



DOMESTIC // HEATING AND COOLING SYSTEMS

EVERY

EVERY
ROOM
MATTERS



ETHEREA

MATTERS



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WELCOME TO NEW DOMESTIC RANGE

More than ever before, Panasonic has developed a range of products designed for you and your clients.

The main new feature in the Domestic line is, without doubt, the Etherea range with the new Eco patrol system, which intuits the level of human presence in a room and their level of activity and adjusts output accordingly. With its innovative design, high efficiency and incomparable purification system, the 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.



'ECO IDEAS' FOR PRODUCTS

We will produce energy-efficient products

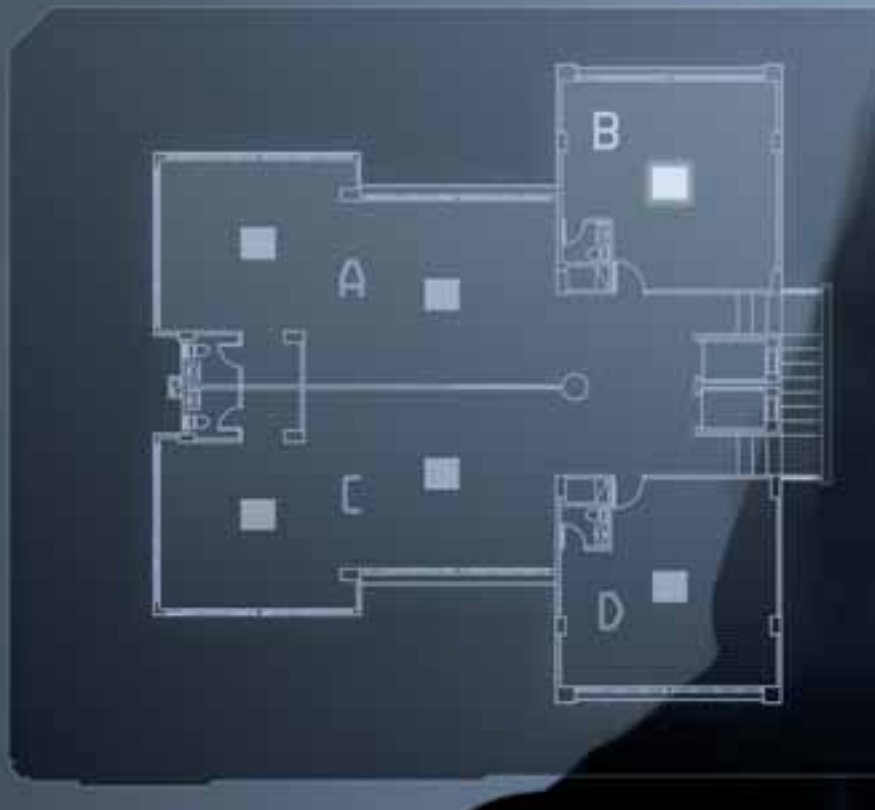


'ECO IDEAS' FOR MANUFACTURING

We will reduce CO₂ emissions across all our manufacturing sites

'ECO IDEAS' FOR EVERYBODY, EVERYWHERE

We will encourage the spread of environmental activities throughout the world





PANASONIC HEATING AND COOLING SYSTEMS TECHNOLOGY MAKES US BETTER

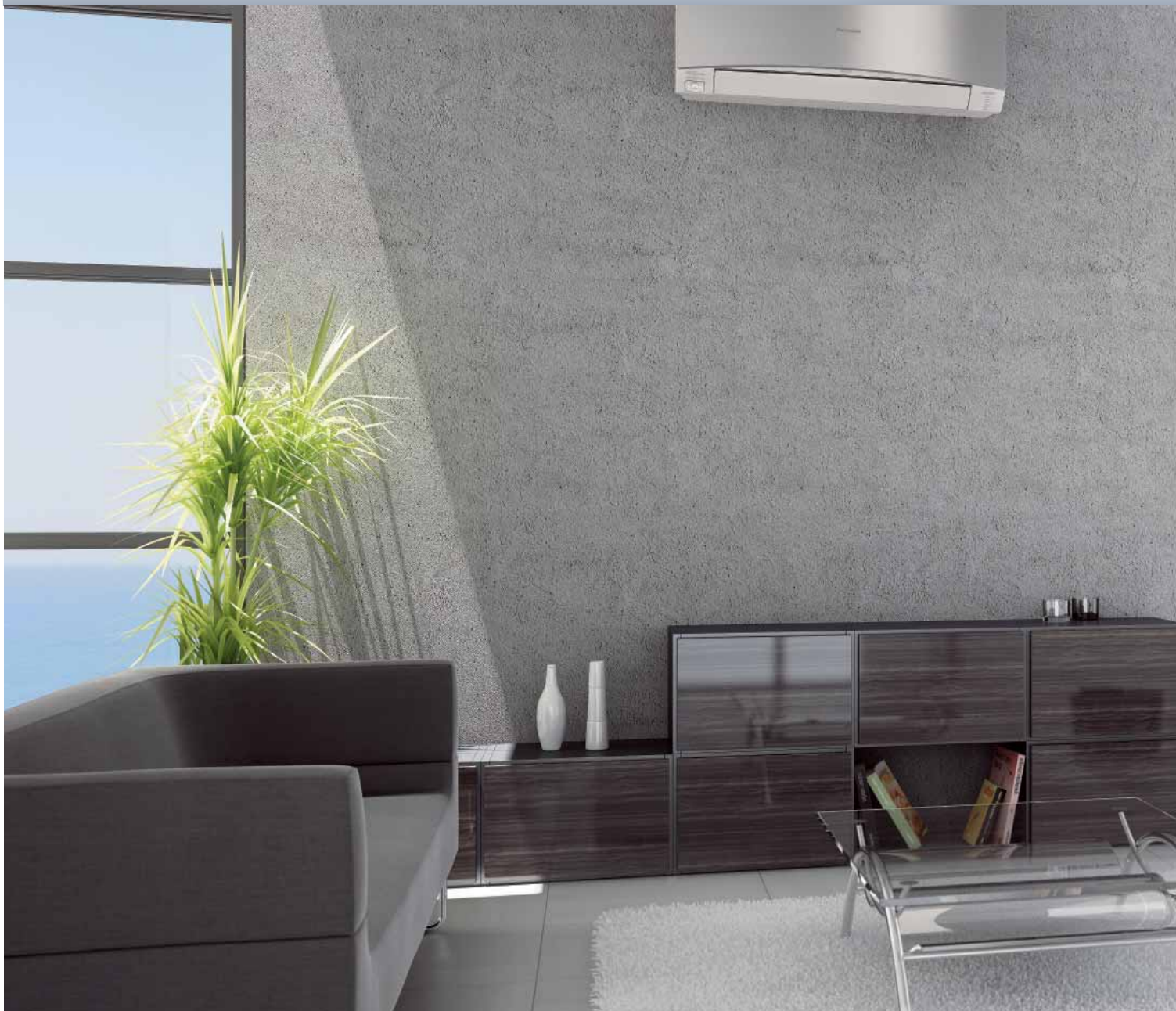
The desire to advance has made Panasonic the international leader in air conditioning. Our industrial capabilities and firm commitment to the environment enable us to open new avenues of research and to develop innovative technologies which can enhance our way of life.

The domestic range, semi-industrial range and VRF industrial range, together with the new Aquearea system, are adjusted to the most avant-garde construction needs and environmental demands of our time.

At Panasonic we know what a great responsibility it is to install heating and cooling systems. Because offering you the best solutions in heating and cooling matters.

EVERYTHING MATTERS





THE NEW ETHEREA RANGE PURE EFFICIENCY

Panasonic's new Etherea units offer maximum efficiency in every sense. They ensure minimum consumption, thanks to the new Eco Patrol system, which intuits the level of human presence in a room and their level of activity and adjusts output accordingly. This feature, together with the Inverter + system, provides up to 71% energy savings on Heat Pump, and up to 60% energy savings on cooling only.

Our super silent air conditioners guarantee the purest air to take care of you and your family. They boast sophisticated features, such as the E-ion plus purification system, designed to eliminate harmful micro-organisms, viruses, bacteria and moulds and a system which prevents humidity in the room from dropping too far. Thanks to Mild Dry System.



ECO PATROL



~~ETHEREA~~

designed to care for you



The Patrol Sensor is on guard 24 hours a day to ensure optimal air quality.

The E-ion+ system eliminates 99% of bacteria, viruses and mildew from the air.

The Perfect Humidity Air controls the humidity level in the air to prevent over-dryness.

The A Inverter system provides energy savings of up to 50%. You win and nature wins.

The Eco Patrol sensor detects people in the room to cut energy when no one is there.

With Super Quiet technology our devices are as quiet as a library.

24h
quality air control

PATROL SENSOR

pure air system

e-ION PLUS

perfect
humidity air

MILD DRY

A
energy
saving air

INVERTER

movement
sensor for
30%
savings

ECO PATROL

20dB
silent air

SUPER QUIET

healthy air

energy saving



ENJOY UNINTERRUPTED COOLING AND MORE ENERGY SAVINGS

For those who welcome energy savings without having to give up uninterrupted cooling, the Eco Patrol is the answer. As soon as it is activated via remote control, Eco Patrol's sensor intuitively senses the level of human presence or activity in a room and adjusts the temperature accordingly. Saving you the hassle of having to remember to turn the air conditioner on or off, the temperature up or down —while saving you maximum 30% in electricity costs.

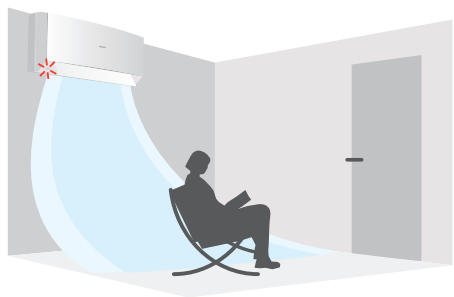
NEW10



THE ECO PATROL SENSOR OPTIMISES OPERATION AS CONDITIONS CHANGE

DETECTION

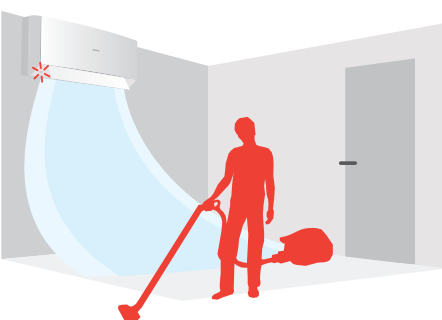
SENSES HUMAN PRESENCE AND ACTIVITY LEVEL



ANALYSIS

RECORDS IF THERE ARE ANY CHANGES.

WHEN THE ACTIVITY LEVEL GOES UP...



WHEN EVERYONE LEAVES...



ADJUSTMENT

INCREASES OR DECREASES POWER ACCORDINGLY.

HIGHER-POWER OPERATION PROVIDES UNINTERRUPTED COOLING



LOW-POWER OPERATION SAVES ENERGY



ECO PATROL

HERE'S WHY THE ECO PATROL SENSOR IS SO GREAT!

It senses people's movements.

It recognises people by "infrared rays + movement" and determines the amount of activity.

It senses the entire room in real-time.

It constantly checks people's movements in the room, and quickly adapts to changes.

High-Precision Sensing

Its wide field of view senses up to 7 meters away with high precision.



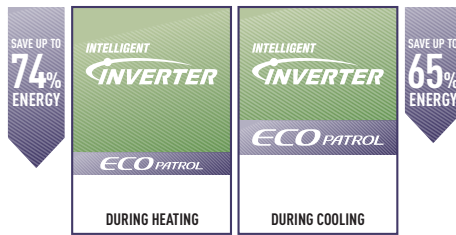
ETHEREA



MAXIMUM 30% ENERGY SAVINGS

The energy-saving benefit of Eco Patrol is maximised when the air conditioner is left switched on in a room that is used intermittently. For example, when the room is empty for two hours, the air conditioner self-adjusts to raise the temperature by 3°C for maximum 30% energy savings. When someone re-enters, the air conditioner reverts to the set temperature to provide uninterrupted cooling.

During Heating total saving: 74% (Inverter: 64% + Eco Patrol: 10%)
 During Cooling total saving: 65% (Inverter: 50% + Eco Patrol: 15%)
 Comparison between an Inverter model with Eco Patrol and non Inverter model without Eco Patrol. Both operating for 2 hours*



What is the most applicable situation to use Eco Patrol function?

Eco Patrol function is best use during absent period when AC automatically switched to energy saving operation. This helps to reduce electricity consumption while maintaining comfortable room environment.

Does the Eco Patrol sensor work constantly?

You can turn on / off Eco Patrol sensor using remote control. Each time AC is switched off, you have to turn it on again using the remote control.

How can I know if I have turn on Eco Patrol sensor?

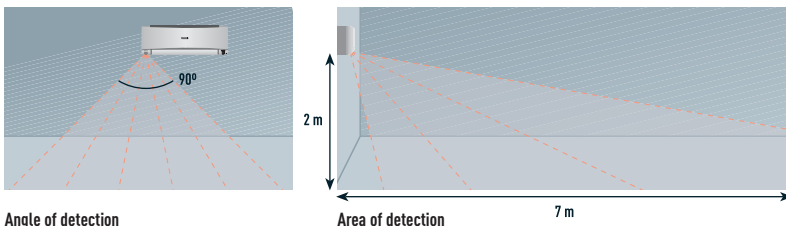
There is a LED light indicator at the bottom right panel. If Eco Patrol sensor is in operation, LED light will light up in Green colour.

Does the sensor ever malfunction?

When the air conditioner is installed in a poor location, the sensor may not be able to reach the entire room. The air conditioner should ideally be installed near the centre of the room.

ECO PATROL'S COVERAGE CAPABILITIES

Eco Patrol's high-precision sensor can detect any moving object within its detection zone.



Will the sensor judge that the room as empty if there are only pets in it?

The air conditioner will operate in Normal mode as long as the pets move occasionally. (The Eco Patrol sensor will then judge it as a normal condition.)

Won't it incorrectly judge that no one is in the room if you're sleeping?

The Eco Patrol Sensor can detect movements as small as 15 cm.

Since human beings do not remain completely still when sleeping, it should not detect the room as empty.

Even if it were to judge that nobody is in the room, it's controlled so that the remote control's set temperature +2°C does not exceed 28°C when cooling, so the room will not become too warm.

How accurate is the sensor?

It is capable of detecting a movement of 15 cm to the right or left in a location that is 7 meters from the sensor.

HIGH-PRECISION SENSING

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

DETECTING HUMAN PRESENCE



Difference in temperatures <input checked="" type="checkbox"/>	Difference in temperatures <input checked="" type="checkbox"/>	Difference in temperatures <input checked="" type="checkbox"/>
Movement <input checked="" type="checkbox"/>	Movement <input checked="" type="checkbox"/>	Movement <input checked="" type="checkbox"/>

When there is no movement for over 30 minutes

Concludes nobody is present	Concludes nobody is present	Concludes somebody is present
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DETERMINING THE LEVEL OF HUMAN ACTIVITY



Scale	Frequency	Speed of Movement
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A highly precise is reached through a complex algorithm

High	Normal
------	--------

Concludes Level of Activity High or Normal

When it enters Eco Patrol sensor function, does the temperature setting display on the remote control change?

No, the display doesn't change. The set temperature remains the same.

Is the sensor harmful to people?

The Eco Patrol sensor itself does not emit rays. It merely receives the infrared rays that are emitted by other objects, so it's not harmful at all.

ECO PATROL SENSOR TECHNOLOGY: DIFFERENTIATING OBJECTS

The risk of an operating error is reduced by eliminating movements with levels that are not humanly possible, by using factors such as size and temperature, and the speed and frequency of the movement.



Difference in temperatures <input checked="" type="checkbox"/>	Movement <input checked="" type="checkbox"/>
Concludes it is not human	



Difference in temperatures <input checked="" type="checkbox"/>	Movement <input checked="" type="checkbox"/>
Concludes it is not human ¹⁾	

From this difference in temperatures and the nature of the object's movement, Eco Patrol can determine if it's human



Difference in temperatures <input checked="" type="checkbox"/>	Movement <input checked="" type="checkbox"/>
Concludes it is not human	



Difference in temperatures <input checked="" type="checkbox"/>	Movement <input checked="" type="checkbox"/>
Concludes it is not human	

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

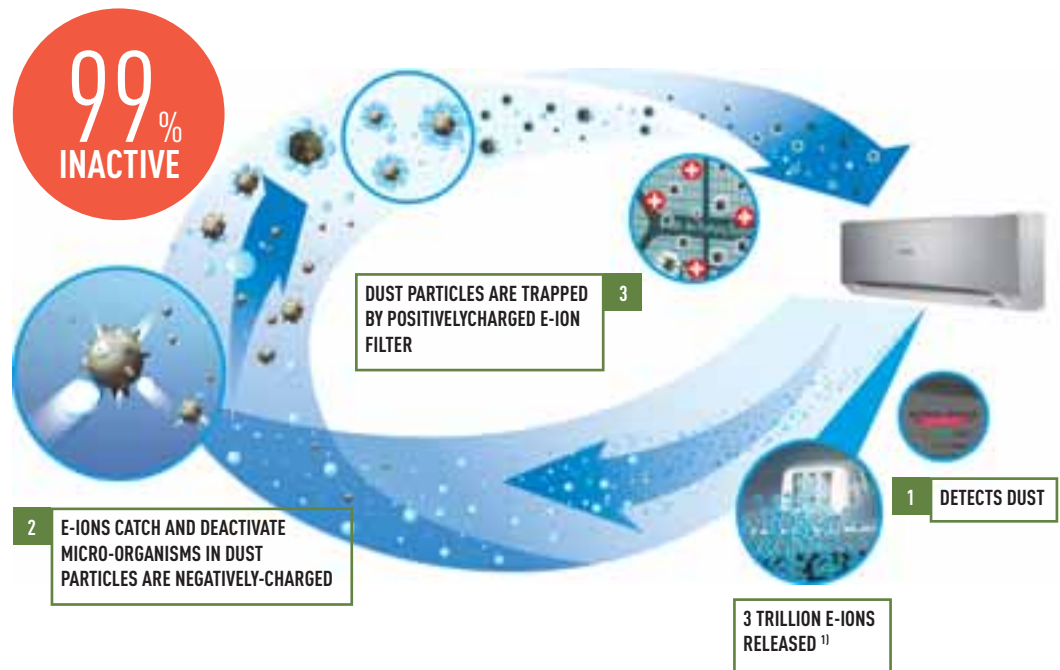
1) If a pet moves in a manner similar to a human, it determines that somebody is present.



