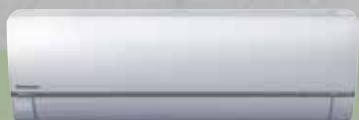


# Panasonic

SMART • NANO-E-G • POWERFUL • QUIET • nano-e-g • ECONAVI

NEW DOMESTIC  
RANGE  
MORE EFFICIENCY  
MORE SAVINGS

2013 / 2014



NEW DOMESTIC AIR TO AIR HEAT PUMP 2013 / 2014



# WELCOME TO NEW DOMESTIC RANGE

**Panasonic has developed a range of products designed for you, better than ever before.**

With its innovative design, high efficiency and incomparable purification system, the Etherea range has been designed with your clients in mind. Above all, it is also a range for air conditioning professionals, such as yourself, thanks to its broad range of products which are capable of conditioning rooms of all sizes – always with optimal efficiency and incomparable ease of installation. The Etherea range guarantees that you are offering your clients the very best.



product design award

### Panasonic Air Conditioning System Wins Prestigious Design Award

Panasonic is pleased to announce that its Etherea air conditioning system has won an iF 2013 Product Design Award.

The iF Product Design Awards are among the most important awards for product design excellence. With strict a criterion that judges everything from cosmetic appearance, functionality, through to the environmental impact of the product, awards are only given to those products that demonstrate their innovative design.

Winning the award thanks to its highly intelligent functionality, the Panasonic Etherea is the ideal air-conditioning system for domestic and other localised installations. The unit makes use of multiple sensors, which measure the room's temperature, humidity, as well as detecting human presence.

2013



### Go green. Go clean. Go your way

Panasonic Air Conditioners are designed to provide more than just cooling comfort to homes. They save energy. They purify your surroundings. They adjust cooling power to suit your living spaces and styles. Living an eco-lifestyle your way is now easier than ever.

## HEALTHY AIR ENERGY SAVING

**Air purifier**  
99% removal  
bacteria-virus-mold  
nanoe-G

**Perfect humidity control**  
MILD DRY

**A class energy saving**  
INVERTER+

**6.6 A++ SEER\***  
SEASONAL ENERGY EFFICIENCY RATIO

**4.0 A+ SCOP\***  
SEASONAL COEFFICIENT OF PERFORMANCE

**Up to 38% energy savings (cooling)**  
ECONAVI

**Improved comfort**  
AUTOCOMFORT

**Silent air 20 dB**  
SUPER QUIET

**Easy control by BMS**  
CONNECTIVITY

**Internet Control Ready**  
INTERNET CONTROL

**5 year compressor warranty**

Feature Explanations on page 16.



ISO 9000 Series Certification  
CERTIFIED TO MS ISO 9002:1994  
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAAM)  
(Formerly know as Matsushita Industrial Corp. Sdn. Bhd.)  
Registration No. AIR 0966



Environment Management Systems Approval Certificate  
CERTIFIED TO MS ISO 14001:1997  
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAAM)  
(Formerly know as Matsushita Industrial Corp. Sdn. Bhd.)  
Certification No.: M015802127

NEW

DOMESTIC



Discover the waste to discover energy savings

When you are relaxing while watching television, the air conditioner's operation usually runs at a constant temperature setting. **Econavi detects and reduces this waste in all the right ways** Using high-tech sensors and precise control programs, it analyses room conditions and adjusts cooling power accordingly. It is smart enough to locate and operate in all the right places to give you better energy savings.



## 5 Features saving energy all at once

### Econavi with intelligent eco sensors Econavi

Intelligent Sensors detect potential waste of energy using the Human Activity Sensor and Sunlight Sensor. It is able to monitor human location, movements, absence and sunlight intensity. It then automatically adjusts cooling power to save energy efficiently with uninterrupted cooling comfort and convenience.



#### New Temperature Wave

Rhythmic temperature-controlled pattern to save energy without sacrificing comfort.



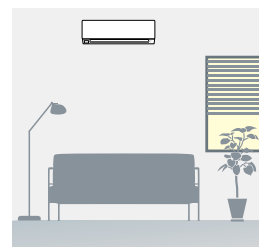
#### Area Search

Directs airflow to wherever you are in the room. Econavi detects changes in human movements and reduces the waste of cooling the unoccupied area of the room.



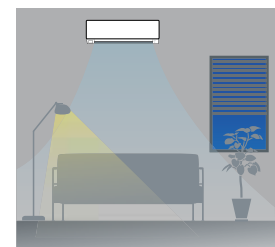
#### Activity Detection

Adapts cooling power to your daily activities. Econavi detects changes in activity levels and reduces the waste of cooling with unnecessary power.



#### Absence Detection

Reduces cooling power when you are not around. Econavi detects human absence in the room and reduces the waste of cooling an empty room.



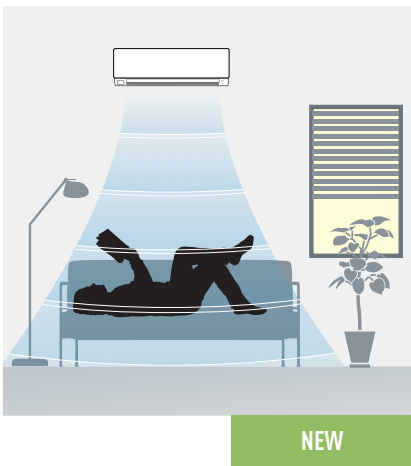
#### Sunlight Detection

Adjusts cooling power to changes in sunlight intensity.

### So Much Saved with So Little Effort - Up to 38% energy savings for Inverter cooling model with temperature wave

Comparison of 1.5HP Inverter model between Econavi with (Dual Human Activity Sensor, Sunlight Sensor, and Temperature Wave) ON and Econavi OFF (Cooling)  
 Econavi ON, Outside temperature: 35°C/24°C  
 Remote setting temperature: 23°C with Fan Speed (High)  
 Vertical Airflow direction: Auto, Horizontal Airflow direction: Econavi Mode  
 Setting temperature goes up 2°C in total, 1°C controlled by Econavi activity level detection and another 1°C controlled by Econavi light intensity detection.

Temperature Wave is ON, electric heater (300 W; simulating the heat of human and TV etc)  
 Econavi OFF, Outside temperature: 35°C/24°C  
 Remote setting temperature: 23°C with Fan Speed (High)  
 Vertical Airflow direction: Auto, Horizontal Airflow direction: Front  
 Total power consumption amount are measured for 2 hours in stable condition. At Panasonic Amenity Room (size: 16.6m<sup>2</sup>).  
 This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.



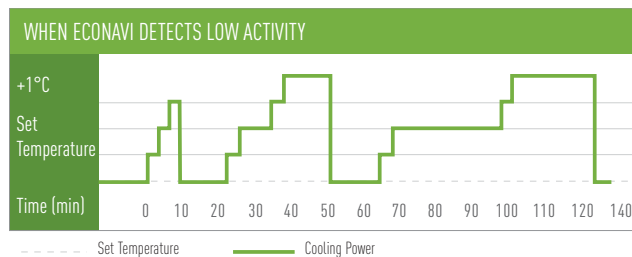
## New temperature wave

**Rhythmic temperature-controlled pattern to save energy without sacrificing comfort.**

New Econavi with Temperature Wave was developed based on an understanding in Thermal Physiology; human body adapts physiologically to changes in temperature. Taking advantage of this understanding in Thermal Physiology, Panasonic Research and Development Centre developed Rhythmic Temperature Control pattern which would offset thermal physiological response.

Hence, when Econavi detects human presence and low activity level, Temperature Wave adapts to this rhythmic temperature control to realise further energy saving without sacrificing comfort.

### How does temperature wave works?



Offset Thermal Physiological Response	
Average Room Temperature (Degree Celcius)	
Rhythmic	Moderate temperature increase
Result :	More Energy Saving
Thermal Sensation Votes (Mean Votes)	
Rhythmic	- 0.1
Result :	Maintain within the comfortable range *

The result of the experiment showed that thermal sensation was maintained within the comfortable range\* even though average set temperature was moderately increased. Hence, when ECONAVI detects human presence and low activity level, Temperature Wave adapts to this rhythmic temperature control to realise further energy saving without sacrificing comfort.

\*The thermal condition of which PMV (Predicted Mean Value) is within -0.5 to +0.5 is recommended as comfortable condition (in the condition B) by International Standard EN ISO 7730.

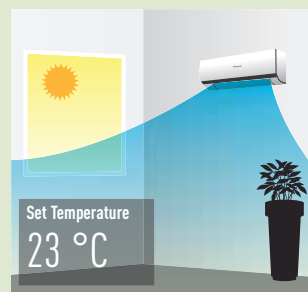
## Econavi sunlight sensor

### New Sunlight Detection (on Cooling Mode)

Econavi detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night. It reduces waste energy by reducing cooling under less sunny conditions.

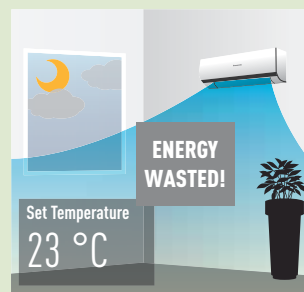
When weather changes from sunny to cloudy/night, Econavi detects less sunlight intensity and determines less cooling power is required. If cooling power remains the same, energy will be wasted. Econavi detects this waste and reduces cooling power by an amount equivalent to increasing the set temperature by 1 °C.

#### Sunny



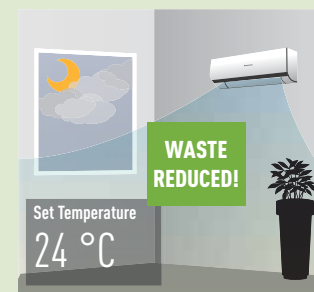
Econavi is switched on when it is sunny.

#### Detect



Econavi detects less cooling power is required.

#### Reduce waste



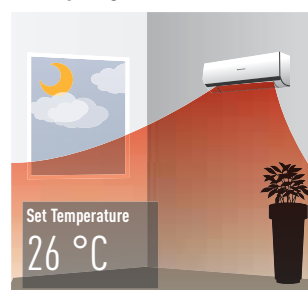
Reduces cooling power by an amount equivalent to increasing the set temperature by 1 °C.

### New Sunlight Detection (on Heating Mode)

Econavi detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night. It reduces the wasted of heating under more sunnier conditions.

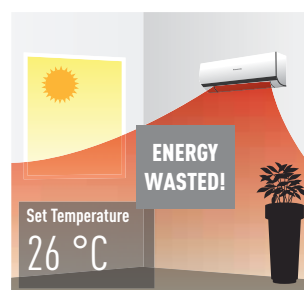
When weather changes from cloudy/night to sunny, Econavi detects more sunlight intensity and determines less heating power is required. If heating power remains the same, energy will be wasted. Econavi detects this waste and reduces heating power by an amount equivalent to decreasing the set temperature by 1 °C.

#### Cloudy/Night.



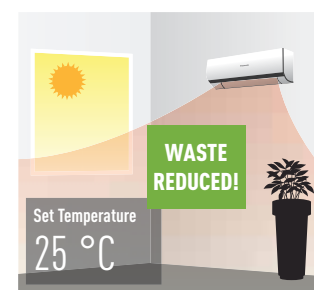
Econavi is switched on when it is cloudy/night.

#### Detect



Econavi detects less heating power is required.

#### Reduce waste



Reduces heating power by an amount equivalent to decreasing the set temperature by 1 °C.



## Econavi intelligent sensors

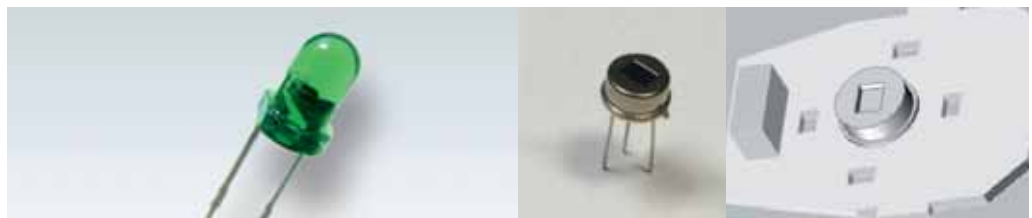
Econavi Intelligent Sensors are able to monitor sunlight intensity, human movements, activity levels and human absence to detect unconscious waste of energy and automatically adjusts cooling power to save energy efficiently with uninterrupted cooling comfort and convenience.

### Sunlight Sensor

Detects changes in Sunlight Intensity

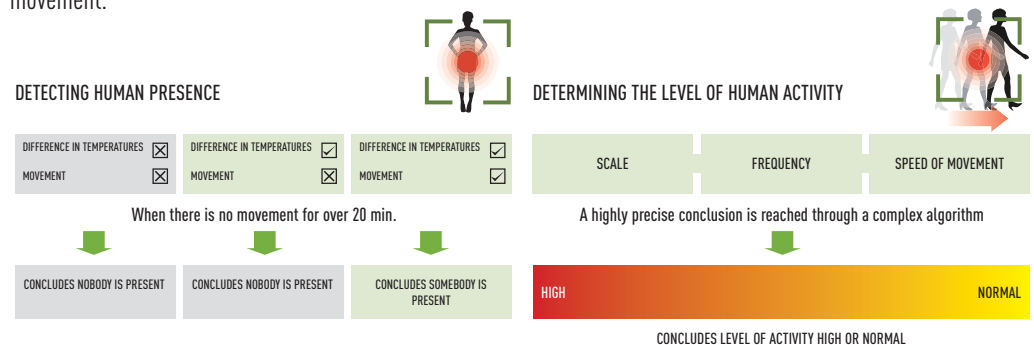
### Human Activity Sensor

Detects human movements, changes in activity levels and human absence.



### High-precision sensing

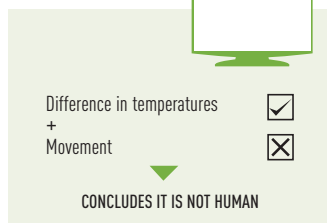
All objects emit infrared rays which, although invisible, can be detected as heat by Econavi's Human Activity Sensor if it is within the detection zone. When an object moves within its detection zone, Econavi compares the object's temperature with the room temperature to determine if it is human, and level of activity based on its movement.



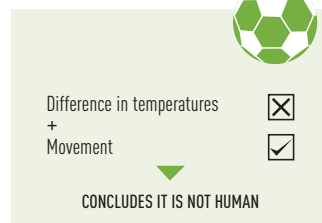
### Differentiating objects

Econavi's sensor technology uses factors such as speed, frequency and temperature of every object to determine if it is human.

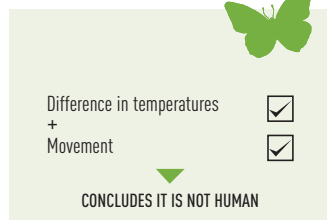
#### ELECTRICAL PRODUCTS



#### A ROLLING BALL

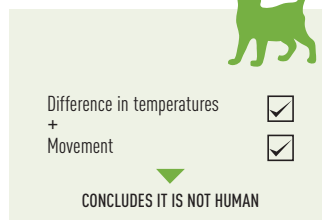


#### SMALL INSECTS



Both changes may be detected, but they are too small to have any effect on the sensor.

#### PETS

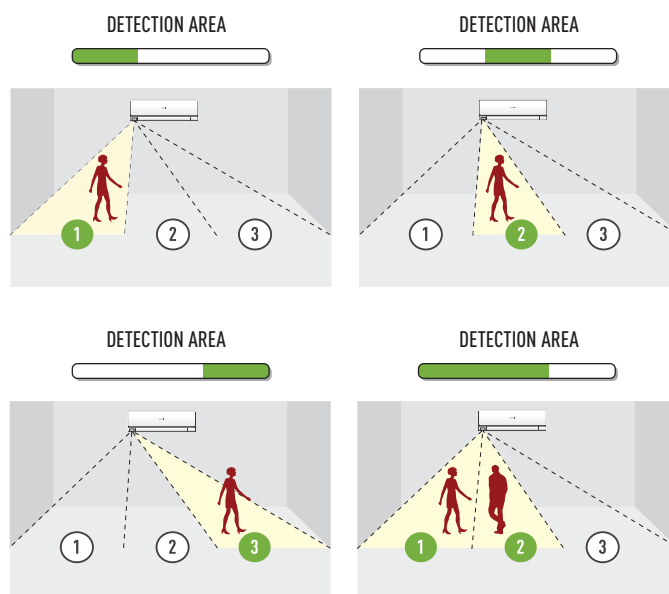


From the difference in temperatures and the nature of the object's movement, Econavi can determine if it's human\*.

\*The sensor may deem pets as humans, unless it moves within the detection zone at speeds that are not humanly possible.

### Sensor detection principle

Human Activity Sensor detects human activity level and directs airflow to occupied or high activity zone. Led indicators indicating Econavi is detecting and functioning.

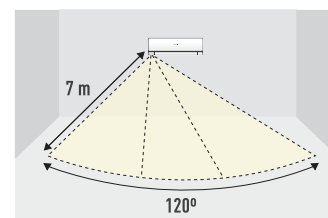


When detecting any change in movements, there will be a time delay between the LED indicator lighting up and a change of airflow direction. This is to avoid over-sensitive lower movements which will not contribute to energy savings.

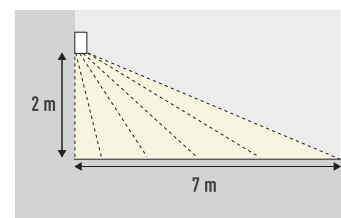
### Coverage capabilities

Human Activity Sensor covers a wider area due to its improved area detection function. The entire room is divided into 3 detection areas. Applicable for dual sensor.

#### HORIZONTAL SENSING AREA



#### VERTICAL SENSING AREA



### Autocomfort dual sensor provides comfort

Autocomfort dual sensor is used to provide comfort. High Activity Detection detects when the level of activity increases, and automatically increases cooling power by an amount equivalent to decreasing the set temperature by 1 °C to improve comfort.

This is explained in the following scenario: High Activity Detection: Econavi High Activity Detection can detect changes in activity levels to adjust cooling power to improve comfort.

#### DETECT



Level of activity increased. Detects high activity.

#### IMPROVE COMFORT



Increases cooling power by an amount equivalent to decreasing the set temperature by 1 °C.

2. AIRBORNE

Removes 99%<sup>\*1</sup> bacteria, viruses and mould in the air.

3. IN-FILTER DEACTIVATION

Deactivates 99%<sup>\*1</sup> bacteria and viruses trapped in the filter.

NEW

Nano-e catches micro-organisms.

Natural Ion Wind spreads Nano-e fine particles that are released from the Nano-e generator.

3 trillion\* Nano-e fine particles released from the generator.

1. ADHESIVE

Deactivates 99%<sup>\*4</sup> bacteria, viruses and inhibits mould growth on surfaces.

