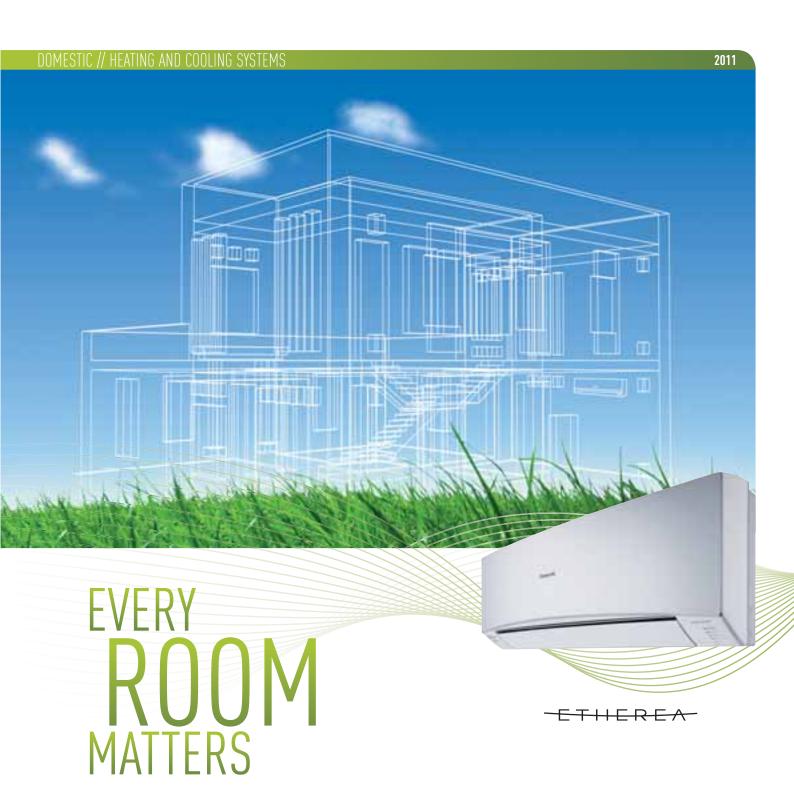
Panasonic ideas for life



Panasonic

ideas for life



'ECO IDEAS' FOR LIFESTYLES: WE WILL PROMOTE LIFESTYLES WITH VIRTUALLY ZERO CO, EMISSIONS THROUGHOUT THE WORLD. SPECIFICALLY:

- 30% of total sales will be achieved through "eco labeled products. This includes both external labels such as EU 'eco ideas' label, which is given to products which achieve industry-leading environmental performance. ¹
- 3,500,000t of contribution in reducing CO₂ emissions with energy solution products (such as Solar Panels, Fuel Cells, Heat Pumps, Energy Recovering Ventilation, LED and Energy
- 'kids school eco learning' programme.

'ECO IDEAS' FOR BUSINESS-STYLES: WE WILL CREATE AND PURSUE BUSINESS-STYLES THAT MAKE THE BEST **USE OF RESOURCES AND ENERGY:**

the mighest rains in the market by extends a chimphost performance.

2) An amount of CO, reduction compared to the estimated figure assuming no improvement.

Measures were taken after March 31, 2006.

3) Includes all Panasonic Group's European Factories with the exception of IPS-Alpha and Sanyo

4) Based on offices with 100 employees or more; based on FY 2009.

5) An amount of CO, reduction compared to the estimated figure assuming no improvement.

Measures were taken after March 31, 2006.



PANASONIC HEATING AND COOLING SYSTEMS

With more than 30 years of experience, exporting to more than 120 countries around the world, Panasonic is unquestionably one of the leaders in the air conditioning sector. The company is also a world leader in innovation as it has filed more than 95,025 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market - thanks to more than 500 researchers working in European laboratories to design increasingly innovative products. In all, the company has produced more than 100 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's air conditioners.

This wish to excel has made Panasonic the international leader in heating and air conditioning solutions. The company's industrial capacity and firm commitment to the environment has enabled it to open new avenues of research and to develop innovative technologies which enhance its customers' way of life.

Panasonic offers a range of turnkey heating and air conditioning solutions for homes, medium-sized buildings such as offices and restaurants, and large-scale buildings. These offer maximum effectiveness, comply with the strictest environmental standards and meet the most avant-garde construction requirements of our time.

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

EVERYTHING MATTERS

heating and cooling systems





PANASONIC ECOLOGY & ENERGY VISION

A STEP AHEAD IN ECOLOGY — IN HOMES, BUILDINGS AND TOWNS

Panasonic presents a more comfortable and ecological lifestyle. By linking a wide range of products for saving, creating and storing energy with Energy Management Systems, it is possible to control energy use in a smart way.

Panasonic aims to contribute towards reducing ${\rm CO_2}$ emissions in the entire house and building.

Our steadfast commitment to the environment means that all of our air conditioners meet the most demanding requirements for energy consumption and noise emissions. But it also means that we search for new ideas to improve our environment, both in meticulous control of the processes of manufacturing and distributing our products and in new ways of living our day-to-day lives without endangering the planet's future.







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 ECONAVI system, which detect 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.





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 overdryness.

designed to care for you







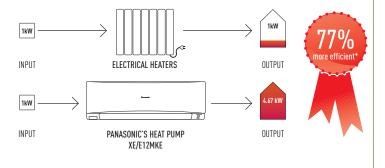
THE NEW ETHEREA RANGE PURE EFFICIENCY WITH ECONAVI

Panasonic's new Etherea units offer maximum efficiency in every sense. They ensure minimum consumption, thanks to the new ECONAVI system, which intuits the level of human presence in a room and their level of activity and adjusts output accordingly. This feature provides up to 40% energy savings on heating mode, and up to 30% energy savings on cooling mode.

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 microorganisms, viruses, bacteria and moulds and a system which prevents humidity in the room from dropping too far. Thanks to Mild Dry System.

ECONOMICAL, ENVIRONMENT-FRIENDLY OPERATION HIGH COP (COEFFICIENCY OF PERFORMANCE)

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



 * On heating mode, XE/E12MKE compared with electrical heaters at +7°C

energysaving



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



ECONAVI sensor determine the human activity level adjust the air flow orientation for maximum comfort and maximum savings.



The Autocomfort system detects conditions in the room and switches to energy saving operation when nobody is on the room.



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



NEW ECONAVI SYSTEM

FCO INTELLIGENCE BY DESIGN

Going green and saving energy shouldn't compromise on your comfortable lifestyle. That is why the inverter – with its exceptional energy-saving performances – has been introduced to our air conditioners.

At the same time, individuals also get to enjoy the Advanced+Plus e-ion Air Purifying System with the Patrol Sensor for cleaner air. Both advanced features have been designed to improve quality of life. With the same concerns in mind, Panasonic is introducing a new Econavi concept – an intelligent eco function with automatic detection which further reduces energy waste.

This enables individuals to save energy easily and thus improve the environment. Imagine what millions of people around the world can change with Econavi. A more sustainable future is possible.



INTRODUCING ECONAVI – A SYSTEM WHICH SAVES ENERGY BY REDUCING WASTE

The ECONAVI concept applies high precision Human Sensor and Control Program technologies to optimise air conditioner operation according to room conditions. How does it save energy? By using technology to detect areas in which energy is normally wasted and self-adjusting cooling power. Thus, it helps you to save energy efficiently with uninterrupted cooling, comfort and convenience.

UP TO 30% ENERGY SAVINGS ON COOLING MODE*, 40% ENERGY SAVINGS ON HEATING MODE**

Accumulative energy consumption is saved up to 40% during stable operation for 1 hour.

*Energy saving effect for cooling by ECONAVI dual sensor: 30%

Test condition

Comparison of 1.5HP Inverter model between with ECONAVI dual sensor ON and OFF ECONAVI dual sensor ON Outside temperature: 35°C/24°C Remote setting temperature: 25°C with Fan Speed (High) /Vertical Airflow direction: Auto, Horizontal Airflow direction: ECONAVI Mode Setting temperature goes up 1°C controlled by ECONAVI activity level ECONAVI dual sensor OFF Outside temperature: 35°C/24°C Remote setting temperature: 25°C with Fan Speed (High) / Vertical Airflow direction: Auto, Horizontal Airflow direction: Front Total power consumption amount are measured for 1 hour in stable condition. At Panasonic Amenity Room (size:16.2M2) This is the maximum energy saving value, and the effect differs according to conditions in installation and usage.

**Energy saving effect for heating by ECONAVI dual sensor: 40% Test condition

Comparison of 1.5HP Inverter model between with ECONAVI dual sensor ON and OFF ECONAVI dual sensor ON Outside temperature: 7°C/6°C Remote setting temperature: 23°C with Fan Speed (High) /Vertical Airflow direction: Auto, Horizontal Airflow direction: ECONAVI Mode Setting temperature goes down 7°C controlled by ECONAVI activity level ECONAVI dual sensor OFF Outside temperature: 7°C/6°C Remote setting temperature: 23°C with Fan Speed (High) / Vertical Airflow direction: Auto, Horizontal Airflow direction: Front Total power consumption amount are measured for 1 hour in stable condition. At Panasonic Amenity Room (size:16.2M2) This is the maximum energy saving value, and the effect differs according to conditions in installation and usage.

One-touch ECONAVI reduces waste in three simple steps:

It examines

- · Levels of activity
- · Human presence

It assesses

- Changes in human location
- · Changes in human activity
- · Changes in human presence

and executes

- Adjusts airflow direction
- High activity: automatic adjustment of the set temperature
- · Absence: saves energy



Adjusts airflow direction



• High activity: automatic adjustment of the set temperature



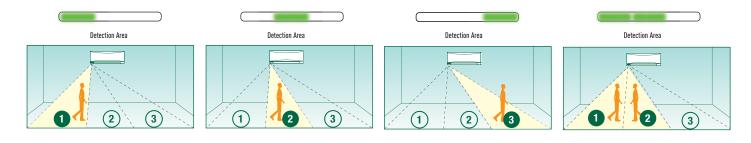
ECONAV

· Absence: save energy

SENSOR DETECTION PRINCIPLE

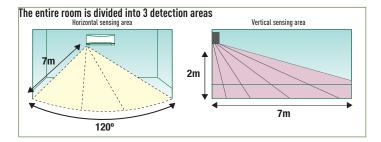
Dual human activity sensor detects human activity level and directs airflow to occupied or high activity zone.

LEDs Operation Indication Status



COVERAGE CAPABILITIES

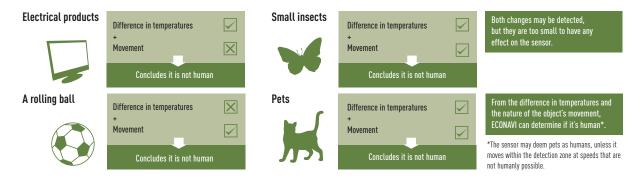
ECONAVI dual sensor covers a wider area due to its improved area detection function.





DIFFERENTIATING OBJECTS

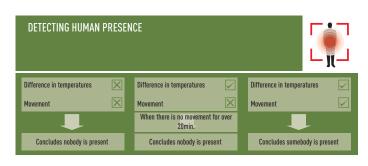
ECONAVI's sensor technology uses factors such as speed, frequency and temperature of every object to determine if it is human.

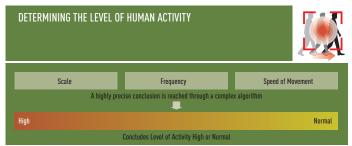


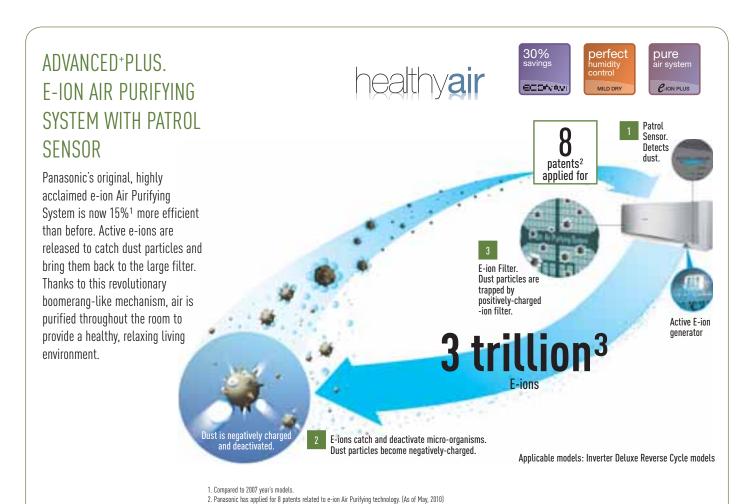
HIGH-PRECISION SENSING

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

The entire room is divided into 3 detection areas







3. 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.

This is Panasonic's revolutionary mechanism

Air is monitored both during air conditioner operation and when it's switched off. When dirt is detected, the air purifying function is started to immediately clean the air in the room.



DETECTS

Patrol Sensor

The sensor measures the dirt in the air, and above a certain level the air is judged to be dirty.

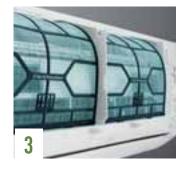
If dirt concentration exceeds the sensing level, the Air Purifying System is switched on.



CATCHES & INACTIVATES

E-Ion Action

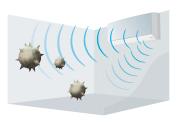
Three trillion e-ions are released to catch floating dust particles. The ions also deactivate bacteria and viruses.



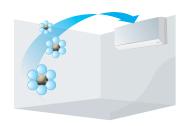
CAPTURES ELECTRICALLY

E-lon filter

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





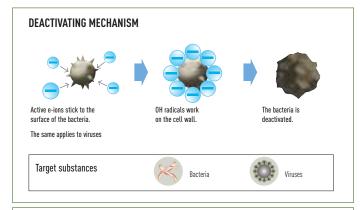


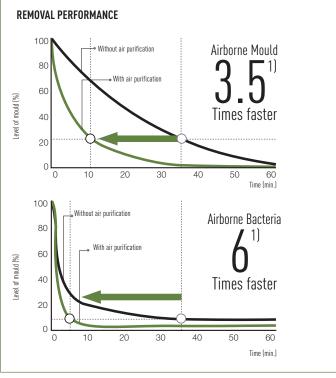
Active F-ion

- Active e-ions can deactivate bacteria and virus activities.
- E-ions Air Purifying System can rapidly reduce airborne mould and bacteria¹⁾

Deactivation was certified by Japan Food Research Laboratories

- Test report number: No. 10057764001-02
- Bacteria: Staphylococcus aureus subsp. aureus (NBRC12732)
- Test report number: No. 10057770001-02
- Bacteria: Escherichia coli (NBRC3972) Test report number: No. 204101750-001
- Virus: Influenza virus A
- Test report number: No. 304110078-001
- 1) Test method: The e-ion Air Purifying System was operated in a test room (10m²) and changes in airborne mould and bacteria were measured by means of the Air Sampler Method (MAS100)





F-ion Filter

Using the force of attraction between positive and negative charges, the e-ion Filter – which is 7 times bigger and finer than ever – powerfully captures airborne dust particles.

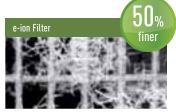


Also captures microscopic dust (100~1,000µm)

Bigger size, finer mesh

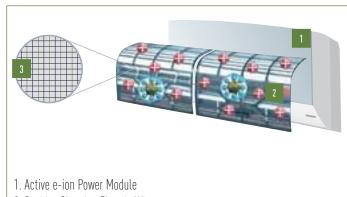
The filter covers the entire grille area.





Electric charging

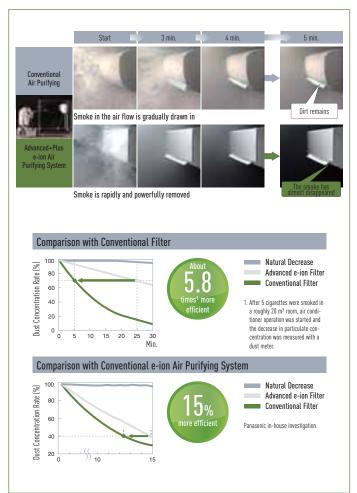
Electric Induction Fibres extend across the entire area of the filter for charging.



- 2. Positive Charging Electric Wire
- 3. Electric Induction Fibres positively charge the entire filter

Electric dust collection for more efficient purification

A smoke collection test demonstrates the exceptional purifying performance.





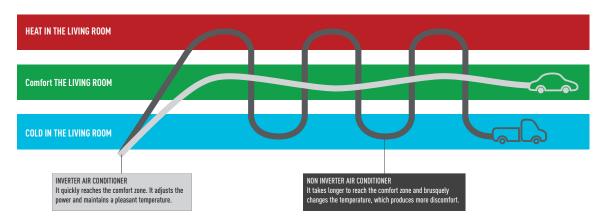
OUTSTANDING ENERGY-SAVING PERFORMANCE

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.

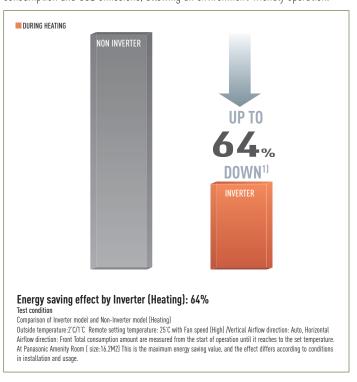
comparing Inverter and non-Inverter air conditioners.





64% Cut in power consumption on heating mode 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.

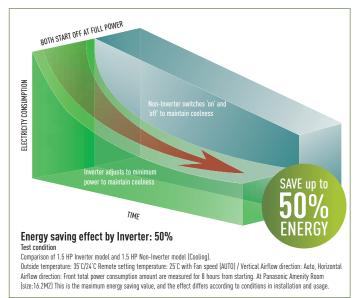


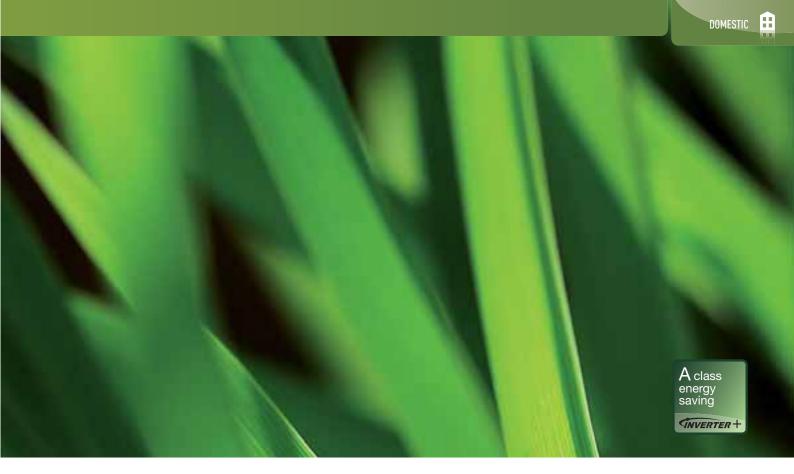
1)Comparison of cumulative electricity consumption during heating to reach the setting temperature (Panasonic in-house comparison)
Test conditions: Indoor and outdoor temperature: 7°C/ Setting temperature: 25°C/ Fan speed: High.

Outstanding performance with up to 50% energy savings on cooling mode

The exceptional energy-saving performance of Panasonic Intelligent Inverter air conditioners ranks among the highest in the industry.

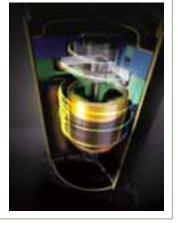
The secret lies in its precision control. After reaching the set temperature, an Intelligent Inverter air conditioner continually adjusts compressor rotation speed to operate with minimum power – giving you up to 50% energy savings during cooling operation. By contrast, a non-Inverter unit operates on an ON-OFF cycle to maintain the temperature –so it uses twice as much electricity.





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

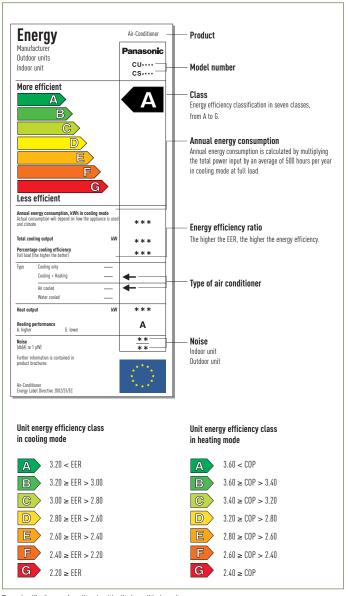
A European Community directive requiring energy labelling of domestic appliances came into effect in 2005. Since then, all manufacturers have been required to label each product with an efficiency level represented by a letter from A to G. This means that a class B domestic appliance consumes approximately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



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. At 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.









Further INVERTER advantages

- · 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).

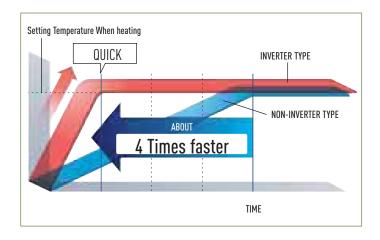
1) Comparison of cumulative electricity consumption during heating to reach the setting temperature (Panasonic in-house comparison) Test conditions: Indoor and outdoor temperature: 7°C/ Setting temperature: 25°C/ Fan speed: High.
2) Comparison of cumulative electricity consumption during 8 hours of cooling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

temperature at start: 35°C/ Setting temperature: 25°C.

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 guarter of 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.



Powerful Airflow with a Larger Cross Flow Fan

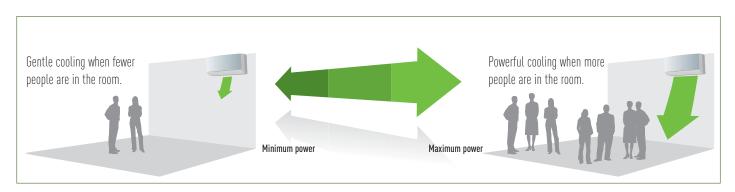
Panasonic's new models feature a large cross flow fan with improved design. The fan's larger diameter dramatically increases airflow. A powerful breeze rapidly cools the room to a comfortable temperature. And because the breeze reaches a wider area, the temperature is evenly distributed throughout the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



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.*



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.*



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	7.0 /0 JAVINO
12+12 in Multi 12+12 in 1X1	760 904	15.9% SAVING
7+7+12 in Multi 7+7+12 in 1X1	605 922	33.3% SAVING
7+7+7+12 in Multi 7+7+7+12 in 1X1	825 1,157.5	8.0% SAVING
7+9+9+12 in Multi 7+9+9+12 in 1X1	825 1,233	35.9% SAVING

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





Savings with correct dimensioning of air conditioning unit: case study for a 12 m 2 bedroom or on a living room of 33 m 2*

MODEL	ANNUAL CONSUMPTION (KW)	SAVING	USING A E7 AND NOT A E9 ON A 12 M ² ROOM		
KIT-XE7-MKE	235	12.3%	Furthermore with a E7 year are not colored in a manage but the E7 is quicker than the E01		
KIT-XE9-MKE	268	12,376	Furthermore, with a E7, you are not only saving money but the E7 is quieter than the E9!		
MODEL	ANNUAL CONSUMPTION (KW)	SAVING	USING A E15 AND NOT A E18 ON A 33 M² LIVING ROOM		
KIT-E15-MKE	630	14.3%	Furthermore, with a E15, you are not only saving money, but have smaller and		
KIT-E18-MKE	735	14,3%	discrete indoor units, and incredibly silent (only 25 dB!)		



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!*

^{*} Standard conditions: 2.5 m High ceiling; 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.

