# Panasonic ideas for life



# Panasonic ideas for life

### eco ideas

'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 flower, Blue Angel or Nordic Swan, and our internal 'eco ideas' label, which is given to products which achieve industry-leading environmental performance. 1)
- 3.500,000t of contribution in reducing CO, emissions with energy solution products (such as Solar Panels, Fuel Cells, Heat Pumps, Energy Recovering Ventilation, LED and Energy Saving Lamps). 2)
- Educate 100,000 children on eco related topics through the '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:** 

- 99% of waste materials generated in European production will be recycled <sup>3]</sup>, meaning less than 1% will be allowed to go to landfill.
- 1,000t of reduction in CO<sub>2</sub> emissions from Panasonic's offices across Europe. 4)
- 7,000t of contribution in reducing CO<sub>2</sub> emissions from production activities.
- 1) Products awarded the 'eco ideas' label include those whose environmental performance is greater than the industry's No.2 model by 10% or more at the time of release, and those which achieve the highest rank in the market by external environmental labels in accordance to environmental
- 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 Panasonic 4) Based on offices with 100 employees or more; based on FY 2009.
- 5) An amount of CO<sub>2</sub> reduction compared to the estimated figure assuming no improvement Measures were taken after March 31, 2006.

### PANASONIC GLOBAL VISION

The Panasonic Group strives to be a green innovation company with a global perspective. Its aim is to be the leading green company in the electronics sector by 2018 - the year that Panasonic celebrates its centenary.

### **HEATING & COOLING**

Panasonic Home Appliances is the European leader in heating and cooling solutions for the home. When it comes to market share, Panasonic is the No. 1 company for home solutions in Europe, the No. 1 company for domestic cooling & heating solutions in Spain, and the No. 1 company for heating systems in the Nordic countries.

Panasonic invests significantly in Research & Development, with a strong network of design, manufacturing and training centres throughout Europe. As part of Panasonic's continued programme of growth, a new R&D facility is open in Langen, Germany. The centre is focused on developing products to meet the needs of European customers, as well as European legislation.

### ECO IDEAS FOR LIFESTYLES

Panasonic is making the environment central to all of its business activities. It will become the No 1 green innovation company in the electronics sector through its eco ideas initiative: eco ideas for lifestyles to change people's lives and eco ideas for business to bring forth green innovation in Panasonic's own global business operations.

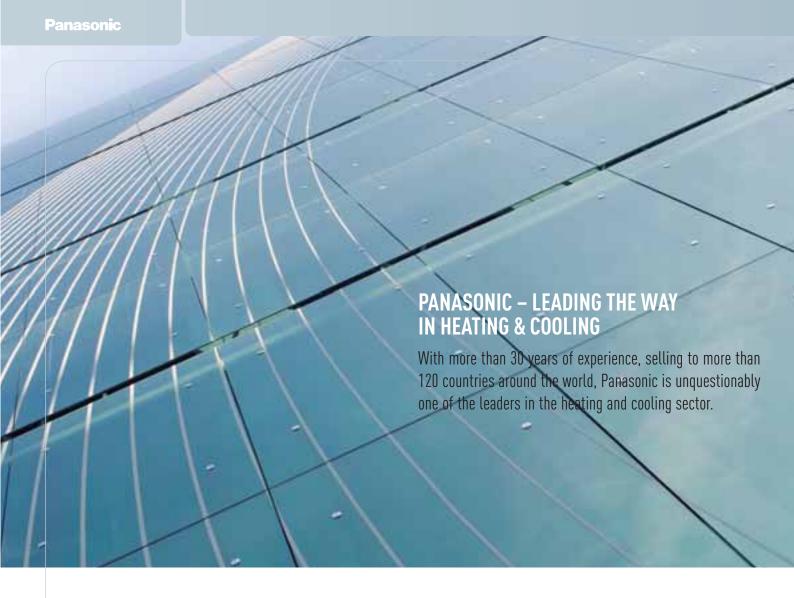
Panasonic always strives to offer better living, with a sense of joy, security and comfort, as well as with virtually zero CO, emissions in the entire house or building.

### ECO IDEAS FOR BUSINESS

Panasonic will create and pursue a business-style which makes the best use of resources and energy. As well as making eco-conscious products and delivering them to customers, Panasonic aims to reduce waste of energy and resources during the manufacturing process. As well as tackling its own business, Panasonic will take a leading role for sharing and working on environmental challenges in entire societies.

# heatingandcoolingsystems





# HISTORY OF AIR CONDITIONING GROUP

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



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



First room air conditioner launched for domestic installation.
Prior to this date, air conditioners were large and only for commercial use. Panasonic developed the first compact air conditioner for windows; it was lightweight and easy to install, improving the quality of life in Japanese homes.
1,100 units were sold in Japan in the first year, and just two years

later, in 1960, this figure rose to

1958

230,000.



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



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

The company is also a world leader in innovation as it has filed more than 91539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's heat pumps. This wish to excel has made Panasonic the international leader in heating and air conditioning solutions of turnkey 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.



### **PANASONIC EUROPE**

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



# PANASONIC FACTORIES AND R&D DEPARTMENT

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



### 2002

The Ion and Oxygen Generator — two of the most important contributions to air conditioning systems.



### 2008

Etherea new concept of air conditioning systems: high efficiency and high performances with a great design. Etherea also includes a very innovative air quality sensor and air purifier in order to enjoy healthy air at home at all times.



### 2010

New Aquarea

Panasonic has created Aquarea, an innovative new, low-energy system, designed to help you enjoy ideal temperatures and hot water in your home, even with extreme outdoor temperatures. Aquarea cools or heats to ensure maximum comfort.

Aquarea is far cleaner, safer, cheaper and environmentally friendly than alternatives using gas, oil and other electrical systems.



### 2011

New Eco i VRF solution
The new Panasonic VRF solution
for big buildings is the most
efficient in the industry in more
than 74% of combinations. ECO
i satisfies the most demanding
standards required by design
offices, architects, owners and
installers.



### 2012

New GHP units
Pansonic's gas-driven VRF
systems are ideal for projects
where power restrictions apply.
In 2012, Panasonic extends the
Gas Heat Pump range with a new
GHP line-up, new GHP G Power
[electricity production] and the
new Chiller Units.



# Ideas for a Cleaner Future

Panasonic is committed to developing environmentally-conscious products from three aspects, such as prevention of global warming, effective utilisation of resources and chemical substances management.



In an era when the world is tackling the reduction of  $\mathrm{CO}_2$  emissions, Panasonic proposes a lifestyle with virtually zero  $\mathrm{CO}_2$  emissions throughout the entire home.  $\mathrm{CO}_2$  emissions are thoroughly reduced by enhancing energy-saving performance of home appliances and utilising building materials with high insulation performance. And energy required will be supplied by creating and storing energy by a combination of solar power generators, fuel cells and storage batteries. The Panasonic energy management system realises a lifestyle with virtually zero  $\mathrm{CO}_2$  emissions by linking these benefits together and smartly controlling all energy use. Meanwhile, intelligent use will also be made of natural elements such as air, light, water and heat to realise a more comfortable lifestyle Experience an ecological and comfortable lifestyle that only Panasonic can present.





# REALISING ECO-CONSCIOUS SOLUTIONS IN ENTIRE TOWNS

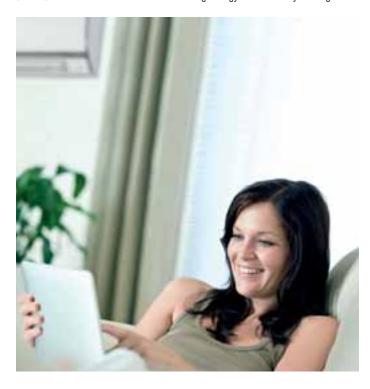
### **TIANJIN ECO-CITY**

Panasonic is taking part in a pioneering project by China and Singapore to create the Tianjin Eco-City, some 40 km from Tianjin city centre and 150 km from Beijing. Designed to be practical, replicable and scalable, the Tianjin Eco-city will demonstrate the determination of both countries in tackling environmental protection, resource and energy conservation, and sustainable development, and serve as a model for sustainable development for other cities in China. By 2020, there will be around 30 square kilometres of city capable of accommodating a population of around 400,000.



### HOME ENERGY MANAGEMENT SYSTEM

Panasonic is supplying each of the houses built in Tianjin Eco-City with a mini-VRF air conditioning system with Home Energy Management System (HEMS). The HEMS will be central to saving energy in homes. By linking a



whole range of domestic appliances, solar power generation equipment, electric vehicle chargers, storage batteries and other devices, the HEMS shows the amount of energy being used in the home. The system will indicate whether or not energy-saving goals are being achieved and will display advice on where further savings could be made. By using easily-read displays on all screens throughout the home, homeowners will become more conscious of energy-saving activities and adopt a more natural and eco-friendly lifestyle.

### **FUJISAWA SUSTAINABLE SMART TOWN**

Panasonic is converting its former factory site in Fujisawa City in Japan, 50 km west of Tokyo, into a smart town deploying services and energy systems based on Panasonic's eco ideas for green lifestyles. Panasonic is working in partnership with eight other companies and Fujisawa City to build an innovative smart town. The developers, manufacturers and service providers will work closely together throughout every phase of the project, from the master planning stage to actual operation of the town that will have about 1,000 households spread over 19 hectares. Homes will employ the full range of Panasonic's most advanced systems for energy production, storage and management. Houses will be fully self-sufficient by generating power from efficient solar modules and fuel cell systems, with energy stored in powerful lithium-ion batteries. Low energy lighting, air conditioning and household appliances will be interconnected via a computer system, and televisions and PCs will be used to display energy consumption and tips on savings.



### **SOFTWARE**

Panasonic provides bespoke software helping system designers, installers and dealers to very quickly design and size systems, create wiring diagrams and issue bills of quantities at the push of a button.



### ECOI VRF DESIGNER

The VRF Designer Software is very easy to use. By using it, engineers can develop projects quickly, by either using the drag and drop icons or the project wizard. It

comes fully loaded with all appropriate Panasonic product details and is designed with flexibility in mind so that several different system designs can be created within one project.

The program will check system designs and correction factors are automatically applied to indoor unit capacities, depending on height differences, piping lengths, indoor/outdoor capacity ratio and design conditions. VRF Designer will also calculate any additional amounts of refrigerant that may be required, based on configuration and piping lengths.

Existing projects can easily be modified or even extended at a later stage. Reports can be exported and printed showing piping and wiring diagrams, power supply diagrams as well as bill of quantities.



### AQUAREA DESIGNER

This program allows HVAC designers, installers and distributors to identify the correct heat pump for a particular application from Panasonic's Aquarea range, calculate

the savings compared to other heat sources and very quickly calculate  $\mathrm{CO}_2$  emissions.

Using Panasonic's Aquarea Designer, projects can be developed simply and easily, by either using the Quick Design or Expert Design options. Each allows the user to build up the project data in a simple step-by-step process and choose to output reports (in either Quick or Large formats) as HTML files or as print outs.

Aquarea Designer will calculate the project's energy costs in terms of hot water, heating and pumping. It will show the equipment running times and calculate the COP (coefficient of performance). It then allows the designer to show clients a comparison with other equipment options such as heating by conventional gas-fired boilers, oil systems, wood, standard electric heating and electric night storage heaters. This compares running costs, initial investment costs and maintenance costs. The comparison can also be made for CO<sub>2</sub> emissions and savings.

### iPAD APP

For a quick and easy introduction to the Aquarea Heat Pump range, the iPad app can be used to show clients the benefits of this energy-efficient heating and hot water system.







### **Panasonic**

PRO Club

### PANASONIC PRO CLUB

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

The website contains a wealth of information from the latest versions of Panasonic's Aquarea and Etherea Design Software, to Technical Documentation, Catalogues and Images for the company's wide range of heating and cooling systems - all in an easy to navigate and use website.

Also, registered users will be able to access news regarding special promotions and take advantage of these offers, as well as access helpful business advice such as ideas and guidelines for showroom decoration or van livery featuring Panasonic logos and display material.

### www.panasonicproclub.com

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



### **Panasonic**

PRO Academy

### THE PANASONIC PRO-ACADEMY OPENS ITS DOORS

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

### NEW TRAINING COURSES COVER THREE LEVELS

**Design, installation, and commissioning & trouble-shooting**Training courses include:

- VRF ECOi
- · Aquarea air source heat pumps (MCS accredited)
- GHP (2012)

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









# WELCOME TO NEW DOMESTIC RANGE

# MORE THAN EVER BEFORE, PANASONIC HAS DEVELOPED A RANGE OF PRODUCTS DESIGNED FOR YOU

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



# **HEALTHY** AIR



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



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

# ENERGY SAVING



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



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



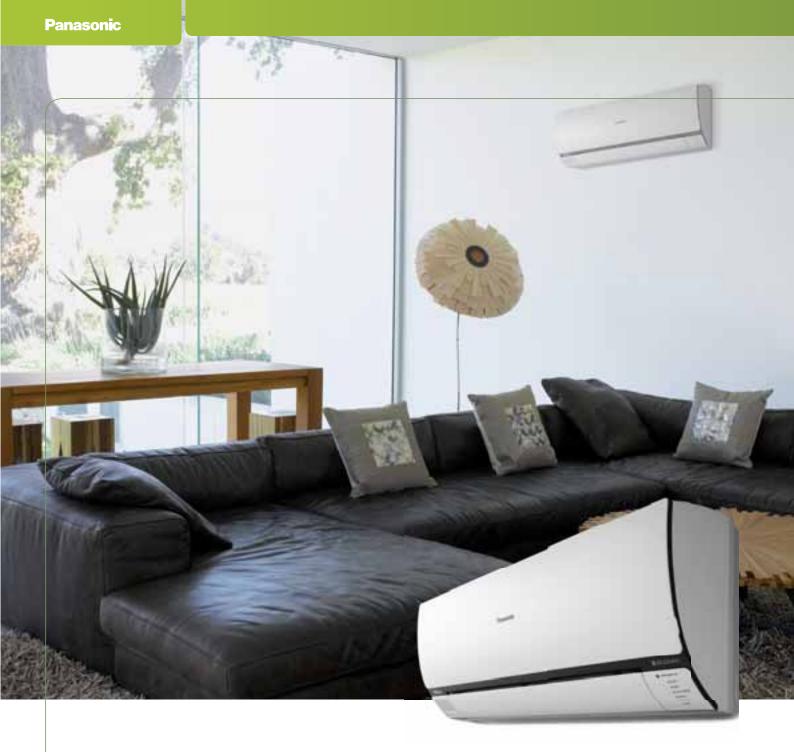
The Autocomfort system detects conditions in the room and switches to energy saving operation when nobody is on the room.



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



5 YEARS Warranty on the compressor.







### THE NEW ETHEREA RANGE PURE EFFICIENCY WITH ECONAVI

Living an eco lifestyle doesn't mean you need to compromise on comfort. With inverter control, you can still enjoy refreshingly cool air while reducing energy consumption by half. To further detect and reduce waste, now there is Econavi to give you even more energy savings. And, for a cleaner living environment, the new Nanoe-G helps purify the air as well as our surroundings. Together, these breakthrough technologies define what Panasonic's Eco Clean Life Innovation is all about — innovations that improve our environment while making life as comfortable as possible.

<sup>\*</sup>¹Comparison of 1.5HP Inverter model with ECONAVI dual sensor ON and OFF (Cooling) // ECONAVI dual sensor ON Outside temperature: 35°C/24°C // Remote setting temperature: 23°C with Fan Speed (High)

Vertical Airflow direction: Auto, Horizontal Airflow direction: ECONAVI Mode // Setting temperature goes up 2°C in total, 1°C controlled by ECONAVI activity level detection and another 1°C controlled by ECONAVI light intensity detection.

ECONAVI dual sensor OFF Outside temperature: 35°C/24°C // Remote setting temperature: 23°C with Fan Speed (High) // Vertical Airflow direction: Auto, Horizontal Airflow direction: Front

Total power consumption amount are measured for 1 hour in stable condition. At Panasonic Amenity Room (size:16.6m²) // This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.

### **ECONAVI WITH INTELLIGENT ECO SENSORS**



ECONAVI Intelligent Sensors monitor sunlight intensity, human movements, activity levels and human absence in order to detect unconscious waste of energy. ECONAVI automatically adjusts cooling power to save energy efficiently, whilst still providing uninterrupted cooling comfort and convenience.

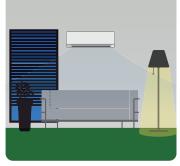
ECONAVI with intelligent eco sensors now has 4 settings to detect and reduce energy waste. You can now enjoy higher maximum energy savings of up to 35%\*1 on cooling mode and up to 45%\*2 on heating mode.



### SUNLIGHT DETECTION

ECONAVI detects changes in sunlight intensity in the room and judges whether it is sunny or cloudy/night and reduces energy consumption by adjusting cooling requirements under less sunny conditions





SUNNY

CLOUDY/NIGHT

### HUMAN ACTIVITY DETECTION

One-touch ECONAVI reduces waste in three simple steps:



AREA SEARCH ECONAVI detects human movements and reduces waste energy by not cooling unoccupied areas.



**ACTIVITY DETECTION** ECONAVI detects changes in activity levels and reduces energy wasted by cooling or heating when not needed..



ABSENCE DETECTION ECONAVI detects human absence in the room and reduces energy wasted by cooling an empty room.

ENERGY SAVING EFFECT FOR HEATING BY ECONAVI DUAL SENSOR + SUNLIGHT SENSOR : 45%\*2

<sup>2</sup>Comparison of 1.5HP Inverter model between with ECONAVI dual sensor ON and OFF

ECONAVI dual sensor ON Outside temperature: 2°C/1°C, Remote setting temperature: 26°C with Fan Speed (High) // Vertical Airflow direction: Auto. Horizontal Airflow direction: ECONAVI Mode Setting temperature goes down 3°C in total, 2°C controlled by ECONAVI activity level detection and another 1°C controlled by ECONAVI light intensity detection.

ECONAVI dual sensor OFF Outside temperature: 2ºC/1ºC, Remote setting temperature: 26ºC 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:16.6M2)

This is the maximum energy saving value, and the effect differs according to conditions in installation and usage.





### NEW SUNLIGHT DETECTION (ON COOLING MODE)

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

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

### SUNNY



ECONAVI is switched on when it is SUNNY.

### DETECT

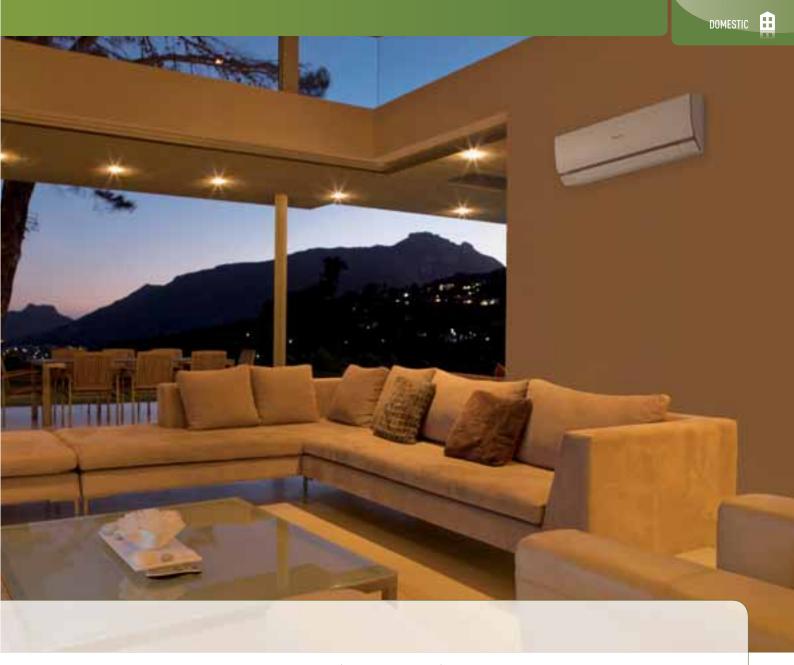


ECONAVI detects less cooling power is required.

### **REDUCE WASTE**



Reduces cooling power by an amount equivalent to increasing the set temperature by 1 degree Celsius.



### NEW SUNLIGHT DETECTION (ON HEATING MODE)

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

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

### SUNNY



ECONAVI is switched on when it is CLOUDY/NIGHT.

### DETECT



ECONAVI detects less heating power is required.

### REDUCE WASTE



Reduces heating power by an amount equivalent to decreasing the set temperature by 1 degree Celsius.





### **ECONAVI INTELLIGENT SENSORS**

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

### SUNLIGHT SENSOR

Detects changes in Sunlight Intensity



### HUMAN ACTIVITY SENSOR

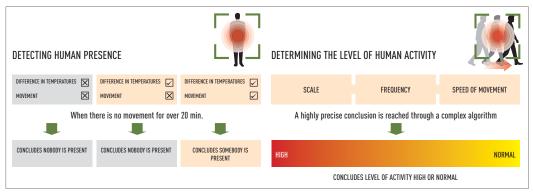
Detects human movements, changes in activity levels and human absence.





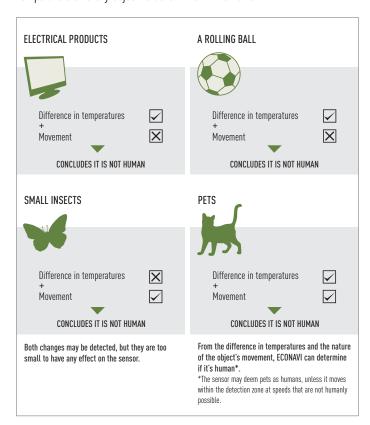
### HIGH-PRECISION SENSING

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



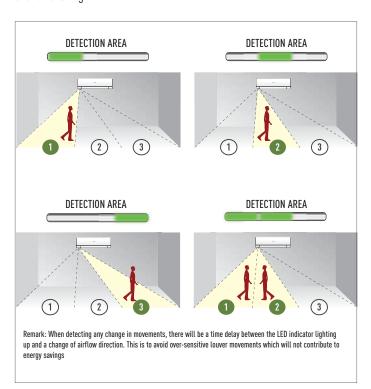
### DIFFERENTIATING OBJECTS

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



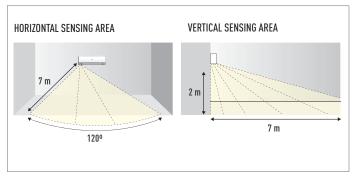
### SENSOR DETECTION PRINCIPLE

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



### **COVERAGE CAPABILITIES**

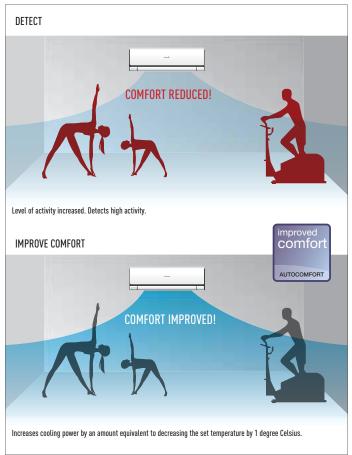
Human Activity Sensor covers a wider area due to its improved area detection function. The entire room is divided into 3 detection areas. Remark: Applicable for dual sensor.



### AUTOCOMFORT DUAL SENSOR PROVIDES COMFORT

Autocomfort dual sensor is used to provide comfort. High Activity Detection detects when the level of activity increases, and automatically increases cooling power by an amount equivalent to decreasing the set temperature by 1 degree Celsius to improve comfort. This is explained in the following scenario:

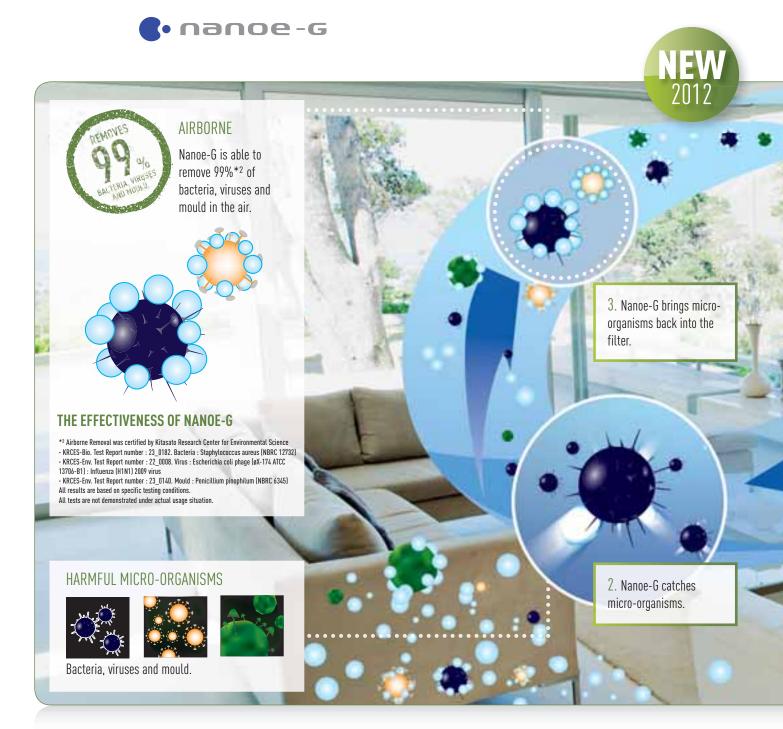
High Activity Detection: ECONAVI High Activity Detection can detect changes in activity levels to adjust cooling power to improve comfort.





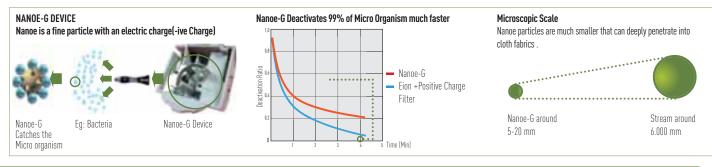
### NANOE-G AIR PURIFYING SYSTEM

Panasonic air conditioners now come with a new air purifying system called Nanoe-G which utilises nano technology consisting of ions and radicals to purify the air in the room. It works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould thus ensuring a cleaner living environment.



### TESTING INSTITUTE: KITASATO RESEARCH CENTER FOR ENVIRONMENTAL SCIENCE

CATEGORY	TARGET SUBSTANCE	SUBSTANCE NAME	EFFECTIVENESS	TEST REPORT NO	METHOD	RESULT
AIRBORNE	Bacteria	Staphylococcus aureus	99%	KRCES-Bio.	The AC with nanoe-G was operated in a test room (25m³) and aerosol was collected and bacterial count	99% removal from the air after 150 minutes of operation
		(NBRC 12732)		Test Report No. 23_0182	was calculated.	
	Virus	Escherichia coli phage	99%	KRCES-Env.	The AC with nanoe-G was operated in a test room (25m³) and airborne phages were collected and phage	99% removal from the air after 120 minutes of operation
		(øX-174 ATCC 13706-B1)		Test Report No. 22_0008	count of the collected air was calculated.	
			99%	KRCES-Env.	nanoe-G was operated in a test chamber (200 Litre) and the phages were collected and phage count of	99% removal from the air after 5 minutes of operation
				Test Report No. 22_0008	the collected air was calculated.	
		Influenza (H1N1)	99%	KRCES-Env.	nanoe-G was operated in a test chamber (200 Litre) and the influenza viruses were collected and the	99% removal from the air after 5 minutes of operation
		2009 virus		Test Report No. 22_0008	virus titers were calculated by the Reed and Muench method.	
					In view of health hazard associated with spatial distribution of Influenza (H1N1) 2009 virus, nanoe-G remo	val effectiveness cannot be tested in large test room (25m³).
					When tested in 200 Litre chamber, nanoe-G was able to decrease Influenza (H1N1) 2009 virus (99%) when	it was operated for 5 minutes.
					Additionally when tested in larger test room (25m³), nanoe-G can remove 99.5% of Coli phage virus when	
					the influenza virus could be speculated from the results on the phage according to the test results in a 20	10 Litre test chamber. It appeared that the air-conditioners in a
					larger test room (25m³) would be able to remove the influenza virus as effectively as the phage.	
	Mould	Penicillium pinophilum	99%	KRCES-Bio.	The AC with nanoe-G was operated in a test room (25m³) and aerosol was collected and fungal spores	99% removal from the air after 90 minutes of operation
		(NBRC 6345)		Test Report No. 23_0140	count was calculated.	





### TESTING INSTITUTE: JAPAN FOOD RESEARCH LABORATORIES

CATEGORY	TARGET SUBSTANCE	SUBSTANCE NAME	EFFECTIVENESS	TEST REPORT NO	METHOD	RESULT
ADHESIVE	Bacteria	Staphylococcus aureus	99%	Test Report No.	The AC with nanoe-G was operated in a test space (10m³) and viable cells were counted by	99% removal from the air after 150 minutes of operation
		(NBRC 12732)		11047933001-02	pour plate method.	
	Virus	Bacteriophage	99%	Test Report No.	nanoe-G was operated in a test box (90 Litre) and phage infectivity titer was determined by	99% removal from the air after 120 minutes of operation
		(Phi X 174 NBRC 103405)		11073649001-02	plaque technique.	
	Mould	Cladosporium cladosporioides	99%	Test Report No.	nanoe-G was operated in a test box (1m³) and colonies on the plate were counted.	99% removal from the air after 5 minutes of operation
		(NBRC 6348)		11047937001-02		

Remark: All results are based on specific testing conditions. All tests are not demonstrated under actual usage situation.

### THE EFFECTIVENESS

Why Nanoe-G is better than e-ion?

- Nanoe-G works on "Airborne" and "Adhesive"

• E-ion only works of "Airborne"

AIRBORNE	ADHESIVE	
Removes 99%	Deactivates 99% VIRUSES	
BACTERIA, VIRUSES AND MOULD	Deactivates 99% BACTERIA	
	Restrain mould growth	







**ELECTRICITY CONSUMPTION COMPARISON** 

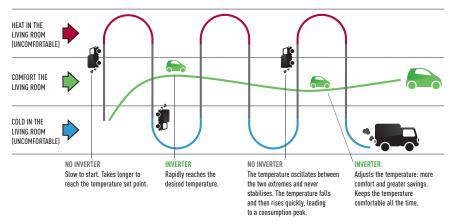
# INVERTER TECHNOLOGY EXCEPTIONAL ENERGY-SAVING PERFORMANCE

### **Reduces Electricity Consumption**

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

Unlike a conventional non-Inverter air conditioner which consumes a lot of energy, Panasonic Inverter air conditioner reduces wasteful operation - giving you energy savings of up to 50%\*1 on cooling mode.

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



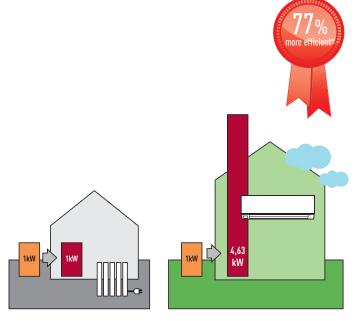
DURING COOLING UP TO 50 %\*1 ENERGY SAVINGS

- \*1 Comparison of 1.5HP Inverter model and 1.5HP Non-Inverter model (Cooling) Outside temperature: 35°C/24°C, Remote setting temperature: 25°C with Fan speed (High) Vertical Airflow direction: Auto, Horizontal Airflow direction: Front.
- Total power consumption amount are measured for 8 hours from starting. At Panasonic Amenity Room (size: 16.6m²) This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.

# 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/E9-NKE compared with electrical heaters at  $+7^{\circ}\text{C}$ 

### **2012 ENERGY LABELING**

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.

