After the room temperature become stable, turn OFF indoor unit refrigerator and heater and only operate circulator and continue cooling down the room by the unit (operating circulator to avoid temperature variation)

TEST SAMPLE TESTING LOCATION: BUILDING 1.460 NEW 6,0HP TESTING ROOM



Indoor setting temperature 27/19°C. Turn OFF indoor unit refrigerator and heater and continue cooling operation (circulator operation ON).

360° air flow

PACi Standard and Elite: indoor units

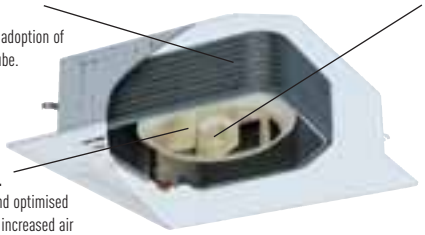
360° Air Flow, 4 Way 90x90 Cassette PACi Standard and Elite

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.

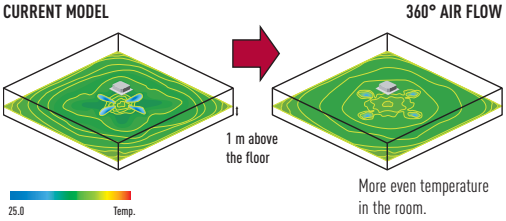


NEW DC-FAN MOTOR.
Optimum airflow is achieved by a new DC-fan motor with independent control.

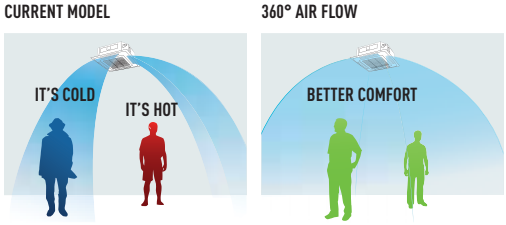
INDIVIDUAL FLAP CONTROL.
Flexible Air flow direction control by individual flap control is possible. 4 Flaps can be controlled individually by setting on wired timer remote controller. It can make more flexible Air-flow control to be matched to several demands in a room.

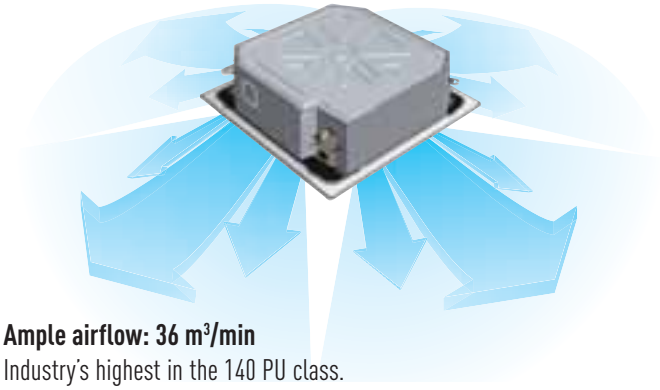
360° Air Flow for improved comfort

By redesigning the air-outlet and flap, Soft & 3D air flow circulates whole space and provides even temperature distribution in the room.



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



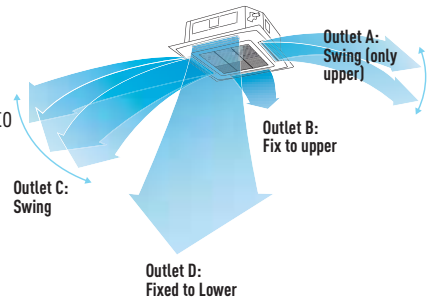


Ample airflow: 36 m³/min
Industry's highest in the 140 PU class.

Flexible 3D air-flow control

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

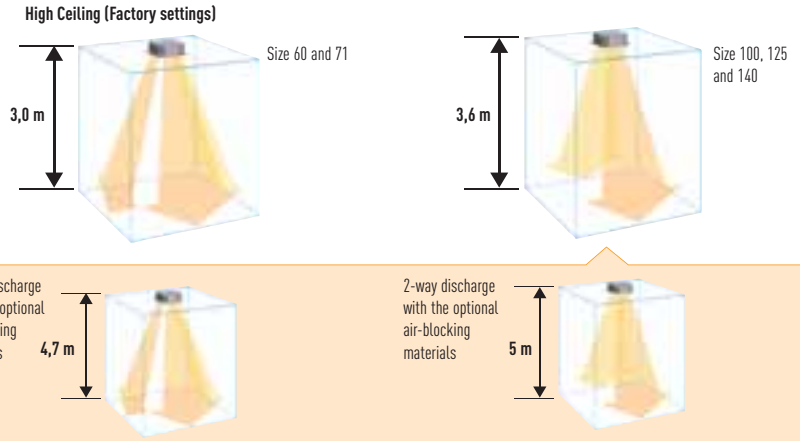
- 4 Flaps can be controlled individually (by standard wired remote controller*).
- Versatile air flow control to cover a wide variety of demands.



* 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.)



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

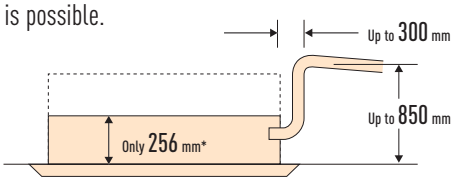
The flap can be removed easily for washing with water.

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.



Drain Pump of about 850 mm from the ceiling surface

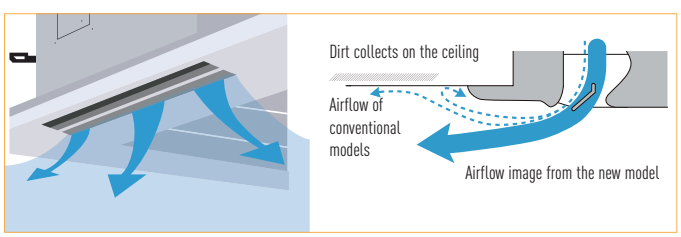
* For 6,0kW / 7,1kW

Low-Profile 33,5 mm Panel

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

Dust Prevention

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

New 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.

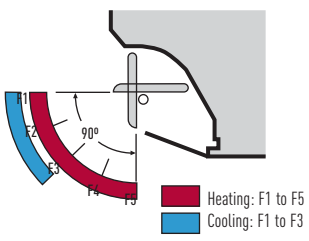
Closed discharge port
When the unit is turned OFF, the flap closes completely to prevent dust getting into the unit and to keep the equipment clean.

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.

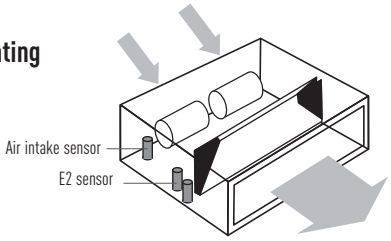
Discharge air temperature control

- Possible to reduce cold drafts at heating operation.

Cold Drafts Reduction at Heating

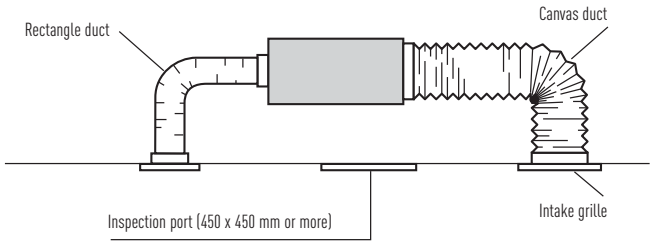
- Accurate temperature measurement by E2 sensor to reduce cold drafts at heating.

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



System Example

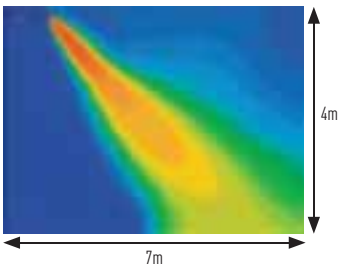
An inspection port (450 mm x 450 mm or more) is required at the control-box side of the indoor unit body.

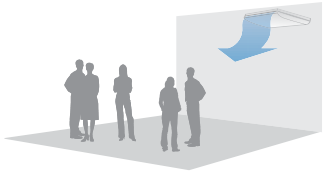


Ceiling

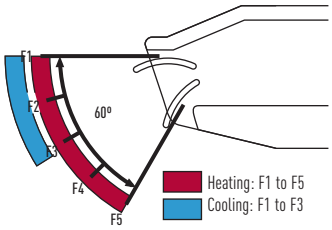
Further comfort improvement

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.



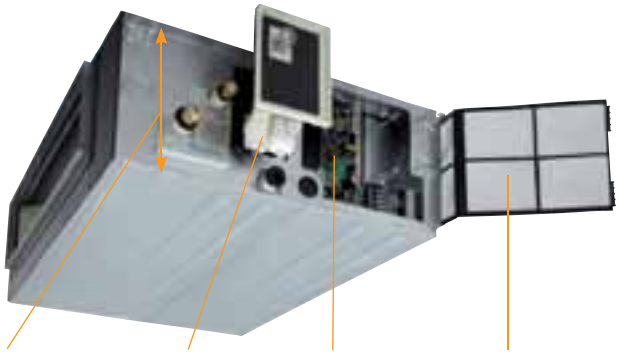


Further comfort improvement with airflow distribution



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.

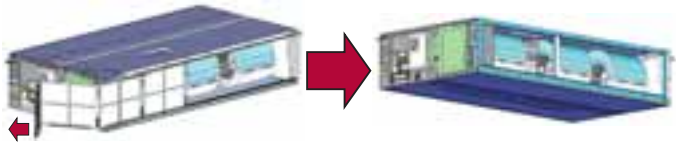
Type	60	71	100	125	140
Standard	70 Pa	70 Pa	100 Pa	100 Pa	100 Pa
Maximum available setting	150 Pa	150 Pa	150 Pa	150 Pa	150 Pa

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

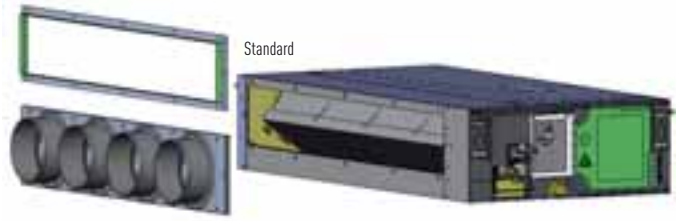
The unit features air inlet on one side, air outlet on the other side. The air inlet filter can be pulled out from the side of the unit and can be folded. Easy access if through the maintenance opening.



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 φ200 outlet frange x 4 ports

Circle duct flange (option)

Number 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)

Range of Commercial units

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-E18PKEA

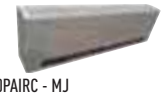
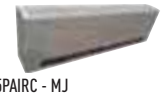
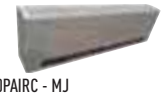
* PKEA indoor units are only compatible with PKEA Outdoor Units.

Indoor Units PACi Standard And Elite	3,6 kW	4,5 kW	5,0 kW	6,0 kW
Wall PACi Inverter+ NEW	S-36PK1E5A	S-45PK1E5A	S-50PK1E5A	S-60PK1E5A
4 - Way 60x60 Cassette PACi Inverter+ (for Twin combinations) NEW	S-36PY2E5A	S-45PY2E5A	S-50PY2E5A	
4 Way 90x90 Cassette PACi Inverter+ NEW	S-36PU1E5A	S-45PU1E5A	S-50PU1E5A	S-60PU1E5A
Low Static Pressure Hide Away PACi Inverter+ NEW	S-36PN1E5A	S-45PN1E5A	S-50PN1E5A	S-60PN1E5A
High Static Pressure Hide Away PACi Inverter+ NEW	S-36PF1E5A	S-45PF1E5A	S-50PF1E5A	S-60PF1E5A
Ceiling PACi Inverter+ NEW	S-36PT2E5A	S-45PT2E5A	S-50PT2E5A	S-60PT2E5A
High Static Pressure Hide Away 20,0 - 25,0 kW PACi Inverter+ NEW				
AHU Kit NEW			PAW-280PAH2	PAW-280PAH2
Air Curtain with DX Coil Jet-Flow				
Air Curtain with DX Coil Standard				

1) Available from November 2014. * The indoor units from 3,6 to 5,0 kW are only available only for Twin, Triple and Doble-Twin combinations.

OUTDOOR UNITS PACi STANDARD AND ELITE			5,0 kW	6,0 kW
PACi STANDARD				U-60PEY1E5 [I]
PACi ELITE			U-50PE1E5 [I]	U-60PE1E5A [I]

[I] Single Phase [III] Three Phase

	7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
	S-71PK1E5A	S-100PK1E5A				
	S-71PU1E5A	S-100PU1E5A	S-125PU1E5A	S-140PU1E5A		
	S-71PN1E5A	S-100PN1E5A	S-125PN1E5A	S-140PN1E5A		
	S-71PF1E5A	S-100PF1E5A	S-125PF1E5A	S-140PF1E5A		
	S-71PT2E5A	S-100PT2E5A	S-125PT2E5A	S-140PT2E5A		
					S-200PE1E8A S-200PE2E5[1]	S-250PE1E8 S-250PE2E5[1]
	PAW-280PAH2	PAW-280PAH2	PAW-280PAH2	PAW-280PAH2	PAW-280PAH2	PAW-280PAH2
		 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-71PEY1E5 [I]	U-100PEY1E5 [I] // U-100PEY1E8 [III]	U-125PEY1E5 [I] // U-125PEY1E8 [III]	U-140PEY1E8 [III]		
	U-71PE1E5A [I] // U-71PE1E8A [III]	U-100PE1E5A [I] // U-100PE1E8A [III]	U-125PE1E5A [I] // U-125PE1E8A [III]	U-140PE1E5A [I] // U-140PE1E8A [III]	U-200PE1E8 [III]	U-250PE1E8 [III]

WALL MOUNTED PKEA

Complete line-up with high efficiency even at -20°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.

- SERVER ROOM SOLUTION WITH THE HIGHEST EFFICIENCY OF THE MARKET
- 24/7 OPERATION

ESEER 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)
Cooling capacity at -10°C	Nominal	kW	2,63	3,69	5,04	6,00
EER at -10°C	Nominal	Energy Saving	7,19	5,96	6,01	6,00
Cooling capacity at -20°C	Nominal	kW	2,61	3,66	4,06	5,82
EER at -20°C	Nominal	Energy Saving	6,71	5,56	4,39	5,39
ESEER	**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 electricity consumption (cooling) [1]		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	3,33	4,07	4,10	4,98
SCOP	**Nominal**	**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 (0,165-1,820)	1,440 (0,340-2,190)	1,520 (0,340-2,570)
Annual electricity consumption (heating) [1]		kWh/a	891	1.229	1.292	1.467
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	1.074 / 1.158
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 / 29	43 / 35 / 29	44 / 37 / 34
Sound power level	Cooling / Heating (Hi)	dB	55 / 56	58 / 58	59 / 59	60 / 60
Dimensions	H x W x D	mm	295 x 870 x 255	295 x 870 x 255	295 x 870 x 255	295 x 1.070 x 255
Net weight		kg	10	10	10	13
Air purifier filter						
Outdoor Unit						
Air Volume	Cooling / Heating	m³/h	1.878 / 1.782	1.974 / 1.926	2.052 / 1.980	2.352 / 2.274
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
Piping length	Min / Max	m	3-15	3-15	3-15	3-20
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	-20 / +43	-20 / +43	-20 / +43	-20 / +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)
Rating Conditions for cooling capacity at low temperature: Cooling Indoor 27°C DB / 19°C WB. Cooling Outdoor 0°C DB / -10°C WB.

1) The annual energy consumption is calculated in accordance with the ErP directive. 2) 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. 3) Add 70 mm for piping port. 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.ptc.panasonic.eu

Included on the kit
Timer remote controller

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

Technical Focus

- New! This units can be installed on R22 pipings
- Designed for 24h/7d a week operation
- Highly efficient even at -20°C
- High durability rolling bearings
- Additional piping sensors to prevent freezing

Outdoor

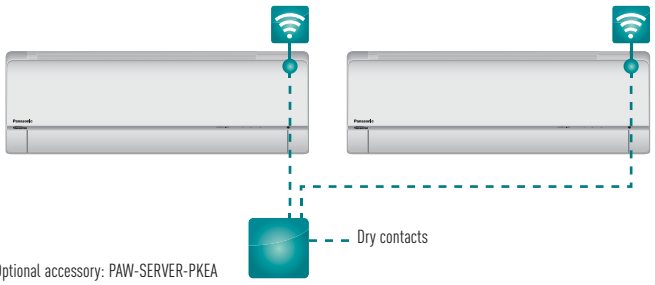
- Cooling even when ambient temperature is as low as -20°C
- Electronic expansion valve (accurate sub-cooling and adjustable refrigerant flow)
- Outdoor DC fan motor to provide flexible air-flow to ensure optimum condensation pressure (works on outdoor pipe temperature sensor)

Interface option to manage server room operation

The PAW-SERVER-PKEA server room interface manages redundancy and backup of two PKEA units with two different selectable modes:

- Plug and play by embedded redundancy and backup algorithm (no external signal needed. Further details please refer to operation manual)
- External (third party PLC) redundancy and backup management by dry contact

All settings are possible without the need for a computer connection.
A special Energy Saving Mode is selectable by deep switch (available only in plug and play mode).
The level of remote control input prohibition can be set when external management is by dry contact.



Optional accessory: PAW-SERVER-PKEA

CU-E9PKEA
CU-E12PKEA

CU-E15PKEA
CU-E18PKEA

WALL MOUNTED
PACi STANDARD AND ELITE INVERTER+

New Wall Mounted PACi. The extension of the range to include a 10 kW unit allows for many more applications such as studios, gyms, high ceiling areas and even computer server rooms.

Technical Focus

- **New!** 10.0 kW capacity unit
- Flat face design for modern appearance
- Compact design offers over 15% reduction in overall size
- Washable front panel
- DC FAN for better efficiency and control
- Three directional piping outlet
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be control by the remote control of the Panasonic indoor unit

STANDARD

NEW

			Single Phase			Three Phase
			6,0 kW	7,1 kW	10,0 kW	10,0 kW
KIT			**KIT-60PKY1E5A***	**KIT-71PKY1E5A***	**KIT-100PKY1E5A***	**KIT-100PKY1E8A***
Indoor			**S-60PK1E5A**	**S-71PK1E5A**	**S-100PK1E5A**	**S-100PK1E5A**
Outdoor			**U-60PEY1E5**	**U-71PEY1E5**	**U-100PEY1E5**	**U-100PEY1E8**
Timer remote controller			**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**
Cooling capacity	Nominal (Min - Max)	kW	6,0 (2,0 - 7,0)	7,1 (2,0 - 7,7)	9,0 (2,7 - 9,7)	9,0 (2,7 - 9,7)
ESEER		**W/W**	**5,4 A**	**5,1 A**	**5,8 A+**	**5,7 A+**
Pdesign		kW	6,0	7,1	9,0	9,0
Power input cooling	Nominal (Min - Max)	kW	1,860 (0,325 - 2,750)	2,450 (0,325 - 3,000)	3,370 (0,530 - 3,800)	3,370 (0,530 - 3,800)
Annual energy consumption (ErP) [1]		kWh/a	389	487	543	553
Heating capacity	Nominal (Min - Max)	kW	6,0 (1,8 - 7,0)	7,1 (1,8 - 8,1)	9,0 (2,1 - 10,5)	9,0 (2,1 - 10,5)
Heating capacity at -7°C [2]	Nominal	kW	4,39	4,32	7,22	7,22
SCOP		**W/W**	**3,9 A**	**3,9 A**	**3,8 A**	**3,8 A**
Pdesign at -10°C		kW	6,0	6,0	9,0	9,0
Power input heating	Nominal (Min - Max)	kW	1,500 (0,275 - 2,200)	1,900 (0,275 - 2,550)	2,430 (0,410 - 3,000)	2,430 (0,410 - 3,000)
Annual energy consumption (ErP) [1]		kWh/a	2154	2154	3.316	3.316
Indoor unit						
Air volume	Cooling (Hi / Med / Lo)	m³/h	1.080 / 870 / 690	1.080 / 870 / 690	1.140 / 990 / 780	1.140 / 990 / 780
	Heating (Hi / Med / Lo)	m³/h	1.080 / 870 / 690	1.080 / 870 / 690	1.140 / 990 / 780	1.140 / 990 / 780
Moisture removal volume		l/h	3,4	4,2	5,4	5,4
Sound pressure level [3]	Cooling (Hi / Med / Lo)	dB(A)	47 / 44 / 40	47 / 44 / 40	49 / 45 / 41	49 / 45 / 41
	Heating (Hi / Med / Lo)	dB(A)	47 / 44 / 40	47 / 44 / 40	49 / 45 / 41	49 / 45 / 41
Sound power level	Cooling (Hi)	dB	64	64	66	66
	Heating (Hi)	dB	64	64	66	66
Dimensions	H x W x D	mm	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 x 230
Net weight		kg	14,5	14,5	14.5	14.5
Outdoor unit						
Power source		V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415
Recommended fuse		A	20	20	25	16
Connection		mm²	2,5	2,5	4,0	2,5
Current	Cooling	A	8,80 / 8,50 / 8,25	11,7 / 11,3 / 10,9	16,0 / 15,3 / 14,6	5,40 / 5,15 / 4,95
	Heating	A	7,05 / 6,80 / 6,60	9,00 / 8,70 / 8,40	11,2 / 10,8 / 10,4	3,85 / 3,65 / 3,55
Air volume	Cooling / Heating	m³/h	1.800 / 2.100	2.340 / 2.340	4.560 / 4.020	4.560 / 4.020
Sound pressure level	Cooling / Heating (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	54 / 54
Sound power level	Cooling / Heating (Hi)	dB	65 / 69	70 / 70	70 / 70	70 / 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
Net weight		kg	42	42	73	73
Piping connections	Liquid pipe	Inch (mm)	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)
Refrigerant loading	R410A	kg	1,7	1,7	2,60	2,60
Elevation difference (in/out) [4]	Max	m	30	30	30	30
Piping length	Min / Max	m	5 / 50	5 / 50	5 / 50	5 / 50
Precharge length	Max	m	20	20	30	30
Additional charge		g/m	40	40	50	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

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) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 2) Heating capacity includes defrost factor correction. 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 June 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

STANDARD

INTERNET CONTROL READY: Optional. ESEER and SCOP: For KIT-60PKY1E5A.

U-60PEY1E5
U-71PEY1E5

U-100PEY1E5 U-100PEY1E8

HIGH HEATING CAPACITY AT -7°C

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWSK2

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

ELITE

			Single Phase			NEW	Three Phase	NEW
			5,0 kW	6,0 kW	7,1 kW	10,0 kW	7,1 kW	10,0 kW
KIT			KIT-50PK1E5A*	KIT-60PK1E5A*	KIT-71PK1E5A*	KIT-100PK1E5A**	KIT-71PK1E8A*	KIT-100PK1E8A**
Indoor			S-50PK1E5A	S-60PK1E5A	S-71PK1E5A	S-100PK1E5A	S-71PK1E5A	S-100PK1E5A
Outdoor			U-50PE1E5	U-60PE1E5A	U-71PE1E5A	U-100PE1E5A	U-71PE1E8A	U-100PE1E8A
Timer remote controller			CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2
Cooling capacity	Nominal (Min - Max)	kW	5,0 (1,5 - 5,6)	6,0 (2,5 - 7,1)	7,1 (2,5 - 8,0)	9,5 (3,3 - 10,5)	7,1 (3,2 - 8,0)	9,5 (3,3 - 10,5)
ESEER		W/W	6,0 A+	6,6 A++	6,6 A++	6,2 A++	6,1 A++	6,0 A+
Pdesign		kW	5,0	6,0	7,1	9,5	7,1	9,5
Power input cooling	Nominal (Min - Max)	kW	1,560 (0,260 - 2,250)	1,560 (0,450 - 2,000)	2,090 (0,450 - 2,650)	2,920 (0,840 - 3,400)	2,090 (0,560 - 2,650)	2,920 (0,840 - 3,400)
Annual energy consumption (ErP) [1]		kWh/a	292	318	376	536	407	554
Heating capacity	Nominal (Min - Max)	kW	5,6 (1,5 - 6,5)	7,0 (2,0 - 8,0)	8,0 (2,0 - 9,0)	9,5 (4,1 - 11,5)	8,0 (2,8 - 9,0)	9,5 (4,1 - 11,5)
Heating capacity at -7°C [2]	Nominal	kW	3,62	5,85	6,69	9,63	6,69	9,63
Heating capacity at -15°C [2]	Nominal	kW	3,08	5,74	6,80	9,05	6,80	9,05
SCOP		W/W	3,9 A	3,9 A	3,9 A	3,8 A	3,8 A	3,8 A
Pdesign at -10°C		kW	4,0	6,0	7,1	9,5	7,1	9,5
Power input heating	Nominal (Min - Max)	kW	1,500 (0,220 - 2,450)	1,820 (0,400 - 2,480)	2,130 (0,400 - 2,900)	2,470 (0,900 - 3,350)	2.130 (0.500-2.900)	2,470 (0,900 - 3,350)
Annual energy consumption (ErP) [1]		kWh/a	1.436	2.154	2.548	3.500	2.616	3.500
Indoor unit								
Air volume	Cooling (Hi / Med / Lo)	m³/h	840 / 720 / 630	1.080 / 870 / 690	1.080 / 870 / 690	1.140 / 990 / 780	1.080 / 870 / 690	1.140 / 990 / 780
	Heating (Hi / Med / Lo)	m³/h	840 / 720 / 630	1.080 / 870 / 690	1.080 / 870 / 690	1.140 / 990 / 780	1.080 / 870 / 690	1.140 / 990 / 780
Moisture removal volume		l/h	2,8	3,4	4,2	5.7	4,2	5.7
Sound pressure level [3]	Cooling (Hi / Med / Lo)	dB(A)	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	49/45/41	47 / 44 / 40	49/45/41
	Heating (Hi / Med / Lo)	dB(A)	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	49/45/41	47 / 44 / 40	49/45/41
Sound power level	Cooling (Hi)	dB	57	64	64	66	64	66
	Heating (Hi)	dB	57	64	64	66	64	66
Dimensions	H x W x D	mm	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1065 x 230	300 x 1.065 x 230	300 x 1065 x 230
Net weight		kg	13,0	14,5	14,5	14.5	14,5	14.5
Outdoor unit								
Power source		V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415
Recommended fuse		A	16	20	20	25	16	16
Connection		mm²	2,5	2,5	2,5	4	2,5	2,5
Current	Cooling	A	7,25 / 7,00 / 6,80	7,45 / 7,15 / 6,95	9,75 / 9,40 / 9,10	13,4 / 12,9 / 12,4	3,25 / 3,15 / 3,05	4,60 / 4,40 / 4,30
	Heating	A	6,95 / 6,75 / 6,50	8,45 / 8,15 / 7,90	9,85 / 9,50 / 9,20	11,3 / 10,9 / 10,6	3,30 / 3,20 / 3,10	3,85 / 3,70 / 3,60
Air volume	Cooling / Heating	m³/h	1.800 / 2.100	3.600 / 3.600	3.600 / 3.600	6.600 / 5.700	3.600 / 3.600	6.600 / 5.700
Sound pressure level	Cooling / Heating (Hi)	dB(A)	46 / 50	48 / 50	48 / 50	52 / 52	48 / 50	52 / 52
Sound power level	Cooling / Heating (Hi)	dB	65 / 69	65 / 67	65 / 67	69 / 69	65 / 67	69 / 69
Dimensions	H x W x D	mm	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340
Net weight		kg	42	68	69	98	71	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)
	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)
Refrigerant loading	R410A	kg	1,65	2	2,35	3,4	2,35	3,4
Elevation difference (in/out) [4]	Max	m	30	30	30	30	30	30
Piping length	Min / Max	m	5 / 40	5 / 50	5 / 50	5 / 75	5 / 50	5 / 75
Precharge length	Max	m	30	30	30	30	30	30
Additional charge		g/m	20	50	50	50	50	50
Operating range	Cooling Min / Max	°C	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
	Heating Min / Max	°C	-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) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 2) Heating capacity includes defrost factor correction. 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 June 2014. ** Available from July 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

ELITE

Internet Control Ready — INTERNET CONTROL
Energy saving — INVERTER+
6,60 A++ SEER* — SEASONAL ENERGY EFFICIENCY RATIO
3,90 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. ESEER and SCOP: For KIT-60PK1E5A and KIT-71PK1E5A.

U-50PE1E5

U-60PE1E5A U-71PE1E8A
U-71PE1E5A U-100PE1E8A
U-100PE1E5A

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
- DC FAN for better efficiency and control
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be control by the remote control of the Panasonic indoor unit

STANDARD

			3,6 kW	4,5 kW	5,0 kW
Indoor			**S-36PY2E5A[1)]***	**S-45PY2E5A[1)]***	**S-50PY2E5A***
Panel			**CZ-KPY3A**	**CZ-KPY3A**	**CZ-KPY3A**
Cooling capacity	Nominal	kW	3,6	4,5	5,0
Heating capacity	Nominal	kW	4,2	5,2	5,6
Air volume	Cool/Heat	m^3/h	540 / 540	636 / 636	750 / 750
Moisture removal volume		l/h	2,1	2,5	2,8
Sound pressure level [2)]	Cooling (Hi / Med / Lo)	dB(A)	32 / 29 / 26	36 / 32 / 28	41 / 37 / 33
	Heating (Hi / Med / Lo)	dB(A)	32 / 29 / 26	36 / 32 / 28	41 / 37 / 33
Sound power level	Cooling (Hi)	dB	49 / 46 / 42	53 / 48 / 45	58 / 54 / 50
	Heating (Hi)	dB	49 / 46 / 42	53 / 48 / 45	58 / 54 / 50
Dimensions (H x W x D)	Indoor	mm	283 x 575 x 575	283 x 575 x 575	283 x 575 x 575
	Panel	mm	30 x 625 x 625	30 x 625 x 625	30 x 625 x 625
Net weight	Indoor (Panel)	kg	16 (2,4)	16 (2,4)	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 November 2014.

