

# Panasonic

## Air Conditioners 2013 / 2014

**Quality Management System Certificate**

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

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

**Environmental Management System Certificate**

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

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

Dealer Stamp

Standard  
Warranty



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

- Please read the Installation Instructions carefully before installing the unit, and the Operating Instructions before using it.
- Specifications are subject to change without prior notice.
- The contents of this catalogue are accurate as of July 2013.
- Due to printing considerations, the actual colours may vary slightly from those shown.
- All graphics are provided merely for the purpose of illustrating a point.

**Panasonic New Zealand Limited.**

350 Te Irirangi Drive, East Tamaki, Manukau, Auckland, 1741. New Zealand.  
Telephone: (02) 9 272 0100, Facsimile: (02) 9 272 0134

[www.panasonic.co.nz](http://www.panasonic.co.nz)

INTELLIGENT ECO SENSORS

**ECONAVI**



# Go Green. Go Clean. Go Your Way.

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

INTELLIGENT ECO SENSORS



**ECONAVI** now comes with 5 features that save energy by adjusting to changes in human movements, activity levels, absence and sunlight intensity.



**INVERTER** technology maintains the room temperature by varying the rotation speed of the compressor; giving you exceptional energy savings.



**nanoe-G** uses nano-technology fine particles that work effectively on micro-organisms in the air, on surfaces and even in the filter to ensure a cleaner living environment.

## INDEX

<b>ECONAVI</b>	04 - 07
<b>INVERTER</b>	08 - 13
<b>nanoe-G</b>	14 - 17
Product Line-Up: Wall-Mounted Deluxe E-Series	18 - 21
Product Line-Up: Floor Console	22 - 23
Multi Inverter Split	24 - 31
Features Comparison and Explanation	32 - 33
<b>ECONAVI</b> Technical Explanation	34 - 38, 40 - 41
<b>AUTOCOMFORT</b> Technical Explanation	39
<b>nanoe-G</b> Technical Explanation	42 - 45
Model Line-Up	46 - 47



INTELLIGENT ECO SENSORS

**ECONAVI**

## Discover the waste to discover energy savings.

When you are relaxing while watching television, the air conditioner's operation usually runs to maintain a constant temperature setting.

**ECONAVI detects and reduces this waste in all the right ways.**

Using high technology sensors and precise control programs, it analyses room conditions and adjusts cooling and heating power accordingly.

It is smart enough to locate and operate in all the right places to give you better energy savings.



Sunlight Sensor

Sunlight Detection

Adjusts cooling and heating power to changes in sunlight intensity.



Absence Detection

Reduces cooling and heating power when you are not around.



Area Search

Directs airflow to wherever you are in the room.



NEW Temperature Wave

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



Activity Detection

Adapts cooling and heating power to your daily activities.



Human Activity Sensor



# 5 FEATURES SAVING ENERGY ALL AT ONCE.

## ECONAVI WITH INTELLIGENT ECO SENSORS

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



Human Activity Sensor

Sunlight Sensor

## So Much Saved with So Little Effort

During Cooling  
Up to  
**38%<sup>\*1</sup>**  
energy savings

For Inverter Cooling Model  
With Temperature Wave

**\*1 Comparison of 3.5kW Inverter model between ECONAVI with (Dual Human Activity Sensor, Sunlight Sensor, and Temperature Wave) ON and ECONAVI OFF (Cooling)**

ECONAVI ON, Outside temperature: 35°C/24°C  
Remote setting temperature: 23°C with Fan Speed (High)  
Vertical Airflow direction: Auto, Horizontal Airflow direction: ECONAVI Mode  
Setting temperature goes up 2°C in total, 1°C controlled by ECONAVI activity level detection and another 1°C controlled by ECONAVI light intensity detection.  
Temperature Wave is ON, electric heater (300W; simulating the heat of human and TV etc)

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

Total power consumption amount are measured for 2 hours in stable condition. At Panasonic Amenity Room (size:16.6m<sup>2</sup>)  
This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.

During Heating  
Up to  
**45%<sup>\*2</sup>**  
energy savings

For Inverter Heating Model

**\*2 Comparison of 3.5kW Inverter model between ECONAVI with dual sensor ON and OFF (Heating)**

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: 2°C/1°C  
Remote setting temperature: 26°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:16.6m<sup>2</sup>)  
This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.



# The secret to its ability is flexibility

Panasonic Inverter air conditioners have the flexibility to **vary the rotation speed of the compressor.**

This allows it to use less energy to maintain the set temperature while also being able to cool and heat the room quicker at start up.

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



Quick cooling, then constant comfort thanks to its flexibility

**1. Quick Cooling**

Cools room faster at start up.

**2. Constant Comfort**

Easily maintains set temperature to keep you comfortable.

**3. Energy Saving**

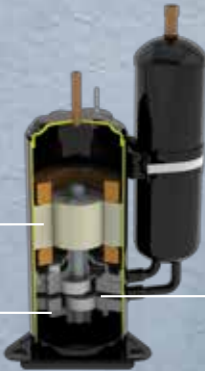
Varies compressor rotation speed to reduce wasteful consumption of energy.



**Inverter Compressor**

Panasonic's Inverter Compressor can achieve high efficiency under high load conditions.

High Efficiency Motor for wide operating voltage



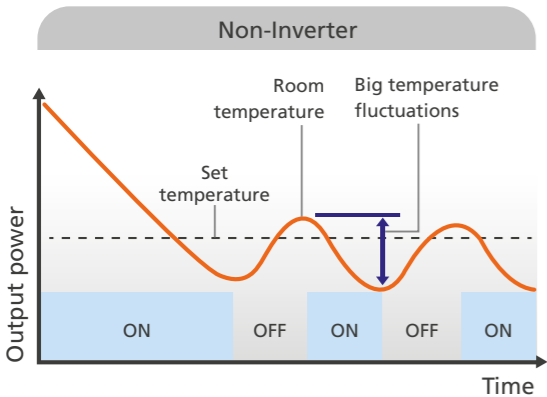
Optimum Shape Muffler for quiet operation

High Efficiency & High Reliability Material for longer life span and to withstand high pressure

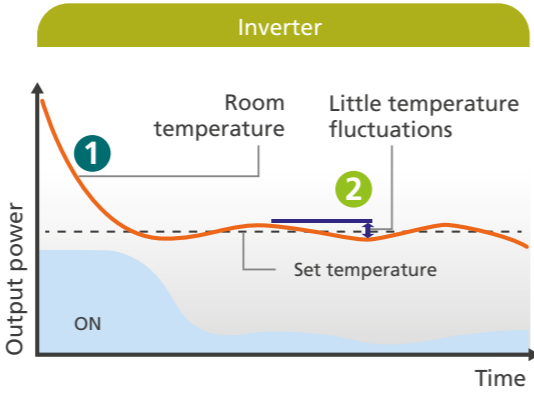
**Reduces Electricity Consumption**

Panasonic Inverter air conditioners give you exceptional energy saving performance while ensuring you stay comfortable at all times. A conventional non-Inverter air conditioner can only operate at a constant speed which is too powerful to maintain the set temperature. Thus, 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, providing a precise method of maintaining the set temperature, giving you energy savings of up to 50%\*.

**Performance Comparison**



REMARK: Energy is wasted by switching the compressor ON and OFF to maintain the set temperature.



REMARK: Saves energy by varying the rotation speed of the compressor to maintain the set temperature.

Legend: ■ Output power — Temperature



Non-Inverter Model



Inverter Model

**50%\*  
down**

**3**

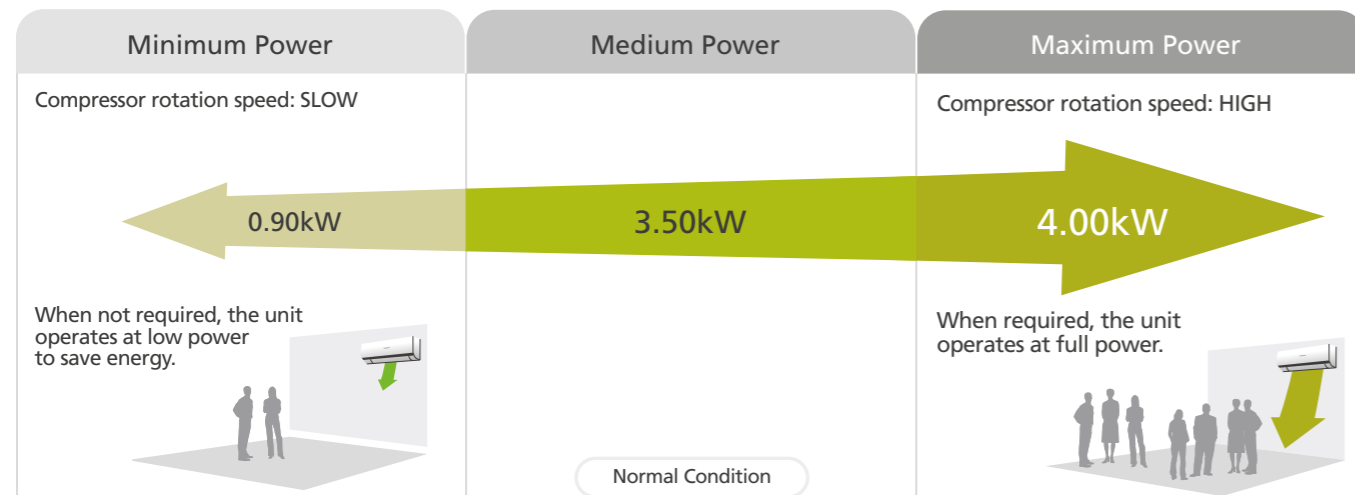
**Up to  
50%\*  
energy savings**

**\*Comparison of 3.5kW Inverter model and 3.5kW 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 start.  
At Panasonic Amenity Room (size:16.6m<sup>2</sup>)  
This is the maximum energy savings value, and the effect differs according to conditions in installation and usage.

## THE OTHER ADVANTAGES OF INVERTER AIR CONDITIONERS

### Constant Comfort

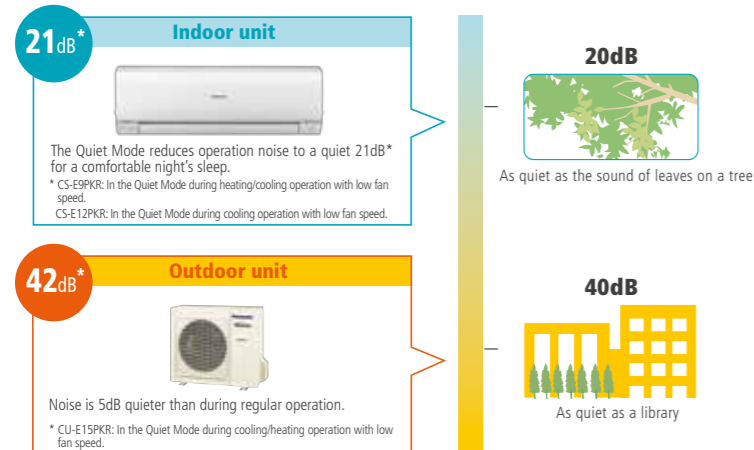
Precise temperature control with a wide power output range enables an inverter air conditioner to meet different room occupancy levels – thus ensuring constant comfort.



Graph shows the 3.5kW Inverter model's wide power output range during cooling.

### QUIET OPERATION FOR MORE COMFORT

Quiet Mode during cooling and heating operation provides quieter indoor unit operation, as well as reduces outdoor unit noise level.

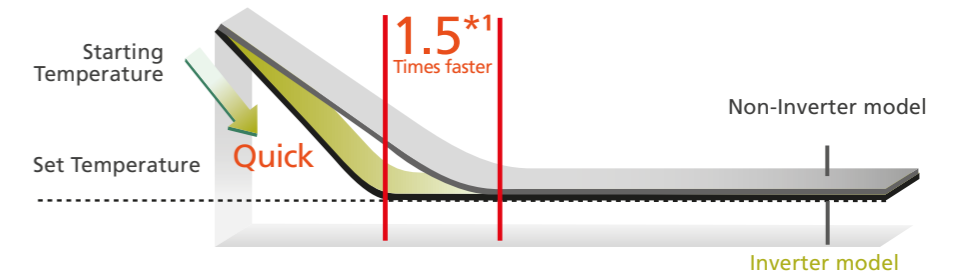


Feature Comparison >> p.32~p.33

### Quick Cooling/Heating

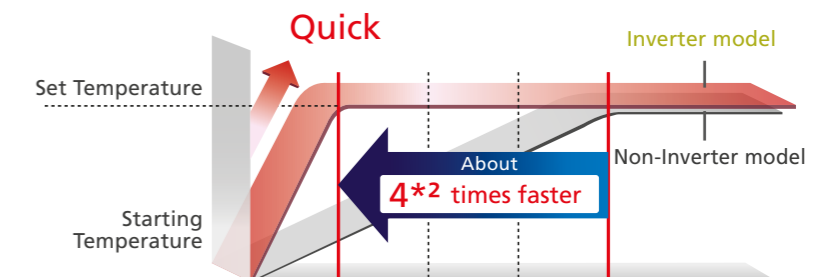
Panasonic Inverter air conditioners can operate with higher power during the start up period to cool the room 1.5 times faster and heat the room 4 times faster than Non-Inverter models.

#### Comparison of Cooling Speed



\*1 3.5kW Inverter vs. Non-Inverter. Outside room temperature: 35°C; setting temperature: 25°C

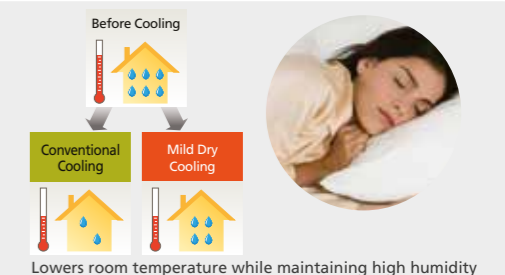
#### Comparison of Heating Speed



\*2 Comparison of 2.6kW Inverter and Non-Inverter. Outside room temperature: 2°C; setting temperature: 25°C

### 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.



# Purifies the air, surfaces and even inside itself

Now you can purify living spaces more effectively with **nanoe-G**.

Using nano-technology fine particles, harmful micro-organisms are removed from the air you breathe.



**But what about the ones found on furniture and other surfaces?** Amazingly, they can also be deactivated by these particles.

And now, when you switch off your air conditioner, nanoe-G will even deactivate the micro-organisms in the filter.

So you can enjoy complete peace-of-mind with a living environment that is fresher and cleaner.

2. AIRBORNE

Removes 99%\*<sup>2</sup> bacteria, viruses and mould in the air.

NEW

3. IN-FILTER DEACTIVATION

Deactivates 99%\*<sup>3</sup> bacteria and viruses trapped in the filter.

1. ADHESIVE

Deactivates 99%\*<sup>1</sup> bacteria, viruses and inhibits mould growth on surfaces.

3 trillion\* nanoe-G fine particles released from the generator.

Natural Ion Wind spreads nanoe-G fine particles that are released from the nanoe-G generator.

nanoe-G catches micro-organisms.

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

ADVANCED AIR PURIFICATION SYSTEM FOR YOUR HOME

NEW nanoe-G with In-filter Deactivation

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

	1. ADHESIVE	2. AIRBORNE	3. IN-FILTER DEACTIVATION
Bacteria	99%* <sup>1</sup> Deactivation	99%* <sup>2</sup> Removal	99%* <sup>3</sup> Deactivation
Viruses	99%* <sup>1</sup> Deactivation	99%* <sup>2</sup> Removal	99%* <sup>3</sup> Deactivation
Mould	Growth Inhibition	99%* <sup>2</sup> Removal	—

\*1 see page 45

\*2 see page 44

\*3 see page 43



ECONAVI

INVERTER CONTROL

nanoe-G

ODOUR-REMOVING

mode  
QUIET MODE

POWERFUL MODE

FAN MODE

24  
DUAL

DEMAND  
CONTROL

3RD PARTY  
CONNECTIVITY

(Optional)

BACKLIGHT  
(Optional)

BLUE FIN CONDENSER

ENERGY SAVING

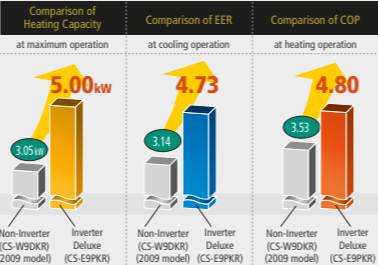
INTELLIGENT ECO SENSORS

ECONAVI

ECONAVI features an energy-saving, intelligent Human Activity Sensor and new Sunlight Sensor technologies that can detect and reduce waste by optimising air conditioner operation according to room conditions.



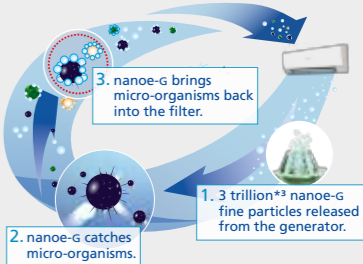
Panasonic's high-efficiency technologies clear stringent energy saving standards. Our new deluxe models have attained high Energy-Efficiency Classification Star Rating, which places them as one of the industry's top class of energy savers. This means you can use these models everyday, without having to worry about the electric bill.



CLEAN AIR



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.