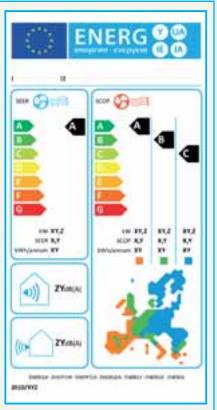
### **Energy efficiency classifications**

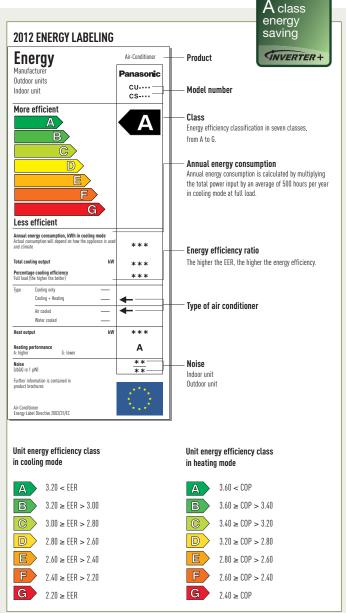
A European Community directive requiring energy labelling of domestic appliances came into effect in 2005. Since then, all manufacturers have been required to label each product with an efficiency level represented by a letter from A to G. This means that a class B domestic appliance consumes approximately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

### NEW 2013 ENERGY LABELING, FOR MORE TRANSPARENCY AND RELIABILITY.

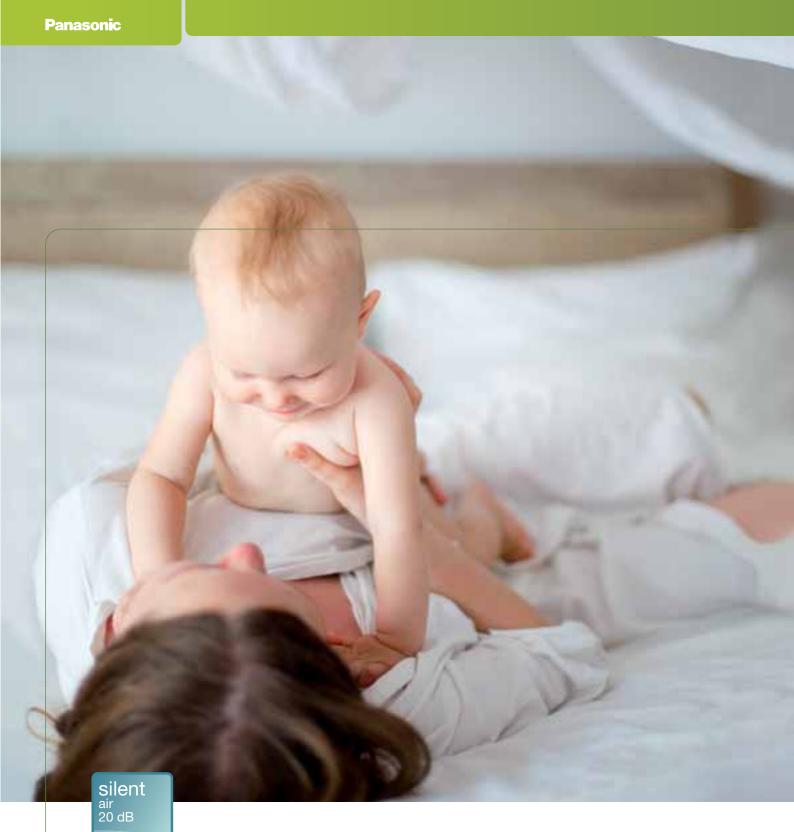
From 1 of January 2013, The energy performance calculation will change from COP to SCOP and EER to SEER. The "S" integrates the seasonal performance of the heat pump. The new energy-related products directive (ErP) will integrate 4 points of measurement on cooling mode and 5 points of measurement on heating mode with different compressor load. This new Seasonal energy performance calculation will give to the user for a better understanding on the real efficiency of his heat pump through out the year and in function of his region. Of course EER (COP) and SEER (SCOP) values are totally different and can not be compared. Also, SCOP and SEER must be calculated by the norm ErP lot10 effective from 1 of January 2013.

ENERGY EFFICIENCY CLASS	SEER	SCOP
A+++	SEER > 7.00	SCOP > 5.10
A++	6.10 <u>SEER &lt; 7.00</u>	4.60 <u>-</u> SCOP < 5.10
A+	5,60 <u>- SEER</u> < 6.10	4.00 <u>-</u> SCOP < 4.60
A	5.10 · SEER < 5.60	3.40 <u>SCOP</u> < 4.00
В	4.60 · SEER < 5.10	3.10 <u>-</u> SCOP < 3.40
C	4.10 · SEER < 4.60	2.80 <u>-</u> SCOP < 3.10
D	3.60 <u>·</u> SEER < 4.10	2.50 <u>-</u> SCOP < 2.80
E	3.10 <u>-</u> SEER < 3.60	2.20 <u>-</u> SCOP < 2.50
F	2.60 <u>SEER</u> < 3.10	1.90 <u>-</u> SCOP < 2.20
G	SEER <u>-</u> 2.60	SCOP <u>-</u> 1.90





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



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.

SUPER QUIET



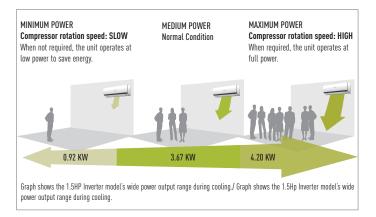




### OTHER ADVANTAGES OF INVERTER AIR CONDITIONERS

### **CONSTANT COMFORT**

Precise temperature control with a wide power output range enables an inverter air conditioner to meet different room occupancy levels - thus ensuring constant comfort.

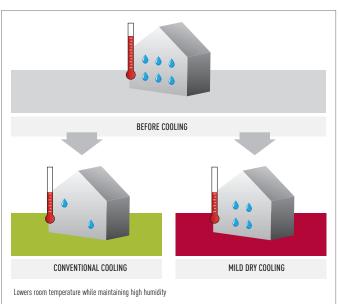


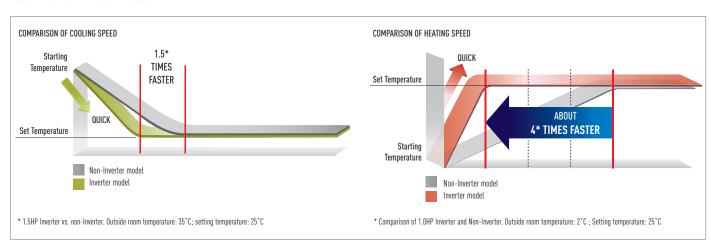
### QUICK COMFORT

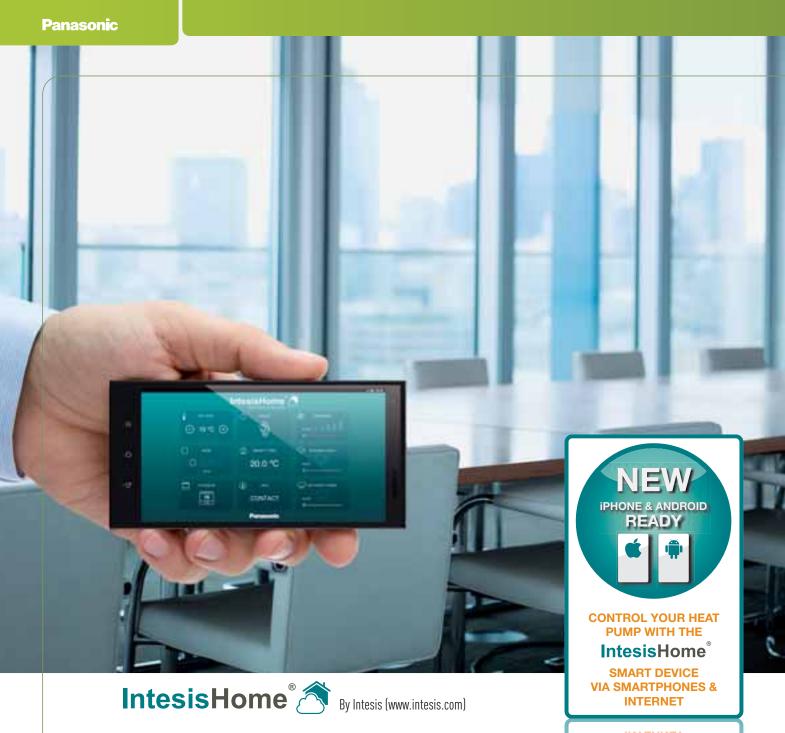
Panasonic Inverter air conditioners can operate with higher power during the start up period to cool the room 1.5 times faster and heat the room 4 times faster than non-Inverter models.

### MILD DRY COOLING

Mild dry cooling maintains a higher level of relative humidity of up to 10% compared to regular cooling operation. This helps to reduce skin dryness - and dry throat.







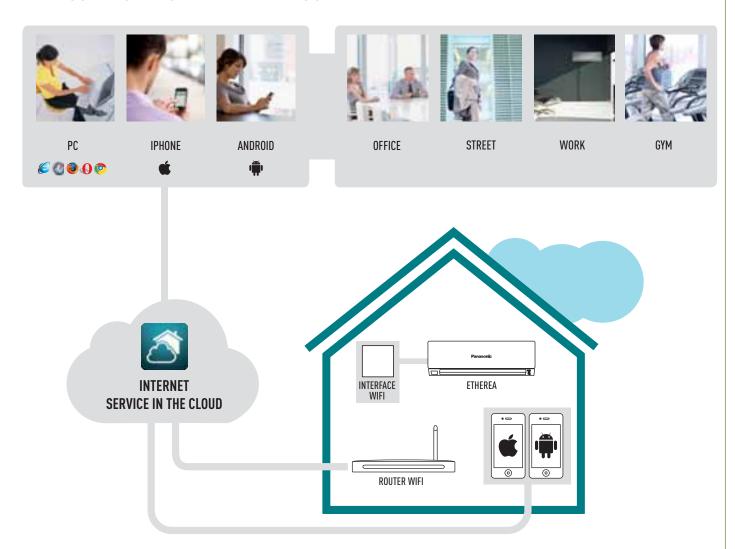
# CONTROL YOUR AIR CONDITIONER WITH YOUR SMART DEVICE -SMARTPHONE & INTERNET-

Panasonic has always offered its customers the most efficient Heat Pumps and Air Conditioners. Now it has taken a step forward and presents with the partnership of Intesis the IntesisHome, the most advanced service taking advantage of the latest Cloud Technology to manage your climate system from anywhere in the world.

Control your environment from your iPad, iPhone, any Android device or from a PC with Internet access using IntesisHome<sup>®</sup>. Offering the same functions as if you were at home: start/stop, Mode Operation, Set Temperature, Room Temperature etc. Experience the new, advanced functionality provided by IntesisHome<sup>®</sup> to achieve the best comfort and efficiency with the lowest energy consumption.

CONTROL YOUR HEAT
PUMP WITH THE
IntesisHome
SMART DEVICE
VIA SMARTPHONES &
INTERNET

### TAKE CONTROL FROM WHEREVER YOU ARE!



# IntesisHome<sup>®</sup>

ADVANCED SERVICE HOSTED IN THE CLOUD THAT PROVIDES ACCESS FROM EVERYWHERE TO YOUR AC SYSTEM.

### **FUNCTIONALITY**

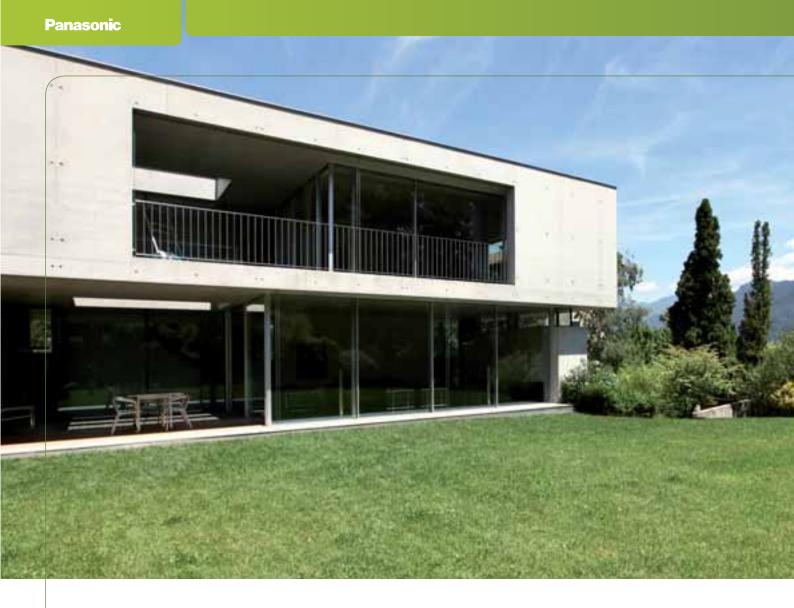
- Remote control: On/Off, Mode, Temp. Setting, etc.
- Scheduler calendar, Energy Saving functions, Preset configuration features
- Maintenance functions:
- Dirty Air Filter alerts
- Technical Service network
- Frror list
- ECO advices.
- Multi-lingual application

### INSTALLATION

- Easy installation.
- Videos and Manuals from www.intesishome.com
- · Helpline (Phone & Internet).
- · Automatic updates.

### REFERENCE

CZ-HI-Etherea, IntesisHome for Etherea







### **CONNECTIVITY**

# GREAT FLEXIBILITY FOR INTEGRATION INTO YOUR KNX / ENOCEAN / MODBUS PROJECTS ALLOWS FULLY BI-DIRECTIONAL MONITORING AND CONTROL OF ALL THE FUNCTIONING PARAMETERS

The Intesis interface has been designed specifically for Panasonic and provides complete monitoring, control and full functionality of the entire Aquarea line-up from KNX, EnOcean and Modbus installations.

Interfaces must be purchased at Intesis. More information on www.intesis.com

To know more about compatibility of Panasonic Heat pumps with Intesis interfaces: http://www.intesis.com/pdf/IntesisBox\_PA-AC-xxx-1\_AC\_Compatibility.pdf

### INTERFACE TO CONNECT ETHEREA TO KNX

### INTESIS PART Nº: PA-AW-KNX-1i

Intesis new Etherea-KNX interface allows monitoring and control, fully bi-directionally, all the functioning parameters of Etherea control from KNX installations. Small dimensions.

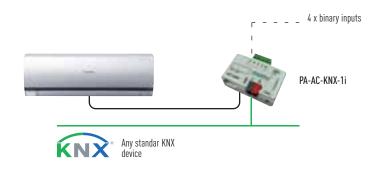
- Quick installation and possibility of hidden installation.
- External power not required.
- Direct connection to the AC indoor unit (split unit or Multi split unit)
- Fully KNX compatible. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication.
- Use the air conditioner ambient temperature or the one measured by a KNX temperature sensor or Thermostat.
- AC unit can be controlled simultaneously by the remote control of the AC unit and by KNX EnOcean devices.
- Advanced control functions: use it as a room controller.
- 4 binary inputs. They work as standard KNX binary inputs as well as being used to control the AC directly.

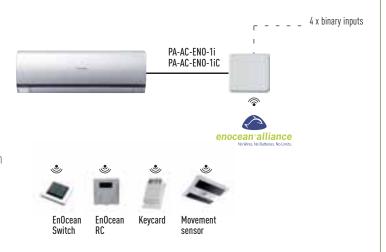
### INTERFACE TO CONNECT ETHEREA TO EN-OCEAN

### INTESIS PART Nº: PA-AC-ENO-11 // PA-AC-ENO-1IC

Intesis new Etherea-EnOcean interface PA-AC-ENO-1i allows monitoring and control, fully bi-directionally, all the functioning parameters of the Etherea control from EnOcean installations. Small dimensions.

- Quick installation and possibility of hidden installation.
- External power not required.
- Direct connection to the AC indoor unit (split unit).
- Fully EnOcean compatible. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication.
- Use the air conditioner ambient temperature or the one measured by an EnOcean temperature sensor or Thermostat.
- AC unit can be controlled simultaneously by the remote control of the AC unit and by EnOcean devices.
- Advanced control functions: use it as a room controller.
- 4 binary inputs. They work as standard EnOcean binary inputs as well as being used to control the AC directly.





# DOMESTIC AIR CONDITIONER RANGE

INDOOR UNITS	2.2 kW	2.8 kW	3.2 kW
WALL MOUNTED ETHEREA // INVERTER+ // SILVER			
NEW 2017			
	KIT-XE7-NKE-3	KIT-XE9-NKE-3	KIT-XE12-NKE-3
WALL MOUNTED ETHEREA // INVERTER+ // WHITE			
NEW 2012			
	KIT-E7-NKE-3	KIT-E9-NKE-3	KIT-E12-NKE-3
WALL MOUNTED RE TYPE // STANDARD INVERTER			
NEW 2012			
MALL MOUNTED VE TYPE // OTANDADD INVEDTED		KIT-RE9-NKX	KIT-RE12-NKX
WALL MOUNTED YE TYPE // STANDARD INVERTER		-	-
		WE AREA AND	Water County
WALL MOUNTED TYPE // INVERTER+ // -15°C		KIT-YE9-MKX	KIT-YE12-MKX
WALL MOUNTED TIPE // INVERTER+ // -13°C			
		KIT-E9-HKEA	KIT-E12-HKEA
WALL-MOUNTED TYPE // STANDARD HEAT PUMP		KII-EY-TIKEA	NII-E IZ-TINEA
WALE PROUNTED THE PARTITION HEAT TO THE			
		KIT-PW9-GKX	KIT-PW12-GKX
WALL MOUNTED UW TYPE // STANDARD INVERTER		MITTWY OUX	MIT WIZ ONA
		KIT-UW9-GKE	KIT-UW12-GKE
FLOOR CONSOLE TYPE // INVERTER+		5	8
CINCLE COLUT FLOOD OD CELLING TYPE // INVEDTED		KIT-E9-GFEW-1	KIT-E12-GFEW-1
SINGLE SPLIT FLOOR OR CEILING TYPE // INVERTER			
ETHEREA MULTI SPLIT 2X1 // INVERTER+			
NEW 2012			
2012			
ETHEREA MULTI SPLIT 3X1 // INVERTER+			
NEW			
2012			
ETHEREA MULTI SPLIT 4X1 // INVERTER+			
NEW 2012			
MULTI 5x1 // INVERTER+			
NEW			
2012			

4.5 kW	5.0 kW	6.0 kW	6.5 kW	8.0 kW
-	-	-		
KIT-XE15-NKE-3	KIT-XE18-NKE	KIT-XE21-NKE		
	2	2 2	2	2
KIT-E15-NKE-3	KIT-E18-NKE	KIT-E21-NKE	KIT-E24-NKE	KIT-E28-NKE
	T +			
KIT-RE15-NKX	KIT-RE18-NKX		KIT-RE24-NKX	
-				
KIT-YE18-MKX				
KIT-E15-HKEA	KIT-E18-HKEA	KIT-E21-HKEA		
	KIT-PW18-GKX		KIT-PW24-JKE	
	KII-PVVIO-UKA		NII-PVVZ4-JNE	
	A			
	KIT-E18-GFEW-1			
KIT-E15-DTE	KIT-E18-DTE	KIT-E21-DTE		
	-			
KIT-2XE/E77-NBE // KIT-2XE/E79-NBE // KIT-2XE/E712-NBE // KIT-2XE/E99-NBE	KIT-2XE/E99-NKE // KIT-2XE/E912-NKE // KIT-2XE/E1212-NKE			
		_		
		KIT-3XE/E7712-NBE // KIT-3XE/E7715-NBE		
				KIT-4XE/E77712 / 4XE/E77715-NBE // KIT-4XE/E77712 / 4XE/E77715-NKE
				*****
				Mary Mary Mary Mary Mary Mary Mary Mary
				CU-5E34NBE

### FEATURE EXPLANATIONS

### Healthy Air Quality



### NANOE-G

Nanoe-G utilises nano-technology fine particles to purify the air in the room. It works

effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould thus ensuring a cleaner living environment.



### MILD DRY COOLING

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

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



#### SOFT BREEZE MODE

The Soft Breeze mode eliminates excess humidity with a soft breeze and gives you the feeling of

well-being without significant temperature changes.



#### ION BENEFIT

Negative ions, found in the air near waterfalls and forests, generally produce a great sense

of wellbeing. Panasonic brings all the benefits to your home, at the push of a button.



### Anti Bacterial Filter

The Anti Bacterial Filter eliminates the allergens it captures. It combines three

functions in one (anti-allergen, anti-virus and antibacteria) 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.



### **FCONAVI**

ECONAVI sensor determines 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 HEATING MODE

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



### POWERFUL MODE

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



### SOFT DRY OPERATION MODE

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



### WIDE & LONG AIRFLOW VANE

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



### PERSONAL AIRFLOW CREATION

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

### AUTOMATIC VERTICAL AIRFLOW CONTROL The flap swings up and down automatically,

making a vertical sweep which spreads the flow throughout the room. The flow can also be set a fixed angle with the remote control.



### MANUAL HORIZONTAL AIRFLOW CONTROL



### AUTO MODE (INVERTER)

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



### SIMPLE AUTO CHANGEOVER

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



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

### Use



12-HOUR ON&OFF TIMER

(T)24

### 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.



### 5 YEARS

Warranty on the compressor.

# **FEATURE COMPARISON**

		MODELS	KIT-XE/E7-NKE-3 KIT-XE/E9-NKE-3 KIT-XE/E12-NKE-3 KIT-XE/E15-NKE-3 KIT-XE/E18-NKE KIT-XE/E21-NKE KIT-E24-NKE KIT-E28-NKE	KIT-RE9-NKX KIT-RE12-NKX KIT-RE15-NKX KIT-RE18-NKX KIT-RE24-NKX	KIT-YE9-MKX KIT-YE12-MKX KIT-YE18-MKX	KIT-E9-HKEA KIT-E12-HKEA KIT-E15-HKEA KIT-E18-HKEA KIT-E21-HKEA	KIT-PW9-GKX KIT-PW12-GKX KIT-PW18-GKX KIT-PW24-JKE	KIT-UW9-GKE KIT-UW12-GKE	KIT-E9-GFEW-1 KIT-E12-GFEW-1 KIT-E18-GFEW-1	KIT-E15-DTE KIT-E18-DTE KIT-E21-DTE	KIT-2MRE77-MBE KIT-2MRE79-MBE KIT-2MRE712-MBE KIT-2MRE712-MBE KIT-2MRE77-MKE KIT-2MRE79-MKE KIT-2MRE79-MKE KIT-2MRE79-MKE KIT-2MRE912-MKE KIT-2MRE912-MKE KIT-2MRE1212-MKE	KIT-2XE/E77-NBE KIT-2XE/E79-NBE KIT-2XE/E712-NBE KIT-2XE/E99-NBE KIT-2XE/E99-NKE KIT-2XE/E912-NKE KIT-2XE/E1212-NKE	KIT-3XE/E7712-NBE KIT-3XE/E7715-NBE	KIT-4XE/E77712-NBE KIT-4XE/E77715-NBE KIT-4XE/E77712-NKE KIT-4XE/E77715-NKE	CU-5E34NBE
	nano technology air cleaner	NanoE-G air purifying system	×									×	×	×	
	perfect humidity		×												
	relaxing	Soft Breeze		×							×				
ΤY	breeze effect sorrarasza			For RE9, RE12 and RE15											
R QUAL	ion generator	Ion Benefit				×									
LTHY AI	prevention allergy filter	Anti Bacterial Filter		X 10 years		×	<b>X</b> Optional	<b>X</b> Optional		<b>✗</b> Optional	×				
¥	PERM	One-Touch anti- mould air filter		×	×				×	×					
	*	Odour-removing	×	×	×	×	×	×	×	x	×	×	×	×	
		function Removable,	x	×	×	x	×	×	×		×	x	×	×	×
		washable panel													
	A class energy saving	Inverter+ system	×			×			×			×	×	×	×
	A class energy saving	Inverter system		×						×	×				
	35% savings	ECONAVI	×									×	×	×	
	improved comfort	AUTOCOMFORT	×									×	×	×	
	silent	Super Quiet mode	x	×	×	x			×	×					
	silent ar 20 dB		For XE/E7, XE/E9 and XE/E12	For RE9, RE12 and RE15											
	down to -15°C in cooling mode	Down to -15°C in cooling only				×									
	down to -15°C in heating mode	Down to -15°C in heat mode	×			×			×			×	×	×	
E	(Page 1997 LPR		X	<b>★</b> For RE9, RE12 and	×	×			×	x		x	×	×	×
COMFORT	4	Soft dry operation	x	RE15		×	×		×	x	×	x	×	×	×
	7	mode Wide & long	x								×	x	x	×	
		airflow vane													
		Personal airflow creation	For XE/E18 and XE/E21	For RE18 and RE24		×									
	-	Automatic vertical airflow control	×	For RE9, RE12			×		×	x	×	×	×	×	
	A		X For XE7, XE9, XE12	and RE15  X For RE9, RE12				×	×	x	×	×	×	×	
	60	AUTO mode	and XE15	and RE15		x			×	x	×	×	×	×	
		(Inverter) Simple Auto	x	×											
		Changeover							v	v		v		v	
	0		×	×		×	×	×	×	×	×	×		×	
	<b>O</b> 12	12-hour ON&OFF timer		For RE9, RE12	×		For PW9 and PW12	×							
	⊕24	Real time clock with dual ON&OFF timer	x	and RE15			OIIU FVVIZ				×		x	x	×
USE	<b></b> 24	Real time clock with single ON&OFF timer		X For RE18 and RE24		×	X For PW18 and PW24		×						
	M	LCD Wireless	×	×		×	×	×	×	x	×	×	×	x	×
	<i>j</i> →	Automatic restart	×	×		×	×		×	×	×	×	×	×	×
	==	Long piping	X 15 m (XE/E7 to XE/E15), 20 m (XE/E18/XE/E21)	★ 15 m (RE9/RE12/ RE15)	<b>X</b> 15 m	¥ 15 m 20 m (E18/E21)	★ 10 m (PW9)     15 m (PW12)     25 m (PW18	<b>X</b> 10 m	<b>★</b> 15 m 20 m (E18)	<b>≭</b> 20 m	<b>✗</b> Max. 30 m	<b>✗</b> Max. 30 m	<b>✗</b> Max. 50 m	<b>✗</b> Max. 70 m	<b>X</b> Max. 80 m
RELIABILITY	· [0]*	Top-Panel	(XE/E18/XE/E21) 30 m (E24/E28)	20 m (RE18) 30 m (RE24)	×	×	25 m (PW18 /PW24)	×	×	×	×	×	×	×	×
RELIA	=	maintenance access	×	×		×			×	×	×	×	×	×	
		Self-diagnosis function													
	5 year compressor warranty	Warranty on the compressor	×	×	×	×	×	×	×	×	×	×	×	×	×



## WALL MOUNTED ETHEREA // INVERTER+ // SILVER

ETHEREA WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN Econavi builds-in a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, you will achieve up to 35% energy savings whilst increasing your comfort.

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















Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when steeping

KIT			KIT-XE7-NKE-3	KIT-XE9-NKE-3	KIT-XE12-NKE-3	KIT-XE15-NKE-3
KIT WITH SMARTPHONE CO	ONTROL		KIT-XE7-NKE-3-WIFI	KIT-XE9-NKE-3-WIFI	KIT-XE12-NKE-3-WIFI	KIT-XE15-NKE-3-WIFI
Indoor			CS-XE7NKEW	CS-XE9NKEW	CS-XE12NKEW	CS-XE15NKE-3
Outdoor			CU-E7NKE-3	CU-E9NKE-3	CU-E12NKE-3	CU-E15NKE-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)	<b>Energy Saving</b>	4.36 (3.13-4.14) <b>A</b>	4.67 (3.47-4.11) <b>A</b>	3.87 (3.40-3.39) <b>A</b>	3.44 (3.50-3.13) <b>A</b>
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 (840-6,110)
Heating capacity at -7°C	Nominal	kW	2.35	2.88	3.75	4.1
COP 1)	Nominal (Min - Max)	<b>Energy Saving</b>	4.41 (3.26-3.92) <b>A</b>	4.63 (3.54-3.85) <b>A</b>	4.04 (3.47-3.47) <b>A</b>	3.70 (2.88-3.21) <b>A</b>
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						
Air Volume	Cooling / Heating	m³/h	654 / 684	678 / 702	750 / 768	750 / 804
Moisture removal volume	J. 1	l/h	1.3	1.5	2	2.4
Sound pressure Level 3)	Cool — Heat (Hi/Lo/S-Lo)	dB(A)	37 / 24 / 20 — 38 / 25 / 20	39 / 25 / 20 — 40 / 27 / 20	42 / 28 / 20 — 42 / 33 / 20	43 / 32 / 29 — 43 / 35 / 29
Sound power Level	Cooling / Heating (Hi)	dB	53 / 54	55 / 56	58 / 58	59 / 59
Dimensions	H x W x D	mm	290 x 870 x 214			
Net weight		Kg	9	9	9	9
Air purifier filter			Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G
OUTDOOR UNIT						
Power source		V	230	230	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current (Nominal)	Cooling / Heating	Α	2.2 / 3.0	2.5 / 3.4	4.1 / 5.1	5.5 / 6.6
Max. current		A	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	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	695 x 875 x 320
Net weight	1	Kg	32	35	35	45
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 1/2" (12.70)
Refrigerant Loading	R410A	Kg	0.830	0.950	0.970	1.040
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	1	g/m	20	20	20	20
Operating range	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43	+5 / +43
1 3 3	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24
-		1	1	*	1	

Specifications subject to change without notice



### **TECHNICAL FOCUS**

- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI, NOW
  WITH SUNLIGHT DETECTION
- EXCLUSIVE SILVER DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- 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





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 NKE 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 routing 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 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-NKE-3 // KIT-XE9-NKE-3 // KIT-XE12-NKE-3 // KIT-XE15-NKE-3

#### **HEALTHY AIR**

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

### **ENERGY EFFICIENCY AND ECOLOGY**

- Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- NEW! Optional Smartphone control with IntensisHome device

### **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-E7NKE-3 CU-E12NKE-3



CU-E15NKE-3



# WALL MOUNTED ETHEREA // INVERTER+ // SILVER

ETHEREA WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi builds-in a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, you will achieve up to 35% energy savings whilst increasing your comfort. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould. 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!











Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping

KIT			KIT-XE18-NKE	KIT-XE21-NKE
KIT WITH SMARTPHONE CO	NTROI		KIT-XE18-NKE-WIFI	KIT-XE21-NKE-WIFI
Indoor			CS-XE18NKEW	CS-XE21NKEW
Outdoor			CU-E18NKE	CU-E21NKE
Cooling capacity	Nominal (Min - Max)	kW	5.00 (0.98-6.00)	6.30 (0.98-7.10)
ooding duputity	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)	2.85 (3.50-2.80) <b>A</b>
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)
ileating capacity	Nominal (Min - Max)	kCal/h	4,990 (840-6,880)	6,190 (840-7,310)
Heating capacity at -7°C	Nominal (Mill - Max)	kW	4.98	5.24
COP 1)	Nominal (Min - Max)	Energy Saving	3.77 (2.88-3.08) <b>A</b>	3.43 (2.88-3.09) <b>A</b>
Power input Heating	Nominal (Min - Max)	kW	1.54 (0.34-2.60)	2.10 (0.34-2.75)
Annual Energy Consumption 2)	NUIIIIIdt (MIII - Max)	kWh	735	1,105
INDOOR UNIT		KVVII	730	1,100
Air Volume	Cooling / Heating	m³/h	978 / 1,074	1,038 / 1,110
Moisture removal volume	cooling / nealing	l/h	2.8	3.5
Sound pressure Level 3)	Cooling (Hi / Lo / S-Lo)		44 / 37 / 34	45 / 37 / 34
Sound bressare resera	Heating (Hi / Lo / S-Lo)		44 / 37 / 34	45 / 37 / 34
Cound named and				
Sound power Level	Cooling (Hi)	dB	60	61
D'	Heating (Hi)	dB	60	61
		mm	290 x 1,070 x 240	290 x 1,070 x 240
	Net weight Kg		12	12
Air purifier filter			NANOE-G	NANOE-G
OUTDOOR UNIT		V	000	230
Power source			230	
Connection	0 1: /11 1:	mm²	4 x 2.5	4 x 2.5
Current (Nominal)	Cooling / Heating	A	6.6 / 6.9	9.9 / 9.4
Max. current	0 11 111 11	Α	11.4	12.1
Air Volume	Cooling / Heating	m³/h	2,352 / 2,274	2,502 / 2,424
Sound pressure Level 3)	Cooling (Hi)	dB(A)	47	48
	Heating (Hi)	dB(A)	47	49
Sound power Level	Cooling (Hi)	dB	61	62
	Heating (Hi)	dB	61	63
Dimensions 4)	H x W x D	mm	695 x 875 x 320	695 x 875 x 320
Net weight		Kg	46	47
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.70)
Refrigerant Loading	R410A	Kg	1.22	1.28
Elevation difference (in/out) 5)		m	15	15
Piping length	Min / Max	m	3-20	3-20
Piping length without refrigerant increase	Max	m	7.5	7.5
Additional gas		g/m	20	20
Operating range	Cooling Min / Max	°C	+5 / +43	+5 / +43
. • •	Heating Min / Max	°C	-5 / +24	-5 / +24
-				•

Specifications subject to change without notice



- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI, NOW
  WITH SUNLIGHT DETECTION
- EXCLUSIVE SILVER DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- 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
	Outeido air tomporaturo	3E0C DD / 3/0C WD	70C DR / 40C M/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 NKE units.

- 1) EER and COP classification is at 230 V in accordance with EU directive 2002/31/EC.
- The annual consumption is calculated by multiplying the input power at 230 V by an avarage of 500 hours per
  year in cooling mode.
   The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body
- 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-XE18-NKE // KIT-XE21-NKE

#### **HEALTHY AIR**

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

### **ENERGY EFFICIENCY AND ECOLOGY**

- Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- · NEW! Optional Smartphone control with IntensisHome device

- · 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-E18NKE



# WALL MOUNTED ETHEREA // INVERTER+ // WHITE

ETHEREA WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi builds-in a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, you will achieve up to 35% energy savings whilst increasing your comfort. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould. 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!















Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when steeping

KIT FYITH SMARTPHONE CONTROL	KIT			KIT-E7-NKE-3	KIT-E9-NKE-3	KIT-E12-NKE-3	KIT-E15-NKE-3
Outcome	KIT WITH SMARTPHONE CO	ONTROL		KIT-E7-NKE-3-WIFI	KIT-E9-NKE-3-WIFI	KIT-E12-NKE-3-WIFI	KIT-E15-NKE-3-WIFI
Cooling capacity   Nominal (Min - Max)   W   2.05 (0.75-2.40)   2.50 (0.85-2.00)   3.50 (0.85-0.00)   4.20 (0.98-5.00)   4.2	Indoor			CS-E7NKEW	CS-E9NKEW	CS-E12NKEW	CS-E15NKEW-3
Nominal (Min - Max)   Kcal/h   Mominal (Min - Max)   Keal/h   Mominal (Min - Max)   Mominal (Min - Max)   Mominal (Min - Max)   Keal/h   Mominal (Min - Max)   Mominal (Min - Max	Outdoor				CU-E9NKE-3		
ERR     Nominal (Min - Max)   Energy Saving   A.36 (3.13.4.14	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)
Power input Cooling   Nominal (Min - Max)   Nominal (Min - Max)			kCal/h	1,760 (650-2,060)	2,150 (730-2,580)		3,610 (840-4,300)
Heating capacity   Nominal (Min - Max)   RW   2.80 (0.75-4.00)   3.40 (0.85-5.00)   4.40 (0.85-6.70)   5.40 (0.98-7.10)	EER 1)	Nominal (Min - Max)	Energy Saving	4.36 (3.13-4.14) <b>A</b>	4.67 (3.47-4.11) <b>A</b>	3.87 (3.40-3.39)	3.44 (3.50-3.13) <b>A</b>
Nominal (Min - Max)   RCal/h   2,410 (658-3,440)   2,920 (730-4,300)   3,780 (730-5,768)   4,640 (840-6,110)	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 at -7°C   Nominal   IW   2.35   2.88   3.75   3.1	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)
COP   3		Nominal (Min - Max)	kCal/h	2,410 (650-3,440)	2,920 (730-4,300)	3,780 (730-5,760)	4,640 (840-6,110)
Nominal (Min - Max)   Nominal (Min - Max)	Heating capacity at -7°C		kW	2.35			4.1
Annual Energy Consumption   3    KWh   235   268   453   610	COP 1)	Nominal (Min - Max)	<b>Energy Saving</b>	4.41 (3.26-3.92) <b>A</b>	4.63 (3.54-3.85) <b>A</b>	4.04 (3.47-3.47) <b>A</b>	3.70 (2.88-3.21) <b>A</b>
Nanoe-G   Nano	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)
Air Volume	Annual Energy Consumption 2	1	kWh	235	268	453	610
Moisture removal volume	INDOOR UNIT						
Sound pressure Level   Sound pressure Level   Sound pressure Level   Cooling / Heating (Hi)   dB   53 / 54   55 / 56   56 / 58   59 / 59	Air Volume	Cooling / Heating	m³/h	654 / 684	678 / 702	750 / 768	750 / 804
Sound power Level   Cooling / Heating (Hi)   dB   53 / 54   55 / 56   58 / 58   59 / 59	Moisture removal volume			1.3	1.5	2	
Dimensions	Sound pressure Level 3)	Cool — Heat (Hi/Lo/S-Lo)	dB(A)	37 / 24 / 20 — 38 / 25 / 20	39 / 25 / 20 — 40 / 27 / 20	42 / 28 / 20 - 42 / 33 / 20	
Net weight	Sound power Level	Cooling / Heating (Hi)	dB	53 / 54	55 / 56	58 / 58	59 / 59
Nanoe-G   Nanoe-G   Nanoe-G   Nanoe-G	Dimensions	H x W x D	mm	290 x 870 x 214	290 x 870 x 214	290 x 870 x 214	290 x 870 x 214
DUTDOOR UNIT	Net weight		Kg	9	9	9	9
Power source	Air purifier filter			Nanoe-G	Nanoe-G	Nanoe-G	Nanoe-G
Connection         mm²         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         A         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 30         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 41         H x W x D         mm         542 x 780 x 289         542 x 780 x 289         542 x 780 x 289         695 x 875 x 320           Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe         linch (mm)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.52) </td <td>OUTDOOR UNIT</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	OUTDOOR UNIT						
Current (Nominal)         Cooling / Heating         A         2.2 / 3.0         2.5 / 3.4         4.1 / 5.1         5.5 / 6.6           Max. current         A         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 31         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 41         H x W x D         mm         542 x 780 x 289         542 x 780 x 289         542 x 780 x 289         695 x 875 x 320           Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe         inch (mm)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)	Power source		V	230	230	230	230
Max. current         A         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 ³¹         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 ⁴¹         H x W x D         mm         542 x 780 x 289         542 x 780 x 289         542 x 780 x 289         695 x 875 x 320           Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe         inch (mm)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) / 3/8" (9.52)	Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
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 31   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 41   H x W x D   mm   542 x 780 x 289   542 x 780 x 289   542 x 780 x 289   695 x 875 x 320   Net weight   Kg   32   35   35   45   Piping connections   Liquid pipe / Gas pipe   inch (mm)   1/4" (6.35) / 3/8" (9.52)   1/4" (6.35) / 3/8" (9.52)   1/4" (6.35) / 3/8" (9.52)   1/4" (6.35) / 3/8" (9.52)   1/4" (6.35) / 1/2" (12.70)   Refrigerant Loading   R410A   Kg   0.830   0.950   0.970   1.040   Elevation difference (in/out) 51   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   Additional gas   g/m   20   20   20   20   Operating range   Cooling Min / Max   °C   +5 / +43   +5 / +43   +5 / +43   +5 / +43	Current (Nominal)	Cooling / Heating			2.5 / 3.4	4.1 / 5.1	
Sound pressure Level 31         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 41         H x W x D         mm         542 x 780 x 289         542 x 780 x 289         542 x 780 x 289         695 x 875 x 320           Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe inch (mm)         11/4" (6.35) / 3/8" (9.52)         11/4" (6.35) / 3/8" (9.5	Max. current						
Sound power Level         Cooling / Heating (Hi)         dB         60 / 61         61 / 62         63 / 65         61 / 61           Dimensions 40         H x W x D         mm         542 x 780 x 289         542 x 780 x 289         542 x 780 x 289         695 x 875 x 320           Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe         inch (mm)         1/4" (6.35) / 3/8" (9.52)         <	Air Volume	Cooling / Heating	m³/h	2,034 / 2,034	1,788 / 1,788	1,860 / 1,860	2,052 / 1,980
Dimensions 40         H x W x D         mm         542 x 780 x 289         542 x 780 x 289         542 x 780 x 289         695 x 875 x 320           Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe inch (mm)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35) /	Sound pressure Level 3)	Cooling / Heating (Hi)	dB(A)	45 / 46	46 / 47		46 / 46
Net weight         Kg         32         35         35         45           Piping connections         Liquid pipe / Gas pipe         inch (mm)         1/4" (6.35) / 3/8" (9.52)         1/4" (6.35	Sound power Level	Cooling / Heating (Hi)	dB	60 / 61	61 / 62	63 / 65	61 / 61
Piping connections         Liquid pipe / Gas pipe         inch (mm)         1/4" (6.35) / 3/8" (9.52) <td>Dimensions 4)</td> <td>H x W x D</td> <td>mm</td> <td>542 x 780 x 289</td> <td>542 x 780 x 289</td> <td>542 x 780 x 289</td> <td>695 x 875 x 320</td>	Dimensions 4)	H x W x D	mm	542 x 780 x 289	542 x 780 x 289	542 x 780 x 289	695 x 875 x 320
Refrigerant Loading         R410A         Kg         0.830         0.950         0.970         1.040           Elevation difference (in/out) 51         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         g/m         20         20         20         20           Operating range         Cooling Min / Max         °C         +5 / +43         +5 / +43         +5 / +43         +5 / +43	Net weight		Kg	32	35	35	45
Elevation difference (in/out) 51       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       g/m       20       20       20       20         Operating range       Cooling Min / Max       °C       +5 / +43       +5 / +43       +5 / +43       +5 / +43	Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 1/2" (12.70)
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         g/m         20         20         20         20           Operating range         Cooling Min / Max         °C         +5 / +43         +5 / +43         +5 / +43			Kg		0.950		
Piping length without refrigerant increase         Max         m         7.5         7.5         7.5         7.5           Additional gas         g/m         20         20         20         20           Operating range         Cooling Min / Max         °C         +5 / +43         +5 / +43         +5 / +43	Elevation difference (in/out) 5	Max	m	15	15	15	15
refrigerant increase         g/m         20         20         20         20         20         20         20         20         20         45 / +43         +5 / +43	Piping length	Min / Max	m				
Operating range   Cooling Min / Max   C   +5 / +43   +5 / +43   +5 / +43   +5 / +43		Max	m	7.5	7.5	7.5	7.5
	Additional gas		g/m	20	20	20	20
Heating Min / Max	Operating range	Cooling Min / Max	°C	+5 / +43			+5 / +43
	· ·	Heating Min / Max	°C	-15 / +24	-15 / +24	-15 / +24	-15 / +24

Specifications subject to change without notice



- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI, NOW
  WITH SUNLIGHT DETECTION
- EXCLUSIVE WHITE DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- 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





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

#### DB: Dry Bulb; WB: Wet Bulb

us: ury suur; we: wet suu 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 NKE 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 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-E7-NKE-3 // KIT-E9-NKE-3 // KIT-E12-NKE-3 // KIT-E15-NKE-3

#### **HEALTHY AIR**

- **NEW!** NANOE-G air purifying system
- Mild Dry Cooling operation mode for increased comfort and prevention of skin moisture loss

#### **ENERGY EFFICIENCY AND ECOLOGY**

- Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- NEW! Optional Smartphone control with IntensisHome device

- · 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-E7NKE-3 CU-E12NKE-3 CU-E9NKE-3



CU-E15NKE-3



# WALL MOUNTED ETHEREA // INVERTER+ // WHITE

ETHEREA WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi builds-in a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Econavi not only optimizes air flow orientation and volume according to human presence, it also reduces cooling power automatically by no/less sunshine. With Econavi, you will achieve up to 35% energy savings whilst increasing your comfort. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive micro-organisms like bacteria, viruses and mould. 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!











Maintains a Relative Humidity up to 10% higher than cooling operation. Ideal when sleeping

PTI		

KIT			KIT-E18-NKE	KIT-E21-NKE	KIT-E24-NKE	KIT-E28-NKE
KIT WITH SMARTPHONE CO	NTROL		KIT-E18-NKE-WIFI	KIT-E21-NKE-WIFI	KIT-E24-NKE-WIFI	KIT-E28-NKE-WIFI
Indoor			CS-E18NKEW	CS-E21NKEW	CS-E24NKES	CS-E28NKES
Outdoor			CU-E18NKE	CU-E21NKE	CU-E24NKE	CU-E28NKE
Cooling capacity	Nominal (Min - Max)	kW	5.00 (0.98-6.00)	6.30 (0.98-7.10)	6.80 (0.98-8.10)	7.65 (0.98-8.60)
	Nominal (Min - Max)	kCal/h	4,300 (840-5,160)	5,420 (840-6,110)	5,850 (840-6,970)	6,580 (840-7,400)
EER 1)	Nominal (Min - Max)	<b>Energy Saving</b>	3.40 (3.50-2.96) <b>A</b>	2.85 (3.50-2.80) <b>A</b>	3.21 (2.58-3.00) <b>A</b>	3.01 (2.58-2.92) <b>A</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	4,990 (840-6,880)	6,190 (840-7,310)	7,400 (840-8,510)	8,260 (840-9,460)
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>A</b>	3.23 (2.18-3.09) <b>A</b>	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				1,100	1,000	1,2.70
Air Volume	Cooling / Heating	m³/h	978 / 1,074	1,038 / 1,110	1,104 / 1,170	1,158 / 1,206
Moisture removal volume	V. V	l/h	2.8	3.5	3.9	4.5
Sound pressure Level 3)	Cooling (Hi / Lo / S-Lo)	dB(A)	44 / 37 / 34	45 / 37 / 34	47 / 38 / 35	49 / 38 / 35
•	Heating (Hi / Lo / S-Lo)		44 / 37 / 34	45 / 37 / 34	47 / 38 / 35	48 / 38 / 35
Sound power Level	Cooling (Hi)	dB	60	61	63	65
•	Heating (Hi)	dB	60	61	63	64
Dimensions	H x W x D	mm	290 x 1,070 x 240			
Net weight	I	Kg	12	12	12	12
Air purifier filter			NANOE-G	NANOE-G	NANOE-G	NANOE-G
OUTDOOR UNIT						
Power source		V	230	230	230	230
Connection		mm <sup>2</sup>	4 x 2.5	4 x 2.5	4 x 2.5	4 x 2.5
Current (Nominal)	Cooling / Heating	Α	6.6 / 6.9	9.9 / 9.4	9.7 / 12.1	11.5 / 15.0
Max. current		Α	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
·	Heating (Hi)	dB(A)	47	49	52	53
Sound power Level	Cooling (Hi)	dB	61	62	66	67
•	Heating (Hi)	dB	61	63	66	67
Dimensions <sup>4)</sup>	HxWxD	mm	695 x 875 x 320	695 x 875 x 320	795 x 875 x 320	795 x 875 x 320
Net weight	I	Kg	46	47	65	67
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 5/8" (15.88)	1/4" (6.35) / 5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.22	1.28	1.70	1.80
Elevation difference (in/out) 5)	Max	m	15	15	20	20
Piping length	Min / Max	m	3-20	3-20	3-30	3-30
Piping length without refrigerant increase	Max	m	7.5	7.5	10	10
Additional gas	I	g/m	20	20	30	30
Operating range	Cooling Min / Max	°C	+5 / +43	+5 / +43	+16 / +43	+16 / +43
1 3 3	Heating Min / Max	°C	-5 / +24	-5 / +24	-5 / +24	-5 / +24

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- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI, NOW WITH SUNLIGHT DETECTION
- EXCLUSIVE WHITE DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- 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
	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 NKE 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-E18-NKE // KIT-E21-NKE // KIT-E24-NKE // KIT-E28-NKE

#### **HEALTHY AIR**

- **NEW!** NANOE-G air purifying system
- Mild Dry Cooling operation mode for increased comfort and prevention of skin moisture loss

### **ENERGY EFFICIENCY AND ECOLOGY**

- · Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- NEW! Optional Smartphone control with IntensisHome device

- · 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-E18NKE CU-E21NKE

CU-E24NKE CU-E28NKE



# WALL MOUNTED RE TYPE // STANDARD INVERTER

RE:Inverter models are powerful and efficient and are always there when you need them. Furthermore, with the Anti Bacterial Filter, you can always enjoy the best quality air, without viruses, moulds and bacteria.

prevention allergy filter relaxing breeze effect

silent air 22 dB

FOR RE9 AND RE12

KIT			KIT-RE9-NKX	KIT-RE12-NKX	KIT-RE15-NKX	KIT-RE18-NKX	KIT-RE24-NKX
Indoor			CS-RE9NKX	CS-RE12NKX	CS-RE15NKX	CS-RE18NKX	CS-RE24NKX
Outdoor			CU-RE9NKX	CU-RE12NKX	CU-RE15NKX	CU-RE18NKX	CU-RE24NKX
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.90-3.00)	3.50 (0.90-3.90)	4.20 (1.00-4.60)	5.00 (0.98-6.00)	6.80 (0.98-8.10)
	Nominal (Min - Max)	kCal/h	2,150 (770-2,580)	3,010 (770-3,350)	3,610 (860-3960)	4,300 (840-5,160)	5,850 (840-6,970)
EER 1)	Nominal (Min - Max)	<b>Energy Saving</b>	3.57 (4.74-3.00) A	3.47 (5.29-3.25) <b>A</b>	3.33 (4.76-2.78) <b>A</b>	3.40 (3.50-2.96) <b>A</b>	3.21 (2.58-3.00) <b>A</b>
Power input Cooling	Nominal (Min - Max)	kW	0.70 (0.19-1.00)	1.01 (0.17-1.2)	1.26 (0.21-1.65)	1.47 (0.28-2.03)	2.12 (0.38-2.70)
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 (0.98-8.00)	8.60 (0.98-9.90)
. ,	Nominal (Min - Max)	kCal/h	2,840 (770-3,520)	3,660 (770-4,390)	4,300 (770-5848)	4,990 (840-6,880)	7,400 (840-8,510)
COP 1)	Nominal (Min - Max)	<b>Energy Saving</b>	4.02 (5.29-3.57) A	3.79 (6.00-3.49) <b>A</b>	3.61 (4.28-2.98)	3.77 (2.88-3.08) <b>A</b>	3.23 (2.18-3.09) <b>A</b>
Power input Heating	Nominal (Min - Max)	kW	0.82 (0.17-1.15)	1.12 (0.15-1.46)	1.385(0.21-2.280)	1.54 (0.34-2.60)	2.66 (0.45-3.20)
Annual Energy Consumption 2)		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	3.3	4.7	6	6.6	9.7
Current Heating	Nominal	Α	3.8	5.2	6.3	6.9	12.1
Max. current	'	Α	5.1	6.8	10.5	11.4	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)	dB(A)	42 / 27 / 22	42 / 30 / 22	46 / 31 / 29	44 / 37	47 / 38
,	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
'	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 240	290 x 1,070 x 240
Net weight		Kg	9	9	9	12	12
Air purifier filter			Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter
OUTDOOR UNIT							
Air Volume	Cooling / Heating	m³/h	1,734 / 1,734	1,830 / 1,830	1,872 / 1,794	2,352 / 2,274	3,012 / 3,012
Sound pressure Level 3)	Cooling (Hi)	dB(A)	47	48	50	47	52
•	Heating (Hi)	dB(A)	48	50	51	47	52
Sound power Level	Cooling (Hi)	dB	63	64	66	61	66
•	Heating (Hi)	dB	64	66	67	61	66
Dimensions 4)	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289	695 x 875 x 320	795 x 875 x 320
Net weight	1	Kg	24	28	36	46	65
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
. •	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	1/2" (12.70)	1/2" (12.70)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	0.85	0.97	1.00	1.22	1.70
Elevation difference (in/out) 5	Max	m	5	5	5	15	20
Piping length	Min / Max	m	3-15	3-15	3-15	3-20	3-30
Piping length without	Max	m	7.5	7.5	7.5	7.5	10
refrigerant increase							
Additional gas		g/m	20	20	20	20	30
Operating range	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-56 / 24	-56) / 24	-56 / 24	-5 <sup>6</sup> / 24	-5 <sup>6</sup> / 24



- 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-RF18NKX // CS-RF24NKX

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 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 NKX 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 h 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.
- 6 Operation possible on heating mode up to -15 °C. Performance guaranty on heating mode up to -5 °C. This product can not be used on 24 h operation on areas where the weather is extreme. When the temperature is lower of -5 °C, the efficiency will drop significantly and the machine may stop for protection.

# KIT-RE9-NKX // KIT-RE12-NKX // KIT-RE15-NKX // KIT-RE18-NKX // KIT-RE24-NKX

#### **HEALTHY AIR**

- · New generation Anti Bacterial 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

- 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-RE15NKX CU-RE9NKX

CU-RE18NKX

CU-RE24NKX



# WALL MOUNTED YE TYPE // STANDARD INVERTER

ECONOMICAL, ENVIRONMENT-FRIENDLY OPERATION WITH 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. YE Inverter models are powerful and efficient.





KIT			KIT-YE9-MKX	KIT-YE12-MKX	KIT-YE18-MKX
INDOOR			CS-YE9MKX	CS-YE12MKX	CS-YE18MKX
Outdoor			CU-YE9MKX	CU-YE12MKX	CU-YE18MKX
Cooling capacity		kW	2.50 (0.90-3.00)	3.30 (0.90-3.90)	5.00 (0.90-5.30)
	Nominal (Min - Max)	kCal/h	2,150 (770-2,580)	2,840 (770-3350)	4,300 (860-4560)
EER 1)	Nominal (Min - Max)	<b>Energy Saving</b>	3.28 (4.73 -3.00) <b>A</b>	3.23 A (4.5-3.00) 🔺	3.01 (4.16-2.71) <b>B</b>
Power input Cooling	Nominal (Min - Max)	kW	0.76 (0.19-1.00)	1.02 (0.20-1.3)	1.66 (0.24-1.95)
Heating capacity		kW	3.20 (0.90-4.20)	4.00 (0.90-5.00)	5.50 (0.90-6.80)
	Nominal (Min - Max)	kCal/h	2,750 (770-3,610)	3,440 (770-4,300)	4,730 (770-5850)
Heating capacity at +2°C	Nominal	kW	3.00	3.61	4.95
COP 1)	Nominal (Min - Max)	<b>Energy Saving</b>	3.63 (4.73-3.50) 🗚	3.61 (4.50-3.52) 🔺	3.40 (4.28-2.89) B
Power input Heating	Nominal (Min - Max)	kW	0.88 (0.19-1.20)	1.11 (0.20-1.42)	1.62 (0.21-2.35)
Annual Energy Consumption <sup>2</sup>		kWh	380	510	830
NDOOR UNIT					
Power source		V	230 (Via outdoor)	230 (Via outdoor)	230 (Via outdoor)
Connection		mm <sup>2</sup>	4 x 2.5	4 x 2.5	4 x 2.5
Current (Nominal)	Cooling / Heating	Α	3.6 / 4.1	4.9 / 5.2	7.9 / 7.7
Max. current		Α	5.80	8.80	10.5
Air Volume	Cooling / Heating	m³/h	750 / 780	810 / 834	876 / 918
Moisture removal volume		l/h	1.4	1.9	2.8
Sound pressure Level 3)	Cooling (Hi / Lo / S-Lo)	dB(A)	40 / 27 / 22	42 / 30 / 22	46 / 31 / 29
·	Heating (Hi / Lo / S-Lo)		40 / 27 / 23	42 / 33 / 25	46 / 30 / 27
Sound power Level		dB	56 / 56	58 / 58	62 / 62
Dimensions	H x W x D	mm	283 x 803 x 214	283 x 803 x 214	283 x 803 x 214
let weight		Kg	8	8	7.5
OUTDOOR UNIT		3			
Air Volume	Cooling / Heating	m³/h	1,980 / 1,980	2,070 / 2,070	2,160 / 2,160
Sound pressure Level 3)		dB(A)	47 / 48	48 / 50	50 / 52
Sound power Level	Cooling / Heating (Hi)	dB	63 / 64	64 / 66	66 / 68
Dimensions 4)	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	540 x 780 x 289
let weight	1	Kg	22	26.5	31.5
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
. •	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	1/2" (12.70)
Refrigerant Loading	R410A	Kg	0.78	0.880	1.15
Elevation difference (in/out) 5		m	5	5	5
Piping length	Min / Max	m	3 / 15	3 / 15	3 / 15
Piping length without efrigerant increase	Max	m	7.5	7.5	7.5
Additional gas	1	g/m	20	20	20
Operating range 3)	Cooling Min / Max	°C	+5 / +43	+5 / +43	+5 / +43
	Heating Min / Max	°C	-5 / +24	-5 / +24	-5 / +24

Specifications subject to change without notice



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

# KIT-YE9-MKX // KIT-YE12-MKX // KIT-YE18-MKX

#### **HEALTHY AIR**

- Odour-removing function
- One-Touch Air Filter

# **ENERGY, EFFICIENCY AND ECOLOGY**

- Inverter system
- · R410A refrigerant gas

#### COMFORT

- Super Quiet mode. Only 22 dB(A)
- Powerful mode

### **EASE OF USE**

- 12-hr timer
- User friendly infrared remote control

#### **EASY INSTALLATION AND MAINTENANCE**

- Maximum connection distance 15 m
- · Removable, washable panel

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 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.



CU-YE9MKX

CU-YE12MKX CU-YE18MKX



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

Complete line-up of air purifying systems with high efficiency even at -15°C! This wall-mounted air conditioner is especially designed for professional applications such as computer rooms where cooling inside the room is necessary even when the outside temperature is low. Furthermore this air conditioner has an automatic changeover system, in order to maintain the inside temperature even when sharp outside temperature changes occur.









FOR F9

KIT			KIT-E9-HKEA	KIT-E12-HKEA	KIT-E15-HKEA	KIT-E18-HKEA	KIT-E21-HKEA
Indoor			CS-E9HKEA	CS-E12HKEA	CS-E15HKEA	CS-E18HKEA	CS-E21HKEA
Outdoor			CU-E9HKEA	CU-E12HKEA	CU-E15HKEA	CU-E18HKEA	CU-E21HKEA
Cooling capacity	Nominal (Min - Max)	kW	2.60 (0.60-3.00)	3.50 (0.60-4.00)	4.40 (0.90-5.00)	5.30 (0.90-6.00)	6.30 (0.90-7.10)
	Nominal (Min - Max)	kCal/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)	<b>Energy Saving</b>	4.41 (5.00-4.00) <b>A</b>	3.80 (5.00-3.39) <b>A</b>	3.21 (4.19-3.13)	3.21 (4.19-2.93) <b>A</b>	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) <b>A</b>	3.81 (5.22-3.57) <b>A</b>	3.50 (3.67-3.16)	3.69 (3.67-3.02) <b>A</b>	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 (Nominal)	Cooling / Heating	Α	2.9 / 4.0	4.3 / 5.8	6.3 / 7.1	7.5 / 8.1	9.9 / 9.3
Max. current		Α	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		l/h	1.6	2.0	2.4	2.9	3.5
Sound pressure Level 3)	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 26 / 23	42 / 29 / 26	43 / 32 / 29	44 / 37 / 34	45 / 37 / 34
•	Heating (Hi / Lo / S-Lo)		40 / 27 / 24	42 / 33 / 30	43 / 35 / 32	44 / 37 / 34	45 / 37 / 34
Sound power Level	Cooling (Hi)	dB	50	53	54	57	58
	Heating (Hi)	dB	51	53	54	57	58
Dimensions	H x W x D	mm	280 x 799 x 183	280 x 799 x 183	280 x 799 x 183	275 x 998 x 230	275 x 998 x 230
Net weight		Kg	9	9	9	11	11
Air purifier filter			Alleru-buster filter + Ion				
OUTDOOR UNIT							
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
	Heating (Hi)	dB(A)	47	50	46	47	49
Sound power Level	Cooling (Hi)	dB	59	61	59	60	61
	Heating (Hi)	dB	60	63	59	60	62
Dimensions 4)	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345	750 x 875 x 345	750 x 875 x 345
Net weight		Kg	35	35	48	49	51
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
. •	Gas pipe	inch (mm)	3/8" (9.52)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)
	ous pipo	mon (mm)					
Refrigerant Loading	R410A		0.930	0.970	1.060	1.18	1.29
Refrigerant Loading Elevation difference (in/out) 51	R410A	Kg m		0.970 5	1.060	1.18 15	1.29 15
	R410A	Kg	0.930				
Elevation difference (in/out) 5	R410A Max	Kg m	0.930 5	5	5	15	15
Elevation difference (in/out) 51 Piping length Piping length without refrigerant increase	R410A Max Min / Max	M m	0.930 5 3-15	5 3-15	5 3-15	15 3-20	15 3-20
Elevation difference (in/out) 51 Piping length Piping length without	R410A Max Min / Max	Kg m m	0.930 5 3-15 7.5	5 3-15 7.5	5 3-15 7.5	15 3-20 10	15 3-20 10

Specifications subject to change without notice



- HIGHLY EFFICIENT HEAT PUMP AND COOLING EVEN AT
- SUPERSONIC AIR PURIFYING SYSTEM WITH ANTI **BACTERIAL 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 NKE 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-E9-HKEA // KIT-E12-HKEA // KIT-E15-HKEA // KIT-E18-HKEA // KIT-E21-HKEA

#### **HEALTHY AIR**

- Refreshing ion generator boosts well-being
- · Anti Bacterial Filter
- · Soft dry operation mode

#### **ENERGY EFFICIENCY AND ECOLOGY**

- · Maximum efficiency Inverter system
- · R410A refrigerant gas

- 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

- 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-E15HKEA CU-E21HKEA



# WALL-MOUNTED TYPE // STANDARD HEAT PUMP

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

KIT			KIT-PW9-GKX	KIT-PW12-GKX	KIT-PW18-GKX	KIT-PW24-JKE
Indoor			CS-PW9GKX	CS-PW12GKX	CS-PW18GKX	CS-PW24JKE
Outdoor			CU-PW9GKX	CU-PW12GKX	CU-PW18GKX	CU-PW24JKE
Cooling capacity	Nominal	kW	2.65	3.4	5.10	7.03
		kCal/h	2,280	2,920	4,386	6,046
EER 1)	Nominal	<b>Energy Saving</b>	3.21 <b>A</b>	3.22 <b>A</b>	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	<b>Energy Saving</b>	3.63 A	3.61 <b>A</b>	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		V	230	230	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5
Current Cooling Nominal A		Α	3.9	5.0	7.7	13.1
urrent Heating Nominal A		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		l/h	1.6	1.9	2.9	4.0
Sound pressure level 3)	Cooling (Hi / Lo / S-Lo)	dB(A)	39 / 31	39 / 32	45 / 38	47 / 41
•	Heating (Hi / Lo / S-Lo)	dB(A)	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	3	CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filter	CZ-SA14P Alleru-buster filt
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		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		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	1	g/m	20	20	20	30
Operating range	Cooling Min / Max	°C	21 / 43	21 / 43	16 / 43	16 / 43
operating range	Heating Min / Max	°C	-5 / 24	-5 / 24	-5 / 24	-5 / 24



- 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
	Outeido air tomporaturo	3E0C DD / 3/0C WD	70C DD / 40C W/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).