STANDARD

HIGH HEATING CAPACITY AT -7°C

Panel
CZ-KPY3A

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWSK2

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

ELITE

			5,0 kW
KIT			**KIT-50PY2E5A***
Indoor			**S-50PY2E5A**
Outdoor			**U-50PE1E5**
Panel			**CZ-KPY3A**
Timer remote controller			**CZ-RTC2**
Cooling capacity	Nominal (Min - Max)	kW	5,0 (1,5 - 5,6)
ESEER		**W/W**	**5,90** A+
Pdesign		kW	5,0
Power input cooling	Nominal (Min - Max)	kW	1,64 (0,260 - 2,45)
Annual energy consumption (ErP) [1]		kWh/a	297
Heating capacity	Nominal (Min - Max)	kW	5,6 (1,5 - 6,3)
Heating capacity at -7°C [2]	Nominal	kW	3,62
Heating capacity at -15°C [2]	Nominal	kW	3,08
SCOP		**W/W**	**3,80** A
Pdesign at -10°C		kW	4,0
Power input heating	Nominal (Min - Max)	kW	1,79 (0,22 - 2,57)
Annual energy consumption (ErP) [1]		kWh/a	1.474
Indoor unit			
Air volume	Cooling / Heating	m³/h	750 / 750
Moisture removal volume		l/h	2,8
Sound pressure level [3]	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)	Indoor	mm	283 x 575 x 575
	Panel	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	A	7,5
	Heating	A	8,2
Air volume	Cooling / Heating	m³/h	1.800 / 2.100
Sound pressure level	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	Inch (mm)	1/4 (6,35)
	Gas pipe	Inch (mm)	1/2 (12,7)
Refrigerant Loading	R410A	kg	1,65
Elevation difference (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) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 2) Heating capacity includes defrost factor correction. 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. 3) When installing the outdoor unit at a higher position than the indoor unit. Recommended fuse for the indoor 3A. * Available from November 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

ELITE

Internet Control Ready — INTERNET CONTROL
Energy saving — INVERTER+
5,90 A+ SEER — SEASONAL ENERGY EFFICIENCY RATIO
3,80 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.

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
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be control by the remote control of the Panasonic indoor unit

STANDARD

			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-60PUY1E5A***	**KIT-71PUY1E5A***	**KIT-100PUY1E5A***	**KIT-125PUY1E5A***	**KIT-100PUY1E8A***	**KIT-125PUY1E8A***	**KIT-140PUY1E8A***
Indoor			**S-60PU1E5A**	**S-71PU1E5A**	**S-100PU1E5A**	**S-125PU1E5A**	**S-100PU1E5A**	**S-125PU1E5A**	**S-140PU1E5A**
Outdoor			**U-60PEY1E5**	**U-71PEY1E5**	**U-100PEY1E5**	**U-125PEY1E5**	**U-100PEY1E8**	**U-125PEY1E8**	**U-140PEY1E8**
Panel			**CZ-KPU21**	**CZ-KPU21**	**CZ-KPU21**	**CZ-KPU21**	**CZ-KPU21**	**CZ-KPU21**	**CZ-KPU21**
Timer remote controller			**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**
Cooling capacity	Nominal (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)
ESEER	Nominal (Min - Max)	**W/W**	**6,8** A++	**6,3** A++	**6,4** A++	**4,50** [1]	**6,2** A++	**4,50** [1]	**4,66** [1]
Pdesign		kW	6,0	7,1	10	–	10,0	–	–
Power input cooling	Nominal (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 (ErP) [2]		kWh/a	309	394	547	–	564	–	–
Heating capacity	Nominal (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)
Heating capacity at -7°C [3]	Nominal	kW	4,39	4,32	7,22	9,14	7,22	9,14	11,68
Heating capacity at -15°C [3]	Nominal	kW	–	–	–	–	–	–	–
SCOP	Nominal (Min - Max)	**W/W**	**4,0** A+	**4,0** A+	**4,0** A+	**3,63** [4]	**4,0** A+	**3,63** [4]	**3,41** [4]
Pdesign at -10°C		kW	6,0	6,0	10,0	–	10,0	–	–
Power input heating	Nominal (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]		kWh/a	2.100	2.100	3.500	–	3.500	–	–
Indoor unit									
Air volume	Cooling (Hi / Med / Lo)	m³/h	1.260 / 1.020 / 840	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	2.160 / 1.740 / 1.380
	Heating (Hi / Med / Lo)	m³/h	1.260 / 1.020 / 840	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	2.160 / 1.740 / 1.380
Moisture removal volume		l/h	3,4	4,2	6,0	7,9	6,0	7,9	9,0
Sound pressure level [5]	Cooling (Hi / Med / Lo)	dB(A)	36 / 31 / 28	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34
	Heating (Hi / Med / Lo)	dB(A)	36 / 31 / 28	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33	44 / 38 / 32	45 / 39 / 33	46 / 40 / 34
Sound power level	Cooling (Hi / Med / Lo)	dB	53 / 48 / 45	54 / 48 / 45	62 / 55 / 49	63 / 56 / 50	62 / 55 / 49	63 / 56 / 50	64 / 57 / 51
	Heating (Hi / Med / Lo)	dB	53 / 48 / 45	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 / 400 / 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	6,85 / 6,50 / 6,25
	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	5,65 / 5,35 / 5,20
Air volume	Cooling / Heating	m³/h	1.800 / 2.100	2340	4.560 / 4.020	4.800 / 4.380	4.560 / 4.020	4.800 / 4.380	8.100 / 7.200
Sound pressure level	Cooling / Heating (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53
Sound power level	Cooling / Heating (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	1.416 x 940 x 340
Net weight		kg	42	42	73	85	73	85	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)	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 difference (in/out) [6]	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 / 50
Precharge length	Max	m	20	20	30	30	30	30	30
Additional charge		g/m	40	40	50	50	50	50	50
Operating range	Cooling Min / Max	°C	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43
	Heating 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) ESEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit SEER=a[EER25)+b[EER50)+c[EER75)+d[EER100) where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively. a, b, c and d are values assigned for an office type. These values are given as a=0.2, b=0.36, c=0.32 and d=0.03. The internal temperatures are taken at 27°C DB and 19°C WB. 2) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Heating capacity includes defrost factor correction. 4) SCOP is calculated in base Eurovent IPLV for SBEM with U1 indoor unit including defrost correction factor. 5) The Sound pressure level of the units shows the value measured of a position 1 meter in

STANDARD

INTERNET CONTROL READY: Optional. ESEER and SCOP: For KIT-60PUY1E5A.

HIGH HEATING CAPACITY AT -7°C

Panel
CZ-KPU21

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWSU2

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

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-50PU1E5A*	KIT-60PU1E5A*	KIT-71PU1E5A*	KIT-100PU1E5A*	KIT-125PU1E5A*	KIT-140PU1E5A*	KIT-71PU1E8A*	KIT-100PU1E8A*	KIT-125PU1E8A*	KIT-140PU1E8A*
S-50PU1E5A	S-60PU1E5A	S-71PU1E5A	S-100PU1E5A	S-125PU1E5A	S-140PU1E5A	S-71PU1E5A	S-100PU1E5A	S-125PU1E5A	S-140PU1E5A
U-50PE1E5	U-60PE1E5A	U-71PE1E5A	U-100PE1E5A	U-125PE1E5A	U-140PE1E5A	U-71PE1E8A	U-100PE1E8A	U-125PE1E8A	U-140PE1E8A
CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21
CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2
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 (3,2 - 8,0)	10,0 (3,3 - 12,5)	12,5 (3,3 - 14,0)	14,0 (3,3 - 15,5)
6,5 A++	7,4 A++	7,4 A++	6,6 A++	5,23 [1]	4,72 [1]	6,8 A++	6,5 A++	5,23 [1]	4,72 [1]
5,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
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 (0,560 - 2,650)	2,380 (0,840 - 3,700)	3,470 (0,840 - 4,600)	4,310 (0,840 - 6,000)
269	284	336	530	—	—	365	538	—	—
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 (2,8 - 9,0)	11,2 (4,1 - 14,0)	14,0 (4,1 - 16,0)	16,0 (4,1 - 18,0)
3,62	5,85	6,69	9,63	11,80	13,98	6,69	9,63	11,80	13,98
3,08	5,74	6,80	9,05	10,84	11,42	6,80	9,05	10,84	11,42
3,8 A	4,1 A+	4,1 A+	4,2 A+	3,63 [4]	3,41 [4]	4,0 A+	4,2 A+	3,63 [4]	3,41 [4]
4,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
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 (0,500 - 2,900)	2,600 (0,900 - 4,400)	3,500 (0,900 - 5,200)	4,330 (0,900 - 5,900)
1.474	2.047	2.424	3.333	—	—	2.485	3.333	—	—
960 / 810 / 720	1.260 / 1.020 / 840	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	2.160 / 1.740 / 1.380	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	2.160 / 1.740 / 1.380
960 / 810 / 720	1.260 / 1.020 / 840	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	2.160 / 1.740 / 1.380	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320	2.160 / 1.740 / 1.380
2,8	3,4	4,2	6,0	7,9	9,0	4,2	6,0	7,9	9,0
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
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
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
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
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
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
23 (4)	24 (4)	24 (4)	27 (4)	27 (4)	27 (4)	24 (4)	27 (4)	27 (4)	27 (4)
220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415
16	20	20	25	30	16	16	16	16	16
2,5	2,5	2,5	4	6	2,5	2,5	2,5	2,5	2,5
6,50 / 6,20 / 5,95	7,15 / 6,90 / 6,70	8,40 / 8,10 / 7,90	10,7 / 10,3 / 9,90	15,8 / 15,3 / 14,8	19,6 / 19,0 / 18,4	2,80 / 2,70 / 2,60	3,70 / 3,50 / 3,40	5,45 / 5,15 / 5,00	6,75 / 6,45 / 6,20
6,90 / 6,60 / 6,30	8,50 / 8,20 / 7,95	9,30 / 9,00 / 8,70	11,8 / 11,4 / 11,0	15,9 / 15,4 / 14,9	19,8 / 19,2 / 18,6	3,10 / 3,00 / 2,90	4,05 / 3,85 / 3,75	5,50 / 5,20 / 5,05	6,85 / 6,50 / 6,25
1.800 / 2.100	3.600 / 3.600	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200
46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55
65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71
569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340
42	68	69	98	98	98	71	98	98	98
1/4 (6,35) / 1/2 (12,7)	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)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 5/8 (15,88)
1,65	2	2,35	3,4	3,4	3,4	2,35	3,4	3,4	3,4
30	30	30	30	30	30	30	30	30	30
5 / 40	5 / 50	5 / 50	5 / 75	5 / 75	5 / 75	5 / 50	5 / 75	5 / 75	5 / 75
30	30	30	30	30	30	30	30	30	30
20	50	50	50	50	50	50	50	50	50
-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24

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. 6) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

ELITE

Internet Control Ready — INTERNET CONTROL
Energy saving — INVERTER+
7,40 A+++ SEER — SEASONAL ENERGY EFFICIENCY RATIO
4,10 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. ESEER and SCOP: For KIT-60PU1E5A and KIT-71PU1E5A.

U-50PE1E5

U-60PE1E5A
U-71PE1E5A
U-71PE1E8A

U-100PE1E5A U-100PE1E8A
U-125PE1E5A U-125PE1E8A
U-140PE1E5A U-140PE1E8A

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 loosing static pressure (Only 250 mm high)
- 50 Pa static pressure
- Easy maintenance and service via external electrical box
- 3 speed centrifugal fan through wired or wireless remote control
- DC FAN for better efficiency and control
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be control by the remote control of the Panasonic indoor unit

STANDARD

			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-60PNY1E5A*	KIT-71PNY1E5A*	KIT-100PNY1E5A*	KIT-125PNY1E5A*	KIT-100PNY1E8A*	KIT-125PNY1E8A*	KIT-140PNY1E8A*
Indoor			S-60PN1E5A	S-71PN1E5A	S-100PN1E5A	S-125PN1E5A	S-100PN1E5A	S-125PN1E5A	S-140PN1E5A
Outdoor			U-60PEY1E5	U-71PEY1E5	U-100PEY1E5	U-125PEY1E5	U-100PEY1E8	U-125PEY1E8	U-140PEY1E8
Timer remote controller			CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2
Cooling capacity	Nominal (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)
ESEER	Nominal (Min - Max)	W/W	4,7 B	5,0 B	5,3 A	4,50 [1]	5,2 A	4,50 [1]	4,66 [1]
Pdesign		kW	6,0	7,1	10,0	—	10,0	—	—
Power input cooling	Nominal (Min - Max)	kW	1,990 (0,325 - 2,940)	2,570 (0,325 - 3,230)	3,555 (0,570 - 4,300)	4,445 (0,950 - 5,200)	3,555 (0,570 - 4,300)	4,445 (0,950 - 5,200)	4,700 (0,840 - 6,000)
Annual energy consumption (ErP) [2]		kWh/a	444	496	660	—	673	—	—
Heating capacity	Nominal (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)
Heating capacity at -7°C [3]	Nominal	kW	4,39	4,32	7,22	9,14	7,22	9,14	11,68
Heating capacity at -15°C [3]	Nominal	kW	—	—	—	—	—	—	—
SCOP	Nominal (Min - Max)	W/W	3,8 A	3,8 A	3,8 A	3,63 [4]	3,8 A	3,63 [4]	3,41 [4]
Pdesign at -10°C		kW	4,8	5,3	7,6	—	7,6	—	—
Power input heating	Nominal (Min - Max)	kW	1,660 (0,275 - 2,420)	2,080 (0,275 - 2,780)	2,935 (0,450 - 4,100)	3,665 (0,780 - 4,600)	2,935 (0,450 - 4,100)	3,665 (0,780 - 4,600)	3,880 (1,050 - 5,400)
Annual energy consumption (ErP) [2]		kWh/a	1.757	1.952	2.800	—	2.800	—	—
Indoor unit									
External static pressure [5]	Nominal (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	Cooling / Heating	m³/h	1.320 / 1.320	1.320 / 1.320	2.160 / 2.160	2.280 / 2.280	2.160 / 2.160	2.280 / 2.280	2.400 / 2.400
Moisture removal volume		l/h	3,4	4,2	6,0	7,9	6,0	7,9	9,0
Sound pressure level [6]	Cooling (Hi / Med / Lo)	dB(A)	43 / 41 / 36	43 / 41 / 36	44 / 42 / 37	45 / 43 / 38	44 / 42 / 37	45 / 43 / 38	46 / 44 / 39
	Heating (Hi / Med / 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	Cooling (Hi / Med / Lo)	dB	60 / 58 / 53	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60
	Heating (Hi / Med / Lo)	dB	60 / 58 / 53	60 / 58 / 53	65 / 63 / 58	66 / 64 / 59	65 / 63 / 58	66 / 64 / 59	67 / 65 / 60
Dimensions [7]	H x W x D	mm	250 x 1.000(+100) x 650	250 x 1.000(+100) x 650	250 x 1.200(+100) x 650	250 x 1.200(+100) x 650	250 x 1.200(+100) x 650	250 x 1.200(+100) x 650	250 x 1.200(+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 / 400 / 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	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	7,05 / 6,70 / 6,45
	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	5,90 / 5,60 / 5,40
Air volume	Cooling / Heating	m³/h	1.800 / 2.100	2.340	4.560 / 4.020	4.800 / 4.380	4.560 / 4.020	4.800 / 4.380	8.100 / 7.200
Sound pressure level	Cooling / Heating (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53
Sound power level	Cooling / Heating (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	1.416 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 difference (in/out) [7]	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 / 50
Precharge length	Max	m	20	20	30	30	30	30	30
Additional charge		g/m	40	40	50	50	50	50	50
Operating range	Cooling Min / Max	°C	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43
	Heating 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) ESEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit SEER=a[EER25)+b(EER50)+c[EER75)+d(EER100) where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively. a, b, c and d are values assigned for an office type. These values are given as a=0.2, b=0.36, c=0.32 and d=0.03. The internal temperatures are taken at 27°C DB and 19°C WB. 2) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Heating capacity includes defrost factor correction. 4) SCOP is calculated in base Eurovent IPLV for SBEM with U1 indoor unit including defrost correction factor. 5) Medium External static pressure setting from factory. 6) The Sound pressure level of the

STANDARD

U-60PEY1E5 U-71PEY1E5 | U-100PEY1E5 U-125PEY1E5 | U-100PEY1E8 U-125PEY1E8 | U-140PEY1E8

INTERNET CONTROL READY: Optional. ESEER and SCOP: For KIT-100PNY1E5A.

HIGH HEATING CAPACITY AT -7°C

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWSK2 + CZ-RWSC3

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

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-50PN1E5A*	KIT-60PN1E5A*	KIT-71PN1E5A*	KIT-100PN1E5A*	KIT-125PN1E5A*	KIT-140PN1E5A*	KIT-71PN1E8A*	KIT-100PN1E8A*	KIT-125PN1E8A*	KIT-140PN1E8A*
	S-50PN1E5A	S-60PN1E5A	S-71PN1E5A	S-100PN1E5A	S-125PN1E5A	S-140PN1E5A	S-71PN1E5A	S-100PN1E5A	S-125PN1E5A	S-140PN1E5A
	U-50PE1E5	U-60PE1E5A	U-71PE1E5A	U-100PE1E5A	U-125PE1E5A	U-140PE1E5A	U-71PE1E8A	U-100PE1E8A	U-125PE1E8A	U-140PE1E8A
	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2
	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)
	4,6 B	5,5 A	5,5 A	6,0 A+	5,23 [1]	4,72 [1]	5,2 A	5,8 A+	5,23 [1]	4,72 [1]
	5,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
	1,56 (0,26 - 2,31)	1,850 (0,550 - 2,105)	2,150 (0,550 - 2,750)	2,670 (0,870 - 3,800)	3,890 (1,000 - 4,800)	4,650 (1,000 - 6,200)	2,150 (0,660 - 2,750)	2,670 (0,870 - 3,800)	3,890 (1,000 - 4,800)	4,650 (1,000 - 6,200)
	380	382	452	583	—	—	477	603	—	—
	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)
	3,62	5,85	6,69	9,63	11,80	13,98	6,69	9,63	11,80	13,98
	3,08	5,74	6,80	9,05	10,84	11,42	6,80	9,05	10,84	11,42
	3,8 A	3,8 A	3,7 A	3,9 A	3,63 [4]	3,41 [4]	3,7 A	3,8 A	3,63 [4]	3,41 [4]
	3,8	5,6	6,5	10,0	—	—	6,5	10,0	—	—
	1,74 (0,22 - 2,52)	1,940 (0,500 - 2,585)	2,260 (0,500 - 2,920)	2,950 (0,980 - 4,500)	3,880 (1,050 - 5,400)	4,690 (1,050 - 6,100)	2,260 (0,600 - 3,000)	2,950 (0,980 - 4,500)	3,880 (1,050 - 5,400)	4,690 (1,050 - 6,100)
	1.400	2.061	2.458	3.590	—	—	2.458	3.684	—	—
	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 - 80)	50 (10 - 80)
	960 / 960	1.320 / 1.320	1.320 / 1.320	2.160 / 2.160	2.280 / 2.280	2.400 / 2.400	1.320 / 1.320	2.160 / 2.160	2.280 / 2.280	2.400 / 2.400
	2,8	3,4	4,2	6,0	7,9	9,0	4,2	6,0	7,9	9,0
	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
	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
	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
	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
	250x780(+100)x650	250x1.000(+100)x650	250x1.000(+100)x650	250x1.200(+100)x650	250x1.200(+100)x650	250x1.200(+100)x650	250x1.000(+100)x650	250x1.200(+100)x650	250x1.200(+100)x650	250x1.200(+100)x650
	29	32	32	41	41	41	32	41	41	41
	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415
	16	20	20	25	30	16	16	16	16	16
	2,5	2,5	2,5	4	6	2,5	2,5	2,5	2,5	2,5
	7,10 / 6,80 / 6,60	8,20 / 8,00 / 7,80	9,70 / 9,40 / 9,20	11,6 / 11,2 / 10,9	17,4 / 16,9 / 16,4	20,5 / 20,1 / 19,5	3,25 / 3,10 / 3,00	3,95 / 3,75 / 3,60	5,80 / 5,50 / 5,30	6,95 / 6,60 / 6,35
	8,00 / 7,70 / 7,40	8,60 / 8,40 / 8,20	10,2 / 9,90 / 9,70	12,8 / 12,5 / 12,2	17,3 / 16,8 / 16,3	20,6 / 20,2 / 19,6	3,35 / 3,20 / 3,10	4,35 / 4,15 / 4,00	5,80 / 5,50 / 5,30	7,00 / 6,65 / 6,45
	1.800 / 2.100	3.600 / 3.600	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200
	46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55
	65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71
	569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340
	42	68	69	98	98	98	71	98	98	98
	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)
	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)
	1,65	2	2,35	3,4	3,4	3,4	2,35	3,4	3,4	3,4
	30	30	30	30	30	30	30	30	30	30
	5 - 40	5 - 50	5 - 50	5 - 75	5 - 75	5 - 75	5 - 50	5 - 75	5 - 75	5 - 75
	30	30	30	30	30	30	30	30	30	30
	20	50	50	50	50	50	50	50	50	50
	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24

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. 7) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

ELITE

Internet Control Ready — INTERNET CONTROL
Energy saving — INVERTER+
6,00 A+ SEER — SEASONAL ENERGY EFFICIENCY RATIO
5,30 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. ESEER and SCOP: For KIT-100PN1E5A.

U-50PE1E5

U-60PE1E5A
U-71PE1E5A
U-71PE1E8A

U-100PE1E5A U-100PE1E8A
U-125PE1E5A U-125PE1E8A
U-140PE1E5A U-140PE1E8A

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 200mm 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
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be control by the remote control of the Panasonic indoor unit

STANDARD

			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-60PFY1E5A***	**KIT-71PFY1E5A***	**KIT-100PFY1E5A***	**KIT-125PFY1E5A***	**KIT-100PFY1E8A***	**KIT-125PFY1E8A***	**KIT-140PFY1E8A***
Indoor			**S-60PF1E5A**	**S-71PF1E5A**	**S-100PF1E5A**	**S-125PF1E5A**	**S-100PF1E5A**	**S-125PF1E5A**	**S-140PF1E5A**
Outdoor			**U-60PEY1E5**	**U-71PEY1E5**	**U-100PEY1E5**	**U-125PEY1E5**	**U-100PEY1E8**	**U-125PEY1E8**	**U-140PEY1E8**
Timer remote controller			**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**
Cooling capacity	Nominal (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)
ESEER	**Nominal (Min - Max)**	**W/W**	**5,4 A**	**5,3 A**	**5,4 A**	**4,50** [1]	**5,2 A**	**4,50** [1]	**4,66** [1]
Pdesign		kW	6,0	7,1	10,0	—	10,0	—	—
Power input cooling	Nominal (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)	4,350 (0,840 - 6,000)
Annual energy consumption (ErP) [2]		kWh/a	389	469	648	—	673	—	—
Heating capacity	Nominal (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)
Heating capacity at -7°C [3]	Nominal	kW	4,39	4,32	7,22	9,14	7,22	9,14	11,68
Heating capacity at -15°C [3]	Nominal	kW	—	—	—	—	—	—	—
SCOP	**Nominal (Min - Max)**	**W/W**	**3,8 A**	**3,8 A**	**3,8 A**	**3,63** [4]	**3,8 A**	**3,63** [4]	**3,41** [4]
Pdesign at -10°C		kW	5,0	5,5	9,5	—	9,5	—	—
Power input heating	Nominal (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)	3,580 (0,900 - 5,200)
Annual energy consumption (ErP) [2]		kWh/a	1.842	2.026	3.500	—	3.500	—	—
Indoor unit									
External static pressure [5]	Nominal (Min - Max)	Pa	70 (10 - 150)	70 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)
Air volume	Cooling (Hi / Med / Lo)	m³/h	1.260 / 1.140 / 900	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	2.160 / 1.920 / 1.500
	Heating (Hi / Med / Lo)	m³/h	1.260 / 1.140 / 900	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	2.160 / 1.920 / 1.500
Moisture removal volume		l/h	3,4	4,2	6,0	7,9	6,0	7,9	9,0
Sound pressure level [6]	Cooling (Hi / Med / Lo)	dB(A)	35 / 32 / 26	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33
	Heating (Hi / Med / 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	Cooling (Hi / Med / Lo)	dB	57 / 54 / 48	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55
	Heating (Hi / Med / 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 1.000 x 700	290 x 1.000 x 700	290 x 1.400 x 700	290 x 1.400 x 700	290 x 1.400 x 700	290 x 1.400 x 700	290 x 1.400 x 700
Net weight		kg	33	33	45	45	45	45	45
Outdoor unit									
Power source		V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 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	9,00 / 8,65 / 8,30	12,2 / 11,7 / 11,2	15,1 / 14,5 / 13,9	18,8 / 18,0 / 17,2	5,10 / 4,85 / 4,70	6,20 / 5,90 / 5,70	6,75 / 6,45 / 6,25
	Heating	A	6,40 / 6,10 / 5,90	8,30 / 7,90 / 7,60	11,8 / 11,2 / 10,7	14,6 / 14,0 / 13,4	4,05 / 3,80 / 3,65	4,90 / 4,65 / 4,50	5,60 / 5,40 / 5,20
Air volume	Cooling / Heating	m³/h	1.800 / 2.100	2.340 / 2.340	4.560 / 4.020	4.800 / 4.380	4.560 / 4.020	4.800 / 4.380	8.100 / 7.200
Sound pressure level	Cooling / Heating (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53
Sound power level	Cooling / Heating (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	1.416 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 difference (in/out) [7]	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 / 50
Precharge length	Max	m	20	20	30	30	30	30	30
Additional charge		g/m	40	40	50	50	50	50	50
Operating range	Cooling Min / Max	°C	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43
	Heating 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) ESEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit SEER=a[EER25)+b[EER50)+c[EER75)+d[EER100) where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively. a, b, c and d are values assigned for an office type. These values are given as a=0.2, b=0.36, c=0.32 and d=0.03. The internal temperatures are taken at 27°C DB and 19°C WB. 2) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Heating capacity includes defrost factor correction. 4) SCOP is calculated in base Eurovent IPLV for SBEM with U1 indoor unit including defrost correction factor. 5) Medium External static pressure setting from factory. 6) The Sound pressure level of the

STANDARD

U-60PEY1E5
U-71PEY1E5

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

U-140PEY1E8

INTERNET CONTROL READY: Optional. ESEER and SCOP: For KIT-60PFY1E5A and KIT-100PFY1E5A.

HIGH HEATING CAPACITY AT -7°C

S-100PF1E5A // S-125PF1E5A // S-140PF1E5A

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWSK2 + CZ-RWSC3

Optional Controller
Simplified remote controller
CZ-RE2C2

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		
	Diameters	Model
60 & 71	2 x Ø 250	CZ-DUMPA90MF2
100, 125 & 140	4 x Ø 200	CZ-DUMPA160MF2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

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-50PF1E5A*	**KIT-60PF1E5A***	**KIT-71PF1E5A***	**KIT-100PF1E5A***	**KIT-125PF1E5A***	**KIT-140PF1E5A***	**KIT-71PF1E8A***	**KIT-100PF1E8A***	**KIT-125PF1E8A***	**KIT-140PF1E8A***
S-50PF1E5A	**S-60PF1E5A**	**S-71PF1E5A**	**S-100PF1E5A**	**S-125PF1E5A**	**S-140PF1E5A**	**S-71PF1E5A**	**S-100PF1E5A**	**S-125PF1E5A**	**S-140PF1E5A**
U-50PE1E5	**U-60PE1E5A**	**U-71PE1E5A**	**U-100PE1E5A**	**U-125PE1E5A**	**U-140PE1E5A**	**U-71PE1E8A**	**U-100PE1E8A**	**U-125PE1E8A**	**U-140PE1E8A**
CZ-RTC2	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**
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 (3,2 - 8,0)	10,0 (3,3 - 12,5)	12,5 (3,3 - 14,0)	14,0 (3,3 - 15,5)
5,7 A+	**6,4** A++	**6,4** A++	**5,8** A+	**5,23** [1]	**4,72** [1]	**5,2** A	**5,8** A+	**5,23** [1]	**4,72** [1]
5,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
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)	4.310 (0,840 - 6.000)	1.850 (0,640 - 2.650)	2.440 (0,840 - 3.700)	3.570 (0,840 - 4.600)	4.310 (0,840 - 6.000)
307	328	388	603	—	—	414	614	—	—
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 (2,8 - 9,0)	11,2 (4,1 - 14,0)	14,0 (4,1 - 16,0)	16,0 (4,1 - 18,0)
3,62	5,85	6,69	9,63	11,80	13,98	6,69	9,63	11,80	13,98
3,08	5,74	6,80	9,05	10,84	11,42	6,80	9,05	10,84	11,42
3,8 A	**3,9** A	**4,0** A+	**3,8** A	**3,63** [4]	**3,41** [4]	**3,7** A	**3,8** A	**3,63** [4]	**3,41** [4]
4,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
1.500 (0,220 - 2.400)	1.810 (0,480 - 2.480)	2.080 (0,480 - 2.900)	2.600 (0,900 - 4.400)	3.480 (0,900 - 5.200)	4.440 (0,900 - 5.900)	2.080 (0,580 - 2.900)	2.600 (0,900 - 4.400)	3.480 (0,900 - 5.200)	4.440 (0,90 - 5.900)
1.474	2.154	2.485	3.684	—	—	2.548	3.684	—	—
70 (10 - 150)	70 (10 - 150)	70 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)	70 (10 - 150)	100 (10 - 150)	100 (10 - 150)	100 (10 - 150)
960 / 900 / 720	1.260 / 1.140 / 900	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	2.160 / 1.920 / 1.500	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	2.160 / 1.920 / 1.500
960 / 900 / 720	1.260 / 1.140 / 900	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	2.160 / 1.920 / 1.500	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380	2.160 / 1.920 / 1.500
2,8	3,4	4,2	6,0	7,9	9,0	4,2	6,0	7,9	9,0
34 / 30 / 26	35 / 32 / 26	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33
34 / 30 / 26	35 / 32 / 26	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32	40 / 36 / 33
56 / 52 / 48	57 / 54 / 48	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55
56 / 52 / 48	57 / 54 / 48	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55	57 / 54 / 48	60 / 56 / 53	61 / 57 / 54	62 / 58 / 55
290 x 800 x 700	290 x 1.000 x 700	290 x 1.000 x 700	290 x 1.400 x 700	290 x 1.400 x 700	290 x 1.400 x 700	290 x 1.000 x 700	290 x 1.400 x 700	290 x 1.400 x 700	290 x 1.400 x 700
28	33	33	45	45	45	33	45	45	45
220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415
16	20	20	25	30	16	16	16	16	16
2,5	2,5	2,5	4	6	2,5	2,5	2,5	2,5	2,5
6,10 / 5,85 / 5,60	7,70 / 7,40 / 7,10	8,90 / 8,60 / 8,30	11,0 / 10,6 / 10,3	16,6 / 15,9 / 15,3	20,1 / 19,3 / 18,6	2,75 / 2,65 / 2,60	3,68 / 3,53 / 3,43	5,52 / 5,29 / 5,12	6,69 / 6,42 / 6,18
6,85 / 6,55 / 6,25	8,70 / 8,40 / 8,10	9,90 / 9,50 / 9,20	11,6 / 11,2 / 10,7	16,3 / 15,8 / 15,1	19,9 / 19,1 / 18,4	3,10 / 3,00 / 2,90	3,86 / 3,70 / 3,58	5,44 / 5,26 / 5,05	6,64 / 6,35 / 6,15
1.800 / 2.100	3.600 / 3.600	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200
46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55
65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71
569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340
42	68	69	98	98	98	71	98	98	98
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)
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)
1,65	2	2,35	3,4	3,4	3,4	2,35	3,4	3,4	3,4
30	30	30	30	30	30	30	30	30	30
5 / 40	5 / 50	5 / 50	5 / 75	5 / 75	5 / 75	5 / 50	5 / 75	5 / 75	5 / 75
30	30	30	30	30	30	30	30	30	30
20	50	50	50	50	50	50	50	50	50
-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24

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. 7) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

ELITE

Internet Control Ready — INTERNET CONTROL
Energy saving — INVERTER+
6,40 A++ SEER — SEASONAL ENERGY EFFICIENCY RATIO
4,00 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. ESEER and SCOP: For KIT-71PF1E5A.