E-ION AIR PURIFYING SYSTEM WITH NEWLY DESIGNED PATROL SENSOR



Give the best to your customers, the e-ion plus air purifying system is more efficient than ever with its innovative patrol sensor and 24h clean air system. Furthermore Etherea is a 2-in-1 with air purifier and air conditioner with fully independent or simultaneous operation.



THIS IS PANASONIC'S REVOLUTIONARY MECHANISM

Room air looks clean, but it's filled with invisible particles. Released e-ions Catch Dust Particles and Bring Them Back to the Filter!

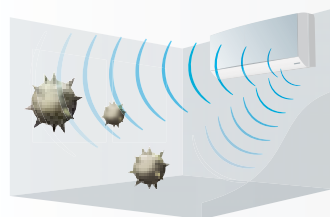


1

DETECTS

NEWLY DESIGNED PATROL SENSOR

The Patrol Sensor monitors the air and informs you of the dirt level through colour indications. Air purifying starts as soon as dirt is detected.

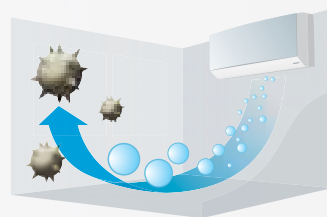


2

CATCHES & INACTIVATES

E-ION ACTION

Three trillion e-ions are released to catch floating dust particles. The ions also inactivate bacteria, mould and viruses.

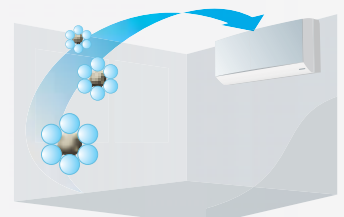


3

CAPTURES ELECTRICALLY

E-ION FILTER

The filter is positively charged, so negatively charged dust particles are electrically attracted. This electrical action assures that dust is efficiently captured.



1) 3 trillion is the simulated number of active e-ions under the mentioned conditions. Actual measured active e-ions at the centre of the room (13 m²):100k/cc Calculated number of active e-ions in the entire room assuming they are evenly distributed.

Available in Kits: XE7-LKE / XE9-LKE / XE12-LKE / XE15-LKE / XE18-LKE / XE21-LKE / E7-LKE / E9-LKE / E12-LKE / E15-LKE / E18-LKE / E21-LKE / E24-LKE / E28J-KE / 2E77-HKE-1 / 2E712-HKE-1 / 2E912-HKE / 2E1212-HKE / 2XE77-LKE / 2XE79-LKE / 2XE712-LKE / 2XE99-LKE / 2XE912-LKE / 2XE1212-LKE / 3XE7712-LKE / 3XE7715-LKE / 4XE77712-JBE / 4XE7715-JBE / 4XE77712-LKE / 4XE77715-LKE

UNIQUE FEATURES

24-HOUR CLEAN AIR

NEWLY DESIGNED PATROL SENSOR

The patrol sensor monitors microscopic dirt in the air and air purifying starts as soon as it is detected. It continues operating even when the air conditioner is switched OFF to maintain room air quality.



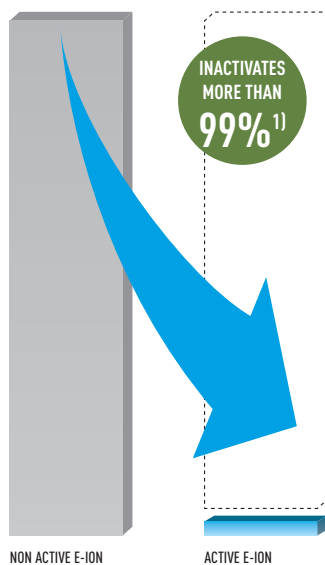
24h
quality air control
PATROL SENSOR

HYGIENIC

E-ION ACTION

Active e-ions inactivate more than 99% of airborne bacteria and mould to make them harmless.

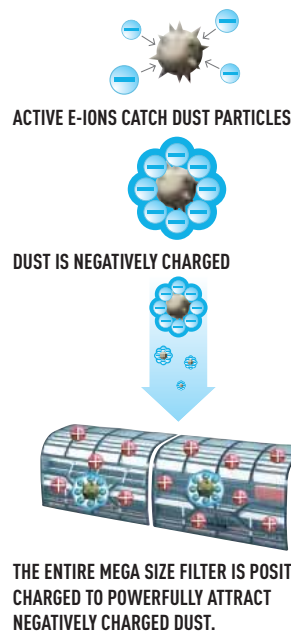
INACTIVATING EFFECT



FASTER PURIFICATION

ELECTRIC CHARGE ATTRACTION

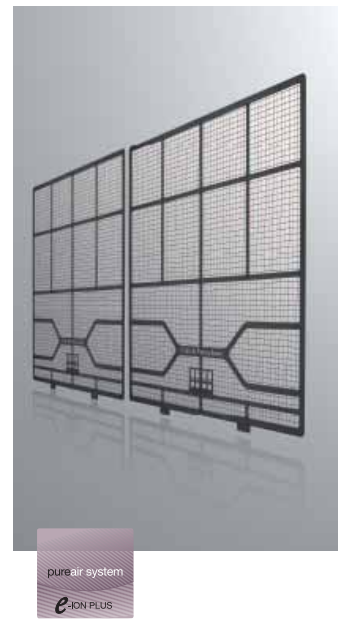
The positively charged filter attracts negatively charged dust particles, providing powerful air purification.



EFFECTIVE CAPTURE

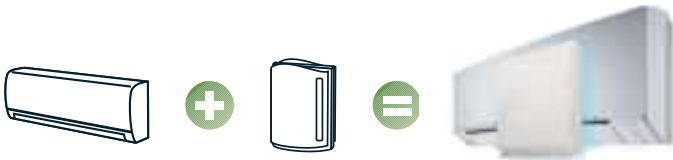
BIGGER, FINER E-ION FILTER

A wider area and finer mesh enables the filter to firmly capture minute micro-level particles.



2-IN-1 VALUE WITH AN AIR PURIFIER

Panasonic air conditioners also offer the function of an air purifier. You can enjoy both cool air with air conditioning and clean air with air purification from a single unit. Thus, it's also really economical.



AIR CONDITIONER:

Moisture (dehumidifying only) control.
Temperature control.

AIR PURIFIER:

Dust collection.
Inactivating viruses, bacteria, mould.

PURE AIR SYSTEM:

Moisture (dehumidifying only) control.
Temperature control.
Dust collection.
Inactivating viruses, bacteria, mould.

¹⁾99% inactivation was certified as indicated below. Certified by Japan Food Research Laboratories. Test report number: No. 205010211-001 Bacteria: Staphylococcus aureus subsp. aureus (NBRC12732). Test report number: No. 204101750-001 Virus: Influenza virus A. ¹Measurement conditions. Certified by Japan Food Research Laboratories. Test report number: 304110078-001. Test method: The e-ion Air Purifying System was operated in a test room (10 m²) and changes in airborne mould and bacteria were measured by means of the Air Sampler Method (MAS100)

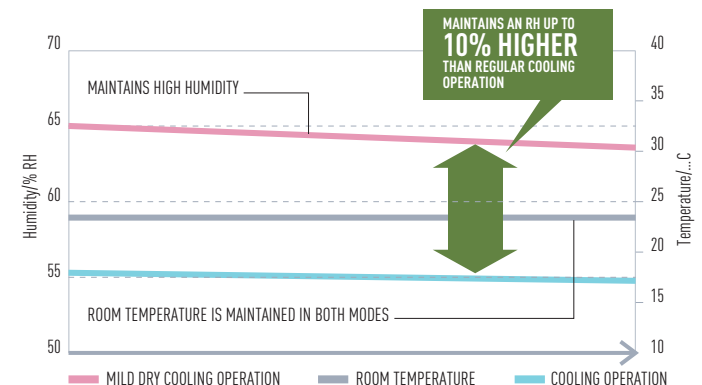
MILD DRY COOLING ³⁾



Fine control helps prevent a rapid decrease in room humidity while maintaining the set temperature.

Maintains an RH (Relative Humidity) up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on.

ROOM HUMIDITY COMPARISON



³⁾Only for Ethera 1x1.

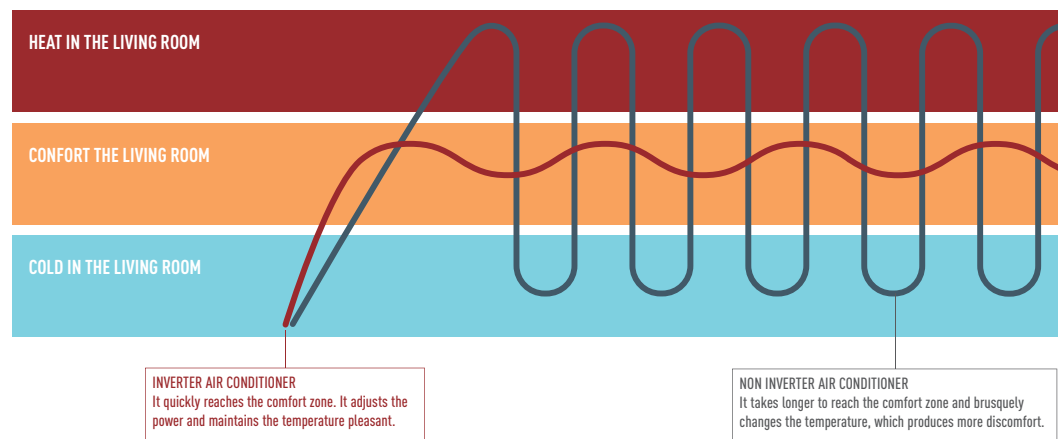
OUTSTANDING ENERGY-SAVING PERFORMANCE



You will always be comfortable with an Inverter air conditioner. After reaching the set temperature quickly, the power will be adjusted smoothly to keep the temperature constant. So, there will be no sharp temperature changes and you will save power. The ample range of output powers also guarantees a pleasant temperature at all times, even when the number of people in the room fluctuates. This way, Inverter air conditioners provide more precise temperature control than non-Inverter models.

THE ADVANTAGES OF INVERTER AIR CONDITIONERS.

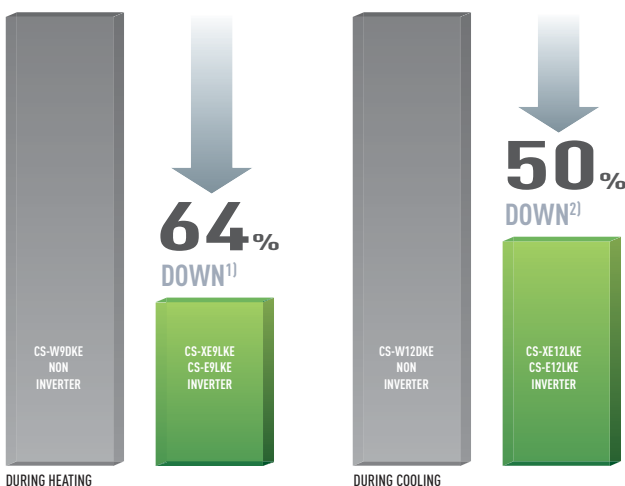
Comparing Inverter and non-Inverter air conditioners.



64% CUT IN POWER CONSUMPTION FOR BIG SAVINGS

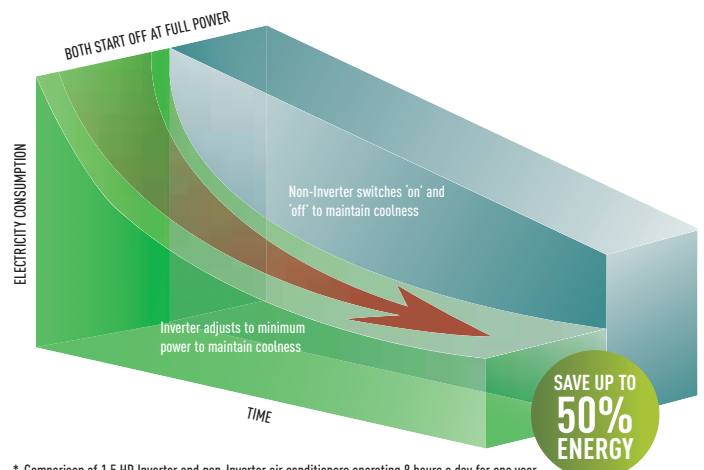
Panasonic Inverter air conditioners provide exceptional energy-saving performance that ranks among the highest in the industry. This dramatically cuts electricity consumption and CO₂ emissions, allowing an environment-friendly operation.

1) Comparison of cumulative electricity consumption during heating to reach the setting temperature (Panasonic in-house comparison) Test conditions: Indoor and outdoor temperature: 7°C / Setting temperature: 25°C / Fan speed: High.
2) Comparison of cumulative electricity consumption during 8 hours of cooling (Panasonic in-house comparison) Test conditions: Room temperature at start: 35°C / Setting temperature: 25°C.



OUTSTANDING PERFORMANCE WITH UP TO 50% ENERGY SAVINGS

The exceptional energy-saving performance of Panasonic Intelligent Inverter air conditioners ranks among the highest in the industry. The secret lies in its precision control. After reaching the set temperature, an Intelligent Inverter air conditioner continually adjusts compressor rotation speed to operate with minimum power – saving you up to 50% in electricity. By contrast, a non-Inverter unit operates on an ON-OFF cycle to maintain the temperature – so it uses twice as much electricity.

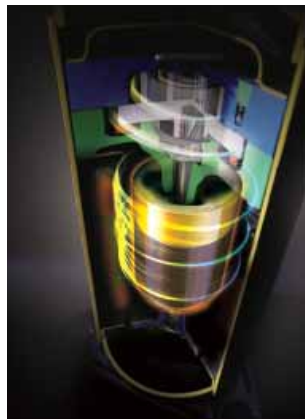


* Comparison of 1.5 HP Inverter and non-Inverter air conditioners operating 8 hours a day for one year.
* Test Conditions <Room Size> 16.2 m²; <Outside temp.>: DB 35°C / WB 24 °C. Set temp.: 25 °C; Fan Speed / Airflow Direction: Hi Fan / Auto Swing.
* Operation starts from indoor temperature DB 35 °C / WB 24 °C, until it achieves the set temperature 25 °C, total operation for 8 hours.



HOW CAN AN INVERTER SAVE ENERGY?

The Inverter constantly adjusts compressor rotation speed to provide optimum performance at all times. This extremely precise operation enables quick cooling while reducing power consumption compared to conventional non-Inverter units.



A: THE MOST EFFICIENT

Our new models have obtained the highest energy performance classification, Class A, which puts them in the highest energy saving class. This means you can use these models every day, without having to worry about the electric bill.

ENERGY EFFICIENCY CLASSIFICATIONS

A European Community directive requiring energy labelling of domestic appliances came into effect in 2005. Since then, all manufacturers have been required to label each product with an efficiency level represented by a letter from A to G. This means that a class B domestic appliance consumes approximately 10% more than an A, a C 20% more than an A, etc.

As well as the corresponding letter, further information on each domestic appliance appears on the right-hand part of the sticker.

In the tables which appear alongside the product in this catalogue, the energy efficiency is referenced with the corresponding letter in white on a black arrow.

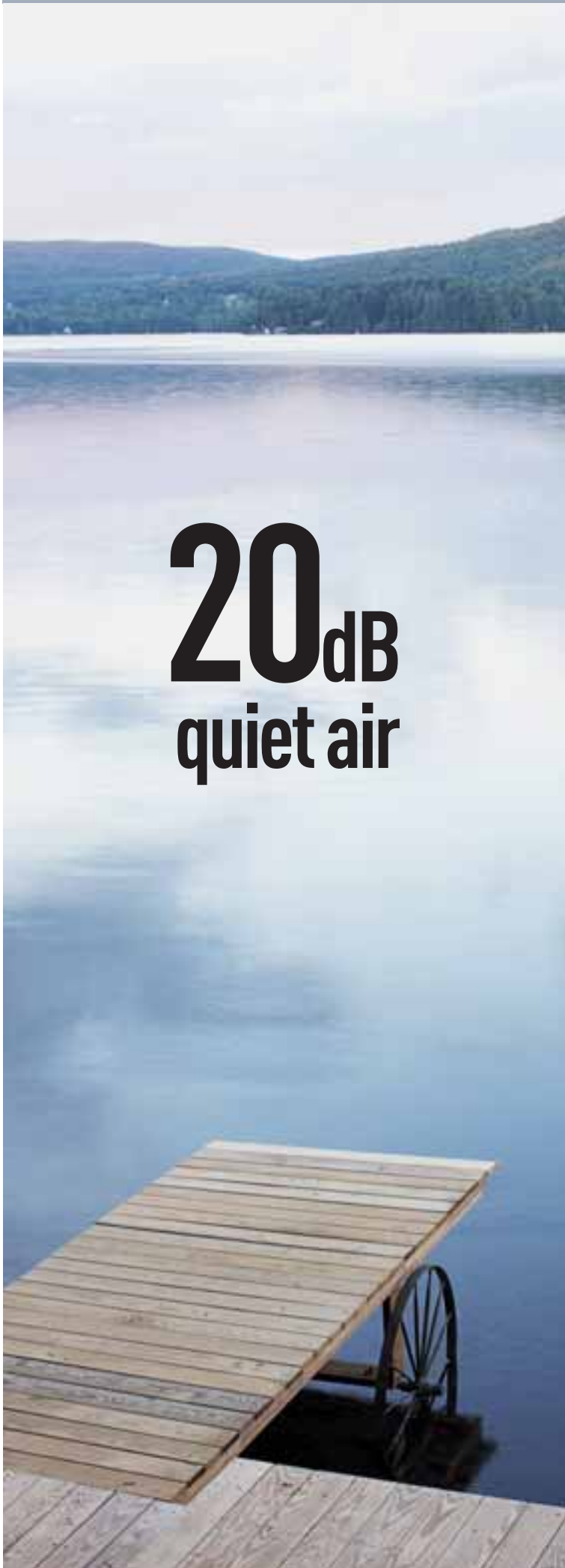
CLASSIFICATIONS

There are seven energy efficiency classifications, from A to G. The highest efficiency level is A and the lowest is G.

These classifications are for split and multi split air conditioning units.

