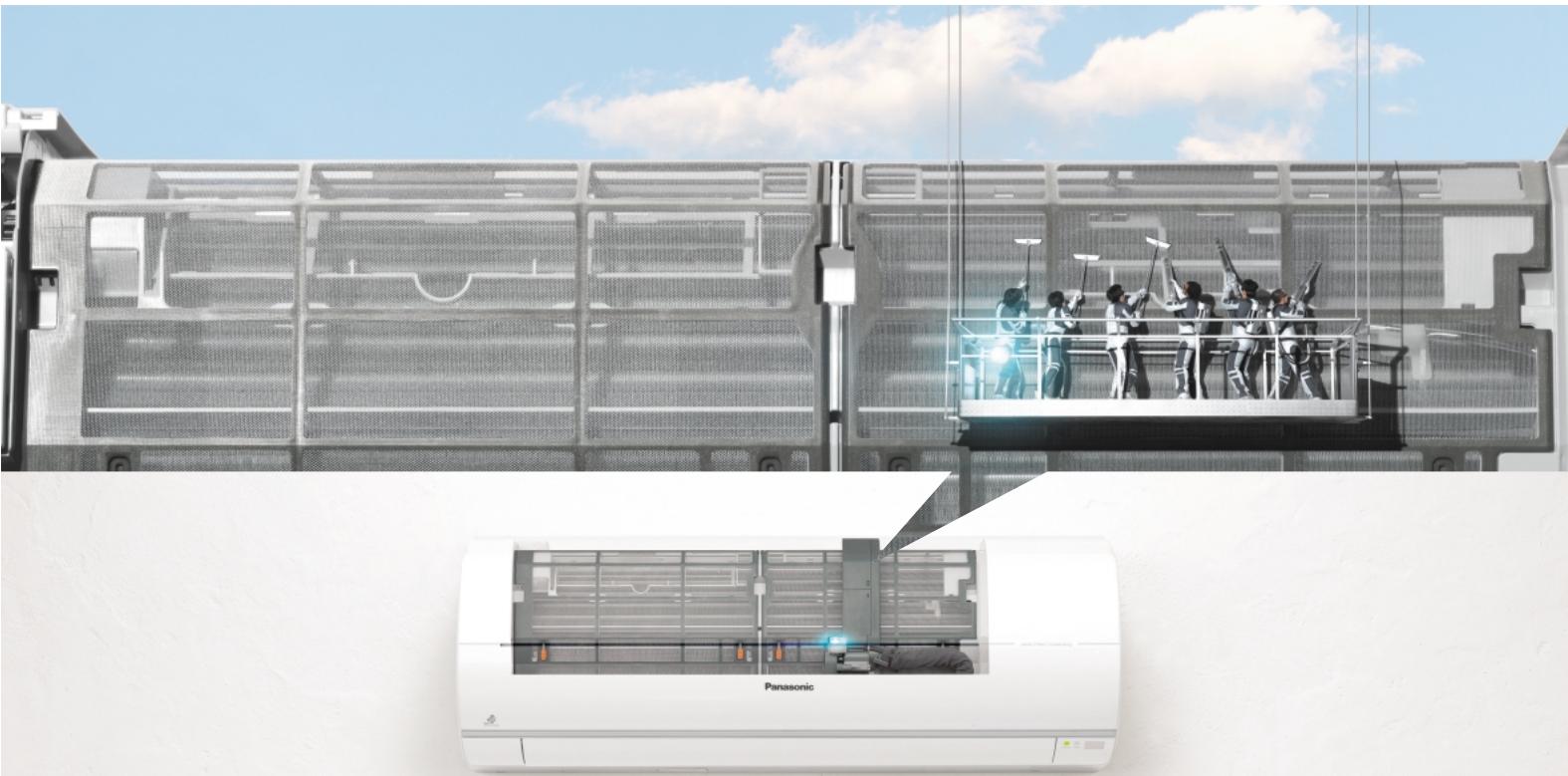


# Panasonic

## ideas for life

Air Conditioners



**AC Robot**  
Auto Cleaning





# Meet the Auto Cleaning Robot.

It automatically cleans the filter to keep the performance just like new.

Introducing Panasonic's original filter-cleaning AC Robot (Auto Cleaning Robot).

This powerful, built-in cleaning mechanism automatically cleans the filter to minimize filter clogging.

This maintains the air conditioner's original performance, while eliminating the unpleasant job of cleaning the filter manually.





Only from Panasonic\*!

It automatically vacuums the dust from the filter  
and exhausts it outdoors each time you use it.

Always  
**CLEAN**

Always  
**POWERFUL**

Always  
**EFFICIENT**



# Model Line-Up Choose the Best Inverter — Panasonic —

## Single Inverter Split

### Wall-Mounted

Indoor	Super Deluxe  <b>NEW</b>  p.16	Super Deluxe Slim  p.16	Deluxe  p.16	Deluxe Wide  p.17
Capacity (kW)	2.5 CS-XE9EKE (CU-XE9EKE) A 3.5 CS-XE12EKE (CU-XE12EKE) A	CS-TE9DKE (CU-TE9DKE) A CS-TE12DKE (CU-TE12DKE) A	CS-E9DKEW (CU-E9DKE) A CS-E12DKEW (CU-E12DKE) A CS-E15DKEW (CU-E15DKE) A CS-E15EKEA (CU-E15EKEA) A <b>NEW</b>	CS-E18DKEW (CU-E18DKE) A CS-E18EKEA (CU-E18EKEA) A <b>NEW</b> CS-E21DKES (CU-E21DKE) CS-E21EKEA (CU-E21EKEA) <b>NEW</b> CS-E24EKES (CU-E24EKE) <b>NEW</b> CS-E28EKE (CU-E28EKE) <b>NEW</b>
Air Quality Features	 	 ION	  ION	  ION

## Multi Inverter Split

Wall-Mounted		Floor or Ceiling	Cassette (1-way)
Indoor	Deluxe  p.20-p.21	Deluxe Wide  p.20-p.21	 p.20-p.21
Capacity (kW)	2.2 CS-ME7DKEG 2.8 CS-E9DKEW 3.2 CS-E12DKEW 4.0 CS-E15DKEW 5.0 CS-E18DKEW		CS-ME7EB1E CS-ME10EB1E CS-ME12EB1E CS-ME14EB1E
Air Quality Features	  ION	  ION	(option)

## Single Split

Wall-Mounted		Floor or Ceiling		
Indoor	Deluxe  p.22	Deluxe Wide  p.22	 p.22	Standard  p.23
Capacity (kW)	2.0 CS-W7DKE (CU-W7DKE) A 2.5 CS-V7DKE (CU-V7DKE) A 3.5 CS-W9DKE (CU-W9DKE) A CS-V9DKE (CU-V9DKE) A CS-W12DKE (CU-W12DKE) A CS-V12DKE (CU-V12DKE) A		CS-PW9DKE (CU-PW9DKE) A CS-PW12DKE (CU-PW12DKE) A	CS-W12CTP (CU-W12CTP5) CS-V12CTP (CU-V12CTP5)
	5.0 CS-W18DKE (CU-W18DKE) A CS-V18DKE (CU-V18DKE) A		CS-PW18DKE (CU-PW18DKE)	CS-W18CTP (CU-W18CTP5) CS-V18CTP (CU-V18CTP5)
	6.5 CS-W24DKE (CU-W24DKE) CS-V24DKE (CU-V24DKE)			CS-W24CTP (CU-W24CTP5) CS-V24CTP (CU-V24CTP5)
	8.0 CS-V28EKE (CU-V28EKE) A			
Air Quality Features	  ION	  ION	  ION (option)	 (option)

 Heat Pump Models  
 Cooling Models

 Auto Cleaning Robot |  Supersonic Air Purifying System |  Super alleru-buster filter (Super alleru-buster + Catechin + Bio) |  Ion Freshener |  Air Quality Indicator

	<b>Floor or Ceiling</b>	<b>Cassette (4-way)</b>	<b>Hide-Away</b>
<b>Standard</b>			
	 p.18	 p.18	 p.18
<b>CS-PE9DKE</b> (CU-PE9DKE) A <b>CS-PE12DKE</b> (CU-PE12DKE) A			
	<b>CS-E15DTEW</b> (CU-E15DBE) A	<b>CS-E15DB4EW</b> (CU-E15DBE)	<b>CS-E15DD3EW</b> (CU-E15DBE) A
	<b>CS-E18DTEW</b> (CU-E18DBE)	<b>CS-E18DB4EW</b> (CU-E18DBE)	<b>CS-E18DD3EW</b> (CU-E18DBE)
	<b>CS-E21DTES</b> (CU-E21DBE)	<b>CS-E21DB4ES</b> (CU-E21DBE)	
 			

<b>Cassette (4-way)</b>	<b>Hide-Away</b>	<b>Outdoor</b>	<b>2 rooms</b>	<b>3 rooms</b>	<b>4 rooms</b>
 p.20-p.21	 p.20-p.21		 <b>CU-2E15CBPG</b> A (4.4-5.0kW)	 <b>CU-3E18EBE</b> A NEW <b>CU-3E23CBPG</b> A (5.0-10.0kW)	 <b>CU-4E27CBPG</b> A (5.0-13.6kW)
			 <b>CU-2E18CBPG</b> A (4.4-6.4kW)		
<b>CS-E15DB4EW</b>	<b>CS-E15DD3EW</b>				
<b>CS-E18DB4EW</b>	<b>CS-E18DD3EW</b>				
					

See the table on page 21 for indoor unit and outdoor unit combinations.

## Multi Split

### Wall-Mounted

<b>Indoor</b>	<b>Dual Split</b> NEW	 p.24	 p.24	<b>Triple Split</b> NEW	 p.24
Capacity 2.0 (kW)			<b>CS-MV7EKE/CS-MV12EKE</b> (CU-2V19EKE)		
3.0	<b>CS-MV9EKEx2</b> (CU-2V14EKE) CS-MV9EKEx2(CU-2V18EKE)			<b>CS-MV9EKEx3</b> (CU-3V20EKE)	
<b>Outdoor</b>	2 rooms	 <b>CU-2V14EKE</b> (2.9-3.6kW)	2 rooms	 <b>CU-2V19EKE</b> (2.0-5.5kW)	3 rooms
		 <b>CU-2V18EKE</b> (2.6-5.3kW)			 <b>CU-3V20EKE</b> A (2.6-6.4kW)
Air Quality Features		   ION		   ION	   ION



Mark indicating product meets German safety standards.