U-50PE1E5

U-60PE1E5A
U-71PE1E5A
U-71PE1E8A

U-100PE1E5A U-100PE1E8A
U-125PE1E5A U-125PE1E8A
U-140PE1E5A U-140PE1E8A

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

- Fresh air connection possible (Outside intake duct connection port of 100mm diameter is available on the unit)
- All units just 235 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
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be control by the remote control of the Panasonic indoor unit

STANDARD

			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-60PTY2E5A***	**KIT-71PTY2E5A***	**KIT-100PTY2E5A***	**KIT-125PTY2E5A***	**KIT-100PTY2E8A***	**KIT-125PTY2E8A***	**KIP-140PTY2E8A***
Indoor			**S-60PT2E5A**	**S-71PT2E5A**	**S-100PT2E5A**	**S-125PT2E5A**	**S-100PT2E5A**	**S-125PT2E5A**	**S-140PT2E5A**
Outdoor			**U-60PEY1E5**	**U-71PEY1E5**	**U-100PEY1E5**	**U-125PEY1E5**	**U-100PEY1E8**	**U-125PEY1E8**	**U-140PEY1E8**
Timer remote controller			**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**
Cooling capacity	Nominal (Min - Max)	kW	6,0 (2,0 - 7,0)	7,1 (2,2 - 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 - 15,0)
ESEER	Nominal (Min - Max)	**W/W**	**6,7** A++	**6,1** A++	**6,1** A++	**4,50** [1]	**6,0** A+	**4,50** [1]	**4,66** [1]
Pdesign		kW	6,0	7,1	10,0	—	10,0	—	—
Power input cooling	Nominal (Min - Max)	kW	1,660 (0,325 - 2,500)	2,210 (0,325 - 2,820)	3,320 (0,530 - 4,340)	4,150 (0,900 - 5,160)	3,320 (0,530 - 4,340)	4,150 (0,900 - 5,160)	4,700 (0,840 - 5,700)
Annual energy consumption (ErP) [2]		kWh/a	314	408	574	—	584	—	—
Heating capacity	Nominal (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)
Heating capacity at -7°C [3]	Nominal	kW	4,39	4,32	7,22	9,14	7,22	9,14	11,68
Heating capacity at -15°C [3]	Nominal	kW	—	—	—	—	—	—	—
SCOP	Nominal (Min - Max)	**W/W**	**4,0** A+	**4,0** A+	**3,9** A	**3,63** [4]	**3,9** A	**3,63** [4]	**3,41** [4]
Pdesign at -10°C		kW	6,0	6,0	10,0	—	10,0	—	—
Power input heating	Nominal (Min - Max)	kW	1,430 (0,275 - 2,155)	1,820 (0,275 - 2,510)	2,600 (0,410 - 4,000)	3,250 (0,730 - 4,400)	2,600 (0,410 - 4,000)	3,250 (0,730 - 4,400)	3,610 (0,900 - 5,210)
Annual energy consumption (ErP) [2]		kWh/a	2.100	2.100	3.590		3.590		—
Indoor unit									
Air volume	Cooling (Hi / Med / Lo)	m³/h	1.200 / 1.020 / 870	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	2.100 / 1.740 / 1.500
	Heating (Hi / Med / Lo)		1.200 / 1.020 / 870	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	2.100 / 1.740 / 1.500
Moisture removal volume		l/h	3,4	4,2	6,0	7,9	6,0	7,9	9,0
Sound pressure level [5]	Cooling (Hi / Med / Lo)	dB(A)	38 / 34 / 30	39 / 35 / 31	42 / 37 / 35	46 / 40 / 36	42 / 37 / 35	46 / 40 / 36	47 / 41 / 37
	Heating (Hi / Med / Lo)	dB(A)	38 / 34 / 30	39 / 35 / 31	42 / 37 / 35	46 / 40 / 36	42 / 37 / 35	46 / 40 / 36	47 / 41 / 37
Sound power level	Cooling (Hi / Med / Lo)	dB	56 /52 / 48	57 / 53 / 49	60 / 55 / 53	64 / 58 / 54	60 / 55 / 53	64 / 58 / 54	65 / 59 / 55
	Heating (Hi / Med / Lo)	dB	56 /52 / 48	57 / 53 / 49	60 / 55 / 53	64 / 58 / 54	60 / 55 / 53	64 / 58 / 54	65 / 59 / 55
Dimensions	H x W x D	mm	235 x 1.275 x 690	235 x 1.275 x 690	235 x 1.590 x 690	230 x 1.590 x 690	235 x 1.590 x 690	230 x 1.590 x 690	360 x 1.655 x 820
Net weight		kg	33	33	40	40	40	40	40
Outdoor unit									
Power source		V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 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	8,05 / 7,70 / 7,40	10,8 / 10,3 / 9,85	15,6 / 15,0 / 14,4	19,7 / 18,9 / 18,1	5,30 / 5,05 / 4,85	6,50 / 6,20 / 6,00	7,40 / 7,00 / 6,80
	Heating	A	6,90 / 6,60 / 6,30	8,75 / 8,35 / 8,00	11,9 / 11,5 / 11,1	15,2 / 14,6 / 13,9	4,10 / 3,90 / 3,75	5,10 / 4,80 / 4,65	5,65 / 5,35 / 5,15
Air volume	Cooling / Heating	m³/h	1.800 / 2.100	2.340 / 2.340	4.560 / 4.020	4.800 / 4.380	4.560 / 4.020	4.800 / 4.380	8.100 / 7.200
Sound pressure level	Cooling / Heating (Hi)	dB(A)	46 / 50	50 / 52	54 / 54	56 / 56	54 / 54	56 / 56	54 / 53
Sound power level	Cooling / Heating (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	1.416 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	1,70	1,70	2,60	3,20	2,60	3,20	3,40
Elevation difference (in/out) [6]	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 / 50
Precharge length	Max	m	20	20	30	30	30	30	30
Additional charge		g/m	40	40	50	50	50	50	50
Operating range	Cooling Min / Max	°C	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43
	Heating 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) ESEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit SEER=a[EER25)+b(EER50)+c[EER75)+d(EER100) where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively. a, b, c and d are values assigned for an office type. These values are given as a=0.2, b=0.36, c=0.32 and d=0.03. The internal temperatures are taken at 27°C DB and 19°C WB. 2) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Heating capacity includes defrost factor correction. 4) SCOP is calculated in base Eurovent IPLV for SBEM with U1 indoor unit including defrost correction factor. 5) The Sound pressure level of the units shows the value measured of a position 1 meter in

STANDARD

INTERNET CONTROL READY: Optional. ESEER and SCOP: For KIT-100PTY2E5A.

HIGH HEATING CAPACITY AT -7°C

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWST3

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

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-50PT2E5A*	KIT-60PT2E5A*	KIT-71PT2E5A*	KIT-100PT2E5A*	KIT-125PT2E5A*	KIT-140PT2E5A*	KIT-71PT2E8A*	KIT-100PT2E8A*	KIT-125PT2E8A*	KIT-140PT2E8A*
S-50PT2E5A	S-60PT2E5A	S-71PT2E5A	S-100PT2E5A	S-125PT2E5A	S-140PT2E5A	S-71PT2E5A	S-100PT2E5A	S-125PT2E5A	S-140PT2E5A
U-50PE1E5	U-60PE1E5A	U-71PE1E5A	U-100PE1E5A	U-125PE1E5A	U-140PE1E5A	U-71PE1E8A	U-100PE1E8A	U-125PE1E8A	U-140PE1E8A
CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2	CZ-RTC2
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 - 15,0)	7,1 (2,5 - 8,0)	10,0 (3,3 - 12,5)	12,5 (3,3 - 14,0)	14,0 (3,3 - 15,0)
6,4 A++	6,8 A++	6,2 A++	6,7 A++	5,23 [1]	4,72 [1]	5,9 A+	6,6 A++	5,23 [1]	4,72 [1]
5,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
1,380 (0,260 - 2,050)	1,490 (0,450 - 2,010)	1,930 (0,450 - 2,780)	2,530 (0,840 - 3,850)	3,730 (0,840 - 4,860)	4,650 (0,840 - 5,650)	1,930 (0,450 - 2,780)	2,530 (0,840 - 3,850)	3,730 (0,840 - 4,860)	4,650 (0,840 - 5,650)
273	309	965	523	—	—	421	531	—	—
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)
3,62	5,85	6,69	9,63	11,80	13,98	6,69	9,63	11,80	13,98
3,08	5,74	6,80	9,05	10,84	11,42	6,80	9,05	10,84	11,42
4,0 A	4,1 A+	4,0 A+	4,3 A+	3,63 [4]	3,41 [4]	4,0 A+	4,3 A+	3,63 [4]	3,41 [4]
4,0	6,0	7,1	10,0	—	—	7,1	10,0	—	—
1,410 (0,220 - 2,300)	1,740 (0,400 - 2,480)	1,930 (0,400 - 2,900)	2,600 (0,900 - 4,400)	3,510 (0,900 - 5,210)	4,360 (0,900 - 5,930)	1,930 (0,400 - 2,900)	2,600 (0,900 - 4,400)	3,510 (0,900 - 5,210)	4,360 (0,900 - 5,930)
1.400	2.049	2.485	3.256	—	—	2.485	3.256	—	—
900 / 750 / 630	1.200 / 1.020 / 870	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	2.100 / 1.740 / 1.500	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	2.100 / 1.740 / 1.500
900 / 750 / 630	1.200 / 1.020 / 870	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	2.100 / 1.740 / 1.500	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440	2.100 / 1.740 / 1.500
2,8	3,4	4,2	6,0	7,9	9,0	4,2	6,0	7,9	9,0
37 / 33 / 29	38 / 34 / 30	39 / 35 / 31	42 / 37 / 35	46 / 40 / 36	47 / 41 / 37	39 / 35 / 31	42 / 37 / 35	46 / 40 / 36	47 / 41 / 37
37 / 33 / 29	38 / 34 / 30	39 / 35 / 31	42 / 37 / 35	46 / 40 / 36	47 / 41 / 37	39 / 35 / 31	42 / 37 / 35	46 / 40 / 36	47 / 41 / 37
55 / 51 / 47	56 /52 / 48	57 / 53 / 49	60 / 55 / 53	64 / 58 / 54	65 / 59 / 55	57 / 53 / 49	60 / 55 / 53	64 / 58 / 54	65 / 59 / 55
55 / 51 / 47	56 /52 / 48	57 / 53 / 49	60 / 55 / 53	64 / 58 / 54	65 / 59 / 55	57 / 53 / 49	60 / 55 / 53	64 / 58 / 54	65 / 59 / 55
235 x 960 x 690	235 x 1.275 x 690	235 x 1.275 x 690	235 x 1.590 x 690	230 x 1.590 x 690	360 x 1.655 x 820	235 x 1.275 x 690	235 x 1.590 x 690	230 x 1.590 x 690	360 x 1.655 x 820
27	33	33	40	40	40	33	40	40	40
220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415
16	20	20	25	30	16	16	16	16	16
2,5	2,5	2,5	4	6	2,5	2,5	2,5	2,5	2,5
6,55 / 6,25 / 6,00	7,15 / 6,90 / 6,70	9,00 / 8,70 / 8,40	11,5 / 11,1 / 10,6	17,0 / 16,4 / 15,8	21,2 / 20,5 / 19,8	3,00 / 2,90 / 2,80	3,95 / 3,75 / 3,65	5,85 / 5,55 / 5,35	7,30 / 6,95 / 6,70
6,70 / 6,40 / 6,15	8,10 / 7,80 / 7,60	8,90 / 8,60 / 8,30	11,8 / 11,4 / 11,0	16,0 / 15,4 / 14,9	19,8 / 19,2 / 18,5	3,00 / 2,90 / 2,80	4,05 / 3,85 / 3,75	5,50 / 5,20 / 5,05	6,85 / 6,50 / 6,25
1.800 / 2.100	3.600 / 3.600	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200
46 / 50	48 / 50	48 / 50	52 / 52	53 / 53	54 / 55	48 / 50	52 / 52	53 / 53	54 / 55
65 / 69	65 / 67	65 / 67	69 / 69	70 / 70	71 / 71	65 / 67	69 / 69	70 / 70	71 / 71
569 x 790 x 285	996 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	996 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340	1.416 x 940 x 340
42	68	69	98	98	98	71	98	98	98
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)
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)
1,65	2,00	2,35	3,40	3,40	3,40	2,35	3,40	3,40	3,40
30	30	30	30	30	30	30	30	30	30
5 / 40	5 / 50	5 / 50	5 / 75	5 / 75	5 / 75	5 / 50	5 / 75	5 / 75	5 / 75
30	30	30	30	30	30	30	30	30	30
20	50	50	50	50	50	50	50	50	50
-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46	-15 / +46
-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24

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. 6) When installing the outdoor unit at a higher position than the indoor unit. // Recommended fuse for the indoor 3A. // * Available from May 2014.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

ELITE

INTERNET CONTROL READY: Optional. ESEER and SCOP: For KIT-60PT2E5A.

U-50PE1E5

U-60PE1E5A
U-71PE1E5A
U-71PE1E8A

U-100PE1E5A U-100PE1E8A
U-125PE1E5A U-125PE1E8A
U-140PE1E5A U-140PE1E8A

HIGH STATIC PRESSURE HIDE AWAY 20-25kW

BIG PACi INVERTER+

Panasonic breaks new ground in offering high performance and power in a small space. The 20-25kW 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 20-25kW systems which are larger and therefore require more space.

INTERNET CONTROL READY: Optional.

			Three Phase			
			20,0 kW	25,0 kW	20,0 kW	25,0 kW
KIT			**KIT-200PE1E8A**	**KIT-250PE1E8**	**KIT-200PE1E8A**	**KIT-250PE1E8**
Indoor			**S-200PE1E8A**	**S-250PE1E8**	**S-200PE2E5***	**S-250PE2E5***
Outdoor			**U-200PE1E8**	**U-250PE1E8**	**U-200PE1E8**	**U-250PE1E8**
Timer remote controller			**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**	**CZ-RTC2**
Cooling capacity	Nominal (Min - Max)	kW	20,0 (6,0 - 22,4)	25,0 (6,0 - 28,0)	19,5	25,0
ESEER		**W/W**	**4,06** [1]	**3,52** [1]	–	–
Pdesign		kW	–	–	–	–
Power input cooling	Nominal	kW	7,640	9,550	6,14	8,09
Running amperes		A	11,8	14,8	–	–
Annual energy consumption (ErP) [2]		kWh/a	–	–	–	–
Heating capacity	Nominal (Min - Max)	kW	21,8 (6,0 - 22,4)	28,0 (6,0 - 31,5)	22,4	28,0
Heating capacity at -7°C [3]	Nominal	kW	15,53	19,42	15,53	19,42
Heating capacity at -15°C [3]	Nominal	kW	14,34	17,92	14,34	17,92
SCOP		**W/W**	**3,79** [4]	**3,09** [4]	–	–
Pdesign at -10°C		kW	–	–	–	–
Power input heating	Nominal	kW	6,15	8,20	6,44	7,29
Running amperes		A	9,5	12,6	–	–
Annual energy consumption (ErP) [2]		kWh/a	–	–	–	–
Indoor unit						
Power source		V / ph / Hz	220 / 240 / 1 / 50	220 / 240 / 1 / 50	220 / 230 / 240 / 1 / 50	220 / 230240 / 1 / 50
External static pressure [5]	With booster cable	Pa	216 (235)	216 (235)	50 (140 / 270 available)	50 (140 / 270 available)
Air volume	Cooling/Heating	m³/h	4.320	4.320	3.360 / 3.360	4.320 / 4.320
Moisture removal volume	Cooling	l/h	11,1	13,9	–	–
Sound pressure level [6]	Hi / Med / Lo	dB(A)	51 / 50 / 49	51 / 50 / 49	44 / 43 / 41	46 / 45 / 43
Sound power level		dB(A)	82	82	–	–
Dimensions	H x W x D	mm	479 x 1.428 x 1.230	479 x 1.428 x 1.230	479 x 1453 x 1205	479 x 1453 x 1205
Net weight		kg	120	120	105	110
Outdoor unit						
Power source		V / ph / Hz	380 / 415 / 3+N / 50/60	380 / 415 / 3+N / 50/60	380 / 415 / 3+N / 50/60	380 / 415 / 3+N / 50/60
Recommended fuse		A	15	20	15	20
Air volume	Cooling/Heating	m³/h	7.740	7.080	7740	7080
Sound pressure level [6]	Cooling / Heating (Hi)	dB(A)	57 / 57	57 / 58	57 / 57	57 / 58
Sound power level	(Hi)	dB	72	73	72	73
Dimensions [7]	H x W x D	mm	1.526 x 940 x 340	1.526 x 940 x 340	1526 x 940 x 340	1526 x 940 x 340
Net weight		kg	118	128	118	128
Piping connections	Liquid pipe	mm (Inch)	9,52 (3/8)	12,7 (1/2)	9,52 (3/8)	12,7 (1/2)
	Gas pipe	mm (Inch)	25,4 (1)	25,4 (1)	25,4 (1)	25,4 (1)
Refrigerant loading		kg	5,3	6,5	5.3	6.5
Elevation difference (in/out) [8]	Max	m	30	30	30	30
Piping length	Min - Max	m	5 - 100	5 - 100	5 - 100	5 - 100
Precharge length	Max	m	30	30	30	30
Additional charge		g/m	40	80	40	80
Operating range	Cooling Min / Max	°C	- 15 / +43	- 15 / +43	-15 / +43	-15 / +43
	Heating Min / Max	°C	- 20 / +15	- 20 / +15	-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)
1) ESEER is calculated in base Eurovent IPLV for SBEM for U1 indoor unit SEER=a(EER25)+b(EER50)+c(EER75)+d(EER100) where EER25, EER50, EER75 and EER100 are the EER measured value at 25%, 50%, 75% and 100% part load for temperatures 20, 25, 30 and 35°C DB, respectively. a, b, c and d are values assigned for an office type. These values are given as a=0.2, b=0.36, c=0.32 and d=0.03. The internal temperatures are taken at 27°C DB and 19°C WB. 2) The annual consumption(ErP) is calculated by formula determined by ErP regulation. 3) Heating capacity includes defrost factor correction. 4) SCOP is calculated in base Eurovent IPLV for SBEM with U1 indoor unit including defrost correction factor. 5) The specification listed on the table indicates values under the condition of 50 Pa (5,1 mmAq) which are applied for factory default setting. Change connector on fan motor from Hi to Shi to have 7,0 mmAq. 6) 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. 7) Add 100 mm for indoor unit or 70 mm for outdoor unit for piping port. 8) When installing the outdoor unit at a higher position than the indoor unit. * Available from November 2014
Specifications subject to change without notice.
For detailed information about ErP, please visit our page http://www.ptc.panasonic.eu

HIGH HEATING CAPACITY AT -7°C

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
CZ-RWSK2 + CZ-RWSC3

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

KIT-200PE1E8A // KIT-250PE1E8

Technical Focus

- High efficiency inverter system
- Cooling with low outdoor temperatures (down to -15°C)
- Maximum pipe length 100 m (more than 40% longer than other split systems)
- Multifunctional wireless remote control with built-in temperature control
- Fresh air supply for improved air quality

Features

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

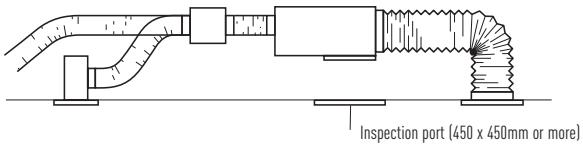
COMFORT
- Cooling with low outdoor temperatures (down to -15°C)
- Heating with low outdoor temperatures (down to -20°C)
- Selection of temperature sensor at indoor unit or wired remote control

EASY 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-250PE1E8	1 x 500 mm	CZ-TREMIESPW706
S-200PE1E8A	1 x 450 mm	CZ-TREMIESPW705

U-200PE1E8
U-250PE1E8

PACi STANDARD | PACi ELITE

PACi Twin, Triple and Double-Twin System

With this system, a single outdoor unit can split capacity for up to 4 indoor areas simultaneously. This makes the system particularly apt for common areas. It reduces noise concentration and enables the same temperature to be reached around the room. A mix of indoor units can be installed (wall, cassette, duct, ceiling) in one system.

PACi Standard Single and Twin System from 10,0 to 12,5 kW
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.

PACi Elite Twin, Triple and Double-Twin System from 7,1 to 14,0 kW
Up to 4 indoor units can be connected to the same outdoor unit. Panasonic's PACi units 71, 100, 125 and 140 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.

Big PACi Elite Twin, Triple and Double-Twin System from 20,0 to 25,0 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.

Indoor unit capacities						
Capacity	Wall	4 Way 60x60 Cassette	4 Way 90x90 Cassette	Low Static Pressure Hide Away	High Static Pressure Hide Away	Celling
3,6 kW	S-36PK1E5A	S-36PY2E5A	S-36PU1E5A	S-36PN1E5A	S-36PF1E5A	S-36PT2E5A
4,5 kW	S-45PK1E5A	S-45PY2E5A	S-45PU1E5A	S-45PN1E5A	S-45PF1E5A	S-45PT2E5A
5,0 kW	S-50PK1E5A	S-50PY2E5A	S-50PU1E5A	S-50PN1E5A	S-50PF1E5A	S-50PT2E5A
6,0 kW	S-60PK1E5A		S-60PU1E5A	S-60PN1E5A	S-60PF1E5A	S-60PT2E5A
7,1 kW	S-71PK1E5A		S-71PU1E5A	S-71PN1E5A	S-71PF1E5A	S-71PT2E5A
10,0 kW	S-100PK1E5A		S-100PU1E5A	S-100PN1E5A	S-100PF1E5A	S-100PT2E5A
12,5 kW			S-125PU1E5A	S-125PN1E5A	S-125PF1E5A	S-125PT2E5A

Outdoor unit capacities				
Capacity	PACi Standard Single and Twin System	PACi Elite Twin, Triple and Double-Twin System from 7,1 to 14,0 kW		PACi Elite Twin, Triple and Double-Twin System from 20,0 to 25,0 kW
7,1 kW	U-71PEY1E5	U-71PE1E5A // U-71PE1E8A		
10,0 kW	U-100PEY1E5 // U-100PEY1E8		U-100PE1E5A // U-100PE1E8A	
12,5 kW	U-125PEY1E5 // U-125PEY1E8		U-125PE1E5A // U-125PE1E8A	
14,0 kW	U-140PEY1E8		U-140PE1E5A // U-140PE1E8A	
20,0 kW				U-200PE1E8
25,0 kW				U-250PE1E8

U-__1E5 Single Phase // U-__1E8 Three Phase

PACi Standard Single/Simultaneous operation system combinations

kW	Outdoor			
Indoor	7,1	10,0	12,5	14,0
3,6	Twin U-71 → S-36 S-36			
5,0		Twin U-100 → S-50 S-50		
6,0			Twin U-125 → S-60 S-60	
7,1	Single[1] U-71 → S-71			Twin U-140 → S-71 S-71
10,0		Single[1] U-100 → S-100		
12,5			Single[1] U-125 → S-125	
14,0				Single[1] U-140 → S-140

PACi Elite from 20,0 to 25,0 kW Single/Simultaneous operation system combinations

kW	Outdoor	
Indoor	20,0	25,0
5,0	Double-Twin U-200 → S-50 S-50 S-50 S-50	
6,0		Double-Twin U-250 → S-60 S-60 S-60 S-60
7,1	Triple U-200 → S-71 S-71 S-71	
10,0	Twin U-200 → S-100 S-100	
12,5		Twin U-250 → S-125 S-125
20,0	Single[1] U-200 → S-200	
25,0		Single[1] U-250 → S-250

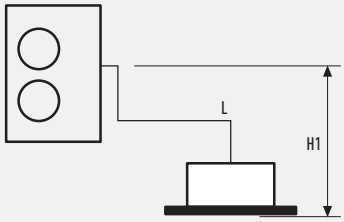
1. PACi 1x1 Kit solution.

PACi Elite from 7,1 to 14,0 kW Single/Simultaneous operation system combinations

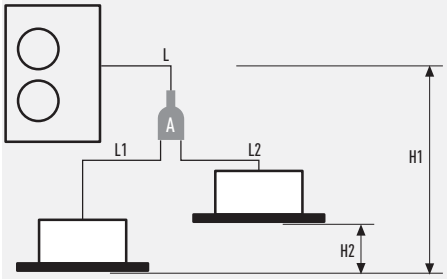
kW	Outdoor			
Indoor	7,1	10,0	12,5	14,0
3,6	Twin U-71 → S-36 S-36	Triple U-100 → S-36 S-36 S-36	Double-Twin U-125 → S-36 S-36 S-36 S-36	
4,5			Triple U-125 → S-45 S-45 S-45	
5,0		Twin U-100 → S-50 S-50		Triple U-140 → S-50 S-50 S-50
6,0			Twin U-125 → S-60 S-60	
7,1	Single[1] U-71 → S-71			Twin U-140 → S-71 S-71
10,0		Single[1] U-100 → S-100		
12,5			Single[1] U-125 → S-125	
14,0				Single[1] U-140 → S-140

1. PACi 1x1 Kit solution.

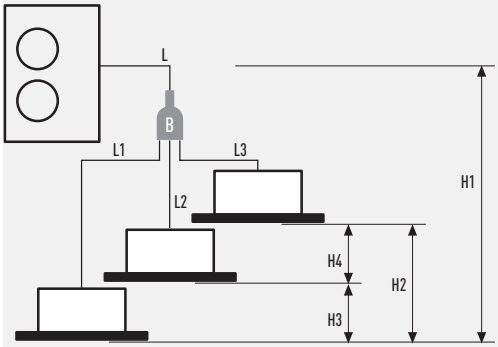
SINGLE



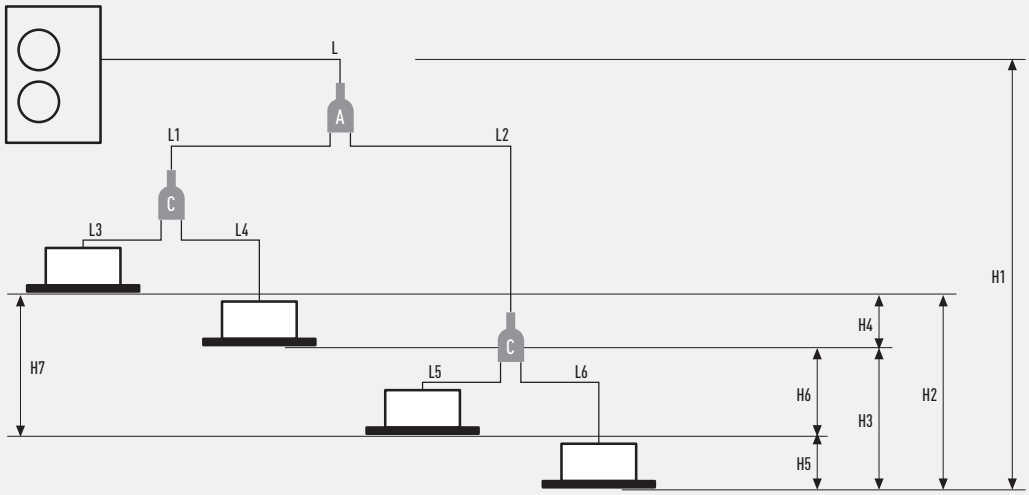
TWIN



TRIPLE



DOUBLE-TWIN



PACi Standard Twin System
Joint distribution (sold separately)
A= CZ-P155BK1

PACi Elite Twin, Triple and Double-Twin System from 7,1 to 14,0 kW
Joint distribution (sold separately)
A= CZ-P155BK1
B= CZ-P3HPC2BM
C= CZ-P155BK1

PACi Elite Twin, Triple and Double-Twin System from 20,0 to 25,0 kW
Joint distribution (sold separately)
A = CZ-P680BK2BM
B = CZ-P3HPC2BM
C = CZ-P155BK1

Twin System	PACi Standard Single and Twin System			PACi Elite Twin, Triple and Double-Twin System from 7,1 to 25 kW					
	Indoor unit combinations (see examples above)		Equivalent lengths and height differences (m) for outdoor unit sizes...	Indoor unit combinations (see examples above)				Equivalent lengths and height differences (m) for outdoor unit sizes from 7,1 to 14,0 kW	Equivalent lengths and height differences (m) for outdoor unit sizes from 20,0 to 25,0 kW
	Single	Twin		Single	Twin	Triple	Double-Twin		
Total pipe length	L	L + L1 + L2	≤ 50 m	L	L + L1 + L2	L + L1 + L2 + L3	L + L1 + L2 + L3 + L4 + L5 + L6	U-60/U-71: ≤ 50 m U-100/125/140: ≤ 75 m	≤ 100 m
Maximum pipe length from outdoor unit to most distant indoor unit	–	–	–	–	L + L1 or L + L2	L + L1 or L + L2 or L + L3	L + L1 + L3 or L + L1 + L4 or L + L2 + L5 or L + L2 + L6	–	≤ 100 m
Maximum branch pipe length	–	L1 L2	≤ 15	–	L1 or L2	L1 or L2 or L3	L1 + L3 or L1 + L4 or L2 + L5 or L2 + L6	≤ 15 m	≤ 20 m
Maximum branch pipe length differences	–	L1 > L2 L1 - L2	≤ 10	–	L1 > L2: L1 - L2	L1 > L2 > L3: L1 - L2 L2 - L3 L1 - L3	L2 + L6 (Max.) L1 + L3 (Min.): (L2 + L6) - (L1 + L3)	≤ 10 m	≤ 10 m
Maximum pipe length after frist branch (Double-Twin)	–	–	–	–	–	–	L2 > L1: L2 - L1	≤ 10 m	≤ 10 m
Maximum pipe length differences after second branch (Double-Twin)	–	–	–	–	–	–	L4 > L3: L4 - L3 L6 > L5: L6 - L5	≤ 10 m	≤ 10 m
Height difference (outdoor unit located higher)	H1	H1	≤ 30	H1	H1	H1	H1	≤ 30 m	≤ 30 m
Height difference (outdoor unit located lower)	H1	H1	≤ 15	H1	H1	H1	H1	≤ 15 m	≤ 15 m
Height difference between indoor units	–	H2	≤ 0.5	–	H2	H2 or H3 or H4	H2 or H3 or H4 or H5 or H6	≤ 0.5 m	≤ 0.5 m

Twin System	PACi Standard Single and Twin System				PACi Elite Twin, Triple and Double-Twin System from 7,1 to 14,0 kW						PACi Elite Twin, Triple and Double-Twin System from 20,0 to 25,0 kW				
	Outdoor unit main pipe diameter (L)		Indoor unit connection tube (L1, L2)		Outdoor unit main pipe diameter (L)	Indoor unit connection pipe diameter (L1, L2, L3, L4) (mm)					Outdoor unit main pipe diameter (L) (mm)		Double-Twin distribution pipe (L1, L2)[1]	Indoor unit connection pipe diameter	
Unit type capacity	100	125	50	60	71 - 140	36	45	50	60	71	200	250	100 - 125	50	60 - 125
Liquid pipe (mm)	Ø 9,52	Ø 12,7	Ø 6,35	Ø 9,52	Ø 9,52	Ø 6,35	Ø 6,35	Ø 6,35	Ø 9,52	Ø 9,52	Ø 9,52	Ø 12,7	Ø 9,52	Ø 6,35	Ø 9,52
Gas pipe (mm)	Ø 15,88	Ø 15,88	Ø 12,7	Ø 15,88	Ø 15,88	Ø 12,70	Ø 12,70	Ø 12,70	Ø 15,88	Ø 15,88	Ø 25,4	Ø 25,4	Ø 15,88	Ø 12,7	Ø 15,88
Additional charge (g/m)	50	50	20	50	50	20	20	20	50	50	40	80	40	20	40

1. Total capacity of indoor unit connected after the branch

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.