Energy		Air-Conditioner	Product
Manufacturer	Panasonic		
Outdoor units	CU-....		Model number
Indoor unit	CS-....		
More efficient		A	Class Energy efficiency classification in seven classes, from A to G.
A			
B			
C			
D			
E			
F			
Less efficient			
G			
Annual energy consumption, kWh in cooling mode <small>Actual consumption will depend on how the appliance is used and climate</small>		***	Annual energy consumption Annual energy consumption is calculated by multiplying the total power input by an average of 500 hours per year in cooling mode at full load.
Total cooling output	kW	***	Energy efficiency ratio The higher the EER, the higher the energy efficiency.
Percentage cooling efficiency <small>Full load (the higher the better)</small>		***	
Type	Cooling only	—	Type of air conditioner
	Cooling + Heating	←	
	Air cooled	←	
	Water cooled	—	
Heat output	kW	***	
Heating performance A: higher G: lower		A	
Noise <small>(dB(A) re 1 µW)</small>		**	Noise Indoor unit Outdoor unit
		**	
<small>Further information is contained in product brochures</small>			
<small>Air-Conditioner Energy Label Directive 2002/31/EC</small>			

Unit energy efficiency class in cooling mode		Unit energy efficiency class in heating mode	
A	3.20 < EER	A	3.60 < COP
B	3.20 ≥ EER > 3.00	B	3.60 ≥ COP > 3.40
C	3.00 ≥ EER > 2.80	C	3.40 ≥ COP > 3.20
D	2.80 ≥ EER > 2.60	D	3.20 ≥ COP > 2.80
E	2.60 ≥ EER > 2.40	E	2.80 ≥ COP > 2.60
F	2.40 ≥ EER > 2.20	F	2.60 ≥ COP > 2.40
G	2.20 ≥ EER	G	2.40 ≥ COP



20dB
quiet air

20dB
silentair
SUPER QUIET



PANASONIC TECHNOLOGY FOR COMFORT

Extremely quiet. We have succeeded in making one of the most silent air conditioners on the market. The indoor unit runs silently with a slow fan speed. When you press the Quiet Mode button on the remote control, the operating sound level reduces even further, down to 20 dB. 20 dB technology our devices are as quiet as a library! We produce discreet air conditioners which do not disturb you, even when the room is at its quietest.

INVERTER

FURTHER WW

- Panasonic's Inverter air conditioners control room temperature much better than models which work at a constant speed.
- An Inverter air conditioner has 64% greater heating capacity than models which work at a constant speed. They provide more than enough power to heat a room in winter ¹⁾.
- Inverter models distribute the warm air over a wider area than electric radiators. They do not pollute the room like paraffin heaters do. There is no fire risk as there is with gas heaters. Air conditioners transfer heat to the room air, so they are safe and practical.
- Tests have shown that a Panasonic Inverter air conditioner consumes half the electricity of non-Inverter models ²⁾.

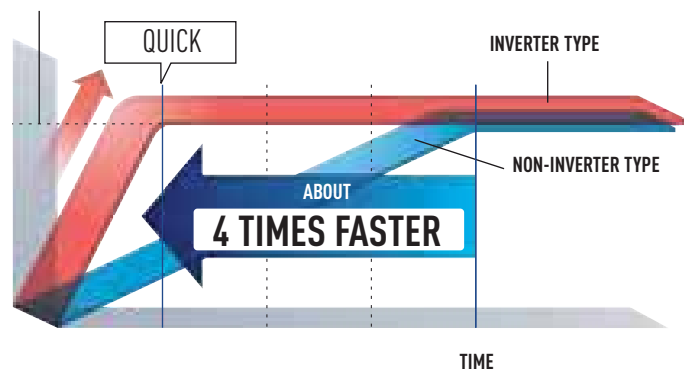
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2) Comparison of cumulative electricity consumption during 8 hours of cooling (Panasonic in-house comparison) Test conditions: Room temperature at start: 35°C/ Setting temperature: 25°C.

QUICK COMFORT

As soon as an Inverter air conditioner is switched on, it provides the exact amount of power needed to rapidly cool or heat the room. This enables it to reach the set temperature in about a quarter the time required by non-Inverter models. So you're comfortable soon after you arrive home on a hot summer day, or on a cold winter morning.

SETTING TEMPERATURE WHEN HEATING



POWERFUL AIRFLOW WITH A LARGER CROSS FLOW FAN

Panasonic's new models feature a large cross flow fan with improved design. The fan's larger diameter dramatically increases airflow. A powerful breeze rapidly cools the room to a comfortable temperature. And because the breeze reaches a wider area, the temperature is evenly distributed throughout the room, providing extra comfort.

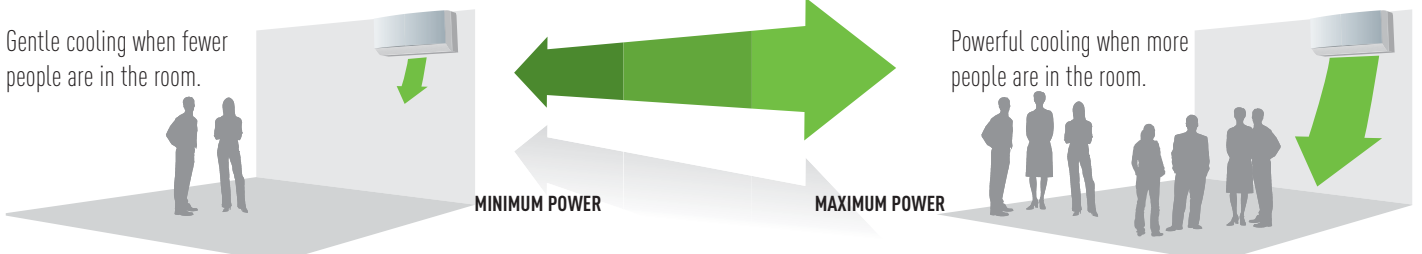


*Compare with HKE.
For LKE series Inverter models except multi type.

MORE PRECISE TEMPERATURE CONTROL

An Inverter varies output power to enable more precise temperature adjustment. In comparison, a non-Inverter air conditioner controls the temperature by switching on and off. This results in temperature fluctuations, leading to uneven cooling. With an Inverter model, you're assured a uniform room temperature for extra comfort.

COOLING POWER ADJUSTS TO MEET CHANGES IN ROOM TEMPERATURE





THE SECRET OF SAVING ENERGY. DIFFERENT RANGES THAT MEET ALL TYPES OF REQUIREMENTS

Panasonic makes the widest power range on the market. In order to meet the requirements of each and every client, this line of models makes it possible to adjust consumption to match the characteristics of every room by choosing the ideal power range. No comfort is sacrificed and power consumption is not exceeded.

Panasonic's exclusive 4.5 kW models (E15, XE15, RE15) thus provide the answer to a large number of situations in which more power is required than that offered by the 3.5 kW models, but for which the 5 kW units are too powerful. Furthermore, using a 4.5 kW instead of a 5 kW unit, you will save money due to the greater efficiency of the E15 and you will win on design because the E15 is the same size as the E12, and is 18% smaller than the 5 kW. Using the E15 range, everybody is a winner, and your customer pays for exactly what he needs! Using our E15, you can save up to 15% compared with an E18 and still obtain a perfect temperature setting in a 30 m² room.*

SAVE UP TO 15%

In the same way, Panasonic's exclusive 2.2 kW models (E7, XE7) guarantee maximum comfort at a minimum price and functioning cost – for small surface areas where the minimum standards of all the other 2.8 kW models exceed real air conditioning requirements.

Using an E7, you can save up to 14% compared with an E9 and still obtain a perfect temperature setting in an 11 m² room.*

SAVE UP TO 14%

SAVINGS WITH CORRECT DIMENSIONING OF AIR CONDITIONING UNIT: CASE STUDY FOR A 12 M² BEDROOM OR ON A LIVING ROOM OF 33 M²*

SAVE UP TO 15%

ANNUAL CONSUMPTION (KW)	SAVING	USING A E7 AND NOT A E9 ON A 12 m ² ROOM
KIT-XE7-LKE 235	12,3%	Furthermore, with a E7, you are not only saving money, but the E7 is quieter than the E9!
KIT-XE9-LKE 267		
ANNUAL CONSUMPTION (KW)	SAVING	USING A E15 AND NOT A E18 ON A 33 m ² LIVING ROOM
KIT-E15-LKE 630	14,3%	Furthermore, with a E15, you are not only saving money, but have smaller and discrete indoor units, and incredibly silent (only 20 dB!)
KIT-E18-LKE 735		



REDUCE CONSUMPTION BY UP TO 36%

PANASONIC'S MULTI SPLIT. CONDITIONS MORE, CONSUMES LESS

If air conditioning requirements exceed the ambit of a single room, Panasonic offers you a very extensive range of possibilities with up to 4 indoor units connected to a single outdoor unit. In this way, not only is the purchase price cheaper, the installation easier, the space for the outdoor units reduced and the elevation difference bigger, but consumption is also reduced enormously. This is because the consumption of one outdoor unit which powers four indoor units is much less than the sum of four outdoor units of individual splits. You can reduce consumption by up to 36% using the multi-split as opposed to the 1x1!*
















ANNUAL CONSUMPTION SAVINGS WITH MULTISPLIT: USING A MULTISPLIT SYSTEM, YOU CAN SAVE MORE!

	ANNUAL CONSUMPTION (KW)	"SAVINGS USING MULTISPLIT INSTEAD OF MONOSPLIT"
7+12 in Multi	615	9.0% SAVING
7+12 in 1X1	687	
12+12 in Multi	760	15.9% SAVING
12+12 in 1X1	904	
7+7+12 in Multi	605	33.3% SAVING
7+7+12 in 1X1	922	
7+7+7+12 in Multi	825	8.0% SAVING
7+7+7+12 in 1X1	1,157.5	
7+9+9+12 in Multi	825	35.9% SAVING
7+9+9+12 in 1X1	1,233	

Furthermore, using a multisplit system, you are saving place on the outdoor unit, making easy installation on small places. The multi system also have long elevation difference and long tubing, which gives flexibility on the installation on the roof.





DOMESTIC AIR CONDITIONER RANGE		COOLING POWER Rated kW (Min-Max)	EER	HEATING POWER Rated kW (Min-Max)	COP	NOISE PRESSURE LEVEL ¹⁾ dB* Cooling/Heating	DIMENSIONS MM ¹⁾ (H x W x D)	FOR STANDARD ROOMS BETWEEN m ² ²⁾			
								10	20	30	40
ETHEREA INVERTER+ // SILVER   <small>FOR E17, E19 AND E12</small>	KIT-XE7-LKE-3	2.05 (0.70-2.40)	4.36 A	2.80 (0.70-4.00)	4.41 A	20 / 20	290 x 870 x 204				
	KIT-XE9-LKE-3	2.50 (0.80-3.00)	4.67 A	3.40 (0.80-5.00)	4.63 A	20 / 20	290 x 870 x 204				
	KIT-XE12-LKE-3	3.50 (0.80-4.00)	3.87 A	4.40 (0.80-6.70)	4.04 A	20 / 20	290 x 870 x 204				
	KIT-XE15-LKE-3	4.20 (0.80-5.00)	3.44 A	5.40 (0.90-7.10)	3.70 A	29 / 29	290 x 870 x 204				
	KIT-XE18-LKE	5.00 (0.90-6.00)	3.40 A	5.80 (0.90-8.00)	3.77 A	34 / 34	290 x 1,070 x 235				
	KIT-XE21-LKE	6.30 (0.90-7.10)	2.85 C	7.20 (0.90-8.50)	3.43 B	34 / 34	290 x 1,070 x 235				
ETHEREA INVERTER+ // WHITE   <small>FOR E7, E9 AND E12</small>	KIT-E7-LKE-3	2.05 (0.70-2.40)	4.36 A	2.80 (0.70-4.00)	4.41 A	20 / 20	290 x 870 x 204				
	KIT-E9-LKE-3	2.50 (0.80-3.00)	4.67 A	3.40 (0.80-5.00)	4.63 A	20 / 20	290 x 870 x 204				
	KIT-E12-LKE-3	3.50 (0.80-4.00)	3.87 A	4.40 (0.80-6.70)	4.04 A	20 / 20	290 x 870 x 204				
	KIT-E15-LKE-3	4.20 (0.80-5.00)	3.44 A	5.40 (0.90-7.10)	3.70 A	29 / 29	290 x 870 x 204				
	KIT-E18-LKE	5.00 (0.90-6.00)	3.40 A	5.80 (0.90-8.00)	3.77 A	34 / 34	290 x 1,070 x 235				
	KIT-E21-LKE	6.30 (0.90-7.10)	2.85 C	7.20 (0.90-8.50)	3.43 B	34 / 34	290 x 1,070 x 235				
	KIT-E24-LKE	6.80 (0.90-8.10)	3.21 A	8.60 (0.90-9.90)	3.23 C	35 / 35	290 x 1,070 x 235				
	KIT-E28-LKE	7.65 (0.90-8.60)	3.01 B	9.60 (0.90-11.00)	2.91 D	35 / 35	290 x 1,070 x 235				
RE TYPE // STANDARD INVERTER   <small>FOR E9</small>	KIT-RE9-JKX-1	2.50 (0.90-3.00)	3.57 A	3.30 (0.90-4.10)	4.02 A	22 / 25	290 x 848 x 204				
	KIT-RE12-JKX-1	3.50 (0.90-3.90)	3.47 A	4.25 (0.90-5.10)	3.79 A	22 / 25	290 x 848 x 204				
	KIT-RE15-JKX-1	4.20 (1.00-4.60)	3.33 A	5.00 (0.90-6.80)	3.61 A	29 / 28	290 x 848 x 204				
	KIT-RE18-JKX-1	5.00 (0.90-6.00)	3.40 A	5.80 (0.90-8.00)	3.77 A	37 / 37	290 x 1,070 x 235				
	KIT-RE24-JKX-1	6.80 (0.90-8.10)	3.21 A	8.60 (0.90-9.90)	3.23 C	38 / 38	290 x 1,070 x 235				
	HKEA TYPE // INVERTER+ // -15°C   <small>FOR E9</small>	KIT-E9-HKEA	2.60 (0.60-3.00)	4.41 A	3.60 (0.60-5.40)	4.26 A	50 / 51	280 x 799 x 183			
KIT-E12-HKEA		3.50 (0.60-4.00)	3.80 A	4.80 (0.60-6.60)	3.81 A	53 / 53	280 x 799 x 183				
KIT-E15-HKEA		4.40 (0.90-5.00)	3.21 A	5.50 (0.90-7.10)	3.50 B	54 / 54	280 x 799 x 183				
KIT-E18-HKEA		5.30 (0.90-6.00)	3.21 A	6.60 (0.90-8.00)	3.69 A	57 / 57	275 x 998 x 230				
KIT-E21-HKEA		6.30 (0.90-7.10)	2.85 C	7.20 (0.90-8.50)	3.43 B	58 / 58	275 x 998 x 230				
PW TYPE // STANDARD HEAT PUMP  <small>OPTIONAL</small>		KIT-PW9-GKX	2.65	3.21 A	2.85	3.63 A	31 / 31	250 x 770 x 205			
	KIT-PW12-GKX	3.40	3.22 A	3.80	3.61 A	32 / 31	280 x 799 x 183				
	KIT-PW18-GKX	5.10	2.91 C	5.30	3.35 C	38 / 38	275 x 998 x 230				
	KIT-PW24-JKE	7.03	2.53 E	7.50	2.87 D	41 / 41	275 x 998 x 230				
	UE TYPE // STANDARD INVERTER   <small>OPTIONAL</small>	KIT-UE9-JKE	2.50 (0.90-3.00)	3.33 A	3.30 (0.90-4.00)	3.66 A	59 / 60	250 x 770 x 205			
KIT-UE12-JKE		3.50 (0.90-3.90)	3.30 A	4.25 (0.90-4.70)	3.63 A	61 / 63	280 x 799 x 183				
FLOOR CONSOLE TYPE // INVERTER+   <small>OPTIONAL</small>	KIT-E9-GFEW-1	2.50 (0.80-3.00)	4.39 A	3.60 (0.80-5.00)	4.16 A	23 / 23	600 x 700 x 210				
	KIT-E12-GFEW-1	3.50 (0.80-3.80)	3.63 A	4.80 (0.80-6.10)	3.64 A	24 / 23	600 x 700 x 210				
	KIT-E18-GFEW-1	5.00 (0.90-5.60)	3.23 A	5.80 (0.90-7.10)	3.63 A	32 / 32	600 x 700 x 210				
FLOOR OR CEILING // INVERTER   <small>OPTIONAL</small>	KIT-E15-DTE	4.15 (0.90-4.55)	3.22 A	5.17 (0.90-6.30)	3.34 C	34 / 30	540 x 1,028 x 200				
	KIT-E18-DTE	5.00 (0.90-5.40)	3.01 B	6.10 (0.90-7.60)	3.35 C	36 / 32	540 x 1,028 x 200				
	KIT-E21-DTE	5.80 (0.90-6.60)	3.01 B	6.80 (0.90-8.10)	3.42 B	38 / 34	540 x 1,028 x 200				

1) Indoor unit.

2) Standard conditions: 2.5 m² High roof; 1 person per 10 m²; 70 w lighting per 10 m²; 1.5 m² window per 10 m² oriented east or west; good thermal insulation on the walls.