THEREA MYCRETER - / SOUTH STATEMEN	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		ARD F	ROOM 3	TWEEN
MIT ASSESSMENT S.50 (10.55-0.00) A.57	THEREA INVERTER+ // SILVER	KIT-XE7-MKE	2,05 (0,75-2,40)	4,36 A	2,80 (0,75-4,00)	4,41 A	20 / 20	290 x 870 x 204			Ť	H	Ť
### STATES-MICE	- 1	KIT-XE9-MKE	2,50 (0,85-3,00)	4,67 A	3,40 (0,85-5,00)	4,63 A	20 / 20	290 x 870 x 204					
MITAGEL AMES SUBJECT-AMES SUBJ		KIT-XE12-MKE	3,50 (0,85-4,00)	4,07 A	4,00 (0,85-6,00)	4,21 A	20 / 20	290 x 870 x 204					
MITATION PARK SUN IN PART AUDI 3.00 Sept 2011 3.00 Sept 20	class savings improved comfort quality ar control 24 h	KIT-XE15-MKE	4,20 (0,85-5,00)					290 x 870 x 204					
THEREA NOVERTER- // WHITE WIT-57-MAKE 2.05 (0.75-2.40) 4.06 € 2.05 (0.75-2.40) 4.06 € 2.05 (0.75-2.40) 4.07 € 3.05	Perfect silent	KIT-XE18-MKE	5.00 (0.98-6.00)					290 x 1.070 x 235					
THEREA NIVERTER - // WHATE NIT EST-MAKE 2,05 (0,75 2,40) 4,05	CONTROL CONTRO											П	
TYPE // STANDARD INVERTER	FOR XEY, XEY AND XE12		.,,.,,		, ,	-,							
TYPE // STANDARD INVERTER	THEREA INVERTER+ // WHITE	KIT-E7-MKE	2.05 (0.75-2.40)	4.36 A	2.80 (0.75-4.00)	4.41 A	20 / 20	290 x 870 x 204					
TIPE STANDARD INVERTER RITHER JULE 200 (1) 0-0 0.00 0.00 0.00 0.00 0.00 0.00 0.00												П	
NT-ESS-WARE \$ 5,00 (1.9-400) \$ 3.0												П	
NIT-ELE-WISE N	class 30% improved comfort ar control 24 h	-											
WIT-221-MADE 6,501 (0.9 P. 7.10) 2,5 €	ure perfect silent												
NIFEZA-MIKE 6,00 (0.99-0.10 3,21	ource system furnisty control 20 dB	-							+			П	
ETYPE // STANDARD INVESTIES KIT-REP-JRE-1 2,50 (0,99-3,00) 3,57	FOR E7, E9 AND E12	-											_
E TYPE // STANDARD INVERTER KIT-REP-JR-1		-							+			Н	T
XIT-RE12-JKE-1			. 100 (01.0 0100)	0,01	7,00 (0)70 11,007	2,71	30,700	270 X 11070 X 200				H	-
NIT-REIP-JRE-1	E TYPE // STANDARD INVERTER	KIT-RE9- IKF-1	2.50 (0.90-3 nn)	3.57 A	3.30 (0.90-4 10)	4.07 A	22 / 25	290 x 848 x 204					
NIT-REIS-JRE-1 4.20 (1,00 4.60) 3,34	E // CIANDAND INVENTER			-,-	.,					I			
KIT-REIB-JKE-1 5.00 (0.90-6.00) 3.40	- 0	-											
N TYPE // STANDARD	class prevention relaxing brosze	-		-,									
M TYPE // STANDARD KIT-PW9-GKE 2.45 3.21	ALLEN BLUTTEN ALLEN BLUTTEN BEFT BRIEZE								+				
AT PUMP		MITALZ4-JAL-1	0,00 (0,70-0,10)	U, E 1	0,00 (0,70-7,70)	0,20	00 / 00	270 A 1.070 A 233					
AT PUMP KIT-PW18-GKE 3.40 3.22	A/ TVDE // CTANDADD	VIT DWO CVE	2 45	2 21 🔨	2 05	2 (2 🔨	21 / 21	250 v 770 v 205	+			\vdash	
KIT-PW18-GKE 5,10 2,91										工	+	H	
NIT-PVZ4_JKE		-								_	₩		
TYPE / STANDARD VITI-VI-DIKE 2,40 3,24									+		+		
OOLING ONLY KIT-V9-DKE 3,00 3,21	evention of the second of the	KII-PWZ4-JKE	7,03	2,03	7,30	2,8/	41 / 41	2/3 X 998 X 23U					T
NIT-Y2-DKE 3,00 3,21 - - 2.4 200 x 797 x 183		KIT-V7-DKE	2,40	3,24 A	-	-	24	280 x 799 x 183	F				
KIT-V24-DKE 7,03 2,76	DOLING ONLY	KIT-V9-DKE	3,00	3,21 A	-	-	24	280 x 799 x 183					
KIT-VZ4-DKE 7,03 2,70 1 - 38 275 x 998 x 230		KIT-V12-DKE	3,68	3,23 A	-	-	27	280 x 799 x 183					
KIT-V28-EKE 7,91 3,22	prevention	KIT-V18-DKE	5,30	3,25 A	-	-	35	275 x 998 x 230					
LOOR CONSOLE TYPE // INVERTER+ KIT-E9-GFEW-1 2,50 (0,80-3,00) 4,39 4 3,60 (0,80-5,00) 4,16 4 23 / 23 600 x 700 x 210 KIT-E12-GFEW-1 3,50 (0,80-3,80) 3,63 4 4,80 (0,80-6,10) 3,64 4 24 / 23 600 x 700 x 210 KIT-E18-GFEW-1 5,00 (0,90-5,60) 3,23 5 5,80 (0,90-7,10) 3,63 5 3 2 / 32 600 x 700 x 210 LOOR OR CEILING // INVERTER KIT-E15-DTE 4,15 (0,90-4,55) 3,22 5,17 (0,90-6,30) 3,34 5 3 3 / 32 / 32 600 x 700 x 210 LOOR OR CEILING // INVERTER KIT-E15-DTE 5,00 (0,90-5,40) 3,01 6 6,10 (0,90-7,60) 3,35 6 3 6 / 32 560 x 1.028 x 200 KIT-E18-DTE 5,00 (0,90-6,40) 3,01 6 6,80 (0,90-8,10) 3,42 7 38 / 34 540 x 1.028 x 200 THEREA MULTI SPLIT // 2x1 KIT-2xE/E77-MBE 4,50 (1,50-5,20) 3,66 5 5,40 (1,10-7,00) 4,62 7 26 / 26 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 4,50 (1,50-5,20) 3,66 7 5,40 (1,10-7,00) 4,62 7 26 / 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 4,50 (1,50-5,20) 3,66 7 5,40 (1,10-7,00) 4,62 7 26 / 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,20) 3,66 7 5,40 (1,10-7,00) 4,62 7 26 / 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,20) 3,66 7 5,40 (1,10-7,20) 4,62 7 26 / 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,20) 3,66 7 5,40 (1,10-7,20) 4,62 7 26 / 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,62 7 26 / 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 26 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 26 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,64 7 5,40 (1,10-7,20) 4,55 7 26 29 290 x 870 x 204 (x2) KIT-2xE/E79-MBE 5,00 (1,50-5,00) 3,60 7 5,40 (1,10-7,20) 4,55 7 26 29 290 x 870 x 204 (x2) KIT-2xE/E79	allery)	KIT-V24-DKE	7,03	2,70 D	-	-	38	275 x 998 x 230					
KIT-E12-GFEW-1 3,50 (0,80-3,80) 3,63		KIT-V28-EKE	7,91	3,22 A	-	-	42	340 x 1.150 x 260					
KIT-E12-GFEW-1 3,50 (0,80-3,80) 3,63													
KIT-E18-GFEW-1 5,00 (0,90-5,60) 3,23	.00R CONSOLE TYPE // INVERTER+	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					
LOOR OR CEILING // INVERTER KIT-E15-DTE	A class energy saving	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					
LOOR OR CEILING // INVERTER KIT-E15-DTE	prevention silent down to allorgy fiber	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					
KIT-E18-DTE 5,00 (0,90-5,40) 3,01 8 6,10 (0,90-7,60) 3,35 36 36 32 540 x 1.028 x 200	OPTIONAL ALLERA-BUSTER BUPER QUET											Ш	
KIT-EZI-DTE 5,80 (0,90-6,60) 3,01	LOOR OR CEILING // INVERTER	KIT-E15-DTE	4,15 (0,90-4,55)	3,22	5,17 (0,90-6,30)	3,34 C	34 / 30	540 x 1.028 x 200					
THEREA MULTI SPLIT // VVERTER+ 2x1 KIT-2XE/E77-MBE 4,00 (1,50-5,00) 3,66 4 5,40 (1,10-7,00) 4,62 4 26 / 26 290 x 870 x 204 (x2) 290 x 870 x 204 (x2) 290 x 870 x 204 (x2) 290 x 870 x 204 (x3) 290 x 870 x 204 (x4)		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					
NERTER+ KIT-2XE/E79-MBE	class prevention alergy	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					4
NUMERTER+ KIT-2XE/E79-MBE 4,50 (1,50-5,20) 3,66	ALLENGALITIES OPTIONAL											Ш	
KIT-2XE/E99-MBE 4,80 (1,50-5,20) 3,66 ▲ 5,40 (1,10-7,00) 4,62 ▲ 26 / 29 290 x 870 x 204 (x2) KIT-2XE/E99-MBE 4,80 (1,50-5,20) 3,66 ▲ 5,40 (1,10-7,00) 4,62 ▲ 26 / 26 290 x 870 x 204 (x2) KIT-2XE/E99-MKE 4,80 (1,50-5,20) 3,66 ▲ 5,60 (1,10-7,20) 4,48 ▲ 26 / 26 290 x 870 x 204 (x2) KIT-2XE/E912-MKE 5,00 (1,50-5,30) 3,36 ▲ 5,60 (1,10-7,20) 4,55 ▲ 26 / 29 290 x 870 x 204 (x2) KIT-2XE/E1212-MKE 5,20 (1,50-5,40) 3,42 ▲ 5,60 (1,10-7,20) 4,55 ▲ 26 / 29 290 x 870 x 204 (x2) KIT-3XE/E7712-MBE 5,20 (1,50-5,40) 3,42 ▲ 5,60 (1,10-7,20) 4,63 ▲ 29 / 29 290 x 870 x 204 (x2) XI KIT-3XE/E7712-MBE 5,20 (1,90-7,20) 4,30 ▲ 6,80 (1,40-8,30) 4,63 ▲ 26 / 29 (E12) 290 x 870 x 204 (x3) KIT-3XE/E7715-MBE 5,20 (1,80-7,30) 4,30 ▲ 6,80 (1,60-8,30) 4,72 ▲ 26 / 29 (E15) 290 x 870 x 204 (x4) KIT-4XE/E77712-MBE 6,80 (1,90-8,80) 4,12 ▲ 8,60 (3,00-10,60) 4,65 ▲ 26 / 29 (E15) 290 x 870 x 204 (x4) KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 ▲ 9,40 (3,40-10,50) 4,43 ▲ 26 / 29 (E12) 290 x 870 x 204 (x4)		KIT-2XE/E77-MBE				-		290 x 870 x 204 (x2)					4
KIT-2XE/E99-MBE 4,80 (1,50-5,20) 3,66 \$\inspece\$ 5,00 (1,10-7,20) 4,48 \$\inspece\$ 26 / 26 290 x 870 x 204 (x2) \$\frac{1}{2}\$ \\ KIT-2XE/E99-MKE 5,00 (1,50-5,20) 3,66 \$\inspece\$ 5,00 (1,10-7,20) 4,48 \$\inspece\$ 26 / 29 290 x 870 x 204 (x2) \$\frac{1}{2}\$ \\ KIT-2XE/E912-MKE 5,00 (1,50-5,30) 3,36 \$\inspece\$ A 5,60 (1,10-7,20) 4,55 \$\inspece\$ A 26 / 29 290 x 870 x 204 (x2) \$\frac{1}{2}\$ \\ KIT-2XE/E1212-MKE 5,20 (1,50-5,40) 3,42 \$\inspece\$ A 5,60 (1,10-7,20) 4,55 \$\inspece\$ A 26 / 29 290 x 870 x 204 (x2) \$\frac{1}{2}\$ \\ KIT-2XE/E7212-MKE 5,20 (1,50-5,40) 3,42 \$\inspece\$ A 5,60 (1,10-7,20) 4,63 \$\inspece\$ A 29 / 29 290 x 870 x 204 (x2) \$\frac{1}{2}\$ \\ XIT-3XE/E7712-MBE 5,20 (1,90-7,20) 4,30 \$\inspece\$ A 6,80 (1,40-8,30) 4,63 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x3) \$\frac{1}{2}\$ \\ KIT-3XE/E77712-MBE 6,80 (1,90-8,80) 4,12 \$\inspece\$ A 8,60 (3,00-10,60) 4,65 \$\inspece\$ A 26 / 29 (E15) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MBE 6,80 (1,90-8,80) 4,12 \$\inspece\$ A 8,60 (3,00-10,60) 4,65 \$\inspece\$ A 26 / 29 (E15) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50) 4,43 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50) 4,43 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50) 4,43 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50) 4,43 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50) 4,43 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50) 4,43 \$\inspece\$ A 26 / 29 (E12) 290 x 870 x 204 (x4) \$\frac{1}{2}\$ \\ KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 \$\inspece\$ A 9,40 (3,40-10,50	IVERIERT	KIT-2XE/E79-MBE	4,50 (1,50-5,20)	3,66 A	5,40 (1,10-7,00)	4,62 A	26 / 26	290 x 870 x 204 (x2)	X			Ш	
KIT-2XE/E99-MKE 4,80 (1,50-5,20) 3,66 ▲ 5,60 (1,10-7,20) 4,48 ▲ 26 / 26 290 x 870 x 204 (x2)		KIT-2XE/E712-MBE	4,50 (1,50-5,20)	3,60 A	5,40 (1,10-7,00)	4,62 A	26 / 29	290 x 870 x 204 (x2)	X		4		
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KIT-2XE/E1212-MKE		KIT-2XE/E99-MKE	4,80 (1,50-5,20)	3,66 A	5,60 (1,10-7,20)	4,48 A	26 / 26	290 x 870 x 204 (x2)					
3x1 KIT-3XE/E7712-MBE 5,20 (1,90-7,20) 4,30		KIT-2XE/E912-MKE	5,00 (1,50-5,30)	3,36 A	5,60 (1,10-7,20)	4,55 A	26 / 29	290 x 870 x 204 (x2)					
KIT-3XE/E7715-MBE 5,20 (1,80-7,30) 4,30 📣 6,80 (1,60-8,30) 4,72 🔌 26 / 29 (E15) 290 x 870 x 204 (x3) 2 20 x 870 x 204 (x3) 2 20 x 870 x 204 (x4) 2 20 x 2	66	KIT-2XE/E1212-MKE	5,20 (1,50-5,40)	3,42 A	5,60 (1,10-7,20)	4,63 A	29 / 29	290 x 870 x 204 (x2)		x2			
4x1 KIT-4XE/E77712-MBE 6,80 (1,90-8,80) 4,12 A 8,60 (3,00-10,60) 4,65 A 26 / 29 (E12) 290 x 870 x 204 (x4)	3x1	KIT-3XE/E7712-MBE	5,20 (1,90-7,20)	4,30 A	6,80 (1,40-8,30)	4,63 A	26 / 29 (E12)	290 x 870 x 204 (x3)	X				
KIT-4XE/E77715-MBE 6,80 (1,90-8,80) 4,12 ▲ 8,60 (3,00-10,60) 4,65 ▲ 26 / 29 (E15) 290 x 870 x 204 (x4) KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 ▲ 9,40 (3,40-10,50) 4,43 ▲ 26 / 29 (E12) 290 x 870 x 204 (x4)	Dr. o	KIT-3XE/E7715-MBE	5,20 (1,80- 7,30)	4,30 A	6,80 (1,60-8,30)	4,72 A	26 / 29 (E15)	290 x 870 x 204 (x3)	X	4			
KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 ◆▲ 9,40 (3,40-10,50) 4,43 ◆▲ 26 / 29 (E12) 290 x 870 x 204 (x4)	4x1	KIT-4XE/E77712-MBE	6,80 (1,90-8,80)	4,12 A	8,60 (3,00-10,60)	4,65 A	26 / 29 (E12)	290 x 870 x 204 (x4)	X	3			
KIT-4XE/E77712-MKE 8,00 (2,80-8,90) 3,76 📤 9,40 (3,40-10,50) 4,43 📤 26 / 29 (E12) 290 x 870 x 204 (x4)	imenued.	KIT-4XE/E77715-MBE	6,80 (1,90-8,80)	4,12 A	8,60 (3,00-10,60)	4,65 A	26 / 29 (E15)	290 x 870 x 204 (x4)					
	savings comfort	KIT-4XE/E77712-MKE	8,00 (2,80-8,90)	3,76 A	9,40 (3,40-10,50)	4,43 A	26 / 29 (E12)	290 x 870 x 204 (x4)	X	XI.			
NAME (CONT.)	uality pure down to -15°C in harton mode	KIT-4XE/E77715-MKE	8,00 (2,80-8,90)	3,76 A	9,40 (3,80-10,50)	4,50 A	26 / 29 (E12)	290 x 870 x 204 (x4)			X		
	CL BRADA PUB OUTCOM												

¹⁾ Indoor unit.
2) Standard conditions: 2.5 m high ceiling; 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	-	-	-
WALL MOUNTED ETHEREA // INVERTER+ // WHITE	KIT-XE7-MKE	KIT-XE9-MKE	KIT-XE12-MKE
	KIT-E7-MKE	KIT-E9-MKE	KIT-E12-MKE
WALL MOUNTED ETHEREA // INVERTER+ // SILVER // WHITE	-		
WALL MOUNTED // INVERTER+	KIT-XE7-MKE-3 / KIT-E7-MKE-3	KIT-XE9-MKE-3 / KIT-E9-MKE-3	KIT-XE12-MKE-3 / KIT-E12-MKE-3
		_	
WALL MOUNTED TYPE // INVERTER+ // -15°C		KIT-RE9-JKE-1	KIT-RE12-JKE-1
WALL-MOUNTED TYPE // STANDARD HEAT PUMP		KIT-E9-HKEA	KIT-E12-HKEA
		=	-
WALL-MOUNTED TYPE // STANDARD COOLING ONLY		KIT-PW9-GKE	KIT-PW12-GKE
FLOOD CONCOLE TYPE // INVENTED	KIT-V7-DKE	KIT-V9-DKE	KIT-V12-DKE
FLOOR CONSOLE TYPE // INVERTER+			
SINGLE SPLIT FLOOR OR CEILING TYPE // INVERTER		KIT-E9-GFEW-1	KIT-E12-GFEW-1
ETHEREA MULTI SPLIT 2X1 // INVERTER+			
ETHEREA MULTI SPLIT 3X1 // INVERTER+			
ETHEREA MULTI SPLIT 4X1 // INVERTER+			

KIT-3XE/E7712-MKE / 3XE/E7715-MKE



FFATURE 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 wellbeing without significant temperature changes.



ION BENEFIT

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



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.



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.



ECONAVI sensor determine the human activity level and the position in the room and adjust the air flow

orientationfor maximum comfort and maximum savings. With ECONAVI, you can save up to 30%.



AUTOCOMFORT

The Autocomfort system detects conditions in the room and switches to energy saving operation when

nobody is on the room. However, priority is given to comfort, so cooling power is increased when there's a lot of human activity. This function provides both comfort and energy saving.



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.



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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

When the difference between the measured temperature and the set temperature is 3°C or more, it automatically switches over the current operation mode to heating or cooling mode necessary to keep the temperature at a



HOT START MODE

constantly comfortable level.

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

Use



12-HOUR ON&OFF TIMER

REAL TIME CLOCK WITH DUAL ON&OFF TIMER This feature enables you to preset two different

sets of start/stop operation timer (hour and minute) within a 24-hour time frame.

REAL TIME CLOCK WITH SINGLE ON&OFF TIMER

The exact operating time (hour and minute) can be set in advance. From here on, the unit will operate in accordance to these preset hours every day until the system is reset.



LCD WIRELESS REMOTE CONTROLLER

Reliability

AUTOMATIC RESTART

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

LONG PIPING

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

			KIT-XE7-MKE KIT-XE9-MKE KIT-XE12-MKE KIT-XE15-MKE KIT-XE18-MKE KIT-XE21-MKE	KIT-E9-MKE KIT-E12-MKE KIT-E15-MKE	KIT-RE12-JKE-1 KIT-RE15-JKE-1	KIT-XE/E7-MKE-3 KIT-XE/E9-MKE-3 KIT-XE/E12-MKE-3 KIT-XE/E15-MKE-3	KIT-E9-HKEA KIT-E12-HKEA KIT-E15-HKEA KIT-E18-HKEA KIT-E21-HKEA	KIT-PW9-GKE KIT-PW12-GKE KIT-PW18-GKE KIT-PW24-JKE	KIT-V7-DKE KIT-V9-DKE KIT-V12-DKE KIT-V18-DKE KIT-V24-DKE KIT-V28-EKE	KIT-E9-GFEW-1 KIT-E12-GFEW-1 KIT-E18-GFEW-1	KIT-E15-DTE KIT-E18-DTE KIT-E21-DTE	KIT-2XE/E79-MBE	KIT-2XE/E99-MKE KIT-2XE/E912-MKE KIT-2XEE/1212-MKE		
	pure air system	Advanced+Plus e-ion. Air purifying system	×	X		x						×	×	×	×
	quality air control 24 h	Newly Designed Patrol Sensor	×	x		x						x	x	×	×
	perfect humidity control	Mild Dry Cooling	×	×		x									
UTY	relaxing breeze effect sorrenezze	Soft Breeze			For RE9, RE12										
\Rightarrow	ion generator	Ion Benefit			and RE15		x		×						
НЕАГТН	prevention allergy liter	Super Alleru-buster filter			X 10 years		x	≭ Optional	×		★ Optional				
		One-Touch anti-mould air filter			×				×	×	×				
	黔	Odour-removing function	×	x	×	x	x	x	x	x	x	×	x	x	×
		Removable, washable panel	×	×	×	×	×	×	×	×		×	×	×	×
	A class energy saving		×	×		×	×			×		×	×	×	×
	A class energy saving	Inverter system			×						×				
	30% savings	ECONAVI	×	×		×							✗ Applicable for MKE	✗ Applicable for MKE	✗ Applicable for MKE
	mproved comfort	AUTOCOMFORT	×	×		×							indoors X Applicable for MKE	indoors X Applicable for MKE	indoors X Applicable for MKE
	silent air 20 dB	Super Quiet mode	×		For RE9, RE12	×	×		×	×	×	×	indoors X	indoors X	indoors X
	down to -15°C in cooling mode	Down to -15°C in cooling only			and RE15		×								
	down to =15°C in heating mode	Down to -15°C in heat pump				×	×			×				×	✗ Applicable for
3T	(<u>P</u> g		×		For RE9, RE12 and	×	×		×	×	×	×	×	×	¥E 23 X
COMFORT	2	Soft dry operation mode	×		RE15	×	×	×	×	×	×	×	×	×	×
	•	Wide & long airflow vane	For XE7, XE9, XE12	✗ For E7, E9, E12 and		×						×	×	×	×
	A 4 4 4 1		×	E15 X For E18, E21, E24	★ For RE18 and RE24		x		X For V18, V24 and						
	001	Automatic vertical	X For XE7, XE9, XE12	and E28 X For E7, E9, E12 and		x		×	V28 X For V7, V9 and V12	×	x	×	x	×	×
	具	airflow control	and XE15 X For XE7, XE9, XE12	For E7, E9, E12 and	and RE15 X For RE9, RE12	×			X For V7, V9 and V12	×	×	×	x	×	×
	60A		and XE15	£15 X	and RE15	×	x			×	×	×	x	×	×
	O	Simple Auto Changeover	×	x	×	x									
	0	Hot start mode	×	×	×	×	×	×		×	×				
	① ¹²	12-hour ON&OFF timer			✗ For RE9, RE12			★ For PW9							
	⊕24	Real time clock with dual ON&OFF timer	×	×	and RE15	×		and PW12				×	×	×	×
USE	 24	Real time clock with single ON&OFF timer			✗ For RE18 and RE24		×	X For PW18 and PW24	×	×					
	M	LCD Wireless remote controller	×	×	×	×	×	x	×	×	×	×	×	×	×
	- /→	Automatic restart	×	×	×	×	×	×	×	×	×	×	×	×	×
RELIABILITY	•		XF12 and XF15)	F12 and F15)	X 15m (RE9, RE12 and RE15) 20m (RE18) 30m (RE24)	X 15m	X 15m 20m (E18 and E21)	X 10m (PW9) 15m (PW12) 25m (PW18 and PW24)	X 10m (V7, V9) 15m (V12) 25m (V18/V24) 30m (V28)	X 15m 20m (E18)	X 20m	See page 55	See page 55	See page 55	See page 55
RELIA	` _ '	Top-Panel maintenance access	×		×	x	x	×	x	x	x	×	x	x	x
		Self-diagnosis function	×	×	×	×	×			x	×	×	x	×	×



WALL MOUNTED ETHEREA // INVERTER+ // SILVER

NEW ETHEREA WITH ECONAVI SENSOR, MORE EFFICIENT, MORE COMFORT, MORE DESIGN, MORE HEALTHY AIR ECONAVI sensor determine the human activity level and the position in the room and adjust the air flow orientation for maximum comfort and maximum savings. With ECONAVI, you can save up to 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 ECONAVI. 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

FOR XE7, XE9 AND XE12

KIT			KIT-XE7-MKE	KIT-XE9-MKE	KIT-XE12-MKE	KIT-XE15-MKE
Indoor			CS-XE7MKEW	CS-XE9MKEW	CS-XE12MKEW	CS-XE15MKEW
Outdoor			CU-E7MKE	CU-E9MKE	CU-E12MKE	CU-E15MKE
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75-2,40)	2,50 (0,85-3,00)	3,50 (0,85-4,00)	4,20 (0,85-5,00)
	Nominal (Min - Max)	kCal/h	1.760 (650-2.060)	2.150 (730-2.580)	3.010 (730-3,440)	3.610 (730-4.300)
EER 1)	Nominal (Min - Max)	Energy Saving	4,36 (3,13-4,14) A	4,67 (3,47-4,11) A	4,07 (3,40-3,54) A	3,33 (3,27-3,18)
Power input Cooling	Nominal (Min - Max)	kW	0,47 (0,24-0,58)	0,535 (0,245-0,730)	0,860 (0,250-1,130)	1,26 (0,260-1,570)
Heating capacity	Nominal (Min - Max)	kW	2,80 (0,75-4,00)	3,40 (0,85-5,00)	4,00 (0,85-6,00)	5,30 (0,80-6,80)
	Nominal (Min - Max)	kCal/h	2.410 (650-3.440)	2.920 (730-4.300)	3.440 (730-5.160)	4.560 (730-5.850)
Heating capacity at -7°C	Nominal	kW	2,35	2,88	3,46	3,94
COP 1)	Nominal (Min - Max)	Energy Saving		4,63 (3,54-3,85) A	4,21 (3,47-3,51)	3,68 (3,33-3,51)
Power input Heating	Nominal (Min - Max)	kW	0,635 (0,23-1,02)	0,735 (0,24-1,30)	0,950 (0,245-1,71)	1,44 (0,255-1,940)
Annual Energy Consumption 2		kWh	235	268	430	630
INDOOR UNIT		KWIII	200	200	400	
Air Volume	Cooling / Heating	m³/h	654 / 684	678 / 702	750 / 768	750 / 804
Moisture removal volume	cooning , mouning	l/h	1,3	1,5	2.0	2,4
Sound pressure Level 3)	Cooling (Hi / Lo / S-Lo)		37 / 24 / 20	39 / 25 / 20	42 / 28 / 20	43 / 31 / 25
Journa pressure Level	Heating (Hi / Lo / S-Lo)	dB(Δ)	38 / 25 / 20	40 / 27 / 20	42 / 33 / 20	43 / 35 / 29
Sound power Level	Cooling (Hi)	dB(A)	53	55	58	59
Journa hower reser	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	II X W X D	kg	Q	Q 270 X 070 X 204	9	Q Q
Air purifier filter		ny	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
OUTDOOR UNIT			ratiot + E-IOII	ratiot + E-IOII	F4(10(+ E-10))	ratiot + E-ioii
		V	230	230	230	230
Power source		-		4 x 1,5	4 x 1,5	4 x 1,5
Connection	M	mm ²	4 x 1,5			
Current Cooling	Nominal	A	2,2	2,5	4,0	5,7
Current Heating	Nominal	A	3,0	3,4	4,4	6,6
Max. current	0 1: /11 1:	Α	4,7	5,8	7,8	9,0
Air Volume	Cooling / Heating	m³/h	2,034 / 2,034	1,788 / 1,788	1,860 / 1,860	1,884 / 1,884
Sound pressure Level 3)	Cooling (Hi)	dB(A)	45	46	48	49
	Heating (Hi)	dB(A)	46	47	50	51
Sound power Level	Cooling (Hi)	dB	60	61	63	64
	Heating (Hi)	dB	61	62	65	66
Dimensions ⁴⁾	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289
Net weight		kg	33	34	34	34
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)
	R410A	kg	0,830	0,950	0,980	1,01
				15	15	15
Elevation difference (in/out) 5	Max	m	15	177		
Elevation difference (in/out) 5 Piping length		m m	3-15	3-15	3-15	3-15
Elevation difference (in/out) ⁵ Piping length Piping length without	Max			177	3-15 7,5	3-15 7,5
Refrigerant Loading Elevation difference (in/out) ⁵ Piping length Piping length without refrigerant increase Additional gas	Max Min / Max	m m	3-15	3-15		
Elevation difference (in/out) ⁵ Piping length Piping length without	Max Min / Max	m	3-15 7,5	3-15 7,5	7,5	7,5

22 Specifications subject to change without notice



TECHNICAL FOCUS

- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH **FCONAVI**
- EXCLUSIVE SILVER 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 20 dB, EQUIVALENT TO NIGHT-TIME IN THE COUNTRY (XE7. XE9 AND XE12)
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



lucas	CS-XE9MKEW EER/COP: 4.67/4.63

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outeido air tomporaturo	3E0C DD / 3/0C WD	70C DR / 40C W/R

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 MKE 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 avarage of 500 hours per
- year in cooling mode.

 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 0,8 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 4) Add 70 mm for piping port.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

KIT-XE7-MKE // KIT-XE9-MKE // KIT-XE12-MKE // KIT-XE15-MKE

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
- NEW!-30% consumption with ECONAVI 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

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

EASY INSTALLATION AND MAINTENANCE

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



CII-F7MKF CU-E12MKE CU-E15MKE



WALL MOUNTED ETHEREA // INVERTER+ // SILVER

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

KIT			KIT-XE18-MKE	KIT-XE21-MKE
Indoor			CS-XE18MKEW	CS-XE21MKEW
Outdoor			CU-E18MKE	CU-E21MKE
Cooling capacity	Nominal (Min - Max)	kW	5.00 (0.98-6.00)	6.30 (0.98-7.10)
	Nominal (Min - Max)	kCal/h	4.300 (840-5.160)	5.420 (840-6.110)
EER 1)	Nominal (Min - Max)	Energy Saving	3,40 (3,50-2,96) A	2,85 (3,50-2,80)
Power input Cooling	Nominal (Min - Max)	kW	1,47 (0,28-2,03)	2,21 (0,28-2,54)
Heating capacity	Nominal (Min - Max)	kW	5,80 (0,98-8,00)	7,20 (0,98-8,50)
	Nominal (Min - Max)	kCal/h	4.990 (840-6.880)	6.190 (840-7.310)
Heating capacity at -7°C	Nominal	kW	4,98	5,24
COP 1)	Nominal (Min - Max)	Energy Saving	3,77 (2,88-3,08)	3,43 (2,88-3,09) B
Power input Heating	Nominal (Min - Max)	kW	1,54 (0,34-2,60)	2,10 (0,34-2,75)
Annual Energy Consumption 2)		kWh	735	1.105
INDOOR UNIT				
Air Volume	Cooling / Heating	m³/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
			Patrol + E-ion	
OUTDOOR UNIT		V	230	Patrol + E-ion
Air purifier filter OUTDOOR UNIT Power source Connection		V mm²	230 4 x 2,5	230 4 x 2,5
OUTDOOR UNIT Power source	Nominal	•	230 4 x 2,5 6,6	230 4 x 2,5 9,9
OUTDOOR UNIT Power source Connection Current Cooling	Nominal Nominal	mm²	230 4 x 2,5	230 4 x 2,5
OUTDOOR UNIT Power source Connection	Nominal	mm ²	230 4 x 2,5 6,6 6,9 11,4	230 4 x 2,5 9,9
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume	Nominal Cooling / Heating	mm² A	230 4 x 2,5 6,6 6,9	230 4 x 2,5 9,9 9,4
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume	Nominal	mm² A A A	230 4 x 2,5 6,6 6,9 11,4	230 4 x 2,5 9,9 9,4 12,1
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current	Nominal Cooling / Heating	mm ² A A A m ³ /h	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi)	mm² A A A m³/h dB(A) dB(A) dB	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31	Nominal Cooling / Heating Cooling (Hi) Heating (Hi)	mm² A A A m³/h dB(A) dB(A)	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi)	mm² A A A m³/h dB(A) dB(A) dB	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi)	mm² A A A m³/h dB(A) dB(A) dB	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 695 x 875 x 320 45	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe	mm² A A A m³/h dB(A) dB(A) dB dB mm	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 695 x 875 x 320 45 1/4" (6,35)	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35)
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D	mm² A A A m³/h dB(A) dB(A) dB mm kg	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70)	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70)
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe	mm² A A A m³/h dB(A) dB(A) dB mm kg inch (mm)	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70) 1,22	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70) 1,28
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max	mm² A A A m³/h dB(A) dB(A) dB mm kg inch (mm)	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70) 1,22 15	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70) 1,28 15
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading Elevation difference (in/out) 51 Piping length	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A	mm² A A A m³/h dB(A) dB(A) dB mm kg inch (mm) kg	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70) 1,22 15 3-20	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70) 1,28 15 3-20
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max	mm² A A A m³/h dB(A) dB(A) dB mm kg inch (mm) kg m	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70) 1,22 15	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70) 1,28 15
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading Elevation difference (in/out) 51 Piping length Piping length	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max	mm² A A A m³/h dB(A) dB(A) dB mm kg inch (mm) kg m	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70) 1,22 15 3-20	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70) 1,28 15 3-20
OUTDOOR UNIT Power source Connection Current Cooling Current Heating Max, current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading Elevation difference (in/out) 51 Piping length Piping length without refrigerant increase	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max	mm² A A A m³/h dB(A) dB(A) dB mm kg inch (mm) inch (mm) m m	230 4 x 2,5 6,6 6,9 11,4 2.352 / 2.274 47 47 61 61 61 695 x 875 x 320 45 1/4" (6,35) 1/2" (12,70) 1,22 15 3-20 7,5	230 4 x 2,5 9,9 9,4 12,1 2.502 / 2.424 48 49 62 63 695 x 875 x 320 46 1/4" (6,35) 1/2" (12,70) 1,28 15 3-20 7,5

24 Specifications subject to change without notice









OPTIONAL WIRED REMOTE CONTROL CZ-RD514C

TECHNICAL FOCUS

- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH **FCONAVI**
- EXCLUSIVE SILVER 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



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 MKE 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 avarage 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/006-97specification.
- 4) Add 70 mm for piping port.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

KIT-XE18-MKE // KIT-XE21-MKE

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
- NEW! -30% consumption with ECONAVI 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

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

EASY INSTALLATION AND MAINTENANCE

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



CII-F18MKF CU-E21MKE



WALL MOUNTED ETHEREA // INVERTER+ // WHITE

NEW ETHEREA WITH ECONAVI SENSOR, MORE EFFICIENT, MORE COMFORT, MORE DESIGN, MORE HEALTHY AIR ECONAVI sensor determine the human activity level and the position in the room and adjust the air flow orientation for maximum comfort and maximum savings. With ECONAVI, you can save up to 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 ECONAVI. 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

FOR E7, E9 AND E12

KIT			KIT-E7-MKE	KIT-E9-MKE	KIT-E12-MKE	KIT-E15-MKE
Indoor			CS-E7MKEW	CS-E9MKEW	CS-E12MKEW	CS-E15MKEW
Outdoor			CU-E7MKE	CU-E9MKE	CU-E12MKE	CU-E15MKE
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75-2,40)	2,50 (0,85-3,00)	3,50 (0,85-4,00)	4,20 (0,85-5,00)
	Nominal (Min - Max)	kCal/h	1.760 (650-2.060)	2.150 (730-2.580)	3.010 (730-3.440)	3.610 (730-4.300)
EER 1)	Nominal (Min - Max)	Energy Saving	4,36 (3,13-4,14) A	4,67 (3,47-4,11) A	4,07 (3.40-3,54) A	3,33 (3,27-3,18)
Power input Cooling	Nominal (Min - Max)	kW	0,47 (0,240-0,580)	0,535 (0,245-0,730)	0,860 (0,250-1,130)	1,26 (0,260-1,570)
Heating capacity		kW	2,80 (0,75-4,00)	3,40 (0,85-5,00)	4,00 (0,85-6,00)	5,30 (0,85-6,80)
	Nominal (Min - Max)	kCal/h	2.410 (650-3.440)	2.920 (730-4.300)	3.440 (730-5.160)	4.560 (730-5850)
Heating capacity at -7°C	Nominal	kW	2,35	2,88	3,46	3,94
COP 1)	Nominal (Min - Max)	Energy Saving	4,41 (3,26-3,92) A	4,63 (3,54-3,85) A	4,21 (3,47-3,51) A	3,68 (3,33-3,51)
Power input Heating	Nominal (Min - Max)	kW	0,635 (0,23-1,02)	0,735 (0,24-1,30)	0,950 (0,245-1,71)	1,44 (0,255-1,940)
Annual Energy Consumption 2)		kWh	235	268	430	630
INDOOR UNIT						
Air Volume	Cooling / Heating	m³/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)		37 / 24 / 20	39 / 25 / 20	42 / 28 / 20	43 / 31 / 25
	Heating (Hi / Lo / S-Lo)	dB(A)	38 / 25 / 20	40 / 27 / 20	42 / 33 / 20	43 / 35 / 29
Sound power Level	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
Commedian			2,2	2,5	4,0	5,7
Current Cooling	Nominal	Α	L,L			
		A A	3,0	3,4	4,4	6,6
Current Cooling	Nominal		*			6,6 9,0
Current Cooling Current Heating	Nominal	A	3,0	3,4	4,4	9,0
Current Cooling Current Heating Max. current	Nominal Cooling / Heating	A A	3,0 4,7	3,4 5,8	4,4 7,8	
Current Cooling Current Heating Max. current Air Volume	Nominal Cooling / Heating Cooling (Hi)	A A m³/h	3,0 4,7 2.034 / 2.034	3,4 5,8 1.788 / 1.788	4,4 7,8 1.860 / 1.860	9,0 1.884 / 1.884
Current Cooling Current Heating Max. current Air Volume	Nominal Cooling / Heating Cooling (Hi) Heating (Hi)	A A m³/h dB(A)	3,0 4,7 2.034 / 2.034 45	3,4 5,8 1.788 / 1.788 46	4,4 7,8 1.860 / 1.860 48	9,0 1.884 / 1.884 49
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31	Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi)	A A m³/h dB(A) dB(A)	3,0 4,7 2.034 / 2.034 45 46	3,4 5,8 1.788 / 1.788 46 47	4,4 7,8 1.860 / 1.860 48 50	9,0 1.884 / 1.884 49 51
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31	Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi)	A A m³/h dB(A) dB(A) dB	3,0 4,7 2.034 / 2.034 45 46 60	3,4 5,8 1.788 / 1.788 46 47 61	4,4 7,8 1.860 / 1.860 48 50 63 65	9,0 1.884 / 1.884 49 51 64
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level	Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) Heating (Hi)	A A A m³/h dB(A) dB(A) dB dB	3,0 4,7 2.034 / 2.034 45 46 60 61	3,4 5,8 1.788 / 1.788 46 47 61 62	4,4 7,8 1.860 / 1.860 48 50 63 65	9,0 1.884 / 1.884 49 51 64
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41	Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) Heating (Hi) H x W x D	A A A M³/h dB(A) dB(A) dB dB mm	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe	A A M M M M M M M M M M M M M M M M M M	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289 34	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D	A A m³/h dB(A) dB(A) dB B mm kg inch (mm)	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33 1/4" (6,35)	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34 1/4" (6,35)	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289 34 1/4" (6,35)	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34 1/4" (6,35)
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections	Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A	A A m³/h dB(A) dB(A) dB B mm kg inch (mm) inch (mm)	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33 1/4" (6,35) 3/8" (9,52)	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52)	4,4 7,8 1.860 / 1.860 48 50 63 65 540 × 780 × 289 34 1/4" (6,35) 3/8" (9,52)	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34 1/4" (6,35) 1/2" (12,70)
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading Elevation difference (in / out) 51	Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A	A A m³/h dB(A) dB(A) dB dB mm kg inch (mm) kg	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33 1/4" (6,35) 3/8" (9,52) 0,830	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,950	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34 1/4" (6,35) 1/2" (12,70) 1,01
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading Elevation difference (in / out) 51 Piping length	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max	A A m³/h dB(A) dB(A) dB dB mm kg inch (mm) kg m	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33 1/4" (6,35) 3/8" (9,52) 0,830 15	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,950	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34 1/4" (6,35) 1/2" (12,70) 1,01 15
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading Elevation difference (in / out) 51 Piping length Piping length without refrigerant increase	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max Max	A A m³/h dB(A) dB(A) dB dB mm kg inch (mm) kg m	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33 1/4" (6,35) 3/8" (9,52) 0,830 15 3-15	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,950 15 3-15	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 15 3-15	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34 1/4" (6,35) 1/2" (12,70) 1,01 15 3-15
Current Cooling Current Heating Max. current Air Volume Sound pressure Level 31 Sound power Level Dimensions 41 Net weight Piping connections Refrigerant Loading	Nominal Cooling / Heating Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max Max	A A M M M M M M M M M M M M M M M M M M	3,0 4,7 2.034 / 2.034 45 46 60 61 540 x 780 x 289 33 1/4" (6,35) 3/8" (9,52) 0,830 15 3-15 7,5	3,4 5,8 1.788 / 1.788 46 47 61 62 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,950 15 3-15 7,5	4,4 7,8 1.860 / 1.860 48 50 63 65 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 15 3-15 7,5	9,0 1.884 / 1.884 49 51 64 66 540 x 780 x 289 34 1/4" (6,35) 1/2" (12,70) 1,01 15 3-15 7,5



THEREA





OPTIONAL WIRED REMOTE CONTROL

INCLUDED WITH THE INDOOR UNIT



TECHNICAL FOCUS

- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH **FCONAVI**
- 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 20 dB, EQUIVALENT TO NIGHT-TIME IN THE COUNTRY (E7. E9 AND E12)
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE

KIT-E7-MKE // KIT-E9-MKE // KIT-E12-MKE // KIT-E15-MKE

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
- NEW! -30% consumption with ECONAVI on heat pump (-20% on cooling mode)
- · R410A refrigerant gas

COMFORT

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

EASE OF USE

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

EASY INSTALLATION AND MAINTENANCE

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



CU-E7MKE

CU-E12MKE

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

DB: Drv 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 MKE 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 avarage 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/006-97specification.
- 4) Add 70 mm for piping port.
- 5) When installing the outdoor unit at a higher position than the indoor unit.