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

RELIABILITY

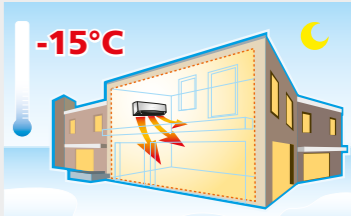
WIDE OPERATING TEMPERATURE RANGE

Panasonic Air Conditioners are perfectly designed to suit New Zealand's climate with outstanding operating temperature range.

Heating  
Possible

-15°C

Providing outstanding cold climate performance, Panasonic Air Conditioners let you enjoy stable heating even when the outside temperature is below freezing. Units operate from -15°C to 24°C. Add to this exceptional durability and reliability and you are looking at worry-free operation for comfort during winter.



Cooling  
Possible

46°C

Cooling is possible even when the outside temperature is from \*5°C up to \*46°C. The highly durable compressors and fan motors found inside Panasonic Air Conditioners help to maintain room comfort even under the hottest conditions.

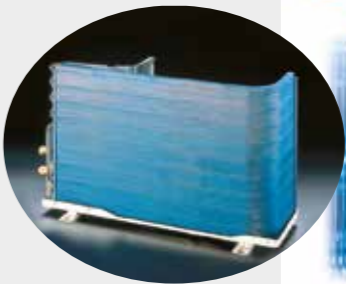


\* Applicable to Deluxe E-Series only.

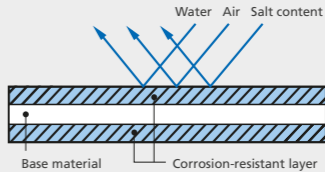
Feature Comparison >> p.32~p.33

BLUE FIN CONDENSER

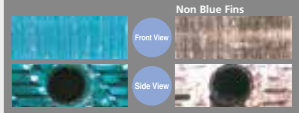
An air conditioner's performance depends largely on its condenser, which can take a beating from exposure to salty air, wind, dust and other corrosive factors. Panasonic has found a way to expand the life of our condensers, using a layer of our original anti-rust coating. This special coating lets you enjoy more years of reliable comfort plus extra economy over the long run.



Special Coating Layer (Fin Cross-section)



Cyclic Corrosion Test Results



**Test Proven Longer Durability**  
Panasonic's condenser has special coating assures longer condenser life for years of reliable comfort.  
Note: According to Panasonic test results.

CONVENIENCE

EASY-TO-USE REMOTE CONTROLLER

Wireless Remote Controller

Panasonic's wireless remote controller features a large Liquid Crystal Display (LCD) panel which makes it extremely user-friendly. So you can sit back and enjoy easy operation and long-lasting comfort from your Panasonic Air Conditioner.

LCD display for an easy overview of the operation status

ECONAVI monitors sunlight intensity, human movements, activity levels and human absence to detect and reduce energy waste.

Toggles between AUTO, HEAT, COOL, DRY and FAN setting mode

Maintain higher level of Relative Humidity

Stronger airflow to cool the room more quickly

Reduces the indoor operating sound

Sets the actual time (hour and minute)

AIR CONDITIONER

MODE MILD DRY

AUTO 23°C 12:00 AUTO FAN

ECONAVI OFF/ON AUTO COMFORT

MODE TEMP NANO-E

MILD DRY AIR SWING

POWERFUL/QUIET FAN SPEED

TIMER ON 1 2 3 OFF 4 5 6 SET

SET CHECK CLOCK RESET

Panasonic INVERTER

Autocomfort mode detects high activity levels and switches to comfort operation for maximum comfort.

Press up or down to set the temperature

Activates the nanoe-g function even when the air conditioner is switched off

Sets the Airflow

Adjusts the fan speed

Sets the 24-hour ON & OFF Timer or 24-hour Dual ON & OFF Timer

Wireless Backlight (optional) Applicable to Deluxe E-Series

LCD display comes with backlight

Buttons glow in the dark

DUAL TIMER



dual timer for 2 on and off times per day

For very simple, convenient timer operation that will repeat everyday until you cancel it.

Select ON or OFF Timer

1 ON

2 OFF

3 Cancel

Set the time.

4

5

Confirm.

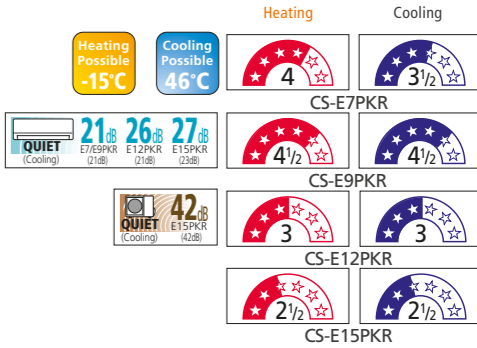
6

7

NEW



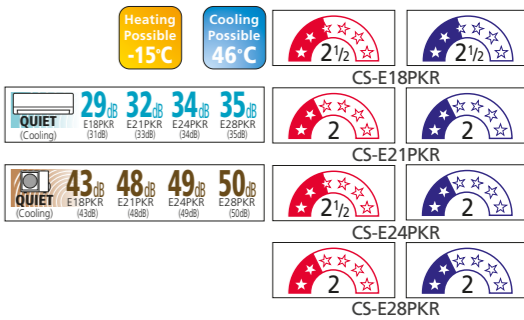
CS-E7PKR | CS-E9PKR | CS-E12PKR | CS-E15PKR



NEW



CS-E18PKR | CS-E21PKR | CS-E24PKR | CS-E28PKR



SPECIFICATIONS

Model	(240V)	CS-E7PKR (CU-E7PKR)	CS-E9PKR (CU-E9PKR)	CS-E12PKR (CU-E12PKR)	CS-E15PKR (CU-E15PKR)	CS-E18PKR (CU-E18PKR)	CS-E21PKR (CU-E21PKR)	CS-E24PKR (CU-E24PKR)	CS-E28PKR (CU-E28PKR)
Cooling/Heating*2 Capacity	kW	2.05 (0.85~2.40) 2.80 (0.70~4.10)	2.60 (0.90~3.00) 3.60 (0.80~5.00)	3.50 (0.90~4.00) 4.90 (0.80~6.70)	4.40 (0.90~5.00) 5.50 (0.90~7.10)	5.00 (0.90~6.00) 6.35 (0.90~8.00)	6.30 (1.70~7.10) 7.20 (1.70~8.50)	7.00 (1.70~8.10) 8.00 (1.70~9.90)	8.00 (2.30~8.60) 9.00 (2.20~11.00)
	Btu/h	6,990 (2,900~8,180) 9,550 (2,390~14,000)	8,870 (3,070~10,200) 12,300 (2,730~17,100)	11,900 (3,070~13,600) 16,700 (2,730~22,800)	15,000 (3,070~17,100) 18,800 (3,070~24,200)	17,100 (3,070~20,500) 21,700 (3,070~27,300)	21,500 (5,800~24,200) 24,600 (5,800~29,000)	23,900 (5,800~27,600) 27,300 (5,800~33,800)	27,300 (7,840~29,300) 30,700 (7,500~37,500)
Air Flow	L/s	175 188	200 215	213 222	247 243	283 295	288 277	340 347	359 357
Dehumid	L/h	1.3	1.6	2.0	2.4	2.8	3.5	4.0	4.7
Running Current	A	2.2 2.8	2.5 3.4	3.7 5.5	5.4 6.5	5.8 7.5	8.4 8.5	9.5 9.7	10.9 11.9
Power Input	kW	0.46 (0.20~0.59) 0.62 (0.16~1.05)	0.55 (0.21~0.78) 0.75 (0.18~1.36)	0.83 (0.21~1.10) 1.22 (0.18~1.89)	1.20 (0.22~1.60) 1.47 (0.25~2.25)	1.30 (0.23~2.05) 1.69 (0.26~2.65)	1.80 (0.44~2.20) 1.98 (0.40~2.50)	2.11 (0.43~2.48) 2.21 (0.38~3.00)	2.39 (0.46~2.70) 2.63 (0.50~3.30)
EER/COP	w / w	4.46 4.52	4.73 4.80	4.22 4.02	3.67 3.74	3.85 3.76	3.50 3.64	3.32 3.62	3.35 3.42
Star Rating		3.5 4.0	4.5 4.5	3.0 3.0	2.5 2.5	2.5 2.5	2.0 2.0	2.0 2.0	2.0 2.0
Sound Pressure Level*1 dB (A)	Inside (Hi/Lo/S-Lo)	37/24/21 38/25/21	42/25/21 41/27/21	43/26/21 46/29/26	47/30/23 45/31/27	47/34/31 44/33/29	47/36/33 47/35/32	49/37/34 49/37/34	51/38/35 50/38/35
	Outside (Hi/S-Lo)	45/— 46/—	47/— 47/—	49/— 50/—	47/42 47/42	48/43 48/43	53/48 53/48	54/49 54/49	55/50 55/50
Sound Power Level dB (A)	Outside (Hi/S-Lo)	60/— 61/—	62/— 62/—	64/— 65/—	62/57 62/57	62/57 62/57	67/62 67/62	68/63 68/63	73/68 73/68
Net Weight (Outdoor)	kg	9 (32)	9 (33)	9 (33)	9 (51)	12 (52)	12 (59)	12 (60)	12 (74)
Dimensions	Height x Width x Depth mm	290 x 870 x 214 (619 x 824 x 299)	290 x 870 x 214 (619 x 824 x 299)	290 x 870 x 214 (619 x 824 x 299)	290 x 870 x 214 (795 x 875 x 320)	290 x 1070 x 240 (795 x 875 x 320)	290 x 1070 x 240 (795 x 875 x 320)	290 x 1070 x 240 (795 x 875 x 320)	290 x 1070 x 240 (1170 x 900 x 320)
Refrigerant	Liquid Side mm/(inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
Pipe Diameter	Gas Side mm/(inch)	9.52 (3/8)	9.52 (3/8)	12.70 (1/2)	12.70 (1/2)	12.70 (1/2)	12.70 (1/2)	15.88 (5/8)	15.88 (5/8)
Pipe Extension Length	Min~Max (m)	3~15	3~15	3~15	3~20	3~20	3~20	3~30	3~30
Pipe Length for Additional Gas	m	7.5	7.5	7.5	7.5	10	10	10	10
Additional Gas Amount	g/m	20	20	20	20	20	20	30	30
Power Supply		Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Operating Range	Cooling Degree (°C)	5~46	5~46	5~46	5~46	5~46	5~46	5~46	5~46
	Heating Degree (°C)	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24

\*1 Sound pressure level specification is measured according to JIS C9612.  
\*2 Maximum heating capacity shown are the values based on powerful operation.

Rating Conditions

	Cooling	Heating
Inside air temperature	27°C DB/19°C WB	20°C DB
Outside air temperature	35°C DB	7°C DB/6°C WB

- Power plugs are not supplied with the unit.
- Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and mains circuit for the model to be installed.
- Please read the Installation Instructions carefully before installing the unit, and read the Operating Instructions before using.

OUTDOOR

Blue Fin Condenser

CU-E7PKR  
CU-E9PKR  
CU-E12PKR

CU-E15PKR  
CU-E18PKR  
CU-E21PKR  
CU-E24PKR

CU-E28PKR

Heating Possible  
-15°C

Cooling Possible  
43°C

Slim and Elegant

A neat fit even in limited space

Thanks to the floor console’s slim, compact design, you can install it even where space is limited. What’s more, although small, the unit is surprisingly powerful and energy-saving.



COMFORTABLE UP-DOWN BI-DIRECTIONAL AIRFLOW WARMS THE ENTIRE ROOM DOWN TO YOUR TOES

Upper & Lower Vane Blow

Optimum air flow from the top and bottom of the unit assures that even your feet are kept comfortably warm. (Only during heating)

Heating

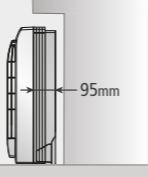
Cooling

Upward and downward air flow warms the whole room uniformly.

Upward air flow efficiently cools the entire room.

Compact Design

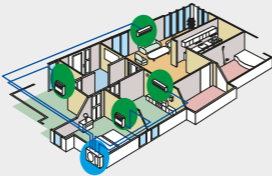
The design features a flat, elegant front panel that provides a neat appearance. And the unit can be recessed into a wall up to 95 mm.



Compatible with Multi System

You can use up to 4 indoor units with 1 outdoor unit, minimizing the space required for outdoor units.

\*Compatible outdoor units  
- CU-4E27PBE  
- CU-4E23LBE



Super Quiet

The indoor and outdoor units deliver quiet operation. And pressing the Quiet mode button lowers operation noise even further to just 23dB for indoor unit with low fan speed.



\*2 CS-E9GFEW: In the Quiet mode during cooling/heating operation with low fan speed  
CS-E12GFEW: In the Quiet mode during heating operation with low fan speed



CS-E9GFEW | CS-E12GFEW | CS-E18GFEW

Heating Possible  
-15°C

Cooling Possible  
43°C

Heating

Cooling

CS-E9GFEW

CS-E12GFEW

CS-E18GFEW

SPECIFICATIONS

Model (240V)			CS-E9GFEW (CU-E12GFR)	CS-E12GFEW (CU-E18GFR)	CS-E18GFEW (CU-E18GFR)
Cooling/Heating Capacity	kW		2.50 (0.80~3.00) 3.60 (0.80~5.00)	3.40 (0.80~3.80) 4.40 (0.80~5.40)	5.00 (0.90~5.60) 5.60 (0.90~6.50)
	Btu/h		8,500 (2,700~10,200) 12,300 (2,700~17,100)	11,600 (2,730~13,000) 15,000 (2,730~18,400)	17,100 (3,070~19,100) 19,100 (3,070~22,200)
Air Flow	L/s		155 160	158 167	183 217
Dehumid	L/h		1.4	2.0	2.8
Running Current	A		2.65 3.90	3.8 4.9	6.5 6.6
Power Input	kW		0.57 (0.18~0.78) 0.87 (0.17~1.36)	0.86 (0.19~1.14) 1.09 (0.18~1.42)	1.55 (0.26~1.91) 1.50 (0.26~1.73)
EER/COP	w/w		4.39 4.16	3.95 4.04	3.23 3.73
Star Rating			3.5 3.0	2.5 2.5	1.5 2.0
Sound Pressure Level*1 dB (A)	Inside (Hi/L0/S-Lo)		38/27/23 38/27/23	39/28/24 39/27/23	44/36/32 46/36/32
	Outside (Hi/S-Lo)		46/— 47/—	48/— 50/—	47/— 48/—
Sound Power Level dB (A)	Outside (Hi/S-Lo)		59/— 60/—	63/— 65/—	61/— 62/—
Net Weight	kg		14 (34)	14 (35)	14 (49)
Dimensions	Height x Width x Depth	mm	600 x 700 x 210 (540 x 780 x 289)	600 x 700 x 210 (540 x 780 x 289)	600 x 700 x 210 (750 x 875 x 345)
Refrigerant Pipe Diameter	Liquid Side	mm/(inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas Side	mm/(inch)	9.52 (3/8)	9.52 (3/8)	12.70 (1/2)
Pipe Extension Length	Min~Max (m)		3~15	3~15	3~20
Pipe Length for Additional Gas	m		7.5	7.5	10
Additional Gas Amount	g/m		20	20	20
Power Supply			Outdoor	Outdoor	Outdoor
Operating Range (Outdoor)	Cooling	Degree (°C)	16~43	16~43	16~43
	Heating	Degree (°C)	-15~24	-15~24	-15~24

\*1 Sound Pressure Level is measured according to JIS C 9612.

OUTDOOR

CU-E9GFE-1  
CU-E12GFR



CU-E18GFR





In the Quiet mode during heating/cooling operation with low fan speed (Indoor)

Star Rating (Heating)

Star Rating (Cooling)

Wall-Mounted (Deluxe)



Model No	CS-E7NKEW	CS-E9NKEW	CS-E12NKEW	CS-E15NKEW*1
Capacity	2.0kW class	2.5kW class	3.2kW class	4.0kW class
Model No	CS-E18NKEW*1	CS-E21NKEW*2		
Capacity	5.0kW class	6.0kW class		
<div><div>ECONAVI</div><div>AUTOCOMFORT</div><div>nanoe-G</div><div></div></div>				

Reverse cycle models

Floor Console



Model No	CS-E9GFEW	CS-E12GFEW	CS-E18GFEW*1
Capacity	2.8kW class	3.2kW class	5.0kW class

Hide-Away



Model No	CS-E10KD3EA	CS-E15JD3EA*1	CS-E18JD3EA*1
Capacity	2.5kW class	4.0kW class	5.0kW class

Cassette (4-way)



Model No	CS-E10KB4EA	CS-E15HB4EA*1	CS-E18HB4EA*1	CS-E21JB4EA*2
Capacity	2.5kW class	4.0kW class	5.0kW class	6.0kW class

Floor or Ceiling



Model No	CS-E15DTEW*1	CS-E18DTEW*1
Capacity	4.0kW class	5.0kW class

\*1 A pipe size reducer (CZ-MA1P) must be used to reduce the pipe diameter to 9.52 mm at the connection port of the indoor unit.  
\*2 A pipe size expander (CZ-MA2P) must be used to expand the pipe diameter of the outdoor unit from 9.52mm to 12.7 mm at the connection port of the outdoor unit.

Advantages of the Large Capacity Inverter Multi-Split System

Indoor unit

A variety of indoor units

Air-quality features (Wall-mounted type only)

• nanoe-G

Adjusts the operation settings for each indoor unit independently

Outdoor unit

Space-saving  
68% less space than four single split types.