Optional Controller
Wired remote controller
CZ-RTC3

Optional Controller
Timer remote controller
CZ-RTC2

Optional Controller
Wireless remote controller
Various type.

Optional Controller
Simplified remote controller
CZ-RE2C2

Compatible with all Panasonic connectivity solutions. For detailed information go to the Control Systems section.

Compatible Indoor Units			3,6 kW	4,5 kW	5,0 kW	6,0 kW	7,1 kW	10,0 kW	12,5 kW
Capacity for all indoor units	Cooling	kW	3,6	4,5	5,0	6,0	7,1	10,0	12,5
	Heating	kW	4,2	5,2	5,6	7,0	8,0	11,2	14,0

Wall*			S-36PK1E5A	S-45PK1E5A	S-50PK1E5A	S-60PK1E5A	S-71PK1E5A	S-100PK1E5A
Dimensions	H x W x D	mm	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 x 230	300 x 1.065 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	47 / 44 / 40
	Heating (Hi / Me / Lo)	dB(A)	35 / 31 / 27	38 / 34 / 30	40 / 36 / 32	47 / 44 / 40	47 / 44 / 40	47 / 44 / 40
Air volume	Cooling (Hi / Me / Lo)	m³ / h	660 / 570 / 450	720 / 630 / 510	840 / 720 / 630	1.080 / 870 / 690	1.080 / 870 / 690	1.140 / 990 / 780
	Heating (Hi / Me / Lo)	m³ / h	660 / 570 / 450	720 / 630 / 510	840 / 720 / 630	1.080 / 870 / 690	1.080 / 870 / 690	1.140 / 990 / 780

4 Way 60x60 Cassette**			S-36PY2E5A	S-45PY2E5A	S-50PY2E5A
Panel			CZ-KPY3A	CZ-KPY3A	CZ-KPY3A
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	m³ / h	540 / 540	636 / 636	750 / 750

4 Way 90x90 Cassette***			S-36PU1E5A	S-45PU1E5A	S-50PU1E5A	S-60PU1E5A	S-71PU1E5A	S-100PU1E5A	S-125PU1E5A
Panel			CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21	CZ-KPU21
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	319 x 840 x 840	319 x 840 x 840
	Panel H x W x D	mm	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950	33,5 x 950 x 950
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	30 / 28 / 27	31 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33
	Heating (Hi / Me / Lo)	dB(A)	30 / 28 / 27	31 / 28 / 27	32 / 29 / 27	36 / 31 / 28	37 / 31 / 28	44 / 38 / 32	45 / 39 / 33
Air volume	Cooling (Hi / Me / Lo)	m³ / h	840 / 780 / 720	900 / 780 / 720	960 / 810 / 720	1.260 / 1.020 / 840	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320
	Heating (Hi / Me / Lo)	m³ / h	840 / 780 / 720	900 / 780 / 720	960 / 810 / 720	1.260 / 1.020 / 840	1.320 / 1.020 / 840	1.980 / 1.620 / 1.260	2.100 / 1.680 / 1.320

Low Static Pressure Hide Away***			S-36PN1E5A	S-45PN1E5A	S-50PN1E5A	S-60PN1E5A	S-71PN1E5A	S-100PN1E5A	S-125PN1E5A
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 1.000(+100) x 650	250 x 1.000(+100) x 650	250 x 1.200(+100) x 650	250 x 1.200(+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	44 / 42 / 37	46 / 44 / 39
	Heating (Hi / Me / Lo)	dB(A)	40 / 38 / 35	41 / 39 / 35	41 / 39 / 35	43 / 41 / 36	43 / 41 / 36	44 / 42 / 37	46 / 44 / 39
External static pressure	High / Medium / Low	Pa	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10	80 / 50 / 10
Air volume	Cooling / Heating	m³ / h	840 / 840	960 / 960	960 / 960	1.320 / 1.320	1.320 / 1.320	2.160 / 2.160	2.400 / 2.400

Hide Away High Static Pressure***			S-36PF1E5A	S-45PF1E5A	S-50PF1E5A	S-60PF1E5A	S-71PF1E5A	S-100PF1E5A	S-125PF1E5A
Dimensions	H x W x D	mm	290 x 800 x 700	290 x 800 x 700	290 x 800 x 700	290 x 1.000 x 700	290 x 1.000 x 700	290 x 1.400 x 700	290 x 1.400 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	38 / 34 / 31	39 / 35 / 32
	Heating (Hi / Me / Lo)	dB(A)	33 / 29 / 25	34 / 30 / 26	34 / 30 / 26	35 / 32 / 26	35 / 32 / 26	38 / 34 / 31	39 / 35 / 32
External static pressure	High / Medium / Low	Pa	150 / 70 / 10	150 / 70 / 10	150 / 70 / 10	150 / 70 / 10	150 / 70 / 10	150 / 100 / 10	150 / 100 / 10
Air volume	Cooling (Hi / Me / Lo)	m³ / h	840 / 780 / 600	840 / 780 / 600	960 / 900 / 720	1.260 / 1.140 / 900	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380
	Heating (Hi / Me / Lo)	m³ / h	840 / 780 / 600	840 / 780 / 600	960 / 900 / 720	1.260 / 1.140 / 900	1.260 / 1.140 / 900	1.920 / 1.560 / 1.260	2.040 / 1.740 / 1.380

Ceiling***			S-36PT2E5A	S-45PT2E5A	S-50PT2E5A	S-60PT2E5A	S-71PT2E5A	S-100PT2E5A	S-125PT2E5A
Dimensions	H x W x D	mm	210 x 910 x 680	210 x 910 x 680	235 x 960 x 690	235 x 1.275 x 690	235 x 1.275 x 690	235 x 1.590 x 690	230 x 1.590 x 690
Sound pressure level	Cooling (Hi / Me / Lo)	dB(A)	35 / 32 / 30	38 / 33 / 30	38 / 33 / 30	39 / 36 / 33	39 / 36 / 33	42 / 38 / 35	45 / 40 / 37
	Heating (Hi / Me / Lo)	dB(A)	36 / 32 / 30	39 / 34 / 30	39 / 34 / 30	40 / 36 / 33	40 / 36 / 33	42 / 38 / 35	46 / 41 / 38
Air volume	Cooling (Hi / Me / Lo)	m³ / h	840 / 720 / 630	900 / 750 / 630	900 / 750 / 630	1.200 / 1.020 / 870	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440
	Heating (Hi / Me / Lo)	m³ / h	840 / 720 / 630	900 / 750 / 630	900 / 750 / 630	1.200 / 1.020 / 870	1.260 / 1.080 / 930	1.800 / 1.500 / 1.380	2.040 / 1.680 / 1.440

* Available from June 2014. ** Available from November 2014. *** Available from May 2014.

Compatible Outdoor Units			7,1 kW	10,0 kW	12,5 kW	14,0 kW	7,1 kW	10,0 kW	12,5 kW	14,0 kW	20,0 kW	25,0 kW
Outdoor Single Phase			U-71PEY1E5	U-100PEY1E5	U-125PEY1E5	—	U-71PE1E5A	U-100PE1E5A	U-125PE1E5A	U-140PE1E5A		
Outdoor Three Phase			—	U-100PEY1E8	U-125PEY1E8	U-140PEY1E8	U-71PE1E8A	U-100PE1E8A	U-125PE1E8A	U-140PE1E8A	U-200PE1E8	U-250PE1E8
Cooling capacity	Nominal (Min - Max)	kW	7,1 (2,0 - 7,7)	10,0 (2,7 - 11,5)	12,5 (3,8 - 13,5)	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)	20,0 (6,0 - 22,4)	25,0 (6,0 - 28,0)
Heating capacity	Nominal (Min - Max)	kW	7,1 (1,8 - 8,1)	10,0 (2,1 - 13,8)	12,5 (3,4 - 15,0)	14,0 (4,1 - 16,0)	8,0 (2,0 - 9,0)	11,2 (4,1 - 14,0)	14,0 (4,1 - 16,0)	16,0 (4,1 - 18,0)	21,8 (6,0 - 22,4)	28,0 (6,0 - 31,5)
Power source	Single Phase	V	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	—	220 / 240	220 / 240	220 / 240	220 / 240		
	Three Phase	V	—	380 / 400 / 415	380 / 400 / 415	380 / 415	380 / 415	380 / 415	380 / 415	380 / 415	380 / 415	380 / 415
Connection		mm²	2,50	4,00	6,00	2,50	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	m³/h	2.340	4.560 / 4.020	4.800 / 4.380	8.100 / 7.200	3.600 / 3.600	6.600 / 5.700	7.800 / 6.600	8.100 / 7.200	7740	7080
Sound pressure level	Cooling / Heating (Hi)	dB(A)	50 / 52	54 / 54	56 / 56	54 / 53	48 / 50	52 / 52	53 / 53	54 / 55	57 / 57	57 / 58
Sound power level	Cooling / Heating (Hi)	dB	70 / 70	70 / 70	73 / 73	71 / 70	65 / 67	69 / 69	70 / 70	71 / 71	72	73
Dimensions	H x W x D	mm	569x790x285	996x940x340	996x940x340	1.416x940x340	996x940x340	1.416x940x340	1.416x940x340	1.416x940x340	1526x940x340	1526x940x340
Net weight		kg	42	73	85	98	69	98	98	98	118	128
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)	3/8 (9,52)	9,52 (3/8)	12,7 (1/2)
	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)	5/8 (15,88)	25,4 (1)	25,4 (1)
Refrigerant Loading	R410A	kg	1,7	2,60	3,20	3,4	2,35	3,4	3,4	3,4	5,3	6,5
Elevation difference (in/out)	Max	m	30	30	30	30	30	30	30	30	30	30
Piping length	Min / Max	m	5 / 50	5 / 50	5 / 50	5 / 50	5 / 50	5 / 75	5 / 75	5 / 75	5 / 100	5 / 100
Operating range	Cooling Min / Max	°C	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-15 / +46	-15 / +46	-15 / +46	-15 / +46	- 15 / 43	- 15 / 43
	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	- 20 / 15	- 20 / 15

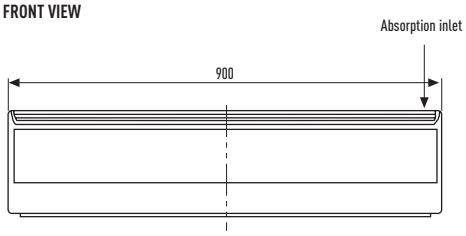
ELECTRIC AIR CURTAIN

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 two sizes - 900mm and 1200mm electric air curtains. Ideal for separating areas and energy saving.

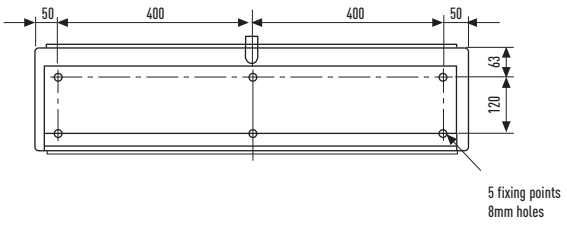
			FY-10ESPNAH	FY-10ELPNAH
Width			900	1.200
Watts	Hi	W	71,5	96
	Lo	W	61,5	74
Current	Hi	A	0,40	0,54
	Lo	A	0,29	0,35
Air speed	Hi	m/s	13,0	13,1
	Lo	m/s	11,1	11,0
Air volume	Hi	m³/h	750	1.000
	Lo	m³/h	630	830
Noise lever	Hi	dB(A)	46	46
	Lo	dB(A)	42	41
Weight		kg	11	14

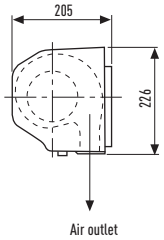
INDOOR UNIT DIMENSIONS FY-10ESPNAH

FRONT VIEW



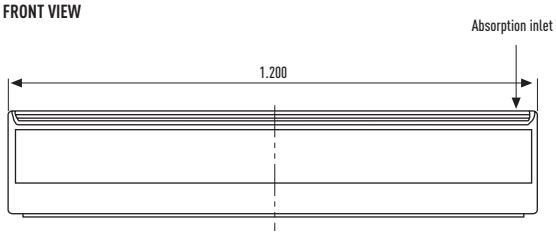
BACK VIEW



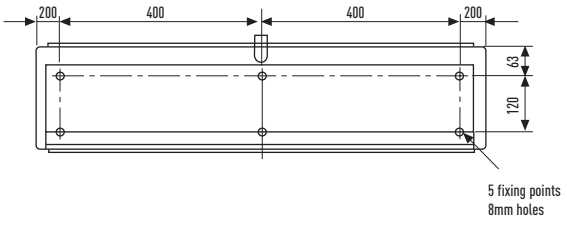


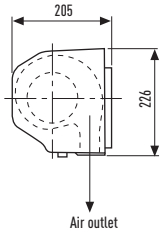
INDOOR UNIT DIMENSIONS FY-10ELPNAH

FRONT VIEW



BACK VIEW





FY-10ESPNAH // FY-10ELPNAH

Technical Focus

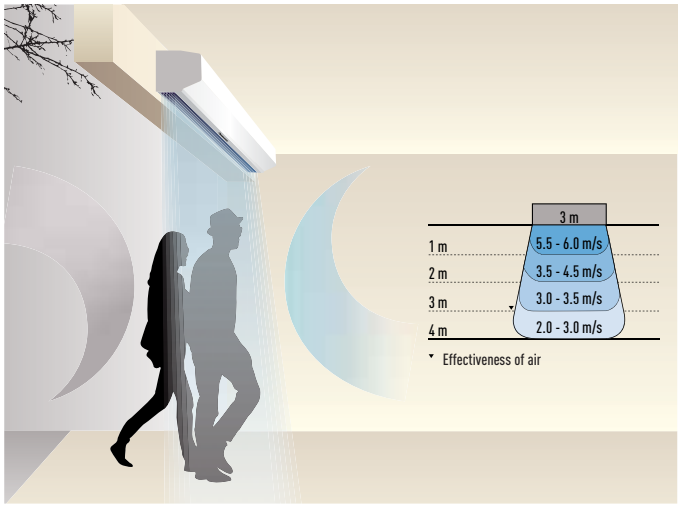
- 2 sizes: 900 mm and 1.200 mm
- Powerful air flow (10 m/s)
- Very low noise, only 42 dB

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

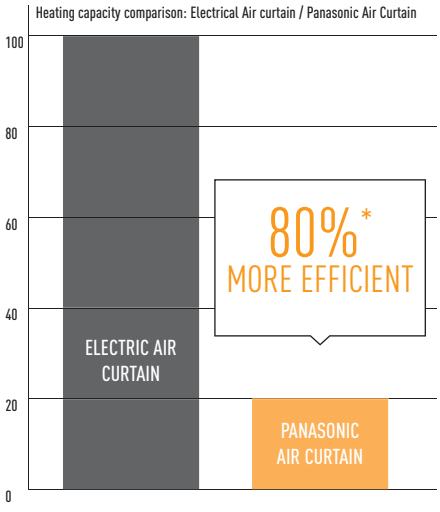


Air Curtain with DX Coil, connected to the PACi or VRF Systems

The Panasonic range of air curtains is designed for smooth operation and efficient performance. Air curtains produce a continuous stream of air blown from the top to the bottom of an open doorway and create a barrier that people and products can flow across, but air can't. Designed to improve energy efficiency, minimise heat loss from a building, and to allow retailers to keep doors open to encourage customers, our Air Curtains are suitable for connection to both PACi and VRF Systems.

- Super-efficient with new EC fan motor (40% lower running costs compared to a standard AC fan motor)
- Easy Cleaning and Servicing
- Can be connected to either Panasonic PACi or VRF systems
- Built-in drain for cooling operation
- Standard and Jet Flow air curtains can be controlled via Panasonic's range of remote internet controls

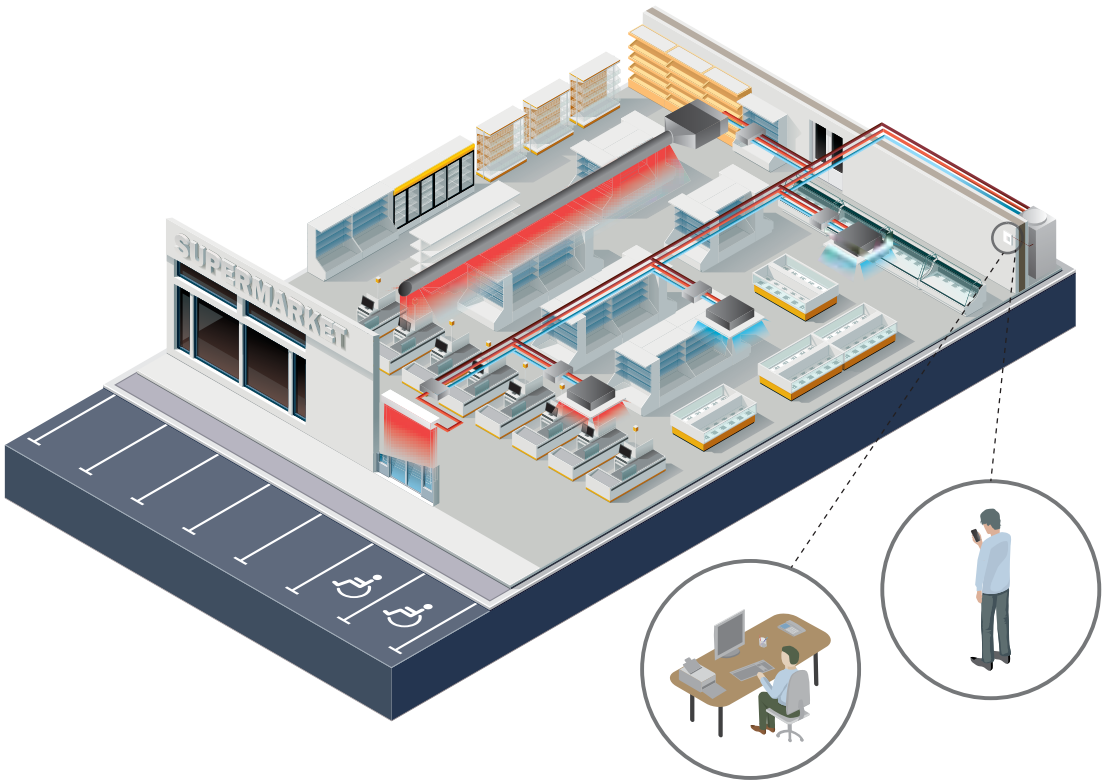
The new standard and jet-flow models are ideal for connection to a PACi or ECOi system. With simple 'plug and play' installation, both are fitted with an EC fan motor for a smooth operation and efficient performance. This new fan guarantees 40% lower running cost than with a standard AC fan motor. With air curtains often running for 12 hours a day as a minimum, this can lead to considerable savings.



* With the U-100PE1E5 on the PAW-20PAIRC-MS.
Calculation method: Taking as consideration SCOP of the Panasonic combination of 6.0. If 100 is the energy needed for a air curtain, Panasonic Air curtain will need 1/(1-6)*100=20.

Highly efficient heating effect

The combined air stream, which has a desirable low air current induction factor (mixing factor), can carry the selected initial temperature effect over long distances, and will reach the floor area while still at room temperature. This is necessary to avoid cooling down the interior spaces.
Available in different lengths to suit requirements between 1 and 2,5m, both air curtains have outlet grilles that can be adjusted to five different positions. The jet flow model can be installed up to a height of 3,5m with the standard model up to 3,0m. The outlet grilles can be easily adjusted into five positions to suit different installations requirements and the air filter can be accessed without the need for specialist tools.

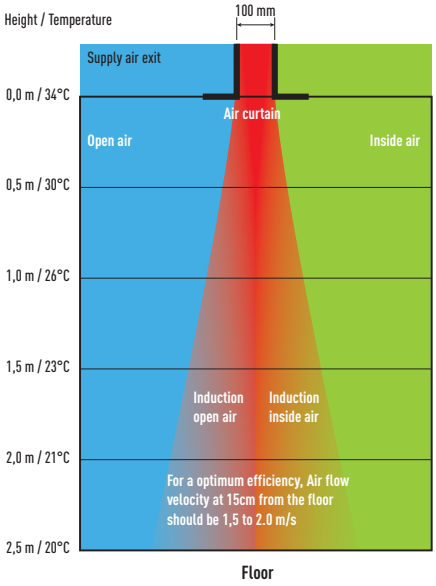


Intelligent Operation

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

Internet Control

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

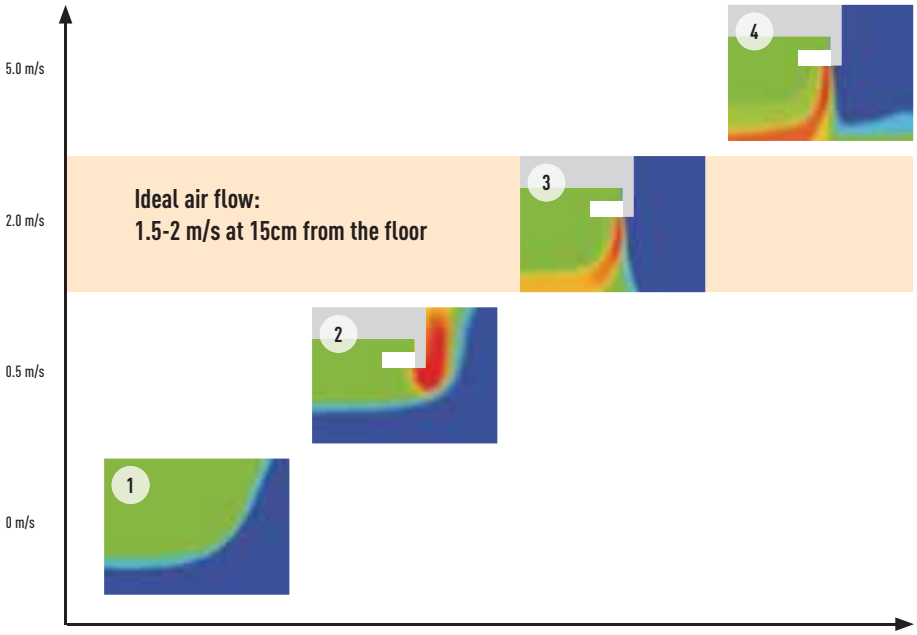


How does it work?

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

Optimised air flow velocity

1. Energy losses, no air curtain installed
2. Too low velocity air curtain – Air Curtain not efficient
3. Optimum results with the Tekadoor Air Curtain connected to Panasonic PACi
4. Too high velocity air curtain – considerable turbulence, energy lost to the outside, Air Curtain not efficient



AIR CURTAIN WITH DX COIL

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

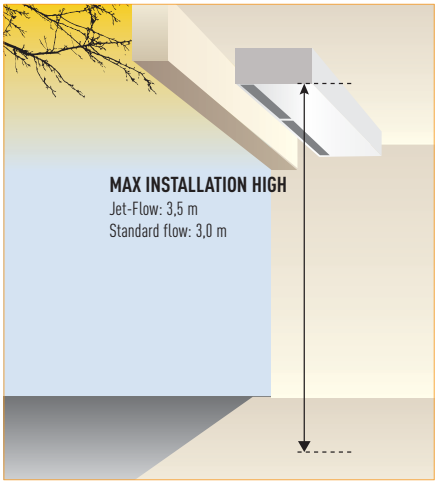
Plug & Play Installation

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.



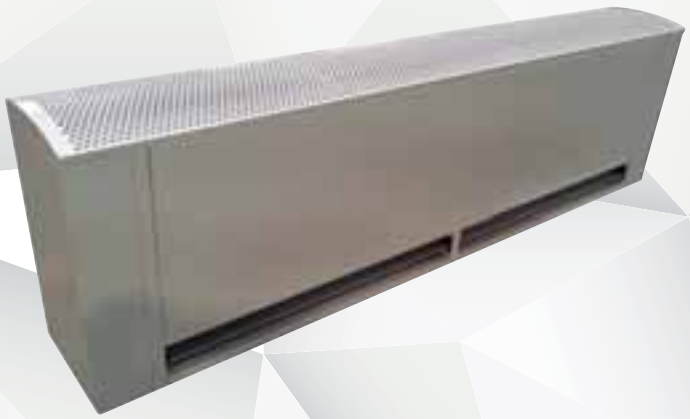
Easy control by BMS
CONNECTIVITY

HP			4 HP	8 HP	10 HP	4 HP	10 HP
Air Curtain			PAW-10PAIRC-MJ	PAW-15PAIRC-MJ	PAW-20PAIRC-MJ	PAW-10PAIRC-MS	PAW-20PAIRC-MS
Air flow type			Jet-flow			Standard	
Air Flow Length (A)		m	1,0	1,5	2,0	1,0	2,0
Air volume	High	m^2/h	1.800	2.700	3.600	1.800	2.700
	Medium	m^2/h	1.500	2.300	3.000	1.500	2.300
	Low	m^2/h	1.200	1.900	2.500	1.200	1.900
Cooling capacity nominal[1]		kW	9,2	17,5	23,1	9,2	17,5
Heating capacity with air in 20°C, air out 40°C		kW	11,9	17,9	23,9	11,9	17,9
Heating capacity with air in 20°C, air out 35°C		kW	8,9	13,4	17,9	8,9	13,4
Heating capacity with air in 20°C, air out 30°C		kW	5,9	8,9	11,9	5,9	8,9
Max installation height	Good condition	m	3,5	3,5	3,5	3,0	3,0
	Normal condition	m	3,1	3,1	3,1	2,7	2,7
	Bad condition	m	2,7	2,7	2,7	2,4	2,4
Refrigerant			R410A	R410A	R410A	R410A	R410A
Tubing suction		mm	16	18	22	16	22
Tubing pressure		mm	10	10	10	10	10
Fan			230V / 50Hz / 1 / N / PE	230V / 50Hz / 1 / N / PE	230V / 50Hz / 1 / N / PE	230V / 50Hz / 1 / N / PE	230V / 50Hz / 1 / N / PE
Fan type			EC	EC	EC	EC	EC
Currency	High	A	2,1	2,8	4,2	2,1	4,2
	Med	A	0,8	1,1	1,6	0,8	1,6
	Low	A	0,3	0,4	0,6	0,3	0,6
Electrical Consumption	High	kW	0,44	0,59	0,89	0,44	0,89
	Med	kW	0,17	0,23	0,34	0,17	0,34
	Low	kW	0,06	0,08	0,12	0,06	0,12
Protecting Fuse		A	M16A	M16A	M16A	M16A	M16A
Noise		dB(A)	40-55	40-56	40-57	40-55	40-57
Dimensions	W x H x D	mm	1.210 x 260 x 590	1.710 x 260 x 590	2.210 x 260 x 590	1.210 x 260 x 490	2.210 x 260 x 490
Weight		kg	70	100	138	60	128

Outdoor combination with PACi Elite unit 40°C	U-100PE1E5/8	U-140PE1E5/8	U-200PE1E8	U-100PE1E5/8	U-140PE1E5/8
Outdoor combination with PACi Standard unit 40°C	U-100PEY1E5/8	—	—	U-100PEY1E5/8	—
Outdoor combination with PACi Elite unit 35°C	U-71PE1E5/8	U-100PE1E5/8	U-140PE1E5/8	U-71PE1E5/8	U-100PE1E5/8
Outdoor combination with PACi Standard unit 35°C	U-100PEY1E5/8	U-100PEY1E5/8	—	U-100PEY1E5/8	U-100PEY1E5/8
Outdoor combination with PACi Elite unit 30°C	U-50PE1E5	U-100PE1E5/8	U-100PE1E5/8	U-50PE1E5	U-100PE1E5/8
Outdoor combination with PACi Standard unit 30°C	U-60PEY1E5	U-100PEY1E5/8	U-100PEY1E5/8	U-60PEY1E5	U-100PEY1E5/8

All combinations under rated conditions: Heating Outdoor +7°C DB/+6°C WB Indoor +20°C DB. In case of lower outdoor temperatures a higher capacity outdoor unit model may be necessary .

1) Rated Conditions Cooling Outdoor +35°C DB Indoor +27°C DB/+19°C WB, Discharge temperature [3] 16°C.