WALL MOUNTED ETHEREA // INVERTER+ // WHITE

NEW ETHEREA WITH ECONAVI SENSOR, MORE EFFICIENT, MORE COMFORT, MORE DESIGN, MORE HEALTHY AIR ECONAVI sensor determine the human activity level and the position in the room and adjust the air flow orientation for maximum comfort and maximum savings. With ECONAVI, you can save up to 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 ECONAVI. 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.









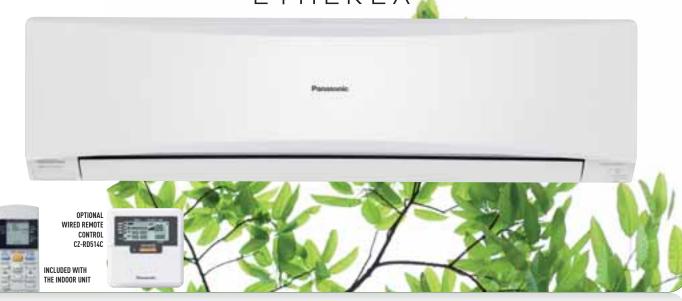


Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping with the air conditioner on.

KIT			KIT-E18-MKE	KIT-E21-MKE	KIT-E24-MKE	KIT-E28-MKE
Indoor			CS-E18MKEW	CS-E21MKEW	CS-E24MKES	CS-E28MKES
Outdoor			CU-E18MKE	CU-E21MKE	CU-E24MKE	CU-E28MKE
Cooling capacity	Nominal (Min - Max)	kW	5,00 (0,98-6,00)	6,30 (0,98-7,10)	6,80 (0,98-8,10)	7,65 (0,98-8,60)
	Nominal (Min - Max)	kCal/h	4.300 (840-5.160)	5.420 (840-6.110)	5.850 (840-6.970)	6580 (840-7400)
EER 1)	Nominal (Min - Max)	Energy Saving	3,40 (3,50-2,96)	2,85 (3,50-2,80)	3,21 (2,58-3,00) A	3,01 (2,58-2,92) B
Power input Cooling	Nominal (Min - Max)	kW	1,47 (0,28-2,03)	2,21 (0,28-2,54)	2,12 (0,38-2,7)	2,54 (0,38-2,95)
Heating capacity	Nominal (Min - Max)	kW	5,80 (0,98-8,00)	7,20 (0,98-8,50)	8,60 (0,98-9,90)	9,60 (0,98-11,00)
	Nominal (Min - Max)	kCal/h	4990 (840-6.880)	6.190 (840-7.310)	7.400 (840-8.510)	8.260 (840-9460)
Heating capacity at -7°C	Nominal	kW	4,98	5,24	6,13	6,77
COP 1)	Nominal (Min - Max)	Energy Saving	3,77 (2,88-3,08)	3,43 (2,88-3,09) B	3,23 (2,18-3,09)	2,91 (2,18-2,93)
Power input Heating	Nominal (Min - Max)	kW	1,54 (0,34-2,60)	2,10 (0,34-2,75)	2,66 (0,45-3,20)	3,30 (0,45-3,75)
Annual Energy Consumption 2)		kWh	735	1.105	1.060	1.270
INDOOR UNIT						
Air Volume	Cooling / Heating	m³/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)		44 / 37 / 34	45 / 37 / 34	47 / 38 / 35	49 / 38 / 35
	Heating (Hi / Lo / S-Lo)		44 / 37 / 34	45 / 37/ 34	47 / 38 / 35	48 / 38 / 35
Sound power Level	Cooling (Hi)	dB	60	61	63	65
outina pontoi zoros	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	II X II X D	kg	12	12	12	12
Air purifier filter		1.9	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
OUTDOOR UNIT			1 44 44 2 1011	1 2 10 11	. 4.101 2 1011	1 4134 2 1011
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	6,6	9,9	9,7	11,5
Current Heating	Nominal	A	6,9	9,4	12,1	15
Max. current	Nominat	A	11,4	12.1	14,6	15,6
Air Volume	Cooling / Heating	m³/h	2.352 / 2.274	2.502 / 2.424	3.012 / 3.012	3.270 / 3.270
Sound pressure Level 3)	Cooling (Hi)	dB(A)	47	48	52	53
Journa pressure Levet	Heating (Hi)	dB(A)	47	49	52	53
Sound power Level	Cooling (Hi)	dB dB	61	62	66	67
Journa hower reser	Heating (Hi)	dB	61	63	66	67
Dimensions ⁴⁾	H x W x D	mm	695 x 875 x 320	695 x 875 x 320	795 x 875 x 320	795 x 875 x 320
Net weight	II X VV X D	kg	45	46	65	66
Piping connections	Liquid pipe	inch (mm)	1/4" (6,35)	1/4" (6,35)	1/4" (6,35)	1/4" (6,35)
riping connections	Gas pipe	inch (mm)	1/2" (12,70)	1/2" (12,70)	5/8" (15,88)	5/8" (15,88)
	R410A		1,122		1,70	1,80
Dafainanant Landina	K41UA	kg	15	1,28 15	20	20
	Man			15		
Elevation difference (in/out) 51		m		2.20	2.20	9 90
Elevation difference (in/out) 51 Piping length	Min / Max	m	3-20	3-20	3-30	3-30
Refrigerant Loading Elevation difference (in/out) ⁵⁾ Piping length Piping length without refrigerant increase		m m	3-20 7,5	7,5	10	10
Elevation difference (in/out) ⁵⁾ Piping length Piping length without refrigerant increase Additional gas	Min / Max	m m g/m	3-20 7,5 20	7,5	30	30
Elevation difference (in/out) ⁵⁾ Piping length Piping length without refrigerant increase	Min / Max	m m	3-20 7,5	7,5	10	10







TECHNICAL FOCUS

- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH **FCONAVI**
- 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

KIT-E18-MKE // KIT-E21-MKE // KIT-E24-MKE // KIT-E28-MKE

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
- NEW! -30% consumption with ECONAVI 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

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

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-E21MKE



CU-E24MKE CU-E28MKE

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 MKE 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 avarage 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/006-97specification.
- 4) Add 70 mm for piping port.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

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



WALL MOUNTED ETHEREA // INVERTER+

NEW ETHEREA WITH ECONAVI, MORE EFFICIENT, MORE COMFORT, MORE DESIGN, MORE HEALTHY AIR ECONAVI'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 ECONAVI, you can save up to 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 ECONAVI. 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

XE12 AND E12

SILVER KIT			KIT-XE7-MKE-3	KIT-XE9-MKE-3	KIT-XE12-MKE-3	KIT-XE15-MKE-3
Indoor			CS-XE7MKEW	CS-XE9MKEW	CS-XE12MKEW	CS-XE15MKE-3
Outdoor			CU-E7MKE-3	CU-E9MKE-3	CU-E12MKE-3	CU-E15MKE-3
WHITE KIT			KIT-E7-MKE-3	KIT-E9-MKE-3	KIT-E12-MKE-3	KIT-E15-MKE-3
Indoor			CS-E7MKEW	CS-E9MKEW	CS-E12MKEW	CS-E15MKEW-3
Outdoor			CU-E7MKE-3	CU-E9MKE-3	CU-E12MKE-3	CU-E15MKE-3
Cooling capacity	Nominal (Min - Max)	kW	2,05 (0,75-2,40)	2,50 (0,85-3,00)	3,50 (0,85-4,00)	4,20 (0,98-5,00)
	Nominal (Min - Max)	kCal/h	1.760 (650-2.060)	2.150 (730-2.580)	3.010 (730-3.440)	3.610 (840-4.300)
EER 1)	Nominal (Min - Max)	Energy Saving	4,36 (3,13-4,14) A	4,67 (3,47-4,11) A	3,87 (3,40-3,39) A	3,44 (3,50-3,13) A
Power input Cooling	Nominal (Min - Max)	kW	0,47 (0,24-0,58)	0,535 (0,245-0,730)	0,905 (0,250-1,180)	1,22 (0,28-1,60)
Heating capacity	Nominal (Min - Max)	kW	2,80 (0,75-4,00)	3,40 (0,85-5,00)	4,40 (0,85-6,70)	5,40 (0,98-7,10)
	Nominal (Min - Max)	kCal/h	2.410 (650-3.440)	2.920 (730-4.300)	3.780 (730-5.760)	4.640 (840-6110)
Heating capacity at -7°C	Nominal	kW	2,35	2.88	3,75	4,10
COP 1)	Nominal (Min - Max)		4,41 (3,26-3,92) A	4,63 (3,54-3,85) A	4,04 (3,47-3,47)	3,70 (2,88-3,21)
Power input Heating	Nominal (Min - Max)	kW	0,635 (0,23-1,02)	0,735 (0,240-1,30)	1,09 (0,245-1,93)	1,46 (0,340-2,210)
Annual Energy Consumption 2)		kWh	235	268	453	610
INDOOR UNIT		KVVII	200	200	400	010
Air Volume	Cooling / Heating	m³/h	654 / 684	678 / 702	750 / 768	750 / 804
Moisture removal volume	Cooting / Heating	Vh	1,3	1,5	2.0	2,4
Sound pressure Level 3)	Cooling (Hi / Lo / S-Lo)		37 / 24 / 20	39 / 25 / 20	42 / 28 / 20	43 / 32 / 29
Sound biesenie reaer.	Heating (Hi / Lo / S-Lo)		38 / 25 / 20	40 / 27 / 20	42 / 33 / 20	43 / 35 / 29
C				55		59
Sound power Level	Cooling (Hi)	dB	53		58	
	Heating (Hi)	dB	54	56	58	59
Dimensions	H x W x D	mm	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 (Nominal)	Cooling / Heating	A	2,2 / 3,0	2,5 / 3,4	4,1 / 5,1	5,5 / 6,6
Max. current		Α	4,7	5,8	8,9	9,7
Air Volume	Cooling / Heating	m³/h	2.034 / 2.034	1.788 / 1.788	1.860 / 1.860	2.052 / 1.980
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	695 x 875 x 320
Net weight		kg	33	34	34	45
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	1,04
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 increase	Max	m	7,5	7,5	7,5	7,5
Additional gas	<u> </u>	g/m	20	20	20	20
Operating range 31	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43	+5 / +43
operating range	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24
	neaung min / max	L	-10/+24	-10 / +24	-10 / +24	-13 / +24

Specifications subject to change without notice



TECHNICAL FOCUS

- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI
- 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 20 dB, EQUIVALENT TO NIGHT-TIME IN THE COUNTRY (XE7, E7, XE9, E9, XE12 AND E12)
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



CS-E7MKEW // CS-E9MKEW // CS-E12MKEW // CS-E15MKE-3

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

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 MKE 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 avarage of 500 hours per year in roolling mode.
- 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.

KIT-XE7-MKE-3 // KIT-XE9-MKE-3 // KIT-XE12-MKE-3 // KIT-XE15-MKE-3 // KIT-E7-MKE-3 // KIT-E9-MKE-3 // KIT-E12-MKE-3 // KIT-E15-MKE-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
- **NEW!** -30% consumption with ECONAVI on heat pump (-20% on cooling mode)
- R410A refrigerant gas

COMFORT

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

EASE OF USE

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

EASY INSTALLATION AND MAINTENANCE

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





CU-E7MKE-3

CU-E12MKE-3

CU-E15MKE-3



WALL MOUNTED RE TYPE // STANDARD INVERTER

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

prevention allergy filter relaxing breeze effect

silent air 22 dB

FOR RE9 AND RE12

KIT			KIT-RE9-JKE-1	KIT-RE12-JKE-1	KIT-RE15-JKE-1	KIT-RE18-JKE-1	KIT-RE24-JKE-1
Indoor			CS-RE9JKE-1	CS-RE12JKE-1	CS-RE15JKE-1	CS-RE18JKE-1	CS-RE24JKE-1
Outdoor			CU-RE9JKE-1	CU-RE12JKE-1	CU-RE15JKE-1	CU-RE18JKE-1	CU-RE24JKE-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/h	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	3,57 (4,74-3,00)	3,47 (5,29-3,25) A	3,33 (4,76-2,78) A	3,40 (4,19-2,96)	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/h	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	4,02 (5,29-3,57) A	3,79 (6,00-3,49) 🗚	3,61 (4,28-2,98) 🗚	3,77 (3,67-3,08)	3,23 (2,50-3,09)
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	1	kWh	350	505	630	735	1.060
INDOOR UNIT							
Power source		٧	230	230	230	230	230
Connection		mm²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Current Cooling	Nominal	Α	3,30	4,7	6.00	6,7	9,7
Current Heating	Nominal	Α	3,70	5,2	6,30	7,0	12,1
Max. current		Α	5,10	6,80	10.5	11.7	14.6
Air Volume	Cooling / Heating	m³/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)		42 / 27 / 22	42 / 30 / 22	46 / 31 / 29	44 / 37	47 / 38
ouna processo zoroc	Heating (Hi / Lo / S-Lo)		42 / 27 / 25	42 / 33 / 25	46 / 34 / 28	44 / 37	47 / 38
Sound power Level	Cooling (Hi)	dB	58	58	62	60	63
odana potror zoroc	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	IIAWAD	kg	0	Q	Q	12	12
Air purifier filter		Ng	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter
OUTDOOR UNIT			Atteru-buster ritter	Atteru-puster ritter	Atteru-Duster litter	Atteru-buster fitter	Atteru-buster fitter
Air Volume	Cooling / Heating	m³/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
Jonna hiezzare reser	Heating (Hi)	dB(A)	48	50	51	47	52
Sound power Level	Cooling (Hi)	dB dB	63	64	66	61	66
Sound hower reser	Heating (Hi)	dB	64	66	67	61	66
Dimensions 4)	H x W x D		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	пхихи	mm	24 × 760 × 269	28	36	48	65
	Diamid atas	kg					
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)
D. C	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		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



TECHNICAL FOCUS

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



CS-RE18JKE-1 // CS-RE24JKE-1

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 JKE-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 avarage 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.

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

HEALTHY AIR

- · New generation Alleru-buster anti allergic filter
- · Odour-removing function
- · Anti-mould filter

ENERGY, EFFICIENCY AND ECOLOGY

- Inverter system
- · R410A refrigerant gas

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

EASE OF USE

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

EASY INSTALLATION AND MAINTENANCE

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







CU-RE15JKE-1 CU-RE9JKE-1

CU-RE18JKE-1

CU-RE24JKE-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

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		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/h	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	4,41 (5,00-4,00) A	3,80 (5,00-3,39)	3,21 (4,19-3,13)	3,21 (4,19-2,93)	2,85 (4,19-2,8)
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/h	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	4,26 (5,22-3,97) A	3,81 (5,22-3,57)	3,50 (3,67-3,16)	3,69 (3,67-3,02)	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							
Power source		٧	230	230	230	230	230
Connection		mm²	4 x 1.5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5
Current Cooling	Nominal	Α	2,9	4,3	6,3	7,5	9,9
Current Heating	Nominal	Α	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	m³/h	576 / 630	642 / 672	660 / 708	912 / 1.002	972 / 1.038
Moisture removal volume	g,g	l/h	1,6	2,0	2,4	2,9	3,5
Sound pressure Level 33	Cooling (Hi / Lo / S-Lo)		39 / 26 / 23	42 / 29 / 26	43 / 32 / 29	44 / 37 / 34	45 / 37 / 34
	Heating (Hi / Lo / S-Lo)		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
ocana ponor coroc	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	0	9	0	11	11
Air purifier filter		ny	Alleru-buster filter + Ion	Alleru-buster filter + Ion	Alleru-buster filter + Ion	Alleru-buster filter + Ion	Alleru-buster filter + Ion
OUTDOOR UNIT			Atteru-buster litter + loll	Atteru-buster litter + lon	Atteru-buster fitter + for	Atteru-buster fitter + for	Atteru-buster fitter + for
Air Volume	Cooling / Heating	m³/h	1.788 / 1.788	1.860 / 1.860	2.910 / 2.808	2.400 / 2.400	2.568/ 2.490
Sound pressure Level 3)	Cooling (Hi)	dB(A)	46	48	46	47	48
Journa pressure Level	Heating (Hi)	dB(A)	47	50	46	47	49
Sound power Level	Cooling (Hi)	dB(A)	59	61	59	60	61
Soulia hower reser	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	II A W A D	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)
riping connections	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		0,930	0,970	1.060	1,18	1,29
		kg			,		
Elevation difference (in/out) 5	Max Min / Max	m	5 3-15	5	5	15 3-20	15
Piping length	• •	m		3-15	3-15		3-20
Piping length without	Max	m	7,5	7,5	7,5	10	10
retrigerant increase		1	20	20	20	20	20
Additional gas		g/m	20	20	20	20	20
refrigerant increase Additional gas Operating range ³⁾	Cooling Min / Max	°C	-15 / +43	-15 / +43	-15 / +43	-15 / +43	-15 / +43

34 Specifications subject to change without notice



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 (ONLY FOR E9)
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE
- MAXIMUM CONNECTION DISTANCE 15 M (E9, 12, 15), 20M (E18, 21)



CS-E18HKEA // CS-E21HKEA

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outeido air tomporaturo	3E0C DD / 3/0C WD	70C DD / 40C M/D

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 MKE 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 avarage of 500 hours per year in rodling mode
- 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.

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 (E9, 12: -10 °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
- · Soft dry operation mode



CU-E9HKEA CU-E12HKEA



CU-E15HKEA CU-E21HKEA CU-E18HKEA



WALL-MOUNTED TYPE // STANDARD HEAT PUMP

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

KIT			KIT-PW9-GKE	KIT-PW12-GKE	KIT-PW18-GKE	KIT-PW24-JKE
Indoor			CS-PW9GKE	CS-PW12GKE	CS-PW18GKE	CS-PW24JKE
Outdoor			CU-PW9GKE	CU-PW12GKE	CU-PW18GKE	CU-PW24JKE
Cooling capacity	Nominal	kW	2,65	3,4	5,10	7,03
•		kCal/h	2.280	2.920	4.386	6.046
EER 1)	Nominal	Energy Saving	3,21 ◀▲	3,22 A	2,91 €	2,53 €
Power input Cooling	Nominal	kW	0,825	1,055	1,75	2,78
Heating capacity	Nominal	kW	2,85	3,8	5,30	7,50
		kCal/h	2.450	3.260	4.560	6.450
COP 1)	Nominal	Energy Saving	3,63 ▲	3,61 A	3,35 €	2,87 ◀◘
Power input Heating	Nominal	kW	0,785	1,05	1,58	2,61
Annual Energy Consumption ²		kWh	413	528	875	1.390
INDOOR UNIT						
Power source		٧	230	230	230	230
Connection		mm ²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5
Current Cooling	Nominal	Α	3,9	5,0	7,7	13,1
Current Heating	Nominal	Α	3,7	4,9	6,9	12,5
Air Volume	Cooling / Heating	m³/h	618 / 618	540 / 552	972 / 984	1.044 / 1.092
Moisture removal volume	0.	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)		29 / 38	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	Ü	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	m³/h	630	672	1.740	3.102
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	1	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	1,82
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
Auurtiviiat yas				+	+ .	+
Operating range 3)	Cooling Min / Max	oC O	21 / 43	21 / 43	16 / 43	16 / 43



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



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 avarage 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.

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

HEALTHY AIR

- · Soft dry operation mode
- · Odour-removing function
- CZ-SA14P Alleru-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

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





CU-PW18GKE





CU-PW24JKE



WALL-MOUNTED TYPE // STANDARD COOLING ONLY

Full line-up of cooling wall-mounted non-Inverter types. Super quiet and with high efficiency (A class from V7 to V18)



KIT			KIT-V7-DKE	KIT-V9-DKE	KIT-V12-DKE	KIT-V18-DKE	KIT-V24-DKE	KIT-V28-EKE
Indoor			CS-V7DKE	CS-V9DKE	CS-V12DKE	CS-V18DKE	CS-V24DKE	CS-V28EKE
Outdoor			CU-V7DKE	CU-V9DKE	CU-V12DKE	CU-V18DKE	CU-V24DKE	CU-V28EKE
Cooling capacity	Nominal	kW	2,40	3,00	3,68	5,30	7,03	7,91
		kCal/h	2.064	2.580	3.165	4.558	6.046	6.803
EER 1)	Nominal	Energy Saving	3,24 A	3,21 A	3,23 A	3,25 🔼	2,70 A	3,22 A
Power input Cooling	Nominal	kW	0,740	0,935	1,140	1,630	2,600	2,460
Annual Energy Consumption 2)		kWh	370	470	570	815	1.300	1.230
INDOOR UNIT								
Power source		V	230	230	230	230	230	230
Connection		mm ²	4 x 1,5	4 x 1,5	4 x 1,5	4 x 2,5	4 x 2,5	4 x 2,5
Current Cooling	Nominal	Α	3,4	4,2	5,3	7,3	12,3	11,3
Air Volume		m³/h	468	510	570	888	1.014	1.206
Moisture removal volume		l/h	1,5	1,7	2,1	2,9	4,0	4,6
Sound pressure level 3)	Hi / Lo / S-Lo	dB(A)	33 / 26 / 24	35 / 26 / 24	39 / 29 / 27	42 / 37 / 35	46 / 40 / 38	49 / 44 / 42
Sound power level	Hi	dB	46	48	52	54	59	62
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	340 x 1.150 x 260
Net weight		kg	9	9	9	11	11	18
Air purifier filter			Alleru-buster	Alleru-buster	Alleru-buster	Alleru-buster	Alleru-buster	Alleru-buster
•			filter + Ion	filter+ Ion				
OUTDOOR UNIT								
Air Volume		m³/h	1.560	1.980	1.848	.520	2.790	3.180
Sound pressure level 3)	Hi	dB(A)	46	48	49	54	54	55
Sound power level	Hi	dB	61	63	64	69	69	70
Dimensions 4)	H x W x D	mm	510 x 650 x 230	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	25	31	33	50	59	62
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)	1/2" (12,70)	1/2" (12,70)	5/8" (15,88)	5/8" (15,88)
Refrigerant Loading	R410A	kg	0,89	0,93	1,05	1,34	1,47	1,9
Elevation difference (in/out) 5)	Max	m	5	5	5	20	20	20
Piping length	Min / Max	m	3 / 10	3 / 10	3 / 15	3 / 25	3 / 25	3 / 30
Piping length without	Max	m	7,5	7,5	7,5	7,5	7,5	7,5
refrigerant increase						*		·
Additional gas		g/m	10	10	15	20	30	30
Operating range 3)	Min / Max	oC	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43
	· · ·	1 -	1	1 1 1			1	1 - 1



- SUPER QUIET MODE FOR INCREASED COMFORT
- POWERFUL MODE FOR QUICK TEMPERATURE SETTING
- EASY TO INSTALL
- R410A REFRIGERANT GAS
- MANUAL AND AUTOMATIC AIRFLOW CONTROL



CS-V18DKE // CS-V24DKE



CS-V28EKE

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

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 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 avarage of 500 hours per
- 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.

KIT-V7-DKE // KIT-V9-DKE // KIT-V12-DKE // KIT-V18-DKE // KIT-V24-DKE // KIT-V28-EKE

HEALTHY AIR

- CZ-SA14P Supersonic air purifying system with Alleru-buster anti allergic filter

ENERGY EFFICIENCY AND ECOLOGY

· R410A refrigerant gas

COMFORT

- · Super Quiet mode
- Powerful mode
- · Manual horizontal airflow control
- · Automatic vertical airflow control
- Automatic restart

EASE OF USE

- 24-hr timer
- User friendly infrared remote control

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



CU-V7DKE CU-V12DKE



CU-V28EKE CU-V18DKE



FLOOR CONSOLE TYPE // INVERTER+

Console for discreet integration on walls, and for high performances, specifically in heat mode even when the outside temperature is as low as -15° C.

Double airflow for improved comfort and temperature dispersion: through the top for an efficient cooling mode, through the bottom for quick heating.





KIT			KIT-E9-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 (Mi			2,50 (0,80 - 3,00)	3,50 (0,80 - 3,80)	5,00 (0,90 - 5,60)
	kCal	l/h	2.150 (690 - 2.580)	3.010 (690 - 3.270)	3.780 (770 - 4.300)
EER 1) Nominal (M	in - Max) Enei	rgy Saving	4,39 (4,57 - 3,85) A	3,63 (4,32 - 3,33) 🗚	3,23 (4,57 - 2,93) A
Power input Cooling Nominal (Mi	n - Max) kW		0,57 (0,17 - 0,78)	0,97 (0,18 - 1,14)	1,55 (0,25 - 1,91)
Heating capacity Nominal (Mi			3,60 (0,80 - 5,00)	4,80 (0,80 - 6,10)	5,80 (0,90 - 7,10)
	kCal	l/h	3.100 (690 - 4.300)	4.130 (690 - 5.250)	4.730 (770 - 6.110)
COP 1) Nominal (M	in - Max) Enei		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 (Mi	n - Max) kW		0,865 (0,16 - 1,36)	1,320 (0,17 - 1,77)	1,600 (0,26 - 2,35)
Annual Energy Consumption 2)	kWh	1	285	483	775
INDOOR UNIT					
Air Volume Cooling / He	ating m³/l		558 / 576	570 / 600	660 / 780
Moisture removal volume	l/h		1,4	2,0	2,8
Sound pressure level 3) Cooling (Hi /			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
Current Cooling			2,7	4,4	7,0
Current Heating	Α				
	Α		4,05	6,00	7,1
Air Volume Cooling / He	A ating m³/l	h	1.788 / 1.788	6,00 1.860 / 1.860	7,1 2.400 / 2.400
	A ating m³/l dB(A	h A)	1.788 / 1.788 46	1.860 / 1.860 48	
Air Volume Cooling / He Sound pressure level 3 Cooling (Hi) Heating (Hi)	A ating m³/t dB(A dB(A	h A) .	1.788 / 1.788 46 47	1.860 / 1.860 48 50	2.400 / 2.400 47 48
Air Volume Cooling / He Sound pressure level 3) Cooling (Hi)	A ating m³/i dB(A dB(A dB)	h A)	1.788 / 1.788 46 47 59	1.860 / 1.860 48	2.400 / 2.400 47
Air Volume Cooling / He Sound pressure level 3 Cooling (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi)	A ating m³/i dB(A dB(A dB)	h A) A)	1.788 / 1.788 46 47 59	1.860 / 1.860 48 50 61 63	2.400 / 2.400 47 48 60 61
Air Volume Cooling / He Sound pressure level 31 Cooling (Hi) Heating (Hi) Cooling (Hi) Heating (Hi) Heating (Hi) Dimensions 41 H x W x D	A m³/l dB(A dB dB dB mm	h A) A)	1.788 / 1.788 46 47 59 60 540 x 780 x 289	1.860 / 1.860 48 50 61 63 540 x 780 x 289	2.400 / 2.400 47 48 60 61 750 x 875 x 345
Air Volume Cooling / He Sound pressure level 31 Cooling (Hi) Heating (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi) Dimensions 41 Net weight H x W x D	A ating m³/l dB(A dB(A dB	h A) A)	1.788 / 1.788 46 47 59 60 540 x 780 x 289	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49
Air Volume Cooling / He Sound pressure level 31 Cooling (Hi) Heating (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi) Heating (Hi) Dimensions 41 H x W x D Net weight Piping connections Liquid pipe	A ating m³/l dB(A dB(A dB	h A) A) (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35)	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35)	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35)
Air Volume Cooling / He Sound pressure level 31 Cooling (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi) Dimensions 41 H x W x D Net weight Liquid pipe Gas pipe Gas pipe	A ating m³/i dB(A dB(A dB) dB dB mm kg inch	h (mm) (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52)	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52)	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70)
Air Volume Cooling / He Sound pressure level 31 Cooling (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi) Dimensions 41 H x W x D Net weight Piping connections Liquid pipe Gas pipe Refrigerant Loading R410A	A ating m³/l dB(A dB(A dB	h (mm) (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,965	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,060
Air Volume Cooling / He	A ating m³/i dB(A dB(A dB) dB dB mm kg inch	h (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,965 5	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 5	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,060 15
Air Volume Cooling / He	A ating m³/i dB(A dB(A dB dB dB mm kg inch inch	h (mm) (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,965 5 3 / 15	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 5 3 / 15	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,060 15 3 / 20
Air Volume Cooling / He	A ating m³/i dB(A dB(A dB dB dB mm kg inch inch kg m	h (mm) (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,965 5	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 5	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,060 15
Air Volume Sound pressure level 3) Cooling (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi) Heating (Hi) Dimensions 4) Net weight Piping connections Liquid pipe Gas pipe Refrigerant Loading R410A Elevation difference (in/out) 5) Max Piping length Min / Max Piping length without refrigerant Max	A ating m³/i dB(A dB(A dB dB dB mm kg inch inch kg m m	h A) A) I (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,965 5 3 / 15 7,5	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 5 3 / 15 7,5	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,060 15 3 / 20 10
Air Volume Sound pressure level 3) Cooling (Hi) Heating (Hi) Sound power level Cooling (Hi) Heating (Hi) Heating (Hi) Dimensions 4) Net weight Piping connections Liquid pipe Gas pipe Refrigerant Loading Elevation difference (in/out) 5) Piping length Min / Max Piping length without refrigerant increase	A ating m3/l dB(A dB(A dB dB dB mm kg inch inch kg m m g/m	h A) A) I (mm)	1.788 / 1.788 46 47 59 60 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,965 5 3 / 15 7,5	1.860 / 1.860 48 50 61 63 540 x 780 x 289 34 1/4" (6,35) 3/8" (9,52) 0,980 5 3 / 15 7,5	2.400 / 2.400 47 48 60 61 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,060 15 3 / 20





INCLUDED WITH 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

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 MKE 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 avarage of 500 hours per year in cooling mode.