Single Split Type CU-E7PKR

CU-4E27PBE




BIG SPACE SAVINGS!

With a single outdoor unit, control up to 4 indoor units. (Maximum)

Inverter control

The inverter offers energy-saving efficiency, quick comfort, and flexible power control. Our compressor saves more energy while reducing vibration, noise and unit size.

Combination Patterns

	Models	Indoor Units: Possible Combination Patterns Must be within capacity range.	Indoor Units Combination Range	Refrigerant Pipe Diameter			Pipe Extension				Indoor Unit Combinations						
				Indoor Unit	Liquid Side	Gas Side	Maximum Pipe Length (1 room)	Maximum Pipe Length (Total)	Maximum Chargeless Length	Additional Gas	Maximum Height	Type Capacity [kW class]	Wall- Mounted	Floor Console	Cassette (4-way)	Floor or Ceiling	Hide-Away
2 rooms	CU-2E18LBE   5.2kW  Dimensions (HxWxD): 540 x 780(+70) x 289 mm Weight: 38 kg	<div>PORT A 2.0 or 2.5 or 2.8 or 3.2</div> <div>* Either unit</div> <div>PORT B 2.0 or 2.5 or 2.8 or 3.2</div> <div>* Either unit</div> <div>* At least two indoor units must be connected.</div>	4.0   6.4 kW  Make sure to keep combinations within this range.	Room A	ø 6.35	ø 9.52	20 m	30 m	20 m	20 g/m	10 m	2.0	●				
												2.5	●		●		●
				Room B	ø 6.35	ø 9.52						2.8		●			
												3.2	●	●			
4 rooms	CU-4E23LBE   6.8kW  Dimensions (HxWxD): 795 x 875(+95) x 320 mm Weight: 72 kg	<div>PORT A 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>PORT B 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>PORT C 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>PORT D 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>* At least two indoor units must be connected.</div>	4.5   11.0 kW  Make sure to keep combinations within this range.	Room A	ø 6.35	ø 9.52	25 m	60 m	30 m	20 g/m	15 m	2.0	●				
												2.5	●		●		●
				Room B	ø 6.35	ø 9.52						2.8		●			
												3.2	●	●			
				Room C	ø 6.35	ø 9.52						4.0	●		●	●	●
												5.0	●	●	●	●	●
				Room D	ø 6.35	ø 9.52						6.0	●		●		
	CU-4E27PBE   8.0kW  Dimensions (HxWxD): 908 x 900 x 320 mm Weight: 73 kg	<div>PORT A 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>PORT B 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>PORT C 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>PORT D 2.0 or 2.5 or 2.8 or 3.2 or 4.0 or 5.0 or 6.0</div> <div>* Either unit</div> <div>* At least two indoor units must be connected.</div>	4.5   13.6 kW  Make sure to keep combinations within this range.	Room A	ø 6.35	ø 9.52	25 m	70 m	45 m	20 g/m	15 m	2.0	●				
												2.5	●		●		●
				Room B	ø 6.35	ø 9.52						2.8		●			
												3.2	●	●			
				Room C	ø 6.35	ø 9.52						4.0	●		●	●	●
												5.0	●	●	●	●	●
				Room D	ø 6.35	ø 9.52						6.0	●		●		

Indoor units

Cooling  
Heating

			Wall-Mounted					
Model			CS-E7NKEW (2.0kW class)	CS-E9NKEW (2.5kW class)	CS-E12NKEW (3.2kW class)	CS-E15NKEW (4.0kW class)	CS-E18NKEW (5.0kW class)	CS-E21NKEW* (6.0kW class)
Power Source			Single phase, 230 V, 50 Hz					
Noise (Hi/Lo/S-Lo)	Sound Pressure Level	dB(A)	40/29/26 40/29/26	40/29/26 40/29/26	44/32/29 44/32/29	44/32/29 44/33/29	46/33/30 46/35/32	46/33/30 46/35/32
	Sound Power Level	dB	56/— 56/—	56/— 56/—	60/— 60/—	60/— 60/—	62/— 62/—	62/— 62/—
Fan Output		W	40	40	40	40	40	40
Dimensions	Height	mm	290	290	290	290	290	290
	Width	mm	870	870	870	870	1,070	1,070
	Depth	mm	204	204	204	204	235	235
Net Weight		kg	9.0	9.0	9.0	9.0	12.0	12.0
Connecting Cable			3 + 1 (earth), ø1.5 mm <sup>2</sup>					
Refrigerant Pipe Diameter	Liquid Side	mm	6.35	6.35	6.35	6.35	6.35	6.35
	Gas Side	mm	9.52	9.52	9.52	9.52* <sup>1</sup>	9.52* <sup>1</sup>	12.70* <sup>2</sup>

			Floor Console			Floor or Ceiling	
Model			CS-E9GFEW (2.8kW class)	CS-E12GFEW (3.2kW class)	CS-E18GFEW (5.0kW class)	CS-E15DTEW (4.0kW class)	CS-E18DTEW (5.0kW class)
Power Source			Single phase, 230 V, 50 Hz				
Noise (Hi/Lo/S-Lo)	Sound Pressure Level	dB(A)	38/27/23 38/27/23	39/28/24 39/27/23	44/36/32 46/36/32	45/37/34 45/33/30	46/39/36 47/35/32
	Sound Power Level	dB	54/— 54/—	55/— 55/—	60/— 62/—	58/— 58/—	59/— 60/—
Fan Output		W	48	48	48	51	51
Dimensions	Height	mm	600	600	600	540	540
	Width	mm	700	700	700	1,028	1,028
	Depth	mm	210	210	210	200	200
Net Weight		kg	14.0	14.0	14.0	17.0	18.0
Connecting Cable			3 + 1 (earth), ø1.5 mm <sup>2</sup>				
Refrigerant Pipe Diameter	Liquid Side	mm	6.35	6.35	6.35	6.35	6.35
	Gas Side	mm	9.52	9.52	9.52* <sup>1</sup>	9.52* <sup>1</sup>	9.52* <sup>1</sup>

			Cassette (4-way)				Hide-Away		
Model			CS-E10KB4EA (2.5kW class)	CS-E15HB4EA (4.0kW class)	CS-E18HB4EA (5.0kW class)	CS-E21JB4EA* (6.0kW class)	CS-E10KD3EA (2.5kW class)	CS-E15JD3EA (4.0kW class)	CS-E18JD3EA (5.0kW class)
Power Source			Single phase, 230 V, 50 Hz						
Noise (Hi/Lo/S-Lo)	Sound Pressure Level	dB(A)	34/26/23 35/28/25	34/26/23 35/28/25	36/28/25 37/29/26	41/33/30 42/34/31	33/24/21 35/25/22	33/27/24 33/27/24	41/30/27 41/32/29
	Sound Power Level	dB	47/— 58/—	47/— 48/—	49/— 50/—	54/— 55/—	49/— 51/—	49/— 51/—	57/— 57/—
Fan Output		W	40	40	40	40	30	30	30
External Static Pressure		Pa(mmAq)	— —	— —	— —	— —	34/64 (3.47/6.53)	34/69 (3.47/7.04)	34/78 (3.47/7.95)
	Air Circulations	m <sup>3</sup> /min	—	—	—	—	6.9	7.9	10.4
Dimensions	Height	mm	260	260	260	260	235	235	285
	Width	mm	575	575	575	575	750(+65)	750(+65)	750(+65)
	Depth	mm	575	575	575	575	370	370	370
Net Weight		kg	18.0	18.0	18.0	18.0	17.0	18.0	18.0
Connecting Cable			3 + 1 (earth), ø1.5 mm <sup>2</sup>						
Refrigerant Pipe Diameter	Liquid Side	mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35
	Gas Side	mm	9.52	9.52* <sup>1</sup>	9.52* <sup>1</sup>	12.70* <sup>2</sup>	9.52	9.52* <sup>1</sup>	9.52* <sup>1</sup>

\* Only can be used with the CU-4E23LBE & CU-4E27PBE.  
\*<sup>1</sup> A pipe size reducer (CZ-MA1P) must be used to reduce the pipe diameter to 9.52 mm at the connection port of the indoor unit.  
\*<sup>2</sup> A pipe size expander (CZ-MA2P) must be used to expand the pipe diameter of the outdoor unit from 9.52mm to 12.7 mm at the connection port of the outdoor unit.

Outdoor units

Cooling  
Heating

Model			(50Hz)	CU-2E18LBE	CU-4E23LBE	CU-4E27PBE
Indoor-units Combination				3.2 kW + 3.2 kW	2.5 kW + 2.8 kW + 2.8 kW + 2.8 kW	3.2 kW + 3.2 kW + 3.2 kW + 4.0 kW
Power Source				Single phase, 230 V, 50 Hz (Power supply from outdoor unit)		
Cooling Operation	Capacity	kW		5.2 (1.5-5.4)	6.8 (1.9-8.8)	8.0 (3.0-9.2)
	Running Current	A		7.10	7.50	8.70
Electrical Data	Power Input	W		1,520 (250-1,580)	1,680 (340-2,470)	1,980 (530-2,870)
	EER	w/w		3.42	4.05	4.04
Noise	Sound Pressure Level	dB(A)		49/—	48/—	48/—
	Sound Power Level	dB		64/—	62/—	61/—
Heating Operation	Capacity	kW		5.6 (1.1-7.2)	8.6 (3.0-10.6)	9.4 (4.2-10.6)
Electrical Data	Running Current	A		5.35	8.60	9.10
	Power Input	W		1,210 (210-1,700)	1,850 (580-2,600)	2,080 (700-3,060)
	COP	w/w		4.63	4.65	4.52
Noise	Sound Pressure Level	dB(A)		51	49	49
	Sound Power Level	dB		66	63	62
Maximum Current		A		12.0	15.6	19.0
Starting Current		A		7.10	8.60	9.10
Compressor Output		W		1,500	1,300	2,200
Fan Output		W		40	60	51
Circuit Breaker Ratio		A		15	20	20
Dimensions	Height	mm		540	795	908
	Width	mm		780 (+70)	875 (+95)	900
	Depth	mm		289	320	320
Net Weight		kg		38	72	73
Connecting Cable				3 + 1 (earth), ø1.5 mm <sup>2</sup>		
Pipe Length Range (1 room)		m		3-20	3-25	3-25
Maximum Pipe Length (Total room)* <sup>3</sup>		m		30	60	70
Refrigerant Pipe Diameter	Liquid Side	mm		6.35	6.35	6.35
	Gas Side	mm		9.52	9.52	9.52
Operating Range	Cooling	Degree (°C)		16~43	-10~46	-10~46
	Heating	Degree (°C)		-15~24* <sup>1</sup>	-20~24* <sup>2</sup>	-20~24* <sup>2</sup>

\*<sup>1</sup> Operating temperature limit is -15°C with performance data guaranteed down to -10°C.  
\*<sup>2</sup> Operating temperature limit is -20°C with performance data guaranteed down to -15°C.  
\*<sup>3</sup> Additional Gas might be required for some models. Refer to page 25 for information on Additional Gas.

Rating Conditions		
	Cooling	Heating
Inside air temperature	27°C DB /19°C WB	20°C DB
Outside air temperature	35°C DB	7°C DB/6°C WB

SPECIFICATIONS

CU-2E18LBE

●How to Read the Table  
Indoor unit combinations are shown here as the number of units operating, and their capacity class.

2 rooms	2.0 + 2.0
	2.0 + 2.8

← A combination of two 2.0-kW indoor units  
← A combination of one 2.2-kW indoor unit and one 2.8-kW indoor unit  
# A.E.C. : Annual Energy Consumption

Indoor Units Capacity		COOLING OPERATION						HEATING OPERATION					
		Cooling Capacity			Running Current	Power Input	A.E.C.#	Heating Capacity			Running Current	Power Input	A.E.C.#
		Room A	Room B	Total				Room A	Room B	Total			
		kW	kW	kW				kW	kW	kW			
1 room	2.0	2.00	-	2.00 (1.1 - 2.9)	2.45	520 (220 - 750)	260	3.20	-	3.20 (0.7 - 4.8)	3.75	850 (170 - 1,410)	
	2.5	2.50	-	2.50 (1.1 - 3.5)	3.15	670 (220 - 1,000)	335	3.60	-	3.60 (0.7 - 5.5)	4.55	1,030 (170 - 1,700)	
	2.8	2.80	-	2.80 (1.1 - 3.5)	3.50	750 (220 - 1,000)	375	4.00	-	4.00 (0.7 - 5.5)	5.10	1,150 (170 - 1,700)	
	3.2	3.20	-	3.20 (1.1 - 4.0)	4.30	920 (220 - 1,220)	460	4.50	-	4.50 (0.7 - 6.2)	5.55	1,250 (170 - 1,810)	
2 rooms	2.0 + 2.0	2.00	2.00	4.00 (1.5 - 5.0)	5.10	1,090 (250 - 1,350)	545	2.70	2.70	5.40 (1.1 - 7.0)	5.20	1,170 (210 - 1,670)	
	2.0 + 2.5	2.00	2.50	4.50 (1.5 - 5.2)	5.75	1,230 (250 - 1,520)	615	2.40	3.00	5.40 (1.1 - 7.0)	5.20	1,170 (210 - 1,670)	
	2.0 + 2.8	1.85	2.65	4.50 (1.5 - 5.2)	5.75	1,230 (250 - 1,520)	615	2.25	3.15	5.40 (1.1 - 7.0)	5.20	1,170 (210 - 1,670)	
	2.0 + 3.2	1.85	2.95	4.80 (1.5 - 5.3)	6.10	1,310 (250 - 1,540)	655	2.15	3.45	5.60 (1.1 - 7.2)	5.45	1,230 (210 - 1,720)	
	2.5 + 2.5	2.40	2.40	4.80 (1.5 - 5.2)	6.10	1,310 (250 - 1,520)	655	2.80	2.80	5.60 (1.1 - 7.2)	5.55	1,250 (210 - 1,740)	
	2.5 + 2.8	2.25	2.55	4.80 (1.5 - 5.2)	6.10	1,310 (250 - 1,520)	655	2.65	2.95	5.60 (1.1 - 7.2)	5.55	1,250 (210 - 1,740)	
	2.5 + 3.2	2.20	2.80	5.00 (1.5 - 5.3)	6.95	1,490 (250 - 1,540)	745	2.45	3.15	5.60 (1.1 - 7.2)	5.45	1,230 (210 - 1,720)	
	2.8 + 2.8	2.40	2.40	4.80 (1.5 - 5.2)	6.10	1,310 (250 - 1,520)	655	2.80	2.80	5.60 (1.1 - 7.2)	5.55	1,250 (210 - 1,740)	
	2.8 + 3.2	2.35	2.65	5.00 (1.5 - 5.3)	6.95	1,490 (250 - 1,540)	745	2.60	3.00	5.60 (1.1 - 7.2)	5.45	1,230 (210 - 1,720)	
	3.2 + 3.2	2.60	2.60	5.20 (1.5 - 5.4)	7.10	1,520 (250 - 1,580)	760	2.80	2.80	5.60 (1.1 - 7.2)	5.35	1,210 (210 - 1,700)	

\*The specifications are different from other type of indoor units when 2.8kW duct type or floor/ceiling type is connected to CU-2E18LBE.