**Air purifier**  
99% removal  
bacteria · virus · mold






Remark: \* 3 trillion is the simulated number of Nano-e fine particles under the mentioned conditions. Actual measured Nano-e fine particles at the centre of the room (13m<sup>2</sup>):100k/cc calculated number of Nano-e fine particles in the entire room assuming they are evenly distributed.

## Purifies the air, surfaces and even inside itself

Now you can purify living spaces more effectively with Nano-e. Using nano-technology fine particles, harmful micro-organisms are removed from the air you breathe. But what about the ones found on furniture and other surfaces? Amazingly, they can also be deactivated by these particles. And now, when you switch off your air conditioner, Nano-e will even deactivate the micro-organisms in the filter. So you can enjoy complete peace-of-mind with a living environment that is fresher and cleaner.

### New Nano-e with In-filter Deactivation. Advanced air purification system for your home

Panasonic introduces an air purification system that captures harmful micro-organisms from the air, deactivates those trapped on surfaces and in the filter as well. It utilises nano-technology fine particles to purify the air and clean harmful micro-organisms attached onto fabrics in the room. And this year, it comes with a brand new feature that deactivates bacteria and viruses trapped in the filter. Thus, giving you the complete air purification system so you come home to a cleaner living environment.

	1. ADHESIVE	2. AIRBORNE	3. NEW IN-FILTER DEACTIVATION
Bacteria 	99% Deactivation	99% Removal	99% Deactivation
Viruses 	99% Deactivation	99% Removal	99% Deactivation
Mould 	Growth Inhibition	99% Removal	—

## How does new in-filter deactivation work?

NEW

### 1. Power "Off"



The air-conditioner first has to be turned off.  
Remark: Main power must be switched on for the entire duration.

### 2. Fan Operation



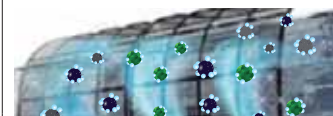
The fan operation will run automatically for 30 minutes with the louver slightly open to ensure the internal components are dry and free from condensation.  
Remark: The 30-minute fan operation is only applicable when the unit has been operated in COOL / DRY mode.  
Fan Operation: On  
Louver: Low Louver Angle  
Nano-e LED: On

### 3. Nano-e Operation



Natural Ion Wind spreads Nano-e particles that are released from the Nano-e generator.  
Fan Operation: Off  
Louver: Closed  
Nano-e LED: On

### 4. Deactivation Effect



Nano-e deactivates bacteria and viruses that are trapped in the filter within 2 hours.  
Fan Operation: Off  
Louver: Closed  
Nano-e LED: On



Control your air conditioning from wherever you are at home. Control your comfort and efficiency with the lowest energy consumption

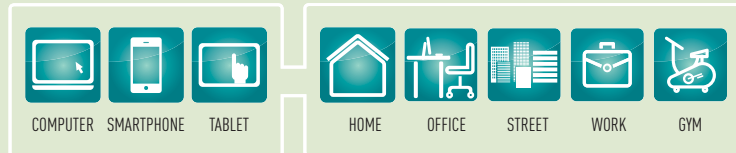


Modbus®



Take control from wherever you are!

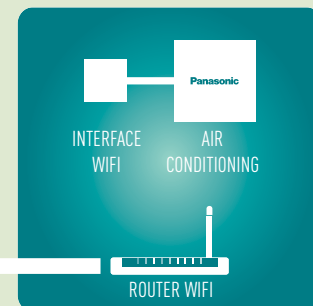
NEW



NEW  
WITH  
**ETHEREA PKE**  
ENERGY CONSUMPTION  
DISPLAY

INTERNET  
service in the cloud\*

Home or Office



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

### 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.

Your existing WiFi connection does the rest when you are at home. Start the App from your smartphone device, your tablet or your computer, and enjoy a new experience in comfort. And if you are out of home, just launch the App, and manage the air conditioning of your home from the cloud. 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 at home.

Internet Control can be downloaded in Apple's AppStore and Android's PlayStore.

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

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



#### Study Case. James, architect

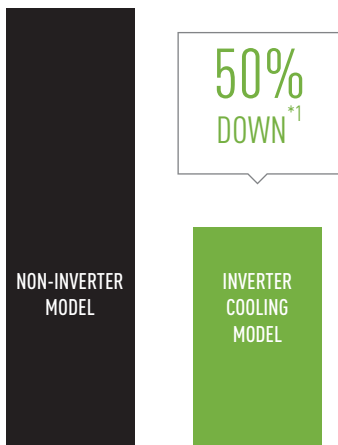
"As an architect, I'm proud of my home. Unfortunately, the pace of my life revolves around airports on all five continents. Because of this, whenever I get the chance to enjoy even just a few days at home, I programme my Panasonic Multi Split System to my tablet and from wherever I happen to be, I can enjoy the comforts that the system gives me from the minute I arrive home."



A class energy saving  
**INVERTER+**

## INVERTER

### ELECTRICITY CONSUMPTION COMPARISON



#### DURING COOLING UP TO 50%\*1 ENERGY SAVINGS

\*1 Comparison of 1.5HP Inverter model and 1.5HP Non-Inverter model (Cooling) Outside temperature: 35°C/24°C, Remote setting temperature: 25°C with Fan speed (High) Vertical Airflow direction: Auto, Horizontal Airflow direction: Front. Total power consumption amount are measured for 8 hours from starting. At Panasonic Amenity Room (size: 16.6m<sup>2</sup>) This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.

## Inverter technology. The secret to its ability is flexibility

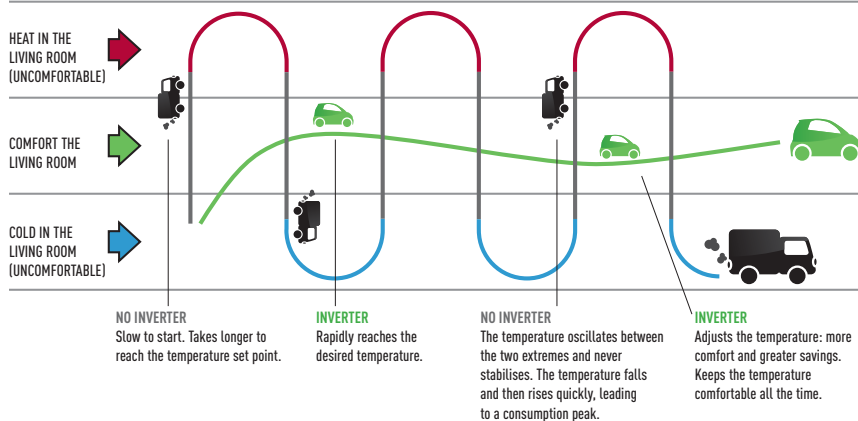
Panasonic Inverter air conditioners have the flexibility to vary the rotation speed of the compressor. This allows it to use less energy to maintain the set temperature while also being able to cool the room quicker at start up.

So you can enjoy better savings on your electricity bills while maintaining cooling comfort

### Exceptional energy-saving performance. Reduces Electricity Consumption

Panasonic Inverter air conditioners are designed to give you exceptional energy savings and performance, whilst also ensuring you stay comfortable at all times. At the start up of an air conditioner's operation, powerful operation is required to reach the set temperature. After the set temperature is reached, less power is required to maintain it. A conventional non-Inverter air conditioner can only operate at a constant speed which is too powerful to maintain the set temperature. Thus, in attempting to achieve this, it switches the compressor ON and OFF repeatedly. This results in wider temperature fluctuations leading to wasteful consumption of energy. The Panasonic Inverter air conditioner varies the rotation speed of the compressor. This provides a highly precise method of maintaining the set temperature. Unlike a conventional non-Inverter air conditioner which consumes a lot of energy, Panasonic Inverter air conditioner reduces wasteful operation - giving you energy savings of up to 50%\*1 on cooling mode.

### The advantages of inverter air conditioners. Comparing Inverter and non-Inverter air conditioners.



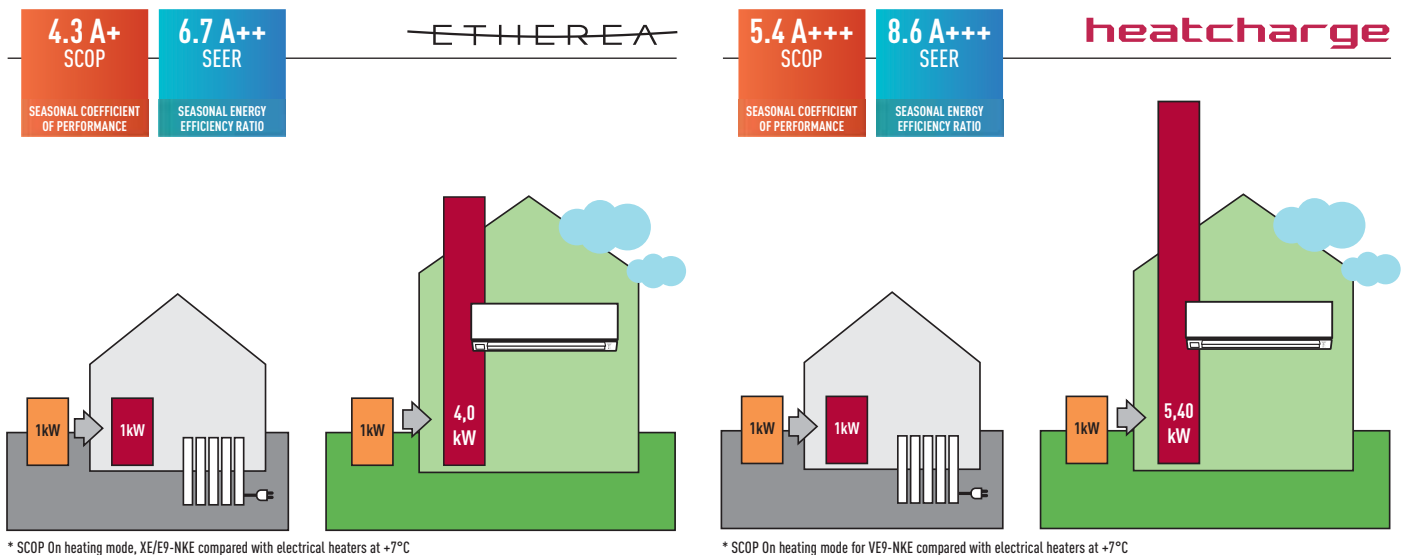
# SEASONAL EFFICIENCY

PRODUCT FOLLOWS THE NEW ECODSIGN REQUIREMENTS



## Economical, environment-friendly operation high SCOP (Seasonal Coefficient of Performance)

Original Panasonic Inverter technology and a high-performance compressor provide top-class operating efficiency. This lets you enjoy lower electricity bills while contributing to environmental protection.



\* SCOP On heating mode, XE/E9-NKE compared with electrical heaters at +7°C

\* SCOP On heating mode for VE9-NKE compared with electrical heaters at +7°C

## Seasonal Efficiency: New Energy Efficiency Label

From January 2013, the energy performance calculation for air conditioning systems will change from an overall EU based standard of EER and COP to a new standard based seasonal efficiencies of SEER and SCOP. These changes to the Energy Related Products Directive or ErP are designed to give consumers a better understanding of the real efficiency of air conditioning and heat pump systems whose nominal power rating does not exceed 12 Kw. Undergoing gradual implementation from 1 January 2013 until 1 January 2019, the schedule for each product category is as follows:

01 January 2013: A+++, A++, A+, A, B, C, D, E, F and G.

01 January 2015: A+++, A++, A+, A, B, C, D, E and F.

01 January 2017: A+++, A++, A+, A, B, C, D and E.

01 January 2019: A+++, A++, A+, A, B, C and D.

**Seasonal Energy Efficiency Ratio (SEER)** – This is the overall energy efficiency ratio of the unit, representative of the entire cooling season. It is calculated as the annual cooling demand divided by the annual consumption of electricity for cooling.

**Seasonal Coefficient of Performance (SCOP)** - This is the overall coefficient of performance of the unit, representative of the entire heating season designated (the value of SCOP corresponds to a determined heating season). It is calculated by dividing the reference annual heating demand by the annual consumption of electricity for heating.



<b>A+++</b>	SEER > 8.50
<b>A++</b>	6.10 · SEER < 7.00
<b>A+</b>	5.60 · SEER < 6.10
<b>A</b>	5.10 · SEER < 5.60
<b>B</b>	4.60 · SEER < 5.10
<b>C</b>	4.10 · SEER < 4.60
<b>D</b>	3.60 · SEER < 4.10
<b>E</b>	3.10 · SEER < 3.60
<b>F</b>	2.60 · SEER < 3.10
<b>G</b>	SEER · 2.60



<b>A+++</b>	SCOP > 5.10
<b>A++</b>	4.60 · SCOP < 5.10
<b>A+</b>	4.00 · SCOP < 4.60
<b>A</b>	3.40 · SCOP < 4.00
<b>B</b>	3.10 · SCOP < 3.40
<b>C</b>	2.80 · SCOP < 3.10
<b>D</b>	2.50 · SCOP < 2.80
<b>E</b>	2.20 · SCOP < 2.50
<b>F</b>	1.90 · SCOP < 2.20
<b>G</b>	SCOP · 1.90

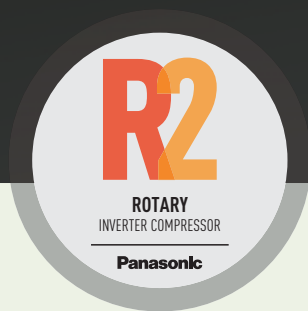
- Supplier's name or trademark
- Supplier's model identifier
- SEER and SCOP indication
- A-G scale
- Energy efficiency class(es)
- Rated capacity for cooling and heating in kW  
SCOP and SEER values, rounded up to one decimal  
Annual energy consumption in kWh/annum
- Noise emissions
- European map and colour squares
- Reference period

## New Panasonic R2 Rotary Compressor

Panasonic Rotary Compressors for Unitary Air Conditioning have been installed in the most demanding environments around the world. Designed to withstand extreme conditions, Panasonic Rotary delivers high-performance, efficiency and reliable service, no matter where you are.

Panasonic, the world's largest manufacturer of rotary compressors.

Making the world a cooler place since 1978.



## Why Panasonic R2 Rotatory Compressor is so efficient?

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

## R2 Compressor Value

### About R2 Compressor

Built upon 28 years of compressor design and production experience, R2 is the next generation of Rotary Compressors for residential central air conditioning. New technology improvements, enhanced materials and simple design ensure R2 compressors are reliable, efficient and quiet. R2 Compressor deliver quality, comfort and peace of mind homes around the world.

Panasonic's Rotary Compressors have been life tested in some of the world's most demanding environments. Proven for years in the the most demanding area of the world, the R2 design is the compressor of choice by contractors and homeowners in these challenging climates. For the performance homeowners demand, R2 Rotary Compressors are the best air conditioning engines for today's residential cooling solutions.

### Leading Technology

Used in over 80% of cooling solutions globally, rotary is the world's dominant residential air conditioning compression technology. Panasonic is the leading rotary and residential AC compressor manufacturer in the world, with over 200 million compressor produced.

### Benefits

Central air conditioning delivered with a Panasonic R2 Rotary Compressor ensures a superior level of comfort at an economical cost.

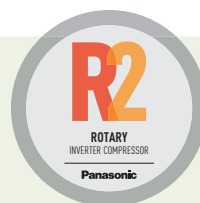


#### Vane - Long Life

The special Physical Vapor Deposition (PVD) coating applied to the Vane greatly enhances the durability and life of the compressor mechanism.

#### Piston - Durable

The piston is made of unique high-grade steel metallurgy that prevents wear and operation life.



## R2 Compressors:

- Higher efficiency
- Single and Dual Piston
- R-410A refrigerant
- Compact size

**R2 rotary compressors utilize rolling piston technology.**



The R2 compressor has been tested usefully in extreme conditions.



## FAQ

### How does a Panasonic Rotary unitary compressor work?

R2 compressors are rolling piston rotary compressors. The heart of the rotary compressor is the cylinder which houses the piston and the vane. The vane maintains constant contact with the piston as the piston rolls along the inside wall of the cylinder. As the piston rotates, gas is compressed into an increasingly smaller area until the discharge pressure is reached, releasing gas into the shell chamber. At the same time, more gas comes in through the suction port, enabling a continuous process of suction and discharge. The simple design and symmetry of the cylinder components, combined with a special coating and premium materials, provide a highly durable and reliable product, rotation after rotation.

### What SEER range do Panasonic unitary compressors support?

R2 compressors are in the latest technology air conditioning products with the highest efficiency products on the market today. Our R2 compressors are engineered specifically for this efficiency requirement, which combined with the inherent simple design of the rotary, results in a highly desirable and economical solution.

### What makes Panasonic's unitary compressor so reliable?

Changes to the construction and material of internal components enables the R2 compressor to reliably operate with an above average maximum discharge

pressure. A Physical Vapor Deposition (PVD) coating on the vane along with enhanced steel materials significantly reduces wear and increases durability.

### What makes Panasonic's unitary compressor so quiet?

The structure of the R2 compressor mechanism has been redesigned to increase stability and reduce vibration. Specifically, the compressor has an upper cylinder discharge, an enhanced fixed upper bearing, and reduced friction in the cylinder parts. The lower discharge and muffler in dual piston compressors also enables lower noise levels. As a result, this new design optimises efficiency and minimises noise.

### How do R2 rotary compressors compare to scroll and reciprocating compressors?







R2 rotary compressors are very similar to some scroll compressors in overall performance, including efficiency and reliability. The simple and symmetrical key components contribute to the R2 unitary compressor's reliability, light weight and compact size, and economical applied cost, without sacrificing the key performance requirements of high efficiency and low noise levels.





















### What refrigerants can be used with Panasonic unitary compressors?

Panasonic has R2 Rotary Compressors available for R410A applications.