 3) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body
- and 1 m height in front of 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.



CU-E9GFE-1 CII-F12GFF-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.



KIT			KIT-E15-DTE	KIT-E18-DTE	KIT-E21-DTE
Indoor			CS-E15DTEW	CS-E18DTEW	CS-E21DTES
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/h	3.570 (770 - 3.910)	4.300 (770 - 4.640)	4.990 (770 - 5.680)
EER 1)	Nominal (Min - Max)	Energy Saving	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/h	4.450 (770 - 5.420)	5.250 (770 - 6.540)	5.850 (770 - 6.970)
COP 1)	Nominal (Min - Max)	Energy Saving	3,34 €	3,35 €	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	m³/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	Α	6,0	7,5	8,7
Current Heating	Nominal	A	7,1	8,2	9,0
Air Volume	Cooling / Heating	m³/h	2.910 / 2.910	2.400 / 2.400	2.568 / 2.490
Sound pressure level 3)			21710 / 21710		2.000 / 2.470
	Cooling (Hi)	dB(A)	46	47	48
•	Cooling (Hi) Heating (Hi)	dB(A) dB(A)		47 48	
Sound power level			46		48
Sound power level	Heating (Hi)	dB(A)	46 47	48	48 49
Sound power level Dimensions 41	Heating (Hi) Cooling (Hi)	dB(A)	46 47 59	48 60	48 49 61
	Heating (Hi) Cooling (Hi) Heating (Hi)	dB(A) dB dB mm	46 47 59 60	48 60 61	48 49 61 62
Dimensions 4)	Heating (Hi) Cooling (Hi) Heating (Hi)	dB(A) dB dB	46 47 59 60 750 x 875 x 345	48 60 61 750 x 875 x 345	48 49 61 62 750 x 875 x 345
Dimensions ⁴⁾ Net weight	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D	dB(A) dB dB mm kg	46 47 59 60 750 x 875 x 345 48	48 60 61 750 x 875 x 345 48	48 49 61 62 750 x 875 x 345 49
Dimensions ⁴⁾ Net weight Piping connections Refrigerant Loading	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D	dB(A) dB dB mm kg inch (mm)	46 47 59 60 750 x 875 x 345 48 1/4" (6,35)	48 60 61 750 x 875 x 345 48 1/4" (6,35)	48 49 61 62 750 x 875 x 345 49 1/4" (6,35)
Dimensions ⁴⁾ Net weight Piping connections	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe	dB(A) dB mm kg inch (mm)	46 47 59 60 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,23 15	48 60 61 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70)	48 49 61 62 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,15 15
Dimensions ⁴⁾ Net weight Piping connections Refrigerant Loading	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A	dB(A) dB dB mm kg inch (mm) kg	46 47 59 60 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,23	48 60 61 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,06	48 49 61 62 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,15
Dimensions ⁴⁾ Net weight Piping connections Refrigerant Loading Elevation difference (in/out) ⁵⁾	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max	dB(A) dB dB mm kg inch (mm) kg m	46 47 59 60 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,23 15	48 60 61 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,06 15	48 49 61 62 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,15 15
Dimensions ^{4]} Net weight Piping connections Refrigerant Loading Elevation difference (in/out) ^{5]} Piping length Piping length without refrigerant	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max	dB(A) dB dB mm kg inch (mm) kg m m	46 47 59 60 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,23 15 3 / 20	48 60 61 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,06 15 3 / 20	48 49 61 62 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,15 15 3 / 20
Dimensions ⁴⁾ Net weight Piping connections Refrigerant Loading Elevation difference (in/out) ⁵⁾ Piping length Piping length without refrigerant increase	Heating (Hi) Cooling (Hi) Heating (Hi) H x W x D Liquid pipe Gas pipe R410A Max Min / Max	dB(A) dB dB mm kg inch (mm) kg m	46 47 59 60 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,23 15 3 / 20 10	48 60 61 750 x 875 x 345 48 1/4" (6,35) 1/2" (12,70) 1,06 15 3 / 20	48 49 61 62 750 x 875 x 345 49 1/4" (6,35) 1/2" (12,70) 1,15 15 3 / 20 10



- A WIDTH OF ONLY 20CM FOR EASY INSTALLATION **FVFRYWHFRF**
- 2 INSTALLATIONS POSSIBLE: ON THE WALL OR ON THE **ROOF**
- POWERFUL LINE-UP, UP TO 5.8 KW!
- POWERFUL MODE FOR QUICK TEMPERATURE SETTING
- R410A REFRIGERANT GAS
- 20 M CONNECTION DISTANCE, 15 M HEIGHT DIFFERENCE ON THE WHOLE LINE-UP



GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outeido air tomporaturo	3E0C DD / 3/0C WD	70C DR / 40C W/R

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 MKE 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 avarage of 500 hours per year in cooling mode.
- year in Cooling Moue.

 3 The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body floor-mounted: 1 m in front of the unit at 1 m height from the floor; ceiling-mounted: 1 m infront and 80 cm 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.

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

HEALTHY AIR

- · Soft dry operation mode
- Odour-removing function
- CZ-SA14P Alleru-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

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



CU-E15DBE

CU-E21DBE



ETHEREA MULTI SPLIT 2X1 // INVERTER+

WITH THE MULTI SYSTEM, SAVE MORE THAN WITH THE 1X1!

ECONAVI'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 ECONAVI, you can save up to 30%. Cool and stylish, the distinctive, beautiful rounded form is designed to complement today's modern interiors. Etherea has an advanced air purifying system with the new Patrol Sensor to detect and eliminate contaminants. Using a Multi Split 2X1 Inverter+ system with the outdoor unit CU-2E15LBE instead of 2 individual mono split Inverter+ systems, you reduce consumption and thus save more! Up to 10%! Furthermore, using a Multi Split system, you save space on the outdoor unit, making it easier to install in small spaces. The multi system also has a greater difference in elevation and longer tubing, leading to greater flexibility on roof installations.











SILVER KIT			KIT-2XE77-MBE	KIT-2XE79-MBE	KIT-2XE712-MBE	KIT-2XE99-MBE
Indoor			CS-XE7MKEW	CS-XE7MKEW	CS-XE7MKEW	CS-XE9MKEW
			CS-XE7MKEW	CS-XE9MKEW	CS-XE12MKEW	CS-XE9MKEW
WHITE KIT			KIT-2E77-MBE	KIT-2E79-MBE	KIT-2E712-MBE	KIT-2E99-MBE
Indoor			CS-E7MKEW	CS-E7MKEW	CS-E7MKEW	CS-E9MKEW
			CS-E7MKEW	CS-E9MKEW	CS-E12MKEW	CS-E9MKEW
Outdoor			CU-2E15LBE	CU-2E15LBE	CU-2E15LBE	CU-2E15LBE
Cooling capacity	Nominal (Min - Max)	kW	4,00 (1,50 - 5,00)	4,50 (1,50 - 5,20)	4,50 (1,50 - 5,20)	4,50 (1,50 - 5,20)
	Nominal (Min - Max)	kCal/h	3.440 (1.290 - 4.300)	3.870 (1.290 - 4.470)	3.870 (1.290 - 4.470)	3.870 (1.290 - 4.470)
EER 1)	Nominal (Min - Max)	Energy Saving	3,66 (6,00 - 3,70)	3,66 (6,00 - 3,70)	3,66 (6,00 - 3,42)	3,66 (6,00 - 3,42) 🗛
Power input Cooling	Nominal (Min - Max)	kW	1,09 (0,25 - 1,35)	1,23 (0,25 - 1,52)	1,23 (0,25 - 1,53)	1,23 (0,25 - 1,52)
Heating capacity	Nominal (Min - Max)	kW	5,40 (1,10 - 7,00)	5,40 (1,10 - 7,00)	5,40 (1,10 - 7,0)	5,40 (1,10 - 7,0)
	Nominal (Min - Max)	kCal/h	4.640 (950 - 6.020)	4.640 (950 - 6.020)	4.640 (950 - 6.020)	4.640 (950 - 6.020)
COP 1)	Nominal (Min - Max)	Energy Saving	4,62 (5,24 - 4,19) A	4,62 (5,24 - 4,19) A	4,62 (5,24 - 4,19) A	4,62 (4,61 - 4,19) 🔺
Power input Heating	Nominal (Min - Max)	kW	1,17 (0,21 - 1,67)	1,17 (0,21 - 1,67)	1,17 (0,21 - 1,67)	1,17 (0,21 - 1,67)
Annual Energy Consumption 2)		kWh	545	615	615	615
INDOOR UNIT						
Air Volume	Cooling	m³/h	606	606 (E7) / 606 (E9)	606 (E7) / 654 (E12)	606
Moisture removal volume		l/h	1,3 / 1,3	1,3 (E7) / 1,5 (E12)	1,1 (E7) / 1,6 (E12)	1,5 / 1,5
Sound pressure Level 3)	Cooling and Heating (S-Lo)	dB(A)	26	26	26 (E7) / 29 (E12)	26
Sound power Level	Cooling and Heating (Hi)	dB	56	56	56 (E7) / 60 (E12)	56
Dimensions	H x W x D	mm	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204
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	Α	5,10 / 5,20	5,75 / 5,20	5,75 / 5,20	5,75 / 5,20
Air Volume	Cooling / Heating	m³/h	1.998 / 1.710	1.998 / 1.710	1.998 / 1.710	1.998 / 1.710
Sound pressure Level 3)	Cooling / Heating (Hi)	dB(A)	47 / 49	47 / 49	47 / 49	47 / 49
Sound power Level	Cooling / Heating (Hi)	dB	62 / 64	62 / 64	62 / 64	62 / 64
Dimensions 4)	H x W x D	mm	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289
Net weight		kg	38	38	38	38
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)	3/8" (9,52)
Refrigerent Loading	R410A	kg	1,45	1,45	1,45	1,45
Elevation difference (in/out) 5)	Max	m	10	10	10	10
Piping length (total)	Min / Max	m	3 / 30	3 / 30	3 / 30	3 / 30
Piping length (one unit)	Min / Max	m	3 / 20	3 / 20	3 / 20	3 / 20
Piping length without refrigerant increase	Мах	m	20	20	20	20
Additional gas	1	g/m	20	20	20	20
Operating range 3)	Cooling Min / Max	oC	16 / 43	16 / 43	16 / 43	16 / 43
	Heating Min / Max	οС	-10 / 24	-10 / 24	-10 / 24	-10 / 24
		1	1			I



- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH **FCONAVI**
- VERY EXCLUSIVE SILVER DESIGN
- NEW GENERATION OF E-ION AIR PURIFYING SYSTEM WITH 24-HR PATROL SENSOR
- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	0 1 11 1 1	OFFICE DR. LOVICE IMP	700 DD / /00 MD

DB: Drv 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_MKE 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) 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 avarage 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.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

KIT-2XE77-MBE // KIT-2XE79-MBE // KIT-2XE712-MBE // KIT-2XE99-MBE // KIT-2E77-MBE // KIT-2E79-MBE // KIT-2E712-MBE // KIT-2E99-MBE

HEALTHY AIR

- E-ion plus air purifying system
- · Patrol sensor to detect and eliminate contaminants
- · Air conditioner and purifier with simultaneous or independent operation

ENERGY EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system, for bigger savings
- **NEW!**-30% consumption with ECONAVI on heat pump (-20% on cooling mode)
- · R410A refrigerant gas

COMFORT

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

EASE OF USE

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

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



CII-2F15I BF



ETHEREA MULTI SPLIT 2X1 // INVERTER+

ETHEREA, A NEW CONCEPT IN AIR CONDITIONERS: AIR PURIFYING SYSTEM, STYLISH DESIGN AND HIGH EFFICIENCY. With the multi system, save more than with the 1x1!

ECONAVI '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 ECONAVI, you can save up to 30%. Cool and stylish, the distinctive, beautiful rounded form is designed to complement today's modern interiors. Etherea has an advanced air purifying system with the new Patrol Sensor to detect and eliminate contaminants.

Using a Multi Split 2x1 Inverter+ system with the outdoor unit CU-2E18LBE instead of 2 individual mono split Inverter+ systems, you reduce consumption and thus save more! Up to 16%! Furthermore, using a Multi Split system, you save space on the outdoor unit, making it easier to install in small spaces.

The multi system also has a greater difference in elevation and longer tubing, leading to greater flexibility on roof installations.











SILVER KIT			KIT-2XE99-MKE	KIT-2XE912-MKE	KIT-2XE1212-MKE
Indoor	· · · · · · · · · · · · · · · · · · ·		CS-XE9MKEW	CS-XE9MKEW	CS-XE12MKEW
			CS-XE9MKEW	CS-XE12MKEW	CS-XE12MKEW
WHITE KIT			KIT-2E99-MKE	KIT-2E912-MKE	KIT-2E1212-MKE
Indoor			CS-E9MKEW	CS-E9MKEW	CS-E12MKEW
			CS-E9MKEW	CS-E12MKEW	CS-E12MKEW
Outdoor			CU-2E18LBE	CU-2E18LBE	CU-2E18LBE
Cooling capacity	Nominal (Min - Max)	kW	4,80 (1,50 - 5,20)	5,00 (1,50 - 5,30)	5,20 (1,50 - 5,40)
		kCal/h	4.130 (1.290 - 4.470)	4.300 (1.290 - 4.560)	4.470 (1.290 - 4.640)
EER 1)	Nominal (Min - Max)	Energy Saving	3,66 (6,00 - 3,42) 🗛	3,36 (6,00 - 3,44) 🗛	3,42 (6,00 - 3,42) A
Power input Cooling	Nominal (Min - Max)	kW	1,31 (0,25 - 1,52)	1,49 (0,25 - 1,54)	1,52 (0,25 - 1,58)
Heating capacity	Nominal (Min - Max)	kW	5,60 (1,10 - 7,20)	5,60 (1,10 - 7,20)	5,60 (1,10 - 7,20)
		kCal/h	4.820 (950 - 6.190)	4.820 (950 - 6.190)	4.820 (950 - 6.190)
COP 1)	Nominal (Min - Max)	Energy Saving	4,48 (5,24 - 4,14) A	4,55 (5,24 - 4,19) 🔼	4,63 (5,24 - 4,24) A
Power input Heating	Nominal (Min - Max)	kW	1,25 (0,21 - 1,74)	1,23 (0,21 - 1,72)	1,21 (0,21 - 1,70)
Annual Energy Consumption 2)		kWh	655	745	760
INDOOR UNIT					
Air Volume	Cooling	m³/h	606	606 (E9) / 654 (E12)	654
Moisture removal volume		l/h	1,5 / 1,5	1,4 (E9) / 1,6 (E12)	1,6 / 1,6
Sound pressure level 3)	Cooling and Heating (S-Lo)	dB(A)	26	26 (E9) / 29 (E12)	29
Sound power level	Cooling and Heating (Hi)	dB	56	56 (E9) / 60 (E12)	60
Dimensions	HxWxD	mm	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204
Net weight		kg	9	9	9
Air purifier filter			Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
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 / Heating (Nominal)	A	6,10 / 5,55	6,95 / 5,45	7,10 / 5,35
Air Volume	Cooling / Heating	m³/h	2.070 / 1.860	2.070 / 1.860	2.070 / 1.860
Sound pressure level 3)	Cooling / Heating (Hi)	dB(A)	49 / 51	49 / 51	49 / 51
Sound power level	Cooling / Heating (Hi)	dB	64 / 66	64 / 66	64 / 66
Dimensions 4)	HxWxD	mm	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289
Net weight		kg	38	38	38
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)	3/8" (9,52)
Refrigerant Loading	R410A	kg	1,45	1,45	1,45
Elevation difference (in/out) 5)	Max	m	10	10	10
Piping length	Total	m	30	30	30
Piping length (one unit)	Min / Max	m	3 / 20	3 / 20	3 / 20
Piping length without refrigerant increase	Max	m	20	20	20
Additional gas		g/m	20	20	20
Operating range 3)	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24



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- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outoido oir tomporaturo	2E0C DD / 2/0C M/D	70C DD / 40C M/D

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_MKE 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) 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 avarage 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
- 4) Add 70 mm for piping port.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

KIT-2XE99-MKE // KIT-2XE912-MKE // KIT-2XE1212-MKE KIT-2E99-MKE // KIT-2E912-MKE // KIT-2E1212-MKE

HEALTHY AIR

- E-ion plus air purifying system
- · Patrol sensor to detect and eliminate contaminants
- · Air conditioner and purifier with simultaneous or independent operation

ENERGY EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system, for bigger savings
- NEW!-30% consumption with ECONAVI on heat pump (-20% on cooling mode)
- · R410A refrigerant gas

COMFORT

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

EASE OF USE

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

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



CU-2E18LBE



ETHEREA MULTI SPLIT 3X1 // INVERTER+

ETHEREA, A NEW CONCEPT IN AIR CONDITIONERS: AIR PURIFYING SYSTEM, STYLISH DESIGN AND HIGH EFFICIENCY. With the multi system, save more than with the 1x1!

ECONAVI'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 ECONAVI, you can save up to 30%.

Cool and stylish, the distinctive, beautiful rounded form is designed to complement today's modern interiors.

Etherea has an advanced air purifying system with the new Patrol Sensor to detect and eliminate contaminants. Using a Multi Split 3X1 Inverter+ system with the outdoor unit CU-3E18LBE instead of 3 individual mono split Inverter+ systems, you reduce consumption and thus save more! Up to 34%! Furthermore, using a Multi Split system, you save space on the outdoor unit, making it easier to install in small spaces.

The multi system also has a greater difference in elevation and longer tubing, leading to greater flexibility on roof installations.











SILVER KIT			KIT-3XE7712-MBE	KIT-3XE7715-MBE
Indoor			CS-XE7MKEW (x2)	CS-XE7MKEW (x2)
			CS-XE12MKEW (x1)	CS-XE15MKEW (x1)
WHITE KIT			KIT-3E7712-MBE	KIT-3E7715-MBE
Indoor			CS-E7MKEW (x2)	CS-E7MKEW (x2)
			CS-E12MKEW (x1)	CS-E15MKEW (x1)
Outdoor			CU-3E18LBE	CU-3E18LBE
Cooling capacity	Nominal (Min - Max)	kW	5,20 (1,90-7,20)	5,20 (1,80-7,30)
	Nominal (Min - Max)	kCal/h	4.470 (1.630-6.190)	4.470 (1.550-6.280)
EER 1)	Nominal (Min - Max)	Energy Saving	4,30 (5,28 - 3,30) A	4,30 (5,00 - 3,35) ▲
Power input Cooling	Nominal (Min - Max)	kW	1.21 (0.36-2.18)	1.21 (0.36-2.18)
Heating capacity	Nominal (Min - Max)	kW	6,80 (1,40-8,30)	6,80 (1,60-8,30)
	Nominal (Min - Max)	kCal/h	5.850 (1.200-7.140)	5.850 (1.380-7.140)
COP 1)	Nominal (Min - Max)	Energy Saving	4,63 (4,38 - 3,94) A	4,72 (5,00 - 3,93) △
Power input Heating	Nominal (Min - Max)	kW	1,47 (0,32-2,11)	1,44 (0,32-2,11)
Annual Energy Consumption 2)		kWh	745	720
INDOOR UNIT				
Air Volume	Cooling	m³/h	606 (E7) / 654 (E12)	606 (E7) / 672 (E15)
Moisture removal volume		l/h	1,3 (E7) / 1,8 (E12)	0,8 (E7) / 1,6 (E15)
Sound pressure Level 3)	Cooling (S-Lo)	dB(A)	26 (E7) / 29 (E12)	26 (E7) / 29 (E15)
	Heating (S-Lo)	dB(A)	26 (E7) / 29 (E12)	26 (E7) / 30 (E15)
Sound power Level	Cooling and Heating (Hi)	dB	56 (E7) / 60 (E12)	56 (E7) / 60 (E15)
Dimensions	H x W x D	mm	290 x 870 x 204	290 x 870 x 204
Net weight	-	kg	9	9
Air purifier filter			Patrol + E-ion	Patrol + E-ion
OUTDOOR UNIT				
Power source		V	230	230
Connection		mm ²	4 x 1,5	4 x 1,5
Current	Cooling / Heating Nominal	Α	5,3 / 8,2	5,3 / 7,9
Air Volume	Cooling / Heating	m³/h	2.502	2.502
Sound pressure Level 3)	Cooling / Heating (Hi)	dB(A)	46 / 47	46 / 47
Sound power Level	Cooling / Heating (Hi)	dB	60 / 61	60 / 61
Dimensions 4)	H x W x D	mm	795 x 875 (+95) x 320	795 x 875 (+95) x 320
Net weight	-	kg	71	71
Piping connections	Liquid pipe	inch (mm)	1/4" (6,35)	1/4" (6,35)
. •	Gas pipe	inch (mm)	3/8" (9,52)	3/8" (9,52)
Refrigerent Loading	R410A	kg	2,64	2,64
Elevation difference (in/out) 5)	Max	m	15	15
Piping length (total)	Min / Max	m	3 / 50	3 / 50
Piping length (one unit)	Min / Max	m	3 / 25	3 / 25
Piping length without refrigerant increase	Max	m	30	30
Additional gas	<u> </u>	g/m	20	20
Operating range 3	Cooling Min / Max	oC	-10 / 46	-10 / 46
-133-	Heating Min / Max	oC	-15 / 24	-15 / 24
	nousing rim / riux		10 / 27	10 / 27



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GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outeido air tomporaturo	3E0C DD / 3/0C WD	70C DR / 40C M/R

DR: Dry Rulh: WR: Wet Rulh

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation). Connectivity restriction: CS-E/XE_MKE 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) 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 avarage 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 95 mm for piping port.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

KIT-3XE7712-MBE // KIT-3XE7715-MBE KIT-3E7712-MBE // KIT-3E7715-MBE

HEALTHY AIR

- E-ion plus air purifying system
- · Patrol sensor to detect and eliminate contaminants
- · Air conditioner and purifier with simultaneous or independent operation

ENERGY EFFICIENCY AND ECOLOGY

- Maximum efficiency Inverter system, for bigger savings
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- · R410A refrigerant gas

COMFORT

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

EASE OF USE

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

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



CU-3E18LBE



ETHEREA MULTI SPLIT 4X1 // INVERTER+

ETHEREA, A NEW CONCEPT IN AIR CONDITIONERS: AIR PURIFYING SYSTEM, STYLISH DESIGN AND HIGH EFFICIENCY. With the multi system, save more than with the 1x1!

ECONAVI '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 ECONAVI, you can save up to 30%. Cool and stylish, the distinctive, beautiful rounded form is designed to complement today's modern interiors. Etherea has an advanced air purifying system with the new Patrol Sensor to detect and eliminate contaminants.

Using a Multi Split 4X1 Inverter+ system with the outdoor unit CU-4E23LBE instead of 4 individual mono split Inverter+ systems, you reduce consumption and thus save more! Up to 36%! Furthermore, using a Multi Split system, you save space on the outdoor unit, making it easier to install in small spaces.

The multi system also has a greater difference in elevation and longer tubing, leading to greater flexibility on roof installations.











SILVER KIT			KIT-4XE77712-MBE	KIT-4XE77715-MBE	KIT-4XE77712-MKE	KIT-4XE77715-MKE
Indoor			CS-XE7MKEW (x3)	CS-XE7MKEW (x3)	CS-XE7MKEW (x3)	CS-XE7MKEW (x3)
WILLE WIT			CS-XE12MKEW (x1)	CS-XE15MKEW (x1)	CS-XE12MKEW (x1)	CS-XE15MKEW (x1)
WHITE KIT			KIT-4E77712-MBE	KIT-4E77715-MBE	KIT-4E77712-MKE	KIT-4E77715-MKE
Indoor			CS-E7MKEW (x3)	CS-E7MKEW (x3)	CS-E7MKEW (x3)	CS-E7MKEW (x3)
			CS-E12MKEW (x1)	CS-E15MKEW (x1)	CS-E12MKEW (x1)	CS-E15MKEW (x1)
Outdoor	(1)	1	CU-4E23LBE	CU-4E23LBE	CU-4E27CBPG	CU-4E27CBPG
Cooling capacity	Nominal (Min - Max)	kW	6,80 (1,90 - 8,80)	6,80 (1,90 - 8,80)	8,00 (2,80 - 8,90)	8,00 (2,80 - 8,90)
4)		kCal/h	5.850 (1.630 - 7.570)	5.850 (1.630 - 7.650)	6.880 (2.410 - 7.650)	6.880 (2.410 - 7.650)
EER 1)	Nominal (Min - Max)		4,12 (5,59 - 3,56) A	4,12 (5,59 - 3,56) A	3,76 (5,71 - 3,09) A	3,76 (5,71 - 3,20) A
Power input Cooling	Nominal (Min - Max)	kW	1.65 (0.34 - 2.47)	1.65 (0.34 - 2.47)	2,13 (0,49 - 2,88)	2,10 (0,49 - 2,87)
Heating capacity	Nominal (Min - Max)	kW	8,60 (3,00 - 10,60)	8,60 (3,00 - 10,60)	9,40 (3,40 - 10,50)	9,40 (3,80 - 10,50)
			7.400 (2.580 - 9.120)	7.400 (2.580 - 9.120)	8.080 (2.920 - 9.030)	8.080 (3.270 - 9.030)
COP 1)	Nominal (Min - Max)		4,65 (5,17 - 4,08) 🔼	4,67 (5,09 - 4,09) A	4,43 (5,76 - 3,30)	4,50 (5,31 - 3,34) 🗛
Power input Heating	Nominal (Min - Max)	kW	1,85 (0,58 - 2,60)	1,84 (0,59 - 2,59)	2,12 (0,59 - 3,18)	2,09 (0,64 - 3,14)
Annual Energy Consumption 2)		kWh	825	825	1.065	1.055
INDOOR UNIT						
Air Volume	Cooling		606 (E7) / 654 (E12)	606 (E7) / 672 (E15)	654 (E7) / 750 (E12)	654 (E7) / 750 (E15)
Moisture removal volume		l/h	0,9 (E7) / 1,5 (E12)	0,9 (E7) / 1,6 (E15)	1,1 (E7) / 1,6 (E12)	1,0 (E7) / 1,8 (E15)
Sound pressure level 3)	Cooling (S-Lo)	dB(A)	26 (E7) / 29 (E12)	26 (E7) / 29 (E15)	26 (E7) / 29 (E12)	26 (E7) / 29 (E15)
	Heating (S-Lo)	dB(A)	26 (E7) / 29 (E12)	26 (E7) / 30 (E15)	26 (E7) / 29 (E12)	26 (E7) / 30 (E15)
Sound power level	Cooling and Heating (Hi)	dB	56 (E7) / 60 (E12)	56 (E7) / 60 (E15)	56 (E7) / 60 (E12)	56 (E7) / 60 (E15)
Dimensions	H x W x D	mm	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		٧	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)	Α	7,40 / 8,60	7,40 / 8,50	9,40 / 9,30	9,30 / 9,20
Air Volume	Cooling / Heating	m³/h	2.550	2.550	2.910	2.910
Sound pressure level 3)	Cooling / Heating (Hi)	dB(A)	48 / 49	48 / 49	48 / 49	48 / 49
Sound power level	Cooling / Heating (Hi)	dB	62 / 63	62 / 63	61 / 62	61 / 62
Dimensions 4)	H x W x D	mm	795 x 875 (+95) x 320	795 x 875 (+95) x 320	908 x 900 x 320	908 x 900 x 320
Net weight	·	kg	72	72	73	73
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)	3/8" (9,52)
Refrigerant Loading	R410A	kg	2,64	2.64	3,10	3,10
Elevation difference (in/out) 5)		m	15	15	15	15
Piping length	Total	m	60	60	70	70
Piping length (one unit)	Min / Max	m	3 / 25	3 / 25	3 / 25	3 / 25
Piping length without	Max	m	30	30	40	40
refrigerant increase						
Additional gas	•	g/m	20	20	20	20
Operating range 3)	Cooling Min / Max	°C	-10 / 46	-10 / 46	16 / 43	16 / 43
. • •	Heating Min / Max	οС	-15 / 24	-15 / 24	-20 / 24	-20 / 24



THEREA



TECHNICAL FOCUS

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- MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



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 Bulh

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation). Connectivity restriction: CS-E/XE_MKE 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) 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 avarage 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.
- 5) When installing the outdoor unit at a higher position than the indoor unit.

KIT-4XE77712-MBE // KIT-4XE77715-MBE // KIT-4XE77712-MKE // KIT-4XE77715-MKE KIT-4E77712-MBE // KIT-4E77715-MBE // KIT-4E77712-MKE // KIT-4E77715-MKE

HEALTHY AIR

- E-ion plus air purifying system
- · Patrol sensor to detect and eliminate contaminants
- · Air conditioner and purifier with simultaneous or independent operation

ENERGY EFFICIENCY AND ECOLOGY

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- · R410A refrigerant gas

COMFORT

- Powerful mode
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- · Automatic vertical airflow control
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- · Automatic restart after power cut

EASE OF USE

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

- · Removable, washable panel
- 70 m maximum connection distance (For CU-4E27CBPG)
- 15 m maximum elevation difference
- · Maintenance access through the top panel of the outdoor unit
- · Self-diagnosis function





CU-4E23LBE

CU-4E27CBPG



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 will help you to select the best option.