DOMESTIC AIR CONDITIONER RANGE

INDOOR UNITS

2.2 kW

2.8 kW

3.2 kW

WALL MOUNTED ETHEREA // INVERTER+ // SILVER
PAGE 20 / 22



KIT-XE7-LKE-3

KIT-XE9-LKE-3

KIT-XE12-LKE-3

WALL MOUNTED ETHEREA // INVERTER+ // WHITE
PAGE 24 / 26



KIT-E7-LKE-3

KIT-E9-LKE-3

KIT-E12-LKE-3

WALL MOUNTED RE TYPE // STANDARD INVERTER
PAGE 28



WALL MOUNTED TYPE // INVERTER+ // -15°C
PAGE 30

KIT-RE9-JKX-1

KIT-RE12-JKX-1



WALL-MOUNTED TYPE // STANDARD HEAT PUMP
PAGE 32

KIT-E9-HKEA

KIT-E12-HKEA



WALL MOUNTED // INVERTER
PAGE 34

KIT-PW9-GKX

KIT-PW12-GKX



FLOOR CONSOLE TYPE // INVERTER+
PAGE 36

KIT-UE9-JKE

KIT-UE12-JKE



SINGLE SPLIT FLOOR OR CEILING TYPE // INVERTER
PAGE 38

KIT-E9-GFEW-1

KIT-E12-GFEW-1

FREE MULTI // INVERTER+
PAGE 40



4.5 kW



5.0 kW



6.0 kW



6.5 kW

8.0 kW

KIT-XE15-LKE-3



KIT-XE18-LKE



KIT-XE21-LKE



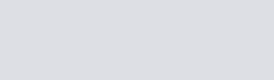
KIT-E15-LKE-3



KIT-E18-LKE



KIT-E21-LKE



KIT-E24-LKE



KIT-E28-LKE

KIT-RE15-JKX-1

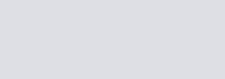


KIT-RE18-JKX-1



KIT-RE24-JKX-1

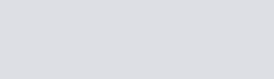
KIT-E15-HKEA



KIT-E18-HKEA



KIT-E21-HKEA



KIT-PW18-GKX

KIT-PW24-JKE



KIT-E18-GFEW-1



KIT-E15-DTE



KIT-E18-DTE



KIT-E21-DTE



CU-2E15LBE



CU-2E18LBE



CU-3E18LBE



CU-4E23LBE // CU-4E27CDBG



FEATURE EXPLANATIONS

Healthy Air Quality



E-ION+ AIR PURIFYING SYSTEM

E-ions are shot out to catch dust and inactivate airborne bacteria and mould. The positively charged e-ion filter attracts dust to thoroughly clean the room.



NEWLY DESIGNED PATROL SENSOR

The patrol sensor monitors microscopic dirt in the air and air purifying starts as soon as it is detected. It continues operating 24-hr a day even when the air conditioner is switched OFF to maintain room air quality.



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.



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 BENEFIT

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



SUPER ALLERU-BUSTER FILTER

The super alleru-buster 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.

ANTI-ALLERGEN PROTECTION

Inactivates more than 99% of filter-captured allergens.

ANTI-VIRUS PROTECTION

Inactivates more than 99% of filter-captured viruses.

ANTI-BACTERIA/ANTI-MOULD PROTECTION

The filter inactivates more than 99% of captured bacteria and mould spores.



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



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.



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.



ECO PATROL

Eco Patrol's sensor technology uses factors such as speed, frequency and temperature to determine the human activity level in the room for maximum comfort and maximum savings. With Eco Patrol, you can save til 30%.



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 -15°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 HEAT PUMP

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



POWERFUL MODE

High power for immediate air conditioning. 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, making a vertical sweep which spreads the flow throughout the room. The flow can also be set a fixed angle with the remote control.



MANUAL HORIZONTAL AIRFLOW CONTROL



AUTO MODE (INVERTER)

Change automatically from cooling to heating in function of the temperature of the room.



SIMPLE AUTO CHANGEOVER

The sensor measures the temperature, and when the difference between the measured temperature and the set temperature is 3°C or more, it automatically switch 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 DUAL SETTING TIMER



24-HOUR ON&OFF DUAL SETTING TIMER

This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 24-hour time frame.



24-HOUR ON&OFF REAL SETTING 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 in 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

This is a figure which indicates the maximum length of pipe between the outdoor unit and the indoor unit(s). The long distances permitted are demonstration of the many 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.



FEATURE COMPARISON

	MODELS	KIT-XE7-LKE-3 KIT-XE9-LKE-3 KIT-XE12-LKE-3 KIT-XE15-LKE-3 KIT-XE18-LKE KIT-XE21-LKE	KIT-E7-LKE-3 KIT-E9-LKE-3 KIT-E12-LKE-3 KIT-E15-LKE-3 KIT-E18-LKE KIT-E21-LKE KIT-E24-LKE KIT-E28-LKE	KIT-RE9-JKX-1 KIT-RE12-JKX-1 KIT-RE15-JKX-1 KIT-RE18-JKX-1 KIT-RE24-JKX-1	KIT-E9-HKEA KIT-E12-HKEA KIT-E15-HKEA KIT-E18-HKEA KIT-E21-HKEA	KIT-PW9-GKX KIT-PW12-GKX KIT-PW18-GKX KIT-PW24-JKE	KIT-UE9-JKE KIT-UE12-JKE	KIT-E9-GFEW-1 KIT-E12-GFEW-1 KIT-E18-GFEW-1	KIT-E15-DTE KIT-E18-DTE KIT-E21-DTE
HEALTHY AIR QUALITY	Advanced+Plus e-ion. Air purifying system	✗	✗						
	Newly Designed Patrol Sensor	✗	✗						
	Mild Dry Cooling	✗	✗						
	Soft Breeze			✗				✗	
	Ion Benefit				✗				
	Super Allergo-buster filter			✗ 10 years	✗	✗ Optional			✗ Optional
	One-Touch anti-mould air filter			✗				✗	✗
	Odour-removing function	✗	✗	✗	✗	✗	✗	✗	✗
	Removable, washable panel	✗	✗	✗	✗	✗	✗	✗	
	Inverter+ system	✗	✗		✗				✗
COMFORT	Inverter system			✗			✗		✗
	Eco Patrol	✗	✗						
	Super Quiet mode	✗	✗	✗ For RE9, RE12 and RE15	✗			✗	✗
	Down to -15°C in cooling only				✗				
	Down to -15°C in heat pump	✗ For XE7, XE9, XE12 and XE15	✗ For E7, E9, E12 and E15		✗			✗	
	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 and E21	✗ For RE18 and RE24	✗				
	Automatic vertical airflow control	✗ For XE7, XE9, XE12 and XE15	✗ For E7, E9, E12 and E15	✗ For RE9, RE12 and RE15		✗	✗	✗	✗
USE	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	✗	✗	✗	✗	✗	✗	✗	✗
	12-Hour ON&OFF dual setting timer			✗ For RE9, RE12 and RE15		✗ For PW9 and PW12	✗		
	24-Hour ON&OFF dual setting timer	✗	✗		✗			✗	✗
	24-Hour ON&OFF real setting timer			✗ For RE18 and RE24		✗ For PW18 and PW24			
	LCD Wireless remote controller	✗	✗	✗	✗	✗	✗	✗	✗
	Automatic restart	✗	✗	✗	✗	✗	✗	✗	✗
	RELIABILITY	Long piping	✗ 15m (XE7, XE9, XE12 and XE15) 20m (XE18 and XE21)	✗ 15m (E7, E9, E12 and E15) 20m (E18 / E24) 30m (E24 / E28)	✗ 15m (RE9, RE12 and RE15) 20m (RE18) 30m (RE24)	✗ 15m 20m (E18 and E21)	✗ 10m (PW9) 15m (PW12) 25m (PW18 and PW24)	✗ 15m	✗ 15m 20m (E18)
Top-Panel maintenance access		✗	✗	✗	✗	✗	✗	✗	✗
Self-diagnosis function		✗	✗	✗	✗			✗	✗



WALL MOUNTED ETHEREA // INVERTER+ // SILVER

NEW ETHEREA WITH ECO PATROL, MORE EFFICIENT, MORE COMFORT, MORE DESIGN, MORE HEALTHY AIR

Eco Patrol's sensor technology uses factors such as speed, frequency and temperature to determine the human activity level in the room for maximum comfort and maximum savings. With Eco Patrol, you can save till 30%.

Furthermore, Etherea is more efficient than ever with 64% less consumption for the non Inverter model on heat pump mode, and can reach 71% total savings when used with Eco Patrol. More efficiency for bigger savings!

Etherea has an advanced air purifying system with the new Patrol Sensor to detect and eliminate contaminants.

Etherea is also able to prevent rapid decreases in Room humidity with the new mild dry cooling system which increases comfort, especially when sleeping with the air conditioning running.



Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on



FOR XE7, XE9 AND XE12



WALL MOUNTED ETHEREA // INVERTER+

Kit			KIT-XE7-LKE-3	KIT-XE9-LKE-3	KIT-XE12-LKE-3	KIT-XE15-LKE-3
Indoor			CS-XE7LKEW	CS-XE9LKEW	CS-XE12LKEW	CS-XE15LKE-3
Outdoor			CU-E7LKE-3	CU-E9LKE-3	CU-E12LKE-3	CU-E15LKE-3
Cooling capacity	Nominal (Min - Max)	kW	2.05 (0.70-2.40)	2.50 (0.80-3.00)	3.50 (0.80-4.00)	4.20 (0.80-5.00)
	Nominal (Min - Max)	kCal	1,760 (600-2,060)	2,150 (690-2,580)	3,010 (690-3,440)	3,610 (690-4,300)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.36 (4.12-4.14) A	4.67 (4.57-4.11) A	3.87 (4.32-3.39) A	3.44 (4.19-3.13) A
Power input Cooling	Nominal (Min - Max)	kW	0.47 (0.17-0.58)	0.535 (0.175-0.730)	0.905 (0.185-1.180)	1.22 (0.215-1.60)
Heating capacity	Nominal (Min - Max)	kW	2.80 (0.70-4.00)	3.40 (0.80-5.00)	4.40 (0.80-6.70)	5.40 (0.90-7.10)
	Nominal (Min - Max)	kCal	2,410 (600-3,440)	2,920 (690-4,300)	3,780 (690-5,760)	4,640 (770-6,110)
Heating capacity at -7°C	Nominal	kW	2.35	2.88	3.75	4.10
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.41 (4.38-3.92) A	4.63 (4.85-3.85) A	4.04 (4.57-3.47) A	3.70 (3.67-3.21) A
Power input Heating	Nominal (Min - Max)	kW	0.635 (0.16-1.02)	0.735 (0.165-1.30)	1.09 (0.175-1.93)	1.46 (0.245-2.210)
Annual Energy Consumption ²⁾		kWh	235	268	453	610
Indoor unit						
Air Volume	Cooling / Heating	m ³ /h	654 / 684	678 / 702	750 / 768	750 / 804
Moisture removal volume		l/h	1.3	1.5	2.0	2.4
Sound pressure Level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	37 / 24 / 20	39 / 25 / 20	42 / 28 / 20	43 / 32 / 29
	Heating (Hi / Lo / S-Lo)	dB(A)	38 / 25 / 20	40 / 27 / 20	42 / 33 / 20	43 / 35 / 29
Sound power Level	Cooling (Hi)	dB	53	55	58	59
	Heating (Hi)	dB	54	56	58	59
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
Net weight		kg	9	9	9	9
Air purifier filter			Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
Outdoor unit						
Power source		V	230	230	230	230
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal	A	2.2 / 3.0	2.5 / 3.4	3.9 / 5.1	5.8 / 6.9
Max. current		A	4.7	5.8	8.9	9.7
Air Volume	Cooling / Heating	m ³ /h	2,034 / 2,034	1,788 / 1,788	1,860 / 1,860	2,910 / 2,808
Sound pressure Level ³⁾	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	46 / 46
Sound power Level	Cooling / Heating (Hi)	dB	60 / 61	61 / 62	63 / 65	61 / 61
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345
Net weight		kg	33	34	34	48
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)	3/8" (9.52)	1/2" (12.70)
Refrigerant Loading	R410A	kg	0.830	0.950	0.970	1.06
Elevation difference (in/out) ⁵⁾	Max	m	15	15	15	15
Piping length	Min / Max	m	3-15	3-15	3-15	3-15
Piping length without refrigerant Max increase		m	7.5	7.5	7.5	7.5
Additional gas		g/m	20	20	20	20
Operating range ³⁾	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43	+5 / +43
	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	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 (24h operation).

Connectivity restriction: JKE units are not compatible with LKE units.

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 meters 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.


NEW10

INVERTER



TECHNICAL FOCUS

- MAXIMUM EFFICIENCY AND COMFORT WITH ECO PATROL
- VERY EXCLUSIVE WHITE DESIGN
- NEW GENERATION OF E-ION AIR PURIFYING SYSTEM WITH 24-HR PATROL SENSOR
- MILD DRY COOLING: PREVENT A RAPID DECREASE IN ROOM HUMIDITY
- SUPER QUIET! ONLY 20DB, EQUIVALENT TO NIGHT-TIME IN THE COUNTRY (FOR E7, E9 AND E12)
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE


 KIT-XE7-LKE-3 // KIT-XE9-LKE-3 //
 KIT-XE12-LKE-3 // KIT-XE15-LKE-3

HEALTHY AIR

- E-ion plus air purifying system
- Patrol sensor to detect and eliminate contaminants
- Air conditioner and purifier with simultaneous or independent operation
- 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
- -30% consumption with Eco Patrol on heat pump (-20% 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

- 24-hr timer
- User friendly infrared remote 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-E7LKE-3 CU-E9LKE-3
 CU-E12LKE-3


CU-E15LKE-3



WALL MOUNTED ETHEREA // INVERTER+ // SILVER

NEW ETHEREA WITH ECO PATROL, MORE EFFICIENT, MORE COMFORT, MORE DESIGN, MORE HEALTHY AIR

Eco Patrol's sensor technology uses factors such as speed, frequency and temperature to determine the human activity level in the room for maximum comfort and maximum savings. With Eco Patrol, you can save till 30%.

Furthermore, Etherea is more efficient than ever with 64% less consumption for the non Inverter model on heat pump mode, and can reach 71% total savings when used with Eco Patrol. More efficiency for bigger savings!

Etherea has an advanced air purifying system with the new Patrol Sensor to detect and eliminate contaminants.

Etherea is also able to prevent rapid decreases in Room humidity with the new mild dry cooling system which increases comfort, especially when sleeping with the air conditioning running.



Maintains an Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on

WALL MOUNTED ETHEREA // INVERTER+ // SILVER

Kit			KIT-XE18-LKE	KIT-XE21-LKE
Indoor			CS-XE18LKEW	CS-XE21LKEW
Outdoor			CU-E18LKE	CU-E21LKE
Cooling capacity	Nominal (Min - Max)	kW	5.00 (0.90-6.00)	6.30 (0.90-7.10)
	Nominal (Min - Max)	kCal	4,300 (770-5,160)	5,420 (770-6,110)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.40 (4.19-2.96) A	2.85 (4.19-2.8) C
Power input Cooling	Nominal (Min - Max)	kW	1.47 (0.215-2.03)	2.21 (0.215-2.54)
Heating capacity	Nominal (Min - Max)	kW	5.80 (0.90-8.00)	7.20 (0.90-8.50)
	Nominal (Min - Max)	kCal	4990 (770-6,880)	6,190 (770-7,310)
Heating capacity at -7°C	Nominal	kW	4.98	5.24
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.77 (3.67-3.08) A	3.43 (3.67-3.09) B
Power input Heating	Nominal (Min - Max)	kW	1.54 (0.245-2.600)	2.10 (0.245-2.75)
Annual Energy Consumption ²⁾		kWh	735	1,105
Indoor unit				
Air Volume	Cooling / Heating	m ³ /h	978 / 1,074	1,038 / 1,110
Moisture removal volume		l/h	2.8	3.5
Sound pressure Level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	44 / 37 / 34	45 / 37 / 34
	Heating (Hi / Lo / S-Lo)	dB(A)	44 / 37 / 34	45 / 37 / 34
Sound power Level	Cooling (Hi)	dB	60	61
	Heating (Hi)	dB	60	61
Dimensions	H x W x D	mm	290 x 1,070 x 235	290 x 1,070 x 235
Net weight		kg	12	12
Air purifier filter			Patrol + E-ion	Patrol + E-ion
Outdoor unit				
Power source		V	230	230
Connection		mm ²	4 x 2.5	4 x 2.5
Current Cooling	Nominal	A	6.7	9.8
Current Heating	Nominal	A	7.0	9.3
Max. current		A	11.7	12.1
Air Volume	Cooling / Heating	m ³ /h	2,400 / 2,316	2,568 / 2,490
Sound pressure Level ³⁾	Cooling (Hi)	dB(A)	47	48
	Heating (Hi)	dB(A)	47	49
Sound power Level	Cooling (Hi)	dB	61	62
	Heating (Hi)	dB	61	63
Dimensions ⁴⁾	H x W x D	mm	750 x 875 x 345	750 x 875 x 345
Net weight		kg	48	49
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	1/2" (12.70)	1/2" (12.70)
Refrigerant Loading	R410A	kg	1.15	1.29
Elevation difference (in/out) ⁵⁾	Max	m	15	15
Piping length	Min / Max	m	3-20	3-20
Piping length without refrigerant Max increase		m	10	10
Additional gas		g/m	20	20
Operating range ³⁾	Cooling Min / Max	°C	+5 / +43	+5 / +43
	Heating Min / Max	°C	-5 / +24	-5 / +24

GLOBAL REMARKS	Rating conditions	
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

- 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 meters 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.

DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation).

Connectivity restriction: JKE units are not compatible with LKE units.