## Domestic Air Conditioner Range

Indoor Units 1 X 1 and Multi split	2.2 kW	2.8 kW	3.2 kW
Wall Mounted VE Inverter+ Energy Charge System <b>NEW</b>		 KIT-VE9-NKE	 KIT-VE12-NKE
Wall Mounted Etherea Inverter+ Silver <b>NEW</b>	 KIT-XE7-PKE	 KIT-XE9-PKE	 KIT-XE12-PKE
Wall Mounted Etherea Inverter+ White <b>NEW</b>	 KIT-E7-PKE	 KIT-E9-PKE	 KIT-E12-PKE
Wall Mounted RE-3 Type Standard Inverter <b>NEW</b>		 KIT-RE9-PKE-3	 KIT-RE12-PKE-3
Wall Mounted UE Type Standard Inverter <b>NEW</b>		 KIT-UE9-PKE	 KIT-UE12-PKE
Wall Mounted Professional Inverter -15 °C <b>NEW</b>		 KIT-E9-PKEA	 KIT-E12-PKEA
Floor Console Type Inverter+ <b>NEW</b>		 KIT-E9-PFE	 KIT-E12-PFE
4-Way 60x60 Cassette Standard Inverter <b>NEW</b>		 KIT-E9-PB4EA	 KIT-E12-PB4EA
Low Static Pressure Hide Away Standard Inverter <b>NEW</b>		 KIT-E9-PD3EA	 KIT-E12-PD3EA
2x1 Wall Mounted MRE Standard Inverter <b>NEW</b>			
Etherea Multi Split 2x1 Inverter+ <b>NEW</b>			
Etherea Multi Split 3x1 Inverter+ <b>NEW</b>			
Etherea Multi Split 4x1 Inverter+ <b>NEW</b>			

Free Multi	4.0 to 5.6 kW	4.0 to 6.4 kW	4.5 to 9.0 kW	4.5 to 11.0 kW	4.5 to 13.6 kW	1.6 to 14.5 kW
						
Outdoor Unit //Inverter+	CU-2E15PBE (2 rooms)	CU-2E18PBE (2 rooms)	CU-3E18PBE (3 rooms)	CU-4E23PBE (4 rooms)	CU-4E27PBE (4 rooms)	CU-5E34PBE (5 rooms)

4.5 kW	5.0 kW	6.0 kW	6.5 kW	8.0 kW
 KIT-XE15-PKE	 KIT-XE18-PKE	 KIT-XE21-PKE		
 KIT-E15-PKE	 KIT-E18-PKE	 KIT-E21-PKE	 KIT-E24-PKE	 KIT-E28-PKE
 KIT-RE15-PKE-3	 KIT-RE18-PKE-3		 KIT-RE24-PKE-3	
 KIT-E15-PKEA	 KIT-E18-PKEA			
	 KIT-E18-PFE			
 KIT-2MRE77-MBE/MKE // KIT-2MRE79-MBE/MKE // KIT-2MRE712-MBE/MKE	 KIT-2MRE912-MBE // KIT-2MRE99-MKE // KIT-2MRE912-MKE // KIT-2MRE1212-MKE			
 KIT-2XE/E77-PBE // KIT-2XE/E79-PBE // KIT-2XE/E712-PBE // KIT-2XE/E99-PBE	 KIT-2XE/E99-PKE // KIT-2XE/E912-PKE // KIT-2XE/E1212-PKE			
		 KIT-3XE/E7712-PBE // KIT-3XE/E7715-PBE		
			 KIT-4XE/E77712 / 4XE/E77715-PBE // KIT-4XE/E77712 / 4XE/E77715-PKE	

## Feature Explanations

### Healthy Air Quality

**Air purifier**  
99% removal  
bacteria-virus-mold

**Nanoe-G**  
Nanoe-G utilises nano-technology fine particles to purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould thus ensuring a cleaner living environment.

**Perfect humidity control**  
MILD DRY

**Mild Dry Cooling**  
Fine control helps prevent a rapid decrease in room humidity while maintaining the set temperature. Maintains an RH\* up to 10% higher than cooling operation (\*RH: Relative Humidity). Ideal when sleeping with the air conditioner on.

**Relaxing breeze effect**  
SOFT BREEZE

**Soft Breeze Mode**  
The Soft Breeze mode eliminates excess humidity with a soft breeze and gives you the feeling of well-being without significant temperature changes.

**Ion generator**  
SOFT ION

**Ion Benefit**  
Negative ions, found in the air near waterfalls and forests, generally produce a great sense of wellbeing. Panasonic brings all the benefits to your home, at the push of a button.

**Prevention allergen filter**  
ANTI-BACTERIAL FILTER

**Anti Bacterial Filter**  
The Anti Bacterial Filter eliminates the allergens it captures. It combines three functions in one (anti-allergen, anti-virus and anti-bacteria) to keep room air clean and healthy.

**One-Touch Anti-Mould Air Filter**

**Odour-removing function**  
Allows the exchanger to be cleaned, preventing possible odours. While this function is connected, the fan also remains off momentarily to avoid unpleasant odours while the exchanger is being cleaned.

**Removable, washable panel**  
The front panel is easy to keep clean. It can be removed quickly in one single step and can be washed in water. A clean front panel ensures smoother, more efficient operation, which can save energy.

### Comfort

**A class energy saving**  
INVERTER+

**Inverter Plus System**  
Inverter plus products improve on the characteristics of standard Inverter air conditioners 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.

**A class energy saving**  
INVERTER

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

**6.6 A++ SEER\***  
SEASONAL ENERGY EFFICIENCY RATIO

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

**4.0 A+ SCOP\***  
SEASONAL COEFFICIENT OF PERFORMANCE

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

**Up to 38% energy savings (cooling)**  
ECONAVI

**Econavi**  
The sensor determines the human activity level and the position in the room and adjust the air flow orientation for maximum comfort and maximum savings.

**Sunlight detection**  
ECONAVI

**Econavi Sunlight Detection**  
Detects changes in sunlight intensity and judges whether it is sunny or cloudy/night. It reduces the waste of heating under more sunlight conditions.

**Improved comfort**  
AUTOCOMFORT

**Autocomfort**  
Detects conditions in the room and switches to energy saving operation when nobody is on the room. However, priority is given to comfort, so cooling power is increased when there's a lot of human activity.

**Silent air 20 dB**  
SUPER QUIET

**Super Quiet Mode**  
Thanks to its latest generation compressor and its twin blade fan, our outdoor unit is one of the most silent on the market. The indoor unit emits an almost imperceptible 20 dB.

**Down to -10°C in cooling mode**  
OUTDOOR TEMPERATURE

**Down to -10°C in cooling only mode**  
The air conditioner works in cooling only mode with an outdoor temperature of -15°C.

**Down to -15°C in heating mode**  
OUTDOOR TEMPERATURE

**Down to -15°C in heating mode**  
The air conditioner works in heat pump mode with an outdoor temperature as low as -15°C.

**Down to -25°C in heating mode**  
OUTDOOR TEMPERATURE

**Down to -25°C in heating mode**  
The air conditioner works in heat pump mode with an outdoor temperature as low as -25°C.

**Constant heating**  
HEATCHARGE

**Heatcharge**  
This innovative, newly developed technology charges heat and uses it for heating. Thanks to this system, you can enjoy incredibly powerful, comfortable air conditioner heating.

**Prevent freezing**  
SUMMER HOUSE

**Summer House**  
This innovative technology charges heat and uses it for heating. You can enjoy incredibly powerful, comfortable air conditioner heating.

**Easy control by BMS**  
CONNECTIVITY

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

**Internet Control Ready**  
INTERNET CONTROL

**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.

**Powerful Mode**  
The rapid and effective powerful mode is ideal for when you come home on the hottest or coldest days. It works at maximum power to reach the desired temperature in 15 minutes.

**Soft Dry Operation Mode**  
The soft dry mode eliminates excess moisture with a soft breeze and provides a sense of wellbeing without much change in temperature.

**Wide & Long Airflow Vane**  
This vane has been designed so that the air goes further. It sends air to every corner of the room to keep the whole room in the comfort zone.

**Personal Airflow Creation**  
Permits the air direction to be adjusted vertically and horizontally. This feature can be conveniently selected by remote control.

**Automatic Vertical Airflow Control**  
The flap swings up and down automatically. The flow can also be set a fixed angle with the remote control.

**Manual Horizontal Airflow Control**

**Auto Mode (Inverter)**  
Automatically changes from cooling to heating depending on the set temperature for the room.

**Simple Auto Changeover**  
When the difference between the measured temperature and the set temperature is 3 °C or more, it automatically switches over the current operation mode to heating or cooling mode necessary to keep the temperature at a constantly comfortable level.

**Hot Start Mode**  
On the start of heating cycle and after defrost cycle, the indoor fan will start up once the indoor heat exchanger is warm.

### Use

**12-Hour On&Off Timer**

**Real Time Clock with Dual On&Off Timer**  
This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 24-hour time frame.

**Real Time Clock with Single On&Off Timer**  
The exact operating time (hour and minute) can be set in advance. From here on, the unit will operate in accordance to these preset hours every day until the system is reset.

**LCD Wireless Remote Controller**

### Reliability

**Automatic Restart**  
This function permits automatic restarting if safe mode operation has stopped for some unusual reason, such as after a power cut. As soon as the power is back, the unit restarts with the parameters selected before it stopped.

**Long Piping**  
Indicates the maximum length of pipe between the outdoor unit and the indoor unit(s). The distances permitted, demonstrate the installations possible.

**Top-Panel Maintenance Access**  
Maintenance of an outdoor unit used to be quite a tedious task. Now, with the possibility of removing the top cover, maintenance is quick and easy.

**Self-Diagnosis Function**  
With this function the unit carries out a process self-diagnosis when a particular function does not work correctly. This allows faster servicing.

**5 Years Warranty.**  
We guarantee the compressors in the entire range for five years.



# Feature Comparison

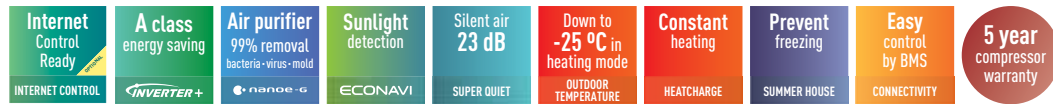
	MODELS	WALL MOUNTED VE INVERTER+ ENERGY CHARGE SYSTEM	WALL MOUNTED ETHEREA INVERTER+ SILVER	WALL MOUNTED ETHEREA INVERTER+ WHITE	WALL MOUNTED RE-3 TYPE STANDARD INVERTER	FLOOR CONSOLE TYPE INVERTER+	WALL MOUNTED PROFESSIONAL INVERTER -15 °C	4-WAY 60x60 CASSETTE INVERTER	LOW STATIC PRESSURE HIDE AWAY INVERTER	2x1 WALL MOUNTED MRE TYPE STANDARD INVERTER	ETHEREA MULTI SPLIT 2X1 INVERTER+	ETHEREA MULTI SPLIT 3X1 INVERTER+	ETHEREA MULTI SPLIT 4X1 INVERTER+	
Healthy Air Quality	Air purifier (100% removal efficiency)	✓	✓	✓							✓	✓	✓	
	Perfect humidity control		✓	✓										
	Soft Breeze					✓ For RE9, RE12 and RE15				✓				
	Ion generator													
	Anti Bacterial Filter					✓ 10 years			✓ Optional					
	One-Touch anti-mould air filter					✓	✓		✓					
	Odour-removing function	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Removable, washable panel	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
	A class energy saving	✓	✓	✓		✓						✓	✓	✓
	Inverter system					✓		✓	✓	✓				
Comfort	Econavi		✓	✓							✓	✓	✓	
	Econavi Sunlight Detection	✓												
	Autocomfort		✓	✓							✓	✓	✓	
	Super Quiet mode	✓	✓ For XE7, XE9 and XE12	✓ For E7, E9 and E12	✓ For RE9, RE12 and RE15	✓		✓	✓					
	Down to -15°C in cooling mode						✓	✓ -10 °C	✓ -10 °C					
	Down to -15°C in heat mode					✓	✓	✓ -10 °C	✓ -10 °C		✓	✓	✓	
	Down to -25°C in heat mode	✓												
	Heatcharge	✓												
	Summer House	✓												
	Easy control by BMS	✓	✓	✓	✓	✓	✓				✓	✓	✓	
	Powerful mode	✓	✓	✓		✓ For RE9, RE12 and RE15	✓	✓	✓	✓	✓	✓	✓	
	Soft dry operation mode	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
	Wide & long airflow vane	✓	✓ For XE7, XE9, XE12 and XE15	✓ For E7, E9, E12 and E15						✓	✓	✓	✓	
	Personal airflow creation	✓	✓ For XE18 and XE21	✓ For E18, E21, E24 and E28	✓ For RE18 and RE24		✓							
	Automatic vertical airflow control	✓	✓	✓		✓ For RE9, RE12 and RE15		✓		✓	✓	✓	✓	
	Manual horizontal airflow control	✓	✓ For XE7, XE9, XE12 and XE15	✓ For E7, E9, E12 and E15	✓ For RE9, RE12 and RE15					✓	✓	✓	✓	
	AUTO mode (Inverter)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Simple Auto Changeover	✓	✓	✓	✓									
	Hot start mode	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	
	Use	12-hour ON&OFF timer				✓ For RE9, RE12 and RE15			✓					
		Real time clock with dual ON&OFF timer	✓	✓	✓						✓		✓	✓
		Real time clock with single ON&OFF timer				✓ For RE18 and RE24	✓	✓						
LCD Wireless remote controller		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Automatic restart		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Long piping		✓ 15 m	✓ 15 m (XE7-15) 20 m (XE18-21)	✓ 15 m (E7-15) 20 m (E18-21) 30 m (E24-28)	✓ 15 m (RE9-15) 20 m (RE18) 30 m (RE24)	✓ 15 m (E18)	✓ 15 m (E18)	✓ 20 m	✓ 20 m	✓ Max. 30 m	✓ Max. 30 m	✓ Max. 50 m	✓ Max. 70 m	
Reliability	Top-Panel maintenance access	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Self-diagnosis function	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	5 year compressor warranty	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

**WALL MOUNTED VE  
INVERTER+  
ENERGY CHARGE SYSTEM**

The new Heatcharge from Panasonic have the capacity to store the heat on the outdoor unit which allows to start to heat the house just after turning on the heat pump. It also ensure a maximum comfort and heat in the house even during defrost operation as Heat charge stores heat for to prevent cool air during defrost.

ECONAVI builds-in a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy.

Furthermore, the Nanoe-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



INTERNET CONTROL READY: Optional.

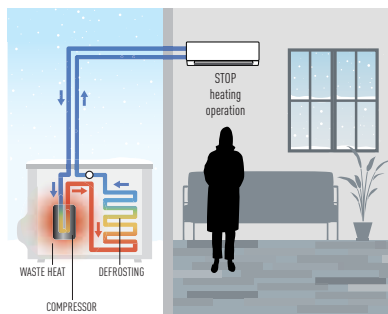
<b>Max Capacity</b>			<b>7.70 kW</b>		<b>8.40 kW</b>
<b>Kit</b>			<b>KIT-VE9-NKE</b>		<b>KIT-VE12-NKE</b>
<b>Indoor</b>			<b>CS-VE9NKE</b>		<b>CS-VE12NKE</b>
<b>Outdoor</b>			<b>CU-VE9NKE</b>		<b>CU-VE12NKE</b>
<b>Cooling capacity</b>	Nominal (Min - Max)	kW	2.50 (0.60 - 3.00)		3.50 (0.60 - 4.00)
<b>EER<sup>1)</sup></b>	Nominal (Min - Max)	Energy Saving	5.15 <b>A</b>		3.98 <b>A</b>
<b>SEER</b>	Nominal	Energy Saving	8.60 <b>A+++</b>		8.50 <b>A+++</b>
<b>Pdesign (cooling)</b>			2.5		3.5
<b>Power input Cooling</b>	Nominal (Min - Max)	kW	0.48 (0.14 - 0.79)		0.88 (0.14 - 1.10)
<b>Annual Energy Consumption (Cooling)<sup>2)</sup></b>		kWh	102		145
<b>Heating capacity</b>	Nominal (Min - Max)	kW	3.20 (0.60 - 7.70)		4.20 (0.60 - 8.40)
<b>Heating capacity at -7 °C</b>	Nominal	kW	3.2		5.60
<b>COP<sup>1)</sup></b>	Nominal (Min - Max)	Energy Saving	5.47 <b>A</b>		4.91 <b>A</b>
<b>SCOP</b>	Nominal	Energy Saving	5.40 <b>A+++</b>		5.10 <b>A+++</b>
<b>Pdesign at -10 °C</b>		kW	3.2		4.2
<b>Power input Heating</b>	Nominal (Min - Max)	kW	0.58 (0.14 - 2.72)		0.85 (0.14 - 3.16)
<b>Annual Energy Consumption (Heating)<sup>2)</sup></b>		kWh	830		1153
<b>Indoor Unit</b>					
<b>Air Volume</b>	Cooling / Heating	m <sup>3</sup> /h	600 / 600		654 / 618
<b>Moisture removal volume</b>		l/h	1.5		2.0
<b>Sound pressure Level<sup>3)</sup></b>	Cooling (Hi / Lo / S-Lo)	dB(A)	44 / 26 / 23		45 / 29 / 26
	Heating (Hi / Lo / S-Lo)	dB(A)	44 / 27 / 24		45 / 33 / 30
<b>Sound power Level</b>	Cooling / Heating (Hi)	dB	59 / 59		60 / 60
<b>Dimensions</b>	H x W x D	mm	295 x 890 x 275		295 x 890 x 275
<b>Net weight</b>		Kg	14.5		14.5
<b>Air purifier filter</b>			Nanoe-G		Nanoe-G
<b>Outdoor Unit</b>					
<b>Power source</b>	V		230		230
<b>Recommended Fuse</b>	A				
<b>Recommended power cable section</b>	mm <sup>2</sup>				
<b>Connection</b>	mm <sup>2</sup>		4 x 1.5		4 x 1.5
<b>Nominal Current</b>	Cooling / Heating	A	2.2 / 2.7		3.9 / 3.8
<b>Max. current</b>		A	14.0		15.0
<b>Air Volume</b>	Cooling / Heating	m <sup>3</sup> /h	1.980 / 1.890		2.052 / 1.890
<b>Sound pressure Level<sup>3)</sup></b>	Cooling (Hi)	dB(A)	49		50
	Heating (Hi)	dB(A)	49		50
<b>Sound power Level</b>	Cooling / Heating (Hi)	dB	64 / 64		65 / 65
<b>Dimensions<sup>4)</sup></b>	H x W x D	mm	623 x 799 x 299		623 x 799 x 299
<b>Net weight</b>		Kg	43		43
<b>Piping connections</b>	Liquid pipe	inch (mm)	1/4 (6.35)		1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)		3/8 (9.52)
<b>Refrigerant Loading</b>	R410A (GWP value)	Kg	1.50		1.50
<b>Elevation difference (in/out)<sup>5)</sup></b>	Max	m	5		5
<b>Piping length</b>	Min / Max	m	3-15		3-15
<b>Precharge length</b>	Max	m	7.5		7.5
<b>Additional charge</b>		g/m	20		20
<b>Operating range</b>	Cooling Min / Max	°C	-10 / +43		-10 / +43
	Heating Min / Max	°C	-25 <sup>6)</sup> / +24		-25 <sup>6)</sup> / +24

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

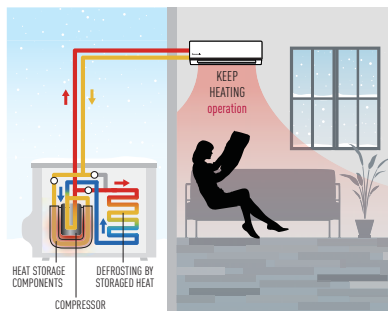
1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 230 V by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. 6) Operation possible on heating mode up to -25 °C tested by SP. Performance guaranty on heating mode up to -20 °C.