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

#### **HEALTHY AIR**

- · Soft dry operation mode
- · Odour-removing function
- CZ-SA14P Anti Bacterial 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-PW18GKX



CU-PW12GKX



CU-PW24JKE



# WALL MOUNTED UW TYPE // STANDARD

A class Panasonic On/Off line up have all you need to enjoy a comfortable temperature at home.

KIT			KIT-UW9-GKE	KIT-UW12-GKE
Indoor			CS-UW9GKE	CS-UW12GKE
Outdoor			CU-UW9GKE	CU-UW12GKE
Cooling capacity	Nominal	kW	2.50	3.30
		kCal/h	2,150	2,840
EER 1)	Nominal	Energy Saving	3.08 B	3.05 ■
Power input Cooling	Nominal	kW	0.81	1.08
Heating capacity	Nominal	kW	2.70	3.70
		kCal/h	2,320	3,180
COP 1)	Nominal	Energy Saving	3.46 B	3.49 B
Power input Heating	Nominal	kW	0.78	1.06
Annual Energy Consumption 2		kW	405	540
INDOOR UNIT				
Power source		V	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5
Current Cooling	Nominal	A	3.8	5.0
Current Heating	Nominal	A	3.7	4.8
Air Volume	Cooling / Heating	m³/h	10.3/10.3	9.0/9.2
Moisture removal volume		l/h	1.4	1.9
Sound pressure level 3)	Cooling (Hi / Lo)	dB(A)	39/31	39/32
	Heating (Hi / Lo)	dB(A)	39/31	39/31
Sound power level	Cooling (Hi)	dB	50	50
Journa power tevet	Heating (Hi)	dB	50	50
Dimensions	H x W x D	mm	250 x 770 x 205	280 x 799 x 183
Net weight		Kg	7.5	9
Air purifier filter			Optional	Optional
OUTDOOR UNIT				
Air Volume	Lo / Med / Hi	m³/h	7.87 / 9.13 / 10.30	7.16 / 7.96 / 9.20
Sound pressure level 3)	Cooling (Hi)	dB(A)	48	49
	Heating (Hi)	dB(A)	49	50
Sound power level	Cooling (Hi)	dB	61	62
	Heating (Hi)	dB	62	63
Dimensions 4)	H x W x D	mm	530 x 650 x 230	540 x 780 x 289
Net weight		Kg	27	30
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)
Refrigerant Loading	R410A	Kg	0.80	0.98
Elevation difference (in/out) 5	Max	m	5	5
Piping length	Min / Max	m	3-10	3-10
Piping length without refrigerant increase	Max	m	7.5	7.5
Additional gas		g/m	20	20
Operating range	Cooling Min / Max	oC	21 / 43	21 / 43
	Heating Min / Max	oC.	-5 / 24	-5 / 24



- EASY TO INSTALL
- R410A REFRIGERANT GAS
- MANUAL AIRFLOW CONTROL

# KIT-UW9-GKE // KIT-UW12-GKE

#### **HEALTHY AIR**

- SUPER alleru-buster filter (CZ-SA14P optional)
- Anti-Mould, One-Touch Air Filter
- · Odour-Removing Function

### **ENERGY EFFICIENCY AND ECOLOGY**

· R410A refrigerant gas

#### COMFORT

- Airflow Direction Control (Up & Down)
- Manual Horizontal Airflow Direction Control
- · Auto Changeover
- Hot Start Control

#### **EASE OF USE**

- 12-Hour ON&OFF Timer
- LCD Wireless Remote Controller

# **EASY INSTALLATION AND MAINTENANCE**

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

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	70C DR / 60C 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)

- 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
- 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.







# FLOOR CONSOLE TYPE // INVERTER+

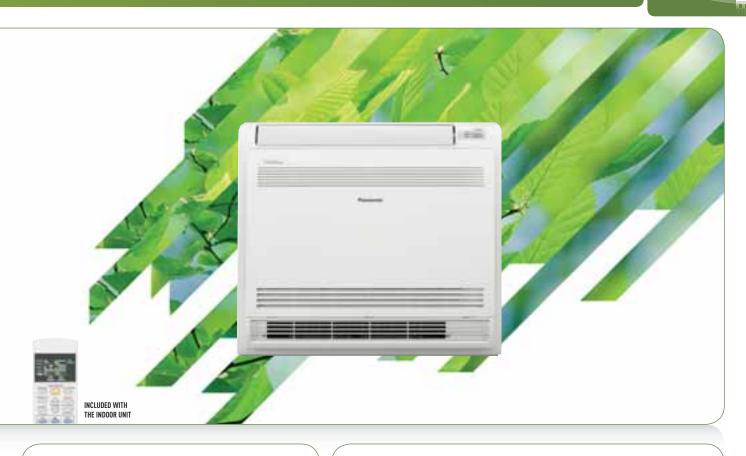
Console for discreet integration on walls, and for high performances, specifically in heat mode even when the outside temperature is as low as  $-15^{\circ}$ C.

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 (Min - Max)	kW	2.50 (0.80 - 3.00)	3.50 (0.80 - 3.80)	5.00 (0.90 - 5.60)
		kCal/h	2,150 (690 - 2,580)	3,010 (690 - 3,270)	3,780 (770 - 4,300)
EER 1)	Nominal (Min - Max)	Energy Saving	4.39 (4.57 - 3.85) <b>A</b>	3.63 (4.32 - 3.33)	3.23 (4.57 - 2.93)
Power input Cooling	Nominal (Min - Max)	kW	0.57 (0.17 - 0.78)	0.97 (0.18 - 1.14)	1.55 (0.25 - 1.91)
Heating capacity	Nominal (Min - Max)	kW	3.60 (0.80 - 5.00)	4.80 (0.80 - 6.10)	5.80 (0.90 - 7.10)
• • •		kCal/h	3,100 (690 - 4,300)	4,130 (690 - 5,250)	4,730 (770 - 6,110)
COP 1)	Nominal (Min - Max)	Energy Saving	4.16 (4.85 - 3.68)	3.64 (4,57 - 3.45) <b>A</b>	3.63 (3.46 - 3.02) <b>A</b>
Power input Heating	Nominal (Min - 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	285	483	775
INDOOR UNIT					
Air Volume	Cooling / Heating	m³/h	558 / 576	570 / 600	660 / 780
Moisture removal volume	, ,	l/h	1.4	2.0	2.8
Sound pressure level 3)	Cooling (Hi / Lo / S-Lo)	dB(A)	38 / 27 / 23	39 / 28 / 24	44 / 36 / 32
		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 <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5
Current Cooling		Α	2.7	4.4	7.0
Current Heating		Α	4.05	6.00	7.1
Air Volume	Cooling / Heating	m³/h	1,788 / 1,788	1,860 / 1,860	2,400 / 2,400
Sound pressure level 3)	Cooling (Hi)	dB(A)	46	48	47
·	Heating (Hi)	dB(A)	47	50	48
Sound power level	Cooling (Hi)	dB	59	61	60
	Heating (Hi)	dB	60	63	61
Dimensions 4)	H x W x D	mm	540 x 780 x 289	540 x 780 x 289	750 x 875 x 345
Net weight		Kg	34	34	49
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	1/2" (12.70)
Refrigerant Loading	R410A	Kg	0.965	0.980	1.060
Elevation difference (in/out)	Max	m	5	5	15
Piping length	Min / Max	m	3 / 15	3 / 15	3 / 20
Piping length without refrigerant increase	Max	m	7.5	7.5	10
			00	20	20
Additional gas		g/m	20	ZU	20
Additional gas Operating range	Cooling Min / Max	g/m oC	16 / 43		
	Cooling Min / Max Heating Min / Max	0.		16 / 43 -15 / 24	16 / 43 -15 / 24



- 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 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 NKE 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)	<b>Energy Saving</b>	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)	<b>Energy Saving</b>	3.34 €	3.35	3.42 <b>B</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)		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 <sup>2</sup>	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	Α	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)	Cooling (Hi)	dB(A)	46	47	48
	Heating (Hi)	dB(A)	47	48	49
Sound power level	Cooling (Hi)	dB	59	60	61
	Heating (Hi)	dB	60	61	62
Dimensions 4)	H x W x D	mm	750 x 875 x 345	750 x 875 x 345	750 x 875 x 345
Net weight		Kg	48	48	49
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)
Refrigerant Loading	R410A	Kg	1.23	1.06	1.15
Elevation difference (in/out) 5		m	15	15	15
Piping length	Min / Max	m	3 / 20	3 / 20	3 / 20
Piping length without refrigerant increase	Max	m	10	10	10
Additional gas		g/m	20	20	20
Operating range	Cooling Min / Max	oC .	16 / 43	16 / 43	16 / 43
	Heating Min / Max	oC O	-5 / 24	-5 / 24	-5 / 24



- A WIDTH OF ONLY 20CM FOR EASY INSTALLATION **FVFRYWHFRF**
- 2 INSTALLATION POSITIONS POSSIBLE: WALL OR CEILING MOUNTED
- 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 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 NKE 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.
- 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 Anti Bacterial 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



# 2x1 WALL MOUNTED MRE TYPE // STANDARD INVERTER

MRE MULTI INVERTER MODELS ARE POWERFUL AND EFFICIENT AND ARE ALWAYS THERE WHEN YOU NEED THEM. Furthermore, with the Anti Bacterial Filter, you can always enjoy the best quality air, without viruses, moulds and bacteria.

prevention allergy filter



# **TECHNICAL FOCUS**

- LARGE COMBINATIONS OF 2x1
- HIGH ENERGY SAVINGS
- LARGE ELEVATION DISTANCE (10 m)
- LARGE PIPING LENGTH (30 m)

KIT			KIT-2MRE77-MBE	KIT-2MRE79-MBE	KIT-2MRE712-MBE	KIT-2MRE912-MBE	KIT-2MRE77-MKE	KIT-2MRE79-MKE
Indoor			CS-MRE7MKE	CS-MRE7MKE	CS-MRE7MKE	CS-MRE9MKE	CS-MRE7MKE	CS-MRE7MKE
			CS-MRE7MKE	CS-MRE9MKE	CS-MRE12MKE	CS-MRE12MKE	CS-MRE7MKE	CS-MRE9MKE
Outdoor			CU-2E15MBE	CU-2E15MBE	CU-2E15MBE	CU-2E15MBE	CU-2E18MBE	CU-2E18MBE
Cooling capacity	Nominal (Min - Max)	kW	4.00 (1.50 - 4.60)	4.40 (1.50 - 4.80)	4.40 (1.50 - 4.80)	4.40 (1.50 - 4.80)	4.40 (1.50 - 4.60)	4.50 (1.50 - 4.80)
	Nominal (Min - Max)	kCal/h	3,560 (1,290 - 4,094)	3,916 (1,290 - 4,272)	3,916 (1,290 - 4,272)	3,916 (1,290 - 4,272)	3,916 (1,290 - 4,094)	3,870 (1,290 - 4,272)
Cooling capacity room A	Nominal	kW	2.00	1.95	1.70	2.20	2.00	2.00
Cooling capacity room B	Nominal	kW	2.00	2.45	2.70	2.20	2.00	2.50
EER 1)	Nominal (Min - Max)		3.42 (5.55 - 3.43)	3.38 (5.55- 3.15) <b>A</b>	3.38 (5.55- 3.15) <b>A</b>	3.38 (5.55- 3.15) <b>A</b>	3.45 (5.55 - 3.43)	3.44 (5.55- 3.18) <b>A</b>
Power input Cooling	Nominal (Min - Max)	kW	1.17 (0.27 - 1.34)	1.30 (0.27 - 1.52)	1.30 (0.27 - 1.52)	1.30 (0.27 - 1.52)	1.16 (0.27 - 1.34)	1.40 (0.27 - 1.51)
Heating capacity	Nominal (Min - Max)	kW	5.80 (1.10 - 6.30)	5.80 (1.10 - 6.30)	5.80 (1.10 - 6.30)	5.80 (1.10 - 6.30)	5.20 (1.10 - 6.30)	5.20 (1.10 - 6.30)
	Nominal (Min - Max)	kCal/h	5,162 (950 - 5,607)	5,162 (950 - 5,607)	5,162 (950 - 5,607)	5,162 (950 - 5,607)	4,628 (979 - 5,607)	4,628 (979 - 5,607)
Heating capacity room A	Nominal	kW	2.40	2.15	1.85	2.40	2.60	2.60
Heating capacity room B	Nominal	kW	2.40	2.65	2.95	2.40	2.60	2.90
COP 1)	Nominal (Min - Max)		4.00 (4.58 - 3.91) <b>A</b>					4.00 (4.58 - 3.91)
Power input Heating	Nominal (Min - Max)	kW	1.20 (0.24 - 1.61)	1.20 (0.24 - 1.61)	1.20 (0.24 - 1.61)	1.20 (0.24 - 1.61)	1.30 (0.24 - 1.61)	1.30 (0.24 - 1.61)
Annual Energy Consumption 2)		kWh	585	650	650	650	580	655
INDOOR UNIT								
Air Volume	Cooling	m³/h	606	606	606 (E7) / 654 (E12)	606 (E9) / 654 (E12)	606	606
Moisture removal volume	Cooling	l/h	1.3 (E7)	1.3 (E7) / 1.5 (E9)	1.1 (E7) / 1.6 (E12)	1.4 (E9) / 1.4 (E12)	1.3 (E7)	1.3 (E7) / 1.5 (E9)
Sound pressure Level 3)	Cooling & Heating (Lo)	dB(A)	29	29	29 (E7) / 32 (E12)	29 (E9) / 32 (E12)	29	29
Sound power Level	Cooling & Heating (Hi)	dB	56	56	56 (E7) / 60 (E12)	56 (E9) / 60 (E12)	56	56
Dimensions	H x W x D	mm	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204
Net weight	ı	Kg	9	9	9	9	9	9
Air purifier filter			Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter
OUTDOOR UNIT								
Power source		V	230	230	230	230	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal	Α	5.45 / 5.35	6.10 / 5.35	6.10 / 5.35	6.10 / 5.35	6.10 / 5.80	6.10 / 5.80
Air Volume		m³/h	1,998	1,998	1,998	1,998	1,998	1,998
Sound pressure Level 3)	Cooling / Heating (Hi)	dB(A)	47 / 49	47 / 49	47 / 49	47 / 49	47 / 49	47 / 49
Sound power Level	Cooling / Heating (Hi)	dB	62 / 64	62 / 64	62 / 64	62 / 64	62 / 64	62 / 64
Dimensions 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	540 x 780 (+70) x 289	540 x 780 (+70) x 289
Net weight		Kg	38	38	38	38	38	38
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
Refrigerant Loading	R410A	Kg	1.45	1.45	1.45	1.45	1.45	1.45
Elevation difference (in/out) 5)	Max	m	10	10	10	10	10	10
Piping length (total)	Min / Max	m	30	30	30	30	30	30
Piping length (one unit)	Min / Max	m	3 / 20	3 / 20	3 / 20	3 / 20	3 / 20	3 / 20
Piping length without refrigerant increase	Max	m	20		20	20	20	20
Additional gas		g/m	20	20	20	20	20	20
Operating range	Cooling Min / Max	°C	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43	16 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24
		1						



KIT-2MRE712-MKE	KIT-2MRE99-MKE	KIT-2MRE912-MKE	KIT-2MRE1212-MKE
CS-MRE7MKE	CS-MRE9MKE	CS-MRE9MKE	CS-MRE12MKE
CS-MRE12MKE	CS-MRE9MKE	CS-MRE12MKE	CS-MRE12MKE
CU-2E18MBE	CU-2E18MBE	CU-2E18MBE	CU-2E18MBE
4.80 (1.50 - 4.90)	4.70 (1.50 - 4.80)	4.80 (1.50 - 5.00)	4.80 (1.50 - 5.00)
3,916 (1,290 - 4,272)	4,183 (1,290 - 4,272)	3,916 (1,290 - 4,450)	3,916 (1,290 - 4,450)
1,85	2.35	2.10	2.40
2,95	2.35	2.70	2.40
3.43 (5.55- 3.20) <b>A</b>	3.43 (5.55 - 3.18) <b>A</b>		3.22 (5.55 - 3.16) <b>A</b>
1.40 (0.27 - 1.53)	1.37 (0.27 - 1.51)	1.49 (0.27 - 1.56)	1.49 (0.27 - 1.58)
5.80 (1.10 - 6.70)	5.80 (1.10 - 6.70)	5.80 (1.10 - 6.70)	5.80 (1.10 - 6.70)
5,162 (950 - 5,963)	5,162 (950 - 5,963)	5,162 (950 - 5,963)	5,162 (950 - 5,963)
2.00	2.60	2.30	2.30
3.20	2.60	2.95	2.95
3.94 (4.58 - 3.90)	3.88 (4.58 - 3.85)		4.00 (4.58 - 3.90) <b>A</b>
1.32 (0.24 - 1.72)	1.34 (0.24 - 1.74)	1.32 (0.24 - 1.72)	1.30 (0.24 - 1.70)
700	685	745	745
606 (E7) / 654 (E12)	606	606 (E9) / 654 (E12)	654
1.2 (E7) / 1.5 (E12)	1.5	1.4 / 1.6	1.5
29 (E7) / 32 (E12)	29	26 (E9) / 29 (E12)	29
56 (E7) / 60 (E12)	56	56 (E9) / 60 (E12)	60
290 x 870 x 204	290 x 870 x 204	290 x 870 x 204	290 x 870 x 204
9	9	9	9
Alleru-buster filter	Alleru-buster filter	Alleru-buster filter	Alleru-buster filter
230	230	230	230
4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
6.50 / 5.85	6.40 / 5.95	6.95 / 5.85	6.95 / 5.75
1,998	1,998	1,998	1,998
47 / 49	47 / 49	47 / 49	47 / 49
62 / 64	62 / 64	62 / 64	62 / 64
540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289	540 x 780 (+70) x 289
38	38	38	38
1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
1.45	1.45	1.45	1.45
10	10	10	10
30	30	30	30
3 / 20	3 / 20	3 / 20	3 / 20
20	20	20	20
20	20	20	20
16 / 43	16 / 43	16 / 43	16 / 43
-10 / 24	-10 / 24	-10 / 24	-10 / 24
10 / 47	10 / 27	10 / 47	10 / 47

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

#### **HEALTHY AIR**

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

#### **ENERGY, EFFICIENCY AND ECOLOGY**

- · Inverter system
- · R410A refrigerant gas

### COMFORT

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

# **EASE OF USE**

- · 24-hrs timer
- User friendly infrared remote control

### EASY INSTALLATION AND MAINTENANCE

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

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

- 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.



CII-2F15MBF



# ETHEREA MULTI SPLIT 2x1 // INVERTER+

ETHEREA WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi features a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive microorganisms like bacteria, viruses and mould. 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.

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 16%! Furthermore, using a Multi Split system, you save space on the outdoor unit, making it easier to install in small spaces.











OPT	101	IΔI	

SILVER KIT			KIT-2XE77-NBE	KIT-2XE79-NBE	KIT-2XE712-NBE	KIT-2XE99-NBE
SILVER KIT WITH SMARTPH	ONE CONTROL		KIT-2XE77-NBE-WIFI	KIT-2XE79-NBE-WIFI	KIT-2XE712-NBE-WIFI	KIT-2XE99-NBE-WIFI
Indoor			CS-XE7NKEW	CS-XE7NKEW	CS-XE7NKEW	CS-XE9NKEW
			CS-XE7NKEW	CS-XE9NKEW	CS-XE12NKEW	CS-XE9NKEW
WHITE KIT			KIT-2E77-NBE	KIT-2E79-NBE	KIT-2E712-NBE	KIT-2E99-NBE
WHITE KIT WITH SMARTPH	ONE CONTROL		KIT-2E77-NBE-WIFI	KIT-2E79-NBE-WIFI	KIT-2E712-NBE-WIFI	KIT-2E99-NBE-WIFI
Indoor			CS-E7NKEW	CS-E7NKEW	CS-E7NKEW	CS-E9NKEW
			CS-E7NKEW	CS-E9NKEW	CS-E12NKEW	CS-E9NKEW
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) <b>A</b>
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)
		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) 🗛	4.62 (5.24 - 4.19) 🔼	4.62 (5.24 - 4.19) 🗛	4.62 (4.61 - 4.19) <b>A</b>
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	I	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 & Heating (S-Lo)		26	26	26 (E7) / 29 (E12)	26
Sound power Level	Cooling & Heating (S-Lo)		56	56	56 (E7) / 60 (E12)	56
Dimensions	H x W x D	mm	290 x 870 x 214			
Net weight		Kg	9	9	9	9
Air purifier filter			NANOE-G	NANOE-G	NANOE-G	NANOE-G
OUTDOOR UNIT						
Power source		V	230	230	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal		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			
Net weight	1::1-:10:	Kg	38	38	38	38
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)
Refrigerant Loading	R410A	Kg	1.45	1.45	1.45	1.45
Elevation difference (in/out) 5)	Max Min / Max	m	10	10	10 3-30	10
Piping length (total)		m	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	Max	m	20	20	20	20
Additional gas		g/m	20	20	20	20
Operating range	Cooling Min / Max	oC.	16 / 43	16 / 43	16 / 43	16 / 43
	Heating Min / Max	oC O	-10 / 24	-10 / 24	-10 / 24	-10 / 24



- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI. NOW WITH SUNLIGHT DETECTION
- EXCLUSIVE SILVER DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- · MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



CS-E7NKEW // CS-E9NKEW

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

#### DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation). Connectivity restriction: CS-E/XE\_NKE 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.
- 37 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-2XE77-NBE // KIT-2XE79-NBE // KIT-2XE712-NBE // KIT-2XE99-NBE // KIT-2E77-NBE // KIT-2E79-NBE // **KIT-2E712-NBE // KIT-2E99-NBE**

#### **HEALTHY AIR**

• NEW! NANOE-G air purifying system

#### **ENERGY EFFICIENCY AND ECOLOGY**

- · Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- NEW! Optional Smartphone control with IntensisHome device

- 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-2E15LBE



# ETHEREA MULTI SPLIT 2x1 // INVERTER+

ETHEREA WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi features a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive microorganisms like bacteria, viruses and mould. 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.

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.











OPTIONAL

SILVER KIT			KIT-2XE99-NKE	KIT-2XE912-NKE	KIT-2XE1212-NKE
SILVER KIT WITH SMARTPH	ONE CONTROL		KIT-2XE99-NKE-WIFI	KIT-2XE912-NKE-WIFI	KIT-2XE1212-NKE-WIFI
Indoor			CS-XE9NKEW	CS-XE9NKEW	CS-XE12NKEW
			CS-XE9NKEW	CS-XE12NKEW	CS-XE12NKEW
WHITE KIT			KIT-2E99-NKE	KIT-2E912-NKE	KIT-2E1212-NKE
WHITE KIT WITH SMARTPH	ONE CONTROL		KIT-2E99-NKE-WIFI	KIT-2E912-NKE-WIFI	KIT-2E1212-NKE-WIFI
Indoor			CS-E9NKEW	CS-E9NKEW	CS-E12NKEW
			CS-E9NKEW	CS-E12NKEW	CS-E12NKEW
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)
	Nominal (Min - Max)	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)	<b>Energy Saving</b>	3.66 (6.00 - 3.42) 🗛	3.36 (6.00 - 3.44) <b>A</b>	3.42 (6.00 - 3.42) <b>A</b>
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)
. , ,	Nominal (Min - Max)	kCal/h	4,820 (950 - 6,190)	4,820 (950 - 6,190)	4,820 (950 - 6,190)
COP 1)	Nominal (Min - Max)	<b>Energy Saving</b>	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 & Heating (S-Lo)	dB(A)	26	26 (E9) / 29 (E12)	29
Sound power Level	Cooling & Heating (S-Lo)		56	56 (E9) / 60 (E12)	60
Dimensions	H x W x D	mm	290 x 870 x 214	290 x 870 x 214	290 x 870 x 214
Net weight	11111111111	Kg	9	9	9
Air purifier filter		9	NANOE-G	NANOE-G	NANOE-G
OUTDOOR UNIT					
Power source		V	230	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal		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)		dB(A)	49 / 51	49 / 51	49 / 51
Sound power Level	Cooling / Heating (Hi)	dB(A)	64 / 66	64 / 66	64 / 66
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
Net weight	11 7 17 7 D	Kg	38	38	38
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)
Refrigerant Loading	R410A	Kg	1.45	1.45	1.45
Elevation difference (in/out) 5)		m	10	10	10
Piping length (total)	Min / Max	m	30	30	30
Piping length (one unit)	Min / Max	m	3-20	3-20	3-20
Piping length without	Max	m	20	20	20
refrigerant increase	MdX				
Additional gas	ı	g/m	20	20	20
Operating range	Cooling Min / Max	oC .	16 / 43	16 / 43	16 / 43
	Heating Min / Max	oC .	-10 / 24	-10 / 24	-10 / 24



- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI. NOW WITH SUNLIGHT DETECTION
- EXCLUSIVE SILVER DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- · MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



CS-E9NKEW // CS-E12NKEW

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

#### DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation). Connectivity restriction: CS-E/XE\_NKE 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.
- 37 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-2XE99-NKE // KIT-2XE912-NKE // KIT-2XE1212-NKE // KIT-2E99-NKE // KIT-2E912-NKE // KIT-2E1212-NKE

#### **HEALTHY AIR**

• NEW! NANOE-G air purifying system

### **ENERGY EFFICIENCY AND ECOLOGY**

- · Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- NEW! Optional Smartphone control with IntensisHome device

- 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 WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi features a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive microorganisms like bacteria, viruses and mould. 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.

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.











OPTIONAL

SILVER KIT			KIT-3XE7712-NBE	KIT-3XE7715-NBE
SILVER KIT WITH SMARTP	PHONE CONTROL		KIT-3XE7712-NBE-WIFI	KIT-3XE7715-NBE-WIFI
Indoor			CS-XE7NKEW (x2)	CS-XE7NKEW (x2)
			CS-XE12NKEW (x1)	CS-XE15NKEW (x1)
WHITE KIT			KIT-3E7712-NBE	KIT-3E7715-NBE
WHITE KIT WITH SMARTP	HONE CONTROL		KIT-3E7712-NBE-WIFI	KIT-3E7715-NBE-WIFI
Indoor			CS-E7NKEW (x2)	CS-E7NKEW (x2)
			CS-E12NKEW (x1)	CS-E15NKEW (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)	<b>Energy Saving</b>	4.30 (5.28 - 3.30) <b>A</b>	4.30 (5.00 - 3.35) <b>A</b>
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)	<b>Energy Saving</b>	4.63 (4.38 - 3.94) 🗛	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 — Heating (S-Lo)	dB(A)	26 (E7) / 29 (E12) — 26 (E7) / 29 (E12)	26 (E7) / 29 (E15) — 26 (E7) / 30 (E15)
Sound power Level	Cooling & Heating (Hi)	dB	56 (E7) / 60 (E12)	56 (E7) / 60 (E15)
Dimensions	H x W x D	mm	290 x 870 x 214	290 x 870 x 214
Net weight		Kg	9	9
Air purifier filter			NANOE-G	NANOE-G
OUTDOOR UNIT				
Power source		V	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal		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 / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)
Refrigerant Loading	R410A	Kg	2.64	2.64
Elevation difference (in/out)	5) Max	m	15	15
Piping length (total)	Min / Max	m	marz-50	marz-50
Piping length (one unit)	Min / Max	m	marz-25	marz-25
Piping length without refrigerant increase	Max	m	30	30
Additional gas	1	g/m	20	20
Operating range	Cooling Min / Max	oC	-10 / 46	-10 / 46
, 3 3-	Heating Min / Max	oC	-15 / 24	-15 / 24
	<u> </u>	1		Specifications subject to change without notice



- NEW! MAXIMUM EFFICIENCY AND COMFORT WITH ECONAVI. NOW WITH SUNLIGHT DETECTION
- EXCLUSIVE SILVER DESIGN
- NEW! NANOE-G AIR PURIFYING SYSTEM, 99% EFFECTIVE ON BOTH AIRBORNE AND ADHESIVE MOULD, VIRUSES AND BACTERIA
- NEW! OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME DEVICE
- · MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



CS-E7NKEW // CS-E12NKEW // CS-E15NKEW

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

#### DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation). Connectivity restriction: CS-E/XE\_NKE 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 peryear in cooling mode.
- 37 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-3XE7712-NBE // KIT-3XE7715-NBE // KIT-3E7712-NBE // KIT-3E7715-NBE

#### **HEALTHY AIR**

• NEW! NANOE-G air purifying system

# **ENERGY EFFICIENCY AND ECOLOGY**

- · Maximum efficiency Inverter system, for bigger savings
- NEW! -30% consumption with Econavi on heat pump, and -35% 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)
- NEW! Optional Smartphone control with IntensisHome device

- 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 WITH ENHANCED ECONAVI SENSOR AND NEW NANOE-G AIR-PURIFYING SYSTEM: OUTSTANDING EFFICIENCY, COMFORT AND HEALTHY AIR COMBINED WITH STATE-OF-THE-ART DESIGN

Econavi features a Human Activity sensor and a new Sunlight Detection technology to adjust output ideally thereby giving you the best comfort at anytime whilst saving energy. Furthermore, the NANOE-G revolutionary air-purifying system utilises nano technology fine particles to remove and deactivate 99% of both airborne and adhesive microorganisms like bacteria, viruses and mould. 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.

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.