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

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 and longer motor duration)
- 3 Lengths of Air Curtains Jet-Flow, from 1 to 2 m and 2 lengths of Air Curtains Standard, 1 and 2 m
- Installation Height up to 3,5 m (Jet-Flow) and 3,0 m (Standard)
- Outlet Grilles can be adjusted in five positions, to suite different Indoor and installation requirements (Jet-Flow)
- Control with Panasonic Remote Control systems (optional)
- Direct integration to BMS by optional Panasonic Interfaces
- Drain included for cooling operation
- Drain pump and float switch available for forced drainage

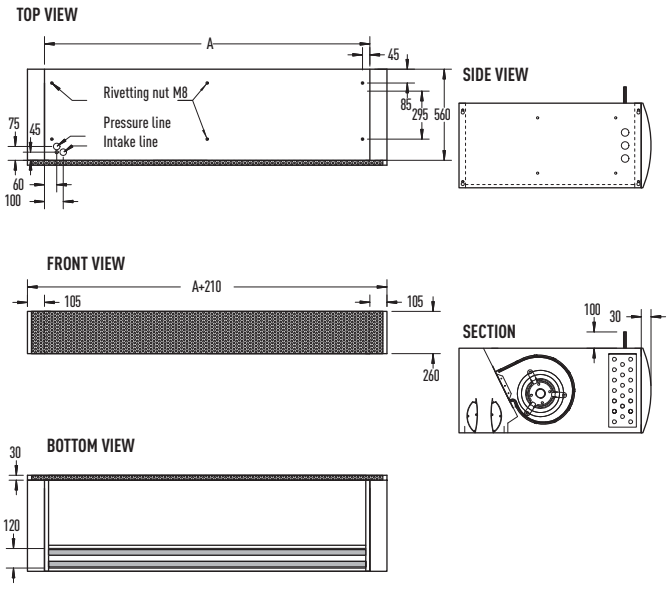
Features

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

EASE OF USE
- Speed selectable on remote controller with 3 speeds

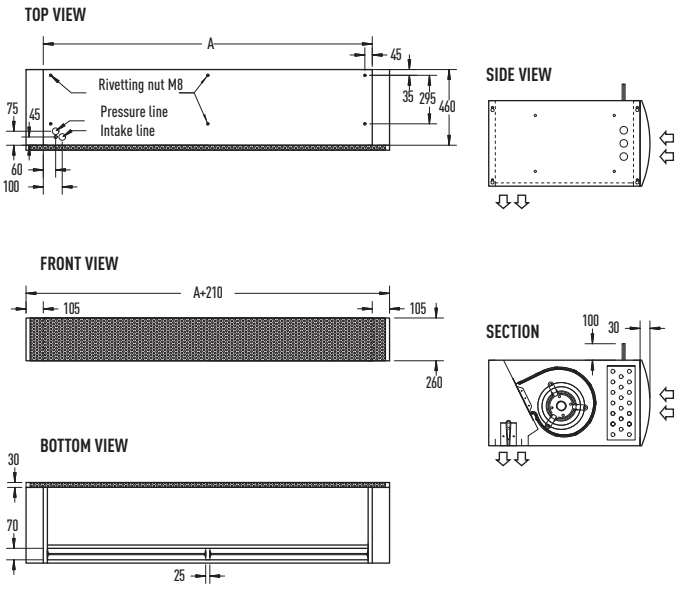
EASY INSTALLATION AND MAINTENANCE
- Easy installation
- Compact dimensions improve installation and positinioning (Jet-Flow)
- Easy cleaning of grid without opening of the unit
- Continuos operation even in case of 1 fan motor failure without stopping air curtain function or stopping the complete system
- Warning indication on remote controller display

JET-FLOW DIMENSIONS



	PAW-10PAIRC-MJ	PAW-15PAIRC-MJ	PAW-20PAIRC-MJ	PAW-25EAIRC-MJ
A	1,000	1,500	2,000	2,500

STANDARD DIMENSIONS



	PAW-10PAIRC-MS	PAW-20PAIRC-MS
A	1,000	2,000

Air Handling Unit Kit 10-25 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

Thermistor x2 (Refrigerant: E1, E2)

Thermistor (Air: TA; 1 sensor)

Remote controller

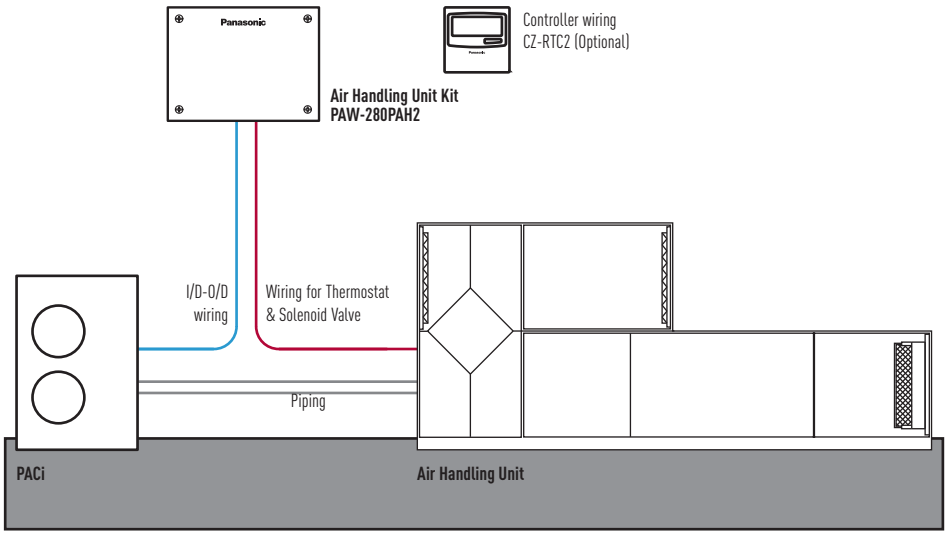
Standard wired remote controller (optional).
Can be installed inside the box.

Panasonic AHU Kit, 10-25 kW connected to PACi outdoor unit

The new Air Handling Unit Kit has been developed to better meet customer demand:

- IP 65 Box in order to be installed outside
- 0-10V demand control (included on the CZ-CABP2 PCB)*
- Easy control by BMS

* Only available with Elite PACi, up to from 6kW to 14kW.



0-10 v control

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

Analog input (V)	Demand (%)
0 (not connect)	Free
0,5	Stop
1,0	40
1,5	45
2,0	50
2,5	55
3,0	60
3,5	65
4,0	70
4,5	75
5,0	80
5,5	85
6,0	90
6,5	95
7,0	100
7,5	105
8,0	110
8,5	115
9,0	120
9,5	Free
10,0	0 (TH. OFF)

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

CZ-RTC2 Timer 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= Cooling / Heating/Fan status
- Defrost
- Thermostat-ON

PAW-T10, PCB to connect to T10 connector

- A Dry contact PCB has been developed to easily control the unit
- Input signal operation ON/OFF
- Remote control prohibition
- Output signal operation ON status maximum 230 V 5 A (NO/NC)
- Output signal alarm status maximum 230 V 5 A (NO/NC)
- **Additional available contacts:**
  - External humidifier control (ON/OFF) 230 VAC 3 A
  - External fan control (ON/OFF) 12V DC
  - External filter status signal potential free
  - External float switch signal potential free
  - External leakage detection sensor or TH. OFF contact potential free (possible usage for external blow out temperature control)

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-50PEY1E5		PAW-280PAH2 (Common use for all outdoor units. Only 1 by 1 connection is allowed.)
	6,0 kW	U-60PEY1E5		
	7,1 kW	U-71PEY1E5		
	10,0 kW		U-100PE1E5A	
	12,5 kW		U-125PE1E5A	
	14,0 kW		U-140PE1E5A	
Three Phase	10,0 kW		U-100PE1E8A	
	12,5 kW		U-125PE1E8A	
	14,0 kW		U-140PE1E8A	
	20,0 kW		U-200PE1E8	
	25,0 kW		U-250PE1E8	

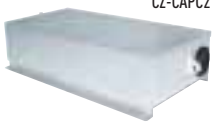
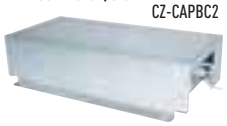
* Additional notice/instruction for system design, installation work will be defined for PAC-i connection.

Operation System	**Individual Control Systems**						
Requirements	Control for hotel application		Wired remote controller		Wireless remote controller	Quick and easy operation	
External appearance	NEW			NEW			
Type, model name	Intelligent Controller		Normal operation	Design wired remote controller	Wireless remote controller	Simplified remote controller	Backlit remote controller
	PAW-RE2C3-WH PAW-RE2C3-GR PAW-RE2C3-MOD-WH PAW-RE2C3-MOD-GR PAW-RE2C3-LON-WH PAW-RE2C3-LON-GR	Stand-Alone White Stand-Alone Grey Modbus White Modbus Grey LonWorks White LonWorks Grey	CZ-RTC2	CZ-RTC3 ECONAVI	CZ-RWSU2 // CZ-RWSY2 // CZ-RWSL2 // CZ-RWSC3 // CZ-RWST2 // CZ-RWST3 // CZ-RWSK2	CZ-RE2C2	CZ-RELC2
Econavi Control	–		–	✔	–	–	
Power consumption monitor	–		–	✔[2]	–	–	
Built-in Thermostat	✔		✔	✔	✔	✔	
I_O which can be controlled	1 indoor unit		1 group, 8 units	1 group, 8 units	1 group, 8 units	1 group, 8 units	
Use limitations	–		• Up to 2 controllers can be connected per group	• 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	
Function ON/OFF	✔		✔	✔	✔	✔	
Mode setting	AUTO		✔	✔	✔	✔	
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). 2) Only for PACi Elite except 50 type. * All specifications subject to change without notice.

Control systems for PACi, ECOi and ECO G

A wide variety of control options to meet the requirements of different applications.

	Timer Operation	**Centralized Control Systems**				
	Daily and weekly program	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
					P-AIMS. Basic Software 	**Seri-Para I/O unit for outdoor unit** CZ-CAPDC2
	Schedule timer	System controller	ON/OFF Controller	Intelligent Controller (Touch screen panel)	CZ-CSWKC2 **Optional software**	
	CZ-ESWC2	CZ-64ESMC2	CZ-ANC2	CZ-256ESMC2 (CZ-CFUNC2)	 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)	**Local adaptor for ON/OFF control** CZ-CAPC2 
	—	—	—	—		
	—	—	—	—		**MINI Seri-Para I/O Unit** CZ-CAPBC2 
	—	—	—	—		
	64 groups, maximum 64 units	64 groups, maximum 64 units	16 groups, maximum 64 units	64 units x 4 systems, max. 256 units		
	· Required power supply from the system controller · When there is no system controller, connection is possible to the T10 terminal of an indoor unit	· Up to 10 controllers, can be connected to one system · Main unit/sub unit (1 main unit + 1 sub unit) connection is possible · Use without remote controller is possible	· Up to 8 controllers (4 main units + 4 sub units) can be connected to one system · Use without remote controller is impossible	· A communication adaptor (CZ-CFUNC2) must be installed for three or more systems	**Web Interface Systems** CZ-CWEBC2 *PC required (field supply)	**Communication Adaptor** CZ-CFUNC2
	—	✔	✔	✔		
	—	✔	—	✔		
	—	✔	—	✔		
	—	✔	—	✔		
	—	✔[1]	—	✔[1]		
	—	✔	✔	✔		
	✔	—	—	✔		

Individual Control Systems

High-spec wired remote controller (CZ-RTC3)

NEW

- Power consumption monitor
- Flat face design & Touch sensor switch for stylish design and operating usability
- New functions such as for Energy saving & monitoring and for Service use are available on the Full dot LCD (3,5" display)
- Improved illumination
- White LED backlit
- Blink when alarm occurs

BASIC OPERATION
- Operation
- Mode
- Temperature setting
- Airflow volume
- Airflow direction

TIMER FUNCTION
- Outing function
- Weekly Program timer
- Easy ON/OFF timer
- Time display

ENERGY SAVING
- Outing function
- Temperature setting range limitation
- Temperature auto return
- OFF remind
- Schedule demand control
- Energy saving mode
- Energy monitoring

OTHERS
- Key lock
- Ventilation fan control
- Display contrast adjustment
- Remote controller sensor
- Quiet operation mode
- Prohibit setting control from Central controller

* Several functions can not use on some outdoor unit. Ex. Power consumption monitor is not available for PACi Standard, Big PACi and PACi Elite 50 type.

Timer remote controller (CZ-RTC2)

- Time Function 24 hours real time clock (week day indicator)
- Weekly programme function (a maximum of 6 actions can be programmed for each day)
- Sleeping function (this function controls the room temperature for comfortable sleeping)
- Maximum 8 indoor units can be controlled from one remote controller
- Remote control by main remote controller and sub controller is possible (maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit)
- Possible to connect to the outdoor unit using PAW-MRC cable for servicing purposes
- Outing function (this function can prevent the room temperature from dropping or rising when the occupants are out for a long time)

Basic remote controller ON/OFF

- Operation mode changeover (Cooling, Heating, Dry, Auto, Fan)
- Temperature setting (Cooling / Dry: 18-30°C Heating: 16-30°C)
- Fan speed setting High / Medium / Low and Auto
- Air flow direction adjustment

Dimensions (H x W x D): 120 x 120 x 16mm

Wireless remote controller

CZ-RWSU2
For 4 Way 90x90 Cassette.

CZ-RWSK2
For Wall Mounted and 4 Way 60x60 Cassette (with panel CZ-KPY3A).

CZ-RWST3
For Ceiling.

CZ-RWSK2 + CZ-RWSC3
Combination for all indoor units.

- 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-RWSC3 is used, wireless control becomes possible for all indoor units (1: when a separate receiver is set up in a different room, control from that room also becomes possible. 2: automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted)
- Operation of separate energy recovery ventilators (When commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote control (interlocked operation with the indoor unit or independent ventilation ON/OFF)

Simplified remote controller (CZ-RE2C2)

A remote controller with simple functions and basic operation

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

Dimensions (H x W x D): 120 x 70 x 16mm

Backlit remote controller (CZ-RELC2)

Backlit 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 backlit display
- Built-in temperature sensor and batch group control for up to 8 indoor units
- Sub remote controller can not be used

Dimensions (H x W x D): 120 x 70 x 16mm

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
- Total lenght up to 500m from indoor unit

Dimensions (H x W x D): 120 x 70 x 16mm

Control contents		Part name, model No.	Quantity
Standard Control	• Control of the various operations of the indoor unit by wired or wireless remote controller. • Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller. • Switching between remote controller sensor and body sensor is possible.	Timer remote controller: CZ-RTC2 Wired remote controller: CZ-RE2C2 // CZ-RELC2 Wireless remote controller: CZ-RWSU2 // CZ-RWSK2 // CZ-RE2C2	1 unit each
(1) Group control	• Batch remote control on all indoor units. • Operation of all indoor cells in the same mode. • Up to 8 units can be connected.	Timer remote controller: CZ-RTC2 Wired remote controller: CZ-RE2C2 Wireless remote controller: CZ-RWSU2 // CZ-RWSK2 // CZ-RE2C2	1 unit
(2) Main/sub remote control	• Max 2 remote controllers per indoor unit. • The button pressed last has priority. • Timer setting is possible even with the sub remote controller.	Main or sub. Timer remote controller: CZ-RTC2 Wireless remote controller: CZ-RWSU2 // CZ-RWSK2 // CZ-RE2C2	As required

Centralised Control Systems

Schedule timer (CZ-ESWC2)

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

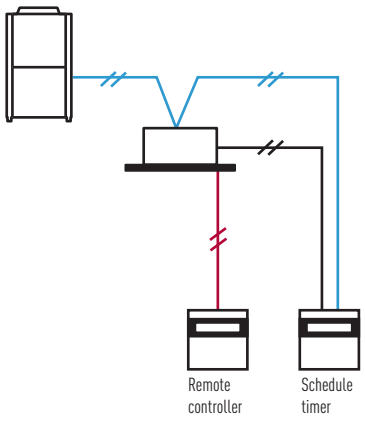
1. Control circuit board (T10) of a nearby indoor unit (power supply wiring length: within 200 m from the indoor unit).
2. System controller (power supply wiring length: within 100 m from the indoor unit).

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

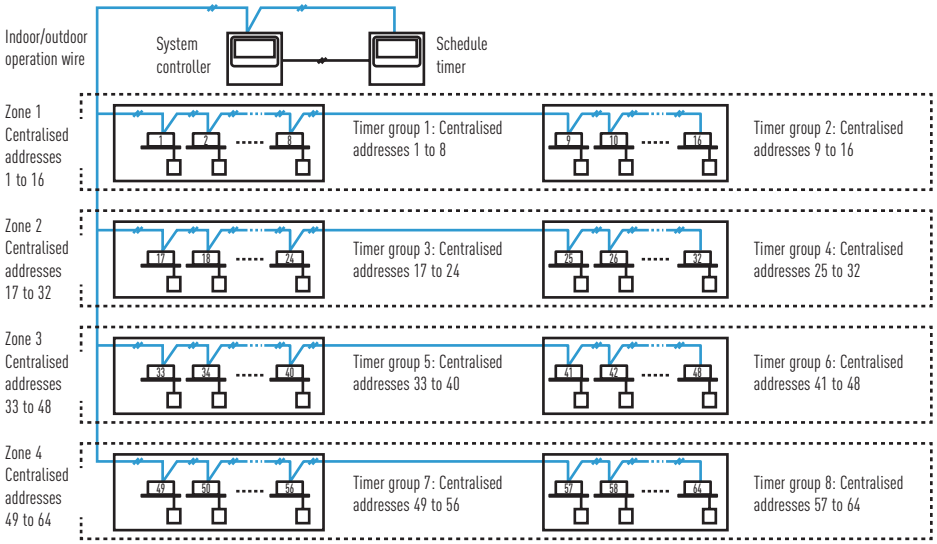
- Up to 64 groups (maximum 64 indoor units) can be controlled divided into 8 timer groups
- Six program operations (Operation/Stop/Local permission/Local prohibition) per day can be set in a program for one week
  - Only operation or stop, remote controller local permission or remote controller local 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.)

Dimensions (H x W x D): 120 x 120 x 16mm.

Connection example 1 (power supply from the indoor unit)



Connection example 2 (power supply from the central controller)



ON/OFF controller (CZ-ANC2)

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

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

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

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.

System controller (CZ-64ESMC2)

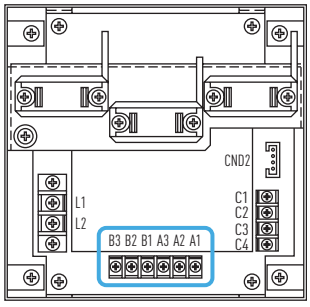
Individual control is possible for max. 64 groups, 64 indoor units.
Control of 64 indoor units divided into 4 zones. (One zone can have up to 16 groups, and one group can have up to 8 units.)
Control is possible for ON/OFF, operation mode, fan speed, air flow direction (only when used without a remote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



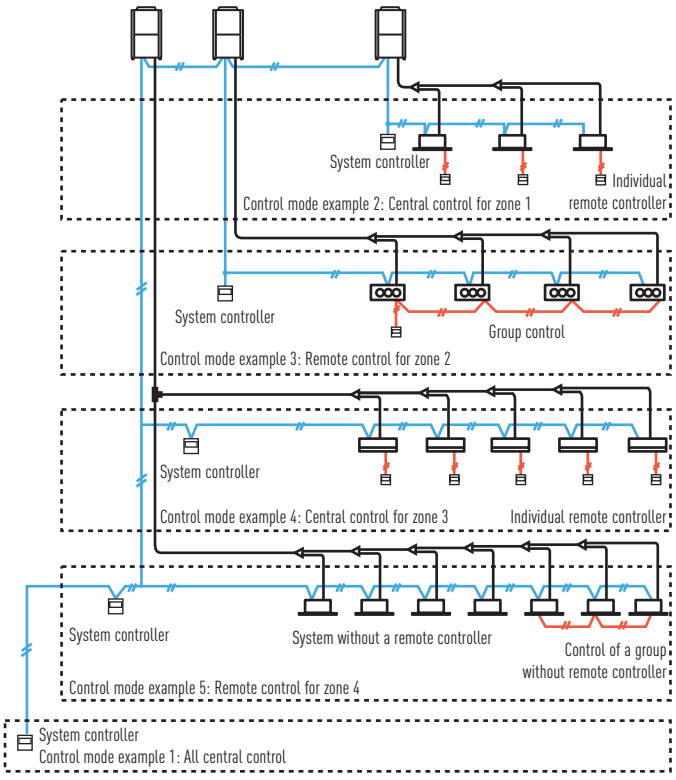
A1) Input for turning ON air conditioners concurrently
A2) Input for turning OFF air conditioners concurrently
A3) Common input for turning air conditioners ON or OFF
B1) On operation state indicator output
B2) Alarm indicator output
B3) Common indicator output

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

Dimensions (H x W x D): 120 x 120 x 21 + 69mm (embedding dimension).
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, maximum 1 A).
Total wiring length: 1 km.

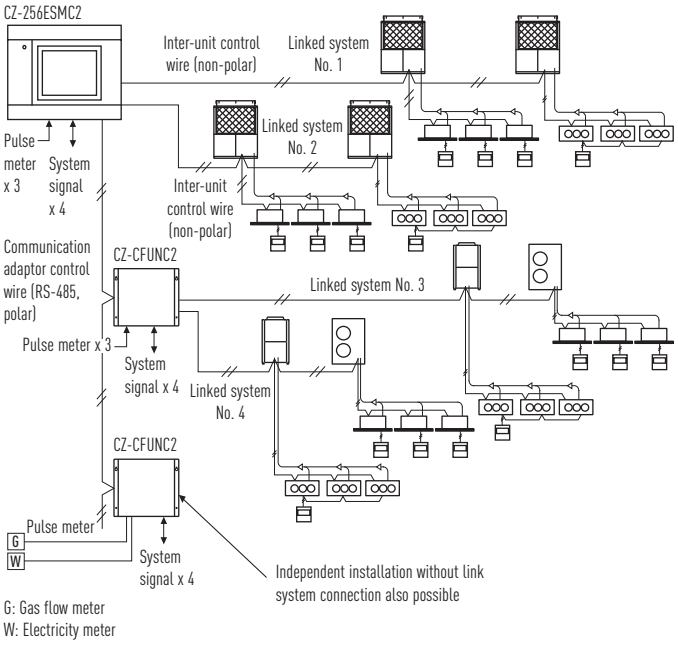


Centralised Control Systems

Intelligent controller (CZ-256ESMC2)

Web application

System Configuration Example



G: Gas flow meter
W: Electricity meter

Maximum number of connections	Indoor units: 256 (64/link x 4)
	Outdoor units: 120 (30/link x 4)
	Communication adaptors: 7
	Link systems (Inter-unit control wires): 4

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)
- Pulse signal input from electric/gas consumption meter

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

Dimensions (H x W x D): 240 x 280 x 138mm.
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.

CZ-CBPCC2: Additional back up memory for CZ-256ESMC2.

Web Interface (CZ-CWEBC2)

Functions

(HxWxD): 248x185x80mm
AC 100 to 240 V (50/60Hz), 17 W
(separate power supply)

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

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

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

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

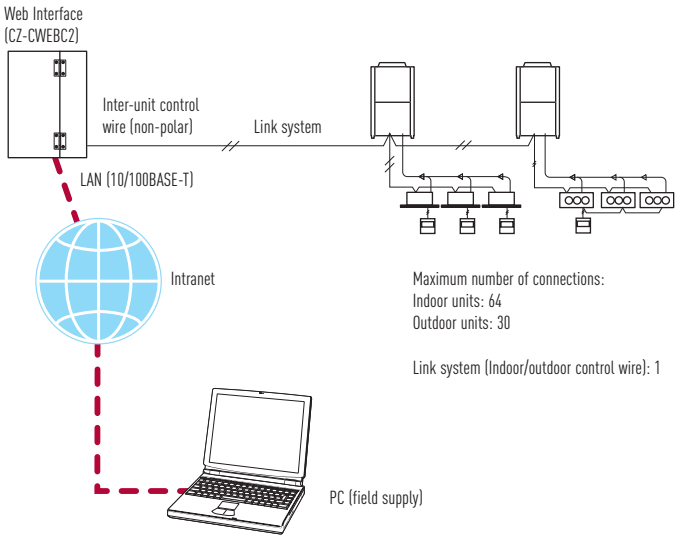
Easy to manage and monitor each tenant use*

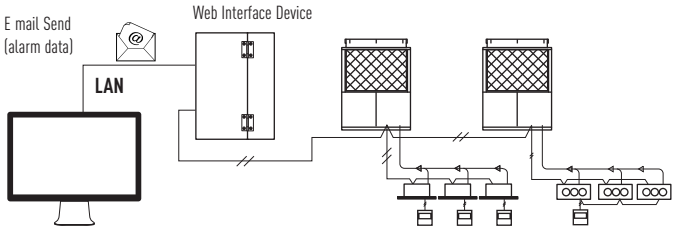
- Each floor or tenant, otherwise each zone can be displayed and controlled.
- All unit statuses can also be displayed on one screen.

Program Timer set

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

* Web interface system not applicable for load distribution.





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 experiance a problem.

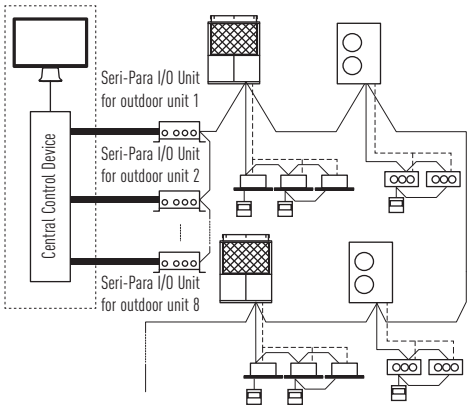
Centralised Control Systems

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

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

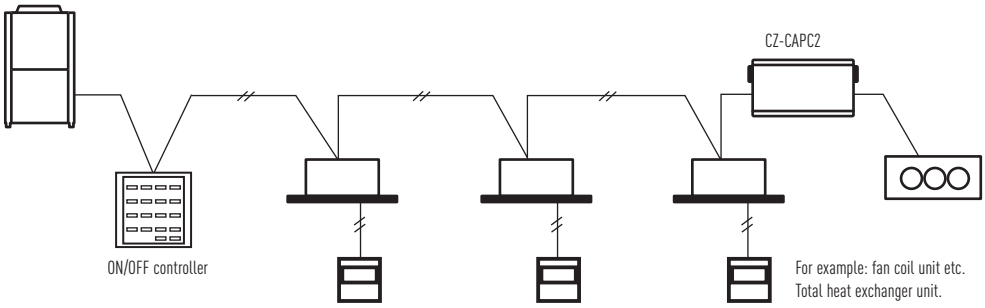
Dimensions (H x W x D): 80 x 290 x 260mm.
Power supply: Single Phase 100/200V (50/60Hz), 18W.
Input: Batch operation/Batch stop (non-voltage contact/DC 24 V, pulse signal). Cooling/Heating (non-voltage contact/static signal). Demand 1/2 (non-voltage contact/static signal) (Local stop by switching)
Output:Operation 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



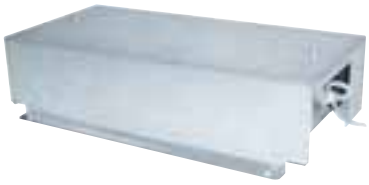
Local adaptor for ON/OFF control (CZ-CAPC2)

- 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.



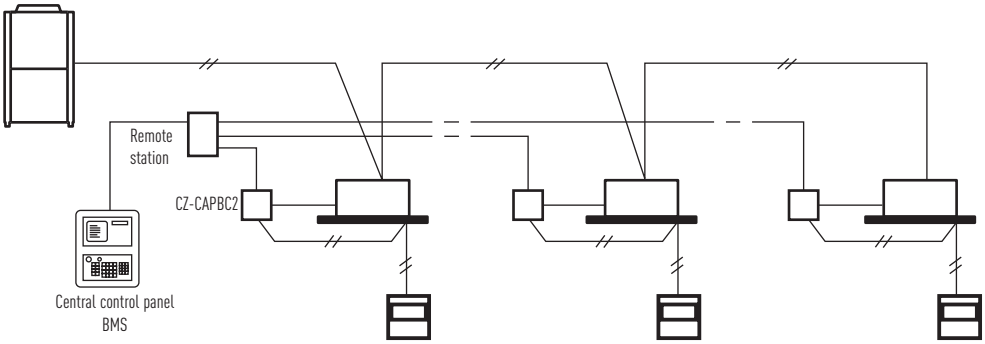
Demand Control 0 -10 V (CZ-CAPBC2)

NEW



- 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.
- **NEW!** The analog input for demand of the outdoor capacity by 20 steps (from 40% to 110%) by 0-10V.
- 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).

* Available in April.



P-AIMS. Panasonic Total Air Conditioning Management System

P-AIMS Basic software / CZ-CSWKC2

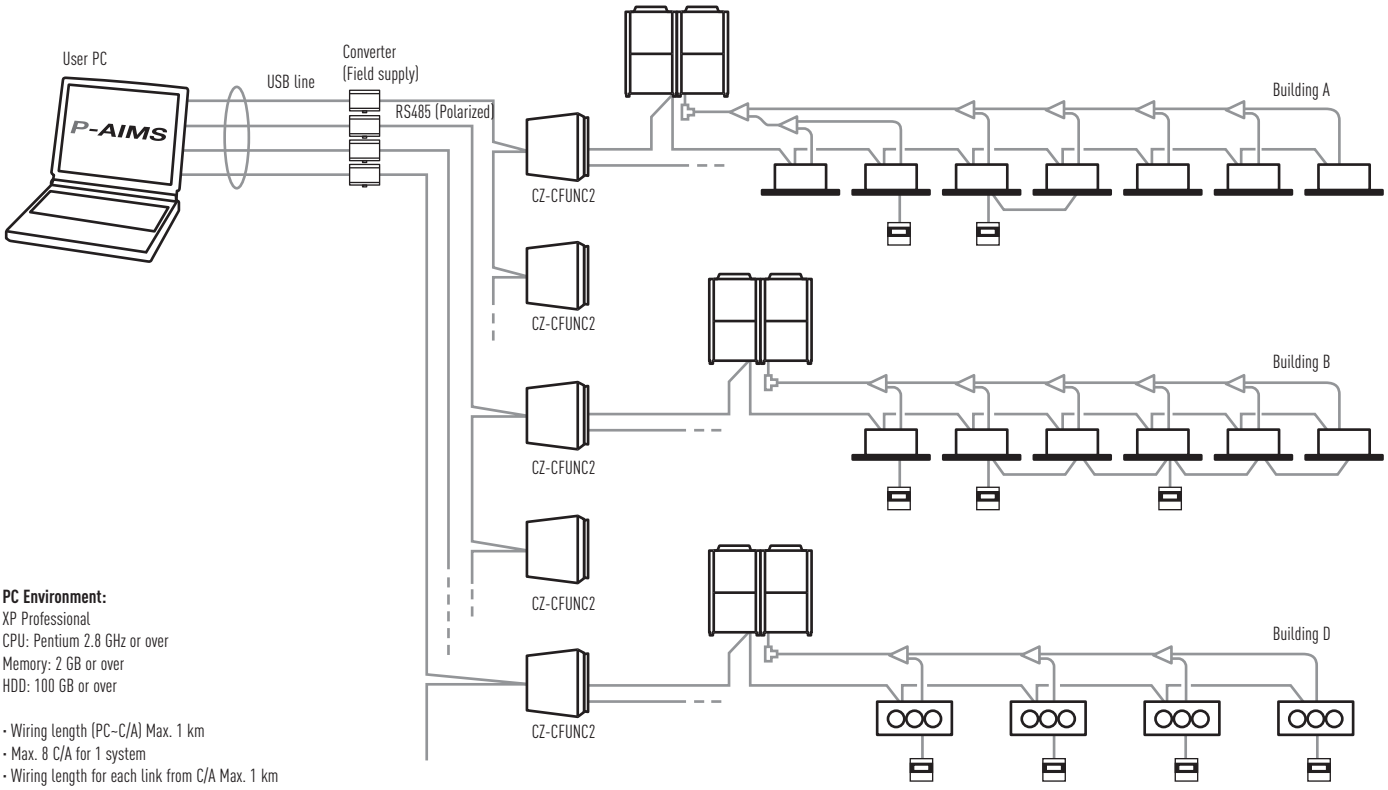
Up to 1024 indoor units can be controlled by one PC.