Specifications subject to change without notice.

\* Preliminary data.



CONVENTIONAL THE ROOM GRADUALLY BECOMES COLD  
DEFROST OPERATION: About 11 to 15 min.  
FALL IN ROOM TEMPERATURE: About 5 to 6 °C



HEATCHARGE THE ROOM IS THOROUGHLY WARMED  
DEFROST OPERATION: About 5 to 6 min.  
FALL IN ROOM TEMPERATURE: About 1 to 2 °C

\* Defrost operation time and how low room temperature falls differ depending on the environment in which the unit is being used (how insulated and airtight and room is), operation conditions, and temperature conditions.

\* Output air temperature falls during defrost operation. How low room temperature falls differs depending on the environment in which the unit is being used (how insulated and airtight and room is), operation conditions, and temperature conditions.

\* In environments where a lot of frost accumulates, heating may stop during defrost operation.



CU-VE9NKE  
CU-VE12NKE

## KIT-VE9-NKE // KIT-VE12-NKE

### Technical focus

- **NEW!** ENERGY CHARGE SYSTEM. HEAT STORAGE UNIT WHICH REALIZES NON-STOP HEATING AND FAST HEATING FUNCTION
- **NEW!** MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI SUNLIGHT DETECTION
- **NEW!** NANO-E AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- SUPER QUIET! ONLY 23 dB, EQUIVALENT TO NIGHT-TIME IN THE COUNTRY
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE

### Features

#### HEALTHY AIR

- **NEW!** NANO-E air purifying system

#### ENERGY EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system, for bigger savings
- **NEW!** ECONAVI SUNLIGHT DETECTION
- R410A refrigerant gas

#### COMFORT

- Super Quiet mode
- Super Powerful heating mode
- Uniform dispersion of airflow
- Automatic vertical airflow control
- Hot start mode, increased comfort on heat pump mode, no cool airflow when process starts
- Automatic restart after power cut

#### EASE OF USE

- Real time clock with dual ON&OFF timer
- User friendly infrared remote control
- Connectivity function (indoor unit equipped with PCB port which can be connected to outside network)

#### EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- 15 m maximum connection distance
- 15 m maximum elevation difference
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function

**WALL MOUNTED ETHEREA  
INVERTER+  
SILVER PLATED / WHITE**

**Etherea with enhanced Econavi sensor and new Nanoe-G air-purifying system: outstanding efficiency, comfort and healthy air combined with state-of-the-art design.**

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With econavi, you will achieve up to 38% energy savings whilst increasing your comfort. Furthermore, the Nanoe-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



<b>Internet Control Ready</b> INTERNET CONTROL	<b>A class energy saving</b> INVERTER+	<b>Air purifier 99% removal bacteria-virus-mold</b> nanoe-g	<b>Up to 38% energy savings (cooling)</b> ECONAVI	<b>Improved comfort</b> AUTOCOMFORT	<b>Perfect humidity control</b> MILD DRY	<b>Silent air 20 dB</b> SUPER QUIET	<b>Easy control by BMS</b> CONNECTIVITY	<b>5 year compressor warranty</b>
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Awarded with the prestigious iF Design Award 2013

INTERNET CONTROL READY: Optional. MILD DRY: Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on. SUPER QUIET: For XE7, XE9, XE12, E7, E9 and XE12

Kit Silver Plated			KIT-XE7-PKE	KIT-XE9-PKE	KIT-XE12-PKE	KIT-XE15-PKE
Kit White			KIT-E7-PKE	KIT-E9-PKE	KIT-E12-PKE	KIT-E15-PKE
Indoor Silver plated			CS-XE7PKEW	CS-XE9PKEW	CS-XE12PKEW	CS-XE15PKEW
Indoor White			CS-E7PKEW	CS-E9PKEW	CS-E12PKEW	CS-E15PKEW
Outdoor			CU-E7PKE	CU-E9PKE	CU-E12PKE	CU-E15PKE
Cooling capacity	Nominal (Min - Max)	kW	2.05 (0.75-2.40)	2.50 (0.85-3.00)	3.50 (0.85-4.00)	4.20 (0.85-5.00)
	Nominal (Min - Max)	kCal/h	1,760 (650-2,060)	2,150 (730-2,580)	3,010 (730-3,440)	3,610 (730-4,300)
EER <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	4.41 (3.13-4.21) ◀A	4.72 (3.47-4.17) ◀A	4.12 (3.40-3.57) ◀A	3.36 (3.27-3.23) ◀A
SEER	Nominal	Energy Saving	6.7 ◀A++	6.6 ◀A++	6.6 ◀A++	5.9 ◀A+
Pdesign (cooling)			2.1	2.5	3.5	4.2
Power input Cooling	Nominal (Min - Max)	kW	0.465 (0.240-0.570)	0.530 (0.245-0.720)	0.850 (0.250-1.120)	1.25 (0.260-1.550)
Annual Energy Consumption (Cooling) <sup>2)</sup>		kWh	110	133	186	249
Heating capacity	Nominal (Min - Max)	kW	2.80 (0.75-4.00)	3.40 (0.85-5.00)	4.00 (0.85-6.00)	5.30 (0.85-6.80)
Heating capacity at -7 °C	Nominal	kW	2.35	2.88	3.37	4.11
COP <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	4.44 (3.26-3.96) ◀A	4.66 (3.54-3.88)	4.32 (3.47-3.55) ◀A	3.71 (3.33-3.52) ◀A
SCOP	Nominal	Energy Saving	4.3 ◀A+	4.1 ◀A+	4.0 ◀A+	3.6 ◀A
Pdesign at -10 °C		kW	2.1	2.7	3.2	3.6
Power input Heating	Nominal (Min - Max)	kW	0.630 (0.230-1.01)	0.730 (0.240-1.29)	0.925 (0.245-1.690)	1.430 (0.255-1.930)
Annual Energy Consumption (Heating) <sup>2)</sup>		kWh	684	922	1120	1400
<b>Indoor Unit</b>						
Power source	V		230	230	230	230
Recommended Fuse	A					
Recommended power cable section	mm <sup>2</sup>					
Connection indoor / outdoor	mm <sup>2</sup>		4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current (Nominal)	Cooling / Heating	A	2.15 / 2.85	2.4 / 3.35	3.80 / 4.10	5.50 / 6.40
Max. current		A	4.5	5.7	7.6	8.8
Air Volume	Cooling / Heating	m <sup>3</sup> /h	732 / 768	762 / 786	834 / 858	846 / 900
Moisture removal volume		l/h	1.3	1.5	2	2.4
Sound pressure Level <sup>2)</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	37 / 24 / 20	39 / 25 / 20	42 / 28 / 20	43 / 31 / 25
	Heating (Hi / Lo / S-Lo)	dB(A)	38 / 25 / 20	40 / 27 / 20	42 / 33 / 20	43 / 35 / 29
Sound power Level	Liquid pipe / Gas pipe	dB	53 / 54	55 / 56	58 / 58	59 / 59
Dimensions <sup>3)</sup>	H x W x D	mm	295 x 870 x 255	295 x 870 x 255	295 x 870 x 255	295 x 870 x 255
Net weight		Kg	10	10	10	10
Air purifier filter			Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G
<b>Outdoor Unit</b>						
Air Volume	Cooling / Heating	m <sup>3</sup> /h	2,034 / 2,034	1,788 / 1,788	1,998 / 1,998	1,998 / 1,998
Sound pressure Level <sup>2)</sup>	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	49 / 51
Sound power Level	Cooling / Heating (Hi)	dB	60 / 61	61 / 62	63 / 65	64 / 66
Dimensions <sup>3)</sup>	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	619 x 824 x 299	619 x 824 x 299
Net weight		Kg	31	33	34	33
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) / 3/8 (9.52)	1/4 (6.35) / 1/2 (12.70)
Refrigerant Loading	R410A (GWP value)	Kg	0.830	1.00	1.05	1.02
Elevation difference (in/out) <sup>4)</sup>	Max	m	15	15	15	15
Piping length	Min / Max	m	3-15	3-15	3-15	3-15
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	-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. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
Connectivity restriction: JKE units are not compatible with PKE units.

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. 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.  
Specifications subject to change without notice.



CS-E7PKEW // CS-E9PKEW //  
CS-E12PKEW // CS-E15PKEW

CS-XE7PKEW // CS-XE9PKEW // CS-XE12PKEW // CS-XE15PKEW



INCLUDED WITH  
THE INDOOR UNIT



OPTIONAL  
WIRED REMOTE CONTROL  
CZ-RD514C

**SEASONAL  
EFFICIENCY**

PRODUCT FOLLOWS THE NEW  
ECODESIGN REQUIREMENTS

SCOP  
A++

**KIT SILVER PLATED: KIT-XE7-PKE // KIT-XE9-PKE //  
KIT-XE12-PKE // KIT-XE15-PKE**

**KIT WHITE: KIT-E7-PKE // KIT-E9-PKE // KIT-E12-PKE //  
KIT-E15-PKE**

#### Technical focus

- MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI, NOW WITH SUNLIGHT DETECTION
- NANO-E AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- OPTIONAL SMARTPHONE CONTROL
- MILD DRY COOLING: PREVENT A RAPID DECREASE IN ROOM HUMIDITY
- SUPER QUIET! ONLY 20 DB, EQUIVALENT TO NIGHT-TIME IN THE COUNTRY (XE7, XE9 XE12, E7, E9 AND E12)
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE

#### Features

##### HEALTHY AIR

- Nanoe-G air purifying system
- Mild Dry Cooling operation mode for increased comfort and prevention of skin moisture loss

##### ENERGY, EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system, for bigger savings
- -45% consumption with Econavi on heat pump, and -38% on cooling mode
- R410A refrigerant gas

##### COMFORT

- Super Quiet mode (from 20 dB)
- Powerful mode
- Uniform dispersion of airflow
- Automatic vertical airflow control
- Hot start mode, increased comfort on heat pump mode, no cool airflow when process starts
- Automatic restart after power cut

##### EASE OF USE

- Real time clock with dual ON&OFF timer
- User friendly infrared remote control
- Optional wired weekly timer with 6 settings per day and 42 settings per week
- Connectivity function (indoor unit equipped with PCB port which can be connected to outside network)
- Optional Smartphone control

##### EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- 15 m maximum connection distance
- 15 m maximum elevation difference
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function



Energy-Efficiency  
Classification  
Most efficient level: A  
(CS-XE9PKEW  
EER/COP: 4.72/4.66)



CU-E7PKE  
CU-E9PKE



CU-E12PKE  
CU-E15PKE

**WALL MOUNTED ETHEREA  
INVERTER+  
SILVER PLATED / WHITE**

**Etherea with enhanced Econavi sensor and new Nanoe-G air-purifying system: outstanding efficiency, comfort and healthy air combined with state-of-the-art design.**

Econavi features an in-built human activity sensor and a new sunlight detection technology to adjust output thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With econavi, you will achieve up to 38% energy savings whilst increasing your comfort. Furthermore, the Nanoe-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould.



<b>Internet Control Ready</b> INTERNET CONTROL	<b>A class energy saving</b> INVERTER+	<b>Air purifier 99% removal</b> bacteria-virus-mold nanoe-g	<b>Up to 38% energy savings (cooling)</b> ECONAVI	<b>Improved comfort</b> AUTOCOMFORT	<b>Perfect humidity control</b> MILD DRY	<b>Easy control by BMS</b> CONNECTIVITY	<b>5 year compressor warranty</b>
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Awarded with the prestigious iF Design Award 2013

INTERNET CONTROL READY: Optional. MILD DRY: Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on.

Kit Silver Plated			KIT-XE18-PKE	KIT-XE21-PKE	—	—
Kit White			KIT-E18-PKE	KIT-E21-PKE	KIT-E24-PKE	KIT-E28-PKE
Indoor Silver plated			CS-XE18PKEW	CS-XE21PKEW	—	—
Indoor White			CS-E18PKEW	CS-E21PKEW	CS-E24PKEW	CS-E28PKES
Outdoor			CU-E18PKE	CU-E21PKE	CU-E24PKE	CU-E28PKE
Cooling capacity	Nominal (Min - Max)	kW	5.00 (0.98-6.00)	6.30 (0.98-7.10)	6.80 (0.98-8.10)	7.65 (0.98-8.60)
	Nominal (Min - Max)	kCal/h	4,300 (840-5,160)	5,420 (840-6,110)	5,850 (840-6,970)	6,580 (840-7,400)
EER <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	3.47 (3.50-3.02) ◀A	2.89 (3.50-2.84) ◀C	3.27 (2.58-3.06) ◀A	3.04 (2.58-2.95) ◀B
SEER	Nominal	Energy Saving	6.9 ◀A++	6.5 ◀A++	6.1 ◀A++	6.0 ◀A+
Pdesign (cooling)			5.0	6.3	6.8	7.7
Power input Cooling	Nominal (Min - Max)	kW	1.44 (0.28-1.99)	2.18 (0.28-2.50)	2.08 (0.38-2.65)	2.52 (0.38-2.92)
Annual Energy Consumption (Cooling) <sup>2)</sup>		kWh	254	339	390	449
Heating capacity	Nominal (Min - Max)	kW	5.80 (0.98-8.00)	7.20 (0.98-8.50)	8.60 (0.98-9.90)	9.60 (0.98-11.00)
Heating capacity at -7 °C	Nominal	kW	4,990 (840-6,880)	6,190 (840-7,310)	7,400 (840-8,510)	8,260 (840-9,460)
COP <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	3.82 (2.88-3.11) ◀A	3.44 (2.88-3.11) ◀B	3.31 (2.18-3.16) ◀C	2.94 (2.18-2.97) ◀D
SCOP	Nominal	Energy Saving	4.2 ◀A+	4.0 ◀A+	3.8 ◀A	3.6 ◀A
Pdesign at -10 °C		kW	4.4	4.6	5.5	6.0
Power input Heating	Nominal (Min - Max)	kW	1.520 (0.340-2.570)	2.09 (0.34-2.73)	2.60 (0.45-3.13)	3.26 (0.45-3.70)
Annual Energy Consumption (Heating) <sup>2)</sup>		kWh	1467	1610	2026	2333
<b>Indoor Unit</b>						
Power source	V		230	230	230	230
Recommended Fuse	A					
Recommended power cable section	mm <sup>2</sup>					
Connection indoor / outdoor	mm <sup>2</sup>		4 x 2.5	4 x 2.5	4 x 2.5	4 x 2.5
Current (Nominal)	Cooling / Heating	A	6.4 / 6.8	9.7 / 9.4	9.5 / 11.8	11.5 / 14.6
Max. current		A	11.3	11.9	13.8	15.5
Air Volume	Cooling / Heating	m <sup>3</sup> /h	1074 / 1158	1,034 / 1,200	1,188 / 1,272	1,266 / 1,314
Moisture removal volume		l/h	2.8	3.5	3.9	4.5
Sound pressure Level <sup>2)</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	44 / 37 / 34	45 / 37 / 34	47 / 38 / 35	49 / 38 / 35
	Heating (Hi / Lo / S-Lo)	dB(A)	44 / 37 / 34	45 / 37 / 34	47 / 38 / 35	48 / 38 / 35
Sound power Level	Cooling / Heating (Hi)	dB	60 / 60	61 / 61	63 / 63	65 / 64
Dimensions <sup>3)</sup>	H x W x D	mm	295 x 1,070 x 255	295 x 1,070 x 255	295 x 1,070 x 255	295 x 1,070 x 255
Net weight		Kg	13	13	13	13
Air purifier filter			Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G
<b>Outdoor Unit</b>						
Air Volume	Cooling / Heating	m <sup>3</sup> /h	2,352 / 2,274	2,502 / 2,424	3,012 / 3,012	3,270 / 3,270
Sound pressure Level <sup>2)</sup>	Cooling / Heating (Hi)	dB(A)	47 / 47	48 / 49	52 / 52	53 / 53
Sound power Level	Cooling / Heating (Hi)	dB	61 / 61	62 / 63	66 / 66	67 / 67
Dimensions <sup>3)</sup>	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	795 x 875 x 320	795 x 875 x 320
Net weight		Kg	46	47	67	67
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 5/8" (15.88)	1/4" (6.35) / 5/8" (15.88)
Refrigerant Loading	R410A (GWP value)	Kg	1.24	1.32	1.80	1.80
Elevation difference (in/out) <sup>4)</sup>	Max	m	15	15	20	20
Piping length	Min / Max	m	3-20	3-20	3-30	3-30
Precharge length	Max	m	7.5	7.5	10	10
Additional charge		g/m	20	20	30	30
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. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
Connectivity restriction: JKE units are not compatible with PKE units.

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. 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.  
Specifications subject to change without notice.



CS-E18PKEW // CS-E21PKEW //  
CS-E24PKES // CS-E28PKES

CS-XE18PKEW // CS-XE21PKEW // CS-XE24PKES // CS-XE28PKES



INCLUDED WITH  
THE INDOOR UNIT



OPTIONAL  
WIRED REMOTE CONTROL  
CZ-RD514C

**SEASONAL  
EFFICIENCY**

PRODUCT FOLLOWS THE NEW  
ECODESIGN REQUIREMENTS

SCOP  
A++

### KIT SILVER PLATED: KIT-XE18-PKE // KIT-XE21-PKE

### KIT WHITE: KIT-E18-PKE // KIT-E21-PKE // KIT-E24-PKE // KIT-E28-PKE

#### Technical focus

- MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI, NOW WITH SUNLIGHT DETECTION
- NANO-E-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- OPTIONAL SMARTPHONE CONTROL
- MILD DRY COOLING: PREVENT A RAPID DECREASE IN ROOM HUMIDITY
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE

#### Features

##### HEALTHY AIR

- Nanoe-G air purifying system
- Mild Dry Cooling operation mode for increased comfort and prevention of skin moisture loss

##### ENERGY, EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system, for bigger savings
- -45% consumption with Econavi on heat pump, and -38% on cooling mode
- R410A refrigerant gas

##### COMFORT

- Super Quiet mode (from 20 dB)
- Powerful mode
- Uniform dispersion of airflow
- Automatic vertical airflow control
- Hot start mode, increased comfort on heat pump mode, no cool airflow when process starts
- Automatic restart after power cut

##### EASE OF USE

- Real time clock with dual ON&OFF timer
- User friendly infrared remote control
- Optional wired weekly timer with 6 settings per day and 42 settings per week
- Connectivity function (indoor unit equipped with PCB port which can be connected to outside network)
- Optional Smartphone control

##### EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- 15 m maximum connection distance
- 15 m maximum elevation difference
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function



CU-E18PKE  
CU-E21PKE



CU-E24PKE  
CU-E28PKE

**WALL MOUNTED RE-3 TYPE  
STANDARD INVERTER**

Inverter models are powerful and efficient and are always there when you need them.