Mark indicating product meets German safety standards.



Panasonic is participating in the EUROVENT Certification Programme.  
Products are as listed in the EUROVENT Directory of Certified Products.

The 3 rooms and 4 rooms Multi-Split Type are not in the scope of the EUROVENT certification.



# AC Robot

**Auto Cleaning**

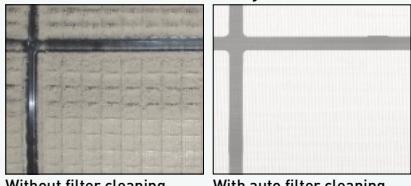
**Cleans its own filter — all by itself!**

The air conditioner stays in the same clean condition, with the same high-performance, as when it was first purchased.

## Always CLEAN

It prevents dust from accumulating and keeps the filter like new. It prevents the breeding of mould and bacteria that cause unpleasant odours. Fresh and comfortable!

### ■ Dust on filter after one year



\*Actual dust accumulation will vary depending on usage and environmental conditions.

## Always POWERFUL

Because it maintains the same performance as when it was new, the level of power remains constant even after long periods of use. You enjoy comfortable air conditioning that reaches every corner of the room.

### Without filter cleaning



The air stream doesn't reach the corners of the room.

### With auto filter cleaning



The powerful airflow reaches throughout the room.

**<Test conditions>** •Starting temperature and humidity: 7°C, 6°C •Set temperature: 23°C •Fan speed/airflow direction: set to auto mode •After air conditioning stabilizes •Area of simulated-house testing facility: 16.5m<sup>2</sup>

## Always EFFICIENT

It prevents the reduced efficiency that is caused by filter clogging, so its top-class energy-saving performance is maintained longer. It also saves on the electric bill by suppressing the wasteful use of electricity.

### ■ Energy-saving comparison (After 3 years' use)

Without filter cleaning  
Inefficient operation wastes electricity.

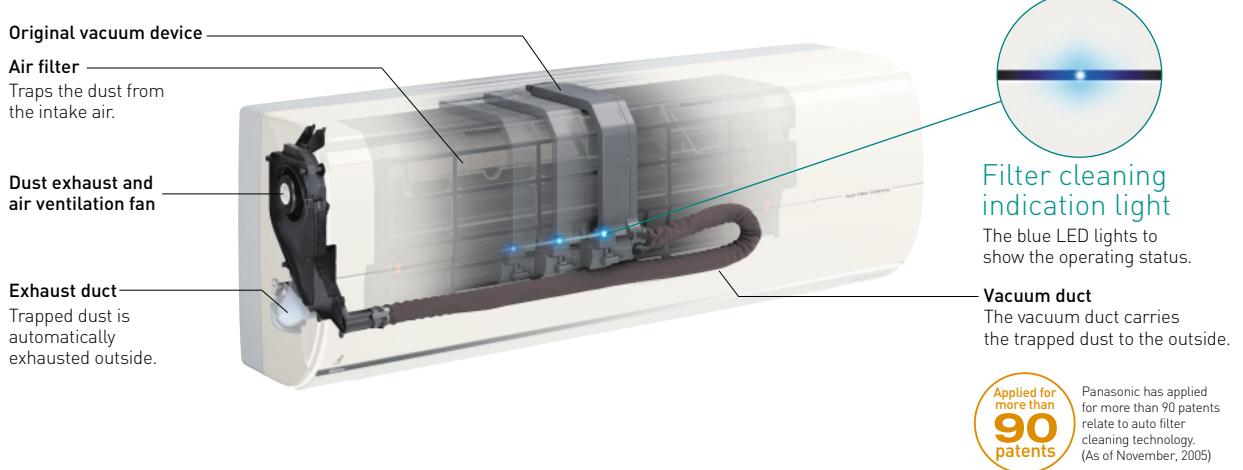


**Saves 23%**  
With auto filter cleaning  
Maintains energy-saving operation.

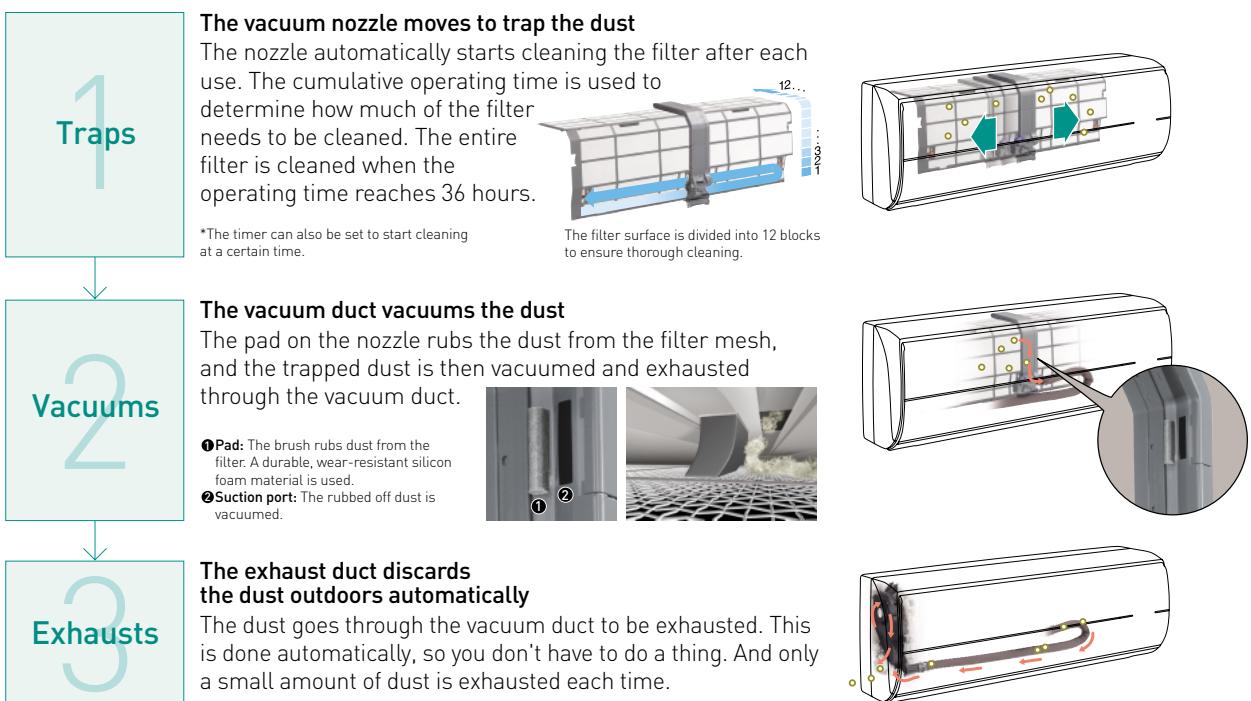
For heating



## Automatically Traps, Vacuums and Exhausts Dust — For Clean Operation without the Cleaning Hassle



### Cleaning Mechanism



### Why does the filter have to be cleaned?

The filter works to trap airborne dust. When the filter is not cleaned regularly, dust can accumulate and clog it.

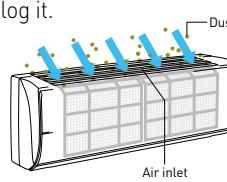
#### ■Problems Caused by Filter Clogging

Lower Air Volume

Lower Efficiency

More Noise

Unpleasant Odours



	Dead dust mites
	Pollen
	Mould spores
	Viruses/bacteria

Actual dust accumulation will vary depending on usage and environmental conditions.

# A Clean Filter Greatly Boosts Performance, Giving



## Comparison of Mould Growth

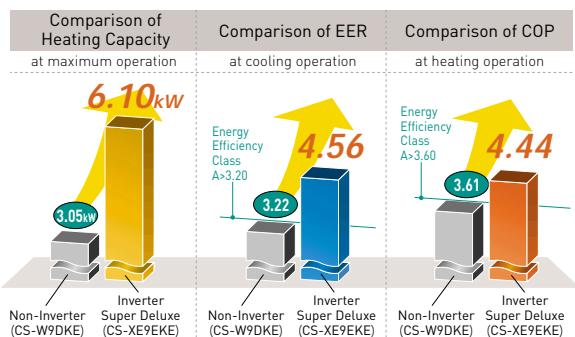
A dirty filter is a natural breeding ground for mould and house mites. Their growth can be greatly reduced by keeping the filter clean.



Observation of mould on filters (used for 3 months) after cultivation on agar media for 3 days.  
Testing organization: Japan Food Research Laboratories Test No.: 204090946-001

## Class A energy saving achieved by inverter technology

Panasonic's high-efficiency technologies clear stringent energy-saving standards, and the AC Robot maintains this high level of performance.



## How It Works

A detailed cleaning programme built into the AC Robot ensures that the entire filter surface stays clean with a highly efficient cleaning process.

- The filter surface is divided into 12 blocks, and the vacuum nozzle cleans each block with a round-trip cleaning operation.
- The number of blocks (amount of surface area) to be cleaned is determined according to the air conditioner's cumulative operating time.
- Cleaning of the entire surface is completed after 36 operating hours are accumulated.



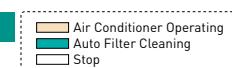
In the High fan speed in the normal setting mode

Cumulative operation hours (hour)	No. of cleaning operations
Less than 2	No cleaning
2 - < 6	2 round-trip
6 - < 9	3 round-trip
9 - < 12	4 round-trip
> 12	5 round-trip
Remarks	Max. of 8 round-trip, then 1 round-trip every 3 hours

The cumulative operating time is stored in an E2-ROM microcomputer memory. In the case of a power interruption, the data is retained. (However, the timer setting is cancelled.)

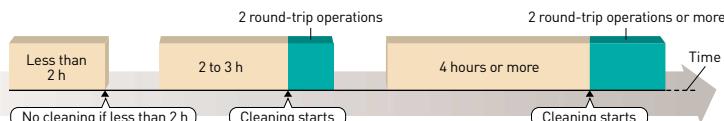
## Auto Filter Cleaning Operation Patterns

Two operations are available. In addition to the normal setting, the timer setting can also be used.