OPTIONAL

SILVER KIT			KIT-4XE77712-NBE	KIT-4XE77715-NBE	KIT-4XE77712-NKE	KIT-4XE77715-NKE
SILVER KIT WITH SMARTPH	ONE CONTROL		KIT-4XE77712-NBE-WIFI	KIT-4XE77715-NBE-WIFI	KIT-4XE77712-NKE-WIFI	KIT-4XE77715-NKE-WIFI
ndoor			CS-XE7NKEW (x3)	CS-XE7NKEW (x3)	CS-XE7NKEW (x3)	CS-XE7NKEW (x3)
			CS-XE12NKEW (x1)	CS-XE15NKEW (x1)	CS-XE12NKEW (x1)	CS-XE15NKEW (x1)
WHITE KIT			KIT-4E77712-NBE	KIT-4E77715-NBE	KIT-4E77712-NKE	KIT-4E77715-NKE
WHITE KIT WITH SMARTPH	ONE CONTROL		KIT-4E77712-NBE-WIFI	KIT-4E77715-NBE-WIFI	KIT-4E77712-NKE-WIFI	KIT-4E77715-NKE-WIFI
Indoor			CS-E7NKEW (x3)	CS-E7NKEW (x3)	CS-E7NKEW (x3)	CS-E7NKEW (x3)
			CS-E12NKEW (x1)	CS-E15NKEW (x1)	CS-E12NKEW (x1)	CS-E15NKEW (x1)
Outdoor			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)
0 1 7	Nominal (Min - Max)	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)	<b>Energy Saving</b>	4.12 (5.59 - 3.56) <b>A</b>	4.12 (5.59 - 3.56) <b>A</b>	3.76 (5.71 - 3.09) <b>A</b>	3.76 (5.71 - 3.20) <b>A</b>
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)
3	Nominal (Min - Max)	kCal/h	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)	Energy Saving	4.65 (5.17 - 4.08) <b>A</b>	4.67 (5.09 - 4.09) <b>A</b>	4.43 (5.76 - 3.30) <b>A</b>	4.50 (5.31 - 3.34) <b>A</b>
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)	Training (Time Train)	kWh	825	825	1.065	1.055
NDOOR UNIT			020	020	1,000	1,000
Air Volume	Cooling	m³/h	606 (E7) / 654 (E12)	606 (E7) / 672 (E15)	654 (E7) / 750 (E12)	654 (E7) / 750 (E15)
Noisture removal volume	g	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 — Heating (S-Lo)				5) 26 (E7) / 29 (E12) — 26 (E7) / 29 (E12)	
Sound power level	Cooling & 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 214	290 x 870 x 214	290 x 870 x 214	290 x 870 x 214
Vet weight	II X II X D	Kg	9	9	9	9
Air purifier filter		ıvg	NANOE-G	NANOE-G	NANOE-G	NANOE-G
OUTDOOR UNIT			MANUE 0	WHITE U	MANUE 0	WANGE O
Power source		V	230	230	230	230
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Current	Cooling / Heating Nominal		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 pressure 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	U X AA Y D	Kq	72 x 6/3 (+73) x 320	72 72 72 (+70) X 320	73	73
Piping connections	Liquid pipe / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)
Refrigerant Loading	R410A	Kg	2.64	2.64	3.1	3.1
Remigerant Loading Elevation difference (in/out) 5)		m .	15	15	15	15
,		1	60	60	70	70
Piping length (total)	Min / Max	m	1 1 1			· ·
Piping length (one unit)	Min / Max	m	3-25	3-25	3-25	3-25 40
Piping length without efrigerant increase	Max	m	30	30	40	
dditional gas		g/m	20	20	20	20
Operating range	Cooling Min / Max	oC.	-10 / 46	-10 / 46	16 / 43	16 / 43
	Heating Min / Max	oC O	-15 / 24	-15 / 24	-20 / 24	-20 / 24



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- · MORE POWERFUL AIRFLOW TO QUICKLY REACH THE DESIRED TEMPERATURE



CS-E7NKEW // CS-E12NKEW // CS-E15NKEW

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

#### DB: Dry Bulb; WB: Wet Bulb

This model is not suitable to use in heating mode below -5°C with continuous operation (24h operation). Connectivity restriction: CS-E/XE\_NKE 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.
- 37 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-4XE77712-NBE // KIT-4XE77715-NBE // KIT-4XE77712-NKE // KIT-4XE77715-NKE // KIT-4E77712-NBE // KIT-4E77715-NBE // KIT-4E77712-NKE // KIT-4E77715-NKE

#### **HEALTHY AIR**

• NEW! NANOE-G air purifying system

#### **ENERGY EFFICIENCY AND ECOLOGY**

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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)
- NEW! Optional Smartphone control with IntensisHome device

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





CU-4E27CBPG



# FREE MULTI SYSTEM

# UP TO 5 INDOOR UNITS WITH A SINGLE OUTDOOR UNIT

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

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

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

Choose the outdoor units according to the 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.





OPTIONAL ONLY FOR ETHEREA

INDOOR UNIT								
	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	24 - 7.1 kW
SPLIT ETHEREA	4	4		4 -	4 -			
	CS-XE7NKEW CS-E7NKEW	CS-XE9NKEW CS-E9NKEW		CS-XE12NKEW CS-E12NKEW	CS-XE15NKEW <sup>1</sup> CS-E15NKEW <sup>1</sup>	CS-XE18NKEW <sup>1</sup> CS-E18NKEW <sup>1</sup>	CS-XE21NKEW <sup>1</sup> CS-E21NKEW <sup>1</sup>	
SPLIT FOR 5x1								
<b>NEW</b> 2012	CS-ME7NKE	CS-ME9NKE		CS-ME12NKE		CS-ME18NKE		CS-ME24NKE
1-WAY CASSETTE								
	CS-ME7KB1E		CS-ME10EBE1E	CS-ME12EBE1E	CS-ME14EB1E			
LOW STATIC PRESSURE HIDE AWAY	GJ-I'IL/ ND IE		GJ-MIL INEDE IE	GJ-PIL I ZEDE IE	CO-THE 14ED IE			
		CS-E10KD3EA			CS-E15JD3EA <sup>1</sup>	CS-E18JD3EA <sup>1</sup>		
FLOOR CONSOLE								
			CS-E9GFEW	CS-E12GFEW		CS-E18GFEW 1		
FLOOR/ CEILING CONSOLE								
			CS-ME10DTEG		CS-E15DTEW <sup>1</sup>	CS-E18DTEW <sup>1</sup>		
4 WAY 60X60 CASSETTE								
		CS-E10KB4EA			CS-E15HB4EA 1	CS-E18HB4EA 1	CS-E21JB4EA 1	



P	OSSI	BLE INDOOR U	NIT COMBINATIONS																	
	lodels		Possible indoor unit	Capacity	Refrigera	nt pipe di	ameter	Pipe leng	jth					Indoor	/outdooi	r unit co	mbinati	ons		
			combinations	kŴ¹	Indoor unit	Liquid	Gas	Max. pipe length (1 room)	Max. pipe length (total)	Max. pipe without additional gas refills	Additional gas	Max. level difference	Capacity	Split Etherea	Split for 5x1	1-way Cassette	Low Static Pressure Hide Away	Floor console	Floor / ceiling console	4 -way Cassette
	2	CU-2E15LBE	A <sup>2</sup> : 7, 9/10 or 12	4.0-5.6	Room A	1/4"	3/8"	20 m	30 m	20 m	20 g/m	10 m	7	×						
			B <sup>2</sup> : 7, 9/10 or 12		Room B	1/4"	3/8"						9/10	×			x	×		×
													12	×				×		
		CU-2E18LBE	A <sup>2</sup> : 7, 9/10 or 12	4.0-6.4	Room A	1/4"	3/8"	20 m	30 m	20 m	20 g/m	10 m	7	×						
			B <sup>2</sup> : 7, 9/10 or 12		Room B	1/4"	3/8"						9/10	×			×	×	×	×
													12	×				×		
	3	CU-3E18LBE	A <sup>3</sup> : 7, 9/10, 12, 15 or 18	4.5-9.0	Room A	1/4"	3/8"	25 m	50 m	30 m	20 g/m	15 m	7	×		×				
		(SS) -	B <sup>3</sup> : 7, 9/10, 12, 15 or 18		Room B	1/4"	3/8"						9/10	X		X	X	X	X	X
		1	C <sup>3</sup> : 7, 9/10, 12, 15 or 18		Room C	1/4"	3/8"						12	X		X		X		
													14/15	X		X	X		X	X
S	2 ,	OII /FOOLDE											18	X			X	X	×	X
OMOOR	2 4	CU-4E23LBE	A <sup>3</sup> : 7, 9/10, 12, 15, 18 or 21	4.5-11.0	Doom A	1/4"	3/8"	25 m	60 m	30 m	20 g/m	15 m	7	×		×				
		4500 -	B <sup>3</sup> : 7, 9/10, 12, 15, 18 or 21	4.0-11.0	Room B	1/4"	3/8"	20 111	00 111	30 111	20 y/111	10 111	9/10	X		X	X	X	X	X
		OSSET.	C <sup>3</sup> : 7, 9/10, 12, 15, 18 or 21		Room C	1/4"	3/8"						12	X		X		X		-
			D <sup>3</sup> : 7, 9/10, 12, 15, 18 or 21		Room D		3/8"						14/15	X		X	X		X	X
													18	X			X	X	X	X
													21	X						X
		CU-4E27CBPG																		
		CHICAGO TO	A <sup>3</sup> : 7, 9/10, 12, 15 or 18	4.5-13.6		1/4"	3/8"	25 m	70 m	40 m	20 g/m	15 m	7	X		X				
		<b>6</b>	B <sup>3</sup> : 7, 9/10, 12, 15 or 18		Room B	1/4"	3/8"						9/10	X		X	X	X	×	X
		100	C <sup>3</sup> : 7, 9/10, 12, 15 or 18 D <sup>3</sup> : 7, 9/10, 12, 15 or 18		Room C Room D	1/4" 1/4"	3/8" 3/8"						12 14/15	×		X	X	^	X	×
			D°: 7, 7/10, 12, 13 01 10		ע וווטטא	1/4	3/0						18	X		^	X	X	X	X
	5	CU-5E34NBE											10	1			••	••		
			A <sup>3</sup> : 7, 9, 12, 18 or 24		Room A	1/4"	3/8"	30 m	80 m	45 m	20 g/m	15 m	7		×					
		0	B <sup>3</sup> : 7, 9, 12, 18 or 24		Room B	1/4"	3/8"						9		X					
			C <sup>3</sup> : 7, 9, 12, 18 or 24		Room C	1/4"	3/8"						12		X					
			D <sup>3</sup> : 7, 9, 12, 18 or 24		Room D	1/4"	1/2"						18	-	X					
			E <sup>3</sup> : 7, 9, 12, 18 or 24		Room E	1/4"	1/2"						24		X					

# INDOOR UNITS FOR FREE MULTI COMBINATIONS













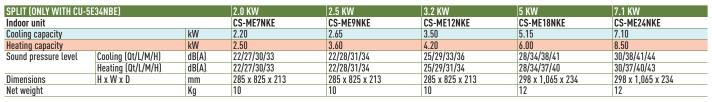






ETHEREA // SILVER OR V	VHITE		2.0 KW	2.5 KW	3.2 KW	4 KW	5 KW	6 KW
Silver Indoor			CS-XE7NKEW	CS-XE9NKEW	CS-XE12NKEW	CS-XE15NKEW <sup>1</sup>	CS-XE18NKEW <sup>1</sup>	CS-XE21NKEW <sup>1</sup>
White Indoor			CS-E7NKEW	CS-E9NKEW	CS-E12NKEW	CS-E15NKEW <sup>1</sup>	CS-E18NKEW <sup>1</sup>	CS-E21NKEW <sup>1</sup>
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 <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level <sup>2</sup>	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	HxWxD	mm	290 x 870 x 204	290 x 1,070 x 235	290 x 1,070 x 235			
Net weight	<u>.</u>	Kg	9	9	9	9	12	12
Air purifier filter			Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion	Patrol + E-ion
Piping connections	Liquid / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.70)	1/4" (6.35) / 1/2" (12.7









CZ-RD52CP INCLUDE ON THE INDOOR UNIT

LOW STATIC PRESSURE	HIDE AWAY		2.5 KW	4 KW	5 KW
Indoor hide away			CS-E10KD3EA	CS-E15JD3EA <sup>1</sup>	CS-E18JD3EA1
Wired remote control	Include on the indoor unit		CZ-RD52CP	CZ-RD52CP	CZ-RD52CP
Cooling capacity	Nominal	kW / kCal/h	2.50 / 2,150	4.00 / 3,440	5.00 / 4,300
Heating capacity	Nominal	kW / kCal/h	3.60 / 3,100	5.60 / 4,820	6.80 / 5,850
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5
External static pressure	Hi / Lo	Pa (mm)	34 / 64 (3.47 / 6.53)	34 / 69 (3.47 / 7.04)	34 / 78 (3.47 / 7.95)
Air Volume	Hi / Med / Lo	m³/h	414 / 402 / 330	474 / 402 / 330	624 / 528 / 444
Sound pressure level <sup>2</sup>	Cooling (Quiet / Lo / Hi)	dB(A)	24 / 27 / 31	24 / 27 / 33	27 / 30 / 41
	Heating (Quiet / Lo / Hi)	dB(A)	24 / 27 / 35	24 / 27 / 33	29 / 32 / 41
Sound power level	Cooling / Heating (Hi)	dB	49 / 51	49 / 51	57 / 57
Dimensions	H x W x D	mm	235 x 750 (+65) x 370	235 x 750 (+65) x 370	285 x 750 (+65) x 370
Net weight	·	Kg	17	18	18
Piping connections	Liquid / 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)





INCLUDE ON THE



CZ-BT20E SOLD SEPARATELY

CZ-SA11P OPTIONAL



4 WAY 60X60 CASSETTE			2.5 KW	4 KW	5 KW	6 KW
Indoor			CS-E10KB4EA	CS-E15HB4EA1	CS-E18HB4EA1	CS-E21JB4EA1
Panel	Sold separatel		CZ-BT20E	CZ-BT20E	CZ-BT20E	CZ-BT20E
Wireless control	Include on the indoor uni	t				
Cooling capacity	Nominal	kW / kCal/h	2.50 / 2,150	4.00 / 3,440	5.00 / 4,300	6.00 / 5,160
Heating capacity	Nominal	kW / kCal/h	3.60 / 3,100	5.60 / 4,820	6.80 / 5,850	8.50 / 7,310
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level <sup>2</sup>	Cooling (Hi / Lo / S-Lo)	dB(A)	34 / 26 / 23	34 / 26 / 23	36 / 28 / 25	41 / 33 / 30
	Heating (Hi / Lo / S-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	37 / 29 / 26	42 / 34 / 31
Sound power level	Cooling / 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
	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)

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. Connectivity restriction: CS-E/XE\_NKE 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.

<sup>1)</sup> A CZ-MA1P pipe reducer is needed on the E15 and E18, a CZ-MA2P pipe expander is needed on the E21.
2) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body.

The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.

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

<sup>4)</sup> Add 70 or 95 mm for piping port.

<sup>5)</sup> When installing the outdoor unit at a higher position than the indoor unit.









1-WAY CASSETTE			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
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 <sup>2</sup>	4 x 1.5			4 x 1.5
Sound pressure level <sup>2</sup>	Cool — Heat (Hi/Lo/S-Lo)	dB(A)	40 / 32 / 29 — 42 / 32 / 29	40 / 32 / 29 — 42 / 32 / 29		43 / 32 / 29 — 44 / 34 / 31
Sound power leve	Cooling / Heating (Hi)	dB	53 / 55	53 / 55	54 / 56	56 / 57
Dimensions	Indoor (H x W x D)	mm	185 x 770 x 360	185 x 770 x 360	185 x 770 x 360	185 x 770 x 360
	Panel (H x W x D)	mm	55 x 1,070 x 460	55 x 1,070 x 460	55 x 1,070 x 460	55 x 1,070 x 460
Net weight		Kg	9.8			9.8
Piping connections	Liquid / Gas pipe	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 3/8" (9.52)





FLOOR CONSOLE			2.8 KW	3.2 KW	5 KW
Indoor					CS-E18GFEW <sup>1</sup>
Cooling capacity	Nominal	kW / kCal/h	2.80 / 2,410	3.20 / 2,750	5.00 / 4,300
Heating capacity	Nominal	kW / kCal/h	4.00 / 3,440	4.50 / 3,870	6.80 / 5,850
Connection		mm <sup>2</sup>	4 x 1.5	4 x 1.5	4 x 1.5
Sound pressure level <sup>2</sup>	Cool — Heat (Hi/Lo/S-Lo)	dB(A)	38 / 27 / 23 — 38 / 27 / 23	39 / 28 / 24 — 39 / 27 / 23	44 / 36 / 32 — 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			2.8 kW	4 kW	5 kW
Indoor			CS-ME10DTEG	CS-E15DTEW <sup>1</sup>	CS-E18DTEW <sup>1</sup>
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
Sound pressure level <sup>2</sup>	Cool — Heat (Hi/Lo/S-Lo)	dB(A)	39 / 31 / 28 — 40 / 31 / 28	45 / 37 / 34 — 45 / 33 / 30	46 / 39 / 36 — 47 / 35 / 32
Dimensions / Net weight	H x W x D	mm	540 x 1,028 x 200 / 17	540 x 1,028 x 200 / 17	540 x 1,028 x 200 / 18
Pining connections	Liquid / Gas nine	inch (mm)	1/4" (6.35) / 3/8" (9.52)	1/4" (6.35) / 1/2" (12.70)	1/4" [6.35] / 1/2" [12.70]

# OUTDOOR UNITS FOR FREE MULTI COMBINATIONS

















CU-2E15LBE CU-2E18	LBE CU-3E18LBE	CU-4E23LBE	CU-4E27CBF	G CU-5E34NBI	E			TEMPERATURE
OUTDOOR UNIT //INVERTER	+		4.0 to 5.6 kW	4.0 to 6.4 kW	4.5 to 9.0 kW	4.5 to 11.0 kW	4.5 to 13.6 kW	1.6 to 14.5 kW
Unit			CU-2E15LBE	CU-2E18LBE	CU-3E18LBE	CU-4E23LBE	CU-4E27CBPG	CU-5E34NBE*
Cooling capacity	Nominal (Min - Max)	kW	4.50 (1.50-5.20)	5.20 (1.50-5.40)	5.20 (1.80-7.30)	6.80 (1,90-8.80)	8.00 (3.00-9.20)	10.00 (1.6 - 11.5)
EER	Nominal	<b>Energy Saving</b>	3.66 <b>A</b>	3.42 <b>A</b>	4.33 A		4.04 A	3.50 <b>A</b>
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)	2.86
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)	12.00 (1.6 - 14.5)
COP	Nominal	<b>Energy Saving</b>	4.62 A	4.63 <b>A</b>	4.86 A		4.52 <b>A</b>	4.20 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)	2.86
Current	Cooling / Heating Nominal	Α	5.75 / 5.20	7.10 / 5.35	5.30 / 6,50	7.50 / 8.60	8.70 / 9.10	12.6
Power source		V	230	230	230		230	220 - 240
Sound pressure level <sup>2</sup>	Cooling / Heating (Hi)	dB(A)	47 / 49	49 / 51	46 / 47	48 / 49	48 / 49	47 / 47 (Quiet mode)
Sound power level	Cooling / Heating (Hi)	dB	62 / 64	64 / 66	60 / 61		61 / 62	50 / 53
Dimensions	H x W x D	mm		540 x 780 (+70) x 289	795 x 875 (+95) x 320	795 x 875 (+95) x 320	908 x 900 x 320	910 x 940 x 340
Net weight		Kg	38	38	71	72	73	82
Piping connections	Liquid pipe	inch (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)
	Gas pipe	inch (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52) x3 + 1/2 (12.7) x2
Refrigerant Loading	R410A	Kg	1.45	1.45	2.64		3.10	4.10
Elevation difference (in/out)	Max	m	10	10	15	15	15	15
Piping length total	Max	m	30	30	50	60	70	80
Piping length to one unit	Min / Max	m	3-20	3-20	3-25		3-25	3-30
Piping length without refrige	rant increase	m (Max)	20	20	30	30	30	45
Additional gas		g/m	20	20	20	20	20	
Operating range	Cooling — Heating Min / Max	°C	16 / 43 — -10 / 24	16 / 43 — -10 / 24	-10 / 46 — -15 / 24	-10 / 46 — -15 / 24	16 / 43 — -10 / 24	-10 / 43 — -15 / 18

# FREE MULTI COMBINATIONS

FREE MULTI	2X1 // OI	JTDOOR	UNIT CU-2E15LBE												
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
capacity	Room A	Room B	Total (MinMax.)	Rating	W/W	kWh	230 V (A)	Volume (l/h)	Room A	Room B	Total (MinMax.)	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
91	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 <sup>2</sup>	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 + 91	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 <sup>2</sup>	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
91 + 91	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
91 + 102	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
102 + 102	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 MULTI	2X1 // 0	UTDOOR	UNIT CU-2E18LBI	E											
Indoor unit	Cooling (	Capacity (k	:W)	Input Power (W)	EER	A.C.E.	Current	Moisture Removal	Heating (	Capacity (I	(W)	Input Power (W)	COP	A.C.E.	Current
capacity	Room A	Room B	Total (MinMax.)	Rating	W/W	kWh	230 V (A)	Volume (l/h)	Room A	Room B	Total (MinMax.)	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
91	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 <sup>2</sup>	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 + 91	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 + 102	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
91 + 91	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
91 + 102	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
91 + 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 <sup>2</sup> + 10 <sup>2</sup>	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 <sup>2</sup> + 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		Capacity (k		J-3E18LBE	Input Power (W)	EER	A.C.E.	Current	Moisture Removal	Heating	Capacity (k	w)		Input Power (W)	COP	A.C.E.	Current
capacity				Total (MinMax.)	Rating	W/W	kWh		Volume (l/h)				Total (MinMax.)		W/W	kWh	230 V (A
1 Room	NOUIII A	KOOIII D	KOUIII C	TOTAL (PIIIIPIAX.)	Kathiy	VV/ VV	KAAII	230 V (M)	votuine (t/ii)	KUUIII A	I(UUIII D	NOUIII C	IUtat (MilliMax.)	Ivaring	VV/ VV	KAAII	230 V (A
7	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
91	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
10 <sup>2</sup>	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
12	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
15	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
18	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
2 Rooms	3.00			3.00 (1.70 3.70)	1000 (040 2100)	3.23 A	773	0.0	L./	0.00			0.00 (1.20 0.70)	2100 (300 2320)	3.24 6	1030	1.2
7 + 7	2.00	2.00		4.00 (1.90-6.20)	1010 (350-2100)	3.96 A	505	4.5	1.3 + 1.3	2.90	2.90		5.80 (1.40-7.00)	1450 (310-2550)	4.00 A	725	6.4
7 + 91	2.00	2.50		4.50 (1.90-6.20)	1270 (350-2100)	3.55 A	635	5.6	1.3 + 1.5	2.84	3.56		6.40 (1.40-7.00)	1720 (310-2550)	3.72 A	860	7.6
7 + 10 <sup>2</sup>	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
7 + 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
7 + 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
7 + 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
91 + 91	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
9 <sup>1</sup> + 10 <sup>2</sup>	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
91 + 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
91 + 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
9 <sup>1</sup> + 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
10 <sup>2</sup> + 10 <sup>2</sup>	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
10 <sup>2</sup> + 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
10 <sup>2</sup> + 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
10 <sup>2</sup> + 18	1.87	3.33		5.20 (1.90-6.80)	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
12 + 12	2.60	2.60		5.20 (1.90-6.40)	1450 (350-2120)	3.59 A	725	6.4	1.6 + 1.6	3.40	3.40		6.80 (1.40-7.50)	1750 (310-2490)	3.89 A	875	7.7
12 + 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
12 + 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
15 + 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
15 + 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
3 Rooms	2.01	2.07		3.20 (1.70 0.70)	1230 (300 2100)	4.10 A	023	0.0	1.0 · 1./	0.02	3.70		0.00 (1.40 0.00)	1300 (310 2170)	4.00 A	730	0.0
7 + 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 + 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 <sup>2</sup>	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 + 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 + 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 + 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
7 + 91 + 91	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
7 + 9 <sup>1</sup> + 10 <sup>2</sup>	1.42	1.78	2.00	5.20 (1.90-7.20)	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
7 + 91 + 12	1.35	1.69	2.16	5.20 (1.90-7.20)	1210 (360-2170)	4.20 A	605	5.3	0.9 + 1.1 + 1.4	1.76	2.21	2.83	6.80 (1.40-8.30)	1470 (320-2120)	4.63 A	735	6.5
7 + 91 + 15	1.22	1.53	2.45	5.20 (1.80-7.30)	1200 (360-2180)	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
$7 + 10^2 + 10^2$	1.36	1.92	1.92	5.20 (1.90-7.20)	1220 (360-2170)	4.33 A	610	5.3	0.9 + 1.2 + 1.2	1.78	2.51	2.51	6.80 (1.50-8.10)	1510 (320-2110)	4.50 A	755	6.7
7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 12	1.30	1.82	2.08	5.20 (1.90-7.20)	1210 (360-2170)	4.20 A 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
7 + 10 <sup>2</sup> + 15	1.18	1.65	2.37	5.20 (1.80-7.30)	1200 (360-2180)	4.30 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
7 + 10 + 13	1.10	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	2.10	2.59	6.80 (1.60-8.30)	1410 (320-2110)	4.00 A 4.82 A	705	6.3
91 + 91 + 91	1.73	1.73	1.70	5.19 (1.90-7.20)	1220 (360-2170)	4.33 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)	4.02 A	755	6.7
91 + 91 + 102	1.67	1.67	1.73	5.20 (1.90-7.20)	1220 (360-2170)	4.25 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)	4.49 A 4.50 A	755	6.7
91 + 91 + 102	1.67	1.67	2.02	5.20 (1.90-7.20)	1210 (360-2170)	4.20 A 4.30 A	605	5.3	1.0 + 1.0 + 1.3	2.18	2.18	2.66	6.80 (1.40-8.30)	1470 (320-2120)	4.50 A 4.63 A	735	6.5
91 + 91 + 15	1.59	1.59	2.02	5.20 (1.90-7.20)	1210 (360-2180)	4.30 A	600		0.9 + 0.9 + 1.5	1.89	1.89	3.02	6.80 (1.40-8.30)	1400 (320-2110)	4.86 A	700	6.5
								5.3									
$9^1 + 10^2 + 10^2$	1.60	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
$9^1 + 10^2 + 12$	1.53	1.71	1.96	5.20 (1.90-7.20)	1210 (360-2180)	4.30 A	605	5.3	1.0 + 1.1 + 1.3	2.00	2.24	2.56	6.80 (1.40-8.30)	1470 (320-2110)	4.63 A	735	6.5
$\frac{9^1 + 12 + 12}{10^2 + 10^2}$	1.46	1.87	1.87	5.20 (1.80-7.30)	1200 (360-2180)	4.33 A	600	5.3	0.9 + 1.2 + 1.2	1.92	2.44	2.44	6.80 (1.60-8.30)	1410 (320-2100)	4.82 A	705	6.3
$10^2 + 10^2 + 10^2$		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
$10^2 + 10^2 + 12$	1.65	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