SUPER QUIET: For RE9 and RE12

Kit			KIT-RE9-PKE-3	KIT-RE12-PKE-3	KIT-RE15-PKE-3	KIT-RE18-PKE-3	KIT-RE24-PKE-3
<b>Indoor</b>			CS-RE9PKE-3	CS-RE12PKE-3	CS-RE15PKE-3	CS-RE18PKE-3	CS-RE24PKE-3
<b>Outdoor</b>			CU-RE9PKE-3	CU-RE12PKE-3	CU-RE15PKE-3	CU-RE18PKE-3	CU-RE24PKE-3
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.90-3.00)	3.50 (0.90-3.90)	4.20 (1.00-4.60)	5.00 (0.98-6.00)	6.80 (0.98-8.10)
	Nominal (Min - Max)	kCal/h	2,150 (770-2,580)	3,010 (770-3,350)	3,610 (860-3960)	4,300 (840-5,160)	5,850 (840-6,970)
EER <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	3.57 (4.74-3.00) ◀A	3.47 (5.29-3.25) ◀A	3.33 (4.76-2.78) ◀B	3.40 (3.50-2.96) ◀A	3.24 (2.58-3.03) ◀A
	Nominal	Energy Saving	5.6 ◀A+	5.6 ◀A+	5.6 ◀A+	6.7 ◀A++	5.9 ◀A+
SEER	Nominal	Energy Saving	5.6 ◀A+	5.6 ◀A+	5.6 ◀A+	6.7 ◀A++	5.9 ◀A+
	Pdesign (cooling)		2.5	3.5	4.2	5.0	6.8
Power input Cooling	Nominal (Min - Max)	kW	0.70 (0.19-1.00)	1.01 (0.17-1.2)	1.26 (0.21-1.65)	1.47 (0.28-2.03)	2.10 (0.38-2.67)
	Annual Energy Consumption (Cooling) <sup>2)</sup>	kWh	156	219	263	261	403
Heating capacity	Nominal (Min - Max)	kW	3.30 (0.90-4.10)	4.25 (0.90-5.10)	5.00 (0.90-6.80)	5.80 (0.98-8.00)	8.60 (0.98-9.90)
	Nominal (Min - Max)	kCal/h	2,840 (770-3,530)	3,660 (770-4,390)	4,300 (770-5850)	4,990 (840-6,880)	7,400 (840-8,510)
Heating capacity at -7°C	Nominal	kW	3.00	3.70	4.93	4.98	6.13
	Nominal (Min - Max)	Energy Saving	4.02 (5.29-3.57) ◀A	3.79 (6.00-3.49) ◀A	3.61 (4.28-2.98) ◀A	3.77 (2.88-3.08) ◀A	3.28 (2.18-3.14) ◀C
COP <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	4.02 (5.29-3.57) ◀A	3.79 (6.00-3.49) ◀A	3.61 (4.28-2.98) ◀A	3.77 (2.88-3.08) ◀A	3.28 (2.18-3.14) ◀C
	Nominal	Energy Saving	3.4 ◀A	3.4 ◀A	3.4 ◀A	4.1 ◀A+	3.4 ◀A
SCOP	Nominal	Energy Saving	3.4 ◀A	3.4 ◀A	3.4 ◀A	4.1 ◀A+	3.4 ◀A
	Pdesign at -10 °C	kW	2.5	3.2	3.6	4.4	5.5
Power input Heating	Nominal (Min - Max)	kW	0.82 (0.17-1.15)	1.12 (0.15-1.46)	1.385(0.21-2.280)	1.54 (0.34-2.60)	2.62 (0.45-3.15)
	Annual Energy Consumption (Heating) <sup>2)</sup>	kWh	1029	1318	1482	1502	2265
<b>Indoor Unit</b>							
Power source	V		230	230	230	230	230
Recommended Fuse	A						
Recommended power cable section	mm <sup>2</sup>						
Connection (indoor/outdoor)	mm <sup>2</sup>		4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5	4 x 2.5
Current (Nominal)	Cooling / Heating	A	3.3 / 3.8	4.7 / 5.2	6.0 / 6.3	6.6 / 6.9	9.6 / 11.8
	Max. current	A	6.3	8.4	10.5	11.4	13.9
Air Volume	Cooling / Heating	m <sup>3</sup> /h	750 / 666	750 / 750	822 / 870	978 / 1,074	1,104 / 1,164
	Moisture removal volume	l/h	1.4	2	2.4	2.8	3.9
Sound pressure Level <sup>3)</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	42 / 27 / 22	42 / 30 / 22	44 / 31 / 29	44 / 37	47 / 38
	Heating (Hi / Lo / S-Lo)	dB(A)	42 / 27 / 25	42 / 33 / 25	46 / 34 / 28	44 / 37	47 / 38
Sound power Level	Cooling (Hi)	dB	58	58	60	60	63
	Heating (Hi)	dB	58	58	62	60	63
Dimensions	H x W x D	mm	290 x 848 x 213	290 x 848 x 213	290 x 848 x 213	290 x 1,070 x 240	290 x 1,070 x 240
	Net weight	Kg	8	8	8	12	12
Air purifier filter							
<b>Outdoor Unit</b>							
Air Volume	Cooling / Heating	m <sup>3</sup> /h	1,902 / 1,842	1,956 / 1,896	1,956 / 1,956	2,352 / 2,274	3,012 / 3,012
Sound pressure Level <sup>3)</sup>	Cooling (Hi)	dB(A)	47	48	49	47	52
	Heating (Hi)	dB(A)	48	50	51	47	52
Sound power Level	Cooling (Hi)	dB	63	64	65	61	66
	Heating (Hi)	dB	64	66	67	61	66
Dimensions <sup>4)</sup>	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289	695 x 875 x 320	795 x 875 x 320
	Net weight	Kg	23	26	27	46	67
Piping connections	Liquid / 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)	1/4 (6.35) / 5/8 (15.88)
Refrigerant Loading	R410A	Kg	0.77	0.86	0.92	1.22	1.8
Elevation difference (in/out) <sup>5)</sup>	Max	m	10	10	10	15	20
	Min / Max	m	3-15	3-15	3-15	3-20	3-30
Precharge length	Max	m	7	7	7	7.5	10
Additional charge		g/m	20	20	20	20	30
Operating range	Cooling Min / Max	°C	-10 / +43	-10 / +43	-10 / +43	-10 / +43	-10 / +43
	Heating Min / Max	°C	-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. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
This model is not suitable to use in heating mode below -5 °C with continuous operation (24 h operation).

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 230 V by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.

Specifications subject to change without notice.





CS-RE9PKE-3 // CS-RE12PKE-3 // CS-RE15PKE-3



FOR RE9, RE12 AND  
RE15. INCLUDED WITH  
THE INDOOR UNIT



FOR RE18 AND RE24.  
INCLUDED WITH THE  
INDOOR UNIT

## KIT-RE9-PKE-3 // KIT-RE12-PKE-3 // KIT-RE15-PKE-3 // KIT-RE18-PKE-3 // KIT-RE24-PKE-3

### Technical focus

- COMPLETE LINE-UP OF STANDARD INVERTER MODELS
- QUIETER INDOOR UNITS
- HIGH ENERGY SAVINGS
- REFRESHING AIRFLOW WITH RELAXING BREEZE EFFECT
- LONG CONNECTION DISTANCE (FROM 15 m UP TO 30 m)



CS-RE18PKE-3 // CS-RE24PKE-3

### Features

#### HEALTHY AIR

- New generation Anti Bacterial Filter
- Odour-removing function
- Anti-mould filter

#### ENERGY, EFFICIENCY AND ECOLOGY

- Inverter system
- R410A refrigerant gas

#### COMFORT

- Refreshing airflow with relaxing breeze effect (only for RE9, RE12 and RE15)
- Super Quiet mode (only for RE9, RE12 and RE15)
- Powerful mode (only for RE9 and RE12 and RE15)
- Automatic vertical airflow control
- Hot start mode
- Automatic restart
- Simple change over

#### EASE OF USE

- 12-hr timer (only for RE9, RE12 and RE15)
- 24-hr timer (only for RE18 and RE24)
- User friendly infrared remote control

#### EASY INSTALLATION AND MAINTENANCE

- 15 m maximum connection distance (20 m for RE18 and 30 m for RE24)
- Removable, washable panel
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function

CU-RE9PKE-3  
CU-RE12PKE-3CU-RE15PKE-3  
CU-RE18PKE-3

CU-RE24PKE-3

**WALL MOUNTED UE TYPE  
STANDARD INVERTER**

**New UE series inverter powerful and efficient.**

**A class**  
energy saving  
INVERTER

**High**  
air flow  
POWERFUL MODE

**Silent air**  
22 dB  
SUPER QUIET

**5 year**  
compressor  
warranty

Kit			KIT-UE9-PKE	KIT-UE12-PKE
Indoor			CS-UE9PKE	CS-UE12PKE
Outdoor			CU-UE9PKE	CU-UE12PKE
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.90-3.00)	3.50 (0.90-3.90)
	Nominal (Min - Max)	kCal/h	2,150 (770-2,580)	3,010 (770-3,350)
EER <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	3.57 (4.74-3.00)	3.47 (5.29-3.25)
	Nominal	Energy Saving	5.6	5.6 <b>A+</b>
Pdesign (cooling)	Nominal (Min - Max)	kW	0.70 (0.19-1.00)	1.01 (0.17-1.2)
	Nominal	kWh	156	219
Annual Energy Consumption (cooling)	Nominal (Min - Max)	kW	3.30 (0.90-3.90)	4.25 (0.90-4.90)
	Nominal (Min - Max)	kCal/h	2,840 (770-3,350)	3,660 (770-4,210)
Heating capacity	Nominal	kW	2.83	3.55
	Nominal	Energy Saving	4.02 (5.29-3.39)	3.79 (6.00-3.35)
Heating capacity at -7°C	Nominal	kW	2.5	3.2
	Nominal	Energy Saving	3.4 <b>A</b>	3.4 <b>A</b>
COP <sup>1)</sup>	Nominal (Min - Max)	kW	0.82 (0.17-1.15)	1.12 (0.15-1.46)
	Nominal	kWh	1029	1318
Indoor Unit				
Power source		V	230	230
Recommended Fuse		A		
Recommended power cable section		mm		
Connection indoor / outdoor		mm	4 x 1.5	4 x 1.5
Current (Nominal)	Cooling	A	3.3	4.7
	Heating	A	3.8	5.2
Max. current		A	6.3	8.4
Air Volume	Cooling / Heating	m <sup>3</sup> /h	750 / 666	750 / 750
Moisture removal volume		l/h	1.4	2.0
Sound pressure Level <sup>2)</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	42 / 27 / 22	42 / 30 / 22
	Heating (Hi / Lo / S-Lo)	dB(A)	42 / 27 / 25	42 / 33 / 25
Sound power Level	Cooling (Hi)	dB	58	58
	Heating (Hi)	dB	58	58
Dimensions <sup>3)</sup>	H x W x D	mm	290 x 848 x 213	290 x 848 x 213
Net weight		kg	8	8
Air purifier filter			Anti Bacterial filter	Anti Bacterial filter
Outdoor Unit				
Air Volume	Cooling / Heating	m <sup>3</sup> /h	1,902 / 1,842	1,956 / 1,896
Sound pressure Level <sup>2)</sup>	Cooling (Hi)	dB(A)	47	48
	Heating (Hi)	dB(A)	48	50
Sound power Level	Cooling (Hi)	dB	63	64
	Heating (Hi)	dB	64	66
Dimensions <sup>3)</sup>	H x W x D	mm	540 x 780 x 289	540 x 780 x 289
Net weight		kg	23	26
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)
Refrigerant Loading	R410A	kg	0.77	0.86
Elevation difference (in/out) <sup>4)</sup>	Max	m	10	10
Piping length	Min / Max	m	3-15	3-15
Piping length without refrigerant increase	Max	m	7	7
Additional gas		g/m	20	20
Operating range	Cooling Min / Max	°C	+16 / +43	+16 / +43
	Heating Min / Max	°C	-10 / +24	-10 / +24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb) / This model is not suitable to use in heating mode below -5 °C with continuous operation (24 h operation).  
 1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. / 2) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0.8 m below the unit. 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.  
 Specifications subject to change without notice.



INCLUDED WITH  
THE INDOOR UNIT

## KIT-UE9-PKE // KIT-UE12-PKE

### Technical focus

- NEW DESIGN
- QUIETER INDOOR UNITS
- HIGH ENERGY SAVINGS
- 12-HR REMOTE CONTROL TIMER
- LONG CONNECTION DISTANCE

### Features

#### HEALTHY AIR

- Odour-removing function
- Anti-mould filter

#### ENERGY, EFFICIENCY AND ECOLOGY

- Inverter system
- R410A refrigerant gas

#### EASE OF USE

- 12-hr timer
- User friendly infrared remote control

#### COMFORT

- Super Quiet mode
- Powerful mode
- Automatic vertical airflow control
- Hot start mode
- Automatic restart

#### EASY INSTALLATION AND MAINTENANCE

- Maximum connection distance 15 m
- Removable, washable panel



CU-UE9PKE  
CU-UE12PKE

**WALL MOUNTED  
PROFESSIONAL  
INVERTER -15 °C  
ON COOLING MODE**

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

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



KIT			KIT-E9-PKEA	KIT-E12-PKEA	KIT-E15-PKEA	KIT-E18-PKEA
Indoor			CS-E9PKEA	CS-E12PKEA	CS-E15PKEA	CS-E18PKEA
Outdoor			CU-E9PKEA	CU-E12PKEA	CU-E15PKEA	CU-E18PKEA
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.85-3.00)	3.50 (0.85-4.00)	4.20 (0.98-5.00)	5.00 (0.98-6.00)
	Nominal (Min - Max)	kCal/h	2,150 (730-2,580)	3,010 (730-3,440)	3,610 (840-4,300)	4,300 (840-5,160)
EER <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	4.85 (4.23-5.00) ◀ A	4.02 (3.57-5.00) ◀ A	3.50 (3.50-3.16) ◀ A	3.47 (3.50-3.02) ◀ A
SEER	Nominal	Energy Saving	7.1 ◀ A++	6.7 ◀ A++	6.3 ◀ A++	6.9 ◀ A++
P Design at -10 °C		kW	2.5	3.5	4.2	5.0
Power input Cooling	Nominal (Min - Max)	kW	0.515 (0.17-0.71)	0.87 (0.17-1.12)	1.20 (0.28-1.58)	1.44 (0.28-1.99)
Annual Energy Consumption (cooling)		kWh	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		kW	3.91	4.78	5.14	5.80
COP <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	4.86 (4.12-5.15) ◀ A	4.35 (3.63-5.15) ◀ A	3.75 (2.88-3.24) ◀ A	3.82 (2.88-3.11) ◀ A
SCOP	Nominal	Energy Saving	4.4 ◀ A+	4.1 ◀ A+	3.9 ◀ A	4.2 ◀ A+
P Design at -10 °C		kW	2.8	3.6	3.6	4.4
Power input Heating	Nominal (Min - Max)	kW	0.7 (0.165-1.31)	0.92 (0.165-1.82)	1.44 (0.34-2.19)	1.52 (0.340-2.57)
Annual Energy Consumption (heating)		kWh	891	1229	1292	1467
<b>Indoor Unit</b>						
Power source		V	230	230	230	230
Recommended Fuse		A				
Recommended power cable section		mm				
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	m <sup>3</sup> /h	798 / 876	816 / 882	846 / 900	1074 / 1158
Moisture removal volume		l/h	1.5	2.0	2.4	2.8
Sound pressure Level <sup>2)</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 26 / 23	42 / 29 / 26	43 / 32 / 29	44 / 37 / 34
	Heating (Hi / Lo / S-Lo)	dB(A)	40 / 27 / 24	42 / 33 / 30	43 / 35 / 32	44 / 37 / 34
Sound power Level	Cooling (Hi)	dB	55	58	59	60
	Heating (Hi)	dB	56	58	59	60
Dimensions <sup>3)</sup>	H x W x D	mm	295 x 870 x 255	295 x 870 x 255	295 x 870 x 255	295 x 1070 x 255
Net weight		Kg	10	10	10	13
Air purifier filter						
<b>Outdoor Unit</b>						
Air Volume	Cooling / Heating	m <sup>3</sup> /h	1878 / 1782	1974 / 1926	2052 / 1980	2352 / 2274
Sound pressure Level <sup>2)</sup>	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 <sup>3)</sup>	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	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	1/2" (12.70)	1/2" (12.70)
Refrigerant Loading	R410A	Kg	1,100	1,100	1,060	1,240
Elevation difference (in/out) <sup>4)</sup>	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	-15 / +43	-15 / +43	-15 / +43	-15 / +43
	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
This model is not suitable to use in heating mode below -5 °C with continuous operation (24 h operation).

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 230 V by an average of 500 hours per year in cooling mode. 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.

Specifications subject to change without notice.



18.12.12

INCLUDED WITH THE INDOOR UNIT

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

**Technical focus**

- DESIGN FOR 24h/7d A WEEK OPERATION
- HIGHLY EFFICIENT EVEN AT -15 °C

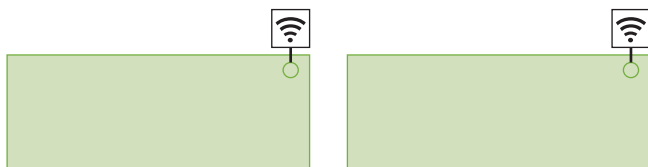
**Features**

**OUTDOOR**

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

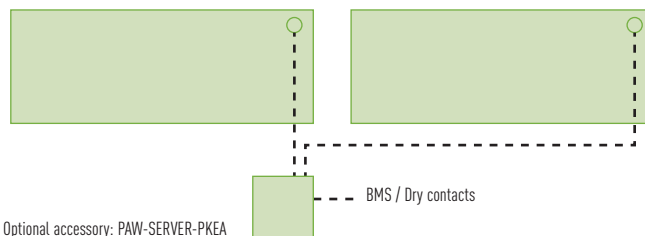
**2 INTERFACE OPTIONS TO MANAGE SERVER ROOM OPERATION**

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



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

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



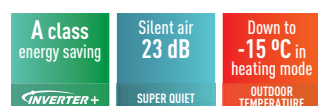
CU-E9PKEA  
CU-E12PKEA



CU-E15PKEA  
CU-E18PKEA

**FLOOR CONSOLE TYPE  
INVERTER+**

Console for discreet integration on walls, and for high performances, specifically in heat mode even when the outside temperature is as low as -15°C.  
Double airflow for improved comfort and temperature dispersion: through the top for an efficient cooling mode, through the bottom for quick heating.