CU-4E23LBE

# A.E.C. : Annual Energy Consumption

Indoor Units Capacity		COOLING OPERATION								HEATING OPERATION						
		Cooling Capacity					Running Current	Power Input	A.E.C.#	Heating Capacity					Running Current	Power Input
		Room A	Room B	Room C	Room D	Total				Room A	Room B	Room C	Room D	Total		
		kW	kW	kW	kW	kW				A	W	kW	kW	kW		
1 room	2.00	2.00	-	-	-	2.00 (1.8 - 2.9)	2.5	500 (340 - 810)	250	3.20	-	-	-	3.20 (1.2 - 4.1)	3.7	740 (300 - 1230)
	2.50	2.50	-	-	-	2.50 (1.8 - 2.9)	3.2	630 (340 - 810)	315	3.60	-	-	-	3.60 (1.2 - 4.3)	4.7	940 (300 - 1230)
	2.80	2.80	-	-	-	2.80 (1.8 - 2.9)	3.5	700 (340 - 810)	350	4.00	-	-	-	4.00 (1.2 - 4.3)	5.2	1050 (300 - 1230)
	3.20	3.20	-	-	-	3.20 (1.8 - 3.8)	3.9	800 (340 - 1360)	400	4.50	-	-	-	4.50 (1.2 - 5.8)	6.0	1230 (300 - 2100)
	4.00	4.00	-	-	-	4.00 (1.8 - 4.3)	5.8	1240 (340 - 1990)	620	5.60	-	-	-	5.60 (1.2 - 6.8)	8.0	1720 (300 - 2930)
	5.00	5.00	-	-	-	5.00 (1.9 - 5.7)	7.2	1550 (340 - 2130)	775	6.80	-	-	-	6.80 (1.2 - 6.9)	9.7	2100 (300 - 2520)
	6.00	6.00	-	-	-	6.00 (1.9 - 6.2)	9.2	2030 (340 - 2330)	1015	8.50	-	-	-	8.50 (1.3 - 9.0)	11.1	2400 (620 - 2530)
2 rooms	2.0 + 2.0	2.00	2.00	-	-	4.00 (1.9 - 6.4)	4.5	1010 (340 - 2150)	505	2.90	2.90	-	-	5.80 (2.7 - 9.8)	6.7	1450 (610 - 2800)
	2.0 + 2.5	2.00	2.50	-	-	4.50 (1.9 - 6.4)	5.7	1270 (340 - 2150)	635	2.71	3.39	-	-	6.10 (2.7 - 9.8)	7.6	1640 (610 - 2800)
	2.0 + 2.8	2.00	2.80	-	-	4.80 (1.9 - 6.4)	6.1	1350 (340 - 2150)	675	2.67	3.73	-	-	6.40 (2.7 - 9.8)	8.0	1720 (610 - 2800)
	2.0 + 3.2	2.00	3.20	-	-	5.20 (1.9 - 6.9)	6.8	1510 (340 - 2410)	755	2.69	4.31	-	-	7.00 (2.7 - 9.9)	8.5	1840 (590 - 2800)
	2.0 + 4.0	2.00	4.00	-	-	6.00 (1.9 - 6.9)	8.1	1810 (330 - 2410)	905	2.73	5.47	-	-	8.20 (2.7 - 9.9)	10.2	2210 (590 - 2800)
	2.0 + 5.0	1.94	4.86	-	-	6.80 (2.0 - 7.5)	8.1	1800 (320 - 2440)	900	2.46	6.14	-	-	8.60 (2.8 - 10.2)	9.9	2140 (530 - 2760)
	2.0 + 6.0	1.70	5.10	-	-	6.80 (2.0 - 7.5)	8.1	1800 (320 - 2440)	900	2.15	6.45	-	-	8.60 (2.8 - 10.2)	10.6	2290 (530 - 2760)
	2.5 + 2.5	2.50	2.50	-	-	5.00 (1.9 - 6.8)	6.2	1380 (340 - 2400)	690	3.20	3.20	-	-	6.40 (2.7 - 9.8)	7.8	1700 (610 - 2800)
	2.5 + 2.8	2.50	2.80	-	-	5.30 (1.9 - 6.8)	6.6	1470 (340 - 2400)	735	3.30	3.70	-	-	7.00 (2.7 - 9.8)	8.6	1860 (610 - 2800)
	2.5 + 3.2	2.50	3.20	-	-	5.70 (1.9 - 6.9)	7.4	1660 (340 - 2410)	830	3.55	4.55	-	-	8.10 (2.7 - 9.9)	10.0	2170 (590 - 2800)
	2.5 + 4.0	2.50	4.00	-	-	6.50 (1.9 - 6.9)	9.2	2070 (330 - 2410)	1035	3.31	5.29	-	-	8.60 (2.7 - 9.9)	10.7	2320 (590 - 2800)
	2.5 + 5.0	2.27	4.53	-	-	6.80 (1.9 - 7.5)	8.8	1970 (320 - 2440)	985	2.87	5.73	-	-	8.60 (2.8 - 10.2)	9.9	2140 (530 - 2760)
	2.5 + 6.0	2.00	4.80	-	-	6.80 (1.9 - 7.5)	8.8	1970 (320 - 2440)	985	2.53	6.07	-	-	8.60 (2.8 - 10.2)	9.9	2140 (530 - 2760)
	2.8 + 2.8	2.80	2.80	-	-	5.60 (1.9 - 6.8)	6.9	1550 (340 - 2400)	775	4.00	4.00	-	-	8.00 (2.7 - 9.8)	9.8	2120 (610 - 2800)
	2.8 + 3.2	2.80	3.20	-	-	6.00 (1.9 - 6.9)	7.8	1750 (340 - 2410)	875	3.97	4.53	-	-	8.50 (2.7 - 9.9)	10.5	2280 (590 - 2800)
	2.8 + 4.0	2.80	4.00	-	-	6.80 (1.9 - 6.9)	9.7	2170 (330 - 2410)	1085	3.54	5.06	-	-	8.60 (2.7 - 9.9)	10.7	2320 (590 - 2800)
	2.8 + 5.0	2.44	4.36	-	-	6.80 (1.9 - 7.5)	8.8	1970 (320 - 2440)	985	3.09	5.51	-	-	8.60 (2.8 - 10.2)	9.9	2140 (530 - 2760)
	2.8 + 6.0	2.16	4.64	-	-	6.80 (1.9 - 7.5)	8.8	1970 (320 - 2440)	985	2.74	5.86	-	-	8.60 (2.8 - 10.2)	9.9	2140 (530 - 2760)
	3.2 + 3.2	3.20	3.20	-	-	6.40 (1.9 - 7.0)	8.8	1960 (330 - 2420)	980	4.30	4.30	-	-	8.60 (2.8 - 10.0)	10.5	2270 (580 - 2800)
	3.2 + 4.0	3.02	3.78	-	-	6.80 (1.9 - 7.1)	9.3	2070 (330 - 2420)	1035	3.82	4.78	-	-	8.60 (2.8 - 10.0)	10.5	2270 (570 - 2800)
	3.2 + 5.0	2.65	4.15	-	-	6.80 (2.0 - 7.6)	8.5	1890 (320 - 2450)	945	3.36	5.24	-	-	8.60 (2.8 - 10.3)	9.7	2090 (520 - 2740)
	3.2 + 6.0	2.37	4.43	-	-	6.80 (2.0 - 7.6)	8.5	1890 (320 - 2450)	945	2.99	5.61	-	-	8.60 (2.8 - 10.3)	9.7	2090 (520 - 2740)
	4.0 + 4.0	3.40	3.40	-	-	6.80 (1.9 - 7.1)	10.2	2270 (330 - 2420)	1135	4.30	4.30	-	-	8.60 (2.8 - 10.0)	10.5	2260 (560 - 2800)
	4.0 + 5.0	3.02	3.78	-	-	6.80 (2.0 - 7.6)	8.5	1890 (320 - 2450)	945	3.82	4.78	-	-	8.60 (2.8 - 10.3)	9.6	2080 (510 - 2740)
	4.0 + 6.0	2.72	4.08	-	-	6.80 (2.0 - 7.6)	8.5	1890 (320 - 2450)	945	3.44	5.16	-	-	8.60 (2.8 - 10.3)	9.6	2080 (510 - 2740)
	5.0 + 5.0	3.40	3.40	-	-	6.80 (2.1 - 8.1)	8.0	1780 (310 - 2460)	890	4.30	4.30	-	-	8.60 (2.8 - 10.5)	9.1	1960 (480 - 2650)
	5.0 + 6.0	3.09	3.71	-	-	6.80 (2.1 - 8.1)	8.0	1780 (310 - 2460)	890	3.91	4.69	-	-	8.60 (2.8 - 10.5)	9.1	1960 (480 - 2650)

CU-4E23LBE

# A.E.C. : Annual Energy Consumption

Indoor Units Capacity		COOLING OPERATION							HEATING OPERATION							
		Cooling Capacity				Running Current	Power Input	A.E.C.#	Heating Capacity				Running Current	Power Input		
		Room A	Room B	Room C	Room D				Total	Room A	Room B	Room C			Room D	Total
		kW	kW	kW	kW				kW	A	W	kW			kW	kW
3 rooms	2.0 + 2.0 + 2.0	2.00	2.00	2.00	-	6.00 (1.9 - 8.0)	7.4	1650 (340 - 2460)	825	2.86	2.86	2.86	-	8.58 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.0 + 2.0 + 2.5	2.00	2.00	2.50	-	6.50 (1.9 - 8.0)	8.2	1830 (340 - 2460)	915	2.65	2.65	3.30	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.0 + 2.0 + 2.8	2.00	2.00	2.80	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.53	2.53	3.54	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.0 + 2.0 + 3.2	1.89	1.89	3.02	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.39	2.39	3.82	-	8.60 (3.3 - 10.4)	9.6	2070 (590 - 2820)
	2.0 + 2.0 + 4.0	1.70	1.70	3.40	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.15	2.15	4.30	-	8.60 (3.3 - 10.5)	9.5	2060 (590 - 2810)
	2.0 + 2.0 + 5.0	1.51	1.51	3.78	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.91	1.91	4.78	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.0 + 2.0 + 6.0	1.36	1.36	4.08	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.72	1.72	5.16	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.0 + 2.5 + 2.5	1.94	2.43	2.43	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.46	3.07	3.07	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.0 + 2.5 + 2.8	1.86	2.33	2.61	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.35	2.95	3.30	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.0 + 2.5 + 3.2	1.76	2.21	2.83	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.23	2.79	3.58	-	8.60 (3.3 - 10.4)	9.6	2070 (590 - 2820)
	2.0 + 2.5 + 4.0	1.60	2.00	3.20	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.02	2.53	4.05	-	8.60 (3.3 - 10.5)	9.5	2060 (590 - 2810)
	2.0 + 2.5 + 5.0	1.43	1.79	3.58	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.81	2.26	4.53	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.0 + 2.5 + 6.0	1.29	1.62	3.89	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.64	2.05	4.91	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.0 + 2.8 + 2.8	1.78	2.51	2.51	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.26	3.17	3.17	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.0 + 2.8 + 3.2	1.70	2.38	2.72	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.15	3.01	3.44	-	8.60 (3.3 - 10.4)	9.6	2070 (590 - 2820)
	2.0 + 2.8 + 4.0	1.55	2.16	3.09	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	1.95	2.74	3.91	-	8.60 (3.3 - 10.5)	9.5	2060 (590 - 2810)
	2.0 + 2.8 + 5.0	1.39	1.94	3.47	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.75	2.46	4.39	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.0 + 2.8 + 6.0	1.26	1.76	3.78	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.59	2.23	4.78	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.0 + 3.2 + 3.2	1.62	2.59	2.59	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.04	3.28	3.28	-	8.60 (3.3 - 10.5)	9.5	2050 (590 - 2800)
	2.0 + 3.2 + 4.0	1.47	2.37	2.96	-	6.80 (1.9 - 8.2)	8.3	1860 (340 - 2460)	930	1.87	2.99	3.74	-	8.60 (3.3 - 10.5)	9.4	2040 (580 - 2790)
	2.0 + 3.2 + 5.0	1.33	2.13	3.34	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.68	2.70	4.22	-	8.60 (3.2 - 10.6)	8.8	1910 (570 - 2680)
	2.0 + 4.0 + 4.0	1.36	2.72	2.72	-	6.80 (1.9 - 8.2)	8.2	1820 (340 - 2460)	910	1.72	3.44	3.44	-	8.60 (3.3 - 10.5)	9.4	2030 (580 - 2780)
	2.0 + 4.0 + 5.0	1.24	2.47	3.09	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.56	3.13	3.91	-	8.60 (3.2 - 10.6)	8.8	1910 (570 - 2680)
	2.5 + 2.5 + 2.5	2.26	2.26	2.26	-	6.78 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.86	2.86	2.86	-	8.58 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.5 + 2.5 + 2.8	2.18	2.18	2.44	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.76	3.08	3.08	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.5 + 2.5 + 3.2	2.07	2.07	2.66	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.62	2.62	3.36	-	8.60 (3.3 - 10.4)	9.6	2070 (590 - 2820)
	2.5 + 2.5 + 4.0	1.89	1.89	3.02	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.39	2.39	3.82	-	8.60 (3.3 - 10.5)	9.5	2060 (590 - 2810)
	2.5 + 2.5 + 5.0	1.70	1.70	3.40	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	2.15	2.15	4.30	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.5 + 2.5 + 6.0	1.55	1.55	3.70	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	1.95	1.95	4.70	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)
	2.5 + 2.8 + 2.8	2.10	2.35	2.35	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.66	2.97	2.97	-	8.60 (3.3 - 10.4)	9.7	2090 (600 - 2840)
	2.5 + 2.8 + 3.2	2.00	2.24	2.56	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.53	2.83	3.24	-	8.60 (3.3 - 10.4)	9.6	2070 (590 - 2820)
	2.5 + 2.8 + 4.0	1.83	2.05	2.92	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.31	2.59	3.70	-	8.60 (3.3 - 10.5)	9.5	2060 (590 - 2810)
2.5 + 2.8 + 5.0	1.65	1.85	3.30	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	2.09	2.34	4.17	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)	
2.5 + 3.2 + 3.2	1.92	2.44	2.44	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.42	3.09	3.09	-	8.60 (3.3 - 10.5)	9.5	2050 (590 - 2800)	
2.5 + 3.2 + 4.0	1.75	2.24	2.81	-	6.80 (1.9 - 8.2)	8.3	1860 (340 - 2460)	930	2.21	2.84	3.55	-	8.60 (3.3 - 10.5)	9.4	2040 (580 - 2790)	
2.5 + 3.2 + 5.0	1.59	2.03	3.18	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	2.01	2.57	4.02	-	8.60 (3.2 - 10.6)	8.8	1910 (570 - 2680)	
2.5 + 4.0 + 4.0	1.62	2.59	2.59	-	6.80 (1.9 - 8.2)	8.2	1820 (340 - 2460)	910	2.04	3.28	3.28	-	8.60 (3.3 - 10.5)	9.4	2030 (580 - 2780)	
2.8 + 2.8 + 2.8	2.26	2.26	2.26	-	6.78 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.86	2.86	2.86	-	8.58 (3.3 - 10.4)	9.7	2090 (600 - 2840)	
2.8 + 2.8 + 3.2	2.16	2.16	2.48	-	6.80 (1.9 - 8.0)	8.6	1910 (340 - 2460)	955	2.74	2.74	3.12	-	8.60 (3.3 - 10.4)	9.6	2070 (590 - 2820)	
2.8 + 2.8 + 4.0	1.98	1.98	2.84	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.51	2.51	3.58	-	8.60 (3.3 - 10.5)	9.5	2060 (590 - 2810)	
2.8 + 2.8 + 5.0	1.80	1.80	3.20	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	2.27	2.27	4.06	-	8.60 (3.2 - 10.6)	8.9	1930 (570 - 2710)	
2.8 + 3.2 + 3.2	2.06	2.37	2.37	-	6.80 (1.9 - 8.1)	8.3	1860 (340 - 2460)	930	2.62	2.99	2.99	-	8.60 (3.3 - 10.5)	9.5	2050 (590 - 2800)	
2.8 + 3.2 + 4.0	1.90	2.18	2.72	-	6.80 (1.9 - 8.2)	8.3	1860 (340 - 2460)	930	2.41	2.75	3.44	-	8.60 (3.3 - 10.5)	9.4	2040 (580 - 2790)	
2.8 + 3.2 + 5.0	1.73	1.98	3.09	-	6.80 (2.0 - 8.5)	7.8	1730 (340 - 2460)	865	2.19	2.50	3.91	-	8.60 (3.2 - 10.6)	8.8	1910 (570 - 2680)	
2.8 + 4.0 + 4.0	1.76	2.52	2.52	-	6.80 (1.9 - 8.2)	8.2	1820 (340 - 2460)	910	2.22	3.19	3.19	-	8.60 (3.3 - 10.5)	9.4	2030 (580 - 2780)	
3.2 + 3.2 + 3.2	2.26	2.26	2.26	-	6.78 (1.9 - 8.2)	8.2	1820 (340 - 2460)	910	2.86	2.86	2.86	-	8.58 (3.3 - 10.5)	9.2	1990 (580 - 2770)	
3.2 + 3.2 + 4.0	2.09	2.09	2.62	-	6.80 (1.9 - 8.2)	8.2	1820 (340 - 2460)	910	2.65	2.65	3.30	-	8.60 (3.3 - 10.5)	9.2	1980 (580 - 2760)	
4 rooms	2.0 + 2.0 + 2.0 + 2.0	1.70	1.70	1.70	1.70	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	2.15	2.15	2.15	2.15	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.0 + 2.0 + 2.5	1.60	1.60	1.60	2.00	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	2.02	2.02	2.02	2.54	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.0 + 2.0 + 2.8	1.55	1.55	1.55	2.15	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	1.95	1.95	1.95	2.75	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.0 + 2.0 + 3.2	1.48	1.48	1.48	2.36	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.87	1.87	1.87	2.99	8.60 (3.0 - 10.6)	8.6	1850 (580 - 2600)
	2.0 + 2.0 + 2.0 + 4.0	1.36	1.36	1.36	2.72	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.72	1.72	1.72	3.44	8.60 (3.0 - 10.6)	8.5	1840 (590 - 2590)
	2.0 + 2.0 + 2.0 + 5.0	1.24	1.24	1.24	3.08	6.80 (1.9 - 8.8)	7.5	1680 (340 - 2470)	840	1.56	1.56	1.56	3.92	8.60 (3.0 - 10.6)	8.6	1850 (580 - 2600)
	2.0 + 2.0 + 2.5 + 2.5	1.51	1.51	1.89	1.89	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	1.91	1.91	2.39	2.39	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.0 + 2.5 + 2.8	1.46	1.46	1.83	2.05	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	1.85	1.85	2.31	2.59	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.0 + 2.5 + 3.2	1.40	1.40	1.75	2.25	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.77	1.77	2.22	2.84	8.60 (3.0 - 10.6)	8.6	1850 (580 - 2600)
	2.0 + 2.0 + 2.5 + 4.0	1.30	1.30	1.61	2.59	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.64	1.64	2.04	3.28	8.60 (3.0 - 10.6)	8.5	1840 (590 - 2590)
	2.0 + 2.0 + 2.8 + 2.8	1.42	1.42	1.98	1.98	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	1.79	1.79	2.51	2.51	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.0 + 2.8 + 3.2	1.36	1.36	1.90	2.18	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.72	1.72	2.41	2.75	8.60 (3.0 - 10.6)	8.6	1850 (580 - 2600)
	2.0 + 2.0 + 2.8 + 4.0	1.26	1.26	1.76	2.52	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.59	1.59	2.23	3.19	8.60 (3.0 - 10.6)	8.5	1840 (590 - 2590)
	2.0 + 2.0 + 3.2 + 3.2	1.31	1.31	2.09	2.09	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2430)	825	1.65	1.65	2.65	2.65	8.60 (3.0 - 10.6)	8.5	1830 (590 - 2570)
	2.0 + 2.5 + 2.5 + 2.5	1.43	1.79	1.79	1.79	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	1.82	2.26	2.26	2.26	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.5 + 2.5 + 2.8	1.39	1.73	1.73	1.95	6.80 (1.9 - 8.7)	7.6	1690 (340 - 2460)	845	1.76	2.19	2.19	2.46	8.60 (3.1 - 10.6)	8.6	1870 (580 - 2620)
	2.0 + 2.5 + 2.5 + 3.2	1.33	1.67	1.67	2.13	6.80 (1.9 - 8.8)	7.4	1650 (340 - 2470)	825	1.68	2.11	2.11	2.70	8.60 (3.0 - 10.6)	8.6	1850 (580 - 2600)
	2.0 + 2.5 + 2.5 + 4.0	1														