Functions of basic software

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

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.



PC Environment:
XP Professional
CPU: Pentium 2.8 GHz or over
Memory: 2 GB or over
HDD: 100 GB or over

- Wiring length (PC–C/A) Max. 1 km
- Max. 8 C/A for 1 system
- Wiring length for each link from C/A Max. 1 km

P-AIMS optional software CZ-CSWAC2 for Load distribution
Load distribution calculation for each tenant

- Air-conditioner load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m^3, 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).

Centralised Control Systems

NEW

NEW Centralised Control Systems

A custom web application to manage the centralized operation of A2W and GHP systems.

Operation and monitoring of devices connected to the new Management System can be realized both remotely/locally from any device with connection to the internet (Laptop, Tablet, Mobile)

The new system will make the interaction with air conditioning systems easier, improving the operation set as well as the global control of installations.

The application will act with various units, regardless of whether they are available in the same intranet or in different locations, transparently to users at any time. In this way, our solution allows to overcome main restrictions like onsite maintenance or the lack of centralization.

In addition, the application offers significant improvements in terms of control:

- Aircon units can be grouped in a totally custom way
- Possibility to realize group commands and batch commands (in succession)
- Alarms and events can be controlled more efficiently and a lot more...

Features of current system

Operation Functions

- Start & Stop
- Temperature settings
- Operation mode selection
- Fan speed, Fan direction settings
- Prohibition of use of remote controller

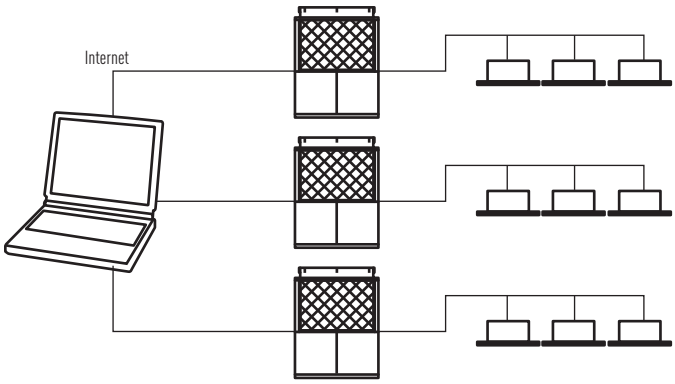
Operation Monitoring

- Monitoring of operation status and alarms
- Monitoring of filter cleaning signs
- Display of alarm logs

Program Timers

- Up to 50 types of weekly timer
- Holiday and Special Days

Current installation



Main restrictions: Decentralization: need to connect to every CZ-WEB one by one to manage installation.
On-site maintenance: Access limited to local network.

Offer reliable solution to improve existing functionalities

- Running timer
- Remote control through Web Cloud Application or local. Accessible anytime, anywhere, via a device with internet connection
- Centralized Control: Manage several installations in one single interface. Ideal for multi-site organizations
- Easy monitoring and maintenance thanks to group commands, and batch commands. Easy supervision of complex installations
- Secure Remote Access. Powerful identity protection and convenient access control

Benefits

The new solution for the centralized control of air conditioning systems offers significant benefits for the different parties involved in its management:

For the building Ownership:

- Maximum equipment performance
- Energy saving
- Increased lifetime of equipment
- Savings in maintenance costs

For Maintenance companies:

- Instant knowledge of any incident
- Possibility of preventive alarms
- Reduction of systematic visits (warning and remote control)
- More effective maintenance support

Internet Control. Control your air conditioning system with your smart device -smartphone & internet for PACi

Reference PA-RC2-WIFI-1

KX-UT670 Smart Desktop Phone from Panasonic.

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.

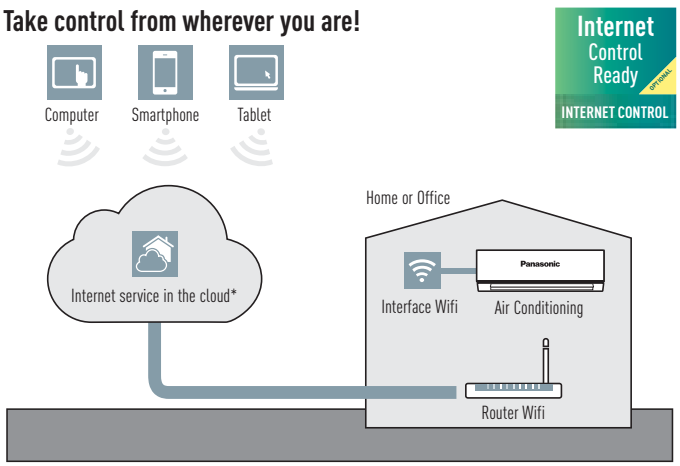
Control your air conditioning with the smart internet control device via smartphones, tablet, PC and smart desktop phone via internet

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.

Case Study. 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."

Take control from wherever you are!



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

PACi Connectivity. Easy connection to KNX, Modbus, LonWorks and BACnet

Easy control by BMS

CONNECTIVITY

AIRZONE

Airzone. Control of the PACi Hide Aways

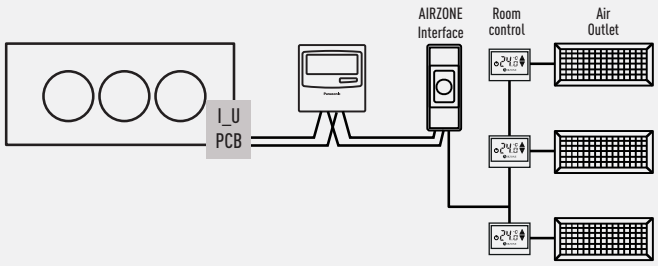
Airzone has developed interfaces to easily connect to Panasonic PACi Hide Away units. Ensuring optimum performance, comfort and energy savings, the new system is efficient and easy to install.

Airzone full range of accessories for any duct project

Different type of outlets

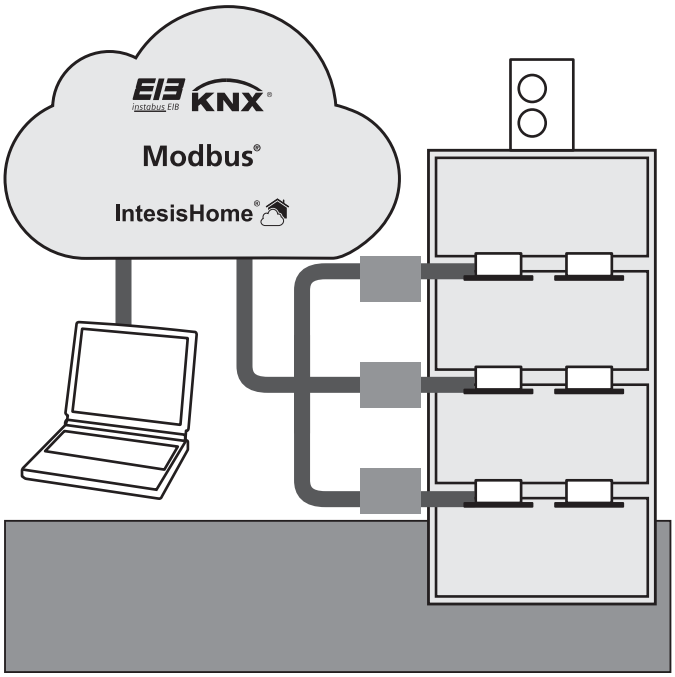
Also plenum automatic doors

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



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

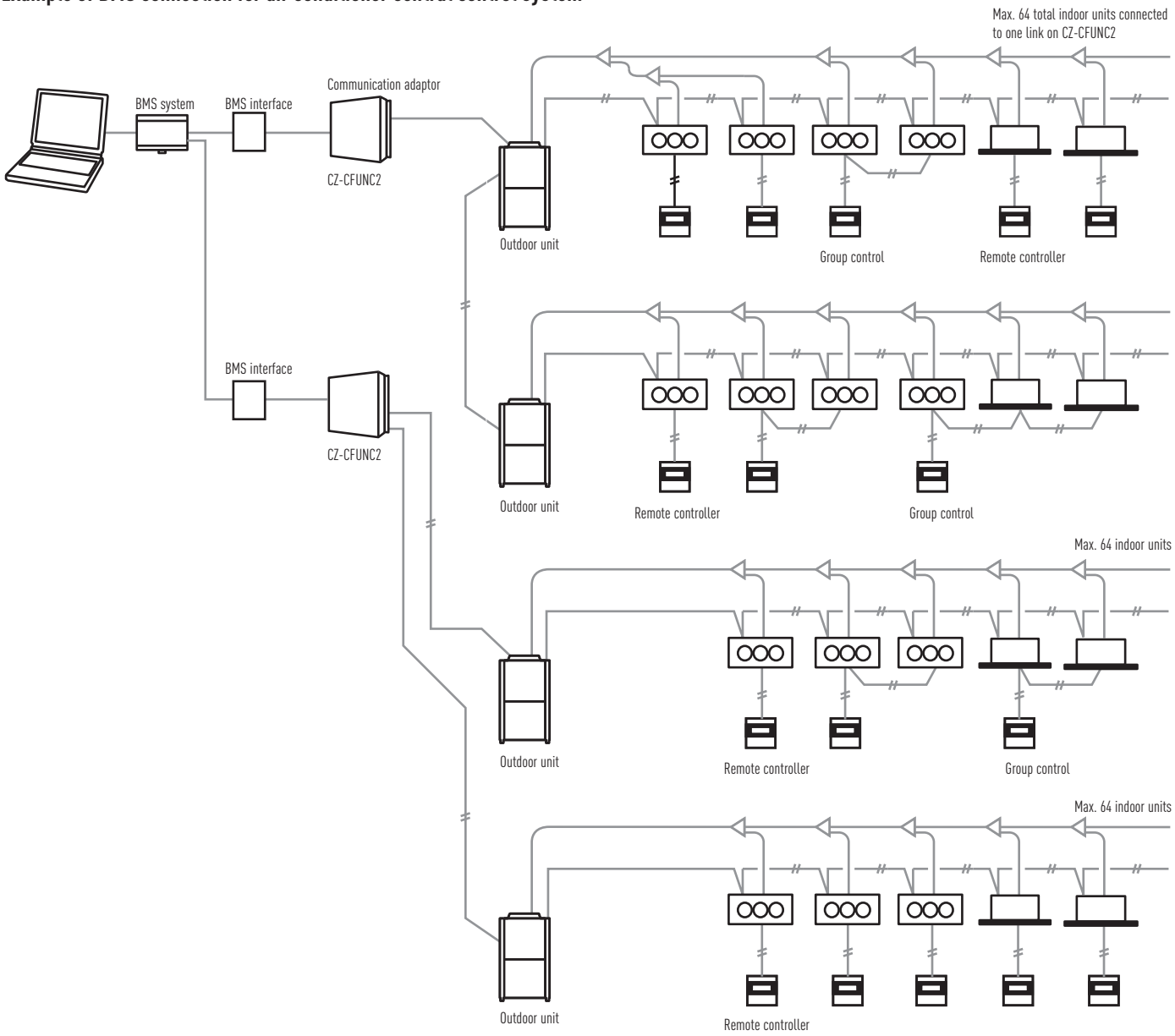
For more information, contact Panasonic.



	Panasonic model name	Interface	Connected on the indoor unit	Maximum number of indoor units connected
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)
	PA-RC2-WIFI-1	IntesisHome	Indoor unit	1 (1 Group of Indoor units.)

* Interface Modbus RTU/TCP is needed

Example of BMS connection for air conditioner central control system



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

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

PACi, ECOi and ECO G Connectivity indoor units

PCB's and cables for PACi, ECOi and ECO G indoor units		
Name of the cables	**Function**	**Comment**
CZ-T10	All T10 functions	Requires field supplied accessory
PAW-FDC	Operate external fan	Requires field supplied accessory
PAW-OCT	All option monitoring signals	Requires field supplied accessory
CZ-CAPE2	Option monitoring signals wo. fan	Requires aditional wires from spare part supply
PAW-EXCT	Forced Thermo OFF/Leakage D.	Requires field supplied accessory
Name of the PBC	**Function**	**Comment**
PAW-T10	All T10 functions	Allows easy connection "Plug & Play"
PAW-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-PACR3	Redundancy of 2 or 3 systems; for PACi and ECOi	Redundancy of 2 or 3 PACi systems including temperature monitoring, error indication, backup, alternative run
PAW-SERVER-PKEA	Redundancy of 2 units PKEA	Redundancy of 2 units PKEA including temperature monitoring, error indication, backup, alternative run

T10 connector (CN015)

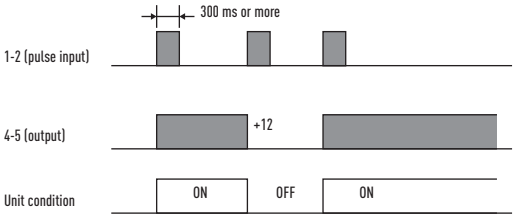
CZ-T10: Panasonic has developed an optional accessory (consisting of plug + wires) called CZ-T10 to enable an easy connection to this T10 connector.

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

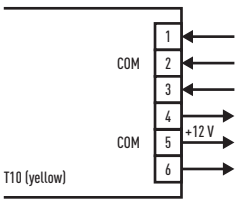


NOTE: The wire length from indoor unit to the Relay must be within 2.0 m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

- 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

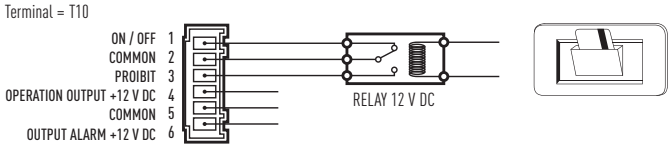


Usage Example

Forced OFF control

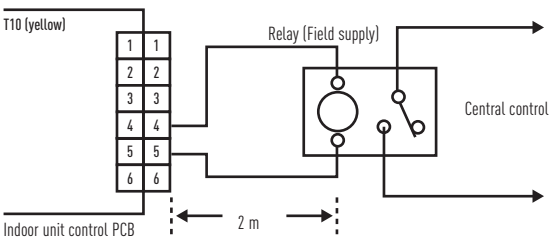
Term 1 & 2: Free contact for ON/OFF signal (cut *JP1* for static signal) when the hotel card is it connected the contact must be close (the unit can be used).

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).



Operation ON/OFF signal output

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



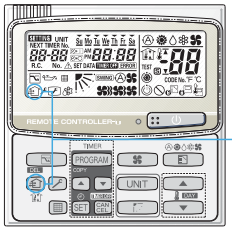
NOTE: The wire length from indoor unit to the Relay must be within 2.0 m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

Fan Drive Connector (CN032)

PAW-FDC: Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-FDC to enable an easy connection to this Fan Drive Connector (CN032).

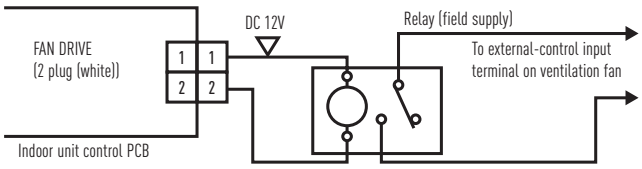
Operating the ventilation fan from the remote controller

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



EXTERNAL FAN ON / OFF

Ventilation button

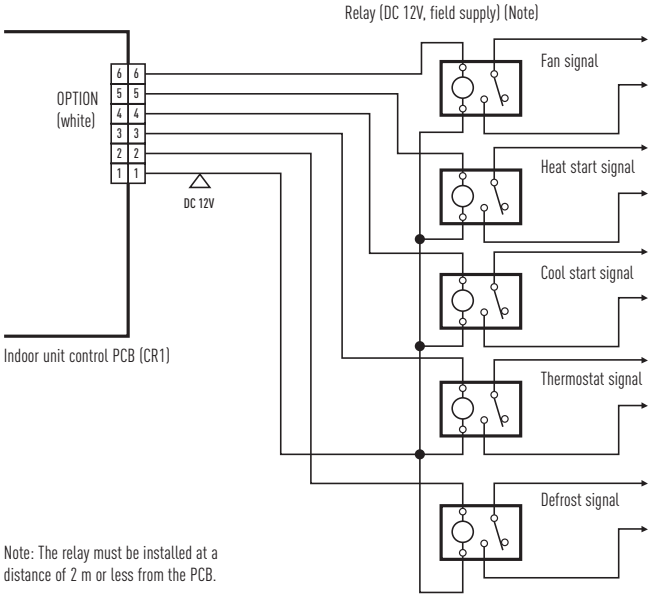


Option Connector (CN060) Output external signals

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.



Note: The relay must be installed at a distance of 2 m or less from the PCB.

EXCT Connector (CN009)

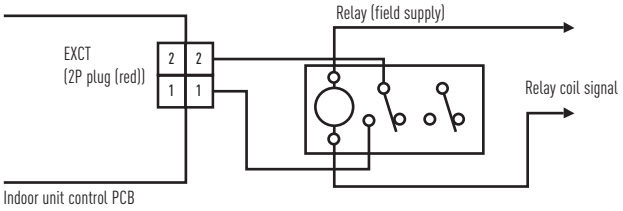
PAW-EXCT: Panasonic has developed an optional accessory (consisting of plug + wires) called PAW-EXCT to enable an easy connection to this EXCT Connector (CN009).

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.

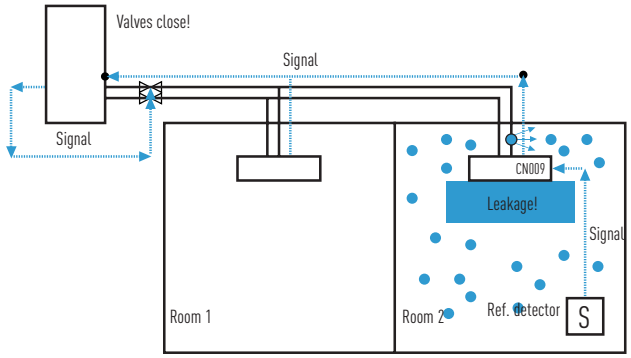
Note: The length of the wiring from the indoor unit control PCB to the relay must be 2m or less.
* Lead wire with 2P plug (special—order part: WIRE K/854 05280 75300)

- 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. Why renewal?

Unique R22 Renewal from Panasonic: Fast, easy to install and Cost effective

- Panasonic refrigerant oil doesn't react to the most common oil types used in air-conditioning systems. This ensures the mix of oil does not damage the units. Therefore installations are easier.
- All Panasonic PACi units can be installed in R22 pipings, no specific models are available.
- Up to 33 Bar! When there is any doubt about the strength of the piping, the maximum working pressure can be reduced to 33 Bar with a setting in the software of the outdoor unit.

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.

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 under certain conditions.. Make sure that the requirements under the section "Notes on reuse of existing refrigerant piping", "Measurement procedure for renewal" and "Refrigerant piping size and allowable piping length" will be satisfied in order to carry out .
Also, check the items with regard to section "Safety" and "Cleaning".

1. Prerequisite

- If the refrigerant used for the existing unit is other than R22, R407C and R410A, 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)

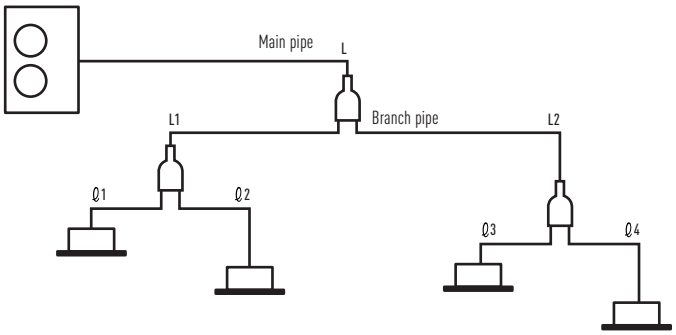
If the existing unit is GHP type, it is necessary to wash the piping thoroughly.

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

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

Notes on renewal for simultaneous operation of multiple units

Only main pipe is applicable for using the different diameter size.
In case of different diameter size for the branch pipes, a new installation work for a standard size is necessary.
Be sure to use our genuine branch piping for refrigerant R410A.



Notes on Renewal for Simultaneous Operation of Multiple Units		
Capacity class	Standard liquid pipe size	Standard gas pipe size
Type 50	Ø 6,35	Ø 12,7
Type from 60 to 140	Ø 9,52	Ø 15,88
Type 200	Ø 9,52	Ø 25,4
Type 250	Ø 12,7	

- 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

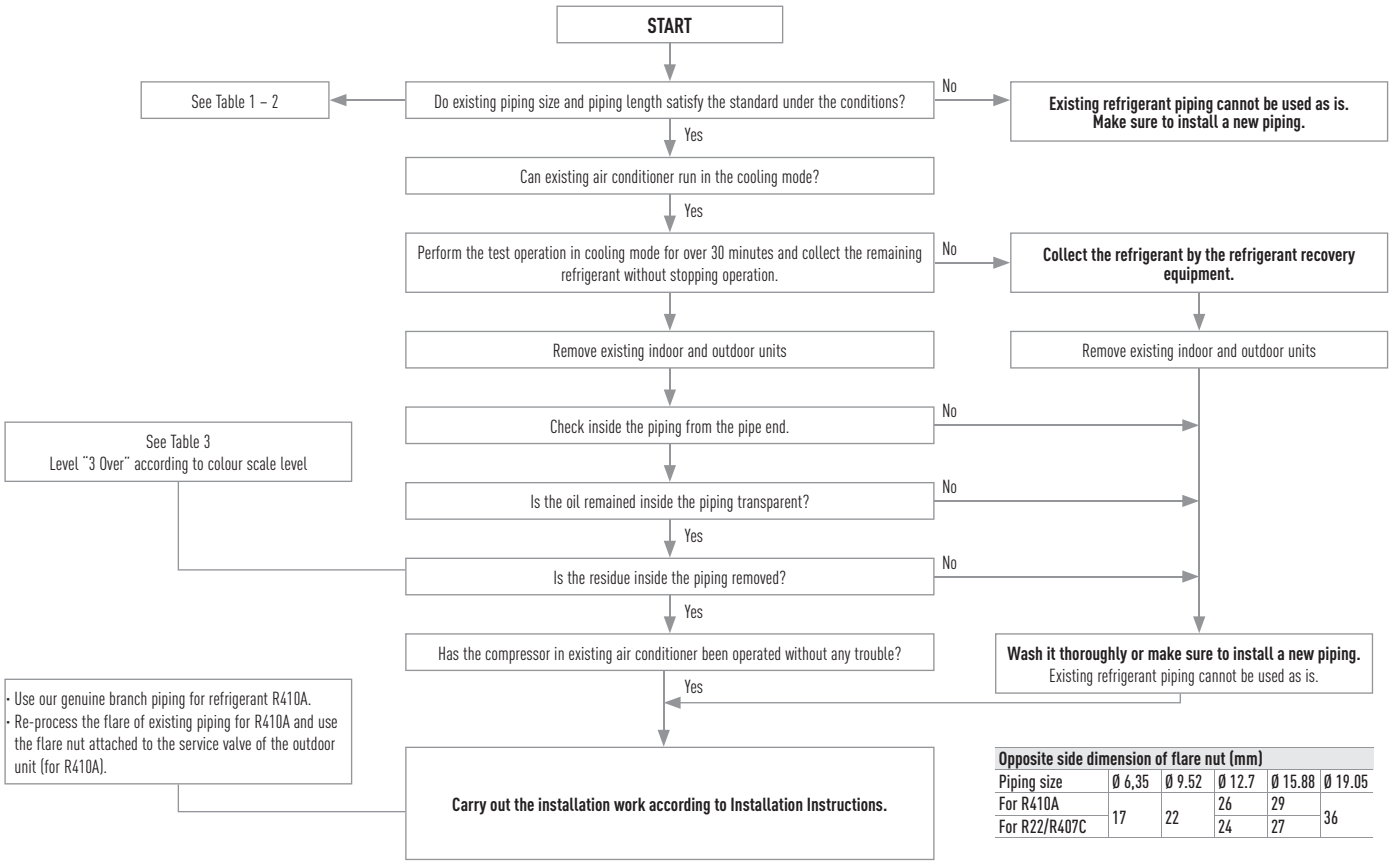
It is not necessary to charge with additional refrigerant until the chargeless pipe length in the table 2.
If the pipe length is exceeding the charge less pipe length, charge with additional refrigerant amount per 1 m according to the equivalent length.

2. In case of simultaneous operation of multiple units

Calculate the refrigerant charging amount according to the calculating method of the standard piping diameter.
As to the additional refrigerant charging amount per 1 m, refer to the additional amount in the table 2.

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



Opposite side dimension of flare nut (mm)					
Piping size	Ø 6,35	Ø 9.52	Ø 12.7	Ø 15.88	Ø 19.05
For R410A	17	22	26	29	36
For R22/R407C			24	27	

R22 Renewal

Refrigerant piping size and allowable piping length

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

Table 1 Reusable existing piping (mm)

Material	O				1/2 H, H*			
External diameter	Ø 6,35	Ø 9,52	Ø 12,7	Ø 15,88	Ø 19,05	Ø 22,22	Ø 25,4	Ø 28,58
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 Ø 19.05, Ø 22.22, Ø 25.4 and Ø 28.58 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		Ø 6,35			Ø 9,52			Ø 12,7	
Gas pipe		Ø 9,52	Ø 12,7	Ø 15,88	Ø 12,7	Ø 15,88	Ø 19,05	Ø 15,88	Ø 19,05
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	

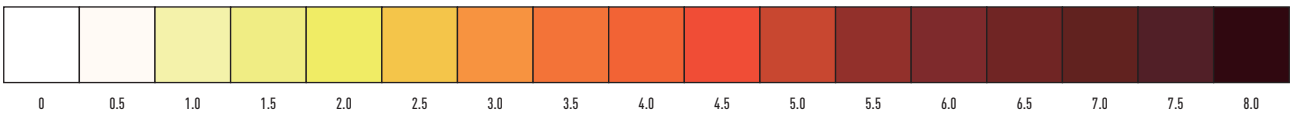
How to see table definition (example):
In case of type 71, standard size is liquid pipe Ø 9,52 / gas pipe Ø 15,88,
There is a limitation to liquid pipe Ø 9,52 / gas pipe Ø 12,7and to liquid pipe Ø 12,7 / gas pipe Ø 15,88,
However, they are applicable for different diameter's pipes.