INDOOR UNIT CA							
CAPACITY	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
SPLIT							
ETHEREA	P -	-			-		
SILVER OR WHITE							_
INVERTER+	CS-XE7MKEW	CS-XE9MKEW		CS-XE12MKEW	CS-XE15MKEW 1)	CS-XE18MKEW 1)	CS-XE21MKEW 1)
INVENTER!	CS-E7MKEW	CS-E9MKEW		CS-E12MKEW	CS-E15MKEW 1)	CS-E18MKEW 1)	CS-E21MKEW 1)
1-WAY	A		A *	A *	A **		
CASSETTE							
INVERTER							
	CS-ME7KB1E		CS-ME10EBE1E	CS-ME12EBE1E	CS-ME14EB1E		
LOW STATIC							
PRESSURE							
HIDE AWAY							
INVERTER+							
		CS-E10KD3EA			CS-E15JD3EA 1]	CS-E18JD3EA 1)	
FLOOR CONSOLE							
INVERTER+						-	
			4	4-11-11-1		-	
			CS-E9GFEW	CS-E12GFEW		CS-E18GFEW 1)	
FLOOR/CEILING							
CONSOLE							
INVERTER+							
			CS-ME10DTEG		CS-E15DTEW 1)	CS-E18DTEW 1)	
4 WAY 60X60							
CASSETTE		100			100	188	188
INVERTER+		11				11	11
		CS-E10KB4EA			CS-E15HB4EA 1)	CS-E18HB4EA 1)	CS-E21JB4EA 1)

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



Models		Possible indoor unit	Capacity	Refriger	ant pipe	diameter	Pipe len	gth					Indoor/d	outdoor u	ınit comb	inations		
		combinations	kW 1)	Indoor unit	Liquid	Gas	Maximum pipe length (1 room)	Maximum pipe length (total)	Max pipe without additional gas refills	Additional gas	Maximum level difference	Capacity	Wall- mounted	Floor console	4 -way Cassette	1 -way Cassette	Floor / ceiling	Ducts
Rooms	CU-2E15LBE	-	4,0-5,6	Room A		3/8"	20 m	30 m	20 m	20 g/m	10 m	7	x					
		B ²⁾ : 7 or 9/10 or 12		Room B	1/4"	3/8"						9/10	×	×	×			×
	CU-2E18LBE											12	×	×				
	CU-ZETOLDE	A ²⁾ : 7 or 9/10 or 12 B ²⁾ : 7 or 9/10 or 12	4,0-6,4	Room A Room B		3/8" 3/8"	20 m	30 m	20 m	20 g/m	10 m	7	×					-
		. 7 01 7/10 01 12			9/1	9/10	×	×	×		×	X						
D	OU OF A OLD F											12	×	×				
Rooms	CU-3E18LBE		25 m 50 m 3	30 m 20	20 g/m	15 m	7	×			×							
		B ³⁾ : 7 or 9/10 or 12 or 15 or 18 C ³⁾ : 7 or 9/10 or 12 or 15 or 18		Room B Room C		3/8" 3/8"					9/10 12	X	X	X	X	×	X	
		. 7 01 7/10 01 12 01 13 01 10		NOUIII C	1/4	3/0						14/15	X	~	X	X	×	X
												18	×	×	X		X	X
Rooms	CU-4E23LBE	A 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	×			×		
	(A)	B ³¹ : 7 or 9/10 or 12 or 15 or 18 or 21	.,0,0	Room B		3/8"	20			20 3,		9/10	X	X	X	X	X	X
	1	C ³⁾ : 7 or 9/10 or 12 or 15 or 18 or 21		Room C	1/4"	3/8"						12	X	X		X		
		D ³⁾ : 7 or 9/10 or 12 or 15 or 18 or 21		Room D	1/4"	3/8"						14/15	X		X	X	X	X
												18	X	X	X		X	X
	OU /FOZODDO											21	X		X			
	CU-4E27CBPG	A ^{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	x			×		
	SHIP OF	B ³⁾ : 7 or 9/10 or 12 or 15 or 18	, ,	Room B	1/4"	3/8"		25 g/11			9/10	X	X	X	X	X	X	
		C ³⁾ : 7 or 9/10 or 12 or 15 or 18		Room C		3/8"						12	X	X		X		
	Alle.	D ³¹ : 7 or 9/10 or 12 or 15 or 18		Room D	1/4"	3/8"					14/15	X		X	X	X	X	
	"											18	X	X	X		X	X

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

INDOOR UNITS FOR FREE MULTI COMBINATIONS



















ETHEREA // SILVER OR WH	ITE // INVERTER+		2,0 KW	2,5 KW	3,2 KW	4 KW	5 KW	6 KW
Silver Indoor			CS-XE7MKEW	CS-XE9MKEW	CS-XE12MKEW	CS-XE15MKEW 1)	CS-XE18MKEW 1)	CS-XE21MKEW 1)
White Indoor			CS-E7MKEW	CS-E9MKEW	CS-E12MKEW	CS-E15MKEW 1)	CS-E18MKEW 1)	CS-E21MKEW 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				
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 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				
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)





LOW STATIC PRESSURE HI	DE AWAY // INVERTER+		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	4,00 / 3.440	5,00 / 4.300
Heating capacity	Nominal	kW / kCal/h	3,60 / 3.100	5,60 / 4.820	6,80 / 5.850
Connection		mm ²	4 x 1,5	4 x 1,5	4 x 1,5
External static pressure	High / Low	Pa (mm)	34 / 64 (3,47 / 6,53)	34 / 69 (3,47 / 7,04)	34 / 78 (3.47 / 7,95)
Air Volume	High / Medium / Low	m³/h	414 / 402 / 330	474 / 402 / 330	624 / 528 / 444
Sound pressure level 2)	Cooling (Quiet / Low / High)	dB(A)	24 / 27 / 31	24 / 27 / 33	27 / 30 / 41
	Heating (Quiet / Low / High)	dB(A)	24 / 27 / 35	24 / 27 / 33	29 / 32 / 41
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)









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	4,00 / 3.440	5,00 / 4.300	6,00 / 5.160
Heating capacity	Nominal	kW / kCal/h	3,60 / 3.100	5,60 / 4.820	6,80 / 5.850	8,50 / 7.310
Connection		mm 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)







						011101012
1-WAY CASSETTE // INVE	RTER+		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	2,00 / 1.720	2,80 / 2.410	3,20 / 2.750	4,00 / 3.440
Heating capacity	Nominal	kW / kCal/h	3,20 / 2.750	4,00 / 3.440	4,50 / 3.870	5,60 / 4.820
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
<u> </u>	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			
Dimensions	Panel (H x W x D)	mm	55 x 1.070 x 460			
Net weight	Indoor	kg	9,8	9,8	9,8	9,8
Pining connections	Liquid / Gas nine	inch (mm)	1/4" (4 35) / 3/8" (9 52)	1/4" (4 35) / 3/8" (9 52)	1/4" (4 35) / 3/8" (9 52)	1/4" (4 35) / 3/8" (9 52)









FLOOR CONSOLE // INVERTE	R+		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	3,20 / 2.750	5,00 / 4.300
Heating capacity	Nominal	kW / kCal/h	4,00 / 3.440	4,50 / 3.870	6,80 / 5.850
Connection		mm 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
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)



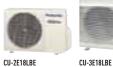




FLOOR/CEILING CONSOLE	: // INVERTER+		2,8 kW	4 kW	5 kW
Indoor			CS-ME10DTEG	CS-E15DTEW 1)	CS-E18DTEW 1)
Cooling capacity	Nominal	kW / kCal/h	2,80 / 2,408	4,15 / 3.570	5,00 / 4.300
Heating capacity	Nominal	kW / kCal/h	4,00 / 3,440	5,17 / 4.450	6,80 / 5.850
Connection		mm ²	4 x 1,5	4 x 1,5	4 x 1,5
Sound 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-4E23LBE



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 (1.290-4.470)	4.470 (1.290-4.640)	4.470 (1.550-6.280)	5.850 (1.630-7.570)	6.880 (2.580-7.910)
EER 3)	Nominal	Energy Saving	3,66 A	3,42 A	4,33 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)	8.080 (3.610/-9.120)
COP 3)	Nominal	Energy Saving	4,62 A	4,63 A	4,86 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)	2,08 (0,70-3,06)
Current	Cooling / Heating Nominal	A	5,75 / 5,20	7,10 / 5,35	5,30 / 6.50	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
Sound power level	Cooling / Heating (Hi)	dB	62 / 64	64 / 66	60 / 61	62 / 63	61 / 62
Dimensions 4)	HxWxD	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	Max	m	20	20	30	30	30
refrigerant increase							
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
. 5 5	Heating Min / Max	°C	-10 / 24	-10 / 24	-15 / 24	-15 / 24	-10 / 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

Connectivity restriction: CS-E/XE_MKE 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.

- A CZ-MA1P pipe reducer is needed on the E15 and E18, a CZ-MA2P pipe expander is needed on the E21.
 The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
 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 COMBINATIONS

FREE MULTI	FREE MULTI 2X1 // OUTDOOR UNIT CU-2E15LBE														
Indoor unit	Cooling C	Capacity (k	(W)	Input Power (W)	EER	A,C,E,	Current	Moisture Removal	Heating Capacity (kW)			Input Power (W)	COP	A,C,E,	Current
capacity	Room A	Room B	Total (Min,-Max,)	Rating	W/W	kWh	230 V (A)	Volume (l/h)	Room A	Room B	Total (Min,-Max,)	Rating	W/W	kWh	230 V (A)
1 Room															
7	2,00		2,00 (1,10-2,90)	520 (220 -750)	3,85 A	260	2,45	1,3	3,20		3,20 (0,70-4,80)	850 (170-1410)	3,76 A	425	3,75
9 1)	2,50		2,50 (1,10-3,50)	670 (220 -1000)	3,73 A	335	3,15	1,5	3,60		3,60 (0,70-5,50)	1030 (170-1700)	3,50 B	515	4,55
10 2)	2,80		2,80 (1,10-3,50)	750 (220 -1000)	3,73 A	375	3,50	1,6	4,00		4,00 (0,70-5,50)	1150 (170-1700)	3,48 B	575	5,10
12	3,20		3,20 (1,10-4,00)	920 (220 -1220)	3,48 A	460	4,30	1,8	4,50		4,50 (0,70-6,20)	1250 (170-1810)	3,60 B	625	5,55
2 Room															
7 + 7	2,00	2,00	4,00 (1,50-5,00)	1090 (250 -1350)	3,66 A	545	5,10	1,3 + 1,3	2,70	2,70	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
7 + 9 1)	2,00	2,50	4,50 (1,50-5,20)	1230 (250 -1520)	3,66 A	615	5,75	1,3 + 1,5	2,40	3,00	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
7 + 10 2)	1,85	2,65	4,50 (1,50-5,20)	1230 (250 -1520)	3,66 A	615	5,75	1,2 + 1,6	2,25	3,15	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
7 + 12	1,75	2,75	4,50 (1,50-5,20)	1230 (250 -1520)	3,66 A	615	5,75	1,1 + 1,6	2,10	3,30	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
9 1) + 9 1)	2,25	2,25	4,50 (1,50-5,20)	1230 (250 -1520)	3,66 A	615	5,75	1,5 + 1,5	2,70	2,70	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
9 1) + 10 2)	2,10	2,40	4,50 (1,50-5,20)	1230 (250 -1520)	3,66 A	615	5,75	1,4 + 1,5	2,55	2,85	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
10 ²⁾ + 10 ²⁾	2,25	2,25	4,50 (1,50-5,20)	1230 (250 -1520)	3,66 A	615	5,75	1,5 + 1,5	2,70	2,70	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20

FREE MULT	FREE MULTI 2X1 // OUTDOOR UNIT CU-2E18LBE														
Indoor unit	Cooling (Capacity (k		Input Power (W)	EER	A,C,E,	Current	Moisture Removal	Heating (Capacity (k	(W)	Input Power (W)	COP	A,C,E,	Current
capacity	Room A	Room B	Total (Min,-Max,)	Rating	W/W	kWh	230 V (A)	Volume (l/h)	Room A	Room B	Total (Min,-Max,)	Rating	W/W	kWh	230 V (A)
1 Room															
_7	2,00		2,00 (1,10-2,90)	520 (220-750)	3,85 A	260	2,45	1,3	3,20		3,20 (0,70-4,80)	850 (170-1410)	3,76 A	425	3,75
9 1)	2,50		2,50 (1,10-3,50)	670 (220-1000)	3,73 A	335	3,15	1,5	3,60		3,60 (0,70-5,50)	1030 (170-1700)	3,50 B	515	4,55
_10 ²⁾	2,80		2,80 (1,10-3,50)	750 (220-1000)	3,73 A	375	3,50	1,6	4,00		4,00 (0,70-5,50)	1150 (170-1700)	3,48 B	575	5,10
12	3,20		3,20 (1,10-4,00)	920 (220-1220)	3,48 A	460	4,30	1,8	4,50		4,50 (0,70-6,20)	1250 (170-1810)	3,60 B	625	5,55
2 Rooms															
7 + 7	2,00	2,00	4,00 (1,50-5,00)	1090 (250-1350)	3,66 A	545	5,10	1,3 + 1,3	2,70	2,70	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
7 + 9 1)	2,00	2,50	4,50 (1,50-5,20)	1230 (250-1520)	3,66 A	615	5,75	1,3 + 1,5	2,40	3,00	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
7 + 10 ²⁾	1.85	2,65	4,50 (1,50-5,20)	1230 (250-1520)	3,66 A	615	5.75	1,2 + 1,6	2,25	3,15	5,40 (1,10-7,00)	1170 (210-1670)	4,62 A	585	5,20
7 + 12	1,85	2,95	4,80 (1,50-5,30)	1310 (250-1540)	3,66 A	655	6,10	1,2 + 1,7	2,15	3,45	5,60 (1,10-7,20)	1230 (210-1720)	4,55 A	615	5,45
9 1) + 9 1)	2,40	2,40	4,80 (1,50-5,20)	1310 (250-1520)	3,66 A	655	6,10	1,5 + 1,5	2,80	2,80	5,60 (1,10-7,20)	1250 (210-1740)	4,48 A	625	5,55
9 1] + 10 2]	2,25	2,55	4,80 (1,50-5,20)	1310 (250-1520)	3,66 A	655	6,10	1,5 + 1,6	2,65	2,95	5,60 (1,10-7,20)	1250 (210-1740)	4,48 A	625	5,55
9 ¹⁾ + 12	2,20	2,80	5,00 (1,50-5,30)	1490 (250-1540)	3,36 A	745	6,95	1,4 + 1,6	2,45	3,15	5,60 (1,10-7,20)	1230 (210-1720)	4,55 A	615	5,45
10 2) + 10 2)	2,40	2,40	4,80 (1,50-5,20)	1310 (250-1520)	3,66 A	655	6,10	1,5 + 1,5	2,80	2,80	5,60 (1,10-7,20)	1250 (210-1740)	4,48 A	625	5,55
10 ²⁾ + 12	2,35	2,65	5,00 (1,50-5,30)	1490 (250-1540)	3,36 A	745	6,95	1,5 + 1,6	2,60	3,00	5,60 (1,10-7,20)	1230 (210-1720)	4,55 A	615	5,45
12 + 12	2.60	2.60	5.20 (1.50-5.40)	1520 (250-1580)	3.42 A	760	7.10	1.6 + 1.6	2,80	2.80	5,60 (1,10-7,20)	1210 (210-1700)	4.63 A	605	5.35

Indoor unit	Cooling C	apacity (k	W)		Input Power (W)	EER	A,C,E,	Current	Moisture Removal	Heating	Capacity (k	(W)		Input Power (W)	COP	A,C,E,	Current
apacity				Total (Min,-Max,)		W/W	kWh		Volume (l/h)				Total (Min,-Max,)		W/W	kWh	230 V (
Room					•									•			
	2.00			2.00 (1.80-2.90)	500 (340-810)	4.00 A	250	2,5	1,3	3,20			3.20 (1.20-4.10)	740 (300-1230)	4,32 A	370	3,7
1]	2.50			2,50 (1,80-2,90)	630 (340-810)	4.00 A	315	3,0	1.5	3.60			3,60 (1,20-4,30)	940 (300-1230)	3,83 A	470	4.5
0 2)	2.80			2,80 (1,80-2,90)	700 (340-810)	4.00 A	350	3,3	1,6	4,00			4.00 (1.20-4.30)	1050 (300-1230)	3,81 A	525	5,0
2	3,20			3,20 (1,80-3,80)	800 (340-1360)	4.00 A	400	3,7	1,8	4,50			4,50 (1,20-5,80)	1230 (300-2100)	3,66 A	615	5,8
5	4,00			4,00 (1,80-4,30)	1240 (340-1990)	3,23 A	620	5,6	2,3	5,60			5,60 (1,20-6,80)	1720 (300-2930)	3,26 C	860	7,7
8	5,00			5.00 (1.90-5.70)	1550 (340-2130)	3,23 A	775	6.8	2,7	6,80			6,80 (1,20-6,90)	2100 (300-2520)	3,24 C	1050	9.2
? Rooms	0,00			3,00 (1,70-3,70)	1000 (040-2100)	3,23 A	1/3	0,0	<i>L,1</i>	0,00			0,00 [1,20-0,70]	2100 (300-2320)	J,24 C	1000	7,2
2 KUUIIIS 2 + 7	2.00	2.00		4.00 (1.90-6.20)	1010 (350-2100)	2.0/ A	505	4.5	1.3 + 1.3	2.90	2,90		5.80 (1.40-7.00)	1450 (310-2550)	/ 00 A	725	6.4
+ 7				4.50 (1.90-6.20)		3,96 A								1720 (310-2550)	4,00 A		
	2,00	2,50			1270 (350-2100)	3,55 A	635	5,6	1,3 + 1,5	2,84	3,56		6,40 (1,40-7,00)		3,72 A	860	7,6
' + 10 ²⁾	2,00	2,80		4,80 (1,90-6,20)	1350 (350-2100)	3,55 A	675	6,0	1,3 + 1,6	2,67	3,73		6,40 (1,40-7,00)	1720 (310-2550)	3,72 A	860	7,6
+ 12	2,00	3,20		5,20 (1,90-6,30)	1490 (350-2110)	3,49 A	745	6,6	1,3 + 1,8	2,62	4,18		6,80 (1,40-7,30)	1840 (310-2520)	3,70 A	920	8,2
+ 15	1,73	3,47		5,20 (1,90-6,40)	1450 (350-2110)	3,59 A	725	6,4	1,1 + 2,0	2,27	4,53		6,80 (1,40-7,30)	1800 (310-2510)	3,78 A	900	7,9
+ 18	1,49	3,71		5,20 (1,90-6,80)	1290 (360-2150)	4,03 A	645	5,7	0,9 + 2,2	1,94	4,86		6,80 (1,40-8,00)	1520 (310-2200)	4,47 A	760	6,7
1] + 9 1)	2,50	2,50		5,00 (1,90-6,20)	1540 (350-2100)	3,25 A	770	6,8	1,5 + 1,5	3,40	3,40		6,80 (1,40-7,00)	1930 (310-2550)	3,52 B	965	8,5
1) + 10 2)	2,45	2,75		5,20 (1,90-6,20)	1540 (350-2100)	3,38 A	770	6,8	1,5 + 1,6	3,21	3,59		6,80 (1,40-7,00)	1930 (310-2550)	3,52 B	965	8,5
^{1]} + 12	2,28	2,92		5,20 (1,90-6,30)	1480 (350-2110)	3,51 A	740	6,5	1,5 + 1,7	2,98	3,82		6,80 (1,40-7,30)	1840 (310-2520)	3,70 A	920	8,1
¹⁾ + 15	2,00	3,20		5,20 (1,90-6,40)	1440 (350-2110)	3,61 A	720	6,4	1,3 + 1,8	2,62	4,18		6,80 (1,40-7,30)	1800 (310-2510)	3,78 A	900	8.0
1) + 18	1.73	3,47		5,20 (1,90-6,80)	1290 (360-2150)	4.03 A	645	5.7	1.1 + 2.0	2,27	4,53		6,80 (1,40-8,00)	1520 (310-2200)	4,47 A	760	6.7
0 2 + 10 2	2,60	2,60		5,20 (1,90-6,20)	1540 (350-2100)	3,38 A	770	6,8	1,6 + 1,6	3,40	3,40		6,80 (1,40-7,00)	1930 (310-2550)	3,52 B	965	8,5
0 2) + 12	2,43	2,77		5,20 (1,90-6,30)	1480 (350-2110)	3,51 A	740	6,5	1,5 + 1,6	3,17	3,63		6,80 (1,40-7,30)	1840 (310-2520)	3,70 A	920	8,1
0 2 + 15	2.14	3,06		5,20 (1,90-6,40)	1440 (350-2110)	3,61 A	720	6.4	1.4 + 1.7	2,80	4,00		6,80 (1,40-7,30)	1800 (310-2510)	3,78 A	900	8,0
0 2 + 18	1,87	3,33		5,20 (1,70-6,40)	1290 (360-2150)	4,03 A	645	5,7	1,2 + 1,9	2,44	4,36		6,80 (1,40-8,00)	1520 (310-2200)	4,47 A	760	6,7
	2.60	2,60		5,20 (1,90-6,40)	1450 (350-2120)		725		1.6 + 1.6		3,40		6.80 (1.40-7.50)	1750 (310-2490)	3,89 A	875	7.7
2 + 12						3,59 A		6,4		3,40							
2 + 15	2,31	2,89		5,20 (1,90-6,50)	1410 (350-2120)	3,69 A	705	6,3	1,5 + 1,7	3,02	3,78		6,80 (1,40-7,50)	1750 (310-2470)	3,89 A	875	7,8
2 + 18	2,03	3,17		5,20 (1,90-6,90)	1250 (360-2150)	4,16 A	625	5,5	1,3 + 1,8	2,65	4,15		6,80 (1,40-8,00)	1500 (310-2180)	4,53 A	750	6,6
5 + 15	2,60	2,60		5,20 (1,90-6,50)	1410 (350-2120)	3,69 A	705	6,2	1,6 + 1,6	3,40	3,40		6,80 (1,40-7,60)	1710 (310-2470)	3,98 A	855	7,5
5 + 18	2,31	2,89		5,20 (1,90-6,90)	1250 (360-2160)	4,16 A	625	5,5	1,5 + 1,7	3,02	3,78		6,80 (1,40-8,00)	1500 (310-2170)	4,53 A	750	6,6
Rooms																	
+7+7	1,73	1,73	1,73	5,19 (1,90-7,20)	1220 (360-2170)	4,25 A	610	5,3	1,1 + 1,1 + 1,1	2,26	2,26	2,26	6,78 (1,50-8,10)	1510 (320-2120)	4,49 A	755	6,7
+7+91	1,60	1,60	2,00	5,20 (1,90-7,20)	1220 (360-2170)	4,26 A	610	5,3	1,0 + 1,0 + 1,3	2,09	2,09	2,62	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
7 + 7 + 10 ²	1,53	1,53	2,14	5,20 (1,90-7,20)	1220 (360-2170)	4,26 A	610	5,3	1,0 + 1,0 + 1,4	2,00	2,00	2,80	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
+7+12	1.44	1.44	2,32	5,20 (1,90-7,20)	1210 (360-2180)	4,30 A	605	5,3	0.9 + 0.9 + 1.5	1.89	1.89	3,02	6,80 (1,40-8,30)	1470 (320-2110)	4,63 A	735	6,5
+ 7 + 15	1,30	1,30	2,60	5,20 (1,80-7,30)	1210 (360-2180)	4,30 A	605	5,3	0,8 + 0,8 + 1,6	1.70	1,70	3,40	6,80 (1,60-8,30)	1440 (320-2110)	4,72 A	720	6,4
+7+18	1,16	1,16	2,88	5,20 (1,80-7,30)	1200 (360-2180)	4,33 A	600	5,3	0.7 + 0.7 + 1.7	1,51	1,51	3,78	6,80 (1,60-8,30)	1400 (320-2110)	4,86 A	700	6,5
+ 9 1) + 9 1)	1.48	1,86	1,86	5,20 (1,90-7,20)	1220 (360-2170)	4,26 A	610	5,3	0.9 + 1.2 + 1.2	1.94	2,43	2,43	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
+ 9 1) + 10 2)	1,42	1,78	2,00	5,20 (1,70 7,20)	1220 (360-2170)	4,26 A	610	5,3	0,9 + 1,1 + 1,3	1,86	2,33	2,61	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
+ 9 1) + 12	1,35	1.69	2,16	5,20 (1,90-7,20)	1210 (360-2170)		605		0.9 + 1.1 + 1.4	1,76	2,33	2,83	6,80 (1,40-8,30)	1470 (320-2120)	4,63 A	735	6,5
+9"+12					1210 (360-2180)	4,30 A		5,3									
	1,22	1,53	2,45	5,20 (1,80-7,30)		4,33 A	600	5,3	0,8 + 1,0 + 1,5	1,60	2,00	3,20	6,80 (1,60-8,30)	1400 (320-2110)	4,86 A	700	6,5
+ 10 2 + 10 2		1,92	1,92	5,20 (1,90-7,20)	1220 (360-2170)	4,26 A	610	5,3	0,9 + 1,2 + 1,2	1,78	2,51	2,51	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
+ 10 2) + 12	1,30	1,82	2,08	5,20 (1,90-7,20)	1210 (360-2180)	4,30 A	605	5,3	0,8 + 1,2 + 1,3	1,70	2,38	2,72	6,80 (1,40-8,30)	1470 (320-2110)	4,63 A	735	6,5
+ 10 2 + 15	1,18	1,65	2,37	5,20 (1,80-7,30)	1200 (360-2180)	4,33 A	600	5,3	0,7 + 1,1 + 1,5	1,55	2,16	3,09	6,80 (1,60-8,30)	1400 (320-2110)	4,86 A	700	6,5
+ 12 + 12	1,24	1,98	1,98	5,20 (1,80-7,30)	1200 (360-2180)	4,33 A	600	5,3	0,8 + 1,3 + 1,3	1,62	2,59	2,59	6,80 (1,60-8,30)	1410 (320-2100)	4,82 A	705	6,3
1) + 9 1) + 9 1)	1,73	1,73	1,73	5,19 (1,90-7,20)	1220 (360-2170)	4,25 A	610	5,3	1,1 + 1,1 + 1,1	2,26	2,26	2,26	6,78 (1,50-8,10)	1510 (320-2120)	4,49 A	755	6,7
1) + 9 1) + 10 2	1,67	1,67	1,86	5,20 (1,90-7,20)	1220 (360-2170)	4,26 A	610	5,3	1,1 + 1,1 + 1,2	2,18	2,18	2,44	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
1) + 9 1) + 12	1,59	1,59	2,02	5,20 (1,90-7,20)	1210 (360-2180)	4,30 A	605	5,3	1,0 + 1,0 + 1,3	2,07	2,07	2,66	6,80 (1,40-8,30)	1470 (320-2110)	4,63 A	735	6,5
1) + 9 1) + 15	1.44	1.44	2,32	5.20 (1.80-7.30)	1200 (360-2180)	4,33 A	600	5,3	0.9 + 0.9 + 1.5	1.89	1.89	3,02	6.80 (1.60-8.30)	1400 (320-2110)	4,86 A	700	6,5
1) + 10 2) + 10		1,80	1,80	5,20 (1,90-7,20)	1220 (360-2170)	4,26 A	610	5,3	1.0 + 1.2 + 1.2	2,10	2,35	2,35	6,80 (1,50-8,10)	1510 (320-2120)	4,50 A	755	6,7
1) + 10 ² + 12		1.71	1,96	5,20 (1,70-7,20)	1210 (360-2170)	4,20 A	605	5,3	1.0 + 1.1 + 1.3	2.00	2,24	2,56	6,80 (1,40-8,30)	1470 (320-2120)	4,63 A	735	6,5
1) + 12 + 12	1,33	1.87		5.20 (1.80-7.30)	1200 (360-2180)		600	5,3	0.9 + 1.2 + 1.2	1.92	2.44	2,30		1410 (320-2110)		705	6.3
			1,87			4,33 A							6,80 (1,60-8,30)		4,82 A		
$0^{2} + 10^{2} + 10^{2}$		1,73	1,73	5,19 (1,90-7,20)	1220 (360-2170)	4,25 A	610	5,3	1,1 + 1,1 + 1,1	2,26	2,26	2,26	6,78 (1,50-8,10)	1510 (320-2120)	4,49 A	755	6,7
$0^{2} + 10^{2} + 1$	∠ I,65	1,65	1,90	5,20 (1,90-7,2)	1210 (360-2180)	4,30 A	605	5,3	1,1 + 1,1 + 1,2	2,16	2,16	2,48	6,80 (1,40-8,30)	1470 (320-2110)	4,63 A	735	6,5