### In the normal setting mode (non-timer)

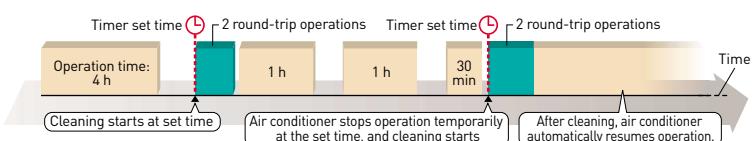
Cleaning automatically starts after each operation. The number of round-trip is determined based on the cumulative operating time.



### In the timer setting mode ⏳

Cleaning starts at the set time everyday.

\* If the air conditioner has not been used for more than 30 minutes since it was cleaned, the cleaning operation will not be done at the preset time.



## You Greater Comfort and Saving Energy.

### Air cleaning features

#### SUPER alleru-buster filter — Long-life type (10 years)

The SUPER alleru-buster filter combines three effects in one: anti-allergen, anti-virus, and anti-bacteria protection, to keep the room air clean and healthful. Plus, the effect is maintained for 10 years.



##### Anti-allergen protection

#### SUPER alleru-buster

Inactivates more than **99%** of all filter-captured allergens!

##### Target substances

Allergens:  
Pollen, dead dust mites and their waste products, cat dander, mould



##### How allergens are inactivated

The allergen is caught by the filter.



Phenolic hydroxyl polymer

Allergen

»»

Phenolic hydroxyl ions cling to the allergen.

»»

The allergen is coated and inactivated.

»»

Even if it enters the body,

it is no longer treated as an allergen.

##### Anti-bacteria/Anti-mould protection

#### Bio (Bio-Elimination)

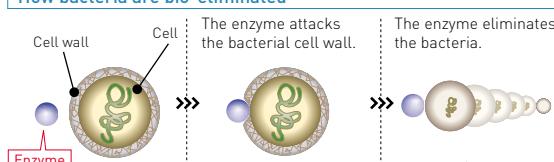
Enzymatic action eliminates more than **99%** of all filter-captured bacteria!

##### Target substances

Bacteria: Staphylococcus aureus  
Mould: Black mould (aspergillus), green fungus



##### How bacteria are bio-eliminated



The enzymatic action hydrolyzes the cell wall and dissolves the bacteria.

##### Anti-virus protection

#### Catechin

Inactivates more than **99%** of all filter-captured viruses!

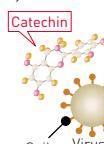
##### Target substances

Viruses: Influenza, Coxsackie virus, etc.



##### How viruses are inactivated

The virus is caught by the filter.



Spike Virus

Filter

»»

Catechin surrounds the virus.

»»

The virus is inactivated.

»»

The spikes are covered by catechin.

#### What's "Allergen"?

When allergens enter the body, they cause allergy symptoms due to an antigen-antibody reaction that occurs as the body tries to combat them.

## Versatile Features for Super Deluxe Models

#### Quiet Mode

Simply press a button to reduce the indoor unit operating sound by about 3 dB. This function is especially convenient for operation near a sleeping baby.

#### 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.

#### Ventilation Control

You can ventilate the room by simply pressing the remote control button. Dirty air is carried outside to keep the room fresh and clean.

#### Operation Indicator



The indicators become visible when the grille is opened.



## super slim

**The super-slim design  
complements modern interiors**

The compact, super-slim body is accented by the silver-grey lustre of its chrome plated flat panel. This modern, yet simple design adds to the beauty of any room.



# Super Deluxe Slim

CS-TE9DKE/TE12DKE

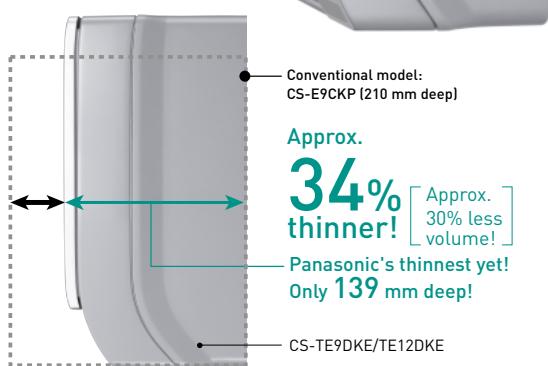
**INVERTER**



## Energy-saving efficiency in a compact design

### Slim & compact size

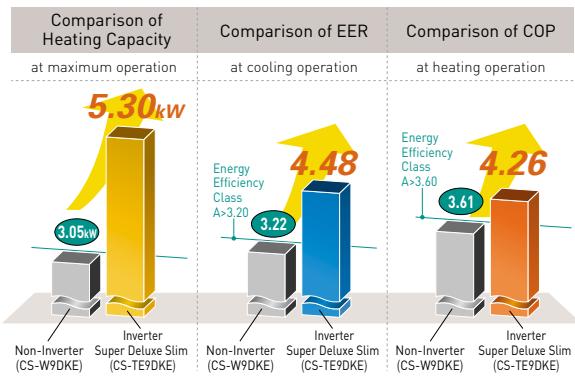
We used a number of unique technologies to downsize each and every component. Only 139 mm deep, these high-efficiency models are about 30% slimmer than previous models, to save space and enhance room interiors.



■ Slimming, Energy-Saving Technologies	
Indoor unit	<ul style="list-style-type: none"> <li>• New-shape heat exchanger</li> </ul>
	The optimized copper tube arrangement and the new triple-bend design combine to slim down body dimensions and raise energy efficiency.
Outdoor unit	<ul style="list-style-type: none"> <li>• High-performance wind circuit</li> </ul>
	The new casing provides a smoother air flow.
	<ul style="list-style-type: none"> <li>• DC Inverter (Hyper Wave Inverter)</li> <li>• e-scroll compressor</li> </ul>

### Powerful heating and top-class energy efficiency

Despite their compact size, our Super Deluxe Slim models offer both high capacity and a class-leading energy-saving performance that far exceeds requirements for Class A, the highest Energy-Efficiency Classification. These models prove that it's possible to achieve both compact size and energy-saving performance.



### SUPER allreu-buster filter

The SUPER allreu-buster filter combines three effects in one—anti-allergen, anti-virus, anti-bacteria protection—to keep room air clean and healthful.

Anti-allergen protection	Inactivates more than <b>99%</b> of all filter-captured allergens
Here, inactivate means to suppress normal activity. This inactivation of mite allergens has been verified by the University of Edinburgh in the UK.	
Anti-virus protection	Inactivates more than <b>99%</b> of all filter-captured viruses
Anti-bacteria/Anti-mould protection	Enzymatic action eliminates more than <b>99%</b> of all filter-captured bacteria

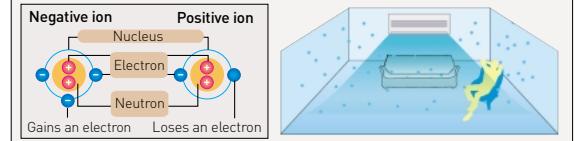


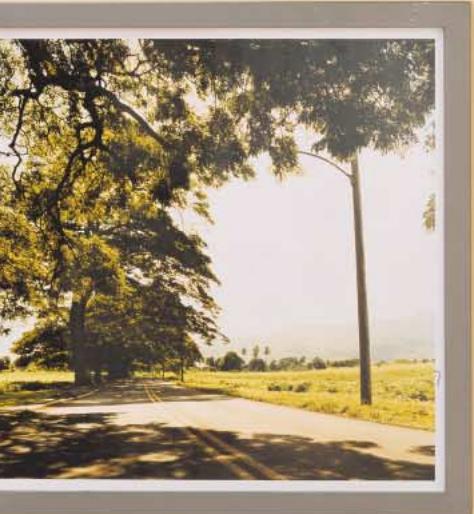
### Ion Freshener

Negative ions are generated to freshen the room. It's like being next to a waterfall or in a forest.

#### ■ What are negative ions?

Negative ions are negatively charged, ultra fine particles.





## supersonic

**Powerfully collects allergens  
from the room's air**

A Supersonic Air Purifying System accelerates the air cleaning effect of the SUPER alleru-buster filter. It keeps room air cleaner, to protect the family's health.





## Cleaner air with supersonic waves and SUPER alleru-buster

### air cleaning

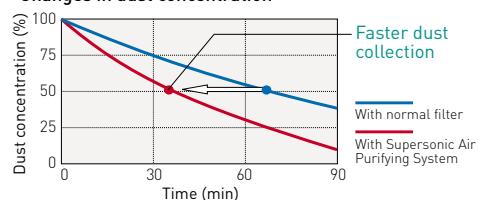
#### Supersonic Air Purifying System with SUPER alleru-buster



Faster dust collection  
Supersonic Air Purifying System

The Supersonic Air Purifying System incorporated in the indoor unit generates supersonic waves. The system works in combination with the filter to collects dust and dirt in the air for faster, more efficient air purification.

##### ■Changes in dust concentration



Inactivates harmful elements  
**SUPER alleru-buster filter**



The SUPER alleru-buster filter combines three effects in one—anti-allergen, anti-virus, anti-bacteria protection—to keep room air clean and healthful.

##### Anti-allergen protection

Inactivates more than **99%** of all filter-captured allergens

Here, inactivate means to suppress normal activity. This inactivation of mite allergens has been verified by the University of Edinburgh in the UK.

##### Anti-virus protection

Inactivates more than **99%** of all filter-captured viruses

##### Anti-bacteria/Anti-mould protection

Enzymatic action eliminates more than **99%** of all filter-captured bacteria



### air-creating

#### Ion Freshener



Around 20,000 negative ions/cc are generated to freshen the room. It's like being next to a waterfall or in a forest.

#### Super quiet

The indoor unit operates at a whisper-quiet 26 dB. You can also press the Quiet Mode button to lower the operating noise 3 dB. We've reduced the noise of the outdoor unit, too. You can run the air conditioner at night and enjoy a deeper, more comfortable sleep, and without bothering your neighbours.



\*1 CS-E9DKEW: In cooling mode with low fan speed  
\*2 CU-E9DKE: In cooling mode

#### Powerful heating & top-class energy efficiency

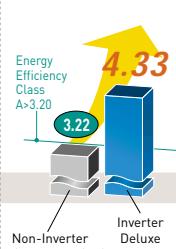
##### Comparison of Heating Capacity

at maximum operation



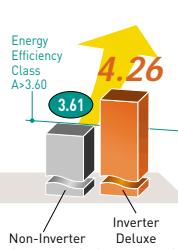
##### Comparison of EER

at cooling operation



##### Comparison of COP

at heating operation



#### Round form

The white body and sleek design have a pleasant, hygienic appearance.