KIT			KIT-E9-PFE	KIT-E12-PFE	KIT-E18-PFE
Indoor			CS-E9GFEW	CS-E12GFEW	CS-E18GFEW
Outdoor			CU-E9PFE	CU-E12PFE	CU-E18PFE
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.85 - 3.00)	3.50 (0.85 - 3.80)	5.00 (0.98 - 5.60)
	Nominal (Min - Max)	kCal/h	2,150 (731 - 2,580)	3,010 (731 - 3,270)	3,780 (853 - 4,300)
EER <sup>1)</sup>	Nominal	Energy Saving	4.50 <b>A</b>	3.72 <b>A</b>	3.25 <b>A</b>
SEER	Nominal	Energy Saving	6.1 <b>A++</b>	5.8 <b>A++</b>	6.2 <b>A++</b>
Pdesign (cooling)			2.50	3.50	5.00
Power input Cooling	Nominal	kW	0.56	0.94	1.53
Annual Energy Consumption (cooling)		kWh			
Heating capacity	Nominal (Min - Max)	kW	3.40 (0.85 - 5.00)	4.00 (0.85 - 6.00)	5.80 (0.98 - 7.10)
	Nominal (Min - Max)	kCal/h	2924 (731 - 4,300)	3440 (731 - 5,100)	4,730 (843 - 6,110)
COP <sup>1)</sup>	Nominal	Energy Saving	4.25 <b>A</b>	4.12 <b>A</b>	3.69 <b>A</b>
SCOP	Nominal	Energy Saving	3.8 <b>A</b>	3.8 <b>A</b>	3.9 <b>A</b>
Pdesign at -10 °C		kW	2.70	3.00	4.40
Power input Heating	Nominal	kW	0.80	0.97	1.57
Annual Energy Consumption (heating)		kWh			
<b>Indoor Unit</b>					
Power source		V	230	230	230
Recommended Fuse		A			
Recommended power cable section		mm			
Connection		mm	4 x 1.5	4 x 1.5	4 x 1.5
Current (Nominal)	Cooling	A	2.7	4.4	7.0
	Heating	A	4.05	6.00	7.1
Air Volume	Cooling / Heating	m/h	558 / 576	570 / 600	660 / 780
Moisture removal volume		l/h	1.4	2.0	2.8
Sound pressure Level <sup>2)</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	38 / 27 / 23	39 / 28 / 24	44 / 36 / 32
	Heating (Hi / Lo / S-Lo)	dB(A)	38 / 27 / 23	39 / 27 / 23	44 / 36 / 32
Sound power level	Cooling (Hi)	dB	54	55	60
	Heating (Hi)	dB	54	55	61
Dimensions <sup>3)</sup>	H x W x D	mm	600 x 700 x 210	600 x 700 x 210	600 x 700 x 210
Net weight		kg	14	14	14
<b>Outdoor Unit</b>					
Air Volume	Cooling / Heating	m/h	1,788 / 1,788	1,860 / 1,860	2,400 / 2,400
Sound pressure Level <sup>2)</sup>	Cooling (Hi)	dB(A)	46	48	47
	Heating (Hi)	dB(A)	47	50	48
Sound power level	Cooling (Hi)	dB	59	61	60
	Heating (Hi)	dB	60	63	61
Dimensions <sup>3)</sup>	H x W x D	mm	540 x 780 x 289	619 x 824 x 299	695 x 875 x 320
Net weight		kg	34	34	49
Piping connections	Liquid pipe	inch (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)	3/8 (9.52)	1/2 (12.70)
Refrigerant Loading	R410A	kg	0.965	0.980	1.060
Elevation difference (in/out) <sup>4)</sup>	Max	m	5	5	15
Piping length	Min / Max	m	3 / 15	3 / 15	3 / 20
Precharge length	Max	m	7.5	7.5	10
Additional charge		g/m	20	20	20
Operating range	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-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. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
This model is not suitable to use in heating mode below -5 °C with continuous operation (24 h operation).  
Connectivity restriction: JKE units are not compatible with PKE units.

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. 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.  
Specifications subject to change without notice.



INCLUDED WITH  
THE INDOOR UNIT

### KIT-E9-PFE // KIT-E12-PFE // KIT-E18-PFE

#### Technical focus

- MORE EFFICIENT THAN EVER FOR LESS CONSUMPTION AND HIGHER SAVINGS
- HEATING MODE DOWN TO -15°C WITH HIGH EFFICIENCY
- DOUBLE AIRFLOW FOR BETTER EFFICIENCY
- POWERFUL MODE FOR QUICK TEMPERATURE SETTING
- R410A REFRIGERANT GAS

#### Features

##### HEALTHY AIR

- Soft dry operation mode
- Odour-removing function

##### ENERGY, EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system
- R410A refrigerant gas

##### COMFORT

- Super Quiet mode
- Powerful mode
- Automatic vertical airflow control
- Hot start mode
- Automatic restart

##### EASE OF USE

- 24-hr timer
- User friendly infrared remote control

##### EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- Maximum connection distance 15 m (E9, 12), 20m (E18)
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function



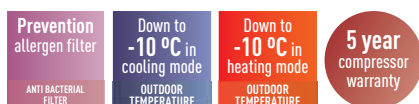
CU-E9PFE  
CU-E12PFE



CU-E18PFE

## 4 WAY 60x60 CASSETTE INVERTER

Small and powerful, ideal for offices and restaurants.



KIT		KIT-E9-PB4EA		KIT-E12-PB4EA	
Indoor		CS-E9PB4EA		CS-E12PB4EA	
Outdoor		CU-E9PB4EA		CU-E12PB4EA	
Panel		CZ-BT20E		CZ-BT20E	
Wireless control		Included with kit		Included with indoor unit	
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.85-3.20)	3.4 (0.9 - 4.8)	
	Nominal (Min - Max)	kCal/h	2150 (731-2752)	2924 (770 - 4130)	
EER <sup>1)</sup>	Nominal	kW	4.1 <b>A</b>	3.42 <b>A</b>	
SEER		W/W	5.1 <b>A</b>	4.8 <b>B</b>	
Pdesign		kW	2.50	3.40	
Power input Cooling	Nominal	kW	0.61	0.99	
Annual Energy Consumption <sup>2)</sup>		kWh			
Heating capacity	Nominal (Min - Max)	kW	3.20 (0.85-5.10)	4.2 (0.9 - 6.20)	
	Nominal (Min - Max)	kCal/h	2752 (731-4386)	3612 (770 - 5330)	
COP <sup>1)</sup>	Nominal (Min - Max)	kW	3.95 <b>A</b>	3.41 <b>A</b>	
SCOP	Nominal	Energy Saving	3.8 <b>A</b>	3.5 <b>A</b>	
Pdesign at -10 °C		kW	2.50	3.00	
Power input Heating	Nominal	kW	0.81	1.23	
Annual Energy Consumption <sup>2)</sup>		kWh			
<b>Indoor Unit</b>					
Air Volume	Cooling / Heating	m <sup>3</sup> /h	630 / 648	630 / 648	
Moisture removal volume		l/h	1.5	2.3	
Sound pressure level <sup>3)</sup>	Cooling (Hi/Lo/S-Lo)	dB(A)	34 / 26 / 23	34 / 26 / 23	
	Heating (Hi/Lo/S-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	
Sound power Level	Cooling (Hi)	dB	47	47	
	Heating (Hi)	dB	48	48	
Dimensions (H x W x D)	Indoor / Panel	mm	260 x 575 x 575 / 51 x 700 x 700	260 x 575 x 575 / 51 x 700 x 700	
Net weight	Indoor / Panel	Kg	18 / 2.5	18 / 2.5	
Dust filter			Yes	Yes	
Antiallergic filter	Optional		CZ-SA13P	CZ-SA13P	
<b>Outdoor Unit</b>					
Power source		V	220-240	220-240	
Connection		mm <sup>2</sup>	4 x 1.5 to 2.5	4 x 1.5 to 2.5	
Current Nominal	Cooling / Heating	A	2.9 / 3.8	6.0 / 8.0	
Air Volume	Cooling / Heating	m <sup>3</sup> /h	1728	2808	
Sound pressure level <sup>3)</sup>	Cooling (Hi)	dB(A)	45	45	
	Heating (Hi)	dB(A)	46	47	
Sound power Level	Cooling (Hi)	dB	58	58	
	Heating (Hi)	dB	59	60	
Dimensions	H x W x D	mm	619 x 824 x 299	695 x 875 x 320	
Net weight		Kg	35	48	
Piping connections	Liquid / Gas pipe	Inch (mm)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 1/2 (12.70)	
Refrigerant Loading	R410A	Kg	1.15	1.23	
Elevation dif. (in/out) <sup>5)</sup>	Max	m	15	15	
Piping length	Min - Max	m	3 - 20	3 - 20	
Precharge length	Max	m	10	10	
Additional charge		g/m	20	20	
Operating range	Cooling (Min / Max)	°C	- 10 / 43	- 10 / 43	
	Heating (Min / Max)	°C	- 10 / 24	- 10 / 24	

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
This model is not suitable to use in heating mode below -5 °C with continuous operation (24 h operation).

1) EER and COP, Energy Saving Classification, is at 220-240 V (380-415 V) only in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 220-240 V (380-415 V) by an average of 500-hr per year in cooling mode.  
3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) 70 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.  
Specifications subject to change without notice.





INCLUDED WITH  
THE INDOOR UNIT



OPTIONAL  
WIRED REMOTE CONTROL  
CZ-RD5ZCP

## KIT-E9-PB4EA // KIT-E12-PB4EA

### Technical focus

- EASY INSTALLATION ON THE DETACHABLE EUROPEAN 60x60 CEILING GRID
- OPERATION DOWN TO -10 °C IN COOLING AND HEATING MODES
- PIPING LENGTH UP TO 30 m
- MAXIMUM ELEVATION DIFFERENCE UP TO 20 m
- ULTRA COMPACT OUTDOOR UNITS FOR EASY INSTALLATION
- 24 HOUR ON/OFF TIMER

### Features

#### HEALTHY AIR

- CZ-SA13P Anti Bacterial Filter (optional)
- Odour-removing function

#### ENERGY, EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system

#### COMFORT

- Super Quiet mode
- Powerful mode
- Automatic vertical airflow control ambient temperature
- Hot start mode
- 24 hour On/Off timer
- Automatic restart after power cut

#### EASE OF USE

- Ergonomic infrared remote control

#### EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel of the indoor unit
- Top panel maintenance access for the outdoor unit



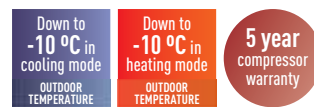
CU-E9PB4EA



CU-E12PB4EA

**LOW STATIC PRESSURE  
HIDE AWAY  
INVERTER**

Compact line up of Inverter Hide Away, from 1.0 HP to 5.0 HP, Single Phase.



KIT			KIT-E9-PD3EA	KIT-E12-PD3EA
<b>Indoor</b>			CS-E9PD3EA	CS-E12PD3EA
<b>Outdoor</b>			CU-E9PD3EA	CU-E12PD3EA
<b>Wired remote control</b>	Included in the kit		CZ-RD5ZCP	CZ-RD5ZCP
<b>Cooling capacity</b>	Nominal (Min-Max)	kW	2.50 (0.85-3.00)	3.4 (0.90-4.70)
	Nominal (Min-Max)	kCal/h	2150 (731-2580)	2924 (770-4040)
<b>EER<sup>1)</sup></b>	Nominal	kW	3.73 <b>A</b>	3.40 <b>A</b>
<b>SEER</b>		W/W	4.7 <b>B</b>	4.6 <b>B</b>
<b>Pdesign</b>		kW	2.50	3.40
<b>Power input Cooling</b>	Nominal	kW	0.67	1.00
<b>Annual Energy Consumption on Cooling mode</b>	Nominal (Min-Max)	kWh	3.20 (0.85-5.00)	4.00 (0.90-5.5)
	Nominal (Min-Max)	kCal/h	2752 (731-4300)	3440 (770-4730)
<b>COP<sup>1)</sup></b>	Nominal	kW	3.68 <b>A</b>	2.90 <b>D</b>
<b>SCOP</b>	Nominal	Energy Saving	3.5 <b>A</b>	3.4 <b>A</b>
<b>Pdesign at -10 °C</b>		kW	2.50	2.90
<b>Power input Heating</b>	Nominal	kW	0.87	1.37
<b>Annual Energy Consumption on Heating mode</b>		kWh		
<b>Indoor Unit</b>				
<b>External static pressure<sup>3)</sup></b>	S-Hi / Hi / Me / Lo	Pa	54 / 24 / 15 / 10	54 / 24 / 15 / 10
<b>Air Volume</b>	Cooling / Heating	m <sup>3</sup> /h	660 / 660	660 / 660
<b>Moisture removal volume</b>		l/h	1.50	2.30
<b>Sound pressure level<sup>4)</sup></b>	Cooling (Hi / Lo)	dB(A)	33 / 24	33 / 24
	Heating (Hi / Lo)	dB(A)	35 / 25	35 / 25
<b>Sound power Level</b>	Cooling (Hi)	dB	49	49
	Heating (Hi)	dB	51	51
<b>Dimensions</b>	H x W x D	mm	235 x 750 x 370	235 x 750 x 370
<b>Net weight</b>		Kg	17	17
<b>Dust filter</b>			No	No
<b>Outdoor Unit</b>				
<b>Power source</b>		V	220-240	220-240
<b>Connection</b>		mm <sup>2</sup>	4 x 1.5 to 2.5	4 x 1.5 to 2.5
<b>Current Nominal</b>	Cooling / Heating	A	3.10 / 4.10	5.7 / 8.2
<b>Air Volume</b>	Cooling/Heating	m <sup>3</sup> /h	1728	2808
<b>Sound pressure level<sup>4)</sup></b>	Cooling (Hi)	dB(A)	45	46
	Heating (Hi)	dB(A)	46	47
<b>Sound power Level</b>	Cooling (Hi)	dB	58	59
	Heating (Hi)	dB	59	60
<b>Dimensions</b>	H x W x D	mm	619 x 824 x 299	695 x 875 x 320
<b>Net weight</b>		Kg	35	48
<b>Piping connections</b>	Liquid / Gas pipe	Inch (mm)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 1/2 (12.70)
<b>Refrigerant Loading</b>	R410A	Kg	1.15	1.23
<b>Elevation dif. (in/out)<sup>5)</sup></b>	Max	m	15	15
<b>Piping length</b>	Min-Max	m	3-20	3-20
<b>Precharge length</b>	Max	m	10	10
<b>Additional charge</b>		g/m	20	20
<b>Area control accessory</b>			—	—
<b>Recommended Fuse</b>		A	—	—
<b>Operating range</b>	Cooling Min/Max	°C	-10 / 43	-10 / 43
	Heating Min/Max	°C	-10 / 24	-10 / 24

Rating Conditions: Cooling Indoor 27 °C DB / 19 °C WB. Cooling Outdoor 35 °C DB / 24 °C WB. Heating Indoor 20 °C DB. Cooling Outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb)  
This model is not suitable to use in heating mode below -5 °C with continuous operation (24 h operation).

1) EER and COP, Energy Saving Classification, is at 220-240 V (380-415 V) only in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 220-240 V (380-415 V) by an average of 500-hr per year in cooling mode.  
3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) 70 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.  
Specifications subject to change without notice.

PRELIMINARY DATA



INCLUDED WITH THE  
INDOOR UNIT  
CZ-RD52CP

### KIT-E9-PD3EA // KIT-E12-PD3EA

#### Technical focus

- ECO MODE FOR 20% ENERGY SAVING
- EXTREMELY COMPACT INDOOR UNITS WITHOUT LOSING STATIC PRESSURE (ONLY 250 mm HIGH)
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- EASY CHECK MODE FOR FAILURE DETECTION

#### Features

##### ENERGY, EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

##### COMFORT

- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at indoor unit or wired remote control

##### EASE OF USE

- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

##### EASY INSTALLATION AND MAINTENANCE

- Installation using existing pipes
- Selectable static pressure up to 7 mmAq
- Self-diagnostic function
- Condensation control
- Ultra compact indoor unit



CU-E9PD3EA



CU-E12PD3EA

MRE WALL MOUNTED 2x1  
STANDARD INVERTER

MRE Multi Inverter models are powerful and efficient and are always there when you need them.

Furthermore, with the Anti Bacterial Filter, you can always enjoy the best quality air, without viruses, moulds and bacteria.