FREE MULTI 4X1 /				-4E23LB	E												
capacity		Capacity Room B		Room D	Total (Min,-Max,)			A,C,E, kWh		Moisture Removal Volume (l/h)				Total (Min,-Max,)	Input Power (W) Rating		C,E, Current Vh 230 V (A)
1 Room 7 9 1)	2,00 2,50				2,00 (1,80-2,90) 2,50 (1,80-2,90) 2,80 (1,80-2,90)	500 (340-810) 630 (340-810)	4,00 A 4,00 A	250 315	2,5 3,2 3,5	1,3 1,5	3,20 3,60			3,20 (1,20-4,10)	740 (300-1230) 940 (300-1230) 1050 (300-1230)	4,32 A 37	0 3,7 0 4,7
10 2)	2,80 3,20				3.20 [1.80-3.80]	800 1340-13601	4,00 A 4.00 A	350 400	3,5 3,9	1,6 1,8	4,00 4,50			4,00 (1,20-4,30) 4,50 (1,20-5,80)	1050 (300-1230) 1230 (300-2100)	3,81 A 52 3,66 A 61	5 5,2 5 6,0
15 18	4,00 5,00				<u>4,00 (1,80-4,30)</u> 5,00 (1,90-5,70)	1240 (340-1990) 1550 (340-2130)	3,23 A 3,23 A	620 775	5,8 7,2	2,3 2,7	5,60 6,80			5,60 (1,20-6,80) 6,80 (1,20-6,90)	1230 (300-2100) 1720 (300-2930) 2100 (300-2520)	3,26 C 86 3,24 C 10	0 8,0 50 9,7
2 Room	6,00 2 nn	2 00			6,00 (1,90-6,20) ,4 nn (1 on_4 ,4n)	2030 (340-2330)	2,96 C		9,2	3,3 1,3 + 1,3	8,50 2 on	2 00		8,50 (1,30-9,00)	2400 (620-2530)	3,54 B 12	UU 11,1
7 + 7 7 + 9 ¹⁾ 7 + 10 ²⁾	2,00 2,00 2.00	2,00 2,50 2,80 3,20			4,50 (1,70-6,40) 4,50 (1,90-6,40) 4.80 (1,90-6,40)	1270 (340-2150) 1350 (340-2150)	3,96 A 3,55 A 3,55 A	635	5,7 6,1	1,3 + 1,5 1,3 + 1,6	2,90 2,71 2,67	2,90 3,39 3,73		6,10 (2,70-9,80) 6,40 (2,70-9,80)	1640 (610-2800) 1720 (610-2800)	3,72 A 82 3,72 A 86	0 7,6 0 8.0
7 + 12 7 + 15	2,00 2,00 2,00 2,00 2,00 2,00 1,94	4,00			5,20 (1,90-6,90) 6,00 (1,90-6,90)	1010 340-2150 1270 340-2150 1350 340-2150 1350 340-2150 1360 330-2410 1810 330-2410 1800 320-2440 1380 340-2400 1470 340-2400 1600 340-2410 2070 330-2440 1970 320-2440 1750 340-2400 1750 340-2400 1750 340-2400 1750 340-2410 1750 340-2400 1750 340-2400 1750 340-2400 1750 340-2410	3,44 A 3,32 A 3,78 A	/55	6,8 8,1	1,3 + 1,8 1,3 + 2,3	2,69 2,73	4,31 5,47		5.80 (2,70-9.80) 6.10 (2,70-9.80) 6.40 (2,70-9.80) 7.00 (2,70-9.90) 8.20 (2,70-9.90) 8.60 (2,80-10.20) 8.60 (2,80-10.20) 6.61 (2,70-9.80)	1840 (590-2800) 2210 (590-2800)	3,80 A 92 3,71 A 11	0 8,5 05 10,2
7 + 21	1,94 1,70 2,50	4,86 5,10 2,50			6,80 (2,00-7,50) 6,80 (2,00-7,50) 5 00 (1 00-6 80)	1800 (320-2440) 1800 (320-2440)	3,78 A 3,78 A 3,61 A	900	8,1 8,1 6.2	1,3 + 2,6 1,1 + 2,8 1,5 + 1,5	2,46 2,15 3,20	6,14 6,45		8,60 (2,80-10,20) 8,60 (2,80-10,20)	2140 [530-2760] 2290 [530-2760] 1700 [410-2800]	3,76 A 11	70 9,9 45 10,6 0 7.8
9 ¹⁾ + 10 ²⁾ 9 ¹⁾ + 12	2,50 2,50 2,50 2,50 2,27	2,50 2,80 3,20			5,30 (1,70-6,80) 5,70 (1,90-6,90)	1470 (340-2400) 1660 (340-2410)	3,61 A 3,43 A	725	6.6 7.4	1,5 + 1,6 1,5 + 1.8	3,30 3,55	3,20 3,70 4,55 5,29 5,73		8.60 (2,80-10,20) 8.60 (2,70-9,80) 8.10 (2,70-9,90) 8.60 (2,70-9,90) 8.60 (2,80-10,20) 8.60 (2,80-10,20) 8.60 (2,80-10,20) 8.60 (2,70-9,90) 8.60 (2,70-9,90) 8.60 (2,70-9,90)	1860 (610-2800) 2170 (590-2800)	3,77 A 93 3,73 A 10	0 8,6 85 10,0
9 ¹ + 15 9 ¹ + 18	2,50 2,27	4,00 4,53 4,80			6,50 (1,90-6,90) 6,80 (1,90-7,50)	2070 (330-2410) 1970 (320-2440)	3,43 A 3,13 B 3,45 A	1035 985	9,2 8,8	1,5 + 2,3 1,5 + 2,5	3,30 3,55 3,31 2,87	5,29 5,73		8,60 (2,70-9,90) 8,60 (2,80-10,20)	2320 (590-2800) 2140 (530-2760)	3,71 A 11 4,02 A 10	60 10,7 70 9,9
10 ²⁾ + 10 ²⁾	2,00 2,80 2,80	2,80 3,20			5,60 (1,90-6,80) 6,00 (1,90-6,80)	1970 (320-2440) 1550 (340-2400) 1750 (340-2410)	3,45 A 3,61 A 3,43 A	775	8,8 6,9 7.8	1,3 + 2,6 1,6 + 1,6 1,6 + 1,8	2,53 4,00 3,97	6,07 4,00 4,53		8,00 (2,70-9,80) 8,00 (2,70-9,80) 8,50 (2,70-9,90)	2120 (610-2800) 2280 (590-2800)	3,77 A 10	70 9,9 60 9,8 40 10.5
10 ²⁾ + 15 10 ²⁾ + 18	2,80	4,00 4,36					3 45 ∆	1085 985	9.7 8.8	1,6 + 2,3 1,5 + 2,4	3,54 3,09	5,06 5,51		8,60 (2,70-9,90) 8,60 (2,80-10,20)	2320 (590-2800) 2140 (530-2760)	3,71 A 11 4,02 A 10	60 10.7 70 9.9
10 ^{2]} + 21 12 + 12	2,16 3,20	4,64 3,20			6,80 (1,90-7,50) 6,40 (1,90-7,00)	1970 320-2440 1970 320-2440 1960 330-2420 2070 330-2420 1890 320-2450 1890 320-2450 2270 330-2420	3,45 A 3,27 A 3,29 A	985 980	8,8	1,4 + 2,5 1,8 + 1,8	2,74 4,30	5,86 4,30		8,60 (2,80-10,20) 8,60 (2,80-10,20) 8,60 (2,80-10,00) 8,60 (2,80-10,00) 8,60 (2,80-10,30) 8,60 (2,80-10,30) 8,60 (2,80-10,30) 8,60 (2,80-10,00)	2140 (530-2760) 2270 (580-2800)	4,02 A 10 3,79 A 11	70 9,9 35 10,5
12 + 18	3,02 2,65 2.37	3,78 4,15 4,43			6,80 (1,70-7,10) 6,80 (2,00-7,60) 6,80 (2,00-7,60)	1890 (320-2450) 1890 (320-2450)	3,60 A 3,60 A	945	9,3 8,5 8,5	1,7 + 2,2 1,6 + 2,4 1,5 + 2,5	3,82 3,36 2,99	4,78 5,24 5,61		8,60 (2,80-10,00) 8,60 (2,80-10,30) 8,60 (2,80-10,30)	2090 (520-2740) 2090 (520-2740)	4,11 A 10	35 10,5 45 9,7 45 9.7
15 + 15 15 + 18	3,40 3,02	3,40 3,78			0,00 (2,00-7,00)	1070 (320-2430)	3,00 C 3,60 A	1135 945	10,2 8,5	1,9 + 1,9 1,7 + 2,2	4,30 3,82	4,30 4,78		0.00 (2.00-10.30)	2000 [310-2/40]	4. I 3 A I I	40 7.0
15 + 21 18 + 18	2,72 3,40	4,08 3,40			6.80 (2.00-7.60)	1890 (320-2450) 1780 (310-2460) 1780 (310-2460)	3,60 A 3,82 A 3,82 A	945	8,5 8,0	1,6 + 2,3 1,9 + 1,9	3,44 4,30	5,16 4,30		8.60 (2.80-10.30)	2080 (510-2740) 1960 (480-2650) 1960 (480-2650)	4.13 A 10	40 9.6
3 Room	3,09 2,00	2.00	2,00		6,00 (1,90-8,00)	1650 (340-2460)			7.4	1,7 + 2,2 1.3 + 1.3 + 1.3	3,91 2,86	2.86	2,86		2090 (600-2840)		
7 + 7 + 9 ¹⁾ 7 + 7 + 10 ²⁾	2,00 2,00	2,00 2,00	2,50 2,80		<u>6,50 (1,90-8,00)</u> 6,80 (1,90-8,00)	1830 (340-2460) 1910 (340-2460)	3,63 A 3,56 A 3,56 A	955	8,2 8,6	1,3 + 1,3 + 1,3 1,3 + 1,3 + 1,5 1,3 + 1,3 + 1,6	2,65 2,53	2,86 2,65 2,53	3,30 3,54	8,60 (3,30-10,40) 8,60 (3,30-10,40)	2090 (600-2840) 2090 (600-2840)	4,11 A 10 4,11 A 10	45 9,7 45 9,7
7 + 7 + 15	1,89 1,70 1,51	1,89 1,70 1,51	3,02 3,40 3,78		6,80 (1,90-8,00) 6,80 (1,90-8,10) 6,80 (2,00-8,50)	1910 (340-2460) 1860 (340-2460) 1730 (340-2460)	3,56 A 3,66 A 3,93 A	930	8,6 8,3 7,8	1,2 + 1,2 + 1,7 1,1 + 1,1 + 1,9 1,0 + 1,0 + 2,2	2,39 2,15 1,91	2,39 2,15 1,91	3,82 4,30 4,78	8,60 (3,30-10,50)	2070 (590-2820) 2060 (590-2810) 1930 (570-2710)	4,17 A 10	30 9,5
7 + 7 + 21	1,36 1,94	1,36 2,43	3,70 4,08 2,43		6,80 (2,00-8,50) 6,80 (1,90-8,00)	1730 (340-2460)	3,93 A 3,56 A	865	7.8 8.6	0,9 + 0,9 + 2,3 1,3 + 1,5 + 1,5	1,71	1,72 3.07	5,16 3,07	8,60 (3,20-10,60)	1930 (570-2710) 1930 (570-2710) 2090 (600-2840)	4,46 A 96	5 8,9
7 + 9 ¹⁾ + 10 ²⁾ 7 + 9 ¹⁾ + 12	1,86 1,76	2,33 2,21	2,61 2,83		<u>6,80 (1,90-8,00)</u> 6,80 (1,90-8,00)	1910 (340-2460) 1910 (340-2460)	3,56 A 3,56 A	955 955	8,6 8,6	1,2 + 1,5 + 1,6 1,1 + 1,4 + 1,7	2,35 2,23	2,95 2,79 2,53	3,30 3,58	8,60 (3,30-10,40) 8,60 (3,30-10,40)	2090 (600-2840) 2070 (590-2820)	4,11 A 10 4,15 A 10	45 9,7 35 9,6
7 + 9 1) + 18	1,60 1,43 1,29	2,00 1,79 1,62	3,20 3,58 3,89		6,80 (1,90-8,10) 6,80 (2,00-8,50) 6,80 (2,00-8,50)	1860 (340-2460) 1730 (340-2460) 1730 (340-2460)	3,66 A 3,93 A 3,93 A	865	8,3 7,8 7.8	1,0 + 1,3 + 1,8 0,9 + 1,2 + 2,1 0,8 + 1,0 + 2,3	2,02 1,81 1,64	2,53 2,26 2,05	4,05 4,53 4,91	8,60 (3,20-10,60)	2060 (590-2810) 1930 (570-2710) 1930 (570-2710)	4,46 A 96	5 8,9
7 + 10 ² + 10 ² 7 + 10 ² + 12	1.78 1.70	2,51 2,38	2,51 2,72		6.80 (1.90-8.00)	1910 (340-2460)	3,56 A 3.56 A	955 955	8.6 8.6	1,1 + 1,5 + 1,5 1,1 + 1,5 + 1,6	2,26 2,15	3,17 3,01	3,17 3,44	8.60 (3.30-10.40)	2090 (600-2840)	4.11 A 10	45 9.7
$7 + 10^{2} + 18$	1,55	2,16 1,94	3,09		6,80 (2,00-8,50)	1910 (340-2460) 1860 (340-2460) 1730 (340-2460)	3,66 A 3,93 A	865	8,3 7,8	1,0 + 1,4 + 1,7 0,9 + 1,3 + 2,0	1,95	2,74	3,91 4,39	8,60 (3,20-10,60)	2070 (590-2820) 2060 (590-2810) 1930 (570-2710)	4,46 A 96	5 8,9
7 + 12 + 12	1,26 1,62 1,47	1,76 2,59 2,37	3,78 2,59 2,96		6,80 (1,90-8,10)	1730 (340-2460) 1860 (340-2460) 1860 (340-2460)	3,93 A 3,66 A 3,66 A	930	7,8 8,3 8.3	0,8 + 1,1 + 2,2 1,0 + 1,6 + 1,6 0,9 + 1,5 + 1,7	1,59 2,04 1,87	2,23 3,28 2.99	4,78 3,28 3,74	8.60 (3.30-10.50)	1930 (570-2710) 2050 (590-2800) 2040 (580-2790)	4.20 A 10	25 9.5
7 + 12 + 18 7 + 15 + 15	1,33 1,36	2,13	3,34 2,72		6,80 (2,00-8,50) 6,80 (1,90-8,20)	1730 (340-2460) 1820 (340-2460)	3,93 A 3,74 A	865 910	7,8 8,2	0,8 + 1,4 + 1,9 0,9 + 1,6 + 1,6	1,68 1,72	2.70 3.44	4,22 3,44	8,60 (3,20-10,60) 8,60 (3,30-10,50)	1910 (570-2680) 2030 (580-2780)	4,50 A 95 4,24 A 10	5 8.8 15 9.4
9 1 + 9 1 + 9 1	1,24 2,26	2,47 2,26 2,18 2,07	3,09 2,26		6,78 (1,90-8,00)	1730 (340-2460) 1910 (340-2460) 1910 (340-2460)	3.55 A	955	7,8 8,6	0,8 + 1,5 + 1,7 1,5 + 1,5 + 1,5 1,4 + 1,4 + 1,5	1,56 2,86	3,13 2,86	3,91 2,86 3,08	8,58 (3,30-10,40)	1910 (570-2680) 2090 (600-2840) 2090 (600-2840)	4.11 A 10	45 9,7
9 11 + 9 11 + 12 9 11 + 9 11 + 15	2,18 2,07 1,89	2,10 2,07 1,89	2,26 2,44 2,66 3,02		6,80 (1,90-8,00)	1910 (340-2460) 1910 (340-2460) 1860 (340-2460)	3,56 A	955	8,6 8,6 8,3	1,3 + 1,3 + 1,6 1,2 + 1,2 + 1,7	2,76 2,62 2,39	2,76 2,62 2,39	3,36 3,82	8,60 (3,30-10,40)	2070 (590-2820) 2060 (590-2810)	4,15 A 10	35 9,6
9 ¹¹ + 9 ¹¹ + 18 9 ¹¹ + 9 ¹¹ + 21	1,70 1,55	1,70 1,55	3,40 3,70		6,80 (2,00-8,50) 6,80 (2,00-8,50)	1730 (340-2460) 1730 (340-2460)	3,93 A 3,93 A	865 865	7.8 7.8	1,1 + 1,1 + 1,9 1,0 + 1,0 + 2,2	2,15 1,95	2,15 1,95	4,30 4,70	8,60 (3,20-10,60) 8,60 (3,20-10,60)	1930 (570-2710) 1930 (570-2710)	4,46 A 96	5 8,9 5 8,9
9 1 + 10 2 + 12	2,10 2,00 1,83	2,35 2,24 2,05	2,35 2,56 2,92		6,80 (1,90-8,00)	1910 (340-2460) 1910 (340-2460) 1860 (340-2460)	3,56 A	955	8,6 8,6 8,3	1,4 + 1,5 + 1,5 1,3 + 1,5 + 1,6 1,2 + 1,3 + 1,7	2,66 2,53 2,31	2,97 2,83 2,59	2,97 3,24 3,70	8.60 (3.30-10.40)	2090 (600-2840) 2070 (590-2820) 2060 (590-2810)	4.15 A 10	35 9.6
9 1) + 10 2) + 18	1,65 1,92	1 85			6,80 (2,00-8,50) 6 80 (1 90-8 10)	1730 (340-2460)	3,93 A	865 930	7,8 8,3	1,1 + 1,2 + 1,9 1,2 + 1,5 + 1,5	2,09 2,42	2,34 3.09	4,17 3,09	8,60 (3,20-10,60) 8,60 (3,30-10,50)	1930 (570-2710) 2050 (590-2800)	4,46 A 96 4,20 A 10	5 8,9 25 9,5
9 11 + 12 + 18	1,75 1,59	2,44 2,24 2,03 2,59	2,44 2,81 3,18 2,59 2,26		6,80 (1,90-8,20) 6,80 (2,00-8,50)	1860 (340-2460) 1730 (340-2460) 1820 (340-2460) 1910 (340-2460)	3,66 A 3,93 A	930 865	8,3 7,8	1,1 + 1,5 + 1,6 1,0 + 1,3 + 1,8	2,21	2,84 2,57 3,28	3,55 4,02 3,28	8,60 (3,30-10,50) 8,60 (3,20-10,60)	2040 (580-2790) 1910 (570-2680) 2030 (580-2780)	4,22 A 10 4,50 A 95	20 9,4 5 8,8
111 4 + 111 4 + 111 4	1,62 2,26 2,16	2,39 2,26 2,16	2,39 2,26 2,48		6,78 (1,90-8,00) 6,80 (1,90-8,00)	1910 (340-2460) 1910 (340-2460)	3,55 A 3,56 A	955 955	8,2 8,6 8,6	1,0 + 1,6 + 1,6 1,5 + 1,5 + 1,5 1,4 + 1,4 + 1,5	2,04 2,86 2,74	2.86	2,86 3,12	8,58 [3,30-10,40]	2090 [600-2840]	4,11 A 10	45 9,7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,98 1,80	1,98	2,84 3,20		6,80 (1,90-8,10) 6,80 (2,00-8,50)	1860 (340-2460) 1730 (340-2460)	3,66 A 3,93 A	930 865	8,3 7,8 8,3	1,3 + 1,3 + 1,7 1,2 + 1,2 + 1,8 1,3 + 1,5 + 1,5	2,51 2,27	2,51	3,58	8,60 (3,30-10,50) 8,60 (3,20-10,60)	2060 (590-2810) 1930 (570-2710)	4,17 A 10 4,46 A 96	30 9,5 5 8,9
10 ²¹ + 12 + 12 10 ²¹ + 12 + 15 10 ²¹ + 12 + 15	1,98 1,80 2,06 1,90 1,73 1,76 2,26	1,98 1,80 2,37 2,18 1,98 2,52 2,26 2,09	2,84 3,20 2,37 2,72 3,09 2,52 2,26 2,62		6,80 (1,90-8,20) 6,80 (2,00-8,50)	910 340-2460 1860 340-2460 1730 340-2460 1860 340-2460 1860 340-2460 1860 340-2460 1860 340-2460 1820 340-2460 340-2460 340-2460 340-2460 340-2460 340-2460 340-2460	3,66 A 3,93 A	930 865	8,3 8,3 7,8 8,2	1,3 + 1,5 + 1,5 1,2 + 1,4 + 1,6 1,1 + 1,3 + 1,7 1,1 + 1,5 + 1,5	2,62 2,41 2,19	2,51 2,27 2,99 2,75 2,50 3,19	4,06 2,99 3,44 3,91 3,19 2,86 3,30	8,60 (3,30-10,40) 8,60 (3,20-10,60) 8,60 (3,30-10,50) 8,60 (3,30-10,50) 8,60 (3,20-10,60) 8,60 (3,30-10,50) 8,58 (3,30-10,50) 8,60 (3,30-10,50)	2040 (580-2790) 1910 (570-2680)	4,20 A 10 4,22 A 10 4,50 A 95	20 9,4 5 8.8
10 ° 12 + 15 10 ° + 15 + 15 12 + 12 + 12	1,76 2,26	2,52 2,26	2,52 2,26		6,80 (1,90-8,20) 6,78 (1,90-8,20)	1820 (340-2460) 1820 (340-2460)	3,74 A 3,73 A	910 910	8,2	1,5 + 1,5 + 1,5	2,22	2.86	3,19 2,86	8,60 (3,30-10,50) 8,58 (3,30-10,50)	2030 (580-2780) 1990 (580-2770)	4,24 A 10 4,31 A 99	15 9,4 5 9,2
12 + 12 + 15 4 Room	2,09 1.70	2,09 1.70	2,62 1.70	1.70	6,8U (1,90-8,20) 6 80 (1 90-9 70)	1820 (340-2460)	3,74 A	910 8/5	7.6	1,4 + 1,4 + 1,6 11 + 11 + 11 + 11	2,65	2,65					
7 + 7 + 7 + 9 1) 7 + 7 + 7 + 10 2)	1,60 1,55	1,60 1,55 1,48	1,60 1.55	2,00 2,15 2,36 2,72	6,80 (1,90-8,70) 6,80 (1,90-8,70)	1690 (340-2460) 1690 (340-2460) 1690 (340-2460) 1650 (340-2470) 1650 (340-2470) 1680 (340-2470)	4,02 A 4,02 A	845 845	7,6 7,6 7,4	1,0 + 1,0 + 1,0 + 1,3 1,0 + 1,0 + 1,0 + 1,4 0,9 + 0,9 + 0,9 + 1,5	2,02	2,02 1 95	2,15 2,15 2,02 2,54 1,95 2,75 1,87 2,99	8.60 (3.10-10.60) 8.60 (3.10-10.60) 8.60 (3.10-10.60) 8.60 (3.00-10.60) 8.60 (3.00-10.60) 8.60 (3.00-10.60) 8.60 (3.10-10.60) 8.60 (3.10-10.60) 8.60 (3.10-10.60) 8.60 (3.10-10.60) 8.60 (3.10-10.60) 8.60 (3.00-10.60) 8.60 (3.00-10.60) 8.60 (3.00-10.60) 8.60 (3.00-10.60) 8.60 (3.00-10.60)	1870 (580-2620) 1870 (580-2620)	4,60 A 93	5 8,6 5 8,6
7 + 7 + 7 + 12 7 + 7 + 7 + 15	1,48 1,36	1,36	1,48 1,36 1,24	2,36	6,80 (1,90-8,80) 6,80 (1,90-8,80)	1650 (340-2470) 1650 (340-2470)	4,12 A	825 825	7,4	0.9 + 0.9 + 0.9 + 1.5 0.9 + 0.9 + 0.9 + 1.6	1,87	1,87	1,87 2,99 1,72 3,44	8,60 (3,00-10,60) 8,60 (3,00-10,60)	1850 (580-2600) 1840 (590-2590)	4,65 A 92 4,67 A 92	5 8,6 0 8,5
7 + 7 + 9 1 + 9 1	1,24 1,51 1,46	1,24 1,51 1,46	1,24 1,89 1,83	2 05	6,80 (1,90-8,80) 6,80 (1,90-8,70) 6,80 (1,90-8,70)	1680 (340-2470) 1690 (340-2460) 1690 (340-2460)	4,05 A 4,02 A 4,02 A	845	7,5 7,6 7,6	0,9 + 0,9 + 0,9 + 1,6 0,8 + 0,8 + 0,8 + 1,7 1,0 + 1,0 + 1,2 + 1,2 0,9 + 0,9 + 1,7 + 1,3	1,56 1,91 1,85	1,56 1,91 1,85	1,56 3,92 2,39 2,39 2,31 2,59	8,60 (3,10-10,60) 8,60 (3,10-10,60) 8,60 (3,10-10,60)	1870 (580-2620) 1870 (580-2620) 1870 (580-2620)	4,05 A 92 4,60 A 93 4,60 A 03	5 8,6 5 8,6 5 8,6
7 + 7 + 9 11 + 12 7 + 7 + 9 11 + 15	1,40 1,30	1,40 1,30	1,75	2,25	6,80 (1,90-8,80) 6,80 (1,90-8,80)	1650 (340-2470) 1650 (340-2470)	4,12 A 4,12 A	825 825	7,4 7,4	0.9 + 0.9 + 1.2 + 1.3 0.9 + 0.9 + 1.1 + 1.5 0.8 + 0.8 + 1.0 + 1.6	1,77	1,77	2,31 2,37 2,22 2,84 2,04 3,28	8,60 (3,00-10,60) 8,60 (3,00-10,60)	1850 (580-2600) 1840 (590-2590)	4,65 A 92 4,67 A 92	5 8,6 0 8,5
7 + 7 + 10 2 + 12	1,42 1,36 1,26	1,42 1,36	1.98	1,98 2,18	<u>6,80 (1,90-8,70)</u> 6,80 (1,90-8,80)	1690 (340-2460) 1650 (340-2470)	4,02 A 4,12 A	845 825	7,6 7,4 7,4	0,9 + 0,9 + 1,3 + 1,3 0,9 + 0,9 + 1,2 + 1,4	1,79	1,79 1,72 1,59	2,51 2,51 2,41 2,75 2,23 3,19	8,60 (3,10-10,60) 8,60 (3,00-10,60)	1870 (580-2620) 1850 (580-2600)	4,60 A 93 4,65 A 92	5 8,6 5 8,6
7 + 7 + 12 + 12 7 + 9 1) + 9 1) + 9 1)	1,26 1,31 1,43	1,26 1,31 1,79	1,76 2,09 1,79	2.09	6.80 (1.90-8.80)	1650 (340-2470) 1650 (340-2430) 1690 (340-2460)	4,12 A 4,12 A 4,02 A	825	7,4 7,4 7.6	0,8 + 0,8 + 1,1 + 1,5 0,8 + 0,8 + 1,4 + 1,4 0,9 + 1,2 + 1,2 + 1,2	1.65	1,65 2,26	2,65 2,65 2,26 2,26	8,60 (3,00-10,60) 8,60 (3,10-10,60)	1830 (590-2570) 1870 (580-2620)	4,07 A 92 4,70 A 91 4,60 A 93	0 8,5 5 8,5 5 8.6
7 + 9 1) + 9 1) + 10 2)	1,39 1,33 1,23	1,73	1,73	1.95	6.80 (1.90-8.70)	1690 (340-2460) 1650 (340-2470) 1680 (340-2470)	4,02 A 4,12 A	845 825	7.6	0,9 + 1,1 + 1,1 + 1,3 0,8 + 1,1 + 1,1 + 1,4	1,76 1,68	2,19	2,19 2,46 2,11 2,70	8 60 (3 10-10 60)	1870 (580-2620) 1850 (580-2600) 1850 (590-2600)	4 60 A 93	5 8.6
7 + 9 1 + 10 2 + 10 2	1,34	1,55 1,68	1,55 1,89 1,81	1.89	6.80 11.90-8.701	1690 (340-2460)	4,05 A 4,02 A	840 845	7,5 7,6	0,8 + 1,0 + 1,0 + 1,5 0,8 + 1,1 + 1,2 + 1,2 0,8 + 1,0 + 1,2 + 1,3	1,56 1.70	1,95 2,14 2,05	1,95 3,14 2.38 2.38	8,60 (3,10-10,60)	1870 (580-2620)	4,6U A 93	5 8,6
$7 + 9^{1} + 12 + 12$ $7 + 10^{2} + 10^{2} + 10^{2}$	1,30 1,24 1,31	1,62 1,56 1,83	2,00 1,83	2,07 2,00 1,83	6,80 (1,90-8,80) 6,80 (1,90-8,70)	1650 (340-2470) 1650 (340-2430) 1690 (340-2460)	4,12 A 4,12 A 4,02 A	825	7,4 7,4 7,6	0,8 + 1,0 + 1,2 + 1,3 0,8 + 1,0 + 1,3 + 1,3 0,8 + 1,2 + 1,2 + 1,2	1,58	2,05 1,98 2,32	2,29 2,62 2,52 2,52 2,32 2,32	8,60 (3,00-10,60)	1850 (580-2600) 1830 (590-2570) 1870 (580-2620)	4,70 A 91	5 8,5
7 + 10 ²¹ + 10 ²¹ + 12 9 11 + 9 11 + 9 11 + 9 11	1,26 1,70	1,76 1,70	1,76 1,70	2,02 1,70	6,80 (1,90-8,80) 6,80 (1,90-8,70)	1680 (340-2470) 1690 (340-2460)	4,05 A 4,02 A	840 845	7.5 7.6	0,8 + 1,1 + 1,1 + 1,3 1,1 + 1,1 + 1,1 + 1,1	1,59 2,15	2,23 2,15	2,23 2,55 2,15 2,15	8,60 (3,00-10,60) 8,60 (3,10-10,60)	1850 (580-2600) 1870 (580-2620)	4,65 A 92 4,60 A 93	5 8,6 5 8,6
9"+9"+9"+10"	1,65 1,59 1,60	1,65 1,59 1,60	1,65 1,59 1,80	2,03	6,80 (1,90-8,70) 6,80 (1,90-8,80) 6,80 (1,90-8,70)	1650 (340-2470)	4,02 A 4,12 A 4,02 A	825	7,6 7,4 7,6	1,1 + 1,1 + 1,1 + 1,2 1,0 + 1,0 + 1,0 + 1,3 1,0 + 1,0 + 1,2 + 1,2	2.01	2,09 2,01 2,03	2,09 2,33 2,01 2,57 2,27 2,27	8.60 (3.00-10.60)	1870 (580-2620) 1850 (580-2600) 1870 (580-2620)	4.65 A 92	5 8.6
9 1) + 9 1) + 10 2) + 12	1,55	1,55	1,72		6,80 (1,90-8,80)	1680 (340-2470)	4,05 A	8/0	7,5	1,0 + 1,0 + 1,1 + 1,3	1 95	1,95	2,19 2,51 2,21 2,21	8,60 (3,00-10,60)	1850 (580-2600)	4 65 A 92	5 8,6

¹⁾ For wall type, hyde away, 60x60 cassette. 2) For one way cassette, floor/ceiling, floor console.