# Advanced Inverter Performance – The Difference in Power and Comfort



Panasonic is harnessing its industry-leading technologies to make life more comfortable.

With the slogan "Technologies that deliver new levels of comfort," the company is working to develop new, high-performance inverter air conditioners.

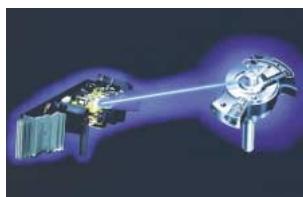
Models with PFC (power-factor corrector) circuitry reduce electrical loss from the power source, thus increasing maximum power input.

This naturally increases the maximum air conditioner output, so you enjoy more comfort.



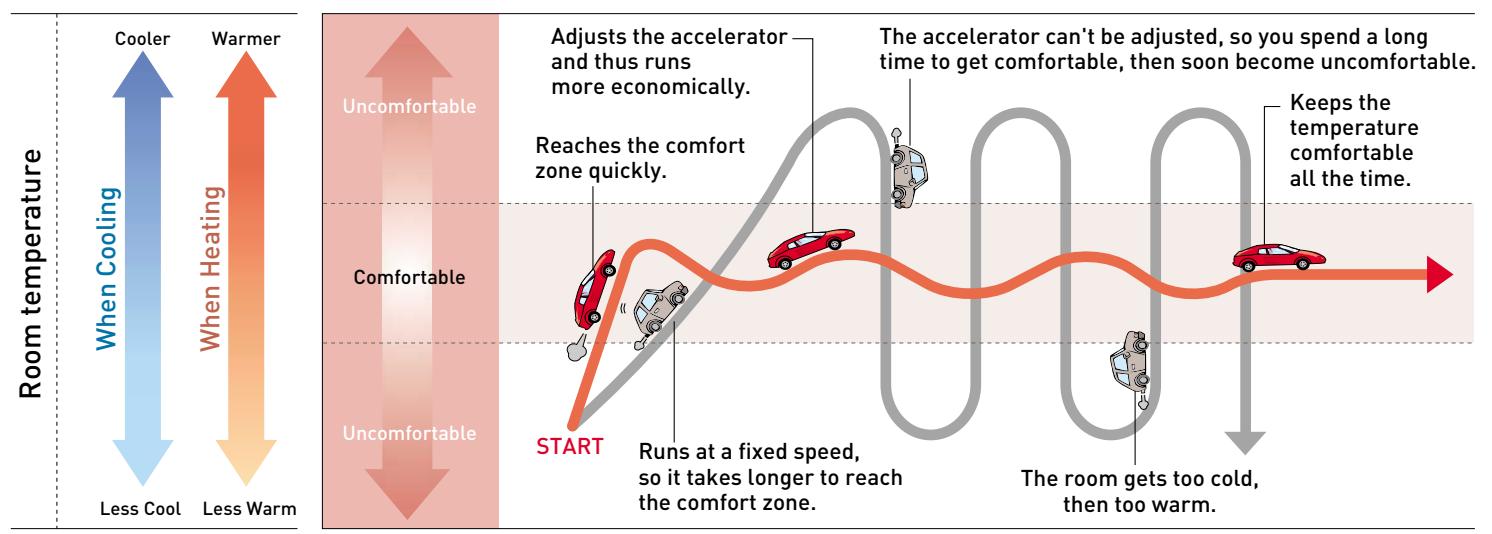
## WHAT'S AN INVERTER?

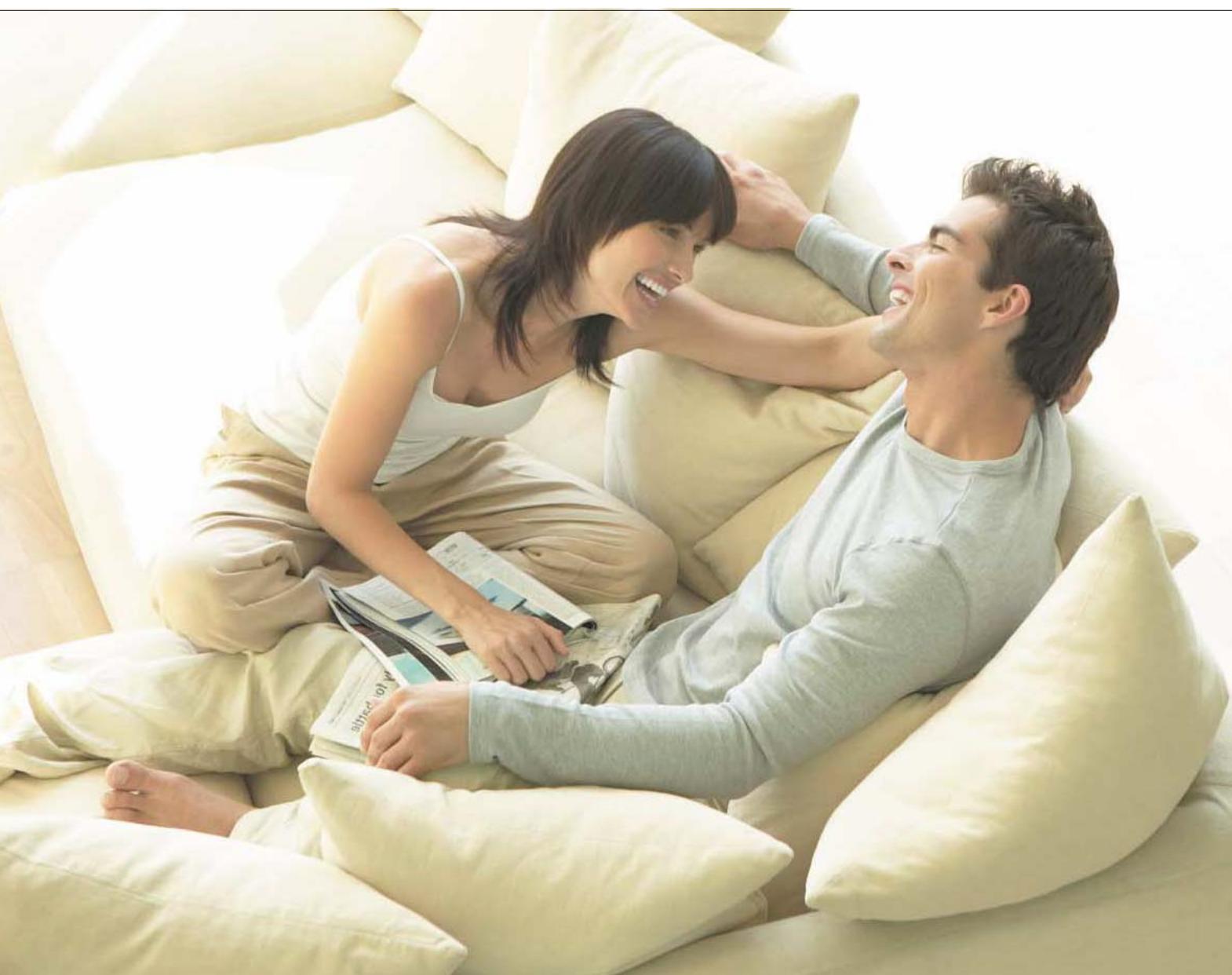
An inverter is a type of power conversion circuit that electronically regulates the voltage, current, and frequency of a device. In an inverter air conditioner, this circuit controls the revolutions of the compressor — and hence the air conditioner's output. Raising the frequency increases the output, lowering the frequency reduces it. In this way, inverter air conditioners provide much finer temperature control than non-inverter models.



## The advantages of an inverter air conditioner

### ■ Comparing inverter and non-inverter air conditioners to cars...

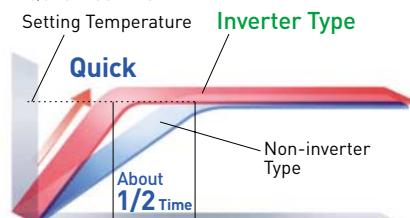




## Quick comfort

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

### ■ Quick comfort

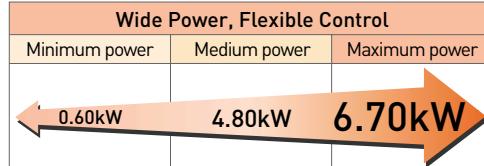


\* The graph is a representation of temperature changes during heating.

## Energy-saving

For optimum use of limited energy resources, an inverter air conditioner features an inverter circuit providing extremely efficient operation. Improved heat exchanger and compressor performance, precise microcomputer control and other innovations further assure dramatically boosted efficiency. So even though you get speedy, flexible operation, you use less electricity. What's more, low energy consumption means operation that's more environment-friendly than ever.

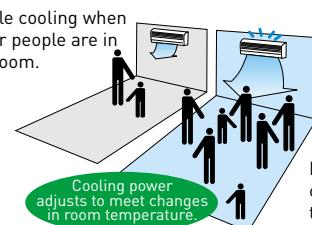
### Flexible power control & Energy saving



## Flexible power control

You're always comfortable with an inverter air conditioner. After quickly reaching the set temperature, it finely adjusts output power to maintain a constant temperature. So there are no uncomfortable temperature swings, while electricity is used more efficiently. Broad output power capability also assures continued comfort even if the number of people in a room changes. And at maximum output, an inverter air conditioner can deliver warm comfort even in the coldest winters.

Gentle cooling when fewer people are in the room.



Powerful cooling when there are more people.