SPECIFICATIONS



Multi Inverter Split Type

CU-4E27PBE

# A.E.C. : Annual Energy Consumption

Indoor Units Capacity		COOLING OPERATION							HEATING OPERATION							
		Cooling Capacity				Running Current	Power Input	A.E.C. #	Heating Capacity				Running Current	Power Input		
		Room A	Room B	Room C	Room D				Total	Room A	Room B	Room C			Room D	Total
		kW	kW	kW	kW				kW	kW	kW	kW			kW	kW
1 room	2.0	2.00	-	-	-	2.00 (1.8 - 2.9)	2.10	440 (380 - 620)	220	3.20	-	-	-	3.20 (1.2 - 4.1)	3.85	840 (370 - 1830)
	2.5	2.50	-	-	-	2.50 (1.8 - 2.9)	2.60	550 (380 - 900)	275	3.60	-	-	-	3.60 (1.2 - 4.3)	4.85	1090 (370 - 1900)
	2.8	2.80	-	-	-	2.80 (1.8 - 2.9)	2.95	620 (380 - 900)	310	4.00	-	-	-	4.00 (1.2 - 4.3)	5.40	1210 (370 - 1900)
	3.2	3.20	-	-	-	3.20 (1.8 - 3.8)	3.40	720 (380 - 1090)	360	4.50	-	-	-	4.50 (1.2 - 5.8)	5.85	1310 (370 - 2290)
	4.0	4.00	-	-	-	4.00 (1.8 - 4.3)	4.60	1030 (380 - 1390)	515	5.60	-	-	-	5.60 (1.2 - 6.8)	8.35	1900 (370 - 3560)
	5.0	5.00	-	-	-	5.00 (1.9 - 5.7)	7.15	1610 (400 - 1800)	805	6.80	-	-	-	6.80 (1.2 - 6.9)	12.40	2840 (430 - 3560)
	6.0	6.00	-	-	-	6.00 (1.9 - 6.2)	-	-	-	8.50	-	-	-	8.50 (1.3 - 9.0)	-	-
2 rooms	2.0+2.0	2.00	2.00	-	-	4.00 (2.4 - 5.8)	3.95	890 (400 - 1260)	445	2.90	2.90	-	-	5.80 (2.2 - 8.2)	6.50	1480 (400 - 3550)
	2.0+2.5	2.00	2.50	-	-	4.50 (2.4 - 5.8)	4.90	1110 (400 - 1880)	555	2.71	3.39	-	-	6.10 (2.2 - 8.2)	7.55	1700 (420 - 3510)
	2.0+2.8	2.00	2.80	-	-	4.80 (2.4 - 5.8)	5.20	1180 (400 - 1880)	590	2.71	3.79	-	-	6.50 (2.2 - 8.2)	7.55	1700 (420 - 3510)
	2.0+3.2	2.00	3.20	-	-	5.20 (2.4 - 5.8)	5.80	1320 (400 - 2790)	660	2.65	4.25	-	-	6.90 (2.2 - 8.6)	7.65	1740 (420 - 3490)
	2.0+4.0	2.00	4.00	-	-	6.00 (2.4 - 6.7)	7.75	1760 (400 - 2790)	880	2.63	5.27	-	-	7.90 (2.2 - 9.8)	9.05	2060 (440 - 3440)
	2.0+5.0	2.00	5.00	-	-	7.00 (2.4 - 8.1)	11.00	2500 (460 - 2800)	1250	2.57	6.43	-	-	9.00 (2.2 - 10.0)	9.90	2260 (530 - 3400)
	2.0+6.0	2.00	6.00	-	-	8.00 (2.4 - 8.5)	-	-	-	2.35	7.05	-	-	9.40 (2.2 - 10.0)	-	-
	2.5+2.5	2.50	2.50	-	-	5.00 (2.4 - 5.8)	6.10	1380 (400 - 2780)	690	3.25	3.25	-	-	6.50 (2.2 - 8.6)	8.15	1860 (440 - 3480)
	2.5+2.8	2.50	2.80	-	-	5.30 (2.4 - 5.8)	6.50	1470 (400 - 2780)	735	3.21	3.59	-	-	6.80 (2.2 - 8.6)	8.65	1970 (440 - 3480)
	2.5+3.2	2.50	3.20	-	-	5.70 (2.4 - 6.7)	7.15	1620 (400 - 2790)	810	3.20	4.10	-	-	7.30 (2.2 - 9.8)	8.70	1980 (440 - 3460)
	2.5+4.0	2.50	4.00	-	-	6.50 (2.4 - 7.2)	9.60	2180 (400 - 2790)	1090	3.19	5.11	-	-	8.30 (2.2 - 10.0)	9.65	2175 (530 - 3390)
	2.5+5.0	2.50	5.00	-	-	7.50 (2.4 - 8.5)	11.50	2610 (460 - 2800)	1305	3.13	6.27	-	-	9.40 (2.2 - 10.0)	10.50	2390 (530 - 3370)
	2.5+6.0	2.35	5.65	-	-	8.00 (2.5 - 8.5)	-	-	-	2.76	6.64	-	-	9.40 (2.2 - 10.0)	-	-
	2.8+2.8	2.80	2.80	-	-	5.60 (2.4 - 5.8)	6.85	1550 (400 - 2780)	775	3.60	3.60	-	-	7.20 (2.2 - 8.6)	8.85	2020 (440 - 3480)
	2.8+3.2	2.80	3.20	-	-	6.00 (2.4 - 6.7)	7.55	1700 (400 - 2790)	850	3.59	4.11	-	-	7.70 (2.2 - 9.8)	8.70	1980 (440 - 3460)
	2.8+4.0	2.80	4.00	-	-	6.80 (2.4 - 7.2)	10.00	2280 (400 - 2790)	1140	3.54	5.06	-	-	8.60 (2.2 - 10.0)	9.65	2175 (530 - 3390)
	2.8+5.0	2.80	5.00	-	-	7.80 (2.4 - 8.5)	11.50	2610 (460 - 2800)	1305	3.37	6.03	-	-	9.40 (2.2 - 10.0)	10.50	2390 (530 - 3370)
	2.8+6.0	2.55	5.45	-	-	8.00 (2.5 - 8.5)	-	-	-	2.99	6.41	-	-	9.40 (2.2 - 10.3)	-	-
	3.2+3.2	3.20	3.20	-	-	6.40 (2.4 - 7.2)	8.15	1860 (400 - 2810)	930	4.05	4.05	-	-	8.10 (2.2 - 10.0)	9.30	2110 (470 - 3390)
	3.2+4.0	3.20	4.00	-	-	7.20 (2.4 - 8.1)	10.60	2410 (460 - 2810)	1205	4.04	5.06	-	-	9.10 (2.2 - 10.0)	9.85	2230 (530 - 3340)
	3.2+5.0	3.12	4.88	-	-	8.00 (2.5 - 8.5)	12.30	2820 (460 - 2880)	1410	3.67	5.73	-	-	9.40 (2.2 - 10.0)	10.50	2390 (530 - 3300)
	3.2+6.0	2.78	5.22	-	-	8.00 (2.5 - 8.5)	-	-	-	3.27	6.13	-	-	9.40 (2.2 - 10.3)	-	-
	4.0+4.0	4.00	4.00	-	-	8.00 (2.5 - 8.5)	11.50	2620 (460 - 2810)	1310	4.70	4.70	-	-	9.40 (2.2 - 10.0)	10.30	2360 (530 - 3320)
	4.0+5.0	3.56	4.44	-	-	8.00 (2.5 - 8.5)	-	-	-	4.18	5.22	-	-	9.40 (2.2 - 10.3)	10.90	2480 (530 - 3300)
	4.0+6.0	3.20	4.80	-	-	8.00 (2.5 - 8.6)	-	-	-	3.76	5.64	-	-	9.40 (2.2 - 10.3)	-	-
	5.0+5.0	4.00	4.00	-	-	8.00 (2.5 - 8.6)	12.50	2860 (480 - 2870)	1430	4.70	4.70	-	-	9.40 (2.2 - 10.3)	-	-
	5.0+6.0	3.64	4.36	-	-	8.00 (2.5 - 8.6)	-	-	-	4.27	5.13	-	-	9.40 (2.2 - 10.5)	-	-
	6.0+6.0	4.00	4.00	-	-	8.00 (2.5 - 8.6)	-	-	-	4.70	4.70	-	-	9.40 (2.2 - 10.5)	-	-
3 rooms	2.0+2.0+2.0	2.00	2.00	2.00	-	6.00 (3.0 - 8.5)	6.65	1510 (410 - 2490)	755	2.87	2.87	2.87	-	8.61 (3.2 - 10.4)	8.80	2470 (590 - 3290)
	2.0+2.0+2.5	2.00	2.00	2.50	-	6.50 (3.0 - 8.5)	7.75	1760 (460 - 2850)	880	2.77	2.77	3.46	-	9.00 (3.2 - 10.4)	8.85	1990 (500 - 3250)
	2.0+2.0+2.8	2.00	2.00	2.80	-	6.80 (3.0 - 8.5)	8.10	1840 (460 - 2850)	920	2.76	2.76	3.88	-	9.40 (3.2 - 10.4)	8.85	2010 (510 - 3220)
	2.0+2.0+3.2	2.00	2.00	3.20	-	7.20 (3.0 - 8.5)	8.70	1980 (460 - 2790)	990	2.61	2.61	4.18	-	9.40 (3.2 - 10.4)	8.95	2010 (510 - 3220)
	2.0+2.0+4.0	2.00	2.00	4.00	-	8.00 (3.0 - 8.6)	10.30	2330 (460 - 2830)	1165	2.35	2.35	4.70	-	9.40 (3.2 - 10.4)	9.50	2030 (510 - 3220)
	2.0+2.0+5.0	1.78	1.78	4.44	-	8.00 (3.0 - 8.6)	10.80	2460 (490 - 2820)	1230	2.09	2.09	5.22	-	9.40 (3.2 - 10.5)	9.30	2150 (510 - 3180)
	2.0+2.0+6.0	1.60	1.60	4.80	-	8.00 (3.0 - 8.8)	-	-	-	1.88	1.88	5.64	-	9.40 (3.2 - 10.5)	-	-
	2.0+2.5+2.5	2.00	2.50	2.50	-	7.00 (3.0 - 8.5)	9.40	2140 (460 - 2790)	1070	2.68	3.36	3.36	-	9.40 (3.2 - 10.4)	9.20	2120 (510 - 3180)
	2.0+2.5+2.8	2.00	2.50	2.80	-	7.30 (3.0 - 8.5)	9.40	2140 (460 - 2790)	1070	2.57	3.22	3.61	-	9.40 (3.2 - 10.4)	9.20	2090 (510 - 3190)
	2.0+2.5+3.2	2.00	2.50	3.20	-	7.70 (3.0 - 8.5)	9.85	2240 (460 - 2840)	1120	2.44	3.05	3.91	-	9.40 (3.2 - 10.4)	9.30	2090 (510 - 3190)
	2.0+2.5+4.0	1.88	2.35	3.77	-	8.00 (3.0 - 8.6)	11.00	2510 (490 - 2800)	1255	2.21	2.76	4.43	-	9.40 (3.2 - 10.4)	9.50	2110 (510 - 3180)
	2.0+2.5+5.0	1.68	2.11	4.21	-	8.00 (3.0 - 8.6)	10.80	2460 (490 - 2800)	1230	1.98	2.47	4.95	-	9.40 (3.2 - 10.5)	9.15	2160 (510 - 3140)
	2.0+2.5+6.0	1.52	1.90	4.58	-	8.00 (3.0 - 8.8)	-	-	-	1.79	2.24	5.37	-	9.40 (3.2 - 10.5)	-	-
	2.0+2.8+2.8	2.00	2.80	2.80	-	7.60 (3.0 - 8.5)	9.40	2140 (460 - 2790)	1070	2.48	3.46	3.46	-	9.40 (3.2 - 10.4)	9.20	2080 (560 - 3150)
	2.0+2.8+3.2	2.00	2.80	3.20	-	8.00 (3.0 - 8.6)	9.85	2240 (460 - 2840)	1120	2.35	3.29	3.76	-	9.40 (3.2 - 10.4)	9.30	2090 (510 - 3190)
	2.0+2.8+4.0	1.81	2.55	3.64	-	8.00 (3.0 - 8.6)	11.00	2510 (490 - 2800)	1255	2.14	2.99	4.27	-	9.40 (3.2 - 10.5)	9.50	2110 (510 - 3180)
	2.0+2.8+5.0	1.63	2.29	4.08	-	8.00 (3.0 - 8.6)	10.80	2460 (490 - 2800)	1230	1.91	2.69	4.80	-	9.40 (3.2 - 10.5)	9.15	2160 (510 - 3140)
	2.0+2.8+6.0	1.48	2.07	4.45	-	8.00 (3.0 - 8.8)	-	-	-	1.74	2.44	5.22	-	9.40 (3.2 - 10.5)	-	-
	2.0+3.2+3.2	1.90	3.05	3.05	-	8.00 (3.0 - 8.6)	10.10	2290 (460 - 2810)	1145	2.24	3.58	3.58	-	9.40 (3.2 - 10.4)	9.40	2080 (560 - 3150)
	2.0+3.2+4.0	1.74	2.78	3.48	-	8.00 (3.0 - 8.6)	10.40	2380 (490 - 2840)	1190	2.04	3.27	4.09	-	9.40 (3.2 - 10.5)	9.50	2130 (500 - 3180)
	2.0+3.2+5.0	1.57	2.51	3.92	-	8.00 (3.0 - 8.8)	10.90	2470 (490 - 2840)	1235	1.84	2.95	4.61	-	9.40 (3.2 - 10.5)	9.55	2150 (500 - 3140)
	2.0+3.2+6.0	1.42	2.29	4.29	-	8.00 (3.0 - 8.8)	-	-	-	1.67	2.69	5.04	-	9.40 (3.2 - 10.6)	-	-
	2.0+4.0+4.0	1.60	3.20	3.20	-	8.00 (3.0 - 8.8)	10.40	2380 (490 - 2810)	1190	1.88	3.76	3.76	-	9.40 (3.2 - 10.5)	9.30	2170 (620 - 3140)
	2.0+4.0+5.0	1.45	2.91	3.64	-	8.00 (3.0 - 8.8)	10.90	2470 (490 - 2810)	1235	1.71	3.42	4.27	-	9.40 (3.2 - 10.5)	9.30	2110 (620 - 3110)
	2.0+4.0+6.0	1.33	2.67	4.00	-	8.00 (3.0 - 9.0)	-	-	-	1.57	3.13	4.70	-	9.40 (3.2 - 10.6)	-	-
	2.0+5.0+5.0	1.34	3.33	3.33	-	8.00 (3.0 - 9.0)	10.70	2430 (490 - 2830)	1215	1.56	3.92	3.92	-	9.40 (3.2 - 10.6)	9.55	2120 (660 - 3110)
	2.0+5.0+6.0	1.23	3.08	3.69	-	8.00 (3.0 - 9.0)	-	-	-	1.44	3.62	4.34	-	9.40 (3.2 - 10.6)	-	-
	2.5+2.5+2.5	2.50	2.50	2.50	-	7.50 (3.0 - 8.5)	10.80	2450 (460 - 2820)	1225	3.13	3.13	3.13	-	9.39 (3.2 - 10.4)	9.55	2170 (700 - 3120)
	2.5+2.5+2.8	2.50	2.50	2.80	-	7.80 (3.0 - 8.5)	10.80	2450 (460 - 2820)	1225	3.01	3.01					