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

Liquid pipe		Ø 9,52			Ø 12,7			Ø 15,88		
Gas pipe		Ø 22,22	Ø 25,4	Ø 28,58	Ø 22,22	Ø 25,4	Ø 28,58	Ø 22,22	Ø 25,4	Ø 28,58
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

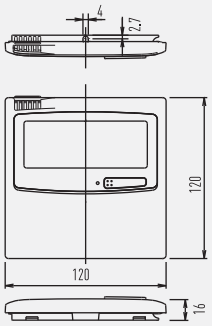
Table 3 Deterioration Criteria for Refrigerant Oil



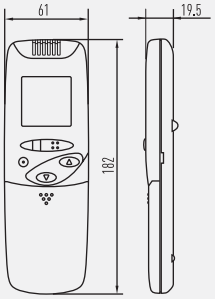
Control equipment external dimensions

Control Systems

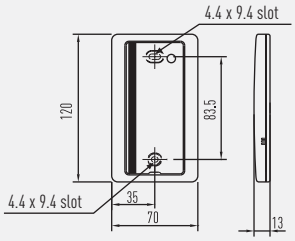
TIMER REMOTE CONTROLLER
(CZ-RTC2)



WIRELESS REMOTE CONTROLLER

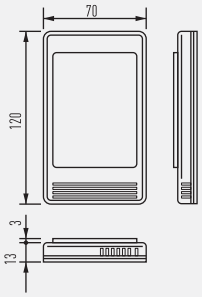


SEPARATE RECEIVER FOR WIRELESS REMOTE CONTROLLER

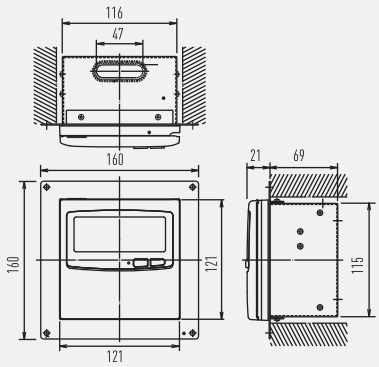


SIMPLIFIED REMOTE CONTROLLER
(CZ-RE2C2)

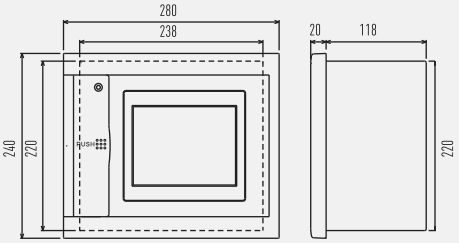
REMOTE SENSOR
(CZ-CSRC2)



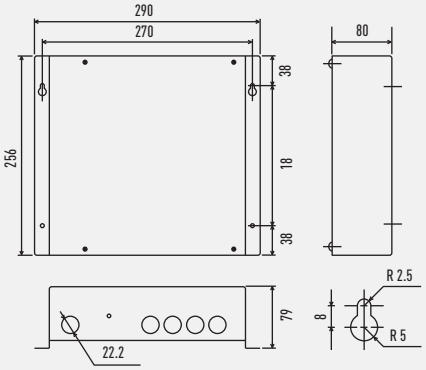
SYSTEM CONTROLLER
(CZ-64ESMC2)



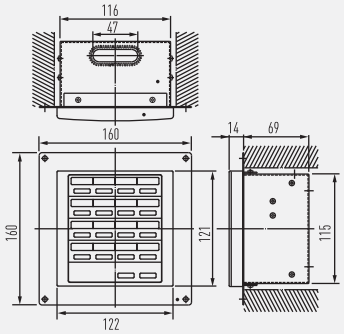
INTELLIGENT CONTROLLER
(CZ-256ESMC2)



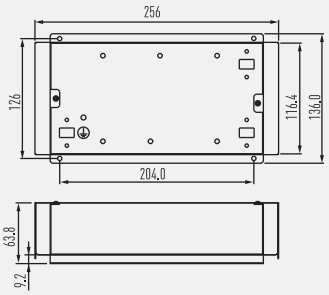
COMMUNICATION ADAPTER
(CZ-CFUNC2)



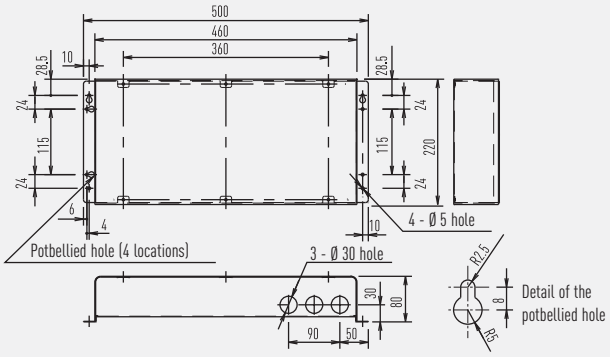
ON/OFF CONTROLLER
(CZ-ANC2)



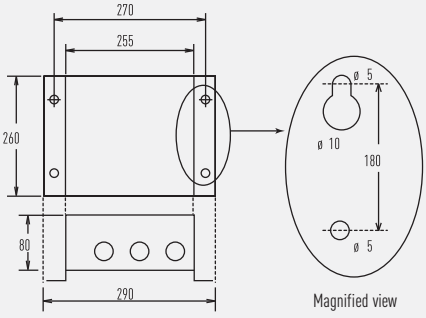
SERI-PARA I/O UNIT FOR EACH INDOOR UNIT
(CZ-CAPBC2)



LONWORKS INTERFACE
(CZ-CLNC2)



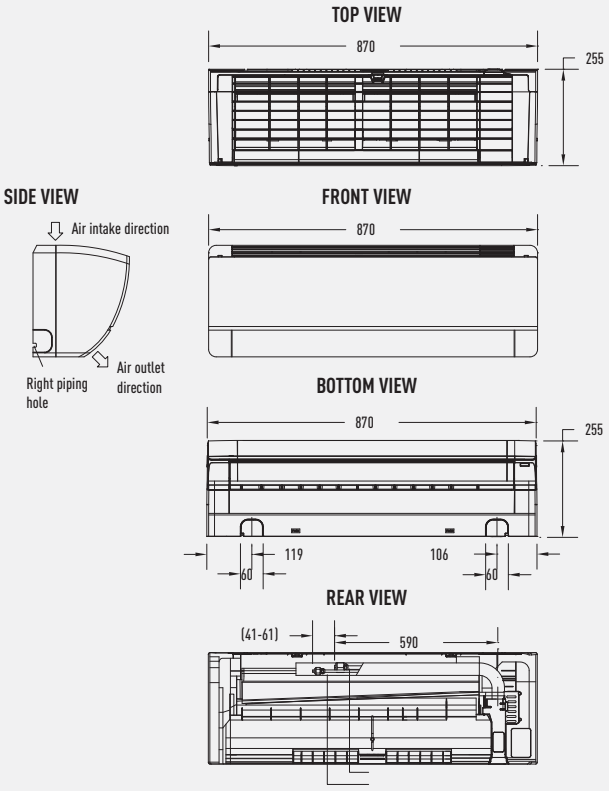
SERI-PARA I /O UNIT FOR OUTDOOR UNIT
(CZ-CAPDC2)



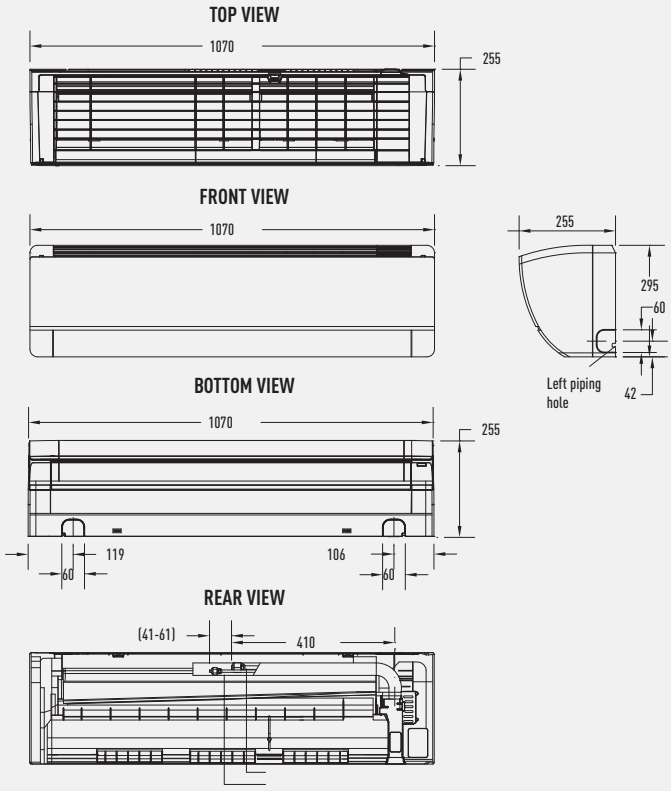
PKEA dimensions

Wall Mounted PKEA

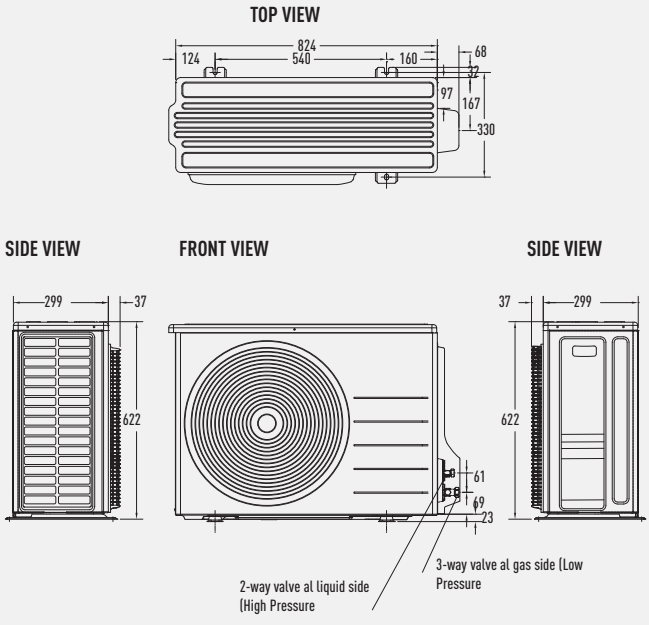
CS-E9PKEA // CS-E12PKEA



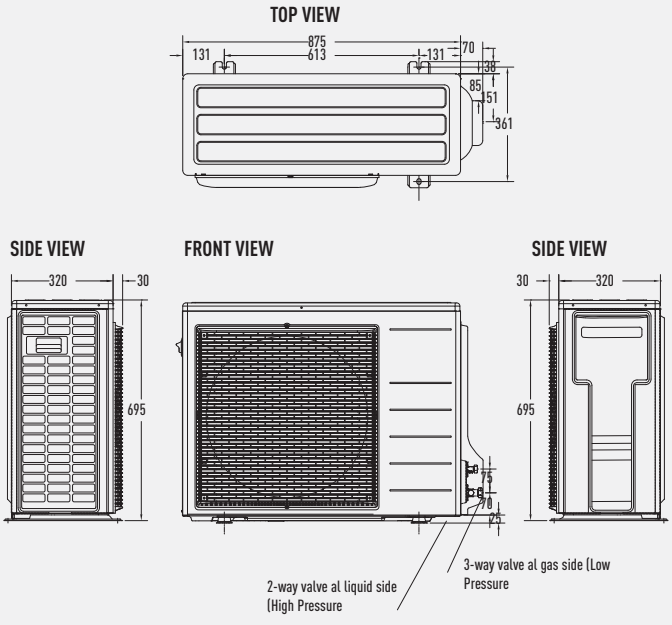
CS-E15PKEA // CS-E18PKEA



CU-E9PKEA // CU-E12PKEA



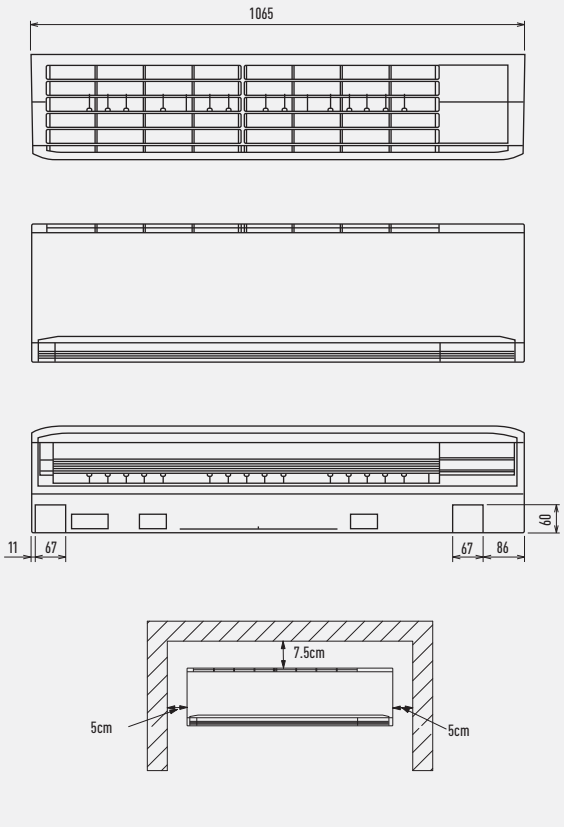
CU-E15PKEA // CU-E18PKEA



Dimensions: mm

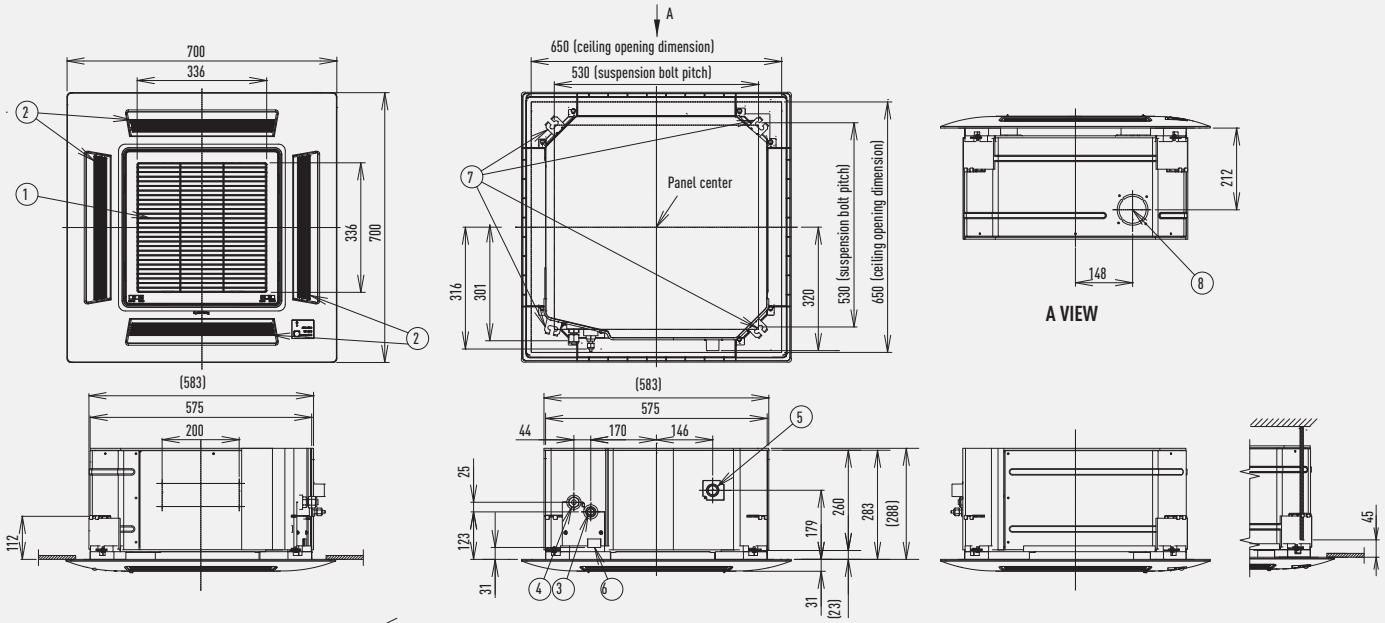
PACi Standard and Elite dimensions

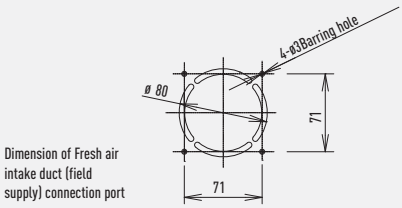
Wall



Type		36 - 50	60 - 100
1	Refrigerant tubing (liquid tube)	Ø 6,35 (flared)	Ø 9,52 (flared)
2	Refrigerant tubing (gas tube)	Ø 12,7 (flared)	Ø 15,88 (flared)
3	Drain hose VP13	Outer diameter Ø 18	
4	Rear panel	PL BACK	
5	Tubing and wiring holes	Ø 80	

4-Way 60x60 Cassette





Dimension of Fresh air intake duct (field supply) connection port

1	Air intake	
2	Discharge outlet	
3	Refrigerant tubing (liquid tube)	Ø 6,35 (flared)
4	Refrigerant tubing (gas tube)	Ø 12,7 (flared)
5	Drain tube connection port VP25	Outer dia. Ø 32
6	Power supply port	
7	Suspension bolt hole	4-11 x 26 hole
8	Fresh air intake duct connection port	Ø 80

Adjust the suspension bolt length so that the gap from the lower ceiling surface becomes 45mm or more, as shown in the figure at right.
If the suspension bolts is too long, it will contact the ceiling panel and the unit cannot be installed.

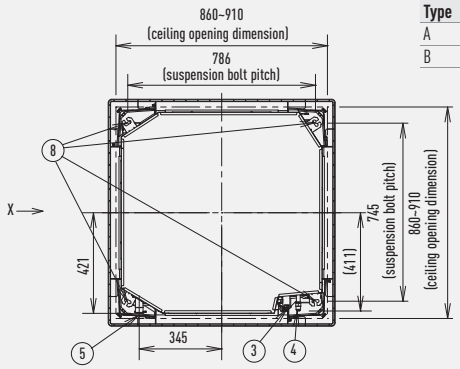
Dimensions: mm

PACi Standard and Elite dimensions

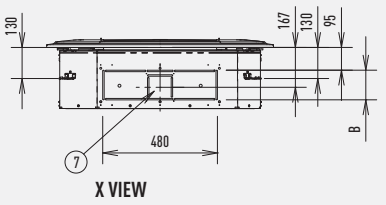
4 Way 90x90 Cassette

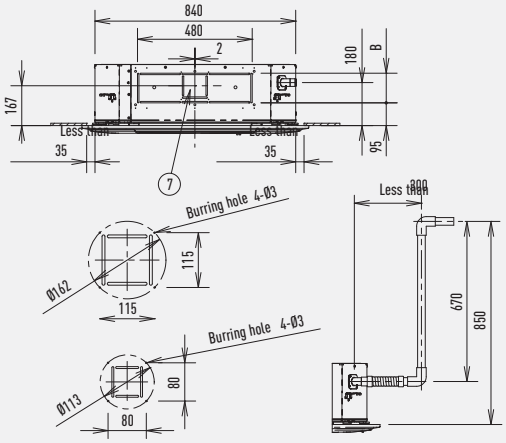
Type		36 - 71	100 - 140
1	Air intake grill		
2	Air discharge outlet		
3	Refrigerant piping (liquid pipes)	Ø 6,35 (flared)	Ø 9,52 (flared)
4	Refrigerant piping (gas pipes)	Ø 12,7 (flared)	Ø 15,88 (flared)
5	Drain outlet VP50	Outer diameter 32mm	
6	Power supply port		
7	Discharge duct	Ø 150	
8	Suspension bolt hole	4-12x30 slot	
9	Fresh air intake duct connection port	Ø 100[1]	

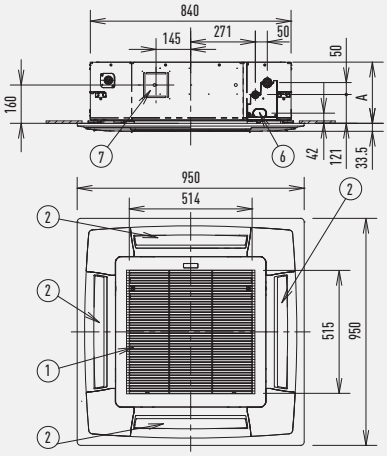
1 Air inlet kit is necessary.
Filter size: 520 x 520 x 16

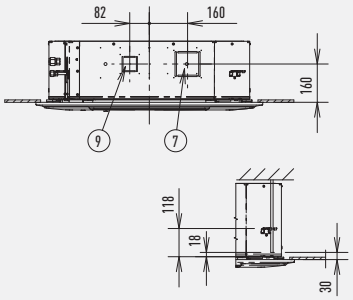


Type	36 - 71	100 - 140
A	256	319
B	124	187







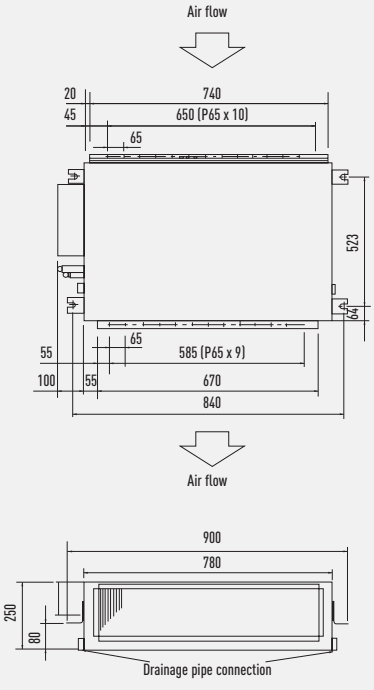


Adjust the suspension bolt length so that the gap from the lower ceiling surface becomes 30mm or more (18mm or more from the lower surface of the body) as shown in the figure. When the suspension bolt length is long, it hits the ceiling panel and installation is not possible.

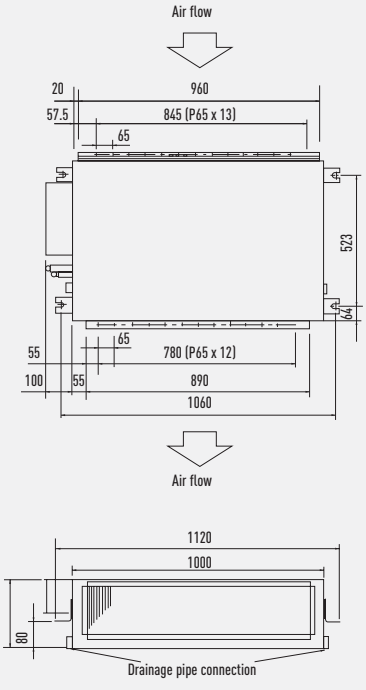
Dimensions: mm

Low Static Pressure Hide Away

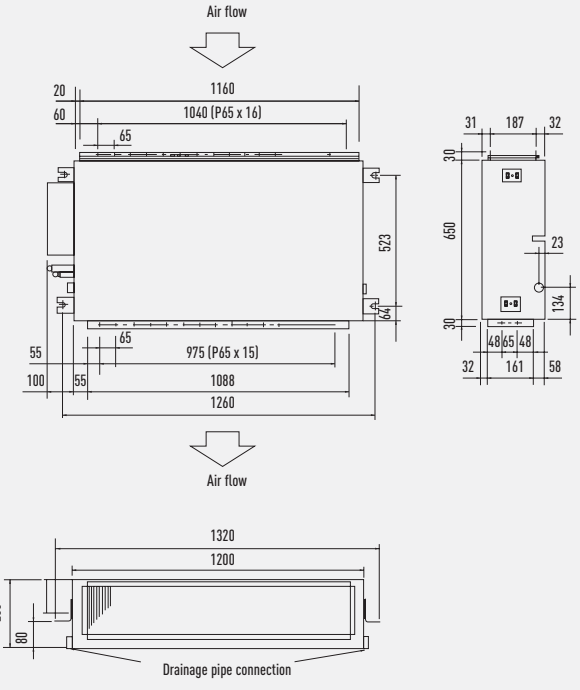
S-36PN1E5A // S-45PN1E5A // S-50PN1E5A



S-60PN1E5A // S-71PN1E5A



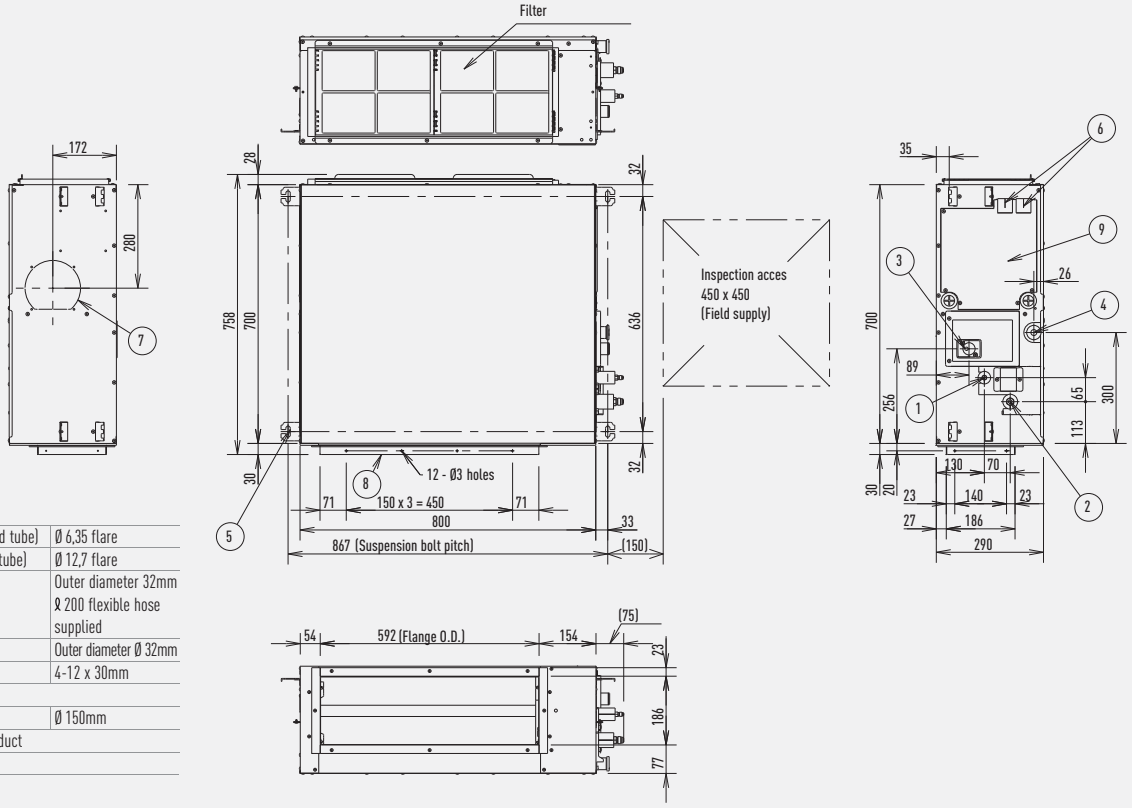
S-100PN1E5A // S-125PN1E5A // S-140PN1E5A



Dimensions: mm

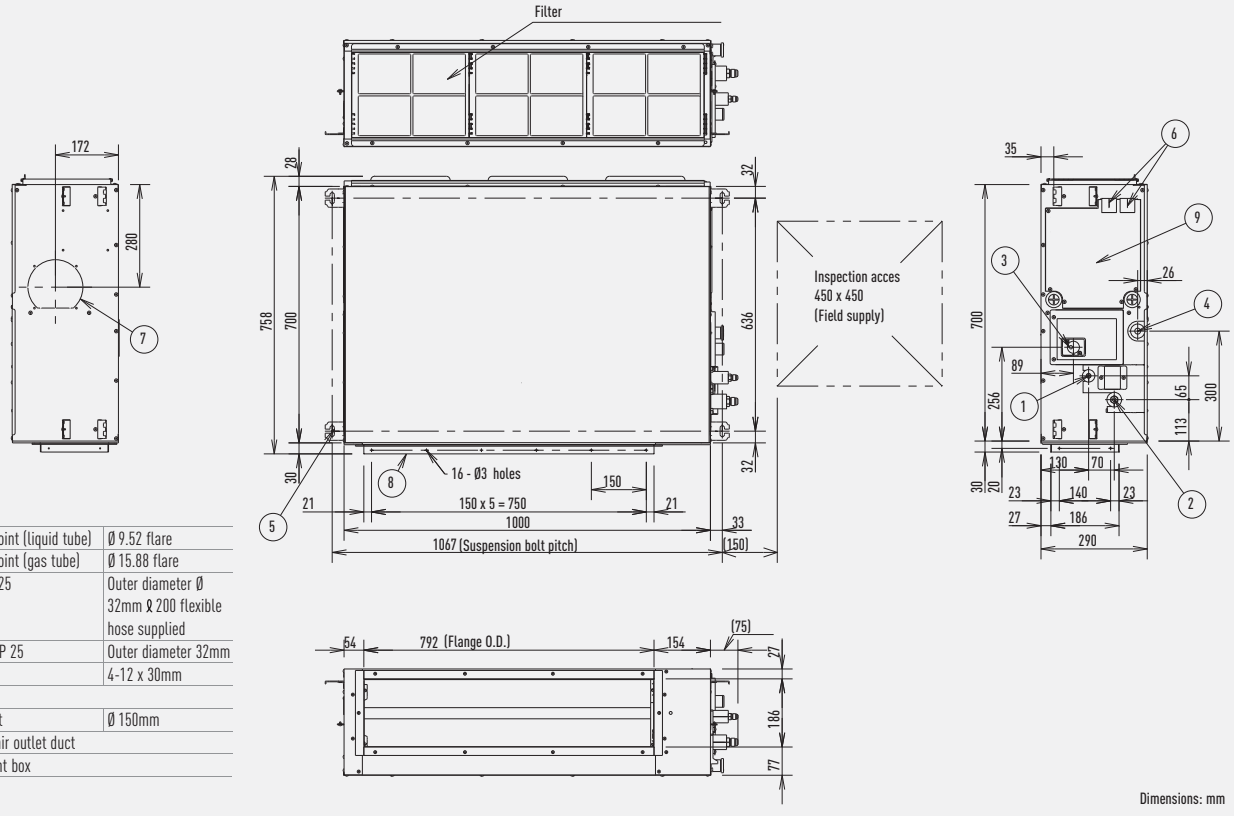
High Static Pressure Hide Away

S-36PF1E5A // S-45PF1E5A // S-50PF1E5A



1	Refrigerant tubing joint (liquid tube)	Ø 6,35 flare
2	Refrigerant tubing joint (gas tube)	Ø 12,7 flare
3	Upper drain port VP25	Outer diameter 32mm ℓ 200 flexible hose supplied
4	Bottom drain port VP 25	Outer diameter Ø 32mm
5	Suspension lug	4-12 x 30mm
6	Power supply outlet	
7	Fresh air intake port	Ø 150mm
8	Flange for flexible air outlet duct	
9	Electrical component box	

S-60PF1E5A // S-71PF1E5A

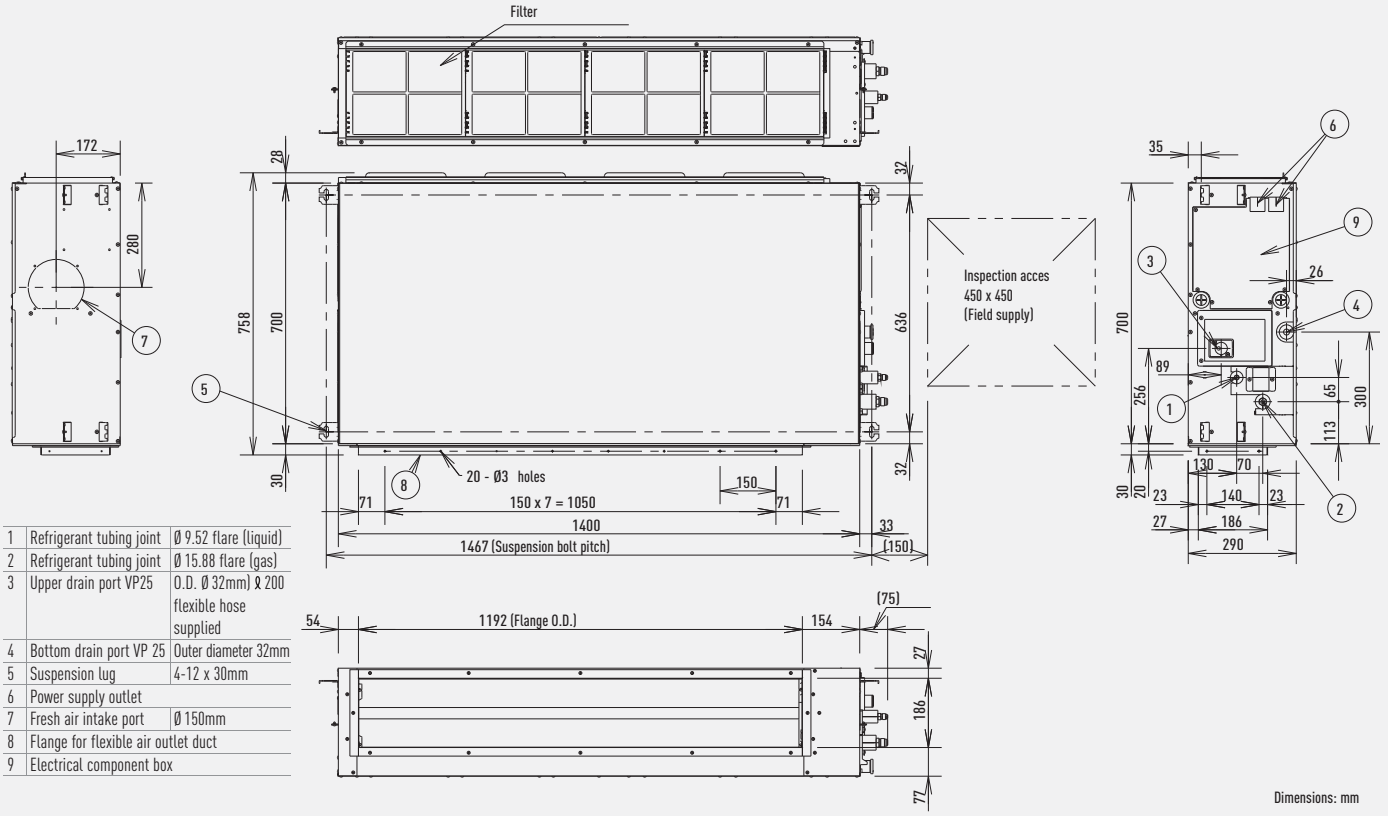


1	Refrigerant tubing joint (liquid tube)	Ø 9.52 flare
2	Refrigerant tubing joint (gas tube)	Ø 15.88 flare
3	Upper drain port VP25	Outer diameter Ø 32mm ℓ 200 flexible hose supplied
4	Bottom drain port VP 25	Outer diameter 32mm
5	Suspension lug	4-12 x 30mm
6	Power supply outlet	
7	Fresh air intake port	Ø 150mm
8	Flange for flexible air outlet duct	
9	Electrical component box	

Dimensions: mm

High Static Pressure Hide Away (Cont.)