## Single Inverter Split

### Wall-Mounted

#### Super Deluxe

**NEW**



**AC Robot**  
Auto Cleaning

With  
Bilingual  
Sticker

CU-XE9EKE/XE12EKE



Model No	CS-XE9EKE	CS-XE12EKE
Capacity(kW)	2.60(0.60~3.00)/3.60(0.60~6.10)	3.50 (0.60~4.00)/4.80(0.60~6.70)
EER/COP(W/W)	4.56 A /4.44 A	3.98 A /3.93 A



CS-XE9EKE

#### Super Deluxe Slim

With  
Bilingual  
Sticker

CU-TE9DKE/TE12DKE



Model No	CS-TE9DKE	CS-TE12DKE
Capacity(kW)	2.60(0.60~3.00)/3.60(0.60~5.30)	3.50(0.60~4.00)/4.80(0.60~6.50)
EER/COP(W/W)	4.48 A /4.26 A	3.89 A /3.64 A



CS-TE9DKE

#### Deluxe

With  
Bilingual  
Sticker



CU-E9DKE/  
E12DKE



CU-E15DKE  
CU-E15EKEA

Low Ambient Cooling

Model No	CS-E9DKEW	CS-E12DKEW	CS-E15DKEW	CS-E15EKEA
Capacity(kW)	2.60(0.80~3.00)/3.60(0.80~5.00)	3.50(0.80~4.00)/4.80(0.80~6.50)	4.40(0.90~5.00)/5.50(0.90~7.10)	4.40(0.90~5.00)/5.50(0.90~7.10)
EER/COP(W/W)	4.33 A /4.26 A	3.63 A /3.81 A	3.21 A /3.50	3.21 A /3.50



CS-E9DKEW



## Deluxe Wide



With  
Bilingual  
Sticker



CS-E18DKEW/  
E21DKES  
CS-E18EKEA/  
E21EKEA  
CS-E24EKE  
CS-E28EKE



CU-E18DKE/  
E21DKE  
CU-E18EKEA/  
E21EKEA  
CU-E24EKE  
CU-E28EKE

Model No	CS-E18DKEW	CS-E21DKES
Capacity(kW)	5.30(0.90~6.00)/6.60(0.90~8.00)	6.30(0.90~7.10)/7.20(0.90~8.50)
EER/COP(W/W)	3.21 A/3.69 A	2.85/3.43

Model No	CS-E24EKEES <b>NEW</b>	CS-E28EKE <b>NEW</b>
Capacity(kW)	6.80(0.90~8.10)/8.60(0.90~9.90)	7.65(0.90~8.60)/9.60(0.90~11.00)
EER/COP(W/W)	3.21 A/3.23	3.01/2.91

### -15°C Low Ambient Cooling

Model No	CS-E18EKEA <b>NEW</b>	CS-E21EKEA <b>NEW</b>
Capacity(kW)	5.30(0.90~6.00)/6.60(0.90~8.00)	6.30(0.90~7.10)/7.20(0.90~8.50)
EER/COP(W/W)	3.21 A/3.69 A	2.85/3.43



## Standard



With  
Bilingual  
Sticker

CU-PE9DKE/PE12DKE



Model No	CS-PE9DKE	CS-PE12DKE
Capacity(kW)	2.50(0.90~3.00)/3.30(0.90~4.00)	3.15(0.90~3.80)/4.10(0.90~5.00)
EER/COP(W/W)	3.42 A/4.02 A	3.46 A/3.69 A



(option)

### -15°C Low Ambient Cooling

Room cooling is possible even when the outside temperature drops as low as -15°C. This unit is designed to withstand conditions where cooling is required even during cold winter months, such as in computer rooms where the equipment heat must be controlled.

## Single Inverter Split

### Floor or Ceiling



Indoor unit: installed in a ceiling



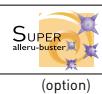
Indoor unit: installed on a floor



CU-E15DBE/E18DBE/  
E21DBE



Model No	CS-E15DTEW	CS-E18DTEW	CS-E21DTES
Capacity(kW)	4.15(0.90~4.55)/5.17(0.90~6.30)	5.00(0.90~5.40)/6.10(0.90~7.60)	5.80(0.90~6.60)/6.80(0.90~8.10)
EER/COP(W/W)	3.22 A /3.34	3.01/3.35	3.01/3.42



(option)

### Cassette (4-way)



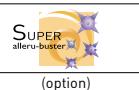
Panel CZ-BT20E



CU-E15DBE/E18DBE/  
E21DBE



Model No	CS-E15DB4EW	CS-E18DB4EW	CS-E21DB4ES
Capacity(kW)	4.10(0.90~4.80)/5.10(0.90~6.20)	4.80(0.90~5.70)/5.60(0.90~7.10)	5.90(0.90~6.30)/7.00(0.90~8.00)
EER/COP(W/W)	3.15/2.88	3.14/2.95	2.88/2.86



CS-E15DB4EW



### Hide-Away



CU-E15DBE/E18DBE



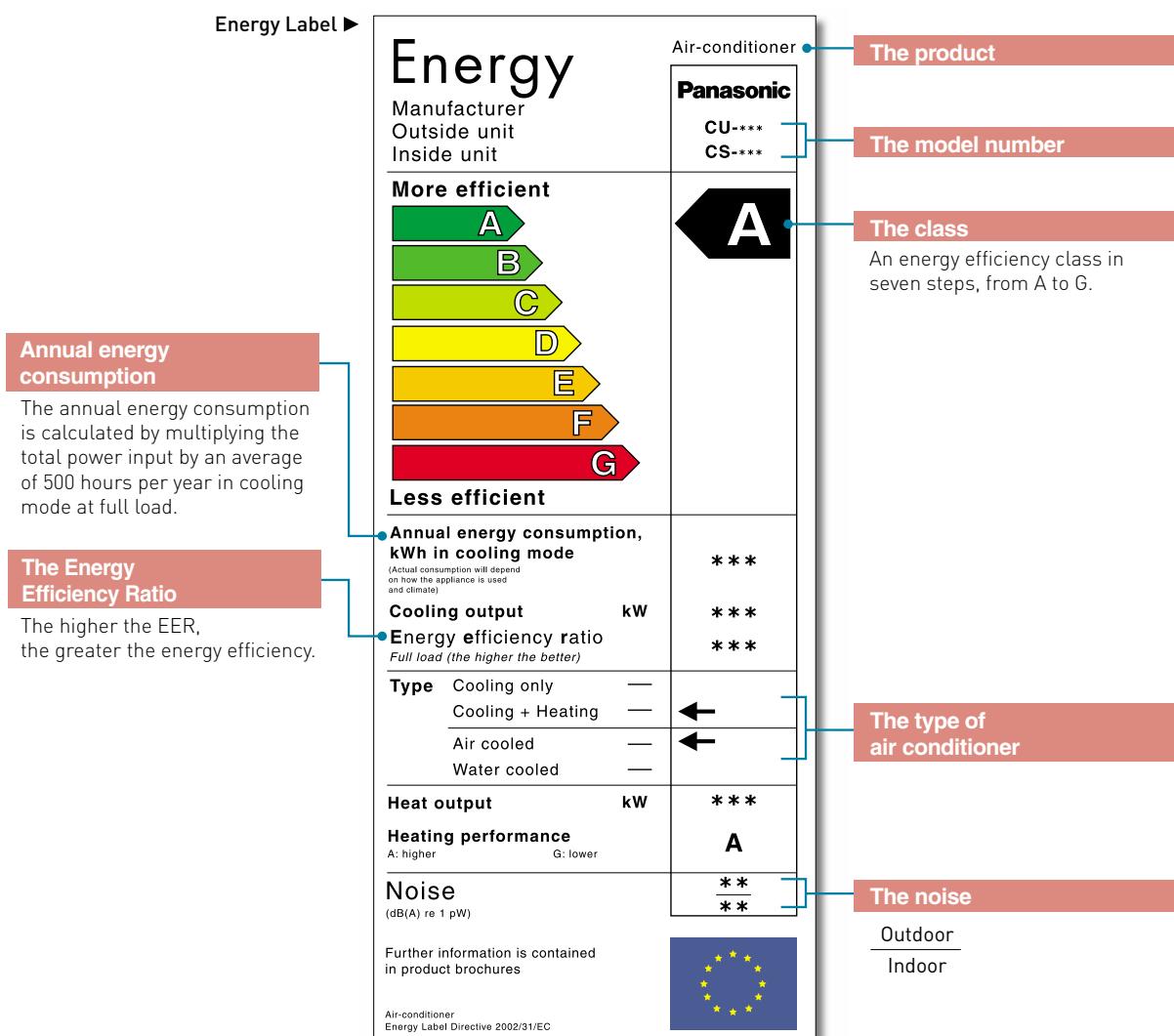
Model No	CS-E15DD3EW	CS-E18DD3EW
Capacity(kW)	4.10(0.90~4.70)/4.80(0.90~5.50)	5.10(0.90~5.70)/6.10(0.90~7.10)
EER/COP(W/W)	3.31 A /2.64	3.15/3.30



# Energy-Efficiency Classifications

According to a new EC Directive, the indication of the Energy Efficiency classification on household air conditioners became compulsory. This aims to provide consumers with clear and objective information regarding energy-saving, and to encourage them to select products that are environmentally friendly.

An Energy Label, like that shown in the sample below, will be provided in shop displays. In the label, the equipment is rated, with "A" being the most efficient. You may notice these labels and ratings appearing soon in shops that sell air conditioners. For easy understanding, the following information will be indicated for each model.



## Classifications

There are seven classifications of energy efficiency, from A to G. The most efficient level is "A" and the least efficient level is "G."

### Energy efficiency class of the unit in COOLING mode

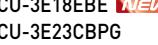
<b>A</b>	3.20 < EER
<b>B</b>	3.20 ≥ EER > 3.00
<b>C</b>	3.00 ≥ EER > 2.80
<b>D</b>	2.80 ≥ EER > 2.60
<b>E</b>	2.60 ≥ EER > 2.40
<b>F</b>	2.40 ≥ EER > 2.20
<b>G</b>	2.20 ≥ EER

### Energy efficiency class of the unit in HEATING mode

<b>A</b>	3.60 < COP
<b>B</b>	3.60 ≥ COP > 3.40
<b>C</b>	3.40 ≥ COP > 3.20
<b>D</b>	3.20 ≥ COP > 2.80
<b>E</b>	2.80 ≥ COP > 2.60
<b>F</b>	2.60 ≥ COP > 2.40
<b>G</b>	2.40 ≥ COP

These classifications are for split and multi-split air-cooled air conditioners.