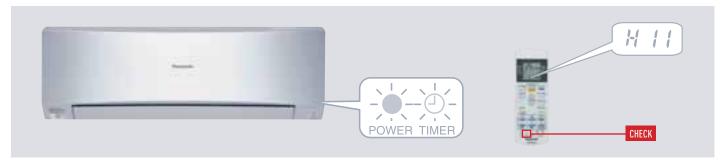
ndoor unit appacity Room 11 0 21 2 55 8 Room + 7 + 7 9 11 + 10 21 + 12 + 15 + 18 11 + 19 11 11 + 10 21 11 + 112 11 + 112 11 + 112 11 + 118 0 21 + 134 0 2		2,00 2,50 2,80 3,20 4,00		2,50 (2,00-3,40) 2,80 (2,00-3,40) 3,20 (2,00-3,90)	440 (380-620) 550 (380-900) 620 (380-900) 720 (380-1090) 1030 (380-1390)	4,52 A 4,52 A 4,52 A 4,44 A	220 275	2,10 2,60	Moisture Removal Volume (l/h)	3,20			Total (Min,-Max,) 3,20 (1,70-4,70)		W/W 3,81 A	kWh	230 V (A) 3,85
Room 10 0 21 2 5 5 8 Room + 7 + 9 11 + 10 21 + 12 + 15 + 18 11 + 9 11 11 + 10 21 11 + 12 11 + 15 11 + 10 11 + 18 10 21 11 + 10 11 + 18 10 21 11 + 18 10 21 11 + 18 10 21 11 + 18 10 21 11 + 18	2,00 2,50 2,80 3,20 4,00 5,00 2,00 2,00 2,00 2,00 2,00 2,00 2	2,00 2,50 2,80 3,20 4,00		2,00 (1,90-2,70) 2,50 (2,00-3,40) 2,80 (2,00-3,40) 3,20 (2,00-3,90) 4,00 (2,00-4,40)	440 (380-620) 550 (380-900) 620 (380-900) 720 (380-1090) 1030 (380-1390)	4,52 A 4,52 A 4,52 A	220 275	2,10 2,60	1,3	3,20			3,20 (1,70-4,70)		3,81 A		
0 2 ¹ 2 5 8 Room + 7 + 9 ¹¹ + 10 ²¹ + 12 + 18 11 + 19 ¹¹ 11 + 112 11 + 15 11 + 10 ²¹ 11 + 12 11 + 18 0 ²¹ + 10 ²¹	2,50 2,80 3,20 4,00 5,00 2,00 2,00 2,00 2,00 2,00 2,00 2	2,50 2,80 3,20 4,00		2,50 (2,00-3,40) 2,80 (2,00-3,40) 3,20 (2,00-3,90) 4,00 (2,00-4,40)	550 (380-900) 620 (380-900) 720 (380-1090) 1030 (380-1390)	4,52 A 4,52 A	275	2,60						840 (370-1830)		420	2 0 5
0 2 ¹ 2 5 8 Room + 7 + 9 ¹¹ + 10 ²¹ + 12 + 18 11 + 19 ¹¹ 11 + 112 11 + 15 11 + 10 ²¹ 11 + 12 11 + 18 0 ²¹ + 10 ²¹	2,80 3,20 4,00 5,00 2,00 2,00 2,00 2,00 2,00 2,00 2	2,50 2,80 3,20 4,00		2,80 (2,00-3,40) 3,20 (2,00-3,90) 4,00 (2,00-4,40)	620 (380-900) 720 (380-1090) 1030 (380-1390)	4,52 A							2 (0 (1 70 / 00)	1000 (270 1000)	2 21 C	E/E	
2 5 5 8 8 Room + 7 + 9 11 + 110 21 + 115 + 115 11 + 115 11	3,20 4,00 5,00 2,00 2,00 2,00 2,00 2,00 2,00 2	2,50 2,80 3,20 4,00		3,20 (2,00-3,90) 4,00 (2,00-4,40)	720 (380-1090) 1030 (380-1390)			2,95	1,5 1,6	3,60 4,00				1090 (370-1900) 1210 (370-1900)			4,85 5,40
8 Room + +7 +9 11 +10 21 +15 +15 11 +	5,00 2,00 2,00 2,00 2,00 2,00 2,00 2,50 2,5	2,50 2,80 3,20 4,00					360		1,8	4,50				1310 (370-2290)			5,85
Room + 7 + 9 '11 + 10 '21 + 12 + 15 + 18 11 + 9 '11 11 + 10 '21 11 + 12 11 + 15 11 + 18 10 21 + 10 21	2,00 2,00 2,00 2,00 2,00 2,00 2,50 2,50	2,50 2,80 3,20 4,00		5,00 (2,10-5,20)		3,88 A			2,3	5,60				1900 (370-3560)			8,35
+ 7 + 9 11 + 10 21 + 12 + 15 + 18 + 18 11 + 9 11 11 + 10 21 11 + 12 11 + 15 11 + 18 0 21 + 10 21	2,00 2,00 2,00 2,00 2,00 2,50 2,50	2,50 2,80 3,20 4,00			1610 (400-1800)	3,11 B	805	7,15	2,7	7,10			7,10 (2,10-7,30)	2840 (430-3560)	2,50 F	1420	12,40
+ 9 11 + 10 21 + 12 + 15 + 18 11 + 9 11 11 + 10 21 11 + 12 11 + 15 11 + 18 0 21 + 10 21	2,00 2,00 2,00 2,00 2,00 2,50 2,50	2,50 2,80 3,20 4,00		4,00 (2,10-5,00)	890 (400-1260)	4,49 A	//5	3,95	1,3 + 1,3	3,20	3,20		6,40 (1,80-9,40)	1480 (400-3550)	/ 22 A	7/0	6,50
+ 10 ²¹ + 12 + 15 + 18 ¹¹ + 9 ¹¹ ¹¹ + 10 ²¹ ¹¹ + 12 ¹¹ + 12 ¹¹ + 15 ¹¹ + 18 ⁰ ²¹ + 10 ²¹	2,00 2,00 2,00 2,00 2,00 2,50 2,50	2,80 3,20 4,00		4,50 (2,10-6,10)		4,47 A			1,3 + 1,5		3,95			1700 (420-3510)			7,55
+ 15 + 18 11 + 9 11 11 + 10 21 11 + 12 11 + 15 11 + 18 0 21 + 10 21	2,00 2,00 2,50 2,50	4,00				4,07 A			1,3 + 1,6		4,15			1700 (420-3510)			7,55
+ 18 11 + 9 11 11 + 10 21 11 + 12 11 + 15 11 + 18 0 21 + 10 21	2,00 2,50 2,50					3,94 A			1,3 + 1,8		4,60			1740 (420-3490)			7,65
1) + 9 1) 1) + 10 2) 1) + 12 1) + 15 1) + 18 0 2) + 10 2)	2,50 2,50	5,00				3,41 A 2,80 D			1,3 + 2,3 1,3 + 2,7		5,55 6,30			2060 (440-3440) 2260 (530-3400)			9,05 9,90
1) + 12 1) + 15 1) + 18 0 2) + 10 2)		2,50				3,61 A			1,5 + 1,5		3,55			1860 (440-3480)			8,15
1) + 15 1) + 18 0 2) + 10 2)	2,50	2,80				3,61 A		6,50	1,5 + 1,6		3,95		7,50 (2,30-9,40)	1970 (440-3480)			8,65
1) + 18 0 ²⁾ + 10 ²⁾		3,20				3,53 A			1,5 + 1,8		4,55				4,09 A		8,70
0 2) + 10 2)	2,50 2,35	4,00 4,75				2,98 C 2,72 D			1,5 + 2,3 1,5 + 2,6		5,30 6,00			2175 (530-3390) 2390 (530-3370)			9,65 10.50
	2,80	2,80				3,61 A			1,6 + 1,6		3,85			2020 (440-3480)			8,85
0 2) + 12	2,80	3,20				3,53 A		7,55	1,6 + 1,8		4,30			1980 (440-3460)			8,70
0 2] + 15	2,80	4,00				2,98 C			1,6 + 2,3		5,05		8,60 (2,10-9,80)	2175 (530-3390)	3,95 A	1088	9,65
0 2 + 18	2,55	4,55				2,72 D			1,6 + 2,5		5,75			2390 (530-3370) 2110 (470-3390)			10,50
2 + 12 2 + 15	3,20	3,20 3,90			1860 (400-2810) 2410 (460-2810)	3,44 A 2 90 C			1,8 + 1,8 1,7 + 2,3		4,25 4,90			2230 (530-3340)			9,30 9,85
2 + 18	2,90	4,50				2,62 D			1,7 + 2,5		5,60			2390 (530-3300)			10,50
5 + 15	3,60	3,60		7,20 (2,50-7,30)	2620 (460-2810)	2,75 D	1310	11,50	2,1 + 2,1	4,55	4,55		9,10 (3,20-10,10)	2360 (530-3320)	3,86 A	1180	10,30
5 + 18	3,25	4,05				2,73 D			1,8 + 2,3		5,20			2480 (530-3300)			10,90
8 + 18 Room	3,75	3,75		7,50 (2,80-7,60)	2860 (480-2870)	Z,6Z D	1430	12,50	2,2 + 2,2	4,70	4,70		7,40 (3,50-10,20)	2470 (590-3290)	3,81 A	1235	10,90
+7+7	2,00	2,00	2,00	6,00 (2,20-7,80)	1510 (410-2490)	3,98 A	755	6,65	1,3 + 1,3 + 1,3	2,87	2,87	2,87	8,61 (3,10-10.40)	1990 (500-3250)	4,33 A	995	8,80
+7+91	2,00	2,00	2,50	6,50 (2,50-8,10)		3,70 A			1,3 + 1,3 + 1,5			3,40		2010 (510-3220)			8,85
+7 + 10 2)	2,00	2,00	2,80			3,70 A			1,3 + 1,3 + 1,6			3,60		2010 (510-3220)			8,85
+ 7 + 12 + 7 + 15	2,05 1,95	2,05 1,95	3,20 3,90			3,69 A 3,35 A			1,3 + 1,3 + 1,8 1,3 + 1,3 + 2,3			4,00 4,60		2030 (510-3220) 2150 (510-3180)			8,95 9,50
+7+13	1,80	1,80	4,40			3,25 A			1,2 + 1,2 + 2,4			5,20		2120 (510-3180)			9,30
+ 9 1 + 9 1	2,10	2,65	2,65	7,40 (2,50-8,10)		3,46 A			1,4 + 1,6 + 1,6			3,20		2090 (510-3190)			
+ 9 1) + 10 2)	2,00	2,55	2,85			3,46 A			1,3 + 1,6 + 1,7			3,45		2090 (510-3190)			9,20
+ 9 ¹⁾ + 12 + 9 ¹⁾ + 15	1,95	2,45	3,20			3,39 A			1,3 + 1,5 + 1,8			3,80		2110 (510-3180)			9,30
+911+18	1,90 1,70	2,35	3,75 4,20	8,00 (2,70-8,20) 8,00 (2,80-8,30)		3,19 B 3,25 A			1,2 + 1,5 + 2,2 1,1 + 1,4 + 2,4			4,45 4,95		2160 (510-3140) 2080 (560-3150)			9,50
+ 10 2) + 10 2)	1,90	2,75	2,75	7,40 (2,50-8,10)		3,46 A			1,2 + 1,6 + 1,6			3,30		2090 (510-3190)			
+ 10 2) + 12	1,90	2,65	3,05	7,60 (2,60-8,20)		3,39 A			1,2 + 1,6 + 1,7			3,70		2110 (510-3180)			9,30
+ 10 2 + 15	1,80	2,55	3,65			3,19 B			1,2 + 1,6 + 2,1			4,25		2160 (510-3140)			9,50
+ 10 ² + 18 + 12 + 12	1,60	2,30 3,00	4,10 3,00			3,25 A 3,45 A			1,0 + 1,5 + 2,3 1,2 + 1,7 + 1,7			4,80 3,55		2080 (560-3150) 2130 (500-3180)			9,15 9,40
+ 12 + 15	1,70	2,80	3,50			3,36 A			1,1 + 1,6 + 2,0			4,10		2150 (500-3140)			9,50
+ 12 + 18	1,55	2,50	3,95	8,00 (2,80-8,30)	2470 (490-2840)	3,24 A	1235	10,90	1,0 + 1,5 + 2,3	1,85	2,95	4,60	9,40 (3,70-10,50)	2170 (620-3140)	4,33 A	1085	
+ 15 + 15	1,60	3,20	3,20			3,36 A			1,0 + 1,8 + 1,8			3,75		2110 (620-3110)			9,30
+ 15 + 18 + 18 + 18	1,45 1,30	2,90 3,35	3,65 3,35			3,24 A 3,29 A			0,9 + 1,7 + 2,1 0,8 + 1,9 + 1,9			4,30 3,90		2120 (660-3110) 2170 (700-3120)			9,30 9,55
1) + 9 1) + 9 1)	2,60	2,60	2,60			3,18 B			1,6 + 1,6 + 1,6			3,08		2170 (510-3160)			9,55
1) + 9 1) + 10 2)	2,50	2,50	2,80	7,80 (2,60-8,10)	2450 (460-2820)	3,18 B			1,5 + 1,5 + 1,6			3,32		2170 (510-3160)			9,55
1) + 9 1) + 12	2,45	2,45	3,10			3,19 B			1,5 + 1,5 + 1,7			3,70		2190 (510-3150)			
1) + 9 1) + 15	2,20	2,20	3,60 4,00			3,19 B 3,25 A			1,4 + 1,4 + 2,1 1,3 + 1,3 + 2,3			4,20 4,70		2140 (530-3130) 2100 (640-3120)			9,40
1) + 10 2) + 10 2)	2,40	2,00	2,70		2450 (460-2820)				1,3 + 1,3 + 2,3 1,5 + 1,6 + 1,6			3,20		2170 (540-3120)			9,55
^{1]} + 10 ^{2]} + 12	2,35	2,65	3,00	8,00 (2,70-8,20)	2510 (490-2810)	3,19 B	1255	11,00	1,5 + 1,6 + 1,7			3,55		2190 (510-3150)			9,65
1) + 10 2) + 15	2,15	2,40	3,45		2510 (490-2790)				1,4 + 1,5 + 2,0	2,50	2,85	4,05	9,40 (3,30-10,40)	2140 (530-3130)	4,39 A	1070	9,40
1) + 10 2) + 18	1,95	2,15	3,90		2460 (490-2790)				1,3 + 1,4 + 2,3			2,0		2100 (640-3120)			
1) + 12 + 12 1) + 12 + 15	2,20	2,90 2,65	2,90 3,30	8,00 (2,70-8,40) 8,00 (2,80-8,40)		3,36 A 3,36 A			1,4 + 1,7 + 1,7 1,3 + 1,6 + 1,9			3,40 3,90		2170 (500-3150) 2130 (560-3120)			9,55 9 40
1) + 12 + 18	1,85	2,40	3,75			3,42 A			1,2 + 1,5 + 2,2			4,40		2150 (660-3120)			
¹⁾ + 15 + 15	1,90	3,05	3,05	8,00 (2,80-8,40)	2380 (490-2800)	3,36 A	1190	10,40	1,2 + 1,7 + 1,7	2,20	3,60	3,60	9,40 (3,80-10,50)	2060 (640-3080)	4,56 A	1030	9,05
1) + 15 + 18	1,70	2,80	3,50			3,42 A			1,1 + 1,6 + 2,0			4,10		2100 (680-3080)			
1) + 18 + 18 1 2) + 10 2) + 10 2)	1,60 2,60	3,20 2,60	3,20 2,60			3,42 A 3,18 B		10,30	1,0 + 1,8 + 1,8 1,6 + 1,6 + 1,6			3,75		2140 (700-3080) 2170 (510-3160)			9,40
12] + 10 2] + 12	2,55	2,55	2,90			3,10 B			1,6 + 1,6 + 1,7			3,40		2190 (510-3150)			
) ²⁾ + 10 ²⁾ + 15	2,35	2,35	3,30	8,00 (2,80-8,20)	2510 (490-2790)	3,19 B	1255	11,00	1,5 + 1,5 + 1,9	2,75	2,75	3,90	9,40 (3,30-10,40)	2140 (530-3130)	4,39 A	1070	9,40
12] + 10 2] + 18	2,10	2,10	3,80			3,25 A			1,4 + 1,4 + 2,2		2,50	4,40		2100 (640-3120)			
1 ^{2]} + 12 + 12 1 ^{2]} + 12 + 15	2,40	2,80 2,55	2,80			3,36 A			1,5 + 1,6 + 1,6 1,5 + 1,6 + 1,8			3,25		2170 (500-3150) 2130 (560-3120)			9,55 9,40
12 + 12 + 15	2,25	2,35	3,20 3,65			3,36 A 3,42 A			1,3 + 1,5 + 2,1			3,75 4,25		2150 (560-3120)			
121 + 15 + 15	2,10	2,95	2,95	8,00 (2,80-8,40)	2380 (490-2800)	3,36 A	1190		1,4 + 1,7 + 1,7			3,50		2060 (640-3080)			
) ²⁾ + 15 + 18	1,90	2,70	3,40	8,00 (2,80-8,40)	2340 (490-2800)	3,42 A	1170	10,30	1,2 + 1,6 + 1,9	2,20	3,20	4,00	9,40 (4,00-10,50)	2100 (680-3080)	4,48 A	1050	9,20
) 2) + 18 + 18	1,70	3,15	3,15			3,42 A			1,1 + 1,8 + 1,8			3,65		2140 (700-3080)			
2 + 12 + 12 2 + 12 + 15	2,66	2,66	2,66 3,10			3,47 A 3,35 A			1,6 + 1,6 + 1,6 1,5 + 1,5 + 1,7			3,13 3,60		2160 (520-3180) 2140 (620-3150)			
2 + 12 + 13	2,45	2,45	3,50			3,35 A			1,5 + 1,5 + 2,0			4,10		2130 (680-3120)			
2 + 15 + 15	2,30	2,85	2,85		2390 (490-2820)				1,5 + 1,7 + 1,7			3,35		2120 (660-3120)			
2 + 15 + 18	2,10	2,60	3,30	8,00 (2,90-8,40)	2350 (490-2820)	3,40 A	1175	10,30	1,4 + 1,6 + 1,9	2,45	3,10	3,85	9,40 (4,10-10,50)	2100 (700-3100)	4,48 A	1050	9,20
2 + 18 + 18	1,90	3,05	3,05			3,40 A			1,2 + 1,7 + 1,7			3,55		2060 (700-3080)			
5 + 15 + 15 5 + 15 + 18	2,66	2,66 2,45	2,66 3,10		2390 (490-2840) 2390 (520-2810)	3,34 A			1,6 + 1,6 + 1,6 1,5 + 1,5 + 1,7			3,13 3,60		2100 (680-3080) 2080 (700-3080)			9,20