FEATURES COMPARISON

Split Type			Deluxe		Floor Console	Deluxe		Floor Console	Floor or Ceiling	Cassette (4-way)	Hide-Away	
			Single Inverter Split			Multi Inverter Split						
			CS-E7PKR CS-E9PKR CS-E12PKR CS-E15PKR	CS-E18PKR CS-E21PKR CS-E24PKR CS-E28PKR	CS-E9GFEW CS-E12GFEW CS-E18GFEW	CS-E7NKEW CS-E9NKEW CS-E12NKEW CS-E15NKEW	CS-E18NKEW CS-E21NKEW	CS-E9GFEW CS-E12GFEW CS-E18GFEW	CS-E15DTEW CS-E18DTEW	CS-E10KB4EA CS-E15HB4EA CS-E18HB4EA CS-E21JB4EA	CS-E10KD3EA CS-E15JD3EA CS-E18JD3EA	
Cleaner Air		nanoe-G										
		nanoe-G <b>NEW</b>										
		Anti-Bacterial Filter										
		Odour-Removing Function										
		Removable, Washable Panel										
Comfort		ECONAVI										
		Temperature Wave										
		AUTOCOMFORT										
		Inverter Control										
		Mild Dry Cooling										
		Indoor Quiet Mode										
		Outdoor (E15)										
		Powerful Mode										
		Heating Operation Limit	-15°C ~ 24°C (Possible)	-15°C ~ 24°C (Possible)	-15°C ~ 24°C (Possible)	-15°C ~ 24°C (ZE18) <sup>*1</sup> -20°C ~ 24°C (4E23) <sup>*2</sup> -20°C ~ 24°C (4E27) <sup>*2</sup>	-20°C ~ 24°C (4E23) <sup>*2</sup> -20°C ~ 24°C (4E27) <sup>*2</sup>	-15°C ~ 24°C (ZE18) <sup>*1</sup> -20°C ~ 24°C (4E23) <sup>*2</sup> -20°C ~ 24°C (4E27) <sup>*2</sup>	-20°C ~ 24°C (4E23) <sup>*2</sup> -20°C ~ 24°C (4E27) <sup>*2</sup>	-15°C ~ 24°C (ZE18) <sup>*1</sup> -20°C ~ 24°C (4E23) <sup>*2</sup> -20°C ~ 24°C (4E27) <sup>*2</sup>	-15°C ~ 24°C (ZE18) <sup>*1</sup> -20°C ~ 24°C (4E23) <sup>*2</sup> -20°C ~ 24°C (4E27) <sup>*2</sup>	
		Cooling Operation Limit	5°C ~ 46°C (Possible)	5°C ~ 46°C (Possible)	16°C ~ 43°C (Possible)	16°C ~ 43°C (ZE18) -10°C ~ 46°C (4E23) -10°C ~ 46°C (4E27)	-10°C ~ 46°C (4E23) -10°C ~ 46°C (4E27)	16°C ~ 43°C (ZE18) -10°C ~ 46°C (4E23) -10°C ~ 46°C (4E27)	-10°C ~ 46°C (4E23) -10°C ~ 46°C (4E27)	16°C ~ 43°C (ZE18) -10°C ~ 46°C (4E23) -10°C ~ 46°C (4E27)	16°C ~ 43°C (ZE18) -10°C ~ 46°C (4E23) -10°C ~ 46°C (4E27)	
		Soft Dry Operation Mode										
		Fan Mode										
	Personal Airflow Creation											
	Airflow Direction Control (Up & Down)											
	Manual Horizontal Airflow Direction Control											
	Auto Changeover (Inverter)											
	Hot Start Control											
Convenience		24-Hour Dual ON / OFF Real Setting Timer										
		24-Hour ON / OFF Real Setting Timer										
		Demand Control										
		3rd Party Connectivity										
		LCD Wireless Remote Controller										
		Wired Remote Controller										
		Wireless Backlight Remote Controller										
Reliability		Blue Fin Condenser										
		Random Auto Restart (32 Restart Patterns)										
		Long Piping										
	Plug Type & Ampere Capacity <small>*The plug must be installed.</small>											
		Top-Panel Maintenance Access										
		Self-Diagnostic Function										

\*1 Operating temperature limit is -15°C with performance data guaranteed down to -10°C

\*2 Operating temperature limit is -20°C with performance data guaranteed down to -15°C

\*3 Total room / One room

Cleaner Air			
nanoe-G nanoe-G works effectively on airborne and adhesive micro-organisms such as bacteria, viruses and mould ensuring a cleaner living environment. » see page 14-17/ 44-45		Anti-Bacterial Filter The Anti-Bacterial Filter combines three effects in one: anti-allergen, anti-virus and anti-bacterial protection to provide clean air.	 Odour-Removing Function With this function, there's no unpleasant odour when the unit starts up. That's because the fan remains off momentarily, while the source of the odour inside the air conditioner is suppressed. The unit must be in cool or dry mode and the fan speed must be set to automatic.
<i>NEW</i> nanoe-G nanoe-G works effectively on airborne, adhesive and in-filter micro-organisms such as bacteria, viruses and mould ensuring a cleaner living environment. » see page 14-17/ 42-45			Removable, Washable Panel The front panel is easy to keep clean. It removes quickly with a simple one-step operation and can be washed in water. A clean front panel promotes smoother, more efficient performance, which can save energy.
Comfort			
ECONAVI ECONAVI features an energy-saving, intelligent Human Activity Sensor and new Sunlight Sensor technologies that can detect and reduce waste by optimising air conditioner operation according to room conditions. » see page 4-7/ 34-38/ 40-41		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. » see page 13	Soft Dry Operation Mode Starts with cooling to dehumidify, then provides continuous breeze at a low frequency to keep a room dry without much change to the temperature.
Temperature Wave Rhythmic temperature-controlled pattern to save energy without sacrificing comfort. » see page 6-7/ 34-35		Quiet Mode The Quiet Mode reduces both indoor and outdoor unit operating sound. This function is especially convenient for operation near a sleeping baby and at night-time. » see page 12	Personal Airflow Creation Vertical and horizontal air flow patterns can be combined as desired to achieve optimum comfort, with operation possible by remote even from a distance by remote control.
AUTOCOMFORT Autocomfort mode detects high activity levels and switches to comfort operation for maximum comfort. » see page 39		Hot Start Control On the start of heating cycle and after defrost cycle, the indoor fan will start up once the indoor heat exchanger is warm.	Auto Changeover (Inverter) Change automatically from cooling to heating in function of the temperature of the room.
Inverter Control An inverter air conditioner provides optimum power control, which is impossible for conventional units. The secret lies in the inverter circuit. By changing the frequency of power supply, this circuit alters the rotation speed of the compressor, which is the heart of the air conditioner. The result is comfortable, economical air conditioning. » see page 8-13		Airflow Direction Control (Up & Down) The flap swings up and down automatically, distributing air throughout the room. You can also adjust the airflow angle by remote control.	Heating Operation Limit Providing outstanding cold climate performance, Panasonic air conditioners let you enjoy stable heating even when the outside temperature is below freezing. Add to this exceptional durability and reliability and you're looking at worry-free operation for comfort during the harsh winter.
		Powerful Mode Pressing the Powerful button cools or heats the room quickly. It provides fast comfort, with full power and a strong airflow. This is perfect for use immediately after coming home, or when unexpected guests arrive.	Cooling Operation Limit Cooling is possible even when the outside temperature is extremely hot. Highly durable compressor and fan motor helps to maintain room comfort even under the hottest conditions.
			Manual Horizontal Airflow Direction Control
			Fan Mode
Convenience			
24-Hour ON & OFF Real Setting Timer The start or stop operation time (hour and minute) can be set at one time. Or both of the times for start and stop operation can be set.		24-Hour Dual ON & OFF Real Setting Timer This feature enables you to preset two different sets of start/stop operation timer (hour and minute) within a 24-hour time frame.	Demand Control
		LCD Wireless Remote Controller	3rd Party Connectivity
			Wired Remote Controller
			Wireless Backlight Remote Controller
Reliability			
Blue Fin Condenser Condensers can take a beating from exposure to salty air, rain and other corrosive factors. Panasonic has expended the life of our condensers with an original anti-rust coating. » see page 19		Long Piping The basic piping can be extended, allowing the outdoor unit to be installed further away from the indoor unit and providing greater installation flexibility.	Self-Diagnostic Function Should a malfunction occur, the unit diagnoses the problem and shows the corresponding alphanumeric code. This allows for quicker servicing.
Random Auto Restart All models are now safe to operate without a starter. With the exclusive Random Auto Restart feature, the air conditioners automatically restart after power failure. Its 32 different recovery-timing patterns ensure that air conditioners in the same building resume one after another instead of all at the same time. This feature helps prevent power surges after a blackout		Top-Panel Maintenance Access Maintenance of the outdoor unit used to be quite a tedious chore, especially when the unit was installed on a narrow balcony or attached to the outer wall of a high-rise building. Now, maintenance can be performed by simply removing the top panel, making these tasks much quicker and easier.	

DISCOVER THE WASTE TO  
DISCOVER ENERGY SAVINGS



Panasonic Air Conditioners with intelligent eco sensors discover where energy is wasted. It automatically adjusts cooling operation to reduce waste.

- **NEW Temperature Wave** ECONAVI reduces the waste: using rhythmic temperature shifts.
- **Area Search** of cooling the unoccupied area of the room.
- **Activity Detection** of cooling with unnecessary power.
- **Absence Detection** of cooling an empty room.
- **Sunlight Detection** of cooling under less sunlight conditions.

INTELLIGENT ECO SENSORS



Up to  
**38%\***  
energy savings

\*see page 6

**NEW** Temperature Wave

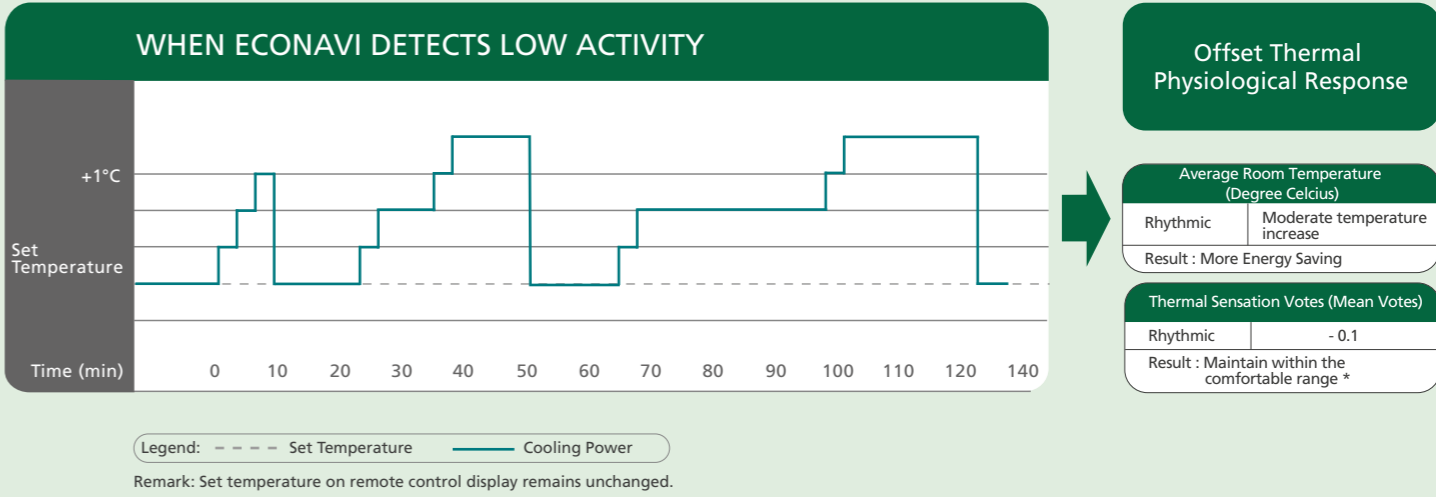
New ECONAVI with Temperature Wave incorporates a unique pattern of Temperature Shifting Control to realise even more energy savings without sacrificing comfort.

This new approach was developed based on an understanding in Thermal Physiology; human body adapts physiologically to changes in temperature.

When set temperature was increased and held at constant, human body displayed periodical physiological response in approximate 60-minute cycles.

Taking advantage of this understanding in Thermal Physiology, Panasonic Research and Development Centre developed Rhythmic Temperature Control pattern which would offset thermal physiological response.

HOW DOES TEMPERATURE WAVE WORKS?



The result of the experiment showed that thermal sensation was maintained within the comfortable range\* even though average set temperature was moderately increased.

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

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



Based on cooperative research with Nara Women's University, Rhythmic Temperature Control enables reduction in cooling power whilst maintain thermal sensation within the comfortable range\*.

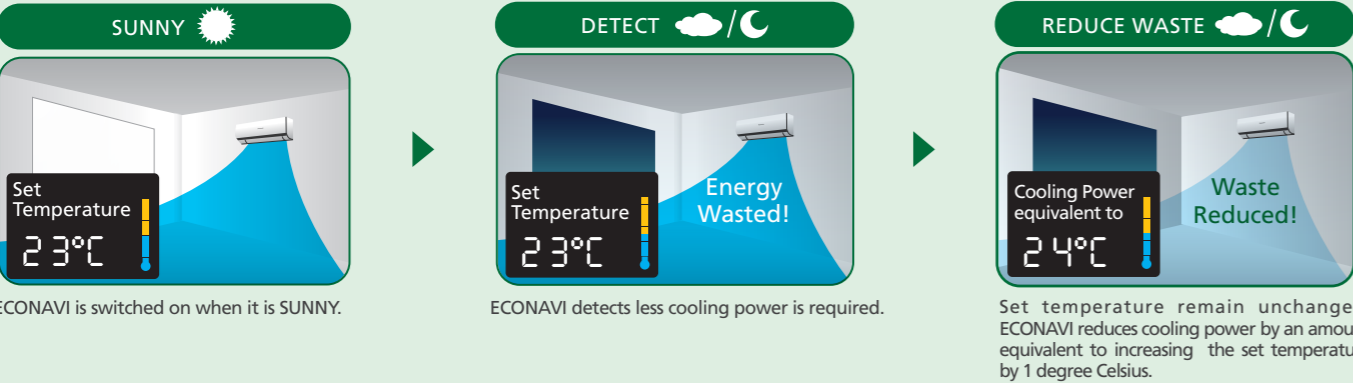
Remark:  
Temperature Wave is only applicable to Deluxe E-Series.  
Temperature Wave works either in ECONAVI or Autocomfort mode during low activity.



SUNLIGHT SENSOR

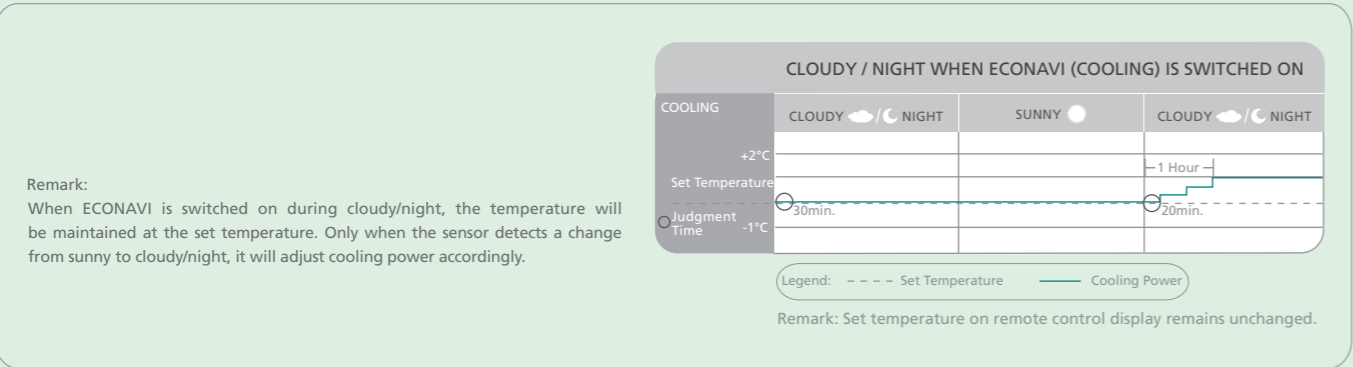
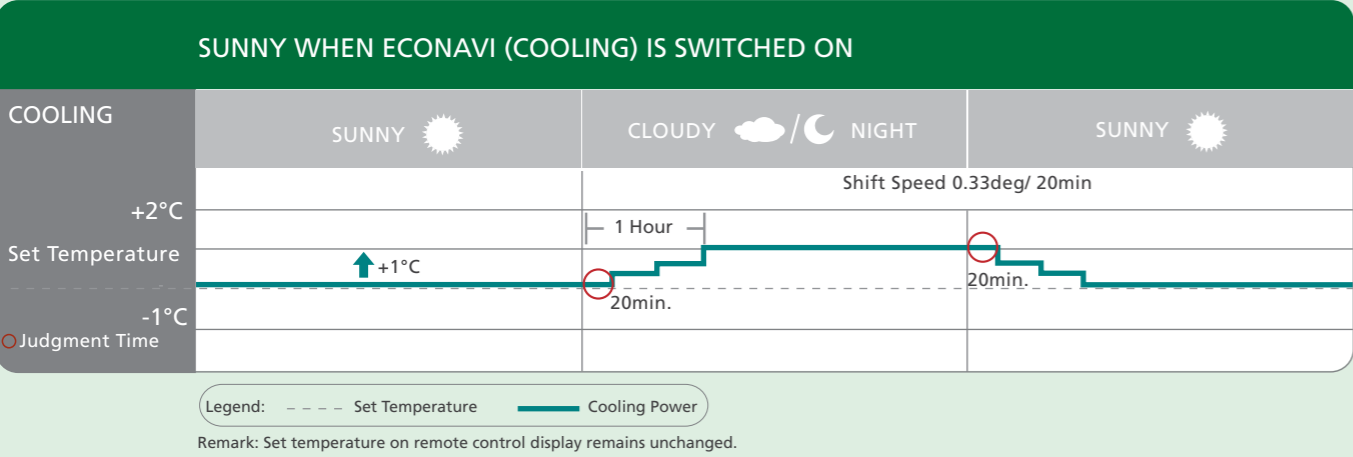
SUNLIGHT DETECTION (COOLING)

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



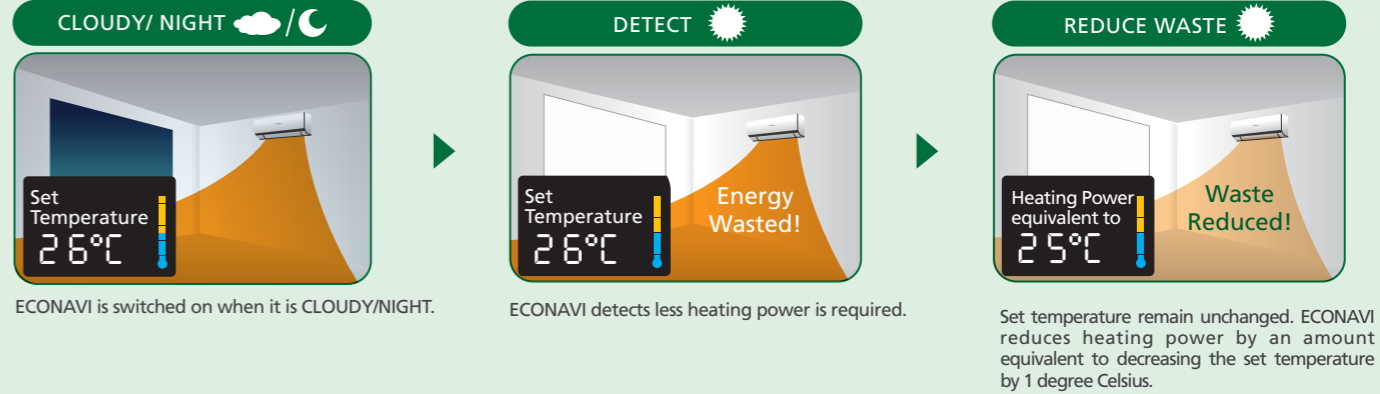
When weather changes from sunny to cloudy/night, ECONAVI detects less sunlight intensity and determines less cooling power is required. If cooling power remains the same, energy will be wasted. ECONAVI detects this waste and reduces cooling power by an amount equivalent to increasing the set temperature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

HOW DOES ECONAVI SUNLIGHT (COOLING) SENSOR WORKS?