## Multi Inverter Split

Indoor Unit	Wall-Mounted																		
	Deluxe	Deluxe-Wide																	
	 <span>With Bilingual Sticker</span>	 <span>With Bilingual Sticker</span>																	
	<table border="1"> <tr><td>Model No</td><td>CS-ME7DKEG</td><td>CS-E9DKEW</td><td>CS-E12DKEW*</td><td>CS-E15DKEW*</td></tr> <tr><td>Capacity</td><td>2.2kW class</td><td>2.8kW class</td><td>3.2kW class</td><td>4.0kW class</td></tr> </table> <div style="display: flex; justify-content: space-around;"> <span></span> <span></span> <span></span> <span></span> </div>	Model No	CS-ME7DKEG	CS-E9DKEW	CS-E12DKEW*	CS-E15DKEW*	Capacity	2.2kW class	2.8kW class	3.2kW class	4.0kW class	<table border="1"> <tr><td>Model No</td><td>CS-E18DKEW*</td></tr> <tr><td>Capacity</td><td>5.0kW class</td></tr> </table> <div style="display: flex; justify-content: space-around;"> <span></span> <span></span> <span></span> <span></span> </div>	Model No	CS-E18DKEW*	Capacity	5.0kW class			
Model No	CS-ME7DKEG	CS-E9DKEW	CS-E12DKEW*	CS-E15DKEW*															
Capacity	2.2kW class	2.8kW class	3.2kW class	4.0kW class															
Model No	CS-E18DKEW*																		
Capacity	5.0kW class																		
Cassette (1-way)	Cassette (4-way)																		
 <span>Panel CZ-BT20P</span> <span>With Bilingual Sticker</span>	 <span>Panel CZ-BT20E</span> <span>With Bilingual Sticker</span>																		
	<table border="1"> <tr><td>Model No</td><td>CS-ME7EB1E</td><td>CS-ME10EB1E</td><td>CS-ME12EB1E</td><td>CS-ME14EB1E</td></tr> <tr><td>Capacity</td><td>2.2kW class</td><td>2.8kW class</td><td>3.2kW class</td><td>4.0kW class</td></tr> </table> <div style="display: flex; justify-content: space-around;"> <span></span> </div>	Model No	CS-ME7EB1E	CS-ME10EB1E	CS-ME12EB1E	CS-ME14EB1E	Capacity	2.2kW class	2.8kW class	3.2kW class	4.0kW class	<table border="1"> <tr><td>Model No</td><td>CS-E15DB4EW*</td><td>CS-E18DB4EW*</td></tr> <tr><td>Capacity</td><td>4.0kW class</td><td>5.0kW class</td></tr> </table> <div style="display: flex; justify-content: space-around;"> <span></span> <span></span> <span></span> </div> <p>(option) CS-E15DB4EW</p>	Model No	CS-E15DB4EW*	CS-E18DB4EW*	Capacity	4.0kW class	5.0kW class	
Model No	CS-ME7EB1E	CS-ME10EB1E	CS-ME12EB1E	CS-ME14EB1E															
Capacity	2.2kW class	2.8kW class	3.2kW class	4.0kW class															
Model No	CS-E15DB4EW*	CS-E18DB4EW*																	
Capacity	4.0kW class	5.0kW class																	
Floor or Ceiling	Hide-Away																		
 <span>With Bilingual Sticker</span>	 <span>With Bilingual Sticker</span>																		
	<table border="1"> <tr><td>Model No</td><td>CS-ME10DTEG</td><td>CS-E15DTEW*</td><td>CS-E18DTEW*</td></tr> <tr><td>Capacity</td><td>2.8kW class</td><td>4.0kW class</td><td>5.0kW class</td></tr> </table> <div style="display: flex; justify-content: space-around;"> <span></span> <span></span> </div> <p>(option)</p>	Model No	CS-ME10DTEG	CS-E15DTEW*	CS-E18DTEW*	Capacity	2.8kW class	4.0kW class	5.0kW class	<table border="1"> <tr><td>Model No</td><td>CS-ME10DD3EG</td><td>CS-E15DD3EW*</td><td>CS-E18DD3EW*</td></tr> <tr><td>Capacity</td><td>2.8kW class</td><td>4.0kW class</td><td>5.0kW class</td></tr> </table> <div style="display: flex; justify-content: space-around;"> <span></span> </div>	Model No	CS-ME10DD3EG	CS-E15DD3EW*	CS-E18DD3EW*	Capacity	2.8kW class	4.0kW class	5.0kW class	
Model No	CS-ME10DTEG	CS-E15DTEW*	CS-E18DTEW*																
Capacity	2.8kW class	4.0kW class	5.0kW class																
Model No	CS-ME10DD3EG	CS-E15DD3EW*	CS-E18DD3EW*																
Capacity	2.8kW class	4.0kW class	5.0kW class																
2 rooms	3 rooms	4 rooms																	
 <span>CU-2E15CBPG</span>	 <span>CU-2E18CBPG</span>	 <span>CU-3E18EBE NEW</span>  <span>CU-3E23CBPG</span>	 <span>CU-4E27CBPG</span>	<p>Additional Parts Pipe Size Reducer</p> <div style="text-align: center;">  <p>CZ-MA1P</p> </div> <p>For the indoor units marked with a star (*), the pipe size reducer must be used.</p>															

## Advantages of the Multi Inverter System

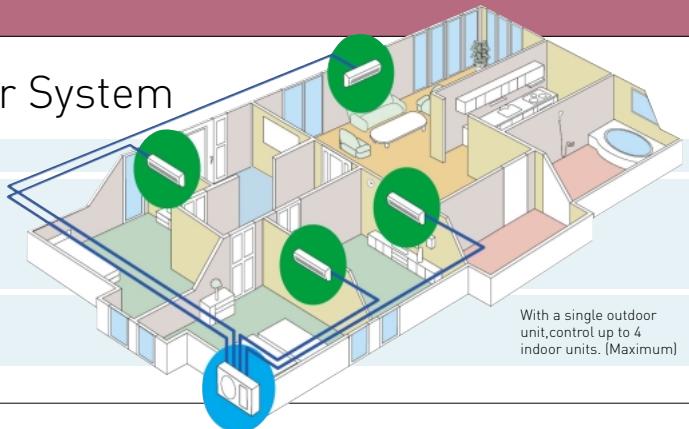
### A variety of indoor units

#### Air-quality features (Wall-mounted type only)

#### Indoor unit

- Supersonic Air Purifying System
- SUPER allergo-buster filter
- Ion Freshener

Adjust the operation settings for each indoor unit independently



## Combination Patterns

Rooms	Models	Indoor Units: Possible Combination Patterns Must be within capacity range.	Capacity 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	Wall-Mounted	Cassette [1-way]	Cassette [4-way]	Floor or Ceiling
2 rooms	CU-2E15CBPG	 Dimensions [HxWxD]: 540 x 780(+70) x 289 mm Weight: 38 kg	PORT A 2.2 or 2.8 * Either unit PORT B 2.2 or 2.8 * Either unit	4.4   5.0 kW	Room A Ø 6.35 Ø 9.52							2.2	●			
	CU-2E18CBPG	 Dimensions [HxWxD]: 540 x 780(+70) x 289 mm Weight: 38 kg	PORT A 2.2, 2.8 or 3.2 * Either unit PORT B 2.2, 2.8 or 3.2 * Either unit	4.4   6.4 kW	Room A Ø 6.35 Ø 9.52							2.2	●			
	CU-3E18EBE	 Dimensions [HxWxD]: 735 x 826(+73) x 300 mm Weight: 49 kg	PORT A 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT B 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT C 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit	5.0   8.4 kW	Room A Ø 6.35 Ø 9.52							2.2	●	●		
	CU-3E23CBPG	 Dimensions [HxWxD]: 735 x 826(+110) x 300 mm Weight: 57 kg	PORT A 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT B 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT C 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit	5.0   10.0 kW	Room A Ø 6.35 Ø 9.52							2.2	●	●		
3 rooms	CU-4E27CBPG	 Dimensions [HxWxD]: 908 x 900 x 320 mm Weight: 73 kg	PORT A 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT B 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT C 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit PORT D 2.2, 2.8, 3.2, 4.0 or 5.0 * Either unit	5.0   13.6 kW	Room A Ø 6.35 Ø 9.52							2.2	●	●		
	CU-4E27CBPG				Room B Ø 6.35 Ø 9.52							2.8	●	●		
	CU-4E27CBPG				Room C Ø 6.35 Ø 9.52							3.2	●	●		
	CU-4E27CBPG				Room D Ø 6.35 Ø 9.52							4.0	●	●	●	●

# Single Split Wall-Mounted

## Deluxe



With  
Bilingual  
Sticker



CU-W7DKE/  
W9DKE/V7DKE



CU-W12DKE/  
V9DKE/V12DKE

### Heat Pump

### Cooling

Model No	CS-W7DKE	CS-W9DKE	CS-W12DKE	CS-V7DKE	CS-V9DKE	CS-V12DKE
Capacity(kW)	2.30/2.45	2.75/3.05	3.60/3.90	2.40	3.00	3.68
EER/COP(W/W)	3.24 A /3.63 A	3.22 A /3.61 A	3.21 A /3.61 A	3.24 A	3.21 A	3.23 A



CS-W7DKE/W9DKE/  
V7DKE/V9DKE

## Deluxe Wide



With  
Bilingual  
Sticker



CU-W18DKE/W24DKE/  
V18DKE/V24DKE/

### Heat Pump

### Cooling

Model No	CS-W18DKE	CS-W24DKE	CS-V18DKE	CS-V24DKE
Capacity(kW)	5.30/5.42	7.03/7.50	5.30	7.03
EER/COP(W/W)	3.21 A /3.27	2.53/2.87	3.25 A	2.70



## Deluxe Wide



With  
Bilingual  
Sticker



CU-V28EKE

### Cooling

Model No	CS-V28EKE <span style="color:red">NEW</span>
Capacity(kW)	7.91
EER(W/W)	3.22 A



## Standard



Air Quality Indicator  
AirQuality

With  
Bilingual  
Sticker

CU-PW9DKE/PW12DKE/



### Heat Pump

Model No	CS-PW9DKE	CS-PW12DKE
Capacity(kW)	2.65/2.85	3.40/3.80
EER/COP(W/W)	3.21 A/3.80 A	3.21 A/3.80 A



(option)

## Standard Wide



With  
Bilingual  
Sticker

CU-PW18DKE



### Heat Pump

Model No	CS-PW18DKE
Capacity(kW)	5.10/5.30
EER/COP(W/W)	2.91/3.35



(option)