S-100PF1E5A // S-125PF1E5A // S-140PF1E5A



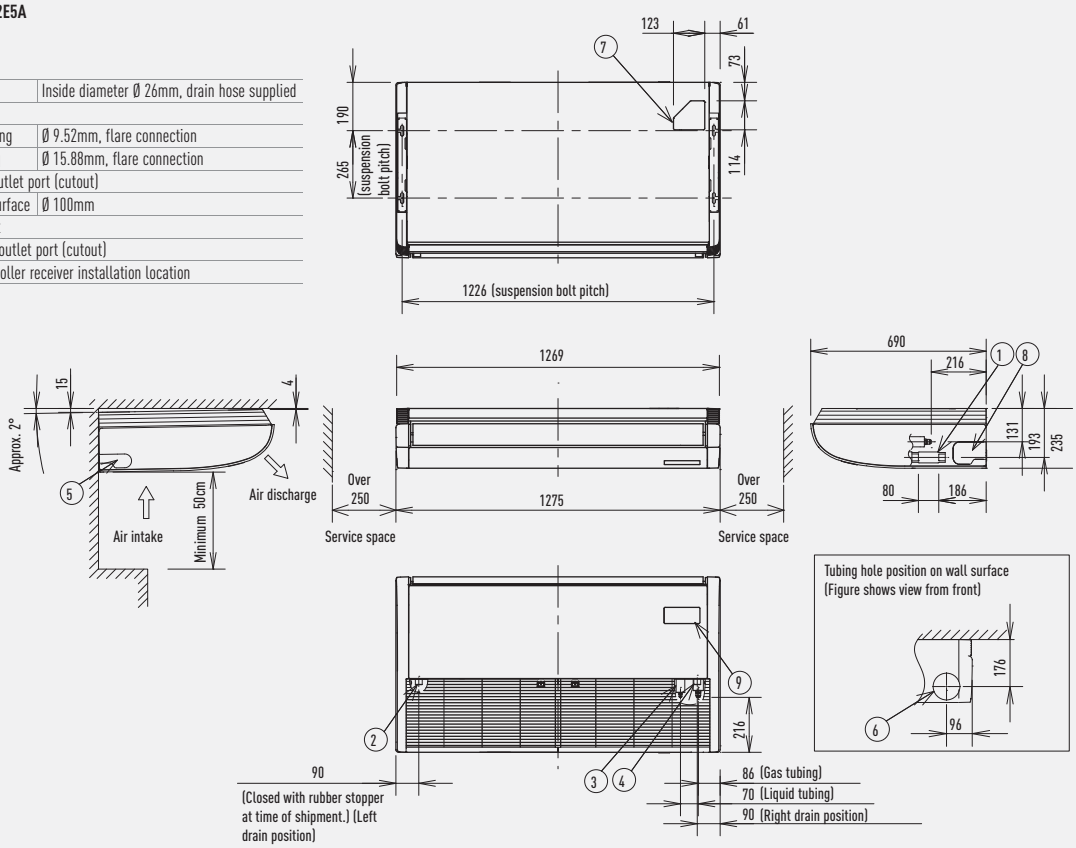
1	Refrigerant tubing joint	Ø 9.52 flare (liquid)
2	Refrigerant tubing joint	Ø 15.88 flare (gas)
3	Upper drain port VP25	O.D. Ø 32mm) ℓ 200 flexible hose supplied
4	Bottom drain port VP 25	Outer diameter 32mm
5	Suspension lug	4-12 x 30mm
6	Power supply outlet	
7	Fresh air intake port	Ø 150mm
8	Flange for flexible air outlet duct	
9	Electrical component box	

Dimensions: mm

Ceiling

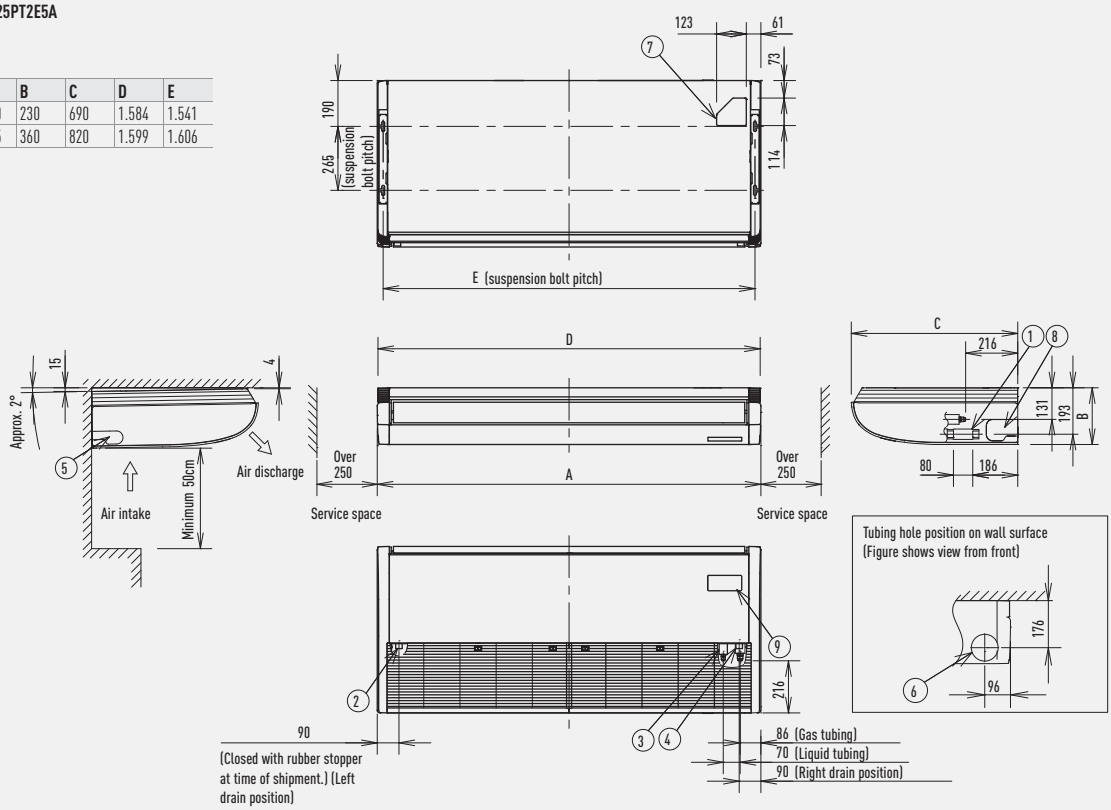
S-60PT2E5A // S-71PT2E5A

1	Drain port VP20	Inside diameter Ø 26mm, drain hose supplied
2	Left drain position	
3	Refrigerant liquid tubing	Ø 9.52mm, flare connection
4	Refrigerant gas tubing	Ø 15.88mm, flare connection
5	Left side drain hose outlet port (cutout)	
6	Tubing hole on wall surface	Ø 100mm
7	Upper side tubing port	
8	Right side drain hose outlet port (cutout)	
9	Wireless remote controller receiver installation location	



S-100PT2E5A // S-125PT2E5A

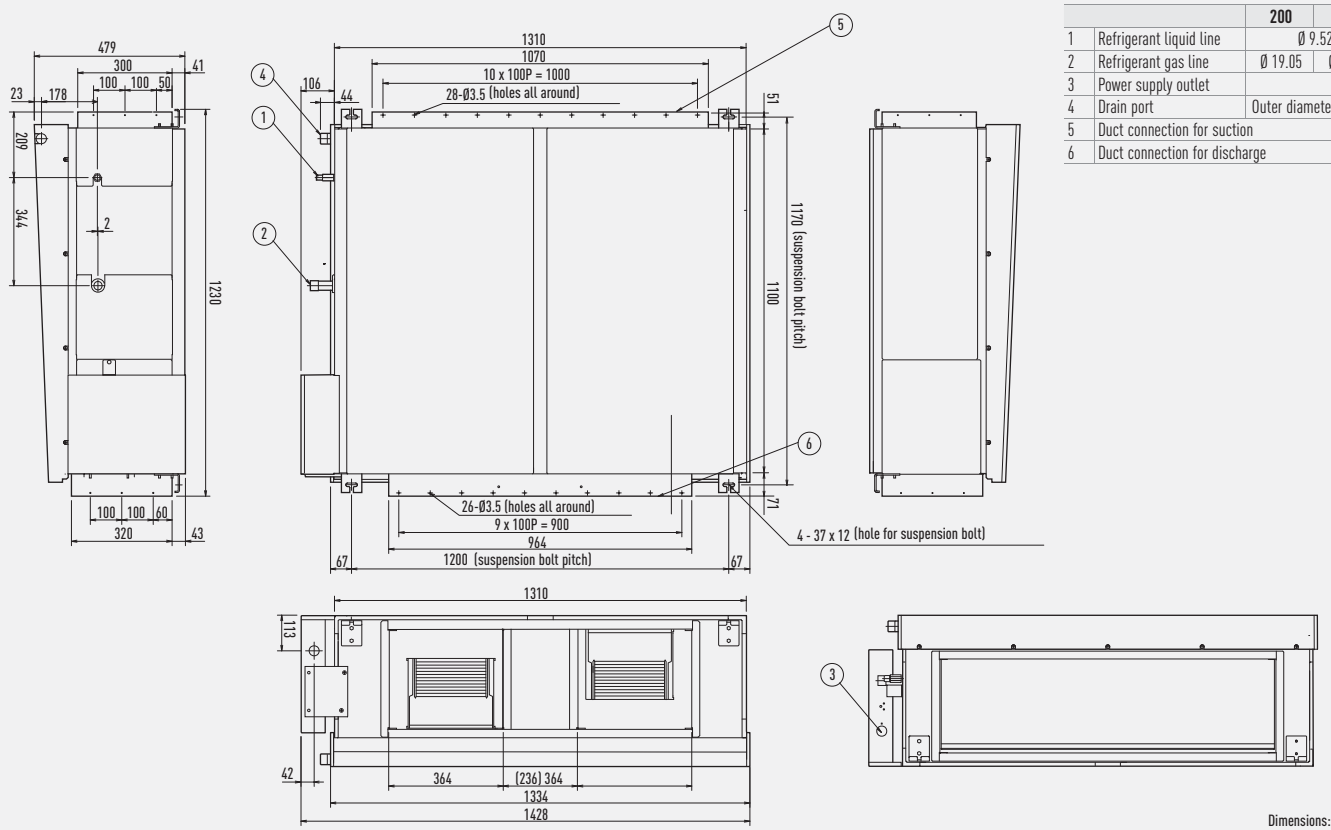
	A	B	C	D	E
100-125 type	1.590	230	690	1.584	1.541
140 type	1.655	360	820	1.599	1.606



Dimensions: mm

PACi Standard and Elite dimensions

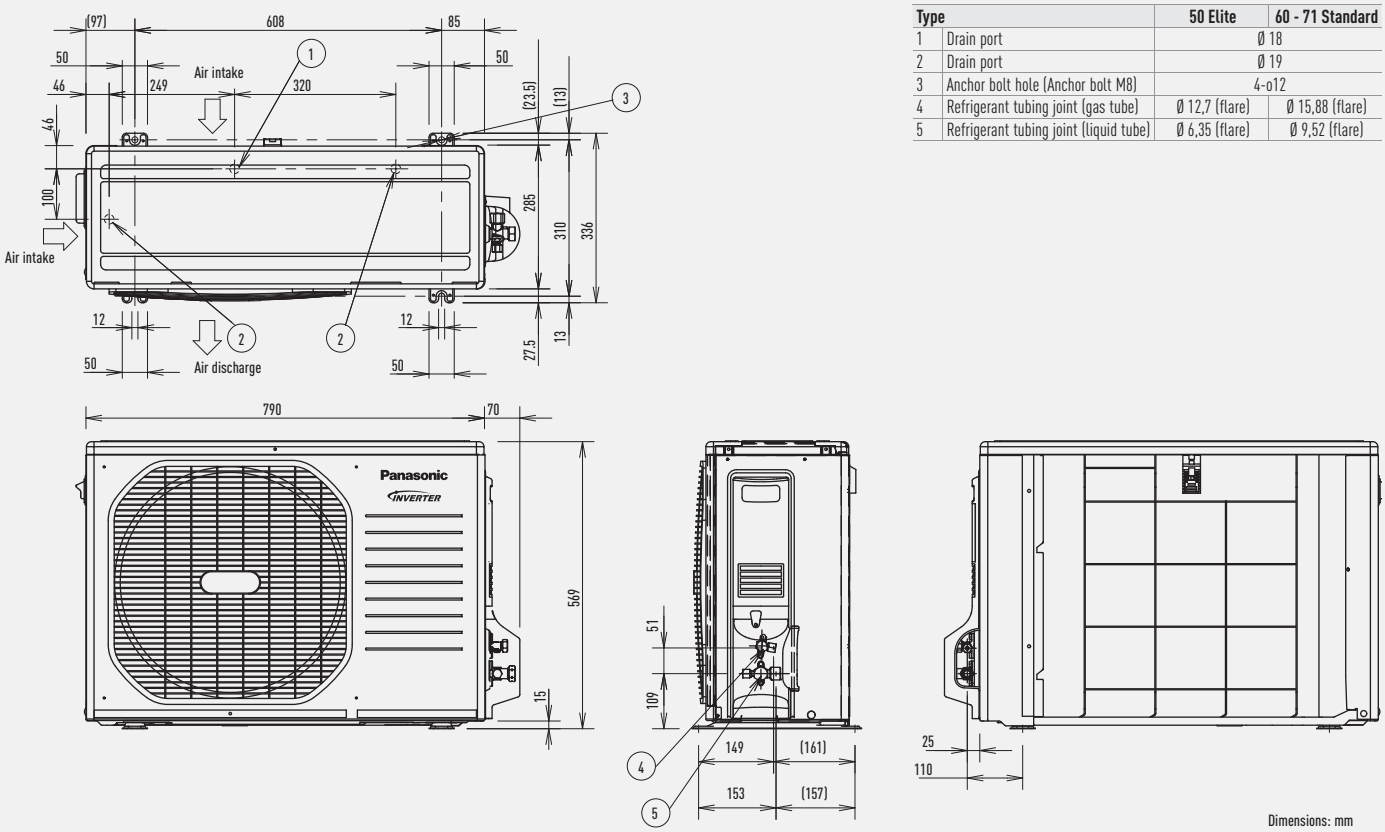
High Static Pressure Hide Away 20,0-25,0 kW



		200	250
1	Refrigerant liquid line	Ø 9.52	
2	Refrigerant gas line	Ø 19.05	Ø 22.22
3	Power supply outlet		
4	Drain port	Outer diameter 32 mm	
5	Duct connection for suction		
6	Duct connection for discharge		

Dimensions: mm

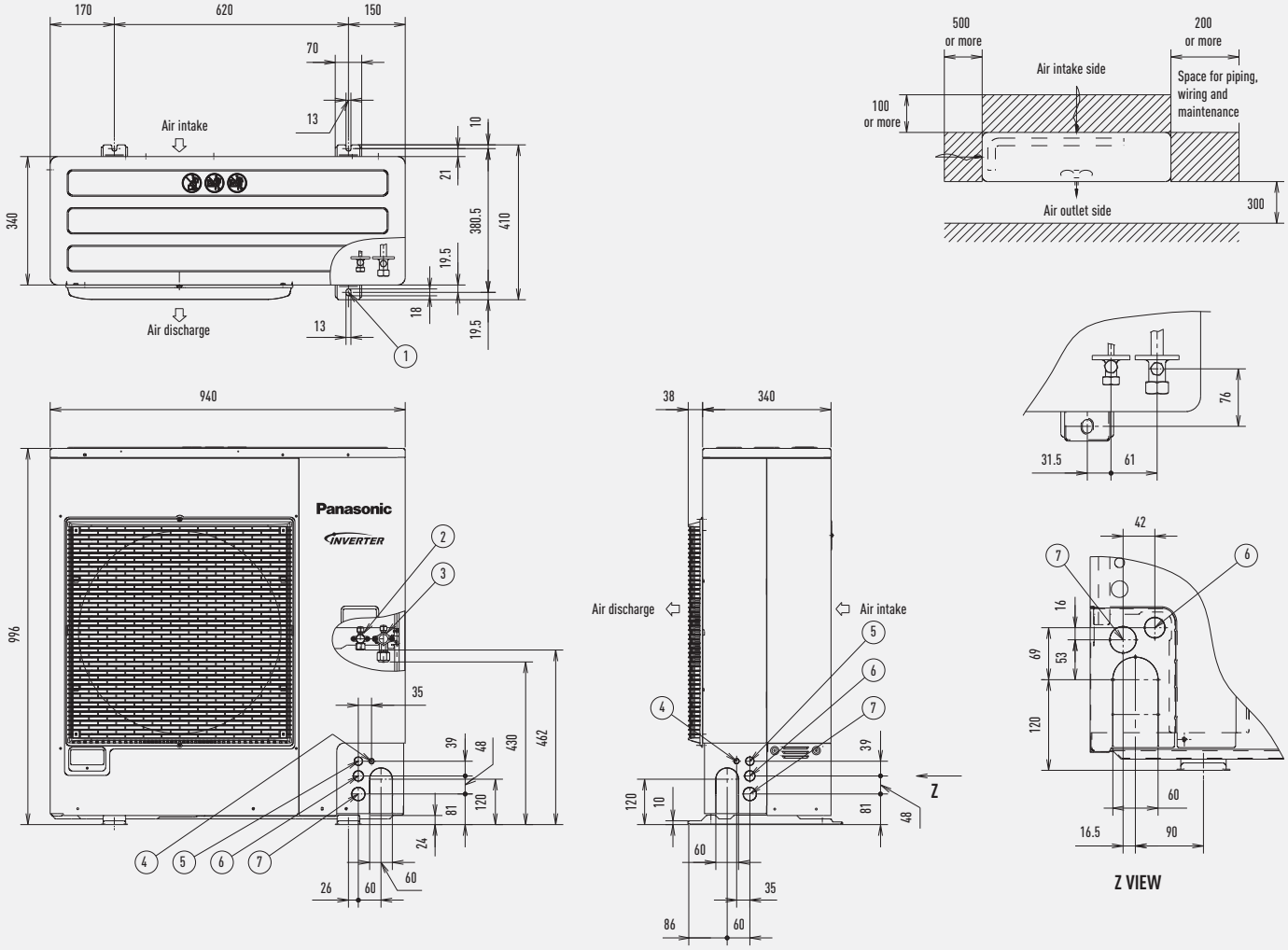
Outdoor Unit PACi Standard 6,0 and 7,1 kW and PACi Elite 5,0 kW



Type		50 Elite	60 - 71 Standard
1	Drain port	Ø 18	
2	Drain port	Ø 19	
3	Anchor bolt hole (Anchor bolt M8)	4-o12	
4	Refrigerant tubing joint (gas tube)	Ø 12,7 (flare)	Ø 15,88 (flare)
5	Refrigerant tubing joint (liquid tube)	Ø 6,35 (flare)	Ø 9,52 (flare)

Dimensions: mm

Outdoor unit PACi Standard 10,0 and 12,5 kW and PACi Elite 6,0 and 7,1 kW

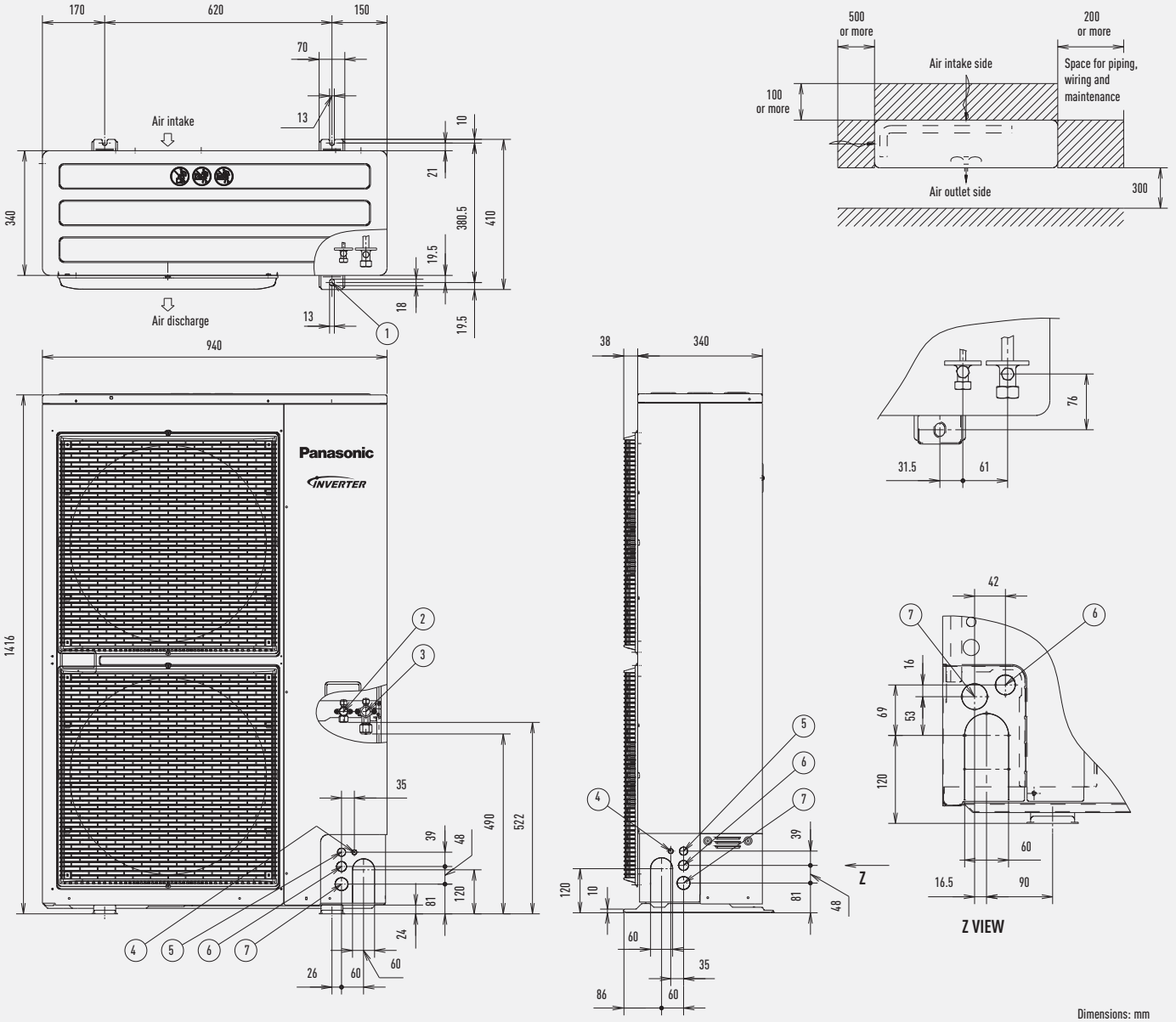


Dimensions: mm

1	Mounting hole (4-R6.5), anchor bolt	M10
2	Refrigerant piping (liquid pipe)	Ø 9,52 (flared)
3	Refrigerant piping (gas pipe)	Ø 15,88 (flared)
4	Electrical wiring port	Ø 13
5	Electrical wiring port	Ø 22
6	Electrical wiring port	Ø 27
7	Electrical wiring port	Ø 35

PACi Standard and Elite dimensions

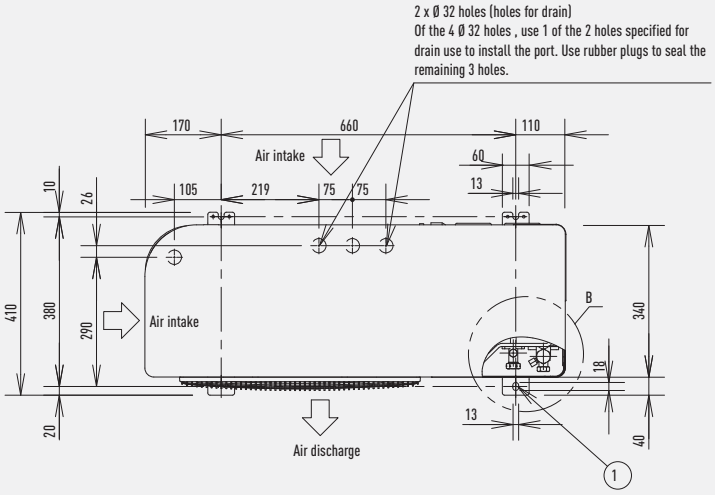
Outdoor unit PACi Standard 14,0 kW and PACi Elite from 10,0 to 14,0 kW



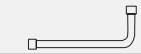
Dimensions: mm

1	Mounting hole (4-R6.5), anchor bolt	M10
2	Refrigerant piping (liquid pipe)	Ø 9,52 (flared)
3	Refrigerant piping (gas pipe)	Ø 15,88 (flared)
4	Electrical wiring port	Ø 13
5	Electrical wiring port	Ø 22
6	Electrical wiring port	Ø 27
7	Electrical wiring port	Ø 35

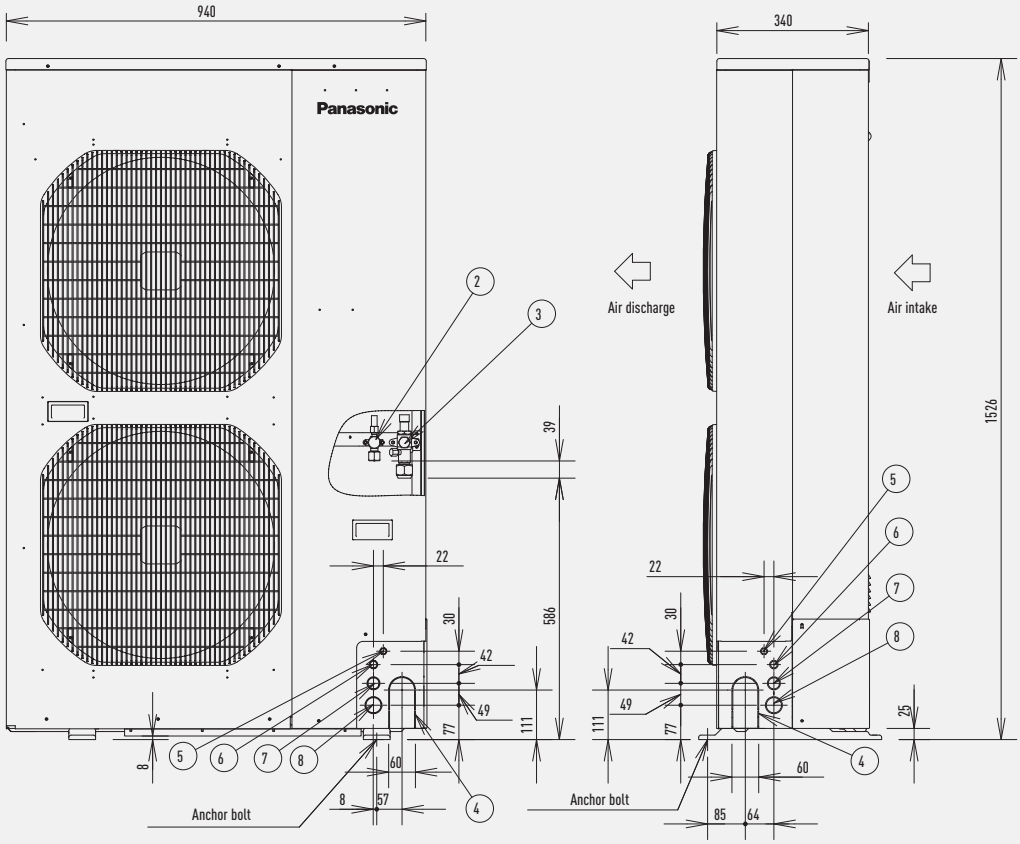
Outdoor unit Big PACi Elite 20,0 and 25,0 kW

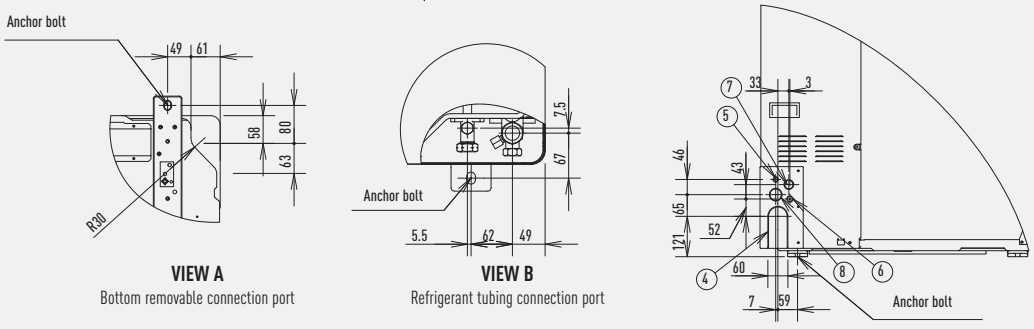


Type		20	25
1	Mounting hole (4-R6.5), anchor bolt	M10	
2	Refrigerant tubing (liquid tube)	Ø 9,52 (flared)	Ø 12,7 (flared)
3	Refrigerant tubing (gas tube)	Ø 19.05 (flared)	
4	Refrigerant tubing port		
5	Electrical wiring port	Ø 16	
6	Electrical wiring port	Ø 19	
7	Electrical wiring port	Ø 29	
8	Electrical wiring port	Ø 38	

Name	Figure	Q'ty
Reducing Joint Tube (Ø 19.05 ➡ Ø 25.4)		1
Joint Tube (Ø 19.05)		1

Remark: There are two types of supplied tubings. The one tubing port Ø 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 (Ø 25.4).





Dimensions: mm

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Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of the other refrigerant.

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