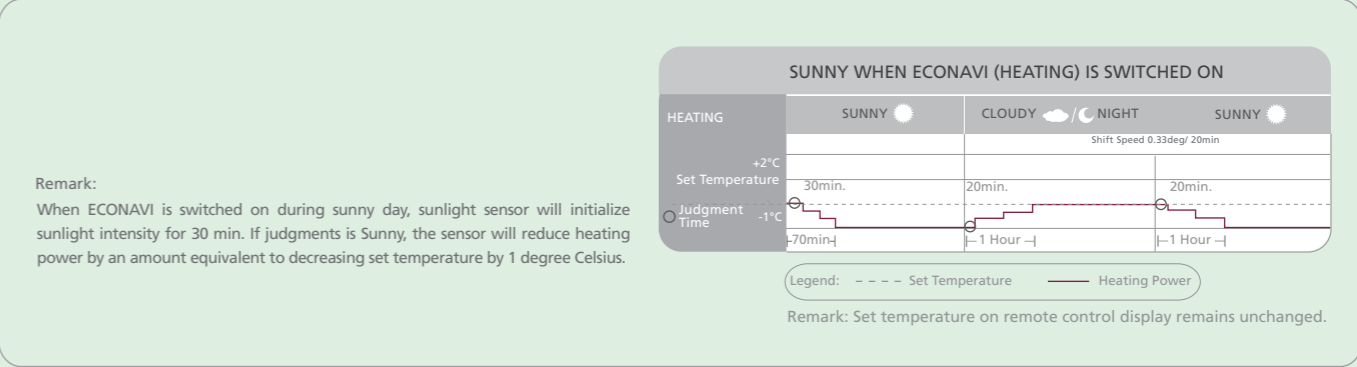
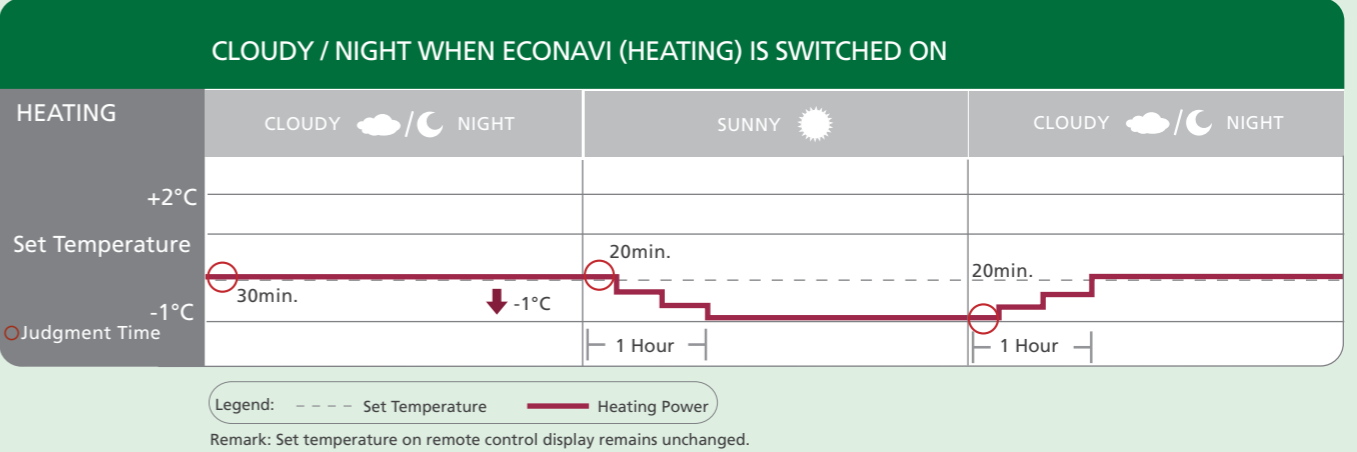
SUNLIGHT DETECTION (HEATING)

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.



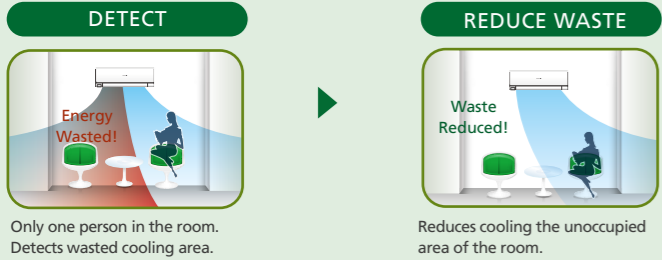
When weather changes from cloudy/night to sunny, ECONAVI detects more sunlight intensity and determines less heating power is required. If heating power remains the same, energy will be wasted. ECONAVI detects this waste and reduces heating power by an amount equivalent to decreasing the set temperature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

HOW DOES ECONAVI SUNLIGHT (HEATING) SENSOR WORKS?



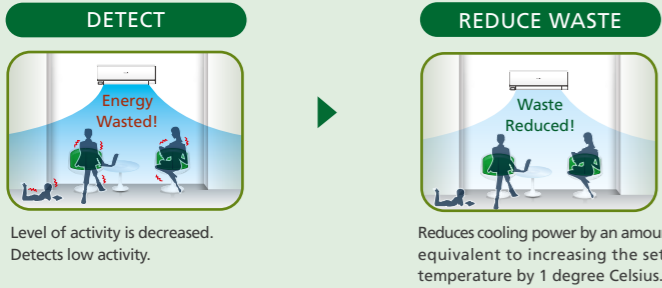
\* Heating operation applicable for Deluxe E-Series only.

INTELLIGENT ECO SENSORS



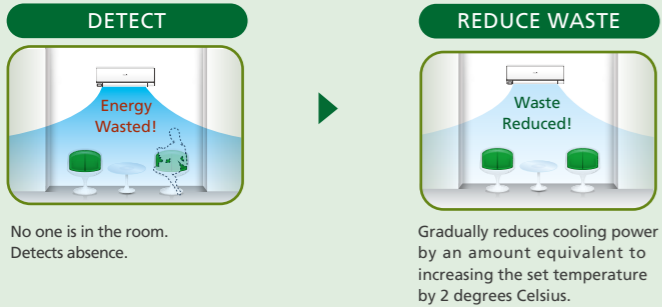
Area Search

ECONAVI detects changes in human movements and reduces the waste of cooling the unoccupied area of the room.



Activity Detection

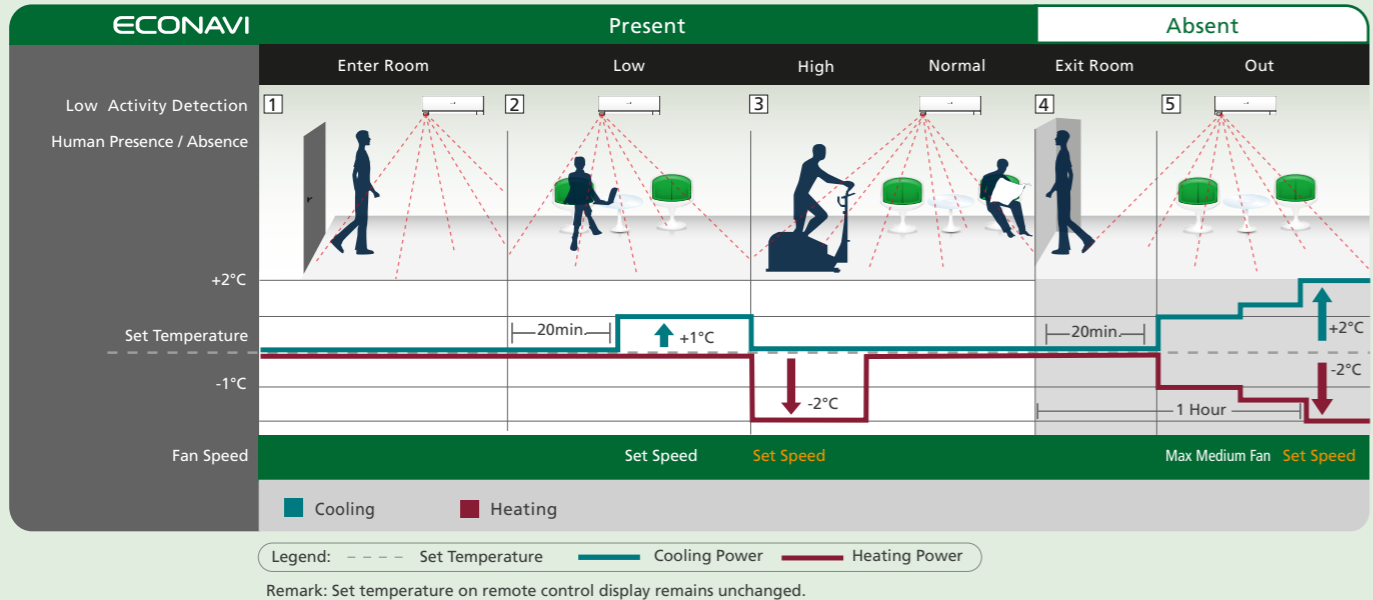
ECONAVI detects changes in activity levels and reduces the waste of cooling with unnecessary power.



Absence Detection

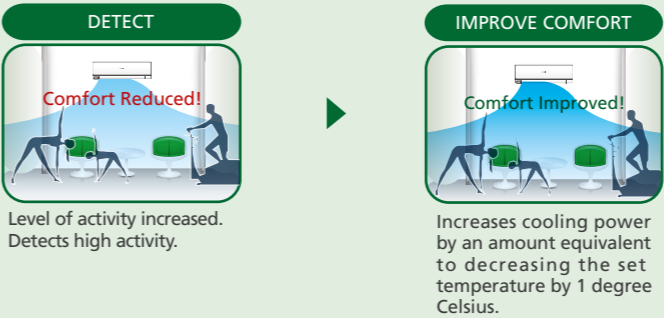
ECONAVI detects human absence in the room and reduces the waste of cooling an empty room.

HOW DOES ECONAVI dual sensor HUMAN ACTIVITY WORKS?



AUTOCOMFORT PROVIDES COMFORT

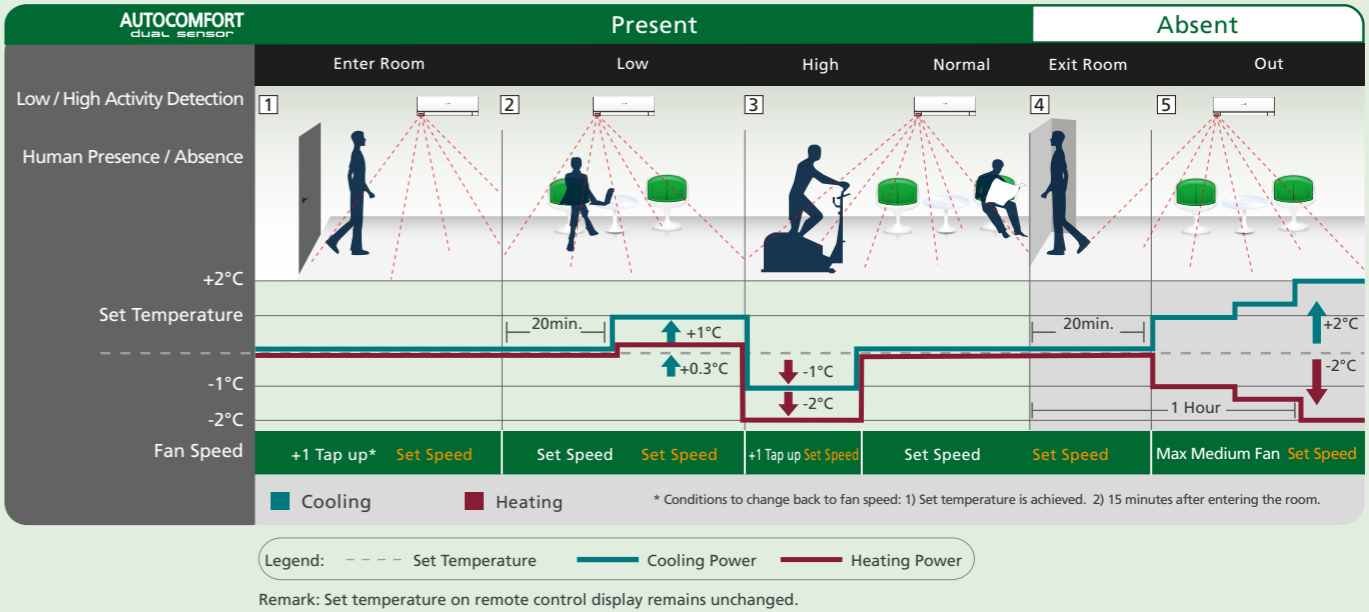
AUTOCOMFORT is used to provide comfort. High Activity Detection detects when the level of activity increases, and automatically increases cooling power by an amount equivalent to decreasing the set temperature by 1 degree Celsius to improve comfort. This is explained in the following scenario:



High Activity Detection

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

HOW DOES AUTOCOMFORT HIGH ACTIVITY DETECTION WORKS?



Remark:  
AUTOCOMFORT consumes more energy during high activity level.

Tips on how to select ECONAVI or AUTOCOMFORT :

- ECONAVI - To enjoy energy savings exclusively.
- AUTOCOMFORT - To enjoy comfort or energy savings depending on situations.

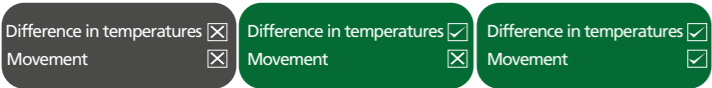
HUMAN ACTIVITY SENSOR

High-Precision Sensing

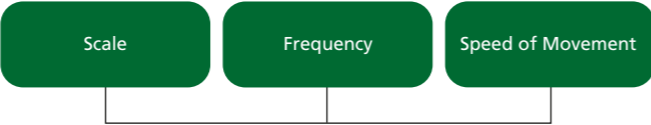
All objects emit infrared rays which, although invisible, can be detected as heat by ECONAVI's Human Activity Sensor if it is within the detection zone. When an object moves within its detection zone, ECONAVI compares the object's temperature with the room temperature to determine if it is human, and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



Detecting Human Presence

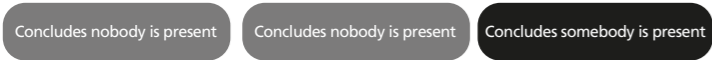


Determining the Level of Human Activity



When there is no movement for over 20min.

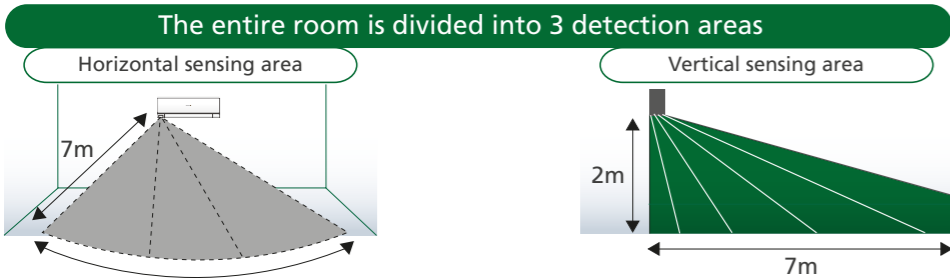
A highly precise conclusion is reached through a complex algorithm



Concludes Level of Activity High or Normal

Coverage Capabilities

Human Activity Sensor covers a wider area due to its improved area detection function.