## Floor or Ceiling

Indoor unit: installed in a ceiling



Indoor unit: installed on a floor

With  
Bilingual  
Sticker

CU-W12CTP5/  
V12CTP5



CU-W18CTP5/  
W24CTP5/  
V18CTP5/  
V24CTP5



### Heat Pump

### Cooling

Model No	CS-W12CTP	CS-W18CTP	CS-W24CTP	CS-V12CTP	CS-V18CTP	CS-V24CTP
Capacity(kW)	3.60/3.95	5.20/5.80	6.90/7.65	3.52	5.30	7.03
EER/COP(W/W)	3.13/3.35	3.07/3.33	2.51/2.65	3.20	3.17	2.58



## Multi Split

### Wall-Mounted

#### Dual Split

2 rooms

**NEW**



#### Cooling

Model No	CS-MV9EKEx2 (CU-2V14EKEx2) 1-Compressor Dual Split Type		CS-MV9EKEx2 (CU-2V18EKEx2) 2-Compressor Dual Split Type	
Capacity(kW)	2.94 One-Unit Operation	3.63 Two-Unit Operation	2.65 One-Unit Operation	5.30 Two-Unit Operation
EER(W/W)	2.49 One-Unit Operation	2.93 Two-Unit Operation	3.05 One-Unit Operation	3.05 Two-Unit Operation



#### Dual Split

2 rooms  
(Different Capacities)

**NEW**



#### Cooling

Model No	CS-MV7EKExE / CS-MV12EKExE (CU-2V19EKExE) 2-Compressor Dual Split Type			
Capacity(kW)	2.06 One-Unit Operation (CS-MV7EKExE)	3.48 One-Unit Operation (CS-MV12EKExE)	5.54 Two-Unit Operation (CS-MV7EKExE+CS-MV12EKExE)	
EER(W/W)	2.86 One-Unit Operation (CS-MV7EKExE)	2.83 One-Unit Operation (CS-MV12EKExE)	3.01 Two-Unit Operation (CS-MV7EKExE+CS-MV12EKExE)	



CS-MV7EKExE

#### Triple Split

3 rooms

**NEW**



CU-3V20EKEx



#### Cooling

Model No	CS-MV9EKEx3 (CU-3V20EKEx) 2-Compressor Triple Split Type				
Capacity(kW)	2.68 One-Unit Operation (B)	2.89 One-Unit Operation (A1 or A2)	5.57 Two-Unit Operation (B + A1 or A2)	3.74 Two-Unit Operation (A1 + A2)	6.42 Three-Unit Operation (B + A1 + A2)
EER(W/W)	2.95 One-Unit Operation (B)	2.58 One-Unit Operation (A1 or A2)	2.87 Two-Unit Operation (B + A1 or A2)	3.12 Two-Unit Operation (A1 + A2)	3.23 Three-Unit Operation (B + A1 + A2) <b>A</b>











# Multi Inverter Split : Outdoor Units



Cooling  
Heating

Model (50Hz)		CU-2E15CBPG	CU-2E18CBPG	CU-3E18EBE	CU-3E23CBPG	CU-4E27CBPG	
Indoor-units Combination		2.2 kW + 2.2 kW	3.2 kW + 3.2 kW	2.2 kW + 2.8 kW + 4.0 kW	2.8 kW + 3.2 kW + 4.0 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	4.5 (1.5 - 5.0)	5.2 (1.5 - 5.4)	5.2 (1.8 - 7.3)	6.8 (2.8 - 8.4)	8.0 (3.0 - 9.2)	
Electrical Data							
Running Current	A	5.75	7.10	5.40	8.50	8.70	
Power Input	W	1,230 (250 - 1,350)	1,520 (250 - 1,580)	1,220 (360 - 2,180)	1,950 (490 - 2,800)	1,980 (530 - 2,870)	
EER	W/W	3.66	3.42	4.26	3.49	4.04	
Noise							
Sound Pressure Level	dB(A)	47	49	46	48	48	
Sound Power Level	dB	62	64	59	61	61	
Heating Operation							
Capacity	kW	5.4 (1.1 - 7.0)	5.6 (1.1 - 7.2)	6.8 (1.6 - 8.3)	8.6 (3.5 - 9.1)	9.4 (4.2 - 10.6)	
Electrical Data							
Running Current	A	5.20	5.35	6.30	8.30	9.10	
Power Input	W	1,170 (210 - 1,670)	1,210 (210 - 1,700)	1,420 (320 - 2,110)	1,880 (560 - 2,710)	2,080 (700 - 3,060)	
COP	W/W	4.62	4.63	4.79	4.57	4.52	
Noise							
Sound Pressure Level	dB(A)	49	51	47	49	49	
Sound Power Level	dB	64	66	60	62	62	
Maximum Current	A	12.0	12.0	17.5	18.5	19.0	
Starting Current	A	5.75	7.10	6.30	8.50	9.10	
Compressor Output	W	1,200	1,500	1,500	1,900	2,200	
Fan Output	W	40	40	50	53	51	
Circuit Breaker Ratio	A	15	15	20	20	20	
Dimensions							
Height	mm	540	540	735	735	908	
Width	mm	780 (+70)	780 (+70)	826 (+73)	826 (+110)	900	
Depth	mm	289	289	300	300	320	
Net Weight	kg	38	38	49	57	73	
Connecting Cable		3 + 1 (earth), ø1.5 mm <sup>2</sup>					
Pipe Length Range (1 room)	m	3 - 20	3 - 20	3 - 25	3 - 25	3 - 25	
Maximum Pipe Length (Total room)***	m	30	30	50	50	70	
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	9.52	9.52	
Energy Saving Classification	Cooling Class						
	Annual Energy Consumption	kW	615	760	610	975	990
	Heating Class						

\* The cooling sound power level specification is based on EUROVENT Document 6/C/006-97.

\*\* Additional Gas might be required for some models.

\*\*\* Refer to page 21 for information on Additional Gas.

# For models with the Air Purifying Filter, the specifications indicate values with the filter removed.

# Specifications

## Multi Inverter Split : Indoor Units

### Wall-Mounted



Cooling  
Heating

Model (Capacity)	CS-ME7DKEG (2.2 kW class)	CS-E9DKEW (2.8 kW class)	CS-E12DKEW (3.2 kW class)	CS-E15DKEW (4.0 kW class)	CS-E18DKEW (5.0 kW class)
Power Source	Single phase, 230 V, 50 Hz				
Noise (Hi/Lo)					
Sound Pressure Level dB(A)	40/29 <b>40/29</b>	40/29 <b>40/29</b>	44/32 <b>44/32</b>	44/32 <b>44/33</b>	46/33 <b>46/35</b>
Sound Power Level dB	53/42 <b>53/42</b>	53/42 <b>53/42</b>	57/45 <b>57/45</b>	57/45 <b>57/46</b>	59/46 <b>59/48</b>
Fan Output W	30	30	30	30	30
Dimensions					
Height mm	280	280	280	280	275
Width mm	799	799	799	799	998
Depth mm	183	183	183	183	230
Net Weight kg	9.0	9.0	9.0	9.0	11.0
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	12.70*	12.70*	12.70*

\*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.

# For models with the Air Purifying Filter, the specifications indicate values with the filter removed.

### Floor or Ceiling



Cooling  
Heating

Model (Capacity)	CS-ME10DTEG (2.8 kW class)	CS-E15DTEW (4.0 kW class)	CS-E18DTEW (5.0 kW class)
Power Source	Single phase, 230 V, 50 Hz		
Noise (Hi/Lo)			
Sound Pressure Level dB(A)	39/31 <b>40/31</b>	45/37 <b>45/33</b>	46/39 <b>47/35</b>
Sound Power Level dB	52/44 <b>53/44</b>	58/50 <b>58/46</b>	59/52 <b>60/48</b>
Fan Output W	51	51	51
Dimensions			
Height mm	540	540	540
Width mm	1,028	1,028	1,028
Depth mm	200	200	200
Net Weight kg	17.0	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
Gas Side mm	9.52	12.70*	12.70*

\*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.

### Cassette (1-way)



Cooling  
Heating

Model (Capacity)	CS-ME7EB1E (2.2 kW class)	CS-ME10EB1E (2.8 kW class)	CS-ME12EB1E (3.2 kW class)	CS-ME14EB1E (4.0 kW class)
Power Source	Single phase, 230 V, 50 Hz			
Noise (Hi/Lo)				
Sound Pressure Level dB(A)	40/32 <b>42/32</b>	40/32 <b>42/32</b>	41/32 <b>43/32</b>	43/32 <b>44/34</b>
Sound Power Level dB	53/45 <b>55/45</b>	53/45 <b>55/45</b>	54/45 <b>56/45</b>	56/45 <b>57/47</b>
Fan Output W	30	30	30	30
Dimensions				
Height mm	185	185	185	185
Width mm	770	770	770	770
Depth mm	360	360	360	360
Net Weight kg	9.8	9.8	9.8	10.5
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
Gas Side mm	9.52	9.52	9.52	9.52

## Multi Inverter Split : Indoor Units

### Cassette (4-way)

Cooling  
Heating

Model (Capacity)	CS-E15DB4EW (4.0 kW class)	CS-E18DB4EW (5.0 kW class)
Power Source	Single phase, 230 V, 50 Hz	
Noise (Hi/Lo)		
Sound Pressure Level dB(A)	34/26 <b>35/28</b>	36/28 <b>37/29</b>
Sound Power Level dB	47/39 <b>48/41</b>	49/41 <b>50/42</b>
Fan Output W	40	40
Dimensions		
Height mm	260	260
Width mm	575	575
Depth mm	575	575
Net Weight kg	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
Gas Side mm	12.70*	12.70*

\*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.

### Hide-Away

Cooling  
Heating

Model (Capacity)	CS-ME10DD3EG (2.8 kW class)	CS-E15DD3EW (4.0 kW class)	CS-E18DD3EW (5.0 kW class)
Power Source	Single phase, 230 V, 50 Hz		
Noise (Hi/Lo)			
Sound Pressure Level dB(A)	31/27 <b>35/27</b>	33/27 <b>35/28</b>	41/30 <b>41/32</b>
Sound Power Level dB	47/43 <b>51/43</b>	49/43 <b>51/44</b>	57/46 <b>57/48</b>
Fan Output W	30	30	30
External Static Pressure Pa(mmAq)	25 (2.55)	25 (2.55)	25 (2.55)
Air Circulation m <sup>3</sup> /min	7.0	7.8	10.3
Dimensions			
Height mm	235	235	285
Width mm	750	750	750
Depth mm	370	370	370
Net Weight kg	17.0	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
Gas Side mm	9.52	12.70*	12.70*

\*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.