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**KIT-XE18-LKE // KIT-XE21-LKE****HEALTHY AIR**

- E-ion plus air purifying system
- Patrol sensor to detect and eliminate contaminants
- Air conditioner and purifier with simultaneous or independent operation
- 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
- -30% consumption with Eco Patrol on heat pump (-20% on cooling mode)
- R410A refrigerant gas

COMFORT

- Super Quiet mode
- 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

- 24-hr timer
- User friendly infrared remote control

EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- 15 m maximum connection distance (20 m for XE18 and XE21)
- 15 m maximum elevation difference
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function

eco ideas

Energy-Efficiency
Classification
Most efficient level: A
(CS-XE18LKEW
EER/COP: 3.40/3.77)



CU-E18LKE
CU-E21LKE



WALL MOUNTED ETHEREA // INVERTER+ // WHITE

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Maintains an Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on



FOR E7, E9 AND E12



WALL MOUNTED ETHEREA // INVERTER+

Kit			KIT-E7-LKE-3	KIT-E9-LKE-3	KIT-E12-LKE-3	KIT-E15-LKE-3
Indoor			CS-E7LKEW	CS-E9LKEW	CS-E12LKEW	CS-E15LKEW-3
Outdoor			CU-E7LKE-3	CU-E9LKE-3	CU-E12LKE-3	CU-E15LKE-3
Cooling capacity	Nominal (Min - Max)	kW	2.05 (0.70-2.40)	2.50 (0.80-3.00)	3.50 (0.80-4.00)	4.20 (0.80-5.00)
	Nominal (Min - Max)	kCal	1,760 (600-2,060)	2,150 (690-2,580)	3,010 (690-3,440)	3,610 (690-4,300)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.36 (4.12-4.14) A	4.67 (4.57-4.11) A	3.87 (4.32-3.39) A	3.44 (4.19-3.13) A
Power input Cooling	Nominal (Min - Max)	kW	0.47 (0.17-0.58)	0.535 (0.175-0.730)	0.905 (0.185-1.180)	1.22 (0.215-1.60)
Heating capacity	Nominal (Min - Max)	kW	2.80 (0.70-4.00)	3.40 (0.80-5.00)	4.40 (0.80-6.70)	5.40 (0.90-7.10)
	Nominal (Min - Max)	kCal	2,410 (600-3,440)	2,920 (690-4,300)	3,780 (690-5,760)	4,640 (770-6110)
Heating capacity at -7°C	Nominal	kW	2.35	2.88	3.75	4.10
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.41 (4.38-3.92) A	4.63 (4.85-3.85) A	4.04 (4.57-3.47) A	3.70 (3.67-3.21) A
Power input Heating	Nominal (Min - Max)	kW	0.635 (0.16-1.02)	0.735 (0.165-1.30)	1.09 (0.175-1.93)	1.46 (0.245-2.210)
Annual Energy Consumption ²⁾		kWh	235	268	453	610
Indoor unit						
Air Volume	Cooling / Heating	m ³ /h	654 / 684	678 / 702	750 / 768	750 / 804
Moisture removal volume		l/h	1.3	1.5	2.0	2.4
Sound pressure Level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	37 / 24 / 20	39 / 25 / 20	42 / 28 / 20	43 / 32 / 29
	Heating (Hi / Lo / S-Lo)	dB(A)	38 / 25 / 20	40 / 27 / 20	42 / 33 / 20	43 / 35 / 29
Sound power Level	Cooling (Hi)	dB	53	55	58	59
	Heating (Hi)	dB	54	56	58	59
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
Net weight		kg	9	9	9	9
Air purifier filter			Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
Outdoor unit						
Power source		V	230	230	230	230
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal	A	2.2 / 3.0	2.5 / 3.4	3.9 / 5.1	5.8 / 6.9
Max. current		A	4.7	5.8	8.9	9.7
Air Volume	Cooling / Heating	m ³ /h	2,034 / 2,034	1,788 / 1,788	1,860 / 1,860	2,910 / 2,808
Sound pressure Level ³⁾	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47	48 / 50	46 / 46
	Cooling / Heating (Hi)	dB	60 / 61	61 / 62	63 / 65	61 / 61
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345
Net weight		kg	33	34	34	48
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)	3/8" (9.52)	1/2" (12.70)
Refrigerant Loading	R410A	kg	0.830	0.950	0.970	1.06
Elevation difference (in/out) ⁵⁾	Max	m	15	15	15	15
Piping length	Min / Max	m	3-15	3-15	3-15	3-15
Piping length without refrigerant Max increase		m	7.5	7.5	7.5	7.5
Additional gas		g/m	20	20	20	20
Operating range ³⁾	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43	+5 / +43
	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

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This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation).

Connectivity restriction: JKE units are not compatible with LKE units.

1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC.

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KIT-XE7-LKE-3 // KIT-XE9-LKE-3 // KIT-XE12-LKE-3 //
KIT-XE15-LKE-3 // KIT-E7-LKE-3 // KIT-E9-LKE-3 //
KIT-E12-LKE-3 // KIT-E15-LKE-3

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- 15 m maximum elevation difference
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- Self-diagnosis function



CU-E7LKE-3 CU-E9LKE-3
CU-E12LKE-3



CU-E15LKE-3



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WALL MOUNTED ETHEREA // INVERTER+ // WHITE

Kit			KIT-E18-LKE	KIT-E21-LKE	KIT-E24-LKE	KIT-E28-LKE
Indoor			CS-E18LKEW	CS-E21LKEW	CS-E24LKE	CS-E28LKE
Outdoor			CU-E18LKE	CU-E21LKE	CU-E24LKE	CU-E28LKE
Cooling capacity	Nominal (Min - Max)	kW	5.00 (0.90-6.00)	6.30 (0.90-7.10)	6.80 (0.90-8.10)	7.65 (0.90-8.60)
	Nominal (Min - Max)	kCal	4,300 (770-5,160)	5,420 (770-6,110)	5,850 (770-6,970)	6580 (770-7400)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.40 (4.19-2.96) A	2.85 (4.19-2.8) C	3.21 (2.57-3.00) A	3.01 (2.57-2.92) B
Power input Cooling	Nominal (Min - Max)	kW	1.47 (0.215-2.03)	2.21 (0.215-2.54)	2.12 (0.35-2.7)	2.54 (0.35-2.95)
Heating capacity	Nominal (Min - Max)	kW	5.80 (0.90-8.00)	7.20 (0.90-8.50)	8.60 (0.90-9.90)	9.60 (0.90-11.00)
	Nominal (Min - Max)	kCal	4990 (770-6,880)	6,190 (770-7,310)	7,400 (770-8,510)	8,260 (770-9460)
Heating capacity at -7°C	Nominal	kW	4.98	5.24	6.13	6.77
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.77 (3.67-3.08) A	3.43 (3.67-3.09) B	3.23 (2.5-3.09) C	2.91 (2.5-2.93) D
Power input Heating	Nominal (Min - Max)	kW	1.54 (0.245-2.600)	2.10 (0.245-2.75)	2.66 (0.36-3.20)	3.30 (0.36-3.75)
Annual Energy Consumption ²⁾		kWh	735	1,105	1,060	1,270
Indoor unit						
Air Volume	Cooling / Heating	m ³ /h	978 / 1,074	1,038 / 1,110	1,104 / 1,170	1,158 / 1,206
Moisture removal volume		l/h	2.8	3.5	3.9	4.5
Sound pressure Level ³⁾	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 (Hi)	dB	60	61	63	65
	Heating (Hi)	dB	60	61	63	64
Dimensions	H x W x D	mm	290 x 1,070 x 235	290 x 1,070 x 235	290 x 1,070 x 235	290 x 1,070 x 235
Net weight		kg	12	12	12	12
Air purifier filter			Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
Outdoor unit						
Power source		V	230	230	230	230
Connection		mm ²	4 x 2.5	4 x 2.5	4 x 2.5	4 x 2.5
Current Cooling	Nominal	A	6.7	9.8	9.7	11.5
Current Heating	Nominal	A	7.0	9.3	12.1	15
Max. current		A	11.7	12.1	14.6	15.6
Air Volume	Cooling / Heating	m ³ /h	2,400 / 2,316	2,568 / 2,490	3,012 / 3,012	3,270 / 3,270
Sound pressure Level ³⁾	Cooling (Hi)	dB(A)	47	48	52	53
	Heating (Hi)	dB(A)	47	49	52	53
Sound power Level	Cooling (Hi)	dB	61	62	66	67
	Heating (Hi)	dB	61	63	66	67
Dimensions ⁴⁾	H x W x D	mm	750 x 875 x 345	750 x 875 x 345	795 x 875 x 320	795 x 875 x 320
Net weight		kg	48	49	65	66
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)	1/2" (12.70)	1/2" (12.70)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	kg	1.15	1.29	1.70	1.80
Elevation difference (in/out) ⁵⁾	Max	m	15	15	20	20
Piping length	Min / Max	m	3-20	3-20	3-30	3-30
Piping length without refrigerant Max increase		m	10	10	10	10
Additional gas		g/m	20	20	30	30
Operating range ³⁾	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43	+5 / +43
	Heating Min / Max	°C	-5 / +24	-5 / +24	-5 / +24	-5 / +24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	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 (24h operation).

Connectivity restriction: JKE units are not compatible with LKE units.

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 meters 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.



NEW10



TECHNICAL FOCUS

- MAXIMUM EFFICIENCY AND COMFORT WITH ECO PATROL
- VERY EXCLUSIVE WHITE DESIGN
- NEW GENERATION OF E-ION AIR PURIFYING SYSTEM WITH 24-HR PATROL SENSOR
- MILD DRY COOLING: PREVENT A RAPID DECREASE IN ROOM HUMIDITY
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



eco ideas

Energy-Efficiency
Classification
Most efficient level: A
(CS-E18LKEW
EER/COP: 3.40/3.77)

KIT-E18-LKE // KIT-E21-LKE // KIT-E24-LKE // KIT-E28-LKE

HEALTHY AIR

- E-ion plus air purifying system
- Patrol sensor to detect and eliminate contaminants
- Air conditioner and purifier with simultaneous or independent operation
- 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
- -30% consumption with Eco Patrol on heat pump (-20% on cooling mode)
- R410A refrigerant gas

COMFORT

- Super Quiet mode
- 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

- 24-hr timer
- User friendly infrared remote control

EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- 20 m maximum connection distance (30 m for E24 and E28)
- 15 m maximum elevation difference (20 m for E24 and E28)
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function



CU-E18LKE
CU-E21LKE



CU-E24LKE
CU-E28LKE



WALL MOUNTED RE TYPE // STANDARD INVERTER

RE: Inverter models are powerful and efficient and are always there when you need them & highly efficient. Furthermore, with the Alleru-buster anti allergenic filter, you can always enjoy the best quality air, without viruses, moulds and bacteria.



FOR RE9 AND RE12

WALL MOUNTED RE TYPE // STANDARD INVERTER

Kit			KIT-RE9-JKX-1	KIT-RE12-JKX-1	KIT-RE15-JKX-1	KIT-RE18-JKX-1	KIT-RE24-JKX-1
Indoor			CS-RE9JKX-1	CS-RE12JKX-1	CS-RE15JKX-1	CS-RE18JKX-1	CS-RE24JKX-1
Outdoor			CU-RE9JKX-1	CU-RE12JKX-1	CU-RE15JKX-1	CU-RE18JKX-1	CU-RE24JKX-1
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 (0,90-6,00)	6,80 (0,90-8,10)
	Nominal (Min - Max)	kCal	2.150 (770-2.580)	3.010 (770-3.350)	3.610 (860-3960)	4.300 (770-5.160)	5.850 (770-6.970)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3,57 [4,74-3,00] A	3,47 [5,29-3,25] A	3,33 [4,76-2,78] A	3,40 [4,19-2,96] A	3,21 [2,57-3,00] A
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 (0,215-2,03)	2,12 (0,35-2,70)
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 (0,90-8,00)	8,60 (0,90-9,90)
	Nominal (Min - Max)	kCal	2.840 (770-3.520)	3.660 (770-4.390)	4.300 (770-5848)	4.990 (770-6.880)	7.400 (770-8.510)
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4,02 [5,29-3,57] A	3,79 [6,00-3,49] A	3,61 [4,28-2,98] A	3,77 [3,67-3,08] A	3,23 [2,50-3,09] C
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 (0,245-2,60)	2,66 (0,36-3,20)
Annual Energy Consumption ²⁾		kWh	350	505	630	735	1.060
Indoor unit							
Power source		V	230	230	230	230	230
Connection		mm ²	4 x 2,5	4 x 2,5	4 x 2,5	4 x 2,5	4 x 2,5
Current Cooling	Nominal	A	3,30	4,7	6,00	6,7	9,7
Current Heating	Nominal	A	3,70	5,2	6,30	7,0	12,1
Max. current		A	5,10	6,80	10,5	11,7	14,6
Air Volume	Cooling / Heating	m ³ /h	750 / 750	756 / 798	840 / 936	978 / 1.074	1.104 / 1.170
Moisture removal volume		l/h	1,4	2,0	2,4	2,8	3,9
Sound pressure Level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	42 / 27 / 22	42 / 30 / 22	46 / 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	62	60	63
	Heating (Hi)	dB	58	58	62	60	63
Dimensions	H x W x D	mm	290 x 848 x 204	290 x 848 x 204	290 x 848 x 204	290 x 1.070 x 235	290 x 1.070 x 235
Net weight		kg	9	9	9	12	12
Air purifier filter			Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter
Outdoor unit							
Air Volume	Cooling / Heating	m ³ /h	1.734 / 1.734	1.830 / 1.830	1.872 / 1.794	2.400 / 2.316	3.012 / 3.012
Sound pressure Level ³⁾	Cooling (Hi)	dB(A)	47	48	50	47	52
	Heating (Hi)	dB(A)	48	50	51	47	52
Sound power Level	Cooling (Hi)	dB	63	64	66	61	66
	Heating (Hi)	dB	64	66	67	61	66
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345	795 x 875 x 320
Net weight		kg	24	28	36	48	65
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)
	Gas pipe	inch (mm)	3/8" (9,52)	3/8" (9,52)	1/2" (12,70)	1/2" (12,70)	5/8" (15,88)
Refrigerant Loading	R410A	kg	0,85	0,970	1,00	1,15	1,70
Elevation difference (in/out) ⁵⁾	Max	m	5	5	5	15	20
Piping length	Min / Max	m	3-15	3-15	3-15	3-20	3-30
Piping length without refrigerant increase	Max	m	7,5	7,5	7,5	10	10
Additional gas		g/m	20	20	20	20	30
Operating range ³⁾	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43	+5 / +43	+16 / +43
	Heating Min / Max	°C	-5 / +24	-5 / +24	-5 / +24	-5 / +24	-5 / +24

GLOBAL REMARKS	Rating conditions	
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation).

Connectivity restriction: JKX units are not compatible with JXK-1 units.

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 meters 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.



CS-RE9JKX-1 // CS-RE12JKX-1 // CS-RE15JKX-1

TECHNICAL FOCUS

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



CS-RE18JKX-1 // CS-RE24JKX-1

KIT-RE9-JKX-1 // KIT-RE12-JKX-1 // KIT-RE15-JKX-1 // KIT-RE18-JKX-1 // KIT-RE24-JKX-1

HEALTHY AIR

- New generation Allergo-buster anti allergic filter with 10-year warranty
- Odour-removing function
- Anti-mould filter

ENERGY, EFFICIENCY AND ECOLOGY

- Inverter system
- R410A refrigerant gas

COMFORT

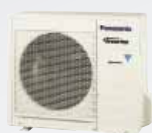
- Refreshing airflow with relaxing breeze effect (only for RE9, RE12 and RE15)
- Super Quiet mode (only for RE9, RE12 and RE15)
- Powerful mode (only for RE9 and RE12 and RE15)
- Automatic vertical airflow control
- Hot start mode
- Automatic restart
- Simple change over

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

FOR RE9, RE12
AND RE15FOR RE18
AND RE24CU-RE9JKX-1 CU-RE15JKX-1
CU-RE12JKX-1

CU-RE18JKX-1



CU-RE24JKX-1



WALL MOUNTED TYPE // INVERTER+ // -15°C

Complete line-up of air purifying systems with high efficiency even at -15°C! This wall-mounted air conditioning 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.



FOR E9

WALL MOUNTED TYPE // INVERTER+ // -15°C

Kit			KIT-E9-HKEA	KIT-E12-HKEA	KIT-E15-HKEA	KIT-E18-HKEA	KIT-E21-HKEA
Indoor			CS-E9HKEA	CS-E12HKEA	CS-E15HKEA	CS-E18HKEA	CS-E21HKEA
Outdoor			CU-E9HKEA	CU-E12HKEA	CU-E15HKEA	CU-E18HKEA	CU-E21HKEA
Cooling capacity	Nominal (Min - Max)	kW	2.60 (0.60-3.00)	3.50 (0.60-4.00)	4.40 (0.90-5.00)	5.30 (0.90-6.00)	6.30 (0.90-7.10)
	Nominal (Min - Max)	kCal	2,240 (690-2,580)	3,010 (690-3,440)	3,780 (690-4,300)	4,560 (770-5,160)	5,420 (770-6,110)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.41 (5.00-4.00) A	3.80 (5.00-3.39) A	3.21 (4.19-3.13) A	3.21 (4.19-2.93) A	2.85 (4.19-2.8) C
Power input Cooling	Nominal (Min - Max)	kW	0.59 (0.12-0.75)	0.92 (0.12-1.18)	1.37 (0.215-1.6)	1.65 (0.215-2.05)	2.21 (0.215-2.54)
Heating capacity	Nominal (Min - Max)	kW	3.60 (0.60-5.40)	4.80 (0.60-6.60)	5.50 (0.90-7.10)	6.60 (0.90-8.00)	7.20 (0.90-8.50)
	Nominal (Min - Max)	kCal	3,100 (520-4,640)	4,130 (520-5,680)	4,730 (770-6,110)	5,680 (770-6,880)	6,190 (770-7,310)
Heating capacity at -7°C	Nominal	kW	3.13	3.86	3.98	4.98	5.24
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.26 (5.22-3.97) A	3.81 (5.22-3.57) A	3.50 (3.67-3.16) B	3.69 (3.67-3.02) A	3.43 (3.67-3.09) B
Power input Heating	Nominal (Min - Max)	kW	0.845 (0.115-1.36)	1.26 (0.115-1.85)	1.57 (0.245-2.25)	1.79 (0.245-2.65)	2.10 (0.245-2.75)
Annual Energy Consumption ²⁾		kWh	295	460	685	825	1,105
Indoor unit							
Air Volume	Cooling / Heating	m ³ /h	576 / 630	642 / 672	660 / 708	912 / 1,002	972 / 1,038
Moisture removal volume		l/h	1.6	2.0	2.4	2.9	3.5
Sound pressure Level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 26 / 23	42 / 29 / 26	43 / 32 / 29	44 / 37 / 34	45 / 37 / 34
	Heating (Hi / Lo / S-Lo)	dB(A)	40 / 27 / 24	42 / 33 / 30	43 / 35 / 32	44 / 37 / 34	45 / 37 / 34
Sound power Level	Cooling (Hi)	dB	50	53	54	57	58
	Heating (Hi)	dB	51	53	54	57	58
Dimensions	H x W x D	mm	280 x 799 x 183	280 x 799 x 183	280 x 799 x 183	275 x 998 x 230	275 x 998 x 230
Net weight		kg	9	9	9	11	11
Air purifier filter			Alleru-buster filter + ion	Alleru-buster filter + ion	Alleru-buster filter + ion	Alleru-buster filter + ion	Alleru-buster filter + ion
Outdoor unit							
Power source		V	230	230	230	230	230
Connection		mm ²	4 x 2.5	4 x 2.5	4 x 2.5	4 x 2.5	4 x 2.5
Current Cooling	Nominal	A	2.9	4.3	6.3	7.5	9.9
Current Heating	Nominal	A	4.0	5.8	7.1	8.1	9.3
Max. current		A	6.4	8.4	10.2	11.9	12.6
Air Volume	Cooling / Heating	m ³ /h	1,788 / 1,788	1,860 / 1,860	2,760 / 2,760	2,400 / 2,400	2,568 / 2,490
Sound pressure Level ³⁾	Cooling (Hi)	dB(A)	46	48	46	47	48
	Heating (Hi)	dB(A)	47	50	46	47	49
	Heating (Hi)	dB	59	61	59	60	61
Sound power Level	Cooling (Hi)	dB	60	63	59	60	62
	Heating (Hi)	dB	60	63	59	60	62
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345	750 x 875 x 345	750 x 875 x 345
Net weight		kg	35	35	48	49	51
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)
	Gas pipe	inch (mm)	3/8" (9.52)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)
Refrigerant Loading	R410A	kg	0.930	0.970	1.060	1.18	1.29
Elevation difference (in/out) ⁵⁾	Max	m	5	5	5	15	15
Piping length	Min / Max	m	3-15	3-15	3-15	3-20	3-20
Piping length without refrigerant Max increase		m	7.5	7.5	7.5	10	10
Additional gas		g/m	20	20	20	20	20
Operating range ³⁾	Cooling Min / Max	°C	-15 / +43	-15 / +43	-15 / +43	-15 / +43	-15 / +43
	Heating Min / Max	°C	-10 / +24	-10 / +24	-15 / +24	-15 / +24	-15 / +24

GLOBAL REMARKS	Rating conditions	
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h 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 meters 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.