Kit			KIT-2MRE77-MBE	KIT-2MRE79-MBE	KIT-2MRE712-MBE	KIT-2MRE912-MBE	KIT-2MRE77-MKE	KIT-2MRE79-MKE
<b>Indoor</b>			CS-MRE7PKE	CS-MRE7PKE	CS-MRE7PKE	CS-MRE9PKE	CS-MRE7PKE	CS-MRE7PKE
			CS-MRE7PKE	CS-MRE9PKE	CS-MRE12PKE	CS-MRE12PKE	CS-MRE7PKE	CS-MRE9PKE
<b>Outdoor</b>			CU-2RE15PBE	CU-2RE15PBE	CU-2RE15PBE	CU-2RE15PBE	CU-2RE18PBE	CU-2RE18PBE
Cooling capacity	Nominal (Min - Max)	kW	4.00 (1.50 - 4.60)	4.40 (1.50 - 4.80)	4.40 (1.50 - 4.80)	4.40 (1.50 - 4.80)	4.40 (1.50 - 4.60)	4.50 (1.50 - 4.80)
	Nominal (Min - Max)	kCal/h	3,560 (1,290 - 4,094)	3,916 (1,290 - 4,272)	3,916 (1,290 - 4,272)	3,916 (1,290 - 4,272)	3,916 (1,290 - 4,094)	3,870 (1,290 - 4,272)
Cooling capacity room A	Nominal	kW	2.00	1.95	1.70	2.20	2.00	2.00
Cooling capacity room B	Nominal	kW	2.00	2.45	2.70	2.20	2.00	2.50
EER <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	3.42 (5.55 - 3.43) ◀A	3.38 (5.55 - 3.15) ◀A	3.38 (5.55 - 3.15) ◀A	3.38 (5.55 - 3.15) ◀A	3.45 (5.55 - 3.43) ◀A	3.44 (5.55 - 3.18) ◀A
SEER	Nominal	Energy Saving		6.50 ◀A++				
Pdesign (cooling)				4.40				
Power input Cooling	Nominal (Min - Max)	kW	1.17 (0.27 - 1.34)	1.30 (0.27 - 1.52)	1.30 (0.27 - 1.52)	1.30 (0.27 - 1.52)	1.16 (0.27 - 1.34)	1.40 (0.27 - 1.51)
Annual Energy Consumption (Cooling) <sup>2)</sup>								
Heating capacity	Nominal (Min - Max)	kW	5.80 (1.10 - 6.30)	5.80 (1.10 - 6.30)	5.80 (1.10 - 6.30)	5.80 (1.10 - 6.30)	5.20 (1.10 - 6.30)	5.20 (1.10 - 6.30)
	Nominal (Min - Max)	kCal/h	5,162 (950 - 5,607)	5,162 (950 - 5,607)	5,162 (950 - 5,607)	5,162 (950 - 5,607)	4,628 (979 - 5,607)	4,628 (979 - 5,607)
Heating capacity room A	Nominal	kW	2.40	2.15	1.85	2.40	2.60	2.60
Heating capacity room B	Nominal	kW	2.40	2.65	2.95	2.40	2.60	2.90
COP <sup>1)</sup>	Nominal (Min - Max)	Energy Saving	4.00 (4.58 - 3.91) ◀A	4.00 (4.58 - 3.91) ◀A	4.00 (4.58 - 3.91) ◀A	4.00 (4.58 - 3.91) ◀A	4.00 (4.58 - 3.91) ◀A	4.00 (4.58 - 3.91) ◀A
SCOP	Nominal	Energy Saving		4.00 ◀A+				
Pdesign at -10 °C				3.60				
Power input Heating	Nominal (Min - Max)	kW	1.20 (0.24 - 1.61)	1.20 (0.24 - 1.61)	1.20 (0.24 - 1.61)	1.20 (0.24 - 1.61)	1.30 (0.24 - 1.61)	1.30 (0.24 - 1.61)
Annual Energy Consumption (Heating) <sup>2)</sup>				1,260				
<b>Indoor unit</b>								
Power source	V		230	230	230	230	230	230
Recommended Fuse	A							
Recommended power cable section	mm <sup>2</sup>							
Connection	mm <sup>2</sup>		4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current Nominal	Cooling / Heating	A	5.45 / 5.35	6.10 / 5.35	6.10 / 5.35	6.10 / 5.35	6.10 / 5.80	6.10 / 5.80
Air Volume	Cooling	m <sup>3</sup> /h	606	606	606 (E7) / 654 (E12)	606 (E9) / 654 (E12)	606	606
Moisture removal volume	Cooling	l/h	1.3 (E7)	1.3 (E7) / 1.5 (E9)	1.1 (E7) / 1.6 (E12)	1.4 (E9) / 1.4 (E12)	1.3 (E7)	1.3 (E7) / 1.5 (E9)
Sound pressure Level <sup>3)</sup>	Cooling & Heating (Lo)	dB(A)	29	29	29 (E7) / 32 (E12)	29 (E9) / 32 (E12)	29	29
Sound power Level	Cooling & Heating (Hi)	dB	56	56	56 (E7) / 60 (E12)	56 (E9) / 60 (E12)	56	56
Dimensions	H x W x D	mm	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204
Net weight	Kg		9	9	9	9	9	9
Air purifier filter			Anti Bacterial Filter	Anti Bacterial Filter	Anti Bacterial Filter	Anti Bacterial Filter	Anti Bacterial Filter	Anti Bacterial Filter
<b>Outdoor unit</b>								
Air Volume		m <sup>3</sup> /h	1,998	1,998	1,998	1,998	1,998	1,998
Sound pressure Level <sup>3)</sup>	Cooling / Heating (Hi)	dB(A)	47 / 49	47 / 49	47 / 49	47 / 49	47 / 49	47 / 49
Sound power Level	Cooling / Heating (Hi)	dB	62 / 64	62 / 64	62 / 64	62 / 64	62 / 64	62 / 64
Dimensions <sup>4)</sup>	H x W x D	mm	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289
Net weight	Kg		38	38	38	38	38	38
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) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)
Refrigerant Loading	R410A	Kg	1.45	1.45	1.45	1.45	1.45	1.45
Elevation difference (in/out) <sup>5)</sup>	Max	m	10	10	10	10	10	10
Piping length (total)	Min / Max	m	30	30	30	30	30	30
Piping length (one unit)	Min / Max	m	3 / 20	3 / 20	3 / 20	3 / 20	3 / 20	3 / 20
Precharge length	Max	m	20	20	20	20	20	20
Additional charge		g/m	20	20	20	20	20	20
Operating range	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24

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

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 2) The annual consumption is calculated by multiplying the input power at 230 V by an average of 500 hours per year in cooling mode. 3) The sound pressure level of the units shows the value measured at a position 1 meter in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit.

Specifications subject to change without notice.



FOR RE9, RE12 AND  
RE15. INCLUDED WITH  
THE INDOOR UNIT

KIT-2MRE712-MKE	KIT-2MRE99-MKE	KIT-2MRE912-MKE	KIT-2MRE1212-MKE
CS-MRE7PKE	CS-MRE9PKE	CS-MRE9PKE	CS-MRE12PKE
CS-MRE12PKE	CS-MRE9PKE	CS-MRE12PKE	CS-MRE12PKE
CU-2RE18PBE	CU-2RE18PBE	CU-2RE18PBE	CU-2RE18PBE
4.80 (1.50 - 4.90)	4.70 (1.50 - 4.80)	4.80 (1.50 - 5.00)	4.80 (1.50 - 5.00)
3,916 (1,290 - 4,272)	4,183 (1,290 - 4,272)	3,916 (1,290 - 4,450)	3,916 (1,290 - 4,450)
1.85	2.35	2.10	2.40
2.95	2.35	2.70	2.40
3.43 (5.55 - 3.20) ◀A	3.43 (5.55 - 3.18) ◀A	3.22 (5.55 - 3.20) ◀A	3.22 (5.55 - 3.16) ◀A
	6.50 ◀A++		
	4.80		
1.40 (0.27 - 1.53)	1.37 (0.27 - 1.51)	1.49 (0.27 - 1.56)	1.49 (0.27 - 1.58)
5.80 (1.10 - 6.70)	5.80 (1.10 - 6.70)	5.80 (1.10 - 6.70)	5.80 (1.10 - 6.70)
5,162 (950 - 5,963)	5,162 (950 - 5,963)	5,162 (950 - 5,963)	5,162 (950 - 5,963)
2.00	2.60	2.30	2.30
3.20	2.60	2.95	2.95
3.94 (4.58 - 3.90) ◀A	3.88 (4.58 - 3.85) ◀A	3.94 (4.58 - 3.80) ◀A	4.00 (4.58 - 3.90) ◀A
	4.00 ◀A+		
	3.80		
1.32 (0.24 - 1.72)	1.34 (0.24 - 1.74)	1.32 (0.24 - 1.72)	1.30 (0.24 - 1.70)
	1,330		
230	230	230	230
4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
6.50 / 5.85	6.40 / 5.95	6.95 / 5.85	6.95 / 5.75
606 (E7) / 654 (E12)	606	606 (E9) / 654 (E12)	654
1.2 (E7) / 1.5 (E12)	1.5	1.4 / 1.6	1.5
29 (E7) / 32 (E12)	29	26 (E9) / 29 (E12)	29
56 (E7) / 60 (E12)	56	56 (E9) / 60 (E12)	60
290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204
9	9	9	9
Anti Bacterial Filter	Anti Bacterial Filter	Anti Bacterial Filter	Anti Bacterial Filter
1,998	1,998	1,998	1,998
47 / 49	47 / 49	47 / 49	47 / 49
62 / 64	62 / 64	62 / 64	62 / 64
540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289
38	38	38	38
1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)	1/4 (6.35) / 3/8 (9.52)
1.45	1.45	1.45	1.45
10	10	10	10
30	30	30	30
3 / 20	3 / 20	3 / 20	3 / 20
20	20	20	20
20	20	20	20
16 / 43	16 / 43	16 / 43	16 / 43
-10 / 24	-10 / 24	-10 / 24	-10 / 24

**KIT-2MRE77-MBE // KIT-2MRE79-MBE // KIT-2MRE712-MBE //  
KIT-2MRE912-MBE // KIT-2MRE77-MKE // KIT-2MRE79-MKE //  
KIT-2MRE712-MKE // KIT-2MRE99-MKE // KIT-2MRE912-MKE //  
KIT-2MRE1212-MKE**

#### Technical focus

- HIGH ENERGY SAVINGS
- LARGE ELEVATION DISTANCE (10 m)
- LARGE PIPING LENGTH (30 m)

#### Features

##### HEALTHY AIR

- New generation Anti Bacterial Filter with 10-year warranty
- Odour-removing function
- Anti-mould filter

##### ENERGY, EFFICIENCY AND ECOLOGY

- Inverter system
- R410A refrigerant gas

##### COMFORT

- Automatic vertical airflow control
- Hot start mode
- Automatic restart

##### EASE OF USE

- 24-hrs timer
- User friendly infrared remote control

##### EASY INSTALLATION AND MAINTENANCE

- 30 m maximum connection distance
- Removable, washable panel
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function



CU-2RE15PBE  
CU-2RE18PBE

FREE MULTI SYSTEM

Up to 5 indoor units with a single outdoor unit

Connect up to five different rooms with a single outdoor unit using the Free Multi system.

With Free Multi you can take care of 2, 3, 4 or 5 rooms with a single outdoor unit.

With the Free Multi range, your clients will be able to save space at the time of installing the outdoor unit, and they will have more energy efficiency than with various 1x1 systems. They will be able to save up to 30% of energy.

Choose the outdoor units according to the individual requirements of each of your client's rooms, and calculate which outdoor unit best adapts itself to the combinations of indoor units.

The combination table will help you to select the best option.

Internet  
Control  
Ready  
INTERNET CONTROL


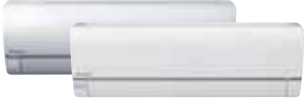




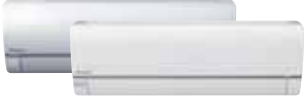

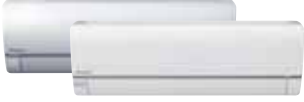


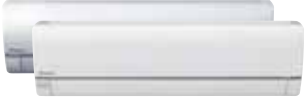



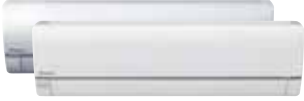

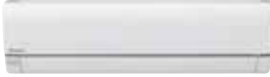
A class  
energy saving  
INVERTER+

Down to  
-15 °C in  
heating mode  
OUTDOOR  
TEMPERATURE

5 year  
compressor  
warranty

INTERNET CONTROL READY: Optional only for Ethersa.

NEW

Indoor Unit Capacities				
Capacity	Split Ethersa	Floor Console	Low Static Pressure Hide Away	4 Way 60x60 Cassette
5 - 1.6 kW	 CS-ME5PKEW <sup>1</sup>			
7 - 2.0 kW	 CS-XE7PKEW / CS-E7PKEW			
9/10 - 2.5 kW	 CS-XE9PKEW / CS-E9PKEW		 CS-ME9PD3EA	 CS-ME9PB4EA
9/10 - 2.8 kW		 CS-E9GFEW		
12 - 3.2 kW	 CS-XE12PKEW / CS-E12PKEW	 CS-E12GFEW		
15 - 4.0 kW	 CS-XE15PKEW <sup>2</sup> / CS-E15PKEW <sup>2</sup>		 CS-ME12PD3EA <sup>2</sup>	 CS-ME12PB4EA <sup>2</sup>
18 - 5.0 kW	 CS-XE18PKEW <sup>2</sup> / CS-E18PKEW <sup>2</sup>	 CS-E18GFEW <sup>2</sup>	 CS-ME18PD3EA <sup>2</sup>	 CS-ME18PB4EA <sup>2</sup>
21 - 6.8 kW	 CS-XE21PKEW <sup>2</sup> / CS-E21PKEW <sup>2</sup>			 CS-ME21PB4EA <sup>2</sup>
24 - 7.1 kW	 CS-E24PKEW <sup>1</sup>			

1. Only for connection with CU-2E15PBE, CU-2E18PBE, CU-3E18PBE and CU-4E23PBE.  
2. A CZ-MA1P pipe reducer is needed on the E15 and E18, a CZ-MA2P pipe expander is needed on the E21.



NEW

Possible indoor unit combinations

Models	Possible indoor unit combinations	Capacity kW <sup>1</sup>	Refrigerant pipe diameter			Pipe length					Indoor/outdoor unit combinations									
			Indoor unit	Liquid	Gas	Max. pipe length (1 room)	Max. pipe length (total)	Max. pipe without additional charge refills	Additional charge	Max. level difference	Capacity	Split Ethera	Floor console	Low Static Pressure Hide Away	4 Way 60x60 Cassette					
ROOMS 2	 CU-2E15PBE A <sup>2</sup> : 5, 7, 9/10 or 12 B <sup>2</sup> : 5, 7, 9/10 or 12	4.0-5.6	Room A	1/4	3/8	20 m	30 m	20 m	20 g/m	10 m	7	✓								
			Room B	1/4	3/8															
											9/10	✓	✓	✓	✓					
											12	✓	✓							
	 CU-2E18PBE A <sup>2</sup> : 5, 7, 9/10 or 12 B <sup>2</sup> : 5, 7, 9/10 or 12	4.0-6.4	Room A	1/4	3/8	20 m	30 m	20 m	20 g/m	10 m	7	✓								
			Room B	1/4	3/8															
											9/10	✓	✓	✓	✓					
											12	✓	✓							
	3	 CU-3E18PBE A <sup>3</sup> : 5, 7, 9/10, 12, 15 or 18 B <sup>3</sup> : 5, 7, 9/10, 12, 15 or 18 C <sup>3</sup> : 5, 7, 9/10, 12, 15 or 18	4.5-9.0	Room A	1/4	3/8	25 m	50 m	30 m	20 g/m	15 m	7	✓							
				Room B	1/4	3/8														
				Room C	1/4	3/8														
											9/10	✓	✓	✓	✓					
										12	✓	✓								
										14/15	✓		✓	✓						
										18	✓	✓	✓	✓						
ROOMS 4	 CU-4E23PBE A <sup>4</sup> : 5, 7, 9/10, 12, 15, 18 or 21 B <sup>4</sup> : 5, 7, 9/10, 12, 15, 18 or 21 C <sup>4</sup> : 5, 7, 9/10, 12, 15, 18 or 21 D <sup>4</sup> : 5, 7, 9/10, 12, 15, 18 or 21	4.5-11.0	Room A	1/4	3/8	25 m	60 m	30 m	20 g/m	15 m	7	✓								
			Room B	1/4	3/8															
			Room C	1/4	3/8															
			Room D	1/4	3/8															
											9/10	✓	✓	✓	✓					
											12	✓	✓							
											14/15	✓		✓	✓					
											18	✓	✓	✓	✓					
											21	✓			✓					
	 CU-4E27PBE A <sup>3</sup> : 7, 9/10, 12, 15 or 18 B <sup>3</sup> : 7, 9/10, 12, 15 or 18 C <sup>3</sup> : 7, 9/10, 12, 15 or 18 D <sup>3</sup> : 7, 9/10, 12, 15 or 18	4.5-13.6	Room A	1/4	3/8	25 m	70 m	40 m	20 g/m	15 m	7	✓								
Room B			1/4	3/8																
Room C			1/4	3/8																
Room D			1/4	3/8																
										9/10	✓	✓	✓	✓						
										12	✓	✓								
										14/15	✓		✓	✓						
										18	✓	✓	✓	✓						
5	 CU-5E34PBE A <sup>3</sup> : 7, 9, 12, 18 or 24 B <sup>3</sup> : 7, 9, 12, 18 or 24 C <sup>3</sup> : 7, 9, 12, 18 or 24 D <sup>3</sup> : 7, 9, 12, 18 or 24 E <sup>3</sup> : 7, 9, 12, 18 or 24		Room A	1/4	3/8	30 m	80 m	45 m	20 g/m	15 m	7	✓								
			Room B	1/4	3/8															
			Room C	1/4	3/8															
			Room D	1/4	1/2															
			Room E	1/4	1/2															
										9	✓									
										12	✓									
										18	✓									
										24	✓									

1. The combinations must remain within this range. 2. A minimum of two indoor units must be connected. 3. A minimum of two indoor units must be connected. minimum combination at 2x1: 7+9. Connectivity restriction: CS-E/XE\_PKE units are only compatible with CU-2E15PBE, CU-2E18PBE, CU-3E18PBE, CU-4E27PBE and CU-4E27PBE outdoor units. No other outdoor unit can be connected.

## Indoor Units for Free Multi combinations



OPTIONAL WIRED REMOTE CONTROL CZ-RD514C

INTERNET CONTROL READY: Optional.



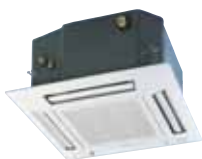
Etherea // Silver or White			1.6 kW	2.0 kW	2.5 kW	3.2 kW	4.0 kW	5.0 kW	6.8 kW	8.0 kW
Silver Indoor			—	CS-XE7PKEW	CS-XE9PKEW	CS-XE12PKEW	CS-XE15PKEW <sup>1</sup>	CS-XE18PKEW <sup>1</sup>	CS-XE21PKEW <sup>1</sup>	—
White Indoor			CS-ME5PKEW*	CS-E7PKEW	CS-E9PKEW	CS-E12PKEW	CS-E15PKEW <sup>1</sup>	CS-E18PKEW <sup>1</sup>	CS-E21PKEW <sup>1</sup>	CS-E24PKEW <sup>1</sup>
Cooling capacity	Nominal	kW/kCal/h	1.6 / 1,376	2.00 / 1,720	2.50 / 2,150	3.20 / 2,750	4.00 / 3,440	5.00 / 4,300	6.00 / 5,160	
Heating capacity	Nominal	kW/kCal/h	2.6 / 2,236	3.20 / 2,750	3.60 / 3,010	4.50 / 3,870	5.60 / 4,820	6.80 / 5,850	8.50 / 7,310	
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level <sup>2</sup>	Cooling (Hi/Lo/S-Lo)	dB(A)	39 / 29 / 23	40 / 26 / 23	40 / 26 / 23	44 / 32 / 26	44 / 32 / 26	46 / 33 / 30	46 / 33 / 30	
	Heating (Hi/Lo/S-Lo)	dB(A)	39 / 29 / 23	40 / 26 / 23	40 / 26 / 23	44 / 32 / 26	44 / 33 / 32	46 / 35 / 32	46 / 35 / 32	
Sound power level	Cooling (Hi)	dB	55	54	56	60	60	62	62	
	Heating (Hi)	dB	55	56	56	60	60	62	62	
Dimensions	H x W x D	mm	295 x 870 x 255	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 1,070 x 235	290 x 1,070 x 235	290 x 1,070 x 235
Net weight		Kg	9	9	9	9	9	12	12	12
Air purifier filter			Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G
Piping connections	Liquid pipe	inch (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)

\* Only for connection with CU-2E15PBE, CU-2E18PBE, CU-3E18PBE and CU-4E23PBE.