door unit		Capacity								Moisture Removal					Input Power (W)		
pacity Room				Room D	Total (MinMax.)					Volume (l/h)				Room D Total (MinMax.	Rating	W/W kWh	
Nooni	2.00 2.50				2.00 (1.80-2.90) 2.50 (1.80-2.90)	500 (340-810) 630 (340-810)	4.00 A 4.00 A	250 315	2.5 3.2	1.3 1.5	3.20 3.60			3.20 (1.20-4.10) 3.60 (1.20-4.30)	740 (300-1230) 940 (300-1230)	4.32 A 370 3.83 A 470	3.7
2	2.80				2.80 (1.80-2.90) 3.20 (1.80-3.80)	700 (340-810)	4.00 A 4.00 A	350	3.5 3.9	1.6 1.8	4.00			4 101 11 20-4 301	1050 (300-1730)	3 81 A 525	5.2
	3.20 4.00				4.00 (1.80-4.30)	1240 (340-1300) 1250 (340-1990) 1550 (340-2130)	3.23 A 3.23 A	620	5.8	2.3	4.50 5.60			5.60 (1.20-6.80)	1230 (300-2100) 1720 (300-2930) 2100 (300-2520)	3.26 C 860	8.0
	5.00 6.00				6.00 (1.90-5.70) 6.00 (1.90-6.20)	2030 (340-2130) 2030 (340-2330)	3.23 A 2.96 C	1015	7.2 9.2	2.7 3.3	6.80 8.50			6.80 (1.20-6.90) 8.50 (1.30-9.00)	2100 (300-2520) 2400 (620-2530)	3.24 C 1050 3.54 B 1200	11.1
Room + 7	2.00	2.00			4.00 (1.90-6.40)	1010 (340-2150)	3.96 A	505	4.5	1.3 + 1.3	2.90	2.90		5.80 (2.70-9.80)	1450 (610-2800)	4.00 A 725	6.7
+ 9 <sup>1</sup> + 10 <sup>2</sup>	2.00	2.50 2.80			4.50 (1.90-6.40) 4.80 (1.90-6.40)	1010 (340-2150) 1270 (340-2150) 1350 (340-2150)	3.55 A	635 675	5.7 6.1	1.3 + 1.5 1.3 + 1.6	2.71 2.67	3.39 3.73		6.10 (2.70-9.80)	1640 (610-2800)	3.72 A 820	7.6
+ 12 + 15	2.00	3.20 4.00			E 30 (1 00-Y 00)	1510 (3/0-2/10)	3 /./. 1	755	6.8	1.3 + 1.8 1.3 + 2.3	2.69	4.31 5.47		7.00 (2.70-9.90)	1840 (590-2800) 2210 (590-2800) 2140 (530-2760)	3.80 A 920	8.5
+ 18	1.94	4.86			6.80 (2.00-7.50)	1810 (340-2410) 1810 (330-2410) 1800 (320-2440) 1800 (320-2440) 1380 (340-2400)	3.78 A	900	8.1	1.3 + 2.6	2.46	6.14		8.60 (2.80-10.20)	2140 (530-2760)	4.02 A 1070	9.9
+ 21 + 9 <sup>1</sup>	1.70 2.50	5.10 2.50			5.00 (1.90-6.80)	1800 (320-2440)	3.78 A 3.61 A	900 690	8.1 6.2	1.1 + 2.8 1.5 + 1.5	2.15 3.20	6.45 3.20		0.0U (2.0U-1U.2U)	1700 (410-2800)	3.70 A 1143	7 0
+ 10 <sup>2</sup> + 12	2.50 2.50	2.80 3.20			5.30 (1.90-6.80) 5.70 (1.90-6.90)	1470 (340-2400) 1660 (340-2410) 2070 (330-2410)	3.61 A 3.43 A	735 830	6.6 7.4	1.5 + 1.6 1.5 + 1.8	3.30 3.55	3.70 4.55		7.00 (2.70-9.80) 8.10 (2.70-9.90)	1860 (610-2800) 2170 (590-2800) 2320 (590-2800) 2140 (530-2760) 2140 (530-2760) 2140 (530-2760)	3.77 A 930 3.73 A 1085	8.6 10.0
+ 15 + 18	2.50 2.27	4.00 4.53			6.50 (1.90-6.90) 6.80 (1.90-7.50)	2070 (330-2410) 1970 (320-2440)	3.13 B	1035 985	9.2 8.8	1.5 + 2.3 1.5 + 2.5	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 1160	10.7
+ 21 ! + 10 <sup>2</sup>	2.00	4.80			/ 00 (1 00 7 50)	1070 (110 17/10)	9 /F A	OOF	8.8	1.3 + 2.6	2.53	6.07		8.60 (2.80-10.20)	2140 (530-2760)	4.02 A 1070	9.9
+ 12	2.80	2.80 3.20			6.00 (1.90-6.90)	1970 (320-2440) 1550 (340-2400) 1750 (340-2410) 2170 (330-2410) 1970 (320-2440)	3.43 A	875	6.9 7.8	1.6 + 1.6 1.6 + 1.8	4.00 3.97	4.00 4.53		8.50 (2.70-9.90)	2120 (610-2800) 2280 (590-2800)	3.73 A 1140	10.5
+ 15 + 18	2.80	4.00 4.36			6.80 (1.90-6.90) 6.80 (1.90-7.50)	2170 (330-2410) 1970 (320-2440)	3.13 B 3.45 A	1085 985	9.7 8.8	1.6 + 2.3 1.5 + 2.4	3.54 3.09	5.06 5.51		0 40 (2 00 10 20)	2320 (590-2800) 2140 (530-2760)	/ N2 A 1070	0.0
+ 21 + 12	2.16 3.20	4.64 3.20			6.80 (1.90-7.50) 6.40 (1.90-7.00)	1970 (320-2440) 1960 (330-2420)	3.45 A 3.27 A	985 980	8.8 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 (2.80-10.00)	2140 (530-2760) 2270 (580-2800)	4.02 A 1070 3.79 A 1135	9.9
+ 15 + 18	1 3 02	3.78 4.15			6.80 (1.90-7.10) 6.80 (2.00-7.40)	1970   320-2440   1970   320-2440   1960   330-2420   2070   330-2420   1890   320-2450   1890   320-2450   2270   330-2420   1990   230-2450   1990   1	3.29 A 3 An A	1035	9.3 8.5	1.7 + 2.2 1.6 + 2.4	3.82	4.78 5.24		8.60 (2.80-10.00) 8 60 (2.80-10.00)	2140 (530-2760) 2270 (580-2800) 2270 (570-2800) 2090 (520-2740) 2090 (520-2740)	3.79 A 1135	10.5
+ 21	2.65 2.37 3.40	4.43			6.80 (2.00-7.60)	1890 (320-2450)	3.60 A	945	8.5	1.5 + 2.5	2.99	5.61		8.60 (2.80-10.30)	2090 (520-2740)	4.11 A 1045	9.7
+ 15 + 18	3.02	3.40			0.00 (2.00-7.00)	1070 [320-2430]	J.00 A	740	10.2 8.5	1.9 + 1.9 1.7 + 2.2	4.30 3.82	4.78		8.60 (2.80-10.30)	2080 (510-2740)	4.13 A 1040	9.6
+ 21 + 18	2.72 3.40 3.09	4.08 3.40			6.80 (2.10-7.60) 6.80 (2.10-8.10)	1890 (320-2450) 1780 (310-2460) 1780 (310-2460)	3.60 A 3.82 A	945 890	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) 8.60 (2.80-10.50)	2080 (510-2740) 1960 (480-2650) 1960 (480-2650)	4.13 A 1040 4.39 A 980	9.6 9.1
+ 21 com	3.09	3.71							8.0	1.7 + 2.2	3.91	4.69					9.1
7 + 7 7 + 9 <sup>1</sup>	2.00	2.00 2.00	2.00 2.50		6.00 (1.90-8.00) 6.50 (1.90-8.00)	1650 (340-2460) 1830 (340-2460) 1910 (340-2460)	3.63 A 3.56 A	825 915	7.4 8.2	1.3 + 1.3 + 1.3 1.3 + 1.3 + 1.5	2.86 2.65	2.86 2.65	2.86 3.30	8.58 (3.30-10.40) 8 60 (3.30-10.40)	2090 (600-2840) 2090 (600-2840)	4.11 A 1045 4.11 A 1045	9.7
7 + 10 <sup>2</sup> 7 + 12	2.00	2.00 2.00 1.89	2.80		6.80 (1.90-8.00)	1910 (340-2460)	3.56 A	955	8.6 8.6	1.3 + 1.3 + 1.6 1.2 + 1.2 + 1.7	2.53	2.53	3.54 3.82	8.60 (3.30-10.40)	2070 (600-2840) 2070 (590-2820)	4.11 A 1045	9.7
7 + 15	1.70	1.70	3.02		6.80 (1.90-8.10)	970 340-2460 1860 340-2460 1730 340-2460 1730 340-2460 1730 340-2460 1910 340-2460 1910 340-2460 1910 340-2460 1730 340-2460 1730 340-2460 1730 340-2460 1730 340-2460	3.66 A	930	8.3	11+11+19	2.15	2.15	4.30	0 /0 (0 00 10 00)	20/0 (FOO 2010)	/ 17 A 1000	0.5
7 + 18 7 + 21	1.51	1.51 1.36 2.43 2.33 2.21 2.00	3.78 4.08		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	1.0 + 1.0 + 2.2 0.9 + 0.9 + 2.3 1.3 + 1.5 + 1.5 1.2 + 1.5 + 1.6	1.91 1.72	1.91 1.72	4.78 5.16 3.07 3.30 3.58 4.05	8.60 (3.20-10.60) 8.60 (3.20-10.60)	2000 1570-2810 1930 1570-2710 1930 1570-2710 2090 (600-2840) 2070 1590-2820 2060 1590-2810 1930 1570-2710 1930 1570-2710 2090 (600-2840)	4.46 A 965 4.46 A 965	8.9
91 + 91 91 + 102	1.94	2.43	2.43		6.80 (1.90-8.00) 6.80 (1.90-8.00)	1910 (340-2460) 1910 (340-2460)	3.56 A 3.56 A	955 955	8.6	1.3 + 1.5 + 1.5 1.2 + 1.5 + 1.6	2.46 2.35 2.23 2.02	3.07	3.07	8.60 (3.30-10.40) 8.60 (3.30-10.40)	2090 (600-2840) 2090 (600-2840)	4.11 A 1045 4.11 A 1045	9.7
9 <sup>1</sup> + 12 9 <sup>1</sup> + 15	1.76 1.60	2.21	2.61 2.83 3.20		6.80 (1.90-8.00) 6.80 (1.90-8.10)	1910 (340-2460) 1860 (340-2460)	3.56 A	955 930	8.6 8.3	1.1 + 1.4 + 1.7 1.0 + 1.3 + 1.8	2.23	2.95 2.79 2.53 2.26	3.58	8.60 (3.30-10.40) 8 60 (3.30-10.50)	2070 (590-2820) 2060 (590-2810)	4.15 A 1035 4.17 Δ 1030	9.6
9 <sup>1</sup> + 18 9 <sup>1</sup> + 21	1.43	1.79	3.58		6.80 (2.00-8.50)	1730 (340-2460)	3.93 A	865	7.8 7.8	0.9 + 1.2 + 2.1	1.81	2.26	4.53 4.91	8.60 (3.20-10.60)	1930 (570-2710)	4.46 A 965	8.9
10 <sup>2</sup> + 10 <sup>2</sup>	1.29	2.51	3.89 2.51		6.80 (1.90-8.00)	1910 (340-2460)	3.56 A	955	8.6	0.8 + 1.0 + 2.3 1.1 + 1.5 + 1.5	1.64 2.26	3.17	3.17	8.60 (3.30-10.40)	2090 600-2840 2070 650-2820 2060 590-2820 2060 590-2810 1930 570-2710 1930 570-2710 2050 590-2800 2040 580-2790	4.40 A 703 4.11 A 1045	9.7
10 <sup>2</sup> + 12 10 <sup>2</sup> + 15	1.70	2.38 2.16	2.72 3.09		6.80 (1.90-8.00) 6.80 (1.90-8.10)	1910 (340-2460) 1860 (340-2460)	3.56 A 3.66 A	955 930	8.6 8.3	1.1 + 1.5 + 1.5 1.1 + 1.5 + 1.6 1.0 + 1.4 + 1.7	1.95	3.01 2.74	3.44	8.60 (3.30-10.40) 8.60 (3.30-10.50)	2070 [590-2820] 2060 (590-2810)	4.15 A 1035 4.17 A 1030	9.6
10 <sup>2</sup> + 18 10 <sup>2</sup> + 21	1.39	1.76	3.47 3.78		6.80 (1.90-8.00) 6.80 (1.90-8.10) 6.80 (2.00-8.50) 6.80 (2.00-8.50) 6.80 (1.90-8.10)	1730 (340-2460) 1730 (340-2460)	3.93 A 3.93 A	865 865	78	119 + 13 + 711	2.15 1.95 1.75 1.59	2.46 2.23 3.28	4.39	8.60 (3.20-10.60) 8.60 (3.20-10.60)	1930 (570-2710) 1930 (570-2710)	4.46 A 965	8.9
12 + 12 12 + 15	1.62	2.16 1.94 1.76 2.59 2.37	3.78 2.59 2.96		6.80 (1.90-8.10) 6.80 (1.90-8.20)	1910 [340-2460] 1910 [340-2460] 1860 [340-2460] 1730 [340-2460] 1730 [340-2460] 1860 [340-2460] 1860 [340-2460]	3.66 A	930	8.3	0.8 + 1.1 + 2.2 1.0 + 1.6 + 1.6 0.9 + 1.5 + 1.7	2.04	3.28	3.44 3.91 4.39 4.78 3.28 3.74	8.60 (3.30-10.50) 8.60 (3.30-10.50)	2050 (590-2800)	4.20 A 1025	9.5
12 + 18	1.33	2.13 2.72	3.34						7.8 8.2	0.8 + 1.4 + 1.9	1.68	2.70	4.22	0.00 (3.20-10.00)	1910 (570-2680) 2030 (580-2780)	4.50 A 955 4.24 A 1015	
15 + 15 15 + 18	1.36 1.24 2.26	2.47	3.09		6.80 (2.00-8.50)	1820 (340-2460) 1730 (340-2460) 1910 (340-2460) 1910 (340-2460)	3.74 A 3.93 A	865	7.8	0.9 + 1.6 + 1.6 0.8 + 1.5 + 1.7 1.5 + 1.5 + 1.5	1.72 1.56 2.86	3.44	3.44 3.91 2.86	8.60 (3.20-10.60)	1910 (570-2680)	/, h     A     Yhh	I X X
+ 9 <sup>1</sup> + 9 <sup>1</sup> + 9 <sup>1</sup> + 10 <sup>2</sup>	2.18	2.26 2.18	2.26		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	8.6	1.4 + 1.4 + 1.5	2.76	2.86	3.08	8.60 (3.30-10.40)	2090 (600-2840)	4.11 A 1045 4.11 A 1045 4.15 A 1035	9.7
+ 9¹ + 12 + 9¹ + 15	2.07 1.89	2.07 1.89	2.66 3.02		6.80 (1.90-8.00) 6.80 (1.90-8.10)	1910 (340-2460) 1860 (340-2460)	3.56 A	955	8.6 8.3	1.3 + 1.3 + 1.6 1.2 + 1.2 + 1.7	2.62	2.62	3.36 3.82	8.60 (3.30-10.40)	2070 (590-2820) 2060 (590-2810)	4.15 A 1035 4.17 A 1030	9.6
+ 9 <sup>1</sup> + 18 + 9 <sup>1</sup> + 21	1.70	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	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)	1930 (570-2710) 1930 (570-2710)	4.46 A 965 4.46 A 965	8.9
+ 10 <sup>2</sup> + 10 <sup>2</sup>	2.10	2.35	2.35		6.80 (1.90-8.00)	1910 (340-2460)	3.56 A	955	8.6	1.4 + 1.5 + 1.5	2.66	2.97	2.97	8.60 (3.30-10.40)	2090 (600-2840)	4.11 A 1045	9.7
+ 10 <sup>2</sup> + 12 + 10 <sup>2</sup> + 15	2.00 1.83	2.24 2.05	2.56 2.92		6.80 (1.90-8.00) 6.80 (1.90-8.10)	1910 (340-2460) 1860 (340-2460) 1730 (340-2460)	3.56 A 3.66 A	955 930	8.6 8.3	1.3 + 1.5 + 1.6 1.2 + 1.3 + 1.7	2.53 2.31	2.83 2.59	3.24 3.70	8.60 (3.30-10.40) 8.60 (3.30-10.50)	2070 (590-2820) 2060 (590-2810) 1930 (570-2710)	4.15 A 1035 4.17 A 1030	9.5
+ 10 <sup>2</sup> + 18 + 12 + 12	1.65 1.92	1.85 2.44	3.30 2.44		6.80 (1.90-8.10)	1730 (340-2460) 1860 (340-2460)	3.93 A 3.66 A	865 930	7.8 8.3	1.1 + 1.2 + 1.9	2.09	3.09	4.17 3.09			4.20 A 1025	9.5
· 12 + 15 · 12 + 18	1.75	2.24	2.81 3.18		6.80 (1.90-8.20) 6.80 (2.00-8.50)	1860 (340-2460) 1730 (340-2460)	3.66 A 3.66 A 3.93 A	930 865	8.3 7.8	1.2 + 1.5 + 1.5 1.1 + 1.5 + 1.6 1.0 + 1.3 + 1.8	2.21	2.84	3.55 4.02	8.60 (3.30-10.50) 8.60 (3.30-10.50)	2050 (590-2800) 2040 (580-2790) 1910 (570-2680)	4.22 A 1020 4.50 A 955	9.4
+ 15 + 15 + 10 <sup>2</sup> + 10 <sup>2</sup>	1.62	2.59	2.59		6.80 (1.90-8.20) 6.78 (1.90-8.00)	1820 (340-2460)	3.74 A 3.55 A	910	8.2 8.6	1.0 + 1.6 + 1.6 1.5 + 1.5 + 1.5	2.04 2.86	3.28	3.28	8.60 (3.30-10.50)	2030 (580-2780) 2090 (600-2840)	4.24 A 1015 4.11 A 1045	9.4
+ 10 <sup>2</sup> + 12	2.16	2.16	2.48		6.80 (1.90-8.00)	1910 (340-2460)	3.56 A	955	8.6	1.4 + 1.4 + 1.5	2.74	2.74	3.12	8.60 (3.30-10.40)	2070 (590-2820)	4.15 A 1035	9.6
+ 10 <sup>2</sup> + 15 + 10 <sup>2</sup> + 18	1.98 1.80	1.98 1.80	2.84 3.20		6.80 (1.90-8.10) 6.80 (2.00-8.50)	1860 (340-2460) 1730 (340-2460) 1860 (340-2460)	3.66 A 3.93 A	93U 865	8.3 7.8	1.3 + 1.3 + 1.7 1.2 + 1.2 + 1.8	2.51	2.51	3.58 4.06 2.99	8.60 (3.20-10.60)	2060 (590-2810) 1930 (570-2710)	4.17 A 1030 4.46 A 965	8.9
+ 12 + 12 + 12 + 15	2.06 1.90	2.37 2.18	2.37		6.80 (1.90-8.10) 6.80 (1.90-8.20)	1860 [340-2460]	3.66 A 3.66 A	930 930	8.3 8.3	1.3 + 1.5 + 1.5 1.2 + 1.4 + 1.6	2.62 2.41	2.99	3.44	8.60 (3.30-10.50)	2050 (590-2800) 2040 (580-2790)	4.20 A 1025 4.22 A 1020	9.5 9.4
+ 12 + 18 + 15 + 15	1.73	1.98	3.09 2.52		6.80 (2.00-8.50) 6.80 (1.90-8.20)	1730 (340-2460) 1820 (340-2460)	3.93 A	865	7.8 8.2	1.1 + 1.3 + 1.7 1.1 + 1.5 + 1.5	2.19	2.50 3.19	3.91 3.19	8.60 (3.20-10.60) 8.60 (3.30-10.50)	1910 (570-2680) 2030 (580-2780)	4.50 A 955 4.24 A 1015	8.8
+ 12 + 12 + 12 + 15	2.26	2.26	2.26		6.78 (1.90-8.20) 6.80 (1.90-8.20)	1820 (340-2460) 1820 (340-2460)	3.73 A	910	8.2 8.2	1.5 + 1.5 + 1.5 1.4 + 1.4 + 1.6	2.86	2.86 2.65	2.86	8.58 (3.30-10.50)	1990 (580-2770) 1980 (580-2760)	4.31 A 995 4.34 A 990	9.2
oom			2.62										3.30				0,4
7 + 7 + 7 7 + 7 + 9 <sup>1</sup>	1.70	1.70 1.60	1.70 1.60		6.80 (1.90-8.70) 6.80 (1.90-8.70)	1690 (340-2460) 1690 (340-2460)		845	7.6 7.6	1.1 + 1.1 + 1.1 + 1.1 1.0 + 1.0 + 1.0 + 1.3	2.02	2.15	2.15	2.54 8.60 (3.10-10.60)	1870 (580-2620) 1870 (580-2620)	4.60 A 935 4.60 A 935	8.6
7 + 7 + 10 <sup>2</sup> 7 + 7 + 12	1.55 1.48	1.55 1.48	1.55 1.48	2.36	6.80 (1.90-8.70) 6.80 (1.90-8.80)	1690 (340-2460) 1650 (340-2470)	4.12 A	825	7.6 7.4	1.0 + 1.0 + 1.0 + 1.4 0.9 + 0.9 + 0.9 + 1.5	1.87	1.95 1.87	1.95 1.87	2.99 8.60 (3.00-10.60)	1870 (580-2620) 1850 (580-2600)	4.60 A 935 4.65 A 925	8.6
7 + 7 + 15 7 + 7 + 18	1.36 1.24	1.36 1.24	1.36 1.24	2.72 3.08	6.80 (1.90-8.80) 6.80 (1.90-8.80)	1650 (340-2470) 1680 (340-2470)	4.12 A 4.05 A	825 840	7.4 7.5	0.9 + 0.9 + 0.9 + 1.6 0.8 + 0.8 + 0.8 + 1.7	1.72	1.72 1.56	1.72 1.56	3.44 8.60 (3.00-10.60)	1840 (590-2590) 1850 (580-2600)	4.67 A 920 4.65 A 925	8.5 8.6
7 + 9 <sup>1</sup> + 9 <sup>1</sup> 7 + 9 <sup>1</sup> + 10 <sup>2</sup>	1.51	1.51	1.89	1.89	6.80 (1.90-8.70) 6.80 (1.90-8.70)	1690 (340-2460) 1690 (340-2460)	4.02 A	845	7.6 7.6	1.0 + 1.0 + 1.2 + 1.2 0.9 + 0.9 + 1.2 + 1.3	1.91	1.91	2.39	2.39 8.60 (3.10-10.60)	1870 (580-2620) 1870 (580-2620)	4.60 A 935 4.60 A 935	8.6 8.6
7 + 9 <sup>1</sup> + 12 7 + 9 <sup>1</sup> + 15	1.40	1.40	1.75	2.25	6.80 (1.90-8.80)	1650 [340-2470] 1650 [340-2470]	4.12 A 4.12 A	825	7.4	0.9 + 0.9 + 1.1 + 1.5 0.8 + 0.8 + 1.0 + 1.6	1.77	1.77	2.22	2.84 8.60 (3.00-10.60)	1850 (580-2600)	4.65 A 925	8.6
7 + 10 <sup>2</sup> + 10 <sup>2</sup>	1.30	1.30	1.61	1.98	6.80 (1.90-8.80) 6.80 (1.90-8.70)	1690 (340-2460)	4.02 A	845	7.6	0.9 + 0.9 + 1.3 + 1.3 0.9 + 0.9 + 1.2 + 1.4	1.79	1.64	2.04	2.51 8.60 (3.10-10.60)	1840 (590-2590) 1870 (580-2620)	4.67 A 920 4.60 A 935	8.5
7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15	1.36	1.36 1.26	1.90 1.76	2.52	6.80 (1.90-8.80) 6.80 (1.90-8.80)	1650 (340-2470)	4.12 A 4.12 A	825	7.4 7.4	0.8 + 0.8 + 1.1 + 1.5	1.59	1.72 1.59	2.41 2.23	3.19 8.60 (3.00-10.60)	1850 (580-2600) 1840 (590-2590)	4.65 A 925 4.67 A 920	8.6 8.5
7 + 12 + 12 91 + 91 + 91	1.31 1.43	1.31 1.79	2.09 1.79	2.09 1.79	6.80 (1.90-8.80) 6.80 (1.90-8.70)	1650 (340-2430) 1690 (340-2460)	4.12 A	825	7.4 7.6	0.8 + 0.8 + 1.4 + 1.4 0.9 + 1.2 + 1.2 + 1.2	1.65	1.65 2.26	2.65 2.26	2.65 8.60 (3.00-10.60)	1830 (590-2570) 1870 (580-2620)	4.70 A 915 4.60 A 935	8.5 8.6
91 + 91 + 102	1.39	1.73	1.73	1.95	6.80 (1.90-8.70)	1690 (340-2460)	4.02 A 4.12 A	845	7 4	00.11.11.12	1 74	2.19	2.19	2.46 8.60 (3.10-10.60)	1870 (580-2620) 1850 (580-2600)	4.60 A 935 4.65 A 925	8.6 8.6
91 + 91 + 12 91 + 91 + 15	1.33	1.67	1.67	2.13 2.47 1.89	6.80 (1.90-8.80) 6.80 (1.90-8.80)	1680 (340-2470)	4.05 A	840	7.4 7.5	0.8 + 1.0 + 1.0 + 1.5	1.56	2.11 1.95	1.95	3.14   8.60 (3.00-10.60)	1850 (590-2600)	4.65 A 925 4.60 A 935	8.6
$\frac{9^1 + 10^2 + 10^2}{9^1 + 10^2 + 12}$	1.34 1.30	1.68	1.89 1.81	2.07	6.80 (1.90-8.70) 6.80 (1.90-8.80)	1650 (340-2470)	4.02 A 4.12 A	825	7.6 7.4	0.8 + 1.0 + 1.2 + 1.3	1.64	2.14	2.38	2.62 8.60 (3.00-10.60)	1870 (580-2620) 1850 (580-2600)	4.65 <b>A</b> 925	8.6
9 <sup>1</sup> + 12 + 12 10 <sup>2</sup> + 10 <sup>2</sup> + 10 <sup>2</sup>	1.24 1.31	1.56 1.83	2.00 1.83	2.00 1.83	6.80 (1.90-8.80) 6.80 (1.90-8.70)	1650 (340-2430)	4.12 A 4.02 A	825	7.4 7.6	0.8 + 1.1 + 1.1 + 1.4 0.8 + 1.0 + 1.0 + 1.0 + 1.5 0.8 + 1.1 + 1.2 + 1.2 0.8 + 1.1 + 1.2 + 1.2 0.8 + 1.0 + 1.3 + 1.3 0.8 + 1.2 + 1.2 + 1.2 0.8 + 1.2 + 1.2 + 1.2	1.58	1.98 2.32	2.52	2.52   8.60 (3.00-10.60)	1830 (590-2570) 1870 (580-2620)	4.70 A 915 4.60 A 935	8.5 8.6
10 <sup>2</sup> + 10 <sup>2</sup> + 12 + 9 <sup>1</sup> + 9 <sup>1</sup> + 9 <sup>1</sup>	1.26	1.76	1.76	2.02	6.80 (1.90-8.80) 6.80 (1.90-8.70)	1680 (340-2470)	4.05 A 4.02 A	840	7.5 7.6	0.8 + 1.1 + 1.1 + 1.3 1.1 + 1.1 + 1.1 + 1.1	1.0/	2.23	2.11 1.95 2.38 2.29 2.52 2.32 2.23 2.15 2.09 2.01 2.27 2.19 2.21	2.55 8.60 (3.00-10.60) 2.15 8.60 (3.10-10.60)	1850 (580-2600) 1870 (580-2620)	4.65 A 925 4.60 A 935	8.6 8.6
+ 91 + 91 + 102	1.65	1.65	1.65	1 85	4 8N (1 9N-8 7N)	1690 (360-2660)	4 N2 A	845	7.6	11+11+11+12	2 09	2.09	2.09	2 33   8 60 [3 10-10 60]	1870 [580-2620]	4 60 A 935	8.6
+ 9 <sup>1</sup> + 9 <sup>1</sup> + 12 + 9 <sup>1</sup> + 10 <sup>2</sup> + 10 <sup>2</sup> + 9 <sup>1</sup> + 10 <sup>2</sup> + 12	1.59 1.60	1.59 1.60	1.59 1.80 1.72	2.03 1.80 1.98	6.80 (1.90-8.80)	1650 (340-2470) 1690 (340-2460) 1680 (340-2470) 1690 (340-2160)	4.12 A 4.02 A	845	7.4 7.6 7.5 7.6	1.0 + 1.0 + 1.0 + 1.3 1.0 + 1.0 + 1.2 + 1.2 1.0 + 1.0 + 1.1 + 1.3	2.03	2.01 2.03	2.27	2.57         8.60 [3.00-10.60]           2.27         8.60 [3.10-10.60]           2.51         8.60 [3.00-10.60]           2.21         8.60 [3.10-10.60]	1850 (580-2600) 1870 (580-2620) 1850 (580-2600) 1870 (580-2620	4.60 A 935	8.6 8.6
$9^{1} + 10^{2} + 12$	1.55 1.55	1.55 1.75	1.72 1.75	1.98 1.75	6.80 (1.90-8.80)	1680 (340-2470)	4.U5 A	840	7.5	1.0 + 1.0 + 1.1 + 1.3 1.0 + 1.1 + 1.1 + 1.1	1.95	1.95 2.21	2.19	Z.51   8.6U (3.00-10.60)	1850 (580-2600)	4.65 A 925	8.6