CS-E9HKEA // CS-E12HKEA // CS-E15HKEA

TECHNICAL FOCUS

- HIGHLY EFFICIENT HEAT PUMP AND COOLING EVEN AT -15°C
- SUPERSONIC AIR PURIFYING SYSTEM WITH ALLERU-BUSTER ANTI ALLERGIC FILTER
- SUPER QUIET! ONLY 23DB
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE
- MAXIMUM CONNECTION DISTANCE 15 M (E9, 12, 15), 20M (E18, 21)



CS-E18HKEA // CS-E21HKEA

KIT-E9-HKEA // KIT-E12-HKEA // KIT-E15-HKEA // KIT-E18-HKEA // KIT-E21-HKEA

HEALTHY AIR

- Refreshing ion generator boosts well-being
- Alleru-buster anti allergic filter
- Soft dry operation mode

ENERGY EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system
- R410A refrigerant gas

COMFORT

- Operates in cold/hot mode in temperatures as low as -15°C
- Automatically changes from cold to hot depending on inside temperature
- Super Quiet mode
- Powerful mode
- Uniform dispersion of airflow
- Automatic vertical and horizontal 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, 15), 20m (E18, 21)
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function with anti-allergen ultrasound filter
- Soft dry operation mode

CU-E9HKEA
CU-E12HKEACU-E15HKEA CU-E21HKEA
CU-E18HKEA



OPTIONAL

WALL-MOUNTED TYPE // STANDARD HEAT PUMP

Powerful heat pump non-Inverter air conditioning. A class efficiency for high savings.

WALL-MOUNTED TYPE // STANDARD HEAT PUMP

Kit			KIT-PW9-GKX	KIT-PW12-GKX	KIT-PW18-GKX	KIT-PW24-JKE
Indoor			CS-PW9GKX	CS-PW12GKX	CS-PW18GKX	CS-PW24JKE
Outdoor			CU-PW9GKX	CU-PW12GKX	CU-PW18GKX	CU-PW24JKE
Cooling capacity	Nominal	kW	2.65	3.4	5.10	7.03
		kCal	2,280	2,920	4,386	6,046
EER ¹⁾	Nominal	Energy Saving Classification	3.21 A	3.22 A	2.91 C	2.53 E
	Power input Cooling	Nominal	kW	0.825	1.055	1.75
Heating capacity	Nominal	kW	2.85	3.8	5.30	7.50
		kCal	2,450	3,260	4,560	6,450
COP ¹⁾	Nominal	Energy Saving Classification	3.63 A	3.61 A	3.35 C	2.87 D
	Power input Heating	Nominal	kW	0.785	1.05	1.58
Annual Energy Consumption ²⁾		kWh	413	528	875	1,390
Indoor unit						
Power source		V	230	230	230	230
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current Cooling	Nominal	A	3.9	5.0	7.7	13.1
Current Heating	Nominal	A	3.7	4.9	6.9	12.5
Air Volume	Cooling / Heating	m ³ /h	618 / 618	540 / 552	972 / 984	1,044 / 1,092
Moisture removal volume		l/h	1.6	1.9	2.9	4.0
Sound pressure level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 31	39 / 32	45 / 38	47 / 41
	Heating (Hi / Lo / S-Lo)	dB(A)	39 / 31	39 / 31	43 / 38	46 / 41
Sound power level	Cooling (Hi)	dB	50	50	58	59
	Heating (Hi)	dB	50	50	56	57
Dimensions	H x W x D	mm	250 x 770 x 205	280 x 799 x 183	275 x 998 x 230	275 x 998 x 230
Net weight		kg	7.5	9	11	11
Air purifier filter	Optional		CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter
Outdoor unit						
Air Volume	Cooling / Heating	m ³ /h	630	672	1,002	3,084
Sound pressure level ³⁾	Cooling (Hi)	dB(A)	48	49	55	54
	Heating (Hi)	dB(A)	49	50	55	55
Sound power level	Cooling (Hi)	dB	61	62	70	69
	Heating (Hi)	dB	62	63	70	70
Dimensions ⁴⁾	H x W x D	mm	530 x 650 x 230	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345
Net weight		kg	27	30	44	63
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)	5/8" (15.88)
Refrigerant Loading	R410A	kg	0.80	0.98	1.33	
Elevation difference (in/out) ⁵⁾	Max	m	5	5	20	20
Piping length	Min / Max	m	3 / 10	3 / 15	3 / 25	3 / 25
Piping length without refrigerant increase	Max	m	7.5	7.5	7.5	7.5
Additional gas		g/m	20	20	20	30
Operating range ³⁾	Cooling Min / Max	°C	21 / 43	21 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-5 / 24	-5 / 24	-5 / 24	-5 / 24

GLOBAL REMARKS	Rating conditions	
	Inside air temperature	Cooling: 27°C DB / 19°C WB Heating: 20°C DB
	Outside air temperature	Cooling: 35°C DB / 24°C WB Heating: 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 (24h 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 meters 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.



CS-PW96KX // CS-PW126KX

TECHNICAL FOCUS

- QUIET MODE FOR IMPROVED COMFORT
- ODOUR REMOVING FUNCTION
- EASY TO INSTALL
- R410A REFRIGERANT GAS
- MANUAL AND AUTOMATIC AIRFLOW CONTROL



CS-PW186KX // CS-PW24JKE

KIT-PW9-GKX // KIT-PW12-GKX // KIT-PW18-GKX // KIT-PW24-JKE

HEALTHY AIR

- Soft dry operation mode
- Odour-removing function
- CZ-SA14P Allergo-buster anti allergic filter (optional)

ENERGY EFFICIENCY AND ECOLOGY

- R410A refrigerant gas

COMFORT

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

EASE OF USE

- 12-hr timer (For PW9 and PW12)
- 24-hr timer (For PW18 and PW24)
- User friendly infrared remote control

EASY INSTALLATION AND MAINTENANCE

- Removable, washable panel
- Maintenance access through the top panel of the outdoor unit

FOR PW9
AND PW12FOR PW18
AND PW24

CU-PW96KX



CU-PW126KX



CU-PW186KX



CU-PW24JKE



WALL MOUNTED // INVERTER

UE INVERTER MODELS ARE POWERFUL AND EFFICIENT.



WALL MOUNTED // INVERTER

Kit			KIT-UE9-JKE	KIT-UE12-JKE
Indoor			CS-UE9JKE	CS-UE12JKE
Outdoor			CU-UE9JKE	CU-UE12JKE
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 ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.33 (4.73-3.00) A	3.30 (5.29-3.25) A
Power input Cooling	Nominal (Min - Max)	kW	0.75 (0.19-1.00)	1.06 (0.17-1.2)
Heating capacity	Nominal (Min - Max)	kW	3.30 (0.90-4.00)	4.25 (0.90-4.70)
	Nominal (Min - Max)	kCal/h	2,840 (770-3,440)	3,660 (770-4,04)
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.66 (4.09-3.33) A	3.63 (6.00-3.56) A
Power input Heating	Nominal (Min - Max)	kW	0.90 (0.22-1.2)	1.17 (0.15-1.32)
Annual Energy Consumption ²⁾		kWh	375	530
Indoor unit				
Power source		V	230	230
Connection		mm ²	4 x 2.5	4 x 2.5
Current (Nominal)	Cooling / Heating	A	3.6 / 4.10	4.7 / 5.2
Air Volume	Cooling / Heating	m ³ /h	648 / 684	702 / 744
Moisture removal volume		l/h	1.4	2.0
Sound pressure Level ³⁾	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 / Heating (Hi)	dB	53 / 53	53 / 53
Dimensions	H x W x D	mm	250 x 770 x 205	280 x 799 x 183
Net weight		kg	7	8.5
Outdoor unit				
Air Volume	Cooling / Heating	m ³ /h	1,734 / 1,734	1,830 / 1,830
Sound pressure Level ³⁾	Cooling / Heating (Hi)	dB(A)	46 / 47	48 / 50
Sound power Level	Cooling / Heating (Hi)	dB	59 / 60	61 / 63
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289
Net weight		kg	28	30
Piping connections	Liquid / Gaz pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)
Refrigerant Loading	R410A	kg	0.84	1.04
Elevation difference (in/out) ⁵⁾	Max	m	5	5
Piping length	Min / Max	m	3 / 15	3 / 15
Piping length without refrigerant increase	Max	m	7.5	7.5
Additional gas		g/m	20	20
Operating range ³⁾	Cooling Min / Max	°C	+16 / +43	+16 / +43
	Heating Min / Max	°C	-5 / +24	-5 / +24
Refrigerant Loading	R410A	kg	1.15	1.29
Elevation difference (in/out) ⁵⁾	Max	m	15	15
Piping length	Min / Max	m	3-20	3-20
Piping length without refrigerant increase	Max	m	10	10
Additional gas		g/m	20	20
Operating range ³⁾	Cooling Min / Max	°C	+5 / +43	+5 / +43
	Heating Min / Max	°C	-5 / +24	-5 / +24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
Outside air temperature	35°C DB / 24°C WB	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 (24h operation)

1) EER and COP classification is at 230V in accordance with EU directive 2002/31/EC.

2) The annual consumption is calculated by multiplying the input power at 230V 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 meters 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.



TECHNICAL FOCUS

- QUIETER INDOOR UNITS
- HIGH ENERGY SAVINGS
- REFRESHING AIRFLOW WITH RELAXING BREEZE EFFECT
- 12-HR REMOTE CONTROL TIMER
- LONG CONNECTION DISTANCE

KIT-UE9-JKE // KIT-UE12-JKE

HEALTHY AIR

- Odour-removing function
- Anti-mould filter

ENERGY, EFFICIENCY AND ECOLOGY

- Inverter system
- R410A refrigerant gas

COMFORT

- Refreshing airflow with relaxing breeze effect
- Super Quiet mode
- Powerful mode
- Automatic vertical airflow control
- Hot start mode
- Automatic restart

EASE OF USE

- 12-hr timer
- User friendly infrared remote control

EASY INSTALLATION AND MAINTENANCE

- Maximum connection distance 15 m
- Removable, washable panel



CU-E18LKE
CU-E21LKE



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.



FLOOR CONSOLE TYPE // INVERTER+

Kit			KIT-E9-GFEW-1	KIT-E12-GFEW-1	KIT-E18-GFEW-1
Indoor			CS-E9GFEW	CS-E12GFEW	CS-E18GFEW
Outdoor			CU-E9GFE-1	CU-E12GFE-1	CU-E18GFE-1
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.80 - 3.00)	3.50 (0.80 - 3.80)	5.00 (0.90 - 5.60)
		kCal	2,150 (690 - 2,580)	3,010 (690 - 3,270)	3,780 (770 - 4,300)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.39 (4.57 - 3.85) A	3.63 (4.32 - 3.33) A	3.23 (4.57 - 2.93) A
	Power input Cooling	Nominal (Min - Max)	kW	0.57 (0.17 - 0.78)	0.97 (0.18 - 1.14)
Heating capacity	Nominal (Min - Max)	kW	3.60 (0.80 - 5.00)	4.80 (0.80 - 6.10)	5.80 (0.90 - 7.10)
		kCal	3,100 (690 - 4,300)	4,130 (690 - 5,250)	4,730 (770 - 6,110)
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	4.16 (4.85 - 3.68) A	3.64 (4.57 - 3.45) A	3.63 (3.46 - 3.02) A
	Power input Heating	Nominal (Min - Max)	kW	0.865 (0.16 - 1.36)	1.320 (0.17 - 1.77)
Annual Energy Consumption ²⁾		kWh	285	483	775
Indoor unit					
Air Volume	Cooling / Heating	m ³ /h	558 / 576	570 / 600	660 / 780
Moisture removal volume		l/h	1.4	2.0	2.8
Sound pressure level ³⁾	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	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
Outdoor unit					
Power source		V	230	230	230
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5
Current Cooling	Min / Max	A	2.75 / 2.65	4.60 / 4.25	7.20 / 6.90
Current Heating	Min / Max	A	4.20 / 3.90	6.25 / 5.80	7.35 / 6.95
Air Volume	Cooling / Heating	m ³ /h	1,788 / 1,788	1,860 / 1,860	2,400 / 2,400
Sound pressure level ³⁾	Cooling (Hi)	dB(A)	46	48	47
	Heating (Hi)	dB(A)	47	50	48
	Sound power level	Cooling (Hi)	dB	59	61
	Heating (Hi)	dB	60	63	61
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345
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) ⁵⁾	Max	m	5	5	15
Piping length	Min / Max	m	3 / 15	3 / 15	3 / 20
Piping length without refrigerant Max increase		m	7.5	7.5	10
Additional gas		g/m	20	20	20
Operating range ³⁾	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-15 / 24	-15 / 24	-15 / 24

GLOBAL REMARKS	Rating conditions	
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB: Dry Bulb; WB: Wet Bulb
This model is not suitable to use in heating mode below -5°C with continuous operation (24h 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 meters 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.



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

KIT-E9-GFEW-1 // KIT-E12-GFEW-1 // KIT-E18-GFEW-1

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

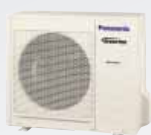
- 24-hr timer
- User friendly infrared remote control

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-E9GFE-1
CU-E12GFE-1



CU-E18GFE-1



SINGLE SPLIT FLOOR OR CEILING TYPE // INVERTER

Versatile Floor or Ceiling air conditioning Inverter type. Ideal for restaurants or offices where powerful and efficient air-conditioning is needed.



OPTIONAL

SINGLE SPLIT FLOOR OR CEILING TYPE // INVERTER

Kit			KIT-E15-DTE	KIT-E18-DTE	KIT-E21-DTE
Indoor			CS-E15DTEW	CS-E18DTEW	CS-E21DTEW
Outdoor			CU-E15DBE	CU-E18DBE	CU-E21DBE
Cooling capacity	Nominal (Min - Max)	kW	4.15 (0.90 - 4.55)	5.00 (0.90 - 5.40)	5.80 (0.90 - 6.60)
		kCal	3,570 (770 - 3,910)	4,300 (770 - 4,640)	4,990 (770 - 5,680)
EER ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.22 A	3.01 B	3.01 B
Power input Cooling	Nominal (Min - Max)	kW	1.29 (0.255 - 1.550)	1.66 (0.255 - 1.890)	1.93 (0.255 - 2.240)
Heating capacity	Nominal (Min - Max)	kW	5.17 (0.90 - 6.30)	6.10 (0.90 - 7.60)	6.80 (0.90 - 8.10)
		kCal	4,450 (770 - 5,420)	5,250 (770 - 6,540)	5,850 (770 - 6,970)
COP ¹⁾	Nominal (Min - Max)	Energy Saving Classification	3.34 C	3.35 C	3.42 B
Power input Heating	Nominal (Min - Max)	kW	1.550 (0.260 - 2.050)	1.820 (0.260 - 2.380)	1.990 (0.260 - 2.650)
Annual Energy Consumption ²⁾		kWh	645	830	965
Indoor unit					
Air Volume	Cooling / Heating	m ³ /h	720 / 732	750 / 762	786 / 792
Moisture removal volume		l/h	2.4	2.8	3.2
Sound pressure level ³⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	45 / 37 / 34	46 / 39 / 36	47 / 41 / 38
	Heating (Hi / Lo / S-Lo)	dB(A)	45 / 33 / 30	47 / 35 / 32	47 / 37 / 34
Sound power level	Cooling (Hi)	dB	58	59	60
	Heating (Hi)	dB	58	60	60
Dimensions	H x W x D	mm	540 x 1,028 x 200	540 x 1,028 x 200	540 x 1,028 x 200
Net weight		kg	17	18	20
Air purifier filter	Optional		CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter
Outdoor unit					
Power source		V	230	230	230
Connection		mm ²	4 x 1.5	4 x 2.5	4 x 2.5
Current Cooling	Nominal	A	6.0	7.5	8.7
Current Heating	Nominal	A	7.1	8.2	9.0
Air Volume	Cooling / Heating	m ³ /h	2,910 / 2,910	2,400 / 2,400	2,568 / 2,490
Sound pressure level ³⁾	Cooling (Hi)	dB(A)	46	47	48
	Heating (Hi)	dB(A)	47	48	49
Sound power level	Cooling (Hi)	dB	59	60	61
	Heating (Hi)	dB	60	61	62
Dimensions ⁴⁾	H x W x D	mm	750 x 875 x 345	750 x 875 x 345	750 x 875 x 345
Net weight		kg	48	48	49
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)
Refrigerant Loading	R410A	kg	1.23	1.06	1.15
Elevation difference (in/out) ⁵⁾	Max	m	15	15	15
Piping length	Min / Max	m	3 / 20	3 / 20	3 / 20
Piping length without refrigerant increase	Max	m	10	10	10
Additional gas		g/m	20	20	20
Operating range ³⁾	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-5 / 24	-5 / 24	-5 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	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 (24h 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 meters 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.