Silent air 23 dB  
SUPER QUIET

Floor Console			2.8 kW	3.2 kW	5.0 kW
Indoor			CS-E9GFEW	CS-E12GFEW	CS-E18GFEW <sup>1</sup>
Cooling capacity	Nominal	kW/kCal/h	2.80 / 2,410	3.20 / 2,750	5.00 / 4,300
Heating capacity	Nominal	kW/kCal/h	4.00 / 3,440	4.50 / 3,870	6.80 / 5,850
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level <sup>2</sup>	Cooling (Hi/Lo/S-Lo)	dB(A)	38 / 27 / 23	39 / 28 / 24	44 / 36 / 32
	Heating (Hi/Lo/S-Lo)	dB(A)	38 / 27 / 23	39 / 27 / 23	46 / 36 / 32
Sound power level	Cooling (Hi)	dB	54	55	60
	Heating (Hi)	dB	54	55	62
Dimensions	H x W x D	mm	600 x 700 x 210	600 x 700 x 210	600 x 700 x 210
Net weight		Kg	14	14	14
Piping connections	Liquid pipe	inch (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)	3/8 (9.52)	1/2 (12.70)



INCLUDE ON THE INDOOR UNIT



OPTIONAL WIRED REMOTE CONTROL CZ-RD52CP



CZ-BT20E SOLD SEPARATELY

OPTIONAL: CZ-SA11P

Prevention allergen filter  
ANTI-BACTERIAL FILTER

4 Way 60x60 Cassette			2.5 kW	4.0 kW	5.0 kW	6.0 kW
Indoor			CS-ME9PB4EA	CS-ME12PB4EA <sup>1</sup>	CS-ME18PB4EA <sup>1</sup>	CS-ME21PB4EA <sup>1</sup>
Panel	Sold separatel		CZ-BT20E	CZ-BT20E	CZ-BT20E	CZ-BT20E
Wireless control	Include on the indoor unit					
Cooling capacity	Nominal	kW/kCal/h	2.50 / 2,150	4.00 / 3,440	5.00 / 4,300	6.00 / 5,160
Heating capacity	Nominal	kW/kCal/h	3.60 / 3,100	5.60 / 4,820	6.80 / 5,850	8.50 / 7,310
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level <sup>2</sup>	Cooling (Hi/Lo/S-Lo)	dB(A)	34 / 26 / 23	34 / 26 / 23	36 / 28 / 25	41 / 33 / 30
	Heating (Hi/Lo/S-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	37 / 29 / 26	42 / 34 / 31
Sound power level	Cooling (Hi)	dB	47	47	49	54
	Heating (Hi)	dB	58	48	50	55
Dimensions	Indoor (H x W x D)	mm	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575
	Panel (H x W x D)	mm	51 x 700 x 700	51 x 700 x 700	51 x 700 x 700	51 x 700 x 700
Net weight	Indoor (Panel)	Kg	18 (2.5)	18 (2.5)	18 (2.5)	18 (2.5)
Air purifier filter	Optional		CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P
Piping connections	Liquid pipe	inch (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)	1/2 (12.70)	1/2 (12.70)	1/2 (12.70)

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

1) A CZ-MA1P pipe reducer is needed on the E15 and E18, a CZ-MA2P pipe expander is needed on the E21. 2) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 3) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC. 4) Add 70 or 95 mm for piping port. 5) When installing the outdoor unit at a higher position than the indoor unit. Specifications subject to change without notice.





CZ-RD52CP INCLUDE ON THE INDOOR UNIT

Low Static Pressure Hide Away		2.5 kW	4.0 kW	5.0 kW
Indoor hide away		CS-ME9PD3EA	CS-ME12PD3EA <sup>1</sup>	CS-ME18PD3EA <sup>1</sup>
Wired remote control	Include on the indoor unit	CZ-RD52CP	CZ-RD52CP	CZ-RD52CP
Cooling capacity	Nominal	kW/kCal/h 2.50 / 2,150	4.00 / 3,440	5.00 / 4,300
Heating capacity	Nominal	kW/kCal/h 3.60 / 3,100	5.60 / 4,820	6.80 / 5,850
Connection		mm <sup>2</sup> 4 x 1.5	4 x 1.5	4 x 1.5
External static pressure	Hi / Lo	Pa (mm) 34 / 64 (3.47 / 6.53)	34 / 69 (3.47 / 7.04)	34 / 78 (3.47 / 7.95)
Air Volume	Hi / Med / Lo	m <sup>3</sup> /h 414 / 402 / 330	474 / 402 / 330	624 / 528 / 444
Sound pressure level <sup>2</sup>	Cooling (Quiet/Lo/Hi)	dB(A) 24 / 27 / 31	24 / 27 / 33	27 / 30 / 41
	Heating (Quiet/Lo/Hi)	dB(A) 24 / 27 / 35	24 / 27 / 33	29 / 32 / 41
Sound power level	Cooling (Hi)	dB 49	49	57
	Heating (Hi)	dB 51	51	57
Dimensions	H x W x D	mm 235 x 750 (+65) x 370	235 x 750 (+65) x 370	285 x 750 (+65) x 370
Net weight		Kg 17	18	18
Piping connections	Liquid pipe	inch (mm) 1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm) 3/8 (9.52)	1/2 (12.70)	1/2 (12.70)

Plenums			
Air Outlet Plenum (without regulation adaptor)			
	N. of exits with diameters	Model	Description
CS-ME9PD3E	2 x ø 160	CZ-DUMPAF10ES2	Outside Insulated with 9 mm Armaduct
CS-ME12PD3E	2 x ø 160	CZ-DUMPAF15ES2	
CS-ME18PD3E	3 x ø 160	CZ-DUMPAF18ES3	

Air Inlet Plenum			
	N. of exits with diameters	Model	
CS-ME9PD3E	2 x ø 200	CZ-DUMPAF10ER2	
CS-ME12PD3E	2 x ø 200	CZ-DUMPAF15ER2	
CS-ME18PD3E	2 x ø 200	CZ-DUMPAF18ER2	



## Outdoor Units for Free Multi combinations



Outdoor Unit // Inverter+			4.0 to 5.6 kW	4.0 to 6.4 kW	4.5 to 9.0 kW	4.5 to 11.0 kW	4.5 to 13.6 kW	1.6 to 14.5 kW
Unit			CU-2E15PBE	CU-2E18PBE	CU-3E18PBE	CU-4E23PBE	CU-4E27PBE	CU-5E34PBE
Cooling capacity	Nominal (Min - Max)	kW	4.50 (1.50 - 5.20)	5.20 (1.50 - 5.40)	5.20 (1.80 - 7.30)	6.80 (1.90 - 8.80)	8.00 (3.00 - 9.20)	10.00 (1.6 - 11.5)
	Nominal (Min - Max)	kCal/h	3,870 (1,290 - 4,470)	4,472 (1,290 - 4,644)	4,470 (1,548 - 6,278)	5,850 (1,630 - 7,570)	6,880 (2,580 - 7,910)	3,50 A
EER	Nominal	W/W	3.66 (6.00 - 3.42) A	3.42 (6.00 - 3.42) A	4.33 (5.00 - 3.35) A	4.05 (5.59 - 3.56) A	4.04 A	2.86
SEER	Nominal	W/W	6.50 A++	6.50 A++	7.00 A++	7.00 A++		
Pdesign (cooling)			4.50	5.20	5.20	6.80		
Power input Cooling	Nominal (Min - Max)	kW	1.23 (0.25 - 1.52)	1.49 (0.25 - 1.54)	1.21 (0.36 - 2.18)	1.68 (0.34 - 2.47)	1.98 (0.53 - 2.87)	12.6
Annual Energy Consumption (Cooling)		kWh	242	280	260	340		
Heating capacity	Nominal (Min - Max)	kW	5.40 (1.10 - 7.00)	5.60 (1.10 - 7.20)	6.80 (1.60 - 8.30)	8.50 (3.00 - 10.60)	9.40 (4.20 - 10.60)	12.00 (1.6 - 14.5)
	Nominal (Min - Max)	kCal/h	4,640 (950 - 6,020)	4,820 (950 - 6,190)	5,850 (1,200 - 7,140)	7,130 (2,580 - 9,120)	8,080 (3,610 - 9,120)	4.20 A
COP	Nominal	W/W	4.62 (5.24 - 4.19) A	4.63 (4.24 - 5.24) A	4.69 (3.93 - 5.00) A	4.47 (4.08 - 5.17) A	4.52	2.86
SCOP	Nominal	W/W	4.00 A+	4.00 A+	4.00 A+	4.00 A+		
Pdesign at -10 °C			4.00	3.80	4.80	5.50		
Power input Heating	Nominal (Min - Max)	kW	1.17 (0.21 - 1.67)	1.30 (0.24 - 1.70)	1.45 (0.32 - 2.11)	1.85 (0.58 - 2.60)	2.08 (0.70 - 3.06)	12.6
Annual Energy Consumption (heating)		kWh	1400	1330	1680	1925		
Current	Cooling	A	1.17 (0.21 - 1.67)	1.30 (0.24 - 1.70)	1.45 (0.32 - 2.11)	1.85 (0.58 - 2.60)	2.08 (0.70 - 3.06)	12.6
	Heating	A	1400	1330	1680	1925		
Power source		V	230	230	230	230		220 - 240
Sound pressure level <sup>2</sup>	Cooling (Hi)	dB(A)	47	49	46	48	48	47
	Heating (Hi)	dB(A)	49	51	47	49	49	47
Sound power level	Cooling (Hi)	dB	62	64	60	62	61	50
	Heating (Hi)	dB	64	66	61	63	62	53
Dimensions	H x W x D	mm	619 x 824 +70 x 299	619 x 824 x 229	795 x 875 (+95) x 320	795 x 875 (+95) x 320	908 x 900 x 320	910 x 940 x 340
Net weight		Kg	39	39	71	72	73	82
Piping connections	Liquid pipe	inch (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52) x3 + 1/2 (12.7) x2
Refrigerant Loading	R410A	Kg	1.40	1.40	2.64	2.64	3.10	4.10
Elevation diff. (in/out)	Max	m	10	10	15	15	15	15
Piping length total	Max	m	3-30	30	3-50	60	70	80
Piping length to one unit	Min / Max	m	3-20	3-20	3-25	3-25	3-25	3-30
Precharge length		m (Max)	20	20	30	30	30	45
Additional charge		g/m	15	15	20	20	20	20
Operating range	Cooling Min/Max	°C	-10 / 46	-10 / 46	-10 / 46	-10 / 46	16 / 43	-10 / 43
	Heating Min/Max	°C	-15 / 24	-15 / 24	-15 / 24	-15 / 24	-20 / 24	-15 / 18



PRELIMINARY DATA





Free Multi 4x1 // Outdoor Unit CU-4E27PBE

Table with columns: Indoor unit capacity, Cooling Capacity (kW) (Room A, Room B, Room C, Room D, Total), Input Power (W) Rating, EER W/W, A.C.E. kWh, Current 230 V (A), Moisture Removal Volume (l/h), Heating Capacity (kW) (Room A, Room B, Room C, Room D, Total), Input Power (W) Rating, COP W/W, A.C.E. kWh, Current 230 V (A). Rows are categorized by room count (1 Room, 2 Room, 3 Room) and specific room configurations.



Free Multi 5x1 // Outdoor Unit CU-5E34PBE

Indoor unit capacity	Cooling						Heating					
	Capacity (Min.-Max.) (kW)						Capacity (Min.-Max.) (kW)					
	Room A	Room B	Room C	Room D	Room E	Total	Room A	Room B	Room C	Room D	Room E	Total
<b>1 Room</b>												
7	2.20	-	-	-	-	2.20 (1.5-2.6)	2.50	-	-	-	-	2.50 (1.8-4.3)
9	2.65	-	-	-	-	2.65 (1.5-3.2)	3.60	-	-	-	-	3.60 (1.8-4.7)
12	3.50	-	-	-	-	3.50 (1.6-3.6)	4.20	-	-	-	-	4.20 (1.9-5.1)
18	5.15	-	-	-	-	5.15 (1.7-5.8)	6.00	-	-	-	-	6.00 (2.0-7.8)
24	7.10	-	-	-	-	7.10 (1.8-7.4)	8.50	-	-	-	-	8.50 (2.0-8.8)
<b>2 Rooms</b>												
7+7	2.20	2.20	-	-	-	4.40 (2.0-5.1)	2.50	2.50	-	-	-	5.00 (2.0-6.4)
7+9	2.20	2.65	-	-	-	4.85 (2.0-5.8)	2.50	3.60	-	-	-	6.10 (2.1-7.5)
7+12	2.20	3.50	-	-	-	5.70 (2.0-6.7)	2.50	4.20	-	-	-	6.70 (2.3-8.3)
7+18	2.14	5.01	-	-	-	7.15 (2.2-7.7)	2.50	6.00	-	-	-	8.50 (3.0-9.4)
7+24	1.81	5.84	-	-	-	7.65 (2.3-8.8)	2.01	6.84	-	-	-	8.85 (3.0-9.8)
9+9	2.65	2.65	-	-	-	5.30 (2.0-6.5)	3.60	3.60	-	-	-	7.20 (2.4-8.5)
9+12	2.54	3.36	-	-	-	5.90 (2.0-7.4)	3.51	4.09	-	-	-	7.60 (2.6-8.5)
9+18	2.46	4.79	-	-	-	7.25 (2.3-8.5)	3.24	5.41	-	-	-	8.65 (3.3-9.4)
9+24	2.11	5.64	-	-	-	7.75 (2.3-8.8)	2.68	6.32	-	-	-	9.00 (3.3-9.8)
12+12	3.40	3.40	-	-	-	6.80 (2.2-8.4)	4.00	4.00	-	-	-	8.00 (2.9-8.5)
12+18	3.03	4.47	-	-	-	7.50 (2.6-8.8)	3.60	5.15	-	-	-	8.75 (3.4-9.8)
12+24	2.61	5.29	-	-	-	7.90 (2.6-9.5)	3.01	6.09	-	-	-	9.10 (3.4-9.8)
18+18	3.95	3.95	-	-	-	7.90 (2.6-9.5)	4.50	4.50	-	-	-	9.00 (3.4-9.8)
18+24	3.70	5.10	-	-	-	8.80 (2.7-9.5)	3.89	5.51	-	-	-	9.40 (3.4-9.8)
24+24	4.40	4.40	-	-	-	8.80 (2.7-9.5)	4.70	4.70	-	-	-	9.40 (3.4-9.8)
<b>3 Rooms</b>												
7+7+7	2.20	2.20	2.20	-	-	6.60 (2.0-7.7)	2.50	2.50	2.50	-	-	7.50 (2.7-9.0)
7+7+9	2.20	2.20	2.65	-	-	7.05 (2.2-8.4)	2.47	2.47	3.56	-	-	8.50 (3.0-9.2)
7+7+12	2.03	2.03	3.23	-	-	7.30 (2.4-8.6)	2.34	2.34	3.93	-	-	8.60 (3.2-9.8)
7+7+18	1.77	1.77	4.15	-	-	7.70 (2.7-9.0)	2.01	2.01	4.83	-	-	8.85 (3.4-9.8)
7+7+24	1.65	1.65	5.31	-	-	8.60 (2.9-10.0)	1.71	1.71	5.82	-	-	9.25 (3.4-9.8)
7+9+9	2.11	2.54	2.54	-	-	7.20 (2.3-8.6)	2.23	3.21	3.21	-	-	8.65 (3.3-9.3)
7+9+12	1.95	2.35	3.10	-	-	7.40 (2.6-9.0)	2.12	3.06	3.57	-	-	8.75 (3.4-9.8)
7+9+18	1.72	2.07	4.02	-	-	7.80 (2.9-9.0)	1.86	2.68	4.46	-	-	9.00 (3.4-9.8)
7+9+24	1.60	1.93	5.17	-	-	8.70 (2.9-10.0)	1.68	2.42	5.71	-	-	9.80 (3.4-9.8)
7+12+12	1.82	2.89	2.89	-	-	7.60 (2.7-9.0)	2.03	3.41	3.41	-	-	8.85 (3.4-9.8)
7+12+18	1.60	2.55	3.75	-	-	7.90 (2.9-9.0)	1.79	3.01	4.30	-	-	9.10 (3.4-9.8)
7+12+24	1.55	2.46	4.99	-	-	9.00 (2.9-10.0)	1.61	2.71	5.48	-	-	9.80 (3.4-9.8)
7+18+18	1.58	3.71	3.71	-	-	9.00 (2.9-9.0)	1.69	4.06	4.06	-	-	9.80 (3.4-9.8)
7+18+24	1.37	3.21	4.42	-	-	9.00 (2.9-10.0)	1.44	3.46	4.90	-	-	9.80 (3.4-9.8)
9+9+9	2.43	2.43	2.43	-	-	7.30 (2.5-8.6)	2.95	2.95	2.95	-	-	8.85 (3.4-9.4)
9+9+12	2.26	2.26	2.98	-	-	7.50 (2.7-9.0)	2.81	2.81	3.28	-	-	8.90 (3.4-9.8)
9+9+18	2.00	2.00	3.89	-	-	7.90 (2.9-9.0)	2.51	2.51	4.18	-	-	9.20 (3.4-9.8)
9+9+24	1.92	1.92	5.15	-	-	9.00 (2.9-10.0)	2.25	2.25	5.31	-	-	9.80 (3.4-9.8)
9+12+12	2.13	2.81	2.81	-	-	7.75 (2.7-9.0)	2.70	3.15	3.15	-	-	9.00 (3.4-9.8)
9+12+18	1.99	2.63	3.87	-	-	8.50 (2.9-9.0)	2.43	2.83	4.04	-	-	9.30 (3.4-9.8)
9+12+24	1.80	2.38	4.82	-	-	9.00 (2.9-10.0)	2.16	2.53	5.11	-	-	9.80 (3.4-9.8)
9+18+18	1.84	3.58	3.58	-	-	9.00 (2.9-9.0)	2.26	3.77	3.77	-	-	9.80 (3.4-9.8)
9+18+24	1.60	3.11	4.29	-	-	9.00 (2.9-10.0)	1.95	3.25	4.60	-	-	9.80 (3.4-9.8)
12+12+12	2.65	2.65	2.65	-	-	7.95 (2.9-9.0)	3.03	3.03	3.03	-	-	9.10 (3.4-9.8)
12+12+18	2.59	2.59	3.81	-	-	9.00 (2.9-9.0)	2.86	2.86	4.08	-	-	9.80 (3.4-9.8)
12+12+24	2.23	2.23	4.53	-	-	9.00 (2.9-10.0)	2.44	2.44	4.93	-	-	9.80 (3.4-9.8)
12+18+18	2.28	3.36	3.36	-	-	9.00 (2.9-10.0)	2.54	3.63	3.63	-	-	9.80 (3.4-9.8)
12+18+24	2.00	2.94	4.06	-	-	9.00 (2.9-10.0)	2.20	3.14	4.45	-	-	9.80 (3.4-9.8)
18+18+18	3.00	3.00	3.00	-	-	9.00 (2.9-10.0)	3.27	3.27	3.27	-	-	9.80 (3.4-9.8)
18+18+24	2.66	2.66	3.67	-	-	9.00 (2.9-10.0)	2.87	2.87	4.06	-	-	9.80 (3.4-9.8)

The table lists the wall-mounted type of indoor units as representative models.  
 For details on the connection of indoor units other than the wall mounted type, refer to the technical data.  
 Specifications subject to change without notice.



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