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

				4E27CE	PU	Innut Daws - (140)	EED	ACE	Curront	Majotura Dament	Uest'	Corosit-	(14741)		Innut Dourse (144)	COD	ACE	Current
ndoor unit capacity		Capacity Room B		Room D	Total (MinMax.)	Input Power (W) Rating				Moisture Removal Volume (l/h)				Room D Total (MinMax.)	Input Power (W) Rating	W/W		230 V (A)
Room	1.0071			NOOM D	Total (Time Tiaxi)	riu.i.g	,		200 1 (1.)	10141110 (411)				Total (Time Time	- Industry	,		200 1 (1.1)
	2.00					440 (380-620)	4.52 A		2.10	1.3	3.20			3.20 (1.70-4.70)	840 (370-1830)	3.81 A		3.85
02	2.50					550 (380-900)	4.52 A		2.60	1.6	3.60			3.60 (1.70-4.80)	1090 (370-1900) 1210 (370-1900)	3.31 C		4.85
0 <sup>2</sup> 2	2.80 3.20				2.80 (2.00-3.40) 3.20 (2.00-3.90)	620 (380-900) 720 (380-1090)	4.52 A 4.44 A		2.95 3.40	1.8	4.00 4.50			4.00 (1.70-4.80) 4.50 (1.70-5.80)	1310 (370-1900)			5.40 5.85
<u>z</u> 5	4.00				4.00 (2.00-4.40)	1030 (380-1390)	3.88 A			2.3	5.60			5.60 (1.80-7.20)		2.95 D		8.35
8	5.00						3.11 B			2.7	7.10			7.10 (2.10-7.30)	2840 (430-3560)			12.40
Room																		
+ 7	2.00	2.00				890 (400-1260)	4.49 A		3.95	1.3 + 1.3	3.20	3.20		6.40 (1.80-9.40)	1480 (400-3550)			6.50
+ 91	2.00	2.50					4.07 A		4.90	1.3 + 1.5	3.15	3.95		7.10 (2.10-9.40)	1700 (420-3510)			7.55
' + 10 <sup>2</sup>	2.00	2.80				1180 (400-1880) 1320 (400-2790)	4.07 A		5.20	1.3 + 1.6		4.15		7.10 (2.10-9.40)	1700 (420-3510)			7.55
+ 12 + 15	2.00	3.20 4.00			5.20 (2.20-7.00) 6.00 (2.20-7.10)		3.94 A 3.41 A		5.80 7.75	1.3 + 1.8 1.3 + 2.3	2.90	4.60 5.55		7.50 (2.20-9.80) 8.30 (2.40-9.80)	1740 (420-3490) 2060 (440-3440)			7.65 9.05
+ 18	2.00	5.00			7.00 (2.50-7.20)		2.80 D			1.3 + 2.7		6.30		8.80 (3.20-9.90)	2260 (530-3400)			9.90
1 + 91	2.50	2.50			5.00 (2.20-6.90)		3.61 A			1.5 + 1.5	3.55	3.55		7.10 (2.30-9.40)	1860 (440-3480)			8.15
1 + 10 <sup>2</sup>	2.50	2.80			5.30 (2.20-6.90)		3.61 A		6.50	1.5 + 1.6	3.55	3.95		7.50 (2.30-9.40)	1970 (440-3480)			8.65
1 + 12	2.50	3.20			5.70 (2.20-7.00)	1620 (400-2790)	3.53 A			1.5 + 1.8	3.55	4.55		8.10 (2.40-9.80)		4.09 A		8.70
1 + 15 1 + 18	2.50	4.00					2.98 C			1.5 + 2.3	3.30	5.30		8.60 (2.10-9.80)	2175 (530-3390)			9.65 10.50
0 <sup>2</sup> + 10 <sup>2</sup>	2.35	4.75 2.80			7.10 (2.50-7.20) 5.60 (2.20-6.90)		2.72 D 3.61 A		6.85	1.5 + 2.6 1.6 + 1.6	3.85	6.00 3.85		9.00 (3.20-9.90) 7.70 (2.30-9.40)	2390 (530-3370) 2020 (440-3480)			8.85
D <sup>2</sup> + 12	2.80	3.20			6.00 (2.20-7.00)		3.53 A		7.55	1.6 + 1.8	3.80	4.30		8.10 (2.40-9.80)	1980 (440-3460)			8.70
) <sup>2</sup> + 15	2.80	4.00			6.80 (2.20-7.10)		2.98 C		10.00	1.6 + 2.3	3.55	5.05		8.60 (2.10-9.80)	2175 (530-3390)			9.65
D <sup>2</sup> + 18	2.55	4.55			7.10 (2.50-7.20)	2610 (460-2800)	2.72 D	1305	11.50	1.6 + 2.5	3.25	5.75		9.00 (3.20-9.90)	2390 (530-3370)	3.77 A	1195	10.50
2 + 12	3.20	3.20					3.44 A		8.15	1.8 + 1.8	4.25	4.25			2110 (470-3390)			9.30
2 + 15	3.10	3.90			7.00 (2.50-7.30)		2.90 C 2.62 D		10.60	1.7 + 2.3	3.90	4.90			2230 (530-3340)			9.85
2 + 18 5 + 15	2.90 3.60	4.50 3.60			7.40 (2.60-7.40) 7.20 (2.50-7.30)		2.62 D		12.30	1.7 + 2.5 2.1 + 2.1	3.60 4.55	5.60 4.55			2390 (530-3300) 2360 (530-3320)			10.50
5 + 18	3.25	4.05			7.30 (2.70-7.40)		2.73 D			1.8 + 2.3		5.20				3.79 A		10.30
8 + 18	3.75	3.75				2860 (480-2870)				2.2 + 2.2		4.70			2470 (590-3290)			10.90
Room																		
+7+7	2.00	2.00	2.00		6.00 (2.20-7.80)		3.98 A		6.65	1.3 + 1.3 + 1.3	2.87		2.87		1990 (500-3250)			8.80
7 + 7 + 91	2.00	2.00	2.50				3.70 A		7.75	1.3 + 1.3 + 1.5			3.40		2010 (510-3220)			8.85
+ 7 + 10 <sup>2</sup> + 7 + 12	2.00	2.00	3.20		6.80 (2.50-8.10) 7.30 (2.50-8.20)		3.70 A 3.69 A		8.10 8.70	1.3 + 1.3 + 1.6 1.3 + 1.3 + 1.8			3.60 4.00		2010 (510-3220) 2030 (510-3220)			8.85 8.95
+7+12	1.95	1.95	3.90				3.35 A			1.3 + 1.3 + 2.3			4.60		2150 (510-3180)			9.50
+7+18	1.80	1.80	4.40				3.25 A		10.80	1.2 + 1.2 + 2.4	2.10		5.20		2120 (510-3180)			9.30
+ 91 + 91	2.10	2.65	2.65				3.46 A		9.40	1.4 + 1.6 + 1.6			3.20		2090 (510-3190)			9.20
+ 91 + 102	2.00	2.55	2.85				3.46 A		9.40	1.3 + 1.6 + 1.7	2.45		3.45		2090 (510-3190)			9.20
+ 91 + 12	1.95	2.45	3.20		7.60 (2.60-8.20)	2240 (460-2840)	3.39 A		9.85	1.3 + 1.5 + 1.8	2.40		3.80			4.36 A		9.30
+ 9 <sup>1</sup> + 15 + 9 <sup>1</sup> + 18	1.90	2.35	3.75 4.20				3.19 B 3.25 A		11.00	1.2 + 1.5 + 2.2 1.1 + 1.4 + 2.4			4.45 4.95		2160 (510-3140) 2080 (560-3150)	4.52 A		9.50 9.15
+ 10 <sup>2</sup> + 10 <sup>2</sup>	1.70	2.75	2.75		7.40 (2.50-8.10)		3.46 A		9.40	1.2 + 1.6 + 1.6	2.40		3.30		2090 (510-3190)			9.10
' + 10 <sup>2</sup> + 12	1.90	2.65	3.05				3.39 A		9.85	1.2 + 1.6 + 1.7	2.30		3.70		2110 (510-3180)			9.30
' + 10 <sup>2</sup> + 15	1.80	2.55	3.65		8.00 (2.70-8.20)		3.19 B		11.00	1.2 + 1.6 + 2.1	2.15		4.25	9.40 (3.20-10.40)	2160 (510-3140)	4.35 A	1080	9.50
' + 10 <sup>2</sup> + 18	1.60	2.30	4.10		8.00 (2.80-8.30)		3.25 A		10.80	1.0 + 1.5 + 2.3	1.90		4.80		2080 (560-3150)			9.15
+ 12 + 12	1.90	3.00	3.00				3.45 A		10.10	1.2 + 1.7 + 1.7	2.20		3.55		2130 (500-3180)			9.40
+ 12 + 15	1.70	2.80	3.50				3.36 A		10.40	1.1 + 1.6 + 2.0	2.05 1.85		4.10 4.60		2150 (500-3140) 2170 (620-3140)			9.50 9.55
+ 12 + 18 + 15 + 15	1.55	3.20	3.20		8.00 (2.80-8.30) 8.00 (2.80-8.40)		3.24 A 3.36 A		10.90	1.0 + 1.5 + 2.3 1.0 + 1.8 + 1.8	1.90		3.75		2110 (620-3140)			9.30
' + 15 + 18	1.45	2.90	3.65		8.00 (2.80-8.30)		3.24 A			0.9 + 1.7 + 2.1			4.30		2120 (660-3110)	4.43 A		9.30
+ 18 + 18	1.30	3.35	3.35				3.29 A			0.8 + 1.9 + 1.9	1.60		3.90		2170 (700-3120)			9.55
1 + 91 + 91	2.60	2.60	2.60		7.80 (2.60-8.10)		3.18 B	1225	10.80	1.6 + 1.6 + 1.6	3.08		3.08			4.26 A		9.55
1 + 91 + 102	2.50	2.50	2.80		7.80 (2.60-8.10)		3.18 B		10.80	1.5 + 1.5 + 1.6	2.96		3.32		2170 (510-3160)			9.55
11 + 91 + 12	2.45	2.45	3.10		8.00 (2.70-8.20)		3.19 B		11.00	1.5 + 1.5 + 1.7	2.85		3.70		2190 (510-3150)			9.65
1 + 91 + 15 1 + 91 + 18	2.20	2.20	3.60 4.00		8.00 (2.80-8.20) 8.00 (2.80-8.30)		3.19 B 3.25 A		11.00	1.4 + 1.4 + 2.1 1.3 + 1.3 + 2.3	2.60		4.20 4.70		2140 (530-3130) 2100 (640-3120)			9.40
11 + 10 <sup>2</sup> + 10 <sup>2</sup>	2.40	2.70	2.70				3.18 B			1.5 + 1.6 + 1.6			3.20		2170 (510-3160)			9.55
1 + 10 <sup>2</sup> + 12	2.35	2.65	3.00			2510 (490-2810)		1255	11.00	1.5 + 1.6 + 1.7			3.55		2190 (510-3150)			9.65
1 + 10 <sup>2</sup> + 15	2.15	2.40	3.45		8.00 (2.80-8.20)	2510 (490-2790)	3.19 B	1255		1.4 + 1.5 + 2.0		2.85	4.05	9.40 (3.30-10.40)	2140 (530-3130)	4.39 A	1070	9.40
1 + 10 <sup>2</sup> + 18	1.95	2.15	3.90			2460 (490-2790)				1.3 + 1.4 + 2.3			4.55		2100 (640-3120)			9.20
1 + 12 + 12	2.20	2.90	2.90				3.36 A			1.4 + 1.7 + 1.7			3.40		2170 (500-3150)			9.55
1 + 12 + 15 1 + 12 + 18	2.05 1.85	2.65	3.30				3.36 A 3.42 A		10.40	1.3 + 1.6 + 1.9 1.2 + 1.5 + 2.2	2.40		3.90 4.40		2130 (560-3120) 2150 (660-3120)			9.40
1 + 12 + 18 1 + 15 + 15	1.80	3.05	3.05		8.00 (2.80-8.40)		3.42 A		10.40	1.2 + 1.5 + 2.2			3.60		2060 (640-3080)			9.05
+ 15 + 18	1.70	2.80	3.50				3.42 A		10.40	1.1 + 1.6 + 2.0	2.05		4.10		2100 (680-3080)			9.20
+ 18 + 18	1.60	3.20	3.20		8.00 (2.90-8.50)	2340 (520-2800)	3.42 A	1170	10.30	1.0 + 1.8 + 1.8	1.90	3.75	3.75		2140 (700-3080)		1070	9.40
1 <sup>2</sup> + 10 <sup>2</sup> + 10 <sup>2</sup>	2.60	2.60	2.60		7.80 (2.60-8.10)	2450 (460-2820)	3.18 B	1225	10.80	1.6 + 1.6 + 1.6	3.08	3.08	3.08	9.24 (3.20-10.40)	2170 (510-3160)	4.26 A	1085	9.55
12 + 102 + 12	2.55	2.55	2.90				3.19 B		11.00	1.6 + 1.6 + 1.7	3.00		3.40		2190 (510-3150)			9.65
2 + 102 + 15	2.35	2.35	3.30				3.19 B		11.00	1.5 + 1.5 + 1.9			3.90		2140 (530-3130)			9.40
2 + 10 <sup>2</sup> + 18 2 + 12 + 12	2.10	2.10	3.80 2.80		8.00 (2.80-8.30) 8.00 (2.70-8.40)		3.25 A 3.36 A		10.80	1.4 + 1.4 + 2.2 1.5 + 1.6 + 1.6	2.50		4.40 3.25		2100 (640-3120) 2170 (500-3150)			9.20 9.55
<sup>2</sup> + 12 + 12 <sup>2</sup> + 12 + 15	2.40	2.80	3.20		8.00 (2.80-8.40)	2380 (490-2850)	3.36 A			1.5 + 1.6 + 1.6	2.65		3.75		2170 (500-3150)			9.40
<sup>2</sup> + 12 + 18	2.00	2.35	3.65				3.42 A			1.3 + 1.5 + 2.1			4.25		2150 (660-3120)			9.50
1 <sup>2</sup> + 15 + 15	2.10	2.95	2.95			2380 (490-2800)	3.36 A		10.40	1.4 + 1.7 + 1.7	2.40		3.50		2060 (640-3080)			9.05
l <sup>2</sup> + 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
D <sup>2</sup> + 18 + 18	1.70	3.15	3.15		8.00 (2.90-8.50)	2340 (520-2800)	3.42 A	1170	10.30	1.1 + 1.8 + 1.8	2.10	3.65	3.65	9.40 (4.20-10.50)	2140 (700-3080)	4.39 A	1070	9.40
2 + 12 + 12	2.66	2.66	2.66				3.47 A		10.10	1.6 + 1.6 + 1.6			3.13		2160 (520-3180)			9.50
2 + 12 + 15	2.45	2.45	3.10		8.00 (2.80-8.40)		3.35 A		10.50	1.5 + 1.5 + 1.7	2.90		3.60		2140 (620-3150)			9.40
2 + 12 + 18	2.25	2.25	3.50				3.35 A			1.5 + 1.5 + 2.0			3.35		2130 (680-3120)			9.40
2 + 15 + 15 2 + 15 + 18	2.30	2.85	2.85 3.30				3.35 A 3.40 A		10.50	1.5 + 1.7 + 1.7 1.4 + 1.6 + 1.9			3.35 3.85		2120 (660-3120) 2100 (700-3100)			9.30 9.20
2 + 13 + 16	1.90	3.05	3.05				3.40 A		10.30	1.2 + 1.7 + 1.7			3.55		2060 (700-3100)			9.05
5 + 15 + 15	2.66	2.66	2.66				3.34 A			1.6 + 1.6 + 1.6			3.13		2100 (680-3080)			9.20
5 + 15 + 18	2.45		3.10			2390 (520-2810)				1.5 + 1.5 + 1.7			3.60		2080 (700-3080)			9.15

oor unit acity  oom  7 * 7 * 7 * 7  7 * 7 * 7 * 10²  7 * 7 * 7 * 10²  7 * 7 * 7 * 15  7 * 7 * 7 * 15  7 * 7 * 9 * 1  7 * 9 * 1 * 10²  7 * 9 * 1 * 10²  7 * 9 * 1 * 10²  7 * 9 * 1 * 10²  7 * 9 * 1 * 10²  7 * 10² * 12  7 * 10² * 12  7 * 10² * 12  7 * 10² * 12  7 * 10² * 12  7 * 10² * 12  7 * 10² * 12  7 * 10² * 12	2.00 1.90 1.80 1.75 1.60 1.45 1.80 1.70 1.65 1.50 1.65 1.50	2.00 1.90 1.80 1.75 1.60 1.45 1.80 1.70 1.65 1.50		2.00 2.30 2.60 2.75 3.20 3.65	Total (MinMax.) 8.00 (2.70-8.80) 8.00 (2.80-8.80) 8.00 (2.80-8.80) 8.00 (2.80-8.90) 8.00 (2.80-8.90) 8.00 (2.80-8.90)	2150 (490-2840) 2140 (490-2880) 2140 (490-2880)	3.72 A 3.74 A	kWh		Moisture Remova Volume (l/h)	Room A	Room B			Total (MinMax.)		W/W	kWh	230 V (
7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 9 + 7 + 7	1.90 1.80 1.75 1.60 1.45 1.80 1.70 1.65 1.50 1.40 1.65 1.60	1.90 1.80 1.75 1.60 1.45 1.80 1.70 1.65	1.90 1.80 1.75 1.60 1.45 2.20	2.30 2.60 2.75 3.20 3.65	8.00 (2.80-8.80) 8.00 (2.80-8.80) 8.00 (2.80-8.90)	2140 (490-2880) 2140 (490-2880)		1075	0.50	10 10 10		0.05	2 25			( )	/ F2 A		
$7 + 7 + 9^1$ $7 + 7 + 10^2$ 7 + 7 + 112 7 + 7 + 15 7 + 7 + 18 $7 + 9^1 + 9^1$ $7 + 9^1 + 10^2$ $7 + 9^1 + 10^2$ $7 + 9^1 + 15$ $7 + 9^1 + 18$ $7 + 10^2 + 10^2$ $7 + 10^2 + 12$ $7 + 10^2 + 12$ $7 + 10^2 + 18$ 7 + 12 + 18 7 + 12 + 18	1.90 1.80 1.75 1.60 1.45 1.80 1.70 1.65 1.50 1.40 1.65 1.60	1.90 1.80 1.75 1.60 1.45 1.80 1.70 1.65	1.90 1.80 1.75 1.60 1.45 2.20	2.30 2.60 2.75 3.20 3.65	8.00 (2.80-8.80) 8.00 (2.80-8.80) 8.00 (2.80-8.90)	2140 (490-2880) 2140 (490-2880)		10/3			1 7 17 76			2.35	9.40 (3.20-10.50)	7090 1550-31701		1040	9.15
$7 + 7 + 10^2$ 7 + 7 + 12 7 + 7 + 15 7 + 7 + 18 $7 + 9^1 + 10^2$ $7 + 9^1 + 10^2$ $7 + 9^1 + 15$ $7 + 9^1 + 15$ $7 + 9^1 + 18$ $7 + 10^2 + 10^2$ $7 + 10^2 + 12$ $7 + 10^2 + 12$ $7 + 10^2 + 12$ $7 + 10^2 + 13$ $7 + 10^2 + 13$ $7 + 10^2 + 14$	1.80 1.75 1.60 1.45 1.80 1.70 1.65 1.50 1.40 1.65 1.60	1.80 1.75 1.60 1.45 1.80 1.70 1.65 1.50	1.80 1.75 1.60 1.45 2.20	2.60 2.75 3.20 3.65	8.00 (2.80-8.80) 8.00 (2.80-8.90)	2140 (490-2880)		1070	9.40	1.3 + 1.3 + 1.3 + 1.2 + 1		2.35	2.20	2.80		2060 (550-3120)	4.52 A		9.05
7 + 7 + 15 7 + 7 + 18 7 + 7 + 18 7 + 9 + 9 + 10 <sup>2</sup> 7 + 9 + 10 <sup>2</sup> 7 + 9 + 12 7 + 9 + 18 7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 18	1.60 1.45 1.80 1.70 1.65 1.50 1.65 1.65 1.60	1.60 1.45 1.80 1.70 1.65 1.50	1.60 1.45 2.20	3.20 3.65		2120 (/00 2000)	3.74 A		9.40	1.2 + 1.2 + 1.2 +		2.15	2.15	2.95	9.40 (3.20-10.50)		4.56 A		9.05
7 + 7 + 18 7 + 9¹ + 9¹ 7 + 9¹ + 10² 7 + 9¹ + 12 7 + 9¹ + 15 7 + 9¹ + 18 7 + 10² + 10² 7 + 10² + 12 7 + 10² + 15 7 + 10² + 18	1.45 1.80 1.70 1.65 1.50 1.40 1.65 1.60	1.45 1.80 1.70 1.65 1.50	1.45 2.20	3.65	8.00 (2.80-8.90)	2130 (490-2880)	3.76 A		9.40	1.1 + 1.1 + 1.1 +		2.05	2.05	3.25		2120 (590-3180)			9.30
7 + 9 <sup>1</sup> + 9 <sup>1</sup> 7 + 9 <sup>1</sup> + 10 <sup>2</sup> 7 + 9 <sup>1</sup> + 12 7 + 9 <sup>1</sup> + 12 7 + 9 <sup>1</sup> + 15 7 + 9 <sup>1</sup> + 18 7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 12	1.80 1.70 1.65 1.50 1.40 1.65 1.60	1.80 1.70 1.65 1.50	2.20			2110 (490-2870)	3.79 A		9.30	1.0 + 1.0 + 1.0 +		1.90	1.90	3.70		2090 (640-3140)			9.20
7 + 9¹ + 10² 7 + 9¹ + 12 7 + 9¹ + 15 7 + 9¹ + 18 7 + 10² + 10² 7 + 10² + 10² 7 + 10² + 15 7 + 10² + 15 7 + 10² + 18 7 + 12 + 12	1.70 1.65 1.50 1.40 1.65 1.60 1.50	1.70 1.65 1.50		2.20	8.00 (2.80-8.90) 8.00 (2.80-8.80)	2110 (490-2840) 2130 (490-2870)	3.79 A 3.76 A		9.30 9.40	0.9 + 0.9 + 0.9 + 1 1.2 + 1.2 + 1.4 +		1.70 2.10	1.70 2.60	4.30 2.60	9.40 (4.00-10.50)	2050 (610-3110)	4.43 A		9.30
7 + 9 <sup>1</sup> + 15 7 + 9 <sup>1</sup> + 18 7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 12	1.50 1.40 1.65 1.60 1.50	1.50		2.45	8.00 (2.80-8.80)	2130 (470-2870)	3.76 A		9.40	1.1 + 1.1 + 1.4 +		2.00	2.55	2.85					9.05
7 + 9 <sup>1</sup> + 18 7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 12	1.40 1.65 1.60 1.50		2.05	2.65	8.00 (2.80-8.90)	2120 (490-2870)	3.77 A		9.30	1.1 + 1.1 + 1.3 +		1.95	2.40	3.10		2100 (620-3160)			9.20
7 + 10 <sup>2</sup> + 10 <sup>2</sup> 7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 12	1.65 1.60 1.50		1.90	3.10	8.00 (2.80-8.90)	2090 (490-2840)	3.83 A		9.20	1.0 + 1.0 + 1.2 +		1.80	2.20	3.60		2070 (660-3110)			9.10
7 + 10 <sup>2</sup> + 12 7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 12	1.60 1.50	1.40	1.70 2.35	3.50 2.35	8.00 (2.90-8.90) 8.00 (2.80-8.80)	2110 (520-2880) 2130 (490-2870)	3.79 A 3.76 A		9.30 9.40	0.9 + 0.9 + 1.1 + 1 1.1 + 1.1 + 1.5 +		1.65	2.00	4.10 2.75	9.40 (4.10-10.50) 9.40 (3.50-10.50)		4.50 A 4.59 A		9.20
7 + 10 <sup>2</sup> + 15 7 + 10 <sup>2</sup> + 18 7 + 12 + 12	1.50	1.60	2.25	2.55	8.00 (2.80-8.90)	2120 (490-2870)	3.77 A		9.30	1.0 + 1.0 + 1.5 +		1.90	2.60	3.00		2100 (620-3160)			9.20
7 + 12 + 12	1 05	1.50	2.05	2.95	8.00 (2.80-8.90)	2090 (490-2840)	3.83 A	1045	9.20	1.0 + 1.0 + 1.3 +	1.7 1.75	1.75	2.40	3.50	9.40 (3.90-10.50)	2070 (660-3110)	4.54 A	1035	9.10
	1.35	1.35	1.90	3.40	8.00 (2.90-8.90)	2110 (520-2880)	3.79 A		9.30	0.9 + 0.9 + 1.2 +		1.60	2.20	4.00		2090 (700-3100)			9.20
	1.55	1.55	2.45	2.45	8.00 (2.80-8.90) 8.00 (2.80-8.90)	2090 (500-2870) 2080 (500-2840)	3.83 A 3.85 A		9.20 9.15	1.0 + 1.0 + 1.5 +		1.80	2.90	2.90 3.35	9.40 (3.80-10.50) 9.40 (4.00-10.50)		4.45 A 4.52 A		9.30 9.15
7 + 12 + 15 7 + 12 + 18	1.30	1.30	2.10	3.30	8.00 (2.90-9.00)	2040 (520-2860)	3.92 A		8.95	0.8 + 0.8 + 1.4 +		1.55	2.45	3.85		2110 (700-3080)			9.30
7 + 15 + 15	1.35	1.35	2.65	2.65	8.00 (2.90-9.00)	2060 (520-2850)	3.88 A		9.05	0.9 + 0.9 + 1.6 +		1.55	3.15	3.15	9.40 (4.10-10.50)		4.59 A		9.05
7 + 15 + 18	1.25	1.25	2.40	3.10	8.00 (2.90-9.00)	2020 (520-2880)	3.96 A		8.85	0.8 + 0.8 + 1.5 +		1.45	2.90	3.60		2080 (700-3060)			9.15
91 + 91 + 91 91 + 91 + 102	1.70	2.10	2.10	2.10	8.00 (2.80-8.80) 8.00 (2.80-8.80)	2120 (490-2850)	3.77 A		9.30	1.1 + 1.4 + 1.4 +		2.45	2.45	2.45		2040 (640-3080)			8.95
91 + 91 + 12	1.60	2.05 1.95	2.05 1.95	2.30	8.00 (2.80-8.90)	2120 (490-2850) 2100 (490-2850)	3.77 A 3.81 A		9.30 9.20	1.0 + 1.3 + 1.3 +		2.40	2.40	2.70	9.40 (3.80-10.50) 9.40 (3.90-10.50)		4.61 A 4.52 A		8.95 9.15
91 + 91 + 15	1.45	1.80	1.80	2.95	8.00 (2.80-8.90)		3.76 A		9.40	0.9 + 1.2 + 1.2 +		2.15	2.15	3.40		2050 (680-3080)			9.05
91 + 91 + 18	1.35	1.65	1.65	3.35	8.00 (2.90-8.90)	2110 (520-2860)	3.79 A		9.30	0.9 + 1.1 + 1.1 +	1.9 1.55	1.95	1.95	3.95	9.40 (4.20-10.50)	2080 (700-3080)	4.52 A	1040	9.15
$\frac{9^1 + 10^2 + 10^2}{01 + 10^2 + 10^2}$	1.60	2.00	2.20	2.20	8.00 (2.80-8.80)	2120 (490-2850)	3.77 A		9.30	1.0 + 1.3 + 1.4 +		2.35	2.60	2.60		2040 (640-3080)			8.95
9 <sup>1</sup> + 10 <sup>2</sup> + 12 9 <sup>1</sup> + 10 <sup>2</sup> + 15	1.50	1.90	2.15	2.45	8.00 (2.80-8.90) 8.00 (2.80-8.90)	2100 (490-2850) 2130 (490-2860)	3.81 A 3.76 A		9.20 9.40	1.0 + 1.2 + 1.4 + 1.3 +		2.25	2.50	2.85 3.35	9.40 (4.00-10.50)		4.52 A 4.59 A		9.15
9 <sup>1</sup> + 10 <sup>2</sup> + 18	1.30	1.65	1.80	3.25	8.00 (2.90-8.90)	2110 (520-2860)	3.79 A		9.30	0.8 + 1.1 + 1.2 +		1.90	2.15	3.80		2080 (700-3080)			9.15
91 + 12 + 12	1.45	1.85	2.35	2.35	8.00 (2.80-8.90)	2130 (500-2850)	3.76 A	1065	9.40	0.9 + 1.2 + 1.5 +	1.5 1.70	2.20	2.75	2.75	9.40 (4.00-10.50)	2090 (680-3180)	4.50 A	1045	9.20
91 + 12 + 15	1.35	1.70	2.20	2.75	8.00 (2.90-9.00)	2070 (520-2860)	3.86 A		9.15	0.9 + 1.1 + 1.4 +		2.00	2.55	3.25		2060 (700-3120)			9.05
9 <sup>1</sup> + 12 + 18 9 <sup>1</sup> + 15 + 15	1.25	1.55	2.00	3.20 2.55	8.00 (2.90-9.00) 8.00 (2.90-9.00)	2030 (520-2840) 2040 (520-2870)	3.94 A 3.92 A		8.95 8.95	0.8 + 1.0 + 1.3 +		1.85	2.35 3.00	3.70 3.00		2090 (700-3080) 2030 (700-3080)			9.20 8.95
91 + 15 + 18	1.20	1.50	2.35	2.95	8.00 (2.90-9.00)	2020 (520-2880)	3.96 A		8.85	0.7 + 1.0 + 1.5 +		1.75	2.80	3.50	9.40 (4.20-10.50)		4.03 A		9.15
10 <sup>2</sup> + 10 <sup>2</sup> + 10 <sup>2</sup>	1.55	2.15	2.15	2.15	8.00 (2.80-8.80)	2120 (490-2850)	3.77 A		9.30	1.0 + 1.4 + 1.4 +		2.55	2.55	2.55	9.40 (3.80-10.50)		4.61 A		8.95
102 + 102 + 12	1.50	2.05	2.05	2.40	8.00 (2.80-8.90)	2100 (490-2850)	3.81 A		9.20	1.0 + 1.3 + 1.3 +		2.45	2.45	2.80		2080 (660-3130)			9.15
10 <sup>2</sup> + 10 <sup>2</sup> + 15 10 <sup>2</sup> + 10 <sup>2</sup> + 18	1.35	1.95	1.95 1.80	2.75 3.15	8.00 (2.80-8.90) 8.00 (2.90-8.90)	2130 (490-2860) 2110 (520-2860)	3.76 A		9.40 9.30	0.9 + 1.3 + 1.3 + 1.3 + 1.2 + 1		2.25	2.25	3.30	9.40 (4.00-10.50)				9.05
10 <sup>2</sup> + 12 + 12	1.40	2.00	2.30	2.30	8.00 (2.80-8.90)	2130 (500-2850)	3.79 A 3.76 A		9.40	0.9 + 1.3 + 1.5 +		2.35	2.70	2.70	9.40 (4.20-10.50) 9.40 (4.00-10.50)		4.50 A		9.20
10 <sup>2</sup> + 12 + 15	1.35	1.85	2.15	2.65	8.00 (2.90-9.00)	2070 (520-2860)	3.86 A		9.15	0.9 + 1.2 + 1.4 +		2.20	2.50	3.15		2060 (700-3120)			9.05
102 + 12 + 18	1.25	1.70	1.95	3.10	8.00 (2.90-9.00)	2030 (520-2840)	3.94 A		8.95	0.8 + 1.1 + 1.3 +		2.00	2.30	3.65	9.40 (4.20-10.50)				9.20
10 <sup>2</sup> + 15 + 15	1.25	1.75	2.50	2.50	8.00 (2.90-9.00)	2040 (520-2870)	3.92 A		8.95	0.8 + 1.1 + 1.5 +		2.05	2.95	2.95	9.40 (4.20-10.50)		4.63 A		8.95
12 + 12 + 12 12 + 12 + 15	1.40	2.20	2.20	2.20	8.00 (2.80-9.10) 8.00 (2.90-9.10)	2040 (500-2870) 2020 (520-2840)	3.92 A 3.96 A		8.95 8.85	0.9 + 1.4 + 1.4 + 1.3 + 1		2.60	2.60	2.60 3.05	9.40 (4.10-10.60)	2110 (680-3120) 2080 (700-3080)	4.45 A		9.30
12 + 12 + 18	1.20	1.90	1.90	3.00	8.00 (3.00-9.20)	2000 (530-2870)	4.00 A		8.80	0.7 + 1.2 + 1.2 +		2.25	2.25	3.50	9.40 (4.20-10.60)		4.45 A		9.30
12 + 15 + 15	1.20	2.00	2.40	2.40	8.00 (2.90-9.10)	2090 (520-2860)	3.83 A		9.20	0.7 + 1.3 + 1.5 +		2.30	2.85	2.85	9.40 (4.20-10.60)		4.56 A		9.05
91 + 91 + 91	2.00	2.00	2.00	2.00	8.00 (2.80-8.80)	2110 (490-2840)	3.79 A		9.30	1.3 + 1.3 + 1.3 +		2.35	2.35	2.35	9.40 (3.90-10.50)		4.63 A		8.95
- 9 <sup>1</sup> + 9 <sup>1</sup> + 10 <sup>2</sup> - 9 <sup>1</sup> + 9 <sup>1</sup> + 12	1.95 1.85	1.95	1.95 1.85	2.15	8.00 (2.80-8.80) 8.00 (2.80-8.90)	2110 (490-2840) 2090 (490-2870)	3.79 A 3.83 A		9.30 9.20	1.3 + 1.3 + 1.3 + 1.2 + 1		2.30	2.30	2.50	9.40 (4.00-10.50)	2030 (660-3080)			8.95 9.05
91 + 91 + 15	1.75	1.75	1.75	2.75	8.00 (2.90-8.90)	2120 (520-2850)	3.77 A		9.30	1.1 + 1.1 + 1.1 +		2.05	2.05	3.25	9.40 (4.10-10.50)				8.95
91 + 91 + 18	1.60	1.60	1.60	3.20	8.00 (2.90-8.90)	2110 (520-2850)	3.79 A		9.30	1.0 + 1.0 + 1.0 +		1.90	1.90	3.70		2070 (700-3070)	4.54 A	1035	9.15
91 + 102 + 102	1.90	1.90	2.10	2.10	8.00 (2.80-8.80)	2110 (490-2840)	3.79 A		9.30	1.2 + 1.2 + 1.4 +		2.20	2.50	2.50	9.40 (3.90-10.50)		4.63 A		8.95
· 9 <sup>1</sup> + 10 <sup>2</sup> + 12 · 9 <sup>1</sup> + 10 <sup>2</sup> + 15	1.80	1.80	2.05 1.90	2.35	8.00 (2.80-8.90) 8.00 (2.90-8.90)	2090 (490-2870) 2120 (520-2850)	3.83 A		9.20 9.30	1.2 + 1.2 + 1.3 +		2.15	2.35	2.75 3.20	9.40 (4.00-10.50)		4.56 A		9.05 8.95
91 + 102 + 18	1.55	1.55	1.75	3.15	8.00 (2.90-8.90)	2110 (520-2850)	3.77 A 3.79 A		9.30	1.0 + 1.0 + 1.1 +		1.85	2.05	3.65		2040 (700-3070) 2070 (700-3070)			9.15
91 + 12 + 12	1.75	1.75	2.25	2.25	8.00 (2.90-9.00)	2080 (500-2870)	3.85 A	1040	9.15	1.1 + 1.1 + 1.5 +	1.5 2.05	2.05	2.65	2.65	9.40 (4.00-10.50)	2070 (680-3140)	4.54 A	1035	9.15
91 + 12 + 15	1.65	1.65	2.10	2.60	8.00 (2.90-9.00)	2050 (520-2880)			9.05	1.1 + 1.1 + 1.4 +		1.95	2.40	3.10		2040 (700-3080)			8.95
9 <sup>1</sup> + 12 + 18 9 <sup>1</sup> + 15 + 15	1.50	1.50	1.95 2.45	3.05 2.45		2030 (520-2840) 2040 (520-2860)				1.0 + 1.0 + 1.3 +		1.80	2.25	3.55 2.90	9.40 (4.20-10.50) 9.40 (4.20-10.50)	2090 (700-3080)			9.20 8.85
10 <sup>2</sup> + 10 <sup>2</sup> + 10 <sup>2</sup>	1.85	2.05	2.45	2.45	8.00 (2.80-8.80)	2110 (490-2840)	3.79 A	1055	9.30	1.2 + 1.3 + 1.3 +		2.40	2.40	2.40		2030 (660-3080)			8.95
102 + 102 + 12	1.75	2.00	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
10 <sup>2</sup> + 10 <sup>2</sup> + 15	1.65	1.85	1.85	2.65	8.00 (2.90-8.90)	2120 (520-2850)			9.30	1.1 + 1.2 + 1.2 +		2.20	2.20	3.10	9.40 (4.10-10.50)				8.95
$\frac{10^2 + 10^2 + 18}{10^2 + 12 + 12}$	1.55	1.70	2.20	3.05	8.00 (2.90-8.90) 8.00 (2.80-8.90)		3.79 A 3.76 A		9.30 9.40	1.0 + 1.1 + 1.1 +		2.00	2.00	3.60 2.55		2070 (700-3070) 2090 (680-3180)			9.15 9.20
10 <sup>2</sup> + 12 + 12 10 <sup>2</sup> + 12 + 15	1.60	1.80	2.20	2.20		2130 (500-2850) 2070 (520-2860)			9.40	1.0 + 1.2 + 1.4 +		2.30	2.40	3.00		2060 (700-3120)			9.05
10 <sup>2</sup> + 12 + 18	1.50	1.65	1.90	2.95	8.00 (2.90-9.00)		3.94 A		8.95	1.0 + 1.1 + 1.2 +		1.95	2.25	3.50	9.40 (4.20-10.50)	2090 (700-3080)	4.50 A	1045	9.20
10 <sup>2</sup> + 15 + 15	1.50	1.70	2.40	2.40	8.00 (2.90-9.00)	2040 (520-2870)	3.92 A	1020	8.95	1.0 + 1.1 + 1.5 +	1.5 1.70	2.00	2.85	2.85	9.40 (4.20-10.50)	2030 (700-3080)	4.63 A	1015	8.95
12 + 12 + 12	1.70	2.10	2.10	2.10	8.00 (2.90-9.10)	2030 (520-2860)			8.95	1.1 + 1.4 + 1.4 +		2.50	2.50	2.50		2090 (700-3100)			9.20
12 + 12 + 15 - 10 <sup>2</sup> + 10 <sup>2</sup> + 10 <sup>2</sup>	1.50 2.00	2.00	2.00	2.50	8.00 (2.90-9.10) 8.00 (2.80-8.80)	2020 (520-2840) 2110 (490-2840)			9.30	1.0 + 1.3 + 1.3 +		2.35	2.35	2.90	9.40 (4.10-10.60)	2080 (700-3080) 2030 (660-3080)			9.15 8.95
+ 10 <sup>2</sup> + 10 <sup>2</sup> + 12	1.95	1.95	1.95	2.15	8.00 (2.80-8.90)	2090 (490-2870)			9.20	1.3 + 1.3 + 1.3 +		2.25	2.25	2.65	9.40 (4.00-10.50)	2060 (680-3100)	4.56 A	1030	9.05
+ 102 + 102 + 15	1.80	1.80	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 2.10	2.10	2.10	3.10	9.40 (4.10-10.50)	2040 (700-3070)	4.61 A	1020	8.95
+ 10 <sup>2</sup> + 10 <sup>2</sup> + 18	1.65	1.65	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)				9.15
+ 102 + 12 + 12	1.85	1.85	2.15	2.15	8.00 (2.90-9.00)	2080 (500-2870)	3.85 A		9.15	1.2 + 1.2 + 1.4 +		2.20	2.50	2.50		2070 (680-3140)			9.15
+ 10 <sup>2</sup> + 12 + 15 + 10 <sup>2</sup> + 15 + 15	1.75	1.75	2.00	2.50	8.00 (2.90-9.00) 8 NN (3 NN-9 NN)	2050 (520-2880) 2040 (520-2860)	3.90 A		9.05 8.95	1.1 + 1.1 + 1.3 +		2.05 1.95	2.35	2.95		2040 (700-3080) 2020 (700-3070)			8.95 8.85
+ 12 + 12 + 12	1.85	2.05	2.05	2.05	8.00 (2.90-9.10)		3.94 A		8.95	1.2 + 1.3 + 1.3 +		2.45	2.45	2.45		2090 (700-3070)			9.20
+ 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 + 12 + 12 + 15	2.00 1.90	2.00	2.00 1.90	2.00		2000 (530-2850) 1980 (530-2870)			8.80 8.70	1.3 + 1.3 + 1.3 +		2.35	2.35	2.35 2.80	9.40 (4.20-10.60) 9.40 (4.20-10.6)				9.30 9.10