TECHNICAL FOCUS

- A WIDTH OF ONLY 20CM FOR EASY INSTALLATION EVERYWHERE
- 2 INSTALLATIONS POSSIBLE: ON THE WALL OR ON THE ROOF
- POWERFUL LINE-UP, UP TO 6.6 KW!
- POWERFUL MODE FOR QUICK TEMPERATURE SETTING
- R410A REFRIGERANT GAS
- 20 M CONNECTION DISTANCE, 15 M HEIGHT DIFFERENCE ON THE WHOLE LINE-UP



KIT-E15-DTE // KIT-E18-DTE // KIT-E21-DTE

HEALTHY AIR

- Soft dry operation mode
- Odour-removing function
- CZ-SA14P Allergo-buster anti allergic filter (optional)
- Anti-mould filter

ENERGY EFFICIENCY AND ECOLOGY

- 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

- Maximum connection distance 20m
- Maintenance access through the top panel of the outdoor unit
- Self-diagnosis function



CU-E15DTE CU-E18DTE
CU-E21DTE



FREE MULTI

UP TO 4 INDOOR UNITS WITH A SINGLE OUTDOOR UNIT

Up to four different rooms with a single outdoor unit. Free Multi is what we need. With Free Multi you can take care of 2, 3 or 4 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 necessities of each of your client's rooms, and calculate which outdoor unit best adapts itself to the combinations of indoor combinations. The combination table P 57, 58, 59 will help you to select the best option.






INDOOR UNIT CAPACITIES

CAPACITY SPLIT	7 - 2.0 kW	9/10 - 2.5 kW	9/10 - 2.8 kW	12 - 3.2 kW	15 - 4 kW	18 - 5 kW	21 - 6 kW
ETHEREA SILVER OR WHITE INVERTER+							
	CS-XE7LKEW CS-E7LKEW	CS-XE9LKEW CS-E9LKEW		CS-XE12LKEW CS-E12LKEW	CS-XE15LKEW ¹⁾ CS-E15LKEW ¹⁾	CS-XE18LKEW ¹⁾ CS-E18LKEW ¹⁾	CS-XE21LKEW ¹⁾ CS-E21LKEW ¹⁾
LOW STATIC PRESSURE HIDE AWAY INVERTER+							
		CS-E10KD3EA			CS-E15JD3EA ¹⁾	CS-E18JD3EA ¹⁾	
4 WAY 60X60 CASSETTE INVERTER+							
		CS-E10KB4EA			CS-E15HB4EA ¹⁾	CS-E18HB4EA ¹⁾	CS-E21JB4EA ¹⁾
1-WAY CASSETTE INVERTER+							
	CS-ME7KB1E		CS-ME10EBE1E	CS-ME12EBE1E	CS-ME14EBE1E		
FLOOR CONSOLE INVERTER+							
			CS-E9GFEW	CS-E12GFEW		CS-E18GFEW ¹⁾	
FLOOR/CEILING CONSOLE INVERTER+							
			CS-ME10DTEG		CS-E15DTEW ¹⁾	CS-E18DTEW ¹⁾	

1) A CZ-MA1P pipe reducer is needed on the E15 and E18, a CZ-MA2P pipe expander is needed on the E21.



POSSIBLE INDOOR UNIT COMBINATIONS

Models	Possible indoor unit combinations	Capacity kW ¹⁾	Refrigerant pipe diameter			Pipe length			Additional gas	Maximum level difference	Capacity	Indoor/outdoor unit combinations					
			Indoor unit	Liquid	Gas	Maximum pipe length (1 room)	Maximum pipe length (total)	Max pipe without additional gas refills				Split	Floor console	4-way Cassette	1-way Cassette	Floor / ceiling	Ducts
2 Rooms CU-2E15LBE 	A ³⁾ : 7 or 9/10 or 12 B ²⁾ : 7 or 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	×	×	×			
CU-2E18LBE 	A ³⁾ : 7 or 9/10 or 12 B ²⁾ : 7 or 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	×	×			×	×
3 Rooms CU-3E18LBE 	A ³⁾ : 7 or 9/10 or 12 or 15 or 18 B ²⁾ : 7 or 9/10 or 12 or 15 or 18 C ³⁾ : 7 or 9/10 or 12 or 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"						9/10	×	×	×	×	×	×
			Room C	1/4"	3/8"						12	×	×	×	×	×	×
			14/15	×							×	×	×	×	×		
4 Rooms CU-4E23LBE 	A ³⁾ : 7 or 9/10 or 12 or 15 or 18 or 21 B ²⁾ : 7 or 9/10 or 12 or 15 or 18 or 21 C ³⁾ : 7 or 9/10 or 12 or 15 or 18 or 21 D ³⁾ : 7 or 9/10 or 12 or 15 or 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"						9/10	×	×	×	×	×	×
			Room C	1/4"	3/8"						12	×	×	×	×	×	×
			Room D	1/4"	3/8"						14/15	×		×	×	×	×
			18	×	×						×	×	×	×	×	×	
			21	×							×						
CU-4E27CBPG 	A ³⁾ : 7 or 9/10 or 12 or 15 or 18 B ²⁾ : 7 or 9/10 or 12 or 15 or 18 C ³⁾ : 7 or 9/10 or 12 or 15 or 18 D ³⁾ : 7 or 9/10 or 12 or 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"						9/10	×	×	×	×	×	×
			Room C	1/4"	3/8"						12	×	×	×	×	×	×
			Room D	1/4"	3/8"						14/15	×		×	×	×	×
18	×	×	×	×	×	×	×	×									

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_LKE units are only compatible with CU-2E15LBE, CU-2E18LBE, CU-3E18LBE, CU-4E23LBE and CU-4E27CBPG outdoor units. No other outdoor unit can be connected.



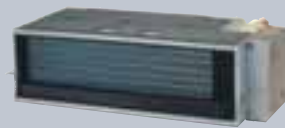
INDOOR UNITS FOR FREE MULTI COMBINATIONS

NEW10

INVERTER



ETHEREA // SILVER OR WHITE // INVERTER+			2.0 kW	2.5 kW	3.2 kW	4 kW	5 kW	6 kW
Silver Indoor			CS-XE7LKEW	CS-XE9LKEW	CS-XE12LKEW	CS-XE15LKEW ¹⁾	CS-XE18LKEW ¹⁾	CS-XE21LKEW ¹⁾
White Indoor			CS-E7LKEW	CS-E9LKEW	CS-E12LKEW	CS-E15LKEW ¹⁾	CS-E18LKEW ¹⁾	CS-E21LKEW ¹⁾
Cooling capacity	Nominal	kW / kCal/h	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	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 ²	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 ²⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	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)	40 / 26 / 23	40 / 26 / 23	44 / 32 / 26	44 / 33 / 32	46 / 35 / 32	46 / 35 / 32
Sound power level	Cooling / Heating (Hi)	dB	54 / 56	56 / 56	60 / 60	60 / 60	62 / 62	62 / 62
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 1,070 x 235	290 x 1,070 x 235
Net weight		kg	9	9	9	9	12	12
Air purifier filter			Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
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)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)



OPTIONAL



LOW STATIC PRESSURE HIDE AWAY // INVERTER+ (Available in September 09)			2.5 kW	4 kW	5 kW
Indoor hide away			CS-E10KD3EA	CS-E15JD3EA ¹⁾	CS-E18JD3EA ¹⁾
Wired remote control	Include on the indoor unit		CZ-RD52CP	CZ-RD52CP	CZ-RD52CP
Cooling capacity	Nominal	kW / kCal/h	2.50 / 2,150	4.10 / 3,530	5.10 / 4,390
Heating capacity	Nominal	kW / kCal/h	3.20 / 2,752	4.80 / 4,130	6.10 / 5,250
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5
External static pressure	High / Medium / Low	mmAq	2.55 / 1.5 / 1	2.55 / 1.5 / 1	2.55 / 1.5 / 1
Air Volume	High / Medium / Low	m ³ /h	414 / 402 / 330	474 / 402 / 330	624 / 528 / 444
Sound pressure level ²⁾	Cooling (Hi / Lo)	dB(A)	33 / 24	33 / 24	41 / 27
	Heating (Hi / Lo)	dB(A)	35 / 25	35 / 25	41 / 29
Sound power level	Cooling / Heating (Hi)	dB	49 / 51	49 / 51	57 / 57
Dimensions ⁴⁾	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)



OPTIONAL



4 WAY 60X60 CASSETTE // INVERTER+			2.5 kW	4 kW	5 kW	6 kW
Indoor			CS-E10KB4EA	CS-E15HB4EA ¹⁾	CS-E18HB4EA ¹⁾	CS-E21JB4EA ¹⁾
Panel	Sold separately		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	4.10 / 3,530	4.8 / 4,130	5.9 / 5,070
Heating capacity	Nominal	kW / kCal/h	3.20 / 2,752	5.10 / 4,390	5.60 / 4,820	7.00 / 6,020
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level ²⁾	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 / Heating (Hi)	dB	47 / 58	47 / 48	49 / 50	54 / 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
Dimensions	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 / Gas pipe	inch (mm)	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) / 1/2" (12.70)



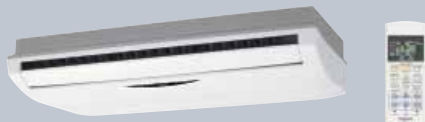
OPTIONAL



1-WAY CASSETTE // INVERTER+			2.0 kW	2.8 kW	3.2 kW	4 kW
Indoor			CS-ME7KB1E	CS-ME10EBE1E	CS-ME12EBE1E	CS-ME14EBE1E
Panel	Sold separately		CZ-BT20P	CZ-BT20P	CZ-BT20P	CZ-BT20P
Cooling capacity	Nominal	kW / kCal/h	2.20 / 1,892	2.80 / 2,408	3.20 / 2,752	4.00 / 3,440
Heating capacity	Nominal	kW / kCal/h	3.20 / 2,752	4.00 / 3,440	4.50 / 3,870	5.60 / 4,816
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level ²⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	40 / 32 / 29	40 / 32 / 29	41 / 32 / 29	43 / 32 / 29
	Heating (Hi / Lo / S-Lo)	dB(A)	42 / 32 / 29	42 / 32 / 29	43 / 32 / 29	44 / 34 / 31
Sound power level	Cooling / Heating (Hi)	dB	53 / 55	53 / 55	54 / 56	56 / 57
Dimensions	Indoor (H x W x D)	mm	185 x 770 x 360	185 x 770 x 360	185 x 770 x 360	185 x 770 x 360
Dimensions	Panel (H x W x D)	mm	55 x 1,070 x 460	55 x 1,070 x 460	55 x 1,070 x 460	55 x 1,070 x 460
Net weight	Indoor	kg	9.8	9.8	9.8	9.8
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) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)



FLOOR CONSOLE // INVERTER+			2.8 kW	3.2 kW	5 kW
Indoor			CS-E9GFEW	CS-E12GFEW	CS-E18GFEW ¹⁾
Cooling capacity	Nominal	kW / kCal/h	2.80 / 2,410	3.50 / 3,010	5.00 / 3,780
Heating capacity	Nominal	kW / kCal/h	4.00 / 3,440	4.80 / 4,130	5.80 / 4,730
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level ²⁾	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 / Heating (Hi)	dB	54 / 54	55 / 55	60 / 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
Air purifier filter	Optional		CZ-SA14P	CZ-SA14P	CZ-SA14P
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)



FLOOR/CEILING CONSOLE // INVERTER+			2.8 kW	4 kW	5 kW
Indoor			CS-ME10DTEG	CS-E15DTEW ¹⁾	CS-E18DTEW ¹⁾
Cooling capacity	Nominal	kW / kCal/h	2.80 / 2,408	4.15 / 3,570	5.00 / 4,300
Heating capacity	Nominal	kW / kCal/h	4.00 / 3,440	5.17 / 4,450	6.10 / 5,250
Connection		mm ²	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level ²⁾	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 31 / 28	45 / 37 / 34	46 / 39 / 36
	Heating (Hi / Lo / S-Lo)	dB(A)	40 / 31 / 28	45 / 33 / 30	47 / 35 / 32
Sound power level	Cooling / Heating (Hi)	dB	52 / 53	58 / 58	59 / 60
Dimensions	H x W x D	mm	540 x 1,028 x 200	540 x 1,028 x 200	540 x 1,028 x 200
Net weight		kg	17	17	18
Air purifier filter	Optional		CZ-SA14P	CZ-SA14P	CZ-SA14P
Piping connections	Liquid / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.70)

OUTDOOR UNITS FOR FREE MULTI COMBINATIONS



CU-2E15LBE

CU-2E18LBE

CU-3E18LBE

CU-4E23LBE

CU-4E27CBPG



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
Unit			CU-2E15LBE	CU-2E18LBE	CU-3E18LBE	CU-4E23LBE	CU-4E27CBPG
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)
	Nominal (Min - Max)	kCal/h	3,870 (1,290-4,472)	4,470 (1,290-4,640)	4,470 (1,550-6,280)	5,850 (1,630-7,570)	6,880 (2,580-7,912)
EER ³⁾	Nominal	Energy Saving Classification	3.66 A	3.42 A	4.30 A	4.05 A	4.04 A
Power input Cooling	Nominal (Min - Max)	kW	1.23 (0.25-1.52)	1.52 (0.25-1.58)	1.21 (0.36-2.18)	1.68 (0.34-2.47)	1.98 (0.53-2.87)
Heating capacity	Nominal (Min - Max)	kW	5.40 (1.10-7.00)	5.60 (1.10-7.20)	6.80 (1.60-8.30)	8.60 (3.00-10.60)	9.40 (4.20-10.60)
	Nominal (Min - Max)	kCal/h	4,640 (950-6,020)	4,820 (950-6,190)	5,850 (1,380-7,140)	7,400 (2,580-9,120)	8,084 (3,612-9,116)
COP ³⁾	Nominal	Energy Saving Classification	4.62 A	4.63 A	4.72 A	4.65 A	4.52 A
	Power input Heating	Nominal (Min - Max)	kW	1.17 (0.21-1.67)	1.21 (0.21-1.70)	1.44 (0.32-2.11)	1.85 (0.58-2.60)
Current	Cooling / Heating Nominal	A	5.75 / 5.20	7.10 / 5.35	5.30 / 7.90	7.50 / 8.60	8.70 / 9.10
Power source		V	230	230	230	230	230
Sound pressure level ²⁾	Cooling / Heating (Hi)	dB(A)	47 / 49	49 / 51	46 / 47	48 / 49	48 / 49
	Cooling / Heating (Hi)	dB	62 / 64	64 / 66	60 / 61	62 / 63	61 / 62
Dimensions ⁴⁾	H x W x D	mm	540 x 780 (+70) x 289	540 x 780 (+70) x 289	795 x 875 (+95) x 320	795 x 875 (+95) x 320	908 x 900 x 320
Net weight		kg	38	38	71	72	73
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)
	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
Refrigerant Loading	R410A	kg	1.45	1.45	2.64	2.64	3.10
Elevation difference (in/out) ⁵⁾	Max	m	10	10	15	15	15
Piping length total	Max	m	30	30	50	60	70
Piping length to one unit	Min / Max	m	3-20	3-20	3-25	3-25	3-25
Piping length without refrigerant increase	Max	m	20	20	30	30	30
Additional gas		g/m	20	20	20	20	20
Operating range ²⁾	Cooling Min / Max	°C	16 / 43	16 / 43	-10 / 46	-10 / 46	16 / 43
	Heating Min / Max	°C	-15 / 24	-15 / 24	-15 / 24	-15 / 24	-15 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	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 (24h operation).

Connectivity restriction: CS-E/XE_LKE units are only compatible with CU-2E15LBE, CU-2E18LBE, CU-3E18LBE, CU-4E23LBE and CU-4E27CBPG outdoor units. No other outdoor unit can be connected.

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 and 0,8 meters below the unit. The sound pressure is measured in accordance with Eurovent 6/C/004-97 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.



FREE MULTI 4X1 // OUTDOOR UNIT CU-4E27CBPG (Cont.)

Table with columns for Indoor unit capacity, Cooling Capacity (kWh) Room A, Room B, Room C, Room D, Total (Min.-Max.), 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 (Min.-Max.), Input Power (W) Rating, COP W/W, A.C.E. kWh, Current 230 V (A).

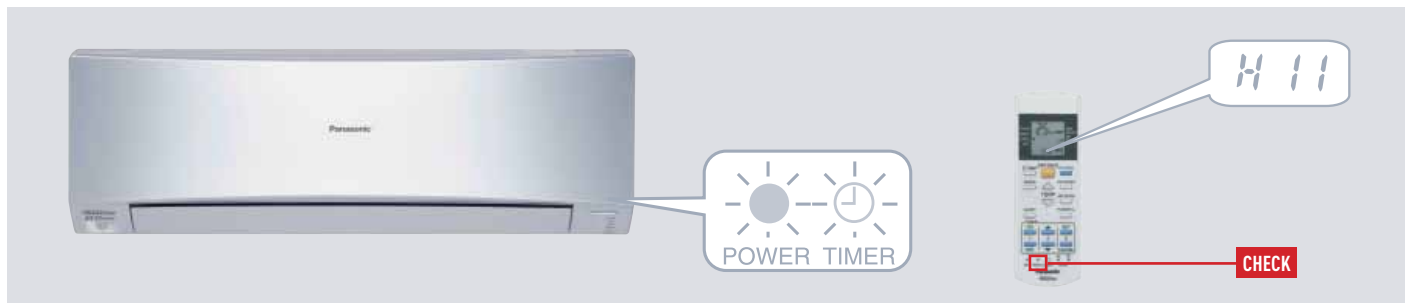
1) For wall type, hide away, 60x60 cassette.
2) For one way cassette, floor/ceiling, floor console.
Connectivity restriction : CS-E/XE_LKE units are only compatible with CU-2E15LBC, CU-2E18LBE, CU-3E18LBE, CU-4E23LBE and CU-4E27CBPG outdoor units. No other outdoor unit can be connected.



SELF DIAGNOSIS DESCRIPTION AND CHECK POINT TABLE

In the event of breakdown, proceed as follows to detect the error code.

1. Press "CHECK" button at the remote control continuously for more than five seconds to turn on diagnosis mode. " _ _ " will be displayed at the remote control LCD.
2. By pressing the TIMER "▲" button once, the next error code (if any) will be displayed; press "▼" button once, previous error code will be displayed.
3. If error code displayed matches the error code saved in unit memory (abnormality detected) Indoor PCB will buzzer for 4 seconds to indicate the correct error code.
4. If "CHECK" button is pressed again or without any operation for 30 seconds, the diagnosis mode will turn off.
5. Turn ON the unit and reset the error code by pressing the AC reset.



ERROR CODES TABLE

Warning: Electrical power must be disconnected when terminal protective cover is not in place to protect against electrocution.