Cooling Capacity Room	L (1.141)	1	FFF	405		Maintana B	11		_		Invest D. Cont.	002	A C =	0
Room		Input Power (W) Total (Min,-Max,) Rating	EER W/W			Moisture Removal Volume (l/h)			Room D	Total (Min,-Max,)	Input Power (W) Rating			Current 230 V (A)
+ 7 + 7 + 9 1,90 1,90 1,90 1,1	D ROOM O ROOM D	locat (Filli, Flax,) Ruting	,	KVVII	200 T (A)	Totalio (411)	ROOM A IN	OOM D ROOM O	Itooni D	Total (Fill) Flax,	Ruting	,		200 F (A)
+ 7 + 7 + 10 2	2,00 2,00	8,00 (2,70-8,80) 2150 (490-2840)	3,72 A		9,50	1,3 + 1,3 + 1,3 + 1,3		35 2,35	2,35			4,52 A		9,15
+ 7 + 7 + 12	1,90 2,30	8,00 (2,80-8,80) 2140 (490-2880) 8,00 (2,80-8,80) 2140 (490-2880)	3,74 A		9,40 9,40	1,2 + 1,2 + 1,2 + 1,5		20 2,20	2,80		2060 (550-3120) 2060 (550-3120)	4,56 A		9,05 9,05
+ 7 + 7 + 15	1,80 2,60 1,75 2,75	8,00 (2,80-8,80) 2140 (490-2880) 8,00 (2,80-8,90) 2130 (490-2880)	3,74 A 3,76 A		9,40	1,2 + 1,2 + 1,2 + 1,6 1,1 + 1,1 + 1,1 + 1,6		.15 2,15 .05 2,05	2,95 3,25		2120 (590-3180)			9.30
+7 + 9 1 + 9 1 1,80 1,80 +7 + 9 1 + 10 2 1,70 1,70 +7 + 9 1 + 10 2 1,50 1,50 +7 + 9 1 + 15 1,50 1,50 +7 + 9 1 + 15 1,50 1,50 +7 + 9 1 + 10 2 1,65 1,65 +7 + 10 2 + 10 2 1,60 1,60 +7 + 10 3 + 15 1,50 1,50 +7 + 10 3 + 15 1,50 1,50 +7 + 10 3 + 15 1,50 1,50 +7 + 10 3 + 18 1,35 1,35 +7 + 12 + 15 1,45 1,45 +7 + 12 + 15 1,45 1,45 +7 + 15 + 18 1,25 1,25 +7 + 15 + 18 1,25 1,25 +7 + 15 + 18 1,25 1,25 +9 1 + 9 1 + 10 2 1,60 2,05 +9 1 + 9 1 + 10 1 1,60 2,05 +9 1 + 10 1 + 10 1 1,60 2,05 +9 1 + 10 1 + 10 1 1,60 2,05 +9 1 + 10 1 + 10 1 1,00	1,60 3,20	8,00 (2,80-8,90) 2110 (490-2870)	3,79 A		9,30	1,0 + 1,0 + 1,0 + 1,8		90 1,90	3,70		2090 (640-3140)			9,20
+ 7 + 9 11 + 10 21	1,45 3,65	8,00 (2,80-8,90) 2110 (490-2840)	3,79 A		9,30	0,9 + 0,9 + 0,9 + 2,1		70 1,70	4,30			4,43 A		9,30
+ 7 + 9 11 + 12	2,20 2,20	8,00 (2,80-8,80) 2130 (490-2870)	3,76 A		9,40	1,2 + 1,2 + 1,4 + 1,4		10 2,60	2,60		2050 (610-3110)			9,05
+ 7 + 9 11 + 15 1,50 1,50 1,50 1,50 1,70 1,80 1,40 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,50 1,55	2,15 2,45 2,05 2,65	8,00 (2,80-8,80) 2130 (490-2870) 8.00 (2,80-8,90) 2120 (490-2870)	3,76 A 3,77 A		9,40 9,30	1,1 + 1,1 + 1,4 + 1,5 1,1 + 1,1 + 1,3 + 1,6		.00 2,55 .95 2,40	2,85 3,10		2050 (610-3110) 2100 (620-3160)	4,59 A		9,05 9,20
+ 7 + 9 11 + 18	1,90 3,10	8,00 (2,80-8,90) 2090 (490-2840)	3,83 A		9.20	1,0 + 1,0 + 1,2 + 1,7		80 2,20	3,60		2070 (660-3110)			9,10
** 7 * 10 * 1 * 12	1,70 3,50	8,00 (2,90-8,90) 2110 (520-2880)	3,79 A	1055	9,30	0,9 + 0,9 + 1,1 + 2,0		65 2,00	4,10			4,50 A		9,20
**7 * 10 2 1 1 5	2,35 2,35	8,00 (2,80-8,80) 2130 (490-2870)	3,76 A		9,40	1,1 + 1,1 + 1,5 + 1,5		,95 2,75	2,75		2050 (610-3110)			9,05
**7 + 10 2 + 18	2,25 2,55	8,00 (2,80-8,90) 2120 (490-2870) 8,00 (2,80-8,90) 2090 (490-2840)	3,77 A		9,30	1,0 + 1,0 + 1,5 + 1,6		90 2,60	3,00		2100 (620-3160)			9,20
+7 + 12 + 12	2,05 2,95 1,90 3,40	8,00 (2,80-8,90) 2090 (490-2840) 8,00 (2,90-8,90) 2110 (520-2880)	3,83 A 3,79 A		9,20 9,30	1,0 + 1,0 + 1,3 + 1,7 0,9 + 0,9 + 1,2 + 1,9		.75 2,40 .60 2,20	3,50 4,00		2070 (660-3110) 2090 (700-3100)			9,10 9,20
+ 7 + 12 + 18	2,45 2,45	8,00 (2,80-8,90) 2090 (500-2870)	3,83 A		9,20	1,0 + 1,0 + 1,5 + 1,5		80 2,90	2,90		2110 (640-3190)			9,30
+ 7 + 15 + 15	2,25 2,85	8,00 (2,80-8,90) 2080 (500-2840)	3,85 A		9,15	0,9 + 0,9 + 1,5 + 1,7		70 2,65	3,35			4,52 A		9,15
** 7 * 15 * 18		8,00 (2,90-9,00) 2040 (520-2860)	3,92 A		8,95	0,8 + 0,8 + 1,4 + 1,9		55 2,45	3,85			4,45 A		9,30
9 9 9 9	2,65 2,65 2,40 3,10	8,00 (2,90-9,00) 2060 (520-2850) 8,00 (2,90-9,00) 2020 (520-2880)	3,88 A 3,96 A		9,05 8,85	0,9 + 0,9 + 1,6 + 1,6 0,8 + 0,8 + 1,5 + 1,7		55 3,15 45 2,90	3,15 3,60		2050 (700-3110) 2080 (700-3060)	4,59 A		9,05 9,15
+ 9 11 + 9 11 + 10 21 1,60 2,05 + 9 11 + 9 11 + 12 1,55 1,95 + 9 11 + 9 11 + 12 1,55 1,95 + 9 11 + 9 11 + 12 1,55 1,95 + 9 11 + 10 21 + 10 21 1,60 2,00 + 9 11 + 10 21 + 10 21 1,60 1,90 + 9 11 + 10 21 + 15 1,40 1,75 + 9 11 + 10 21 + 15 1,40 1,75 + 9 11 + 10 21 + 15 1,40 1,75 + 9 11 + 12 + 12 1,45 1,85 + 9 11 + 12 + 12 1,45 1,85 + 9 11 + 12 + 15 1,35 1,70 + 9 11 + 12 + 15 1,35 1,70 + 9 11 + 12 + 15 1,35 1,70 + 9 11 + 15 + 15 1,30 1,60 + 9 11 + 15 + 15 1,30 1,60 + 9 11 + 15 + 15 1,30 1,60 + 9 11 + 15 + 15 1,30 1,60 + 9 11 + 15 + 18 1,20 1,50 + 10 21 + 10 21 + 10 21 1,55 2,15 + 10 21 + 10 21 + 12 1,55 2,15 + 10 21 + 10 21 + 15 1,35 1,95 + 10 21 + 10 21 + 15 1,35 1,95 + 10 21 + 12 + 15 1,35 1,95 + 10 21 + 12 + 15 1,35 1,85 + 10 21 + 12 + 15 1,35 1,85 + 10 21 + 12 + 15 1,35 1,85 + 10 21 + 12 + 15 1,25 1,75 + 12 + 12 + 12 1,40 2,20 + 12 + 12 + 15 1,25 1,75 + 12 + 12 + 18 1,20 2,00 + 9 11 + 9 11 + 10 21 1,95 1,95 + 9 11 + 9 11 + 10 21 1,95 1,95 + 9 11 + 9 11 + 10 21 1,95 1,95 + 9 11 + 10 21 + 10 21 1,95 1,95 + 9 11 + 10 21 + 10 21 1,95 1,95 + 9 11 + 10 21 + 10 21 1,95 1,95 + 9 11 + 10 21 + 10 21 1,85 1,55 + 9 11 + 10 21 + 10 21 1,85 1,55 + 9 11 + 10 21 + 10 21 1,85 1,55 + 10 21 + 10 21 + 10 21 1,85 1,55 + 10 21 + 10 21 + 10 21 1,85 1,55 + 10 21 + 10 21 + 10 21 1,85 1,95 + 10 21 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 + 10 21 1,85 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 + 10 21 + 10 21 1,95 1,95 + 10 21 +	2,10 2,10	8,00 (2,80-8,80) 2120 (490-2850)	3,70 A		9.30	1,1 + 1,4 + 1,4 + 1,4		45 2,45	2,45		2040 (640-3080)			8,95
+ 9 11 + 9 11 + 15	2,05 2,30	8,00 (2,80-8,80) 2120 (490-2850)	3,77 A	1060	9,30	1,0 + 1,3 + 1,3 + 1,5	1,90 2	40 2,40	2,70	9,40 (3,80-10,50)	2040 (640-3080)	4,61 A	1020	8,95
$\begin{array}{c} +9 \ ^{11} +9 \ ^{11} +18 & 1,35 & 1,65 \\ +9 \ ^{11} +10 \ ^{21} +10 \ ^{21} & 1,60 & 2,00 \\ +9 \ ^{11} +10 \ ^{21} +12 & 1,50 & 1,90 \\ +9 \ ^{11} +10 \ ^{21} +15 & 1,40 & 1,75 \\ +9 \ ^{11} +10 \ ^{21} +15 & 1,40 & 1,75 \\ +9 \ ^{11} +10 \ ^{21} +15 & 1,30 & 1,65 \\ +9 \ ^{11} +12 \ ^{11} +15 & 1,35 & 1,70 \\ +9 \ ^{11} +12 \ ^{11} +15 & 1,35 & 1,70 \\ +9 \ ^{11} +12 \ ^{11} +15 & 1,35 & 1,70 \\ +9 \ ^{11} +12 \ ^{11} +15 & 1,35 & 1,50 \\ +9 \ ^{11} +15 \ ^{11} +15 & 1,30 & 1,60 \\ +9 \ ^{11} +15 \ ^{11} +15 & 1,35 & 1,50 \\ +0 \ ^{11} +15 \ ^{11} +10 \ ^{21} +10 \$		8,00 (2,80-8,90) 2100 (490-2850)	3,81 A		9,20	1,0 + 1,3 + 1,3 + 1,6		30 2,30	2,95		2080 (660-3130)			9,15
P P P P P P P P P P	1,80 2,95	8,00 (2,80-8,90) 2130 (490-2860) 8,00 (2,90-8,90) 2110 (520-2860)	3,76 A		9,40 9,30	0,9 + 1,2 + 1,2 + 1,7		.15 2,15 05 1.05	3,40		2050 (680-3080)	4,59 A 4,52 A		9,05 9,15
P P P P P P P P P P	1,65 3,35 2,20 2,20	8,00 (2,90-8,90) 2110 (520-2860) 8,00 (2,80-8,80) 2120 (490-2850)	3,79 A 3.77 A		9,30	0,9 + 1,1 + 1,1 + 1,9 1,0 + 1,3 + 1,4 + 1,4		,95 1,95 ,35 2,60	3,95 2,60		2080 (700-3080) 2040 (640-3080)			8,95
$\begin{array}{c} +9^{\circ 1} + 10^{\circ 2} + 15 & 1,40 & 1,75 \\ +9^{\circ 1} + 10^{\circ 2} + 18 & 1,30 & 1,65 \\ +9^{\circ 1} + 12 + 12 & 1,45 & 1,85 \\ +9^{\circ 1} + 12 + 15 & 1,35 & 1,70 \\ +9^{\circ 1} + 12 + 15 & 1,35 & 1,70 \\ +9^{\circ 1} + 12 + 18 & 1,25 & 1,55 \\ +9^{\circ 1} + 15 + 15 & 1,30 & 1,60 \\ +9^{\circ 1} + 15 + 18 & 1,20 & 1,50 \\ +10^{\circ 2} + 10^{\circ 1} + 10^{\circ 1} & 1,55 & 2,15 \\ +10^{\circ 2} + 10^{\circ 1} + 12 & 1,55 & 2,15 \\ +10^{\circ 2} + 10^{\circ 1} + 12 & 1,55 & 2,15 \\ +10^{\circ 2} + 10^{\circ 1} + 12 & 1,55 & 2,15 \\ +10^{\circ 2} + 10^{\circ 2} + 15 & 1,35 & 1,95 \\ +10^{\circ 2} + 10^{\circ 2} + 15 & 1,35 & 1,95 \\ +10^{\circ 2} + 12 + 12 & 1,40 & 2,00 \\ +10^{\circ 2} + 12 + 12 & 1,40 & 2,00 \\ +10^{\circ 2} + 12 + 15 & 1,35 & 1,85 \\ +10^{\circ 2} + 12 + 15 & 1,25 & 1,75 \\ +12^{\circ 2} + 12 + 15 & 1,25 & 1,75 \\ +12^{\circ 2} + 12 + 15 & 1,20 & 2,00 \\ +2^{\circ 1} + 2^{\circ 1} + 15 & 1,20 & 2,00 \\ +2^{\circ 1} + 2^{\circ 1} + 15 & 1,20 & 2,00 \\ +2^{\circ 1} + 2^{\circ 1} + 15 & 1,20 & 2,00 \\ +2^{\circ 1} + 2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 10^{\circ 2} + 15 & 1,25 & 1,25 \\ +2^{\circ 1} + 10^{\circ 2} + 15 & 1,55 & 1,55 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,65 & 1,65 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,65 & 1,65 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,65 & 1,65 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,60 & 1,80 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,55 & 1,25 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,65 & 1,85 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,55 & 1,25 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,65 & 1,85 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,50 & 1,20 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,65 & 1,85 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,50 & 1,20 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,95 & 1,95 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,50 & 1,20 \\ +2^{\circ 1} + 10^{\circ 2} + 10^{\circ 2} + 15 & 1,95 & 1,9$	2,15 2,45	8,00 (2,80-8,90) 2100 (490-2850)	3,81 A		9,20	1,0 + 1,2 + 1,4 + 1,5		25 2,50	2,85		2080 (660-3130)			9,15
+ 9 11 + 12 + 12	2,00 2,85	8,00 (2,80-8,90) 2130 (490-2860)	3,76 A		9,40	0,9 + 1,1 + 1,3 + 1,7		10 2,35	3,35			4,59 A		9,05
$ \begin{array}{c} +9 \ ^{11} + 12 + 15 \\ +9 \ ^{11} + 12 + 18 \\ +9 \ ^{11} + 15 + 15 \\ +13 \\ +9 \ ^{11} + 15 + 15 \\ +13 \\ +10 \ ^{12} + 10 \ ^{11} + 10 \ ^{11} \\ +15 \\ +10 \ ^{12} + 10 \ ^{11} + 10 \ ^{11} \\ +10 \ ^{12} + 10 \ ^{12} + 11 \\ +10 \ ^{12} + 10 \ ^{12} + 11 \\ +10 \ ^{12} + 10 \ ^{12} + 15 \\ +10 \ ^{12} + 10 \ ^{12} + 15 \\ +10 \ ^{12} + 10 \ ^{12} + 15 \\ +10 \ ^{12} + 12 \ ^{12} + 13 \\ +10 \ ^{12} + 12 + 12 \\ +10 \ ^{12} + 12 + 15 \\ +10 \ ^{12} + 12 + 15 \\ +12 \ ^{12} + 12 + 15 \\ +12 \ ^{12} + 12 + 18 \\ +12 \ ^{12} + 12 + 18 \\ +12 \ ^{12} + 12 + 18 \\ +12 \ ^{12} + 12 \ ^{14} + 10 \ ^{12} + 12 \\ +12 \ ^{12} + 12 \ ^{14} + 10 \ ^{12} + 12 \\ +12 \ ^{12} + 12 \ ^{14} + 10 \ ^{12} + 12 \\ +12 \ ^{12} + 12 \ ^{14} + 10 \ ^{12} + 12 \\ +12 \ ^{12} + 15 \ ^{12} + 12 \\ +12 \ ^{12} + 15 \ ^{12} + 12 \\ +12 \ ^{12} + 15 \ ^{12} + 12 \\ +12 \ ^{12} + 15 \ ^{12} + 12 \\ +12 \ ^{12} + 18 \\ +12 \ ^{12} + 19 \ ^{11} + 10 \ ^{12} + 19 \\ +12 \ ^{11} + 10 \ ^{11} + 10 \ ^{12} + 19 \\ +12 \ ^{11} + 10 \$		8,00 (2,90-8,90) 2110 (520-2860)	3,79 A		9,30	0,8 + 1,1 + 1,2 + 1,8		90 2,15	3,80		2080 (700-3080)			9,15
$\begin{array}{c} +9^{\circ} +12+18 & 1,25 & 1,55 \\ +9^{\circ} +15+15 & 1,30 & 1,60 \\ +9^{\circ} +15+15 & 1,20 & 1,50 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} +1,55 & 2,15 \\ +10^{\circ} +10^{\circ} +10^{\circ} +15 & 1,50 & 2,05 \\ +10^{\circ} +10^{\circ} +15 & 1,5 & 1,55 & 1,55 \\ +10^{\circ} +10^{\circ} +10^{\circ} +15 & 1,55 & 1,55 \\ +10^{\circ} +10^{\circ} +12 & 1,15 & 1,25 & 1,80 \\ +10^{\circ} +12 & +12 & 1,25 & 1,25 & 1,25 \\ +10^{\circ} +12 & +12 & 1,25 & 1,25 & 1,25 \\ +10^{\circ} +12 & +13 & 1,25 & 1,25 & 1,25 \\ +10^{\circ} +12 & +15 & 1,25 & 1,25 & 1,25 \\ +12 & +12 & +15 & 1,25 & 1,25 & 1,25 \\ +12 & +12 & +15 & 1,20 & 2,05 \\ +12 & +12 & +15 & 1,20 & 2,05 \\ +12 & +12 & +15 & 1,20 & 2,05 \\ +12 & +12 & +15 & 1,20 & 2,00 \\ +9^{\circ} +9^{\circ} +9^{\circ} +10^{\circ} & 1,95 & 1,95 \\ +9^{\circ} +9^{\circ} +9^{\circ} +15 & 1,75 & 1,95 \\ +9^{\circ} +9^{\circ} +9^{\circ} +15 & 1,75 & 1,95 \\ +9^{\circ} +9^{\circ} +9^{\circ} +15 & 1,75 & 1,95 \\ +9^{\circ} +9^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,95 & 1,95 \\ +9^{\circ} +9^{\circ} +10^{\circ} +10^{\circ} & 1,95 & 1,95 \\ +9^{\circ} +9^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,90 & 1,90 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,95 & 1,55 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,55 & 1,55 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,55 & 1,55 \\ +9^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,85 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,85 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,80 & 1,80 \\ +10^{\circ} +12^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\ +10^{\circ} +10^{\circ} +10^{\circ} +10^{\circ} & 1,85 & 1,95 \\$	2,35 2,35 2,20 2,75	8,00 (2,80-8,90) 2130 (500-2850) 8,00 (2,90-9,00) 2070 (520-2860)	3,76 A 3,86 A		9,40 9,15	0,9 + 1,2 + 1,5 + 1,5 0,9 + 1,1 + 1,4 + 1,6		20 2,75 00 2,55	2,75 3,25		2090 (680-3180) 2060 (700-3120)	4,50 A		9,20 9,05
$\begin{array}{c} 9 \ ^{11} + 15 + 15 \\ 10 \ ^{2} + 10 \ ^{2} + 15 + 18 \\ 10 \ ^{2} + 10 \ ^{2} + 10 \ ^{2} \\ 10 \ ^{2} + 10 \ ^{2} + 12 \\ 10 \ ^{2} + 10 \ ^{2} + 12 \\ 10 \ ^{2} + 10 \ ^{2} + 12 \\ 10 \ ^{2} + 10 \ ^{2} + 15 \\ 10 \ ^{2} + 10 \ ^{2} + 15 \\ 10 \ ^{2} + 10 \ ^{2} + 15 \\ 10 \ ^{2} + 10 \ ^{2} + 15 \\ 10 \ ^{2} + 10 \ ^{2} + 15 \\ 10 \ ^{2} + 12 \ ^{2} \\ 10 \ ^{2} + 12 + 12 \\ 10 \ ^{2} + 12 + 12 \\ 10 \ ^{2} + 12 + 15 \\ 120 \ ^{2} + 12 + 18 \\ 120 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 15 \\ 122 \ ^{2} + 12 + 18 \\ 120 \ ^{2} + 12 \ ^{2} + 10 \\ 122 \ ^{2} + 12 + 12 \\ 123 \ ^{2} + 12 \ ^{2} + 12 \\ 123 \ ^{2} + 12 + 15 \\ 124 \ ^{2} + 12 + 15 \\ 125 \ ^{2} + 12 + 15 \\ 127 \ ^{2} + 12 + 15 \\ 127 \ ^{2} + 12 \ ^{2} + 12 \\ 127 \ ^{2} + 12 \ ^{2} + 12 \\ 127 \ ^{2} + 12 \ ^{2} + 12 \\ 127 \ ^{2} + 12 \ ^{2} + 12 \\ 127 \ ^{2} + 12 \ ^{2} + 12 \\ 128 \ ^{2} + 12 \ ^{2} + 12 \\ 12$	2,00 3,20	8,00 (2,90-9,00) 2030 (520-2840)	3,94 A		8,95	0,8 + 1,0 + 1,3 + 1,8		,00 2,35 ,85 2,35	3,70		2090 (700-3120)			9,20
$\begin{array}{c} \cdot 10^{21} + 10^{21} + 10^{21} & 1,55 & 2,15 \\ \cdot 10^{21} + 10^{21} + 12 & 1,50 & 2,05 \\ \cdot 10^{21} + 10^{21} + 15 & 1,35 & 1,95 \\ \cdot 10^{21} + 10^{21} + 18 & 1,25 & 1,80 \\ \cdot 10^{21} + 12^{21} + 18 & 1,25 & 1,80 \\ \cdot 10^{21} + 12^{21} + 18 & 1,25 & 1,70 \\ \cdot 10^{21} + 12^{21} + 18 & 1,25 & 1,70 \\ \cdot 10^{21} + 12^{21} + 18 & 1,25 & 1,70 \\ \cdot 10^{21} + 12^{21} + 18 & 1,25 & 1,75 \\ \cdot 12^{21} + 12^{21} + 13 & 1,25 & 1,75 \\ \cdot 12^{21} + 12^{21} + 13 & 1,20 & 1,90 \\ \cdot 12^{21} + 12^{21} + 13 & 1,20 & 1,90 \\ \cdot 12^{21} + 12^{21} + 13 & 1,20 & 1,90 \\ \cdot 12^{21} + 12^{21} + 13 & 1,20 & 1,90 \\ \cdot 12^{21} + 12^{21} + 10^{21} + 1,95 & 1,95 \\ \cdot 12^{21} + 12^{21} + 10^{21} + 1,95 & 1,95 \\ \cdot 12^{21} + 12^{21} + 13^{21} + 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,10 & 1,90 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,10 & 1,90 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,10 & 1,90 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,10 & 1,90 \\ \cdot 12^{21} + 12^{21} + 12^{21} + 1,75 & 1,75 \\ \cdot 12^{21} + 12^{21} + 12^{21} + 1,75 & 1,55 \\ \cdot 12^{21} + 12^{21} + 12^{21} + 1,75 & 1,55 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 12^{21} + 1,50 & 1,50 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 12^{21} + 1,75 & 1,50 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 12^{21} + 1,75 & 1,50 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 13^{22} + 1,00 & 1,90 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,50 & 1,50 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,00 & 1,90 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,00 & 1,90 \\ \cdot 12^{21} + 10^{21} + 12^{21} + 1,00 & 1,90 \\ \cdot 12^{21} + 10^{21} + $	2,55 2,55	8,00 (2,90-9,00) 2040 (520-2870)	3,92 A		8,95	0,8 + 1,0 + 1,6 + 1,6		,90 3,00	3,00	9,40 (4,20-10,50)	2030 (700-3080)	4,63 A	1015	8,95
$\begin{array}{c} \cdot 10^{21} + 10^{21} + 12^{21} & 1,50 \\ \cdot 10^{21} + 10^{21} + 18 & 1,25 \\ \cdot 10^{21} + 10^{21} + 18 & 1,25 \\ \cdot 10^{21} + 10^{21} + 18 & 1,25 \\ \cdot 10^{21} + 12 + 12 & 1,40 & 2,00 \\ \cdot 10^{21} + 12 + 15 & 1,35 & 1,85 \\ \cdot 10^{21} + 12 + 18 & 1,25 & 1,75 \\ \cdot 10^{21} + 12 + 18 & 1,25 & 1,75 \\ \cdot 12^{21} + 12 + 11 & 1,40 & 2,20 \\ \cdot 12^{21} + 12 + 15 & 1,30 & 2,05 \\ \cdot 12^{21} + 15^{21} & 1,30 & 2,05 \\ \cdot 12^{21} + 15^{21} & 1,20 & 1,90 \\ \cdot 12^{21} + 15^{21} & 1,20 & 2,00 \\ \cdot 12^{21} + 15^{21} & 1,20 & 2,00 \\ \cdot 12^{21} + 15^{21} & 1,20 & 2,00 \\ \cdot 12^{21} + 19^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 19^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 19^{21} + 10^{21} & 1,95 & 1,85 \\ \cdot 12^{21} + 19^{21} + 10^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,90 & 1,90 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,90 & 1,90 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,90 & 1,90 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,90 & 1,90 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,90 & 1,90 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,90 & 1,90 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,95 & 1,55 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,55 & 1,55 \\ \cdot 12^{21} + 10^{21} + 10^{21} & 1,85 & 1,65 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 \\ \cdot 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,25 \\ \cdot 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,25 \\ \cdot 10^{21} + 10^{21} + 10^{21} & 1,55 & 1,55 \\ \cdot 10^{21} + 10^{21} + 10^{21} & 1,65 & 1,85 \\ \cdot 10^{21} + 10^{21} + 10^{21} & 1,65 & 1,85 \\ \cdot 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,70 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ \cdot 12^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ \cdot 12^{21} + 10^{21} + 10^{21}$	2,35 2,95	8,00 (2,90-9,00) 2020 (520-2880)	3,96 A		8,85	0,7 + 1,0 + 1,5 + 1,7		75 2,80	3,50		2080 (700-3060)			9,15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,15 2,15	8,00 (2,80-8,80) 2120 (490-2850) 8,00 (2,80-8,90) 2100 (490-2850)	3,77 A		9,30 9,20	1,0 + 1,4 + 1,4 + 1,4		55 2,55	2,55		2040 (640-3080)			8,95 9,15
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,05 2,40 1,95 2,75	8,00 (2,80-8,90) 2100 (490-2850) 8,00 (2,80-8,90) 2130 (490-2860)	3,81 A 3,76 A		9,40	1,0 + 1,3 + 1,3 + 1,5 0,9 + 1,3 + 1,3 + 1,6		.45 2,45 .25 2,25	2,80 3,30		2080 (660-3130) 2050 (680-3080)			9,05
$\begin{array}{c} +10^{2i} + 12 + 15 & 1,35 & 1,85 \\ +10^{2i} + 12 + 18 & 1,25 & 1,75 \\ +10^{2i} + 15 + 15 & 1,25 & 1,75 \\ +12 + 12 + 12 & 1,40 & 2,20 \\ +12 + 12 + 15 & 1,20 & 2,05 \\ +12 + 12 + 18 & 1,20 & 2,00 \\ +12 + 15 + 15 & 1,20 & 2,00 \\ +9^{2i} + 9^{2i} + 9^{2i} + 10^{2i} & 1,95 \\ +9^{2i} + 9^{2i} + 9^{2i} + 12 & 1,85 & 1,85 \\ +9^{2i} + 9^{2i} + 9^{2i} + 18 & 1,60 & 1,60 \\ +9^{2i} + 9^{2i} + 18 & 1,60 & 1,60 \\ +9^{2i} + 9^{2i} + 18 & 1,75 & 1,75 \\ +9^{2i} + 9^{2i} + 18 & 1,60 & 1,60 \\ +9^{2i} + 9^{2i} + 18 & 1,60 & 1,60 \\ +9^{2i} + 10^{2i} + 15 & 1,70 & 1,70 \\ +9^{2i} + 10^{2i} + 15 & 1,75 & 1,75 \\ +9^{2i} + 10^{2i} + 15 & 1,75 & 1,75 \\ +9^{2i} + 10^{2i} + 15 & 1,70 & 1,70 \\ +9^{2i} + 10^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 10^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 12^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 12^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 10^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 10^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 10^{2i} + 15 & 1,55 & 1,55 \\ +9^{2i} + 10^{2i} + 15 & 1,55 & 1,55 \\ +10^{2i} + 10^{2i} + 15 & 1,65 & 1,85 \\ +10^{2i} + 10^{2i} + 15 & 1,65 & 1,85 \\ +10^{2i} + 10^{2i} + 12 & 1,70 & 1,90 \\ +10^{2i} + 10^{2i} + 12 & 1,70 & 1,90 \\ +10^{2i} + 10^{2i} + 12 & 1,70 & 1,90 \\ +10^{2i} + 10^{2i} + 12 & 1,70 & 1,90 \\ +10^{2i} + 10^{2i} + 10^{2i} + 15 & 1,50 & 1,90 \\ +10^{2i} + 10^{2i} + 10^{2i} + 15 & 1,50 & 1,90 \\ +10^{2i} + 10^{2i} + 10^{$	1,80 3,15	8,00 (2,90-8,90) 2110 (520-2860)	3,79 A		9,30	0,8 + 1,2 + 1,2 + 1,8		10 2,10	3,75		2080 (700-3080)			9,15
$\begin{array}{c} +10^{21} + 12 + 18 & 1,25 & 1,70 \\ +10^{21} + 15 + 15 & 1,25 & 1,25 \\ +12 + 12 + 12 & 1,40 & 2,20 \\ +12 + 12 + 15 & 1,30 & 2,05 \\ +12 + 12 + 15 & 1,20 & 2,00 \\ +2 + 12 + 15 & 1,20 & 2,00 & 2,00 \\ +3 + 10^{21} + 15 & 1,20 & 2,00 \\ +9 + 10^{21} + 9 + 10^{21} & 1,95 & 1,95 \\ +9 + 10^{21} + 9 + 12 & 1,85 & 1,85 \\ +9 + 10^{21} + 10^{21} + 15 & 1,75 & 1,75 \\ +9 + 10^{21} + 10^{21} + 15 & 1,75 & 1,75 \\ +9 + 10^{21} + 10^{21} + 15 & 1,75 & 1,75 \\ +9 + 10^{21} + 10^{21} + 15 & 1,75 & 1,75 \\ +9 + 10^{21} + 10^{21} + 12 & 1,85 & 1,85 \\ +9 + 10^{21} + 10^{21} + 12 & 1,85 & 1,85 \\ +9 + 10^{21} + 10^{21} + 12 & 1,75 & 1,70 \\ +9 + 10^{21} + 12 & 1,75 & 1,70 \\ +9 + 10^{21} + 12 & 1,75 & 1,70 \\ +9 + 10^{21} + 12 & 1,75 & 1,55 \\ +9 + 12 + 12 & 1,75 & 1,55 \\ +9 + 11 + 12 + 15 & 1,65 & 1,65 \\ +9 + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,55 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,55 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,55 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,55 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,55 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,55 \\ +10^{21} + 10^{21} + 10^{21} & 1,85 & 1,50 \\ +10^{21} + 12 + 12 & 1,70 & 1,90 \\ +10^{21} + 12 + 15 & 1,60 & 1,80 \\ +10^{21} + 12 + 15 & 1,50 & 1,00 \\ +10^{21} + 12 + 15 & 1,50 & 1,00 \\ +10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ +10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ +10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ +10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,95 & 1,95 \\ +10^{21} + 10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ +10^{21} + 10^{21} + 10^{21} + 10^{21} + 10^{21} & 1,85 & 1,85 \\ \end{array}$	2,30 2,30	8,00 (2,80-8,90) 2130 (500-2850)	3,76 A		9,40	0,9 + 1,3 + 1,5 + 1,5		35 2,70	2,70		2090 (680-3180)	4,50 A		9,20
$\begin{array}{c} +10^{2l} + 15 + 15 & 1,25 & 1,75 \\ +12 + 12 + 12 & 1,40 & 2,20 \\ +12 + 12 + 15 & 1,30 & 2,05 \\ +12 + 12 + 18 & 1,20 & 1,90 \\ +12 + 15 + 15 & 1,20 & 2,00 \\ 1 + 9^{-11} + 9^{-11} + 10^{-2l} & 1,95 & 1,95 \\ 1 + 9^{-11} + 9^{-11} + 10^{-2l} & 1,95 & 1,95 \\ 1 + 9^{-11} + 9^{-11} + 10^{-2l} & 1,95 & 1,95 \\ 1 + 9^{-11} + 9^{-11} + 15 & 1,75 & 1,75 \\ 1 + 9^{-11} + 9^{-11} + 15 & 1,75 & 1,75 \\ 1 + 9^{-11} + 9^{-11} + 10^{-2l} & 1,90 & 1,90 \\ 1 + 9^{-11} + 10^{-2l} + 10^{-2l} & 1,90 & 1,90 \\ 1 + 9^{-11} + 10^{-2l} + 15 & 1,75 & 1,75 \\ 1 + 9^{-11} + 10^{-2l} + 15 & 1,70 & 1,70 \\ 1 + 9^{-11} + 10^{-2l} + 15 & 1,75 & 1,55 \\ 1 + 9^{-11} + 10^{-2l} + 15 & 1,55 & 1,55 \\ 1 + 9^{-11} + 12^{-1} + 15 & 1,55 & 1,55 \\ 1 + 9^{-11} + 10^{-2l} + 15 & 1,55 & 1,55 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,80 & 1,80 \\ 1 + 9^{-11} + 10^{-2l} + 15 & 1,55 & 1,55 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,85 & 1,85 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,85 & 1,85 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,85 & 1,85 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,85 & 1,85 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,80 & 1,80 \\ 1 + 10^{-2l} + 10^{-2l} + 15 & 1,60 & 1,80 \\ 1 + 10^{-2l} + 12^{-2l} & 1,70 & 1,90 \\ 1 + 10^{-2l} + 12^{-2l} & 1,70 & 1,90 \\ 1 + 10^{-2l} + 12^{-2l} & 1,70 & 1,90 \\ 1 + 10^{-2l} + 12^{-2l} & 1,70 & 1,90 \\ 1 + 10^{-2l} + 12^{-2l} & 1,70 & 1,90 \\ 1 + 10^{-2l} + 12^{-2l} & 1,80 & 1,80 \\ 1 + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,95 & 1,95 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,95 & 1,95 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,95 & 1,95 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 10^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 12^{-2l} & 1,85 & 1,85 \\ 1^{-2l} + 10^{-2l} + 10^{-2l} + 1$		8,00 (2,90-9,00) 2070 (520-2860)	3,86 A			0,9 + 1,2 + 1,4 + 1,6		20 2,50	3,15		2060 (700-3120)			9,05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,95 3,10 2,50 2,50	8,00 (2,90-9,00) 2030 (520-2840) 8,00 (2,90-9,00) 2040 (520-2870)	3,94 A 3,92 A		8,95 8,95	0,8 + 1,1 + 1,3 + 1,7 0,8 + 1,1 + 1,5 + 1,5		00 2,30 05 2,95	3,65 2,95		2090 (700-3080) 2030 (700-3080)	4,50 A		9,20 8,95
$\begin{array}{c} +12+12+15 & 1,30 & 2,05 \\ +12+12+18 & 1,20 & 1,90 \\ +12+15+15 & 1,20 & 2,00 \\ 0,9+9+9+9+9+1 & 2,00 & 2,00 \\ 0,9+9+9+9+10+1 & 1,95 & 1,95 \\ 1,9+9+9+9+15 & 1,75 & 1,75 \\ 1,9+9+9+18 & 1,60 & 1,60 \\ 1,9+9+19+10+10+10+10+1 & 1,90 \\ 1,9+9+10+10+10+10+10+1 & 1,90 \\ 1,9+9+10+10+10+10+1 & 1,90 \\ 1,9+9+10+10+10+110+1 & 1,90 \\ 1,9+9+10+10+110+1 & 1,90 \\ 1,9+9+10+10+110+1 & 1,95 \\ 1,9+1+10+10+110+1 & 1,95 \\ 1,9+1+10+10+110+1 & 1,95 \\ 1,9+1+10+10+11 & 1,55 \\ 1,55 \\ 1,9+1+12+12 & 1,75 & 1,75 \\ 1,9+1+12+15 & 1,65 & 1,65 \\ 1,9+1+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+11 & 1,55 & 1,55 \\ 1,9+10+10+10+12 & 1,70 & 2,00 \\ 1,9+10+12+12 & 1,70 & 1,90 \\ 1,9+10+12+15 & 1,60 & 1,80 \\ 1,9+10+12+15 & 1,60 & 1,80 \\ 1,9+10+12+15 & 1,50 & 1,70 \\ 1,9+10+12+15 & 1,50 & 1,70 \\ 1,9+10+12+15 & 1,50 & 1,70 \\ 1,9+10+12+15 & 1,50 & 1,70 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+12 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10+10 & 1,75 & 1,75 \\ 1,9+10+10+10+10$	2,20 2,20	8,00 (2,80-9,10) 2040 (500-2870)	3,72 A		8,95	0,9 + 1,4 + 1,4 + 1,4		60 2,60	2,60		2110 (680-3120)			9,30
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,05 2,60	8,00 (2,90-9,10) 2020 (520-2840)	3,96 A		8,85	0,8 + 1,3 + 1,3 + 1,6		45 2,45	3,05		2080 (700-3080)			9,15
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,90 3,00	8,00 (3,00-9,20) 2000 (530-2870)	4,00 A		8,80	0,7 + 1,2 + 1,2 + 1,7		.25 2,25	3,50			4,45 A		9,30
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,40 2,40	8,00 (2,90-9,10) 2090 (520-2860)	3,83 A		9,20	0,7 + 1,3 + 1,5 + 1,5		30 2,85	2,85		2060 (700-3060)			9,05
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,00 2,00 1,95 2,15	8,00 (2,80-8,80) 2110 (490-2840) 8,00 (2,80-8,80) 2110 (490-2840)	3,79 A 3,79 A		9,30 9,30	1,3 + 1,3 + 1,3 + 1,3 1,3 + 1,3 + 1,3 + 1,4		35 2,35 30 2,30	2,35		2030 (660-3080) 2030 (660-3080)	4,63 A		8,95 8 95
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,85 2,45	8,00 (2,80-8,90) 2090 (490-2870)	3,83 A		9,20	1,2 + 1,2 + 1,2 + 1,5		20 2,20	2,80		2060 (680-3100)			9,05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,75 2,75	8,00 (2,90-8,90) 2120 (520-2850)	3,77 A		9,30	1,1 + 1,1 + 1,1 + 1,6		,05 2,05	3,25	9,40 (4,10-10,50)		4,61 A		8,95
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		8,00 (2,90-8,90) 2110 (520-2850)	3,79 A		9,30	1,0 + 1,0 + 1,0 + 1,8		90 1,90	3,70			4,54 A		9,15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,10 2,10 2,05 2,35	8,00 (2,80-8,80) 2110 (490-2840) 8,00 (2,80-8,90) 2090 (490-2870)	3,79 A 3,83 A		9,30 9,20	1,2 + 1,2 + 1,4 + 1,4 1,2 + 1,2 + 1,3 + 1,5		20 2,50 15 2,35	2,50 2,75		2030 (660-3080) 2060 (680-3100)	4,63 A		8,95 9,05
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,90 2,70	8,00 (2,90-8,90) 2120 (520-2850)	3,77 A		9,30	1,1 + 1,1 + 1,2 + 1,6		,00 2,20	3,20		2040 (700-3070)			
$\begin{array}{c} 1+9 \stackrel{11}{1}+12+15 & 1,65 & 1,65\\ 1+9 \stackrel{11}{1}+12+18 & 1,50 & 1,50\\ 1+9 \stackrel{11}{1}+15+15 & 1,55 & 1,55\\ 1+10 \stackrel{11}{2}+10 \stackrel{11}{2}+10 \stackrel{11}{2}+15 & 1,55\\ 1+10 \stackrel{11}{2}+10 \stackrel{11}{2}+12 & 1,75 & 2,00\\ 1+10 \stackrel{11}{2}+10 \stackrel{11}{2}+13 & 1,55 & 1,70\\ 1+10 \stackrel{11}{2}+10 \stackrel{11}{2}+13 & 1,55 & 1,70\\ 1+10 \stackrel{11}{2}+12+12 & 1,70 & 1,90\\ 1+10 \stackrel{11}{2}+12+18 & 1,55 & 1,70\\ 1+10 \stackrel{11}{2}+12+18 & 1,50 & 1,40\\ 1+10 \stackrel{11}{2}+12+18 & 1,50 & 1,70\\ 1+10 \stackrel{11}{2}+12+18 & 1,50 & 1,70\\ 1+12+12+12+12 & 1,70 & 1,90\\ 1+12+12+12+12 & 1,70 & 2,10\\ 1+12+12+12+15 & 1,50 & 2,00\\ 1+10 \stackrel{11}{2}+10 \stackrel$	1,75 3,15	8,00 (2,90-8,90) 2110 (520-2850)	3,79 A	1055	9,30	1,0 + 1,0 + 1,1 + 1,8	1,85 1,	85 2,05	3,65	9,40 (4,20-10,50)	2070 (700-3070)	4,54 A	1035	9,15
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,25 2,25		3,85 A		9,15	1,1 + 1,1 + 1,5 + 1,5		05 2,65	2,65		2070 (680-3140)			9,15
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,10 2,60	8,00 (2,90-9,00) 2050 (520-2880)			9,05	1,1 + 1,1 + 1,4 + 1,6		95 2,40	3,10		2040 (700-3080)			8,95
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,95 3,05 2,45 2,45	8,00 (2,90-9,00) 2030 (520-2840) 8,00 (3,00-9,00) 2040 (520-2860)				1,0 + 1,0 + 1,3 + 1,7 1,0 + 1,0 + 1,5 + 1,5		,80 <u>2,25</u> ,80 <u>2,90</u>	3,55 2,90		2090 (700-3080) 2020 (700-3070)			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,05 2,05	8,00 (2,80-8,80) 2110 (490-2840)			9,30	1,2 + 1,3 + 1,3 + 1,3		40 2,40	2,40		2030 (660-3080)			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,00 2,25	8,00 (2,80-8,90) 2090 (490-2870)	3,83 A	1045	9,20	1,1 + 1,3 + 1,3 + 1,5	2,05 2	35 2,35	2,65	9,40 (4,00-10,50)	2060 (680-3100)	4,56 A	1030	9,05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		8,00 (2,90-8,90) 2120 (520-2850)			9,30	1,1 + 1,2 + 1,2 + 1,6		2,20	3,10		2040 (700-3070)			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,70 3,05 2,20 2,20	8,00 (2,90-8,90) 2110 (520-2850) 8.00 (2.80-8.90) 2130 (500-2850)			9,30 9,40	1,0 + 1,1 + 1,1 + 1,7 1,1 + 1,2 + 1,4 + 1,4		00 2,00 30 2,55	3,60 2,55		2070 (700-3070) 2090 (680-3180)			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		8,00 (2,90-9,00) 2070 (520-2860)				1,0 + 1,2 + 1,3 + 1,6		,10 2,40	3,00		2060 (700-3120)			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,90 2,95	8,00 (2,90-9,00) 2030 (520-2840)	3,94 A	1015	8,95	1,0 + 1,1 + 1,2 + 1,7	1,70 1,	.95 2,25	3,50	9,40 (4,20-10,50)	2090 (700-3080)	4,50 A	1045	9,20
+ 12 + 12 + 15	2,40 2,40	8,00 (2,90-9,00) 2040 (520-2870)			8,95	1,0 + 1,1 + 1,5 + 1,5		00 2,85	2,85		2030 (700-3080)			
1 + 10 21 + 10 21 + 10 21 2,00 2,00 21 + 10 21 + 10 21 + 12 1,95 1,95 21 + 10 21 + 10 21 + 15 1,80 1,80 22 + 10 21 + 10 21 + 10 1,65 1,65 23 + 10 21 + 10 21 + 12 1,85 1,85 24 + 10 21 + 12 + 12 1,85 1,85		8,00 (2,90-9,10) 2030 (520-2860)			8,95	1,1 + 1,4 + 1,4 + 1,4		50 2,50	2,50		2090 (700-3100)			
101 + 10 21 + 10 21 + 12 1,95 112 + 10 21 + 10 21 + 15 1,80 113 + 10 21 + 10 21 + 15 1,80 114 + 10 21 + 10 21 + 18 1,65 115 + 10 21 + 12 + 12 1,85 115 + 10 21 + 12 + 12 1,85 115 + 10 21 + 12 + 12 1,85	2,00 2,50 2,00 2,00	8,00 (2,90-9,10) 2020 (520-2840) 8,00 (2,80-8,80) 2110 (490-2840)			8,85 9,30	1,0 + 1,3 + 1,3 + 1,5 1,3 + 1,3 + 1,3 + 1,3		35 2,35 35 2,35	2,90		2080 (700-3080) 2030 (660-3080)			
(1) + 10 (2) + 10 (2) + 15 1,80 1,80 (2) + 10 (2) + 10 (2) + 18 1,65 1,65 (2) + 10 (2) + 12 + 12 1,85 1,85	1,95 2,15	8,00 (2,80-8,90) 2090 (490-2870)			9,20	1,3 + 1,3 + 1,3 + 1,4		25 2,25	2,65		2060 (680-3100)			
²¹ + 10 ²¹ + 10 ²¹ + 18 1,65 1,65 ²¹ + 10 ²¹ + 12 + 12 1,85 1,85	1,80 2,60	8,00 (2,90-8,90) 2120 (520-2850)	3,77 A	1060	9,30	1,2 + 1,2 + 1,2 + 1,6		10 2,10	3,10	9,40 (4,10-10,50)	2040 (700-3070)	4,61 A	1020	8,95
	1,65 3,05	8,00 (2,90-8,90) 2110 (520-2850)	3,79 A	1055	9,30	1,1 + 1,1 + 1,1 + 1,7	1,95 1,	95 1,95	3,55	9,40 (4,20-10,50)	2070 (700-3070)	4,54 A	1035	9,15
~'+ IU -'' + IZ + ID I./5 I./5	2,15 2,15	8,00 (2,90-9,00) 2080 (500-2870)			9,15	1,2 + 1,2 + 1,4 + 1,4		2,50	2,50		2070 (680-3140)			
^{2]} + 10 ^{2]} + 15 + 15		8,00 (2,90-9,00) 2050 (520-2880) 8,00 (3,00-9,00) 2040 (520-2860)			9,05 8 95	1,1 + 1,1 + 1,3 + 1,5 1,1 + 1,1 + 1,5 + 1,5		,05 2,35 ,95 2,75	2,95		2040 (700-3080) 2020 (700-3070)			
2) + 12 + 12 + 12	2,05 2,05	8,00 (2,90-9,10) 2030 (520-2860)			8,95	1,2 + 1,3 + 1,3 + 1,3		,45 2,45	2,75		2090 (700-3070)			
^{2]} + 12 + 12 + 15 1,70 1,95	1,95 2,40	8,00 (2,90-9,10) 2010 (520-2880)	3,98 A	1005	8,85	1,1 + 1,3 + 1,3 + 1,5	1,95 2	30 2,30	2,85	9,40 (4,20-10,60)	2070 (700-3080)	4,54 A	1035	9,15
+ 12 + 12 + 12	2,00 2,00	8,00 (2,90-9,20) 2000 (530-2850) 8,00 (3,00-9,20) 1980 (530-2870)	4,00 A	1000		1,3 + 1,3 + 1,3 + 1,3 1,2 + 1,2 + 1,2 + 1,5	2,35 2	35 2,35 20 2,20	2,35 2,80	9,40 (4,20-10,60)	2110 (700-3080) 2080 (700-3060)	4,45 A	1055	9,30

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 "A" button once, the next error code (if any) will be displayed; press "V" 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
11	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.
12	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.
14	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.
15	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.
16	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).	Check the refrigerant cycle: Gas may be leaking (the amount of refrigerant is extremely low). 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.
19	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).	Check the nature of the fan lockup trouble. Check for disconnections of the fan motor connectors and for defects in contact, in the fan motor and in the control PCB.
123	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) (0 L or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
126	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.
27	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 isnot found, defective contact of the connector or a defective control PCB is to blame.
128	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.
130	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 tamp 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.
132	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.
133	Indoor / Outdoor wrong connection	Indoor / Outdoor different model junction, 100Y charge into 200Y 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.
134	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.
136	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.
137	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 tiquid 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.
138	Indoor / Outdoor mismatch (brand code)	-	- Contact of the connector of a defective contact of the definition
39	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.	
141	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.	-
150	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 fl ow 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 multitester. This trouble display appears when suction nozzle stop at left side of Filter Cleaning Device: 1. Check the Right
H52	Limit Switch Failure	This display appears when both Limit Switch (left & right) detected short circuit.	Limit Switch switching function by multitester. 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).
Н97	Outdoor fan motor mechanism lock	CU-ZE: When trouble, which is defi ned 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/AE: 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.	Check the nature of the fan lockup trouble. 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.)	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 startup. Check also for short circuits indoors and clogging of the air fi tters.
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.	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. Check the refrigerating cycle: Gas may be leaking (the amount of refrigerant is low) or a pipe may be broken, etc.
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.	Check also for short circuits indoors and clogging of the air filters. 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). 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 -9°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.	Check the refrigerating cycle: Expansion valve leakage. Check the indoor unit pipe temperature sensor (check for changes in its characteristics and check its resistance).
F90	PFC circuit protection (CU-2E)	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	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.
	Main circuit low voltage (CU-3E/4E)	of the compressor is not synchronized with the control signal has been detected on 8 successive occasions, operation stops, and the trouble display appears.	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.)
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: $H99 \rightarrow F97 \rightarrow F91 \rightarrow H16$. 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 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.	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.	Check the outdoor unit heat exchanger temperature sensor (check for changes in its characteristics and check its resistance). 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-ZE: 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/AE: 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.	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.). Defective IPM (outdoor unit control PCB). 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 steps. 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).	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. When operation steps with this trouble display appearing, check the compressor temperature sensor (check for changes in its characteristics and check its resistance). 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-ZE: 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/EE: 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.	In 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.	To Check whether the compressor is defective (locked up or shorted winding). Check the outdoor unit control PCB.

OPTIONAL ACCESSORIES

REPLACEMENT ANTI-ALLERGEN FILTER





CS-V28EKE, CS-E15DTEW, CS-E18DTEW, CS-E21DTES





PIPE REDUCER (for Multi)



CZ-MA1P is to be used to reduce the connection size on the indoor unit to 3/8". CS-E15/18/MKEW, CS-E15/18DTEW, CS-E15/18HB4EA, CS-E15/18JD3EA, CS-E18GFEW, CS-E18GFEW, CS-XE15/18MKEW

PIPE EXPANDER (for Multi)



CZ-MA2P is to be used to increase the connection size on the outdoor unit to 1/2". CS-E21MKEW, CS-XE21MKEW, CS-E21JB4EA

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