ndoor unit capacity	TDOOR UNIT CU-5E34NBE Cooling						Heating					
	Capacity (MinMax.) (kW)						Capacity (MinMax.) (kW)					
	Room A	Room B	Room C	Room D	Room E	Total	Room A	Room B	Room C	Room D	Room E	Total
Room												
	2.20	-	-	-	-	2.20 (1.5-2.6)	2.50	-	-	-	-	2.50 (1.8-
	2.65	-	-	-	-	2.65 (1.5-3.2)	3.60	-	-	-	-	3.60 (1.8-
2	3.50	-	-	-	-	3.50 (1.6-3.6)	4.20	-	-	-	-	4.20 (1.9-
8	5.15	-	-	-	-	5.15 (1.7-5.8)	6.00	-	-	-	-	6.00 (2.0-
4	7.10	-	-	-	-	7.10 (1.8-7.4)	8.50	-	-	-	-	8.50 (2.0-
Rooms												
+7	2.20	2.20	-	-	-	4.40 (2.0-5.1)	2.50	2.50	-	-	-	5.00 (2.0
+9	2.20	2.65	-	-	-	4.85 (2.0-5.8)	2.50	3.60	-	-	-	6.10 (2.1
+12	2.20	3.50	-	-	-	5.70 (2.0-6.7)	2.50	4.20	-	-	-	6.70 (2.3
+18	2.14	5.01	-	-	-	7.15 (2.2-7.7)	2.50	6.00	-	-	-	8.50 (3.0
+24	1.81	5.84	-	-	-	7.65 (2.3-8.8)	2.01	6.84	-	-	-	8.85 (3.0-
+9	2.65	2.65	-	-	-	5.30 (2.0-6.5)	3.60	3.60	-	-	-	7.20 (2.4
+12	2.54	3.36	-	-	-	5.90 (2.0-7.4)	3.51	4.09	-	-	-	7.60 (2.6
+18	2.46	4.79	-	-	-	7.25 (2.3-8.5)	3.24	5.41	-	-	-	8.65 (3.3
+24	2.11	5.64	-	-	-	7.75 (2.3-8.8)	2.68	6.32	-	-	-	9.00 (3.3
2+12	3.40	3.40	-	-	-	6.80 (2.2-8.4)	4.00	4.00	-	-	-	8.00 (2.9
2+18	3.03	4.47	-	-	-	7.50 (2.6-8.8)	3.60	5.15	-	1-	-	8.75 (3.4
2+24	2.61	5.29	-	-	-	7.90 (2.6-9.5)	3.01	6.09	-	1-	-	9.10 (3.4
8+18	3.95	3.95	1-	-	-	7.90 (2.6-9.5)	4.50	4.50		1-	-	9.00 (3.4
8+24	3.70	5.10	1-	-	-	8.80 (2.7-9.5)	3.89	5.51	-	1-	-	9.40 (3.4
4+24	4.40	4.40	1-	-	-	8.80 (2.7-9.5)	4.70	4.70	1-	1-	-	9.40 (3.4
Rooms	4.40	7.70				0.00 (2.7 7.0)	7.70	4.70				7.40 (0.4
+7+7	2.20	2.20	2.20	-	-	6.60 (2.0-7.7)	2.50	2.50	2.50	1-	1-	7.50 (2.7
+7+9	2.20	2.20	2.65	-		7.05 (2.2-8.4)	2.47	2.47	3.56	1.	-	8.50 (3.0
+7+12	2.03	2.03	3.23			7.30 (2.4-8.6)	2.34	2.34	3.93			8.60 (3.2
+7+12	1.77	1.77	4.15			7.70 (2.7-9.0)	2.01	2.01	4.83			8.85 (3.4
+7+10	1.65	1.65	5.31			8.60 (2.9-10.0)		1.71	5.82			9.25 (3.4
+9+9	2.11	2.54	2.54			7.20 (2.3-8.6)	2.23	3.21	3.21		-	8.65 (3.3
+9+12	1.95	2.34	3.10	-	-	7.40 (2.6-9.0)	2.23	3.06	3.57	-	-	8.75 (3.4
+9+12 +9+18	1.72	2.35	4.02	-	-		1.86		4.46	-	-	9.00 (3.4
+9+24		1.93		-	-	7.80 (2.9-9.0)		2.68	5.71	-	-	
	1.60		5.17	-	-	8.70 (2.9-10.0)		2.42			-	9.80 (3.4
+12+12	1.82	2.89	2.89	-	-	7.60 (2.7-9.0)	2.03	3.41	3.41	-	-	8.85 (3.4
+12+18	1.60	2.55	3.75	-	-	7.90 (2.9-9.0)	1.79	3.01	4.30	-	-	9.10 (3.4
+12+24	1.55	2.46	4.99	-	-	9.00 (2.9-10.0)		2.71	5.48	-	-	9.80 (3.4
+18+18	1.58	3.71	3.71	-	-	9.00 (2.9-9.0)	1.69	4.06	4.06	-	-	9.80 (3.4
+18+24	1.37	3.21	4.42	-	-	9.00 (2.9-10.0)		3.46	4.90	-	-	9.80 (3.4
+9+9	2.43	2.43	2.43	-	-	7.30 (2.5-8.6)	2.95	2.95	2.95	-	-	8.85 (3.4
+9+12	2.26	2.26	2.98	-	-	7.50 (2.7-9.0)	2.81	2.81	3.28	-	-	8.90 (3.4
+9+18	2.00	2.00	3.89	-	-	7.90 (2.9-9.0)	2.51	2.51	4.18	-	-	9.20 (3.4
+9+24	1.92	1.92	5.15	-	-	9.00 (2.9-10.0)		2.25	5.31	-	-	9.80 (3.4
+12+12	2.13	2.81	2.81	-	-	7.75 (2.7-9.0)	2.70	3.15	3.15	-	-	9.00 (3.4
+12+18	1.99	2.63	3.87	-	-	8.50 (2.9-9.0)	2.43	2.83	4.04	-	-	9.30 (3.4
+12+24	1.80	2.38	4.82	-	-	9.00 (2.9-10.0)		2.53	5.11	-	-	9.80 (3.4
+18+18	1.84	3.58	3.58	-	-	9.00 (2.9-9.0)	2.26	3.77	3.77	-	-	9.80 (3.4
+18+24	1.60	3.11	4.29	-	-	9.00 (2.9-10.0)		3.25	4.60	-	-	9.80 (3.4
2+12+12	2.65	2.65	2.65	-	-	7.95 (2.9-9.0)	3.03	3.03	3.03	-	-	9.10 (3.4
2+12+18	2.59	2.59	3.81	-	-	9.00 (2.9-9.0)	2.86	2.86	4.08	-	-	9.80 (3.4
2+12+24	2.23	2.23	4.53	-	-	9.00 (2.9-10.0)	2.44	2.44	4.93	-	-	9.80 (3.4
2+18+18	2.28	3.36	3.36	-	-	9.00 (2.9-10.0)		3.63	3.63	-	-	9.80 (3.4
2+18+24	2.00	2.94	4.06	-	-	9.00 (2.9-10.0)		3.14	4.45	-	-	9.80 (3.4-
8+18+18	3.00	3.00	3.00	-	-	9.00 (2.9-10.0)		3.27	3.27	-	-	9.80 (3.4-
8+18+24	2.66	2.66	3.67	-	1-	9.00 (2.9-10.0)		2.87	4.06	1-	-	9.80 (3.4-

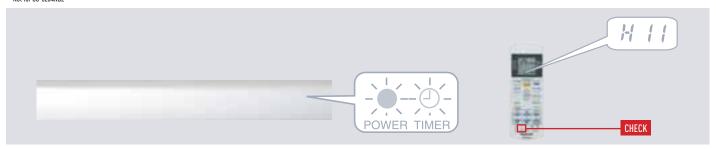
The table lists the wall-mounted type of indoor units as representative models. For details on the connection of indoor units other than the wall mounted type, refer to the technical data. Specifications subject to change without notice.

loor unit capacity	Cooling						Heating					
,	Capacity (	MinMax.) (k						MinMax.) (k\				
N	Room A	Room B	Room C	Room D	Room E	Total	Room A	Room B	Room C	Room D	Room E	Total
100ms 7+7+7	1.88	1.88	1.88	1.88	1_	7.50 (2.9-10.5)	2 10	2.18	2.18	2.18		8.70 (3.4-
7+7+9 7+7+9	1.82	1.82	1.82	2.19	-	7.65 (2.9-10.5)		1.99	1.99	2.10	-	8.85 (3.4-
7+7+12	1.71	1.71	1.71	2.72	-		1.91	1.91	1.91	3.21	-	8.95 (3.4-
7+7+18	1.59	1.59	1.59	3.73	-	8.50 (2.9-10.5)		1.71	1.71	4.11	-	9.25 (3.4-
7+7+24	1.48	1.48	1.48	4.77	-	9.20 (2.9-10.5)		1.53	1.53	5.21	-	9.80 (3.4-
7+9+9	1.76	1.76	2.12	2.12	-	7.75 (2.9-10.5)		1.85	2.67	2.67	-	9.05 (3.4-
7+9+12 7+9+18	1.66 1.53	1.66 1.53	2.00 1.85	3.59	-	7.95 (2.9-10.5)		1.79	2.57 2.42	3.00	-	9.15 (3.4-
7+9+10 7+9+24	1.53	1.43	1.72	4.62	-	8.50 (2.9-10.5) 9.20 (2.9-10.5)	1.68	1.43	2.42	4.03	-	9.80 (3.4- 9.80 (3.4-
7+12+12	1.64	1.64	2.61	2.61	-	8.50 (2.9-10.5)		1.72	2.88	2.88	-	9.20 (3.4-
7+12+18	1.55	1.55	2.47	3.63	-	9.20 (2.9-10.5)		1.61	2.71	3.87	-	9.80 (3.4-
7+12+24	1.35	1.35	2.15	4.35	-	9.20 (2.9-10.5)	1.38	1.38	2.33	4.71	-	9.80 (3.4-
7+18+18	1.38	1.38	3.22	3.22	-	9.20 (2.9-10.5)		1.44	3.46	3.46	-	9.80 (3.4-
7+18+24	1.22	1.22	2.85	3.92	-	9.20 (2.9-10.5)		1.26	3.02	4.27	-	9.80 (3.4-
9+9+9 9+9+12	1.70 1.66	2.05	2.05	2.05	-	7.85 (2.9-10.5) 8.30 (2.9-10.5)	1.73	2.49	2.49 2.41	2.49	-	9.20 (3.4- 9.30 (3.4-
7+7+12 7+9+18	1.53	1.84	1.84	3.58	-	8.80 (2.9-10.5)		2.41	2.25	3.75	-	9.80 (3.4-
7+9+24	1.36	1.63	1.63	4.38	-	9.00 (2.9-10.5)		1.94	1.94	4.58	-	9.80 (3.4-
)+12+12	1.60	1.92	2.54	2.54	-	8.60 (2.9-10.5)	1.69	2.43	2.84	2.84	-	9.80 (3.4-
7+12+18	1.47	1.77	2.33	3.43	-	9.00 (2.9-10.5)		2.16	2.53	3.61	-	9.80 (3.4-
9+12+24	1.31	1.58	2.08	4.23	-	9.20 (2.9-10.5)		1.88	2.19	4.43	-	9.80 (3.4-
9+18+18 9+18+24	1.34 1.18	1.61 1.43	3.13 2.77	3.13 3.82	-	9.20 (2.9-10.5) 9.20 (2.9-10.5)		1.95 1.71	3.25 2.85	3.25 4.04	-	9.80 (3.4- 9.80 (3.4-
7+18+24 12+12+12	1.18	2.54	2.77	2.54	-	9.20 (2.9-10.5)		2.73	2.85	2.73	-	9.80 (3.4-
12+12+12	1.41	2.24	2.24	3.30	-	9.20 (2.9-10.5)		2.73	2.73	3.48	-	9.80 (3.4-
12+12+24	1.24	1.98	1.98	4.01	-	9.20 (2.9-10.5)		2.12	2.12	4.29	-	9.80 (3.4-
12+18+18	1.27	2.01	2.96	2.96	-	9.20 (2.9-10.5)	1.31	2.20	3.14	3.14	-	9.80 (3.4-
9+9+9	2.00	2.00	2.00	2.00	-	8.00 (2.9-10.5)		2.45	2.45	2.45	-	9.80 (3.4-
9+9+12	1.94	1.94	1.94	2.57	-	8.40 (2.9-10.5)		2.35	2.35	2.74	-	9.80 (3.4-
9+9+18 9+9+24	1.82	1.82	1.82 1.62	3.54 4.34	-	9.00 (2.9-10.5) 9.20 (2.9-10.5)		2.10 1.83	2.10 1.83	3.50 4.32	-	9.80 (3.4- 9.80 (3.4-
9+12+12	1.90	1.90	2.50	2.50	-	8.80 (2.9-10.5)		2.26	2.64	2.64	-	9.80 (3.4-
9+12+18	1.75	1.75	2.31	3.40	-	9.20 (2.9-10.5)		2.03	2.37	3.38	-	9.80 (3.4-
9+12+24	1.53	1.53	2.03	4.11	-	9.20 (2.9-10.5)		1.77	2.07	4.19	-	9.80 (3.4-
9+18+18	1.56	1.56	3.04	3.04	-	9.20 (2.9-10.5)		1.84	3.06	3.06	-	9.80 (3.4-
9+18+24	1.39	1.39	2.70	3.72	-	9.20 (2.9-10.5)		1.63	2.71	3.84	-	9.80 (3.4-
12+12+12	1.81	2.40	2.40	2.40	-	9.00 (2.9-10.5)		2.54	2.54	2.54	-	9.80 (3.4-
12+12+18 12+12+24	1.65 1.46	2.18 1.92	2.18 1.92	3.20 3.90	-	9.20 (2.9-10.5) 9.20 (2.9-10.5)		2.29 2.01	2.29 2.01	3.27 4.06	-	9.80 (3.4- 9.80 (3.4-
+12+12+12	2.30	2.30	2.30	2.30	-	9.20 (2.9-10.5)		2.45	2.45	2.45	-	9.80 (3.4-
+12+12+18	2.06	2.06	2.06	3.03	-	9.20 (2.9-10.5)		2.21	2.21	3.16	-	9.80 (3.4-
Rooms	·				_					'	,	
7+7+7+7	2.00	2.00	2.00	2.00	2.00	10.00 (3.5-11.5		2.40	2.40	2.40	2.40	12.00 (4.0
7+7+7+9	1.92	1.92	1.92	1.92	2.31	10.00 (3.5-11.5	4	2.21	2.21	2.21	3.18	12.00 (4.0
7+7+7+12 7+7+7+18	1.79 1.58	1.79 1.58	1.79 1.58	1.79 1.58	2.85 3.69	10.00 (3.5-11.5		2.11	2.11 1.88	2.11 1.88	3.55 4.50	12.00 (4.0
7+7+7+10 7+7+7+24	1.38	1.38	1.38	1.38	4.47	10.00 (3.5-11.5) 10.00 (3.5-11.5)		1.88	1.62	1.62	5.51	12.00 (4.0 12.00 (4.0
7+7+9+9	1.85	1.85	1.85	2.23	2.23	10.00 (3.5-11.5		2.04	2.04	2.94	2.94	12.00 (4.0
7+7+9+12	1.73	1.73	1.73	2.08	2.75	10.00 (3.5-11.5		1.96	1.96	2.82	3.29	12.00 (4.0
7+7+9+18	1.53	1.53	1.53	1.84	3.58	10.00 (3.5-11.5)		1.75	1.75	2.53	4.21	12.00 (4.0
7+7+9+24	1.35	1.35	1.35	1.62	4.34	10.00 (3.5-11.5		1.53	1.53	2.20	5.20	12.00 (4.0
7+7+12+12	1.62	1.62	1.62	2.57	2.57	10.00 (3.5-11.5		1.89	1.89	3.17	3.17	12.00 (4.0
7+7+12+18 7+7+12+24	1.44 1.28	1.44	1.44	2.30	3.38 4.13	10.00 (3.5-11.5) 10.00 (3.5-11.5)		1.69	1.69 1.49	2.85	4.07 5.05	12.00 (4.0 12.00 (4.0
7+7+12+24 7+9+9+9	1.78	1.78	2.15	2.03	2.15	10.00 (3.5-11.5		1.49	2.73	2.73	2.73	12.00 (4.0
7+9+9+12	1.67	1.67	2.01	2.01	2.65	10.00 (3.5-11.5		1.83	2.63	2.63	3.07	12.00 (4.0
7+9+9+18	1.48	1.48	1.78	1.78	3.47	10.00 (3.5-11.5)	1.65	1.65	2.37	2.37	3.96	12.00 (4.0
7+9+9+24	1.31	1.31	1.58	1.58	4.23	10.00 (3.5-11.5)	1.45	1.45	2.09	2.09	4.93	12.00 (4.0
7+9+12+12	1.57	1.57	1.89	2.49	2.49	10.00 (3.5-11.5		1.76	2.54	2.96	2.96	12.00 (4.0
7+9+12+18	1.40	1.40	1.69	2.23	3.28	10.00 (3.5-11.5		1.60	2.30	2.68	3.83	12.00 (4.0
7+12+12+12 9+9+9+9	1.48	1.48 2.07	2.35	2.35	2.35	10.00 (3.5-11.5 10.00 (3.5-11.5		1.70 2.56	2.86 2.56	2.86	2.86	12.00 (4.0 12.00 (4.0
7+7+7 7+9+9+12	1.61	1.94	1.94	1.94	2.56	10.00 (3.5-11.5		2.47	2.47	2.47	2.88	12.00 (4.0
7+9+9+18	1.44	1.73	1.73	1.73	3.37	10.00 (3.5-11.5		2.24	2.24	2.24	3.73	12.00 (4.0
9+9+9+24	1.28	1.54	1.54	1.54	4.12	10.00 (3.5-11.5)	1.38	1.98	1.98	1.98	4.68	12.00 (4.0
9+9+12+12	1.52	1.83	1.83	2.41	2.41	10.00 (3.5-11.5)	1.66	2.39	2.39	2.78	2.78	12.00 (4.0
9+9+12+18	1.36	1.64	1.64	2.17	3.19	10.00 (3.5-11.5		2.17	2.17	2.53	3.62	12.00 (4.0
9+9+12+19	1.43	1.73	2.28	2.28	2.28	10.00 (3.5-11.5		2.31	2.70	2.70	2.70	12.00 (4.0
9+9+9+9 9+9+9+12	2.00 1.88	2.00 1.88	2.00 1.88	2.00 1.88	2.00 2.48	10.00 (3.5-11.5 10.00 (3.5-11.5		2.40	2.40 2.32	2.40	2.40	12.00 (4.0 12.00 (4.0
9+9+9+12 9+9+9+18	1.68	1.68	1.68	1.68	3.27	10.00 (3.5-11.5	1 2 12	2.12	2.32	2.32	3.53	12.00 (4.0
9+9+9+24	1.50	1.50	1.50	1.50	4.01	10.00 (3.5-11.5		1.89	1.89	1.89	4.45	12.00 (4.0
9+9+12+12	1.77	1.77	1.77	2.34	2.34	10.00 (3.5-11.5		2.25	2.25	2.63	2.63	12.00 (4.0
9+12+12+12	1.68	1.68	2.22	2.22	2.22	10.00 (3.5-11.5		2.18	2.55	2.55	2.55	12.00 (4.0

# 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.
- \* Not for CU-5E34NBE



## **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
111	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 bein supplied properly to the outdoor unit or whether it is being returned from the outdoor unit to the indoor units.
112	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.
114	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.
115	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.
116	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 store, and if it continues to operate at a total current of under 1.5A for another 3 minutes, its operation separation is 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).	<ol> <li>Check the refrigerant cycle: Gas may be leaking (the amount of refrigerant is extremely low).</li> <li>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 th regular compressor is operating.</li> </ol>
119	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.
H23	Indoor heat exchanger temp. sensor	This trouble display appears when a temperature of under approximately -40°C or above approximately 80°C has been detected by the heat exchanger temperature sensor continuously for 5 seconds. (This trouble is not detected during de-icing.)	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if (open-circuit) (0L or $\infty$ ) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H26	Ionizer Abnormality	_	Measure the voltages of the indoor unit communication cables, and check whether the voltage is being supplied properly. 2. Check the ionizer needle and grounding plate is dust free.
H27	Outdoor air temp. sensor	This trouble display appears when a temperature of under approximately -40°C or above approximately 150°C has been detected by the outside air temperature sensor for 2 to 5 seconds. (This trouble is not detected during de-icing.)	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting ( $0 L \text{ or } \infty$ ) or short-circuit isnot found, defective contact of the connector or a defective control PCB is to blame.
H28	Outdoor heat exchanger temp. sensor 1	This trouble display appears when a temperature of under approximately -60°C or above approximately 110°C has been detected by the heat exchanger temperature sensor for 2 to 5 seconds. (This trouble is not detected during de-icing.)	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H30	Outdoor discharge pipe temp. sensor	CU-2E: This trouble display appears when a temperature of under approximately -16°C or above approximately 200°C has been detected by the outlet temperature sensor for 2 to 5 seconds. CU-3E/AE: Disconnected discharge sensor - When the condensation temperature is higher than the discharge temperature + (plus) 6°C, a sensor disconnection is detected, operation stops, and the trouble display appears (the timer lamp blinks).	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H32	Outdoor heat exchanger temp. sensor 2 (discharge pipe temp.)	This trouble display appears when a temperature of under approximately -60°C or over approximately 110°C has been detected continuously for 2 to 5 seconds by the outlet temperature sensor of the heat exchanger.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting (OL or ∞) or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H33	Indoor / Outdoor wrong connection	Indoor / Outdoor different model junction, 100V charge into 200V outdoor unit.	Check whether the voltage is being supplied property to the outdoor unit or whether it is being returned from the outdoor unit to the indoor units.
H34	Outdoor heat sink temp. sensor	This trouble display appears when a temperature of under -43°C or above 80°C has been detected by the outdoor unit radiator fin sensor continuously for 2 seconds.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting $(0.1 \ or\ \infty)$ or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H36	Abnormal gas pipe temp. sensor	This trouble display appears when a temperature of under approximately -45°C or above approximately 149°C has been detected by the outdoor unit gas side pipe temperature sensor continuously for 2 to 5 seconds.	This trouble display appears when a temperature which is impossibly high or low from a normal standpoint has been detected. Check the sensor, and if open-circuiting $(0.1 \text{ or } \infty)$ or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H37	Outdoor liquid pipe temp. sensor	This trouble display appears when a temperature of under -45°C or above 149°C has been detected by the outdoor unit 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 $\{0L\ or\ \infty\}$ or short-circuit is not found, defective contact of the connector or a defective control PCB is to blame.
H38	Indoor / Outdoor mismatch (brand code)	-	-
139	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.	-
H50	Ventilation failure	This display appears when ventilation motor is lock.	1. Check the voltage drop at pin 1 & 2 of CNVENT to have 14Vdc. 2. Check the ventilation hose condition from ventilation opening until tip cover. 3. Check air 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).
1107	0		3. Check switching function of limit switch (left & right).
H97	Outdoor fan motor mechanism lock	CU-2E: 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/4E: When the fan motor speed detected when its maximum output is demanded is below 30 rpm continuously for 15 seconds, the fan motor stops for 3 minutes and then restarted. When this happens on 16 occasions (the trouble display is cleared when the value	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	is normal for 5 minutes), the H97 diagnostic symbol is stored in the memory, and the fan motor stops.  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 cloqqing of the air fi lters.
Н99	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	/	CH OF What the '-day with the second of the Control	3. Check also for short circuits indoors and clogging of the air fi lters.
FII	4-way valve switching failure	CU-ZE: 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 disptay appears when this happens on 4 occasions in a 30 minutes period.	<ol> <li>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).</li> <li>If the coil is troublefree, the switching action of the 4-way valve may be defective.</li> </ol>
		CU-3E/4E: When a difference of 0°C to 5°C has been detected between the outdoor unit heat exchanger	
F17	Indoor standBy units	temperature and liquid side pipe temperature on 5 occasions, the trouble display appears.  CU-2E: After the operation of one indoor unit stops continuously for 5 minutes. The hole operation stops when the	1. Check the refrigerating cycle: Expansion valve leakage.
	freezing	stopping indoor unit pipe temperature is under -5°C continuously for 1 minute or under 0°C continuously for 5 minutes, and operation restarts after 3 minutes. This trouble display appears if that trouble happens on 3 occasions in a 30 minutes period.	<ol><li>Check the indoor unit pipe temperature sensor (check for changes in its characteristics and check its resistance).</li></ol>
		CU-3E/4E: When the difference of an intake temperature from 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.	
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	<ol> <li>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.</li> </ol>
	Main circuit low voltage (CU-3E/4E)	of the compressor is not synchronized with the control signal has been detected on $\theta$ 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,	Conducts for each interest same symptom as in. 1. Check the refigerating cycle GSs may be teaking [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	Operation stops, and the trouble display appear.  CU-2E: When the reputation of the compressor is not synchronized with the control signal, the F93 diagnostic display is stored in the memory, and operation stops. 3 minutes later, operation is restarted. This trouble display appears when this happens on 4 occasions in a 20 minutes period. CU-3E/4E: When a state in which the rotation of the compressor is not synchronized with the control signal has been detected on 8 successive occasions, operation stops, and the trouble display appears.	1. To check whether the 2-way or 3 -way valve has been left open by mistake, operation is performed for one to several minutes after the compressor has started up, F93 is stopped in the memory as the symptom, and operation stops.     2. Check the Inverter circuit (for open circuits) in the control PCB: Check the IPM base current (6 locations) within 3 minutes after the power has been turned back on. As the symptom, F93 is stored in the memory 30 seconds after the compressor has started up, and operation stops. The trouble display appears after 4 restarts.     3. Check for broken wires (open circuits) in the compressor winding: Approximately 1 ohm under normal
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.	conditions for each phase (same symptom as in 2.)  1. Check the outdoor unit heat exchanger temperature sensor (check for changes in its characteristics and check its resistance).  2. Check whether something is interfering with the dissipation of the heat outdoors.
F96	Power transistor	CU-2E: Heating is detected inside the IPM which shuts itself off, the F96 diagnostic symbol is stored in the	Something may be interfering with the dissipation of the heat outdoors or the outdoor unit fan may be
	module or compressor overheating (CU-2E) Compressor high	memory, and operation stops. 3 minutes later, operation is restarted. The trouble display appears when this happens on 4 occasions in a 30-minutes period.  CU-3E/4E: When this trouble is detected from the electrical parts radiation fin temperature sensor and OLP output during operation, operation stops, and it is restarted 3 minutes later. If the trouble occurs on 4 occasions,	defective. (The outdoor unit fan is not running.).  2. Defective IPM (outdoor unit control PCB).  3. Gas leaks. 2-way or 3-way valve is not opened.
	discharge temperature (CU-3E/4E)	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.	
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-ZE: The trouble display appears and operation stops when this happens on 4 occasions in a 20 minutes period.	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).
F98	Total running accept	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).  CU-2E: When the total current exceeds the certified the EQU displayer is cleared in the memory and	3. Something may be interfering with the dissipation of the heat outdoors or the outdoor unit fan may be defective. (The fan will not run because of an open circuit.) (The protection function may be activated by an overload, and the F97 trouble display will remain stored in the memory.). 1. Check the AC voltage at the outdoor with the outdoor will the memory.
1'70	Total running current protection	CU-2E: When the total current exceeds the setting, the F98 diagnostic display is stored in the memory, and operation stops. 3 minutes later, operation is restarted. The trouble display appears and operation stops when this happens on 3 occasions in a 20-minutes period.  CU-3E/4E: When the total current exceeds the setting (17A to 20A), frequency control is started, and if it then exceeds the setting, operation stops, and the trouble display appears.	1. Check the AC voltage at the outdoor unit terminal board during operation: The voltage drop must be within 5% of the voltage when operation has stopped (£ 110% of rated voltage even during operation). If the voltage drop exceeds 5% or if the voltage changes suddenly, inspect whether the power supply cord and indoor/outdoor unit connection cables are too long or too small in diameter, etc. 2. Check whether something is interfering with the dissipation of the heat outdoors (during cooling operations): Normally, the capacity is limited by the current so that the outdoor unit don't stop, and the diagnostic display
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.	does not appear.  1. Check whether the compressor is defective (locked up or shorted winding). Check the outdoor unit control PCB.

# OPTIONAL ACCESSORIES

# REPLACEMENT ANTI-ALLERGEN FILTER









# PIPE REDUCER (for Multi)



CZ-MAIP 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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