Diagnosis Display	Abnormality / Protection Control	Diagnosis Method	Diagnosis Checkpoint
H11	Indoor/Outdoor abnormal communication	This trouble display appears when indoor/outdoor unit communication fails to be established after 30 or more seconds.	Measure the voltages of the indoor/outdoor unit communication cables, and check whether the voltage is being supplied properly to the outdoor unit or whether it is being returned from the outdoor unit to the indoor units.
H12	Indoor unit capacity unmatched	This trouble display appears when wrong in the total connection capacity and wrong connection in each capacity. The trouble is determined within 2 minutes after the power is turned on.	Check the total capacity of the units connected and check that the models are compatible for connection.
H14	Intake air temp. sensor	This trouble display appears when the intake air temperature has exceeded above 46°C continuously for 2 minutes or dropped below -54°C continuously for 5 seconds during operation.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector is to blame.
H15	Outdoor compressor temperature sensor abnormality	—	Check the sensor, and if open-circuit (more than 500 k) or (short-circuit) (less than 6.5 k) is not found, defective contact of the connector is to blame.
H16	Outdoor Current Transformer	CU-2E: When a value of under 1.5A has been detected for the total current during operation beyond the set capacity, the compressor operates with its operating frequency controlled to a maximum of 38Hz for 3 minutes, and if it continues to operate at a total current of under 1.5A for another 3 minutes, its operation stops. CU-3E/4E: When the total current has dropped below the set current level continuously for 20 seconds during operation beyond the set capacity, operation is stopped. Three minutes later, operation is started up again, and when the trouble occurs on 4 successive occasions, the trouble display appears (the timer lamp blinks).	1. Check the refrigerant cycle: Gas may be leaking (the amount of refrigerant is extremely low). 2. Check the control PCB: Check for a broken wire (open circuit) in the current transformer. (If an open circuit is found, replace the control PCB) In the case of a scroll compressor (DC motor), H16 is detected only when the regular compressor is operating.
H19	Indoor fan motor mechanism lock	· High-voltage PWM: When a state in which the fan motor speed is not synchronized with the control signal has been detected on 7 successive occasions. · Low-voltage PAM: When the fan lock detection signal has been detected on 7 successive occasions or it has been detected continuously for 25 seconds or when a state in which the fan motor speed is not synchronized with the control signal has been detected on 7 successive occasions: The trouble display appears (the timer lamp blinks).	1. Check the nature of the fan lockup trouble. 2. Check for disconnections of the fan motor connectors and for defects in contact, in the fan motor and in the control PCB.
H23	Indoor heat exchanger temp. sensor	This trouble display appears when a temperature of under approximately -40°C or above approximately 80°C has been detected by the heat exchanger temperature sensor continuously for 5 seconds. (This trouble is not detected during de-icing.)	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if (open-circuit) (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H26	Ionizer Abnormality	—	1. Measure the voltages of the indoor unit communication cables, and check whether the voltage is being supplied properly. 2. Check the ionizer needle and grounding plate is dust free.
H27	Outdoor air temp. sensor	This trouble display appears when a temperature of under approximately -40°C or above approximately 150°C has been detected by the outside air temperature sensor for 2 to 5 seconds. (This trouble is not detected during de-icing.)	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H28	Outdoor heat exchanger temp. sensor 1	This trouble display appears when a temperature of under approximately -60°C or above approximately 110°C has been detected by the heat exchanger temperature sensor for 2 to 5 seconds. (This trouble is not detected during de-icing.)	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H30	Outdoor discharge pipe temp. sensor	CU-2E: This trouble display appears when a temperature of under approximately -16°C or above approximately 200°C has been detected by the outlet temperature sensor for 2 to 5 seconds. CU-3E/4E: Disconnected discharge sensor - When the condensation temperature is higher than the discharge temperature + (plus) 6°C, a sensor disconnection is detected, operation stops, and the trouble display appears (the timer lamp blinks).	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H32	Outdoor heat exchanger temp. sensor 2 (discharge pipe temp.)	This trouble display appears when a temperature of under approximately -60°C or over approximately 110°C has been detected continuously for 2 to 5 seconds by the outlet temperature sensor of the heat exchanger.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H33	Indoor / Outdoor wrong connection	Indoor / Outdoor different model junction, 100V charge into 200V outdoor unit.	Check whether the voltage is being supplied properly to the outdoor unit or whether it is being returned from the outdoor unit to the indoor units.
H34	Outdoor heat sink temp. sensor	This trouble display appears when a temperature of under -43°C or above 80°C has been detected by the outdoor unit radiator fin sensor continuously for 2 seconds.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H36	Abnormal gas pipe temp. sensor	This trouble display appears when a temperature of under approximately -45°C or above approximately 149°C has been detected by the outdoor unit gas side pipe temperature sensor continuously for 2 to 5 seconds.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H37	Outdoor liquid pipe temp. sensor	This trouble display appears when a temperature of under -45°C or above 149°C has been detected by the outdoor unit liquid side pipe temperature sensor continuously for 2 seconds.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H38	Indoor / Outdoor mismatch (brand code)	—	—
H39	Abnormal indoor operating unit or standBy units	This display appears in rooms other than one in which indoor freezing trouble has occurred when the pipes have been connected incorrectly, when an outdoor expansion valve is defective or when an expansion valve connector has become disconnected.	—
H41	Abnormal wiring or piping connection	CU-2E only This display appears when this kind of trouble is detected 3 minutes after a forced cooling operation was conducted for one room during the initial operation after the power was turned on. It appears when: · The indoor unit pipe temperature in a room without the capacity supply available at an outside air temperature above 5°C has dropped by more than 20°C to 5°C or lower 3 minutes after the compressor started up. · The outdoor unit gas pipe temperature in a room without the capacity supply available has dropped by more than 5°C to 5°C or lower 3 minutes after the compressor started up.	—
H50	Ventilation failure	This display appears when ventilation motor is lock.	1. Check the voltage drop at pin 1 & 2 of CNVENT to have 14Vdc. 2. Check the ventilation hose condition from ventilation opening until tip cover. 3. Check air flow from tip cover by hand.



H51	Vacuum Nozzle Failure	This display appears when the vacuum nozzle stop.	This trouble display appears when suction nozzle stop at centre of the Filter Cleaning device: 1. Check the filter setting position. 2. Check the nozzle drive stepper motor running condition. This trouble display appears when suction nozzle stop at left side of Filter Cleaning device: 1. Check vacuum nozzle position. 2. Check the left limit switch switching function by multimeter. This trouble display appears when suction nozzle stop at left side of Filter Cleaning Device: 1. Check the Right Limit Switch switching function by multimeter.
H52	Limit Switch Failure	This display appears when both Limit Switch (left & right) detected short circuit.	1. Unplug the CNSIDESW connector and check Pin 1-2 and Pin 3-4 condition on PCB. 2. Check wiring condition at limit switch (left & right). 3. Check switching function of limit switch (left & right).
H97	Outdoor fan motor mechanism lock	CU-2E: When trouble, which is defined as a state in which the fan motor speed is not synchronized with the control signal has been detected on 5 successive occasions, has occurred for the third time in a 60-minute period and twice during a 30-minute period, the trouble display appears, and operation stops. CU-3E/4E: When the fan motor speed detected when its maximum output is demanded is below 30 rpm continuously for 15 seconds, the fan motor stops for 3 minutes and then restarted. When this happens on 16 occasions (the trouble display is cleared when the value is normal for 5 minutes), the H97 diagnostic symbol is stored in the memory, and the fan motor stops.	1. Check the nature of the fan lockup trouble. 2. Check for disconnections of the fan motor connectors and for defects in contact, in the fan motor and in the control PCB.
H98	Indoor high pressure protection	The restriction on the compressor frequency is started when the temperature of the indoor unit heat exchanger source is between 50°C and 52°C, the compressor stops at a temperature from 62°C to 65°C, it is restarted 3 minutes later at below 62°C to 65°C, and the restriction on the compressor frequency is released at a temperature between 48°C and 50°C. (No trouble display appears.)	1. Check the indoor unit heat exchanger temperature sensor (check for changes in its characteristics and check its resistance). Symptoms include no hot start when operation is started, a failure of the thermostat to turn on (no outdoor unit operation). And frequent repetition of stopping and start-up. 2. Check also for short circuits indoors and clogging of the air filters.
H99	Indoor operating unit freezing	The restriction on the compressor frequency is started when the indoor unit heat exchanger temperature is between 8°C and 12°C. Operation stops if a temperature below 0°C continues for 6 minutes. Three minutes later, operation is started up at a temperature from 3°C to 8°C. The restriction on the compressor frequency is released at a temperature between 13°C and 14°C.	1. A cooling or dry mode operation conducted at a low outside air temperature is mainly to blame: this is not indicative of any malfunctioning. If the outside air temperature rises during automatic operation in the winter months, the dry mode operation is selected. The H99 diagnostic display also appears at such a time. 2. Check the refrigerating cycle: Gas may be leaking (the amount of refrigerant is low) or a pipe may be broken, etc. 3. Check also for short circuits indoors and clogging of the air filters.
F11	4-way valve switching failure	CU-2E: When the indoor unit heat exchanger temperature is under -5°C during a warming operation or above 45°C during a cooling or dry mode operation four minutes after the compressor has started up, the F11 diagnostic symbol is stored in the memory, and operation stops. 3 minutes later, operation is restarted. This trouble display appears when this happens on 4 occasions in a 30 minutes period. CU-3E/4E: When a difference of 0°C to 5°C has been detected between the outdoor unit heat exchanger temperature and liquid side pipe temperature on 5 occasions, the trouble display appears.	1. Check the 4-way valve coil: Check that no power is supplied to the coil during cooling and dry mode operations, and that power is supplied during heating operations. Inspect the coil for broken wires (open circuits). 2. If the coil is troublefree, the switching action of the 4-way valve may be defective.
F17	Indoor standBy units freezing	CU-2E: After the operation of one indoor unit stops continuously for 5 minutes. The hole operation stops when the stopping indoor unit pipe temperature is under -5°C continuously for 1 minute or under 0°C continuously for 5 minutes, and operation restarts after 3 minutes. This trouble display appears if that trouble happens on 3 occasions in a 30 minutes period. CU-3E/4E: When the difference of an intake temperature (room temperature sensor) and the indoor unit heat exchanger temperature (piping sensor) is higher than 10°C or an indoor unit heat exchanger temperature of below -1°C has been detected continuously for 5 minutes, operation stops. Three minutes later, it is started up, and the trouble display appears when this has occurred on 3 consecutive occasions.	1. Check the refrigerating cycle: Expansion valve leakage. 2. Check the indoor unit pipe temperature sensor (check for changes in its characteristics and check its resistance).
F90	PFC circuit protection (CU-2E) Main circuit low voltage (CU-3E/4E)	CU-2E: When the rotation of the compressor is not synchronized with the control signal, the F90 diagnostic display is stored in the memory, and operation stops. 3 minutes later, operation is restarted. This trouble display appears when this happens on 4 occasions in a 10-minutes period. * With the multi 53 or above, it appears when this happens on 16 occasions. CU-3E/4E: When a DC voltage below 305V to 328V has been detected on 16 occasions, this trouble display appears.	1. To check whether the 2-way or 3-way valve has been left open by mistake, operation is performed for one to several minutes after the compressor has started up, F93 is stored in the memory as the symptom, and operation stops. 2. Check the Inverter circuit (for open circuits) in the control PCB: Check the IPM base current (6 locations) within 3 minutes after the power has been turned back on. As the symptom, F93 is stored in the memory 30 seconds after the compressor has started up, and operation stops. The trouble display appears after 4 restarts. 3. Check for broken wires (open circuits) in the compressor winding: Approximately 1 ohm under normal conditions for each phase (same symptom as in 2.). 4. Check the power supply voltage has been down or not.
F91	Refrigeration cycle abnormality	CU-2E: When the rotation speed of the compressor exceeds the setting frequency and the total current is 1.5A or higher to 1.9A or lower continuously for 5 minutes, operation stops if the indoor unit heat exchanger temperature is higher than 20°C during cooling or dry operation or if it is under 25°C during heating. Three minutes later, it is restarted, and if the trouble occurs on 2 consecutive occasions in a 20 minutes period, the trouble display appears. CU-3E/4E: When the compressor frequency is above 55 Hz and the current drops below the prescribed level continuously for 7 minutes, operation stops, and it is restarted 3 minutes later. When the compressor discharge temperature has exceeded the setting and the expansion valve has remained fully open for 80 seconds, operation stops, and it is restarted 3 minutes later. When the stopping described above has occurred on 4 occasions, operation stops, and the trouble display appear.	Check the refrigerating cycle: Gas may be leaking (more than onehalf of the volume of the gas has gone). The diagnostic displays resulting from a gas leak generally change in the following sequence depending on the extent of the gas leak: H99 → F97 → F91 → H16. The range of this trouble (F91) is limited. (Compressor protection at the start of the season).
F93	Compressor abnormal revolution	CU-2E: When the reputation of the compressor is not synchronized with the control signal, the F93 diagnostic display is stored in the memory, and operation stops. 3 minutes later, operation is restarted. This trouble display appears when this happens on 4 occasions in a 20 minutes period. CU-3E/4E: When a state in which the rotation of the compressor is not synchronized with the control signal has been detected on 8 successive occasions, operation stops, and the trouble display appears.	1. To check whether the 2-way or 3-way valve has been left open by mistake, operation is performed for one to several minutes after the compressor has started up, F93 is stopped in the memory as the symptom, and operation stops. 2. Check the Inverter circuit (for open circuits) in the control PCB: Check the IPM base current (6 locations) within 3 minutes after the power has been turned back on. As the symptom, F93 is stored in the memory 30 seconds after the compressor has started up, and operation stops. The trouble display appears after 4 restarts. 3. Check for broken wires (open circuits) in the compressor winding: Approximately 1 ohm under normal conditions for each phase (same symptom as in 2.)
F95	Outdoor high pressure protection	CU-2E only: When the temperature of the outdoor unit heat exchanger temperature sensor exceeds 63°C, the F95 diagnostic symbol is stored in the memory, and operation stops. 3 minutes later, operation is restarted at a temperature below 56°C. This trouble display appears when this happens on 4 occasions in a 20-minutes period.	1. Check the outdoor unit heat exchanger temperature sensor (check for changes in its characteristics and check its resistance). 2. Check whether something is interfering with the dissipation of the heat outdoors.
F96	Power transistor module or compressor overheating (CU-2E) Compressor high discharge temperature (CU-3E/4E)	CU-2E: Heating is detected inside the IPM which shuts itself off, the F96 diagnostic symbol is stored in the memory, and operation stops. 3 minutes later, operation is restarted. The trouble display appears when this happens on 4 occasions in a 30-minutes period. CU-3E/4E: When this trouble is detected from the electrical parts radiation fin temperature sensor and OLP output during operation, operation stops, and it is restarted 3 minutes later. If the trouble occurs on 4 occasions, operation stops, and the trouble display appears.	1. Something may be interfering with the dissipation of the heat outdoors or the outdoor unit fan may be defective. (The outdoor unit fan is not running). 2. Defective IPM (outdoor unit control PCB). 3. Gas leaks. 2-way or 3-way valve is not opened.
F97	Compressor high discharge temperature	When the temperature of the compressor temperature sensor exceeds 112 to 120°C, the F97 diagnostic symbol is stored in the memory, and operation stops. Two minutes later, operation is restarted at a temperature below 107 to 110°C. CU-2E: The trouble display appears and operation stops when this happens on 4 occasions in a 20 minutes period. CU-3E/4E: This trouble display appears and operation stops when this happens on 6 occasions (it is cleared when the operation is normal for 20 minutes).	1. Check the refrigerating cycle: Gas may be leaking (the amount of refrigerant is low). The stopping of the outdoor unit from time to time is a symptom of this trouble. 2. When operation steps with this trouble display appearing, check the compressor temperature sensor (check for changes in its characteristics and check its resistance). 3. Something may be interfering with the dissipation of the heat outdoors or the outdoor unit fan may be defective. (The fan will not run because of an open circuit.) (The protection function may be activated by an overload, and the F97 trouble display will remain stored in the memory).
F98	Total running current protection	CU-2E: When the total current exceeds the setting, the F98 diagnostic display is stored in the memory, and operation stops. 3 minutes later, operation is restarted. The trouble display appears and operation stops when this happens on 3 occasions in a 20-minutes period. CU-3E/4E: When the total current exceeds the setting (17A to 20A), frequency control is started, and if it then exceeds the setting, operation stops, and the trouble display appears.	1. Check the AC voltage at the outdoor unit terminal board during operation: The voltage drop must be within 5% of the voltage when operation has stopped (± 110% of rated voltage even during operation). If the voltage drop exceeds 5% or if the voltage changes suddenly, inspect whether the power supply cord and indoor/outdoor unit connection cables are too long or too small in diameter, etc. 2. Check whether something is interfering with the dissipation of the heat outdoors (during cooling operations): Normally, the capacity is limited by the current so that the outdoor unit don't stop, and the diagnostic display does not appear.
F99	DC peak detection	CU-2E: If the current level exceeds 22.5A after startup, the compressor stops, and it is restarted 3 minutes later. When this occurs on 7 consecutive occasions, operation stops, and the trouble display appears. CU-3E/4E: When "Output current trouble", which occurs when the prescribed current level is exceeded, has occurred on 16 consecutive occasions, operation stops, and the trouble display appears.	1. Check whether the compressor is defective (locked up or shorted winding). Check the outdoor unit control PCB.

OPTIONAL ACCESSORIES

REPLACEMENT ANTI-ALLERGEN FILTER

CZ-SA13P
CS-E9/12/15/18/21HKEACZ-SA14P
CS-PW9/12/18GKE, CS-PW24JKE, CS-V7DKE, CS-V9DKE, CS-V12DKE, CS-V18DKE, CS-V24DKE, CS-V28EKE, CS-E15DTE, CS-E18DTE, CS-E21DTECZ-SA16P
CS-RE9/12/18/24JKE-1

PIPE REDUCER (for Multi)

CZ-MA1P
CS-E12/15/18JLKEW, CS-E15/18DTEW, CS-E15/18HB4EA, CS-E15/18JD3EA, CS-E18GFEW, CS-E18GFWEW

PIPE EXPANDER (for Multi)

CZ-MA2P
CS-E21JKEW, CS-XE21JKEW, CS-E21LKEW, CS-XE21LKEW, CS-E21JB4EA



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