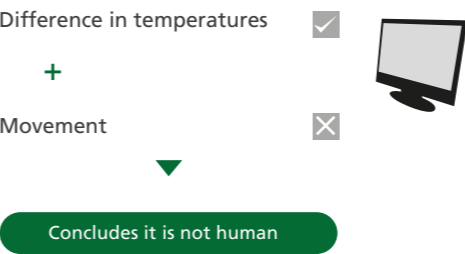
Remark: Applicable for dual sensor

INTELLIGENT ECO SENSORS

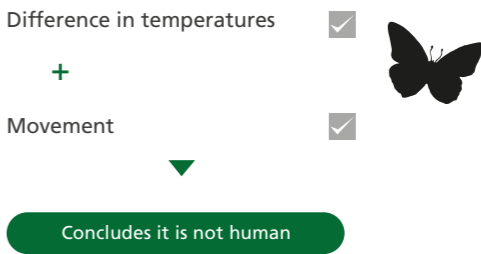


Differentiating Objects

ELECTRICAL PRODUCTS

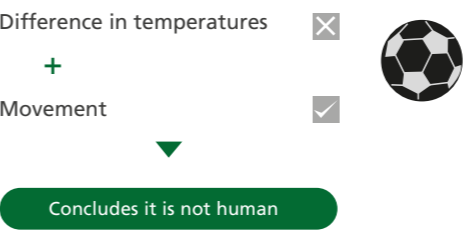


SMALL INSECTS

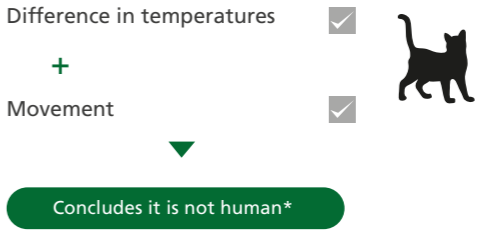


Both changes may be detected, but they are too small to have any effect on the sensor.

A ROLLING BALL



PETS

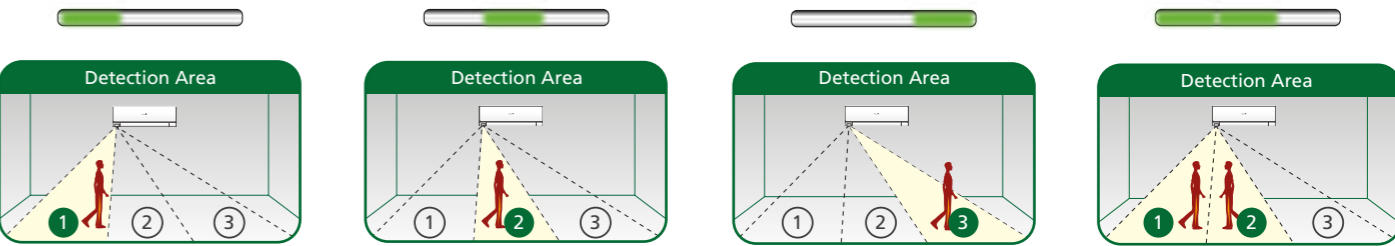


From the difference in temperatures and the nature of the object's movement, ECONAVI can determine if it's human\*.

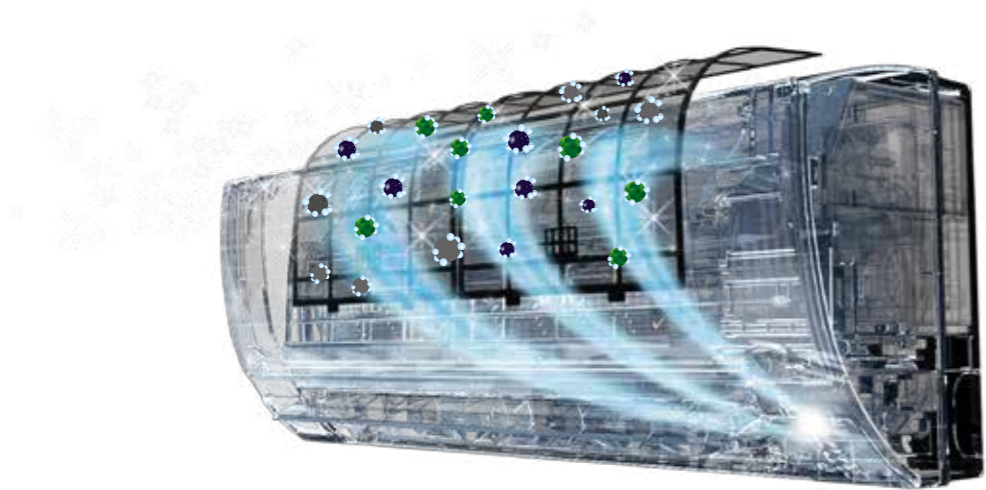
\*The sensor may deem pets as humans, unless it moves within the detection zone at speeds that are not humanly possible.

Sensor Detection Principle




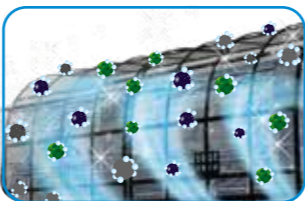
Human Activity Sensor detects human activity level and directs airflow to occupied or high activity zone. LED indicators indicating ECONAVI is detecting and functioning.



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



HOW DOES **NEW** IN-FILTER DEACTIVATION WORK?

1. Power "Off"	2. Fan Operation	3. nanoe-G Operation	4. Deactivation Effect
<div></div> <p>The air-conditioner first has to be turned off.</p> <p>Remark: Main power must be switched on for the entire duration.</p>	<div></div> <p>The fan operation will run automatically for 30 minutes with the louver slightly open to ensure the internal components are dry and free from condensation.</p> <p>Remark: The 30-minute fan operation is NOT applicable to heating models.</p>	<div></div> <p>Natural Ion Wind spreads nanoe-G particles that are released from the nanoe-G generator.</p>	<div></div> <p>nanoe-G deactivates bacteria and viruses that are trapped in the filter within 2 hours.</p>
	Fan Operation : On  Louver : Low Louver Angle  nanoe-G LED : On	Fan Operation : Off  Louver : Closed  nanoe-G LED : On	

Remark:  
Depending on the Air Conditioner's accumulated operation time, nanoe-G In-Filter Deactivation may be activated only once a day.

THE EFFECTIVENESS OF nanoe-G

IN-FILTER DEACTIVATION

IN-FILTER DEACTIVATION	Target Substance	Substance Name	Effectiveness	Testing Institute	Test Report no	Method	Result
	Bacteria	<i>Staphylococcus aureus</i> (NBRC 12732)	99%	Japan Food Research Laboratories	Test Report No. 12037932001	The test piece impregnated with <i>Staphylococcus aureus</i> was placed on the filter of the Air Conditioner indoor unit, and then nanoe-G was operated. After the test piece was collected, viable cells were counted. * test substance was placed on the 4 locations of the filter; upper/lower right and upper/lower left.	99% of deactivation after 2-hour nanoe-G operation.
	Virus	<i>Escherichia coli</i> phage (φX-174 ATCC 13706-B1)	99%	Japan Food Research Laboratories	Test Report No. 12014705001	The test piece impregnated with <i>Escherichia coli</i> phage was placed on the filter of the Air Conditioner indoor unit, and then nanoe-G was operated. After the test piece was collected, phage infectivity titer was determined. * test substance was placed on the 4 locations of the filter; upper/lower right and upper/lower left.	99% of deactivation after 2-hour nanoe-G operation.
		Influenza (H1N1) 2009 Virus	Average 90% on filter (The percentage varies from 78.9% to 96.1% depending on its location)	Kitasato Research Center for Environmental Science	KRCES-Virus Test Report No. 24_0013	The test piece impregnated with Influenza (H1N1) 2009 Virus was placed on the filter of the Air Conditioner indoor unit, and then nanoe-G was operated. After the test piece was collected, virus infectivity titer was determined. * test substance was placed on the 4 locations of the filter; upper/lower right and upper/lower left.	Average 90% deactivation after 2-hour nanoe-G operation. (The percentage varies from 78.9% to 96.1%, depending on its location on filter)

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

IN-FILTER DEACTIVATION	Deactivates <b>99%</b> <sup>*3</sup> BACTERIA and VIRUSES	<b>*3 In-Filter Deactivation was certified by Japan Food Research Laboratories</b> • Test Report number : 12037932001 Bacteria : <i>Staphylococcus aureus</i> (NBRC 12732) • Test Report number : 12014705001 Virus : <i>Escherichia coli</i> phage (φX-174 ATCC 13706-B1) <b>All results are based on specific testing conditions.</b> <b>All tests are not demonstrated under actual usage situation.</b>
	Deactivates Average <b>90%</b> INFLUENZA (H1N1) 2009 VIRUS	In-Filter Deactivation was certified by Kitasato Research Center for Environmental Science • Test Report number : KRCES-Virus Test Report No. 24_0013 Virus : Influenza (H1N1) 2009 Virus <b>All results are based on specific testing conditions.</b> <b>All tests are not demonstrated under actual usage situation.</b>

THE EFFECTIVENESS OF nanoe-G

AIRBORNE

**Data on removal of airborne bacteria was presented by HARVARD SCHOOL of Public Health researchers at Nano-Symposium at Kyoto University, 2012**

In a large space of 40 m³  
Removal effect has been evaluated.

The effect after 100 minutes in a 40 m³ test space [about the size of a 10 tatami mat room], not the effect in a space where actually used.

“Performance evaluation of a novel ionizer for air purification applications”. Dr. S. Rudnick et al. Harvard School of Public Health, Environmental Health Nanoscience Lab.

A study of the removal effect of airborne bacteria by using an air-conditioner incorporating nanoe-G was carried out in a large space, and the results were presented at Nano-Symposium jointly held in September 2012 by Harvard University and Kyoto University.

Test methods: Bacteria removal method: Release of nanoe-G ions.

Target: Airborne bacteria, Test results: It is estimated that after three hours of operation the nanoe-G will achieve 2.7 log<sub>10</sub> reductions, ~ 1 log<sub>10</sub> reduction more, as compared to without nanoe-G.

TESTING INSTITUTE: KITASATO RESEARCH CENTER FOR ENVIRONMENTAL SCIENCE

	Target Substance	Substance Name	Effectiveness	Test Report no	Method	Result
AIRBORNE	Bacteria	<i>Staphylococcus aureus</i> (NBRC 12732)	99%	KRCES-Bio. Test Report No. 23_0182	The AC with nanoe-G was operated in a test room (25m³) and aerosol was collected and bacterial count was calculated.	99% removal from the air after 150 minutes of operation.
	Virus	<i>Escherichia coli</i> phage (oX-174 ATCC 13706-B1)	99%	KRCES-Env. Test Report No. 22_0008	The AC with nanoe-G was operated in a test room (25m³) and airborne phages were collected and phage count of the collected air was calculated.	99% removal from the air after 120 minutes of operation.
			99%	KRCES-Env. Test Report No. 22_0008	nanoe-G was operated in a test chamber (200 Litre) and the phages were collected and phage count of the collected air was calculated.	99% removal from the air after 5 minutes of operation.
		Influenza (H1N1) 2009 virus	99%	KRCES-Env. Test Report No. 22_0008	nanoe-G was operated in a test chamber (200 Litre) and the influenza viruses were collected and the virus titers were calculated by the Reed and Muench method.	99% removal from the air after 5 minutes of operation.
	Mould	<i>Penicillium pinophilum</i> (NBRC 6345)	99%	KRCES-Bio. Test Report No. 23_0140	The AC with nanoe-G was operated in a test room (25m³) and aerosol was collected and fungal spores count was calculated.	99% removal from the air after 90 minutes of operation.

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

**Removes**

**99%<sup>\*2</sup>**

**BACTERIA VIRUSES and MOULD**

**\*2 Airborne Removal was certified by Kitasato Research Center for Environmental Science**

- KRCES-Bio. Test Report no. : 23\_0182  
Bacteria : *Staphylococcus aureus* (NBRC 12732)
- KRCES-Env. Test Report no. : 22\_0008  
Virus : *Escherichia coli* phage (oX-174 ATCC 13706-B1)  
: Influenza (H1N1) 2009 virus
- KRCES-Env. Test Report no. : 23\_0140  
Mould : *Penicillium pinophilum* (NBRC 6345)

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



ADHESIVE

TESTING INSTITUTE: JAPAN FOOD RESEARCH LABORATORIES

	Target Substance	Substance Name	Effectiveness	Test Report no	Method	Result
ADHESIVE	Bacteria	<i>Staphylococcus aureus</i> (NBRC 12732)	99%	Test Report No. 11047933001-02	The AC with nanoe-G was operated in a test space (10m³) and viable cells were counted by pour plate method.	99% inactivation after 24 hour operation of nanoe-G. (compared to the original condition/ ventilation mode)
	Virus	Bacteriophage (Phi X 174 NBRC 103405)	99%	Test Report No. 11073649001-02	nanoe-G was operated in a test box (90 Litre) and phage infectivity titer was determined by plaque technique.	99% inactivation after 120 minutes operation of nanoe-G. (compared to non-operation)
	Mould	<i>Cladosporium cladosporioides</i> (NBRC 6348)	Inhibit Mould Growth	Test Report No. 11047937001-02	nanoe-G was operated in a test box (1m³) and colonies on the plate were counted.	The growth of the subject was inhibited. (>85% after 7 days)

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

**ADHESIVE**

Deactivates

**99%<sup>\*1</sup>**

BACTERIA and VIRUSES

Inhibits MOULD Growth

**\*1 Adhesive Deactivation was certified by Japan Food Research Laboratories**

- Test Report number : 11047933001-02  
Bacteria : *Staphylococcus aureus* (NBRC 12732)
- Test Report number : 11073649001-02  
Virus : Bacteriophage (Phi X 174 NBRC 103405)
- Test Report number : 11047937001-02  
Mould : *Cladosporium cladosporioides* (NBRC 6348)

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

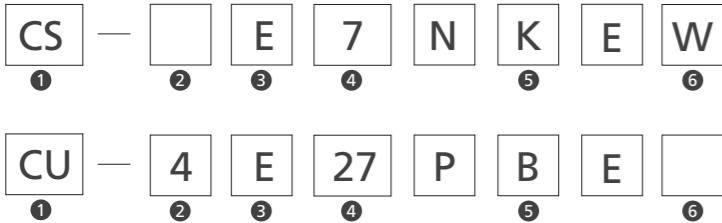
MODEL LINE-UP

Heating Capacity (kW)		2.0-5.5 (kW)	6.0-9.0 (kW)	Features
Single Inverter Split	Deluxe	<div></div> <div>Page 21</div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
	Floor Console	<div></div> <div>Page 22-23</div>	<div></div> <div></div> <div></div>	

( ) : Outdoor Unit

OPTIONAL ACCESSORIES	
■ Remote Control	
Wireless Backlight Remote Controller	Wired Remote Controller
<div></div> <div>CS-E7PKR, CS-E9PKR, CS-E12PKR, CS-E15PKR, CS-E18PKR, CS-E21PKR, CS-E24PKR, CS-E28PKR</div> <div>CZ-RR8</div>	<div></div> <div>CS-E7PKR, CS-E9PKR, CS-E12PKR, CS-E15PKR, CS-E18PKR, CS-E21PKR, CS-E24PKR, CS-E28PKR</div> <div>CZ-RD514C</div>

THE SYSTEM OF MODEL NUMBERS FOR SPLIT MODELS



- 1 Model Type

CS : Split Type (Indoor unit)

CU : Split Type (Outdoor unit)

CZ : Accessories
- 2 Connection Configuration / Classification

<Indoor unit>

No Indications : Single Split / Deluxe

<Outdoor unit>

n : (n) rooms Multi
- 3 Function

E : Inverter Reverse Cycle
- 4 Capacity

Value = Capacity (Btu/h) x 1/1000

e.g. 18,000 Btu/h x 1/1000 = 18
- 5 Type

K : Wall-Mounted Type

F : Floor Console Type

T : Floor or Ceiling Dual Mountable Type

B4 : Cassette Type

D3 : Hide-Away Type

B : Flexibly connectable to various type of indoor unit
- 6 Other

<Indoor unit>

W : For either single or multi use

Capacity (kW)		2.0-4.0 (kW)	5.0-6.0 (kW)	Features
Multi Inverter Split	Deluxe	<div></div>	<div></div>	<div></div> <div></div> <div></div> <div></div>
	Floor Console	<div></div>	<div></div>	<div></div> <div></div>
	Hide-Away	<div></div>	<div></div>	<div></div> <div></div>
	Cassette (4-way)	<div></div>	<div></div>	<div></div> <div></div>
	Floor or Ceiling	<div></div>	<div></div>	<div></div> <div></div>
	Outdoor	2 rooms	4 rooms	
		<div></div>	<div></div> <div></div>	

See the table on page 27 for indoor unit and outdoor unit combinations.  
\*1 Operating temperature limit is -15°C with performance data guaranteed down to -10°C. \*2 Operating temperature limit is -20°C with performance data guaranteed down to -15°C.