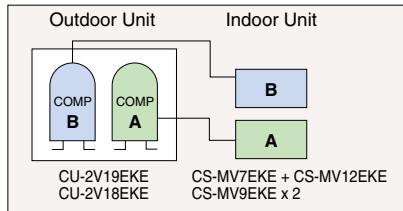


# Specifications

## Multi Split R410A

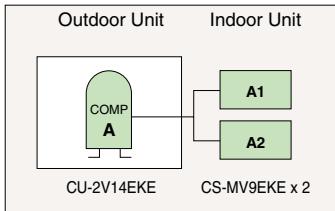
Model		CS-MV9EKEx2 (CU-2V14EKE)		CS-MV9EKEx2 (CU-2V18EKE)		Unit B: CS-MV7EKE Unit A: CS-MV12EKE (CU-2V19EKE)		
Operation		1 Unit		2 Units		1 Unit <b>B</b>		1 Unit <b>A</b>
Cooling Capacity kW		2.94		3.63		2.65		5.30
kcal/h		2,530		3,120		2,280		4,560
EER W/W		2.49		2.93		3.05		3.05
Electrical Data								
Voltage V		230		230		230		230
Running Current A		5.3		5.6		4.0		8.0
Power Input W		1,180		1,240		870		1,740
Noise	Sound Pressure Level							
	Indoor (Hi/Lo) dB(A)		36/26		36/26		36/26	
	Outdoor (Hi) dB(A)		47		47		55	
	Sound Power Level*							
	Indoor (Hi) dB		49		49		49	
Outdoor (Hi) dB		62		62		70		70
Moisture Removal L/h		1.7		2.1		1.6		2.9
Air Circulation (Indoor/Hi) m³/min		9.1		9.1		7.9		9.6
Dimensions Indoor (Outdoor)								
Height mm		280 (540)		280 (651)		280 (651)		
Width mm		799 (760)		799 (893)		799 (893)		
Depth mm		183 (250)		183 (345)		183 (345)		
Net Weight Indoor (Outdoor) kg		9 (34)		9 (64)		9 (66)		
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"		<b>B</b> 9.52 3/8" <b>A</b> 12.70 1/2"		
Pipe Extension Minimum Pipe Length m		3		3		3		
Maximum Pipe Length** m		15		15		15		
Power Supply		Outdoor		Outdoor		Outdoor		
Energy Saving Classification	Cooling Class	E		C		B		B
	Annual Energy Consumption kW	590		620		435		870
						360		615
						920		

### Multi Split Type : System Configuration



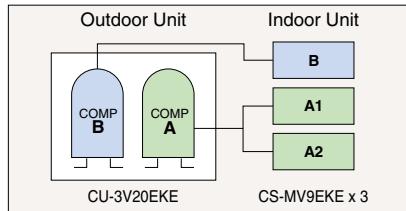
#### 2-Compressor Dual Split Type

Two compressors independently drive two indoor units so there is no loss in capacity when both indoor units are operating.



#### 1-Compressor Dual Split Type

A single compressor can cool one or two rooms as required.



#### 2-Compressor Triple Split Type

One compressor drives one indoor unit to cool one room, while another drives two indoor units to cool two rooms.

# Multi Split R410A

Model (50Hz)		Unit B, A1, A2:CS-MV9EKEx3 (CU-3V20EKE)				
Operation		1 Unit <b>B</b>	1 Unit <b>A1 or A2</b>	2 Units <b>B+A1 or A2</b>	2 Units <b>A1+A2</b>	3 Units <b>B+A1+A2</b>
Cooling Capacity		2.68 kW	2.89	5.57	3.74	6.42
		2,300 kcal/h	2,490	4,790	3,220	5,520
EER		W/W	2.95	2.58	2.87	3.12
Electrical Data		Voltage	230 V	230	230	230
Running Current		A	4.1	5.0	8.6	5.3
Power Input		W	910	1,120	1,940	1,200
Noise	Sound Pressure Level					
	Indoor (Hi/Lo)	dB(A)	36/26	36/26	36/26	36/26
	Outdoor (Hi)	dB(A)	56	56	56	56
	Sound Power Level*					
	Indoor (Hi)	dB	49	49	49	49
	Outdoor (Hi)	dB	71	71	71	71
	Moisture Removal	L/h	1.6	1.7	3.0	2.2
	Air Circulation (Indoor/Hi)	m³/min	9.1	9.1	9.1	9.1
	Dimensions Indoor (Outdoor)					
	Height	mm		280 (651)		
	Width	mm		799 (893)		
	Depth	mm		183 (345)		
	Net Weight Indoor (Outdoor)	kg		9 (66)		
	Refrigerant Pipe Diameter					
	Liquid Side	mm inch		6.35 1/4"		
	Gas Side	mm inch		9.52 3/8"		
	Pipe Extension Minimum Pipe Length	m		3		
	Maximum Pipe Length**	m		15		
	Power Supply					
				Outdoor		
Energy Saving Classification	Cooling Class	C	E	C	B	<b>A</b>
	Annual Energy Consumption	kW	455	560	970	600
						995

\* The cooling sound power level specification is based on EUROVENT Document 6/C/006-97.

\*\* Additional Gas might be required for some models.

# For models with the Air Purifying Filter, the specifications indicate values with the filter removed.

## Rating Conditions

	<b>Cooling</b>	<b>Heating</b>
Inside air temperature	27°C DB/19°C WB	20°C DB
Outside air temperature	35°C DB/24°C WB	7°C DB/6°C WB

**Caution (Important)**  
Please do not use copper pipes which the thickness is less than 0.8mm.

### ISO 9000 Series Certification



SIRIM

**CERTIFIED TO MS ISO 9002: 1994**  
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAM)  
Registration No.: AR 0866



**CERTIFIED TO DIN EN ISO 9001: 1994**  
MATUSHITA ELECTRIC INDUSTRIAL CO., LTD.  
AIR-CONDITIONER DIVISION  
Certificate Registration No.09 100 5766

### Environmental Management Systems Approval Certificate



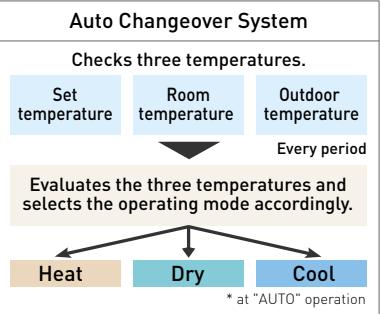
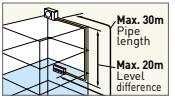
MS ISO 14001 CERT. NO. MO 15802127  
**CERTIFIED TO MS ISO 14001: 1997**  
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAM)  
Certification No.: M015802127



**CERTIFIED TO ISO 14001: 1996**  
MATUSHITA ELECTRIC INDUSTRIAL CO., LTD.  
AIR-CONDITIONER DIVISION  
Approval Certificate No.: 771754

# Feature Explanations

Healthy Air Quality		Comfortable	
<p> <b>AC Robot (Auto Cleaning Robot)</b></p> <p>Automatically removes dust from the filter and exhausts it outside the unit to keep the inside clean.</p>  <p>The vacuum nozzle slides over the filter after each use* to vacuum the dust and exhaust it outside automatically.</p> <p>*The size of the area to be cleaned is determined based on cumulative operating hours and fan speed.</p>		<p> <b>Air Quality Indicator</b></p> <p>This indicator helps monitor the condition of the air quality in the room, and tells when ventilation is needed.</p>  <p><i>You turn on AC with window closed</i></p> <p><b>Green Lamp:</b> Air quality is normal</p> <p><b>Orange Lamp:</b> Air quality is deteriorating, and it is recommended to let in fresh air (i.e. open the window)</p> <p><b>Red Lamp:</b> Air quality is very poor and ventilation is needed immediately</p> <p><i>You start to let fresh air in</i></p> <p><b>Orange Lamp:</b> Air quality is improving</p> <p><b>Green Lamp:</b> Air quality resumed normal</p> <p><i>You can stop the ventilation</i></p>	
<p> <b>Ion Freshener</b></p> <p>It is known that areas rich in negative ions, like near waterfalls and forests, generally make people feel refreshed. With Panasonic split air conditioner, the same refreshing feeling can be felt just by pushing a single button.</p>		<p> <b>Inverter Control</b></p> <p>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.</p>	
<p> <b>Supersonic Air Purifying System</b></p> <p>The Supersonic Air Purifying System incorporated in the indoor unit generates supersonic waves. The system works in combination with the filter to collect dust and dirt in the air for faster, more efficient air purification.</p>  <p>Supersonic Air Purifying Device</p>  <p>Supersonic wave generator SUPER allreu-buster filter</p>		<p> <b>Quiet Mode</b></p> <p>Simply press a button to reduce the indoor unit operating sound by about 3 dB. This function is especially convenient for operation near a sleeping baby.</p> <p><b>Press a QUIET button</b> 3dB Down</p> 	
<p> <b>SUPER allreu-buster filter</b></p> <p>The SUPER allreu-buster filter combines three effects in one — anti-allergen, anti-virus, and anti-bacteria protection — to keep room air clean and healthful.</p> <p><b>Anti-allergen protection</b> Inactivates more than <b>99%</b> of all filter-captured allergens</p> <p>Here, inactivate means to suppress normal activity. This inactivation of mite allergens has been verified by the University of Edinburgh in the UK.</p> <p><b>Anti-virus protection</b> Inactivates more than <b>99%</b> of all filter-captured viruses</p> <p><b>Anti-bacteria/Anti-mould protection</b> Enzymatic action eliminates more than <b>99%</b> of all filter-captured bacteria</p>		<p> <b>Powerful Mode</b></p> <p>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.</p> 	
		<p> <b>Ventilation Control</b></p> <p>You can ventilate the room by simply pressing the remote control button. Dirty air is carried outside to keep the room fresh and clean.</p>	
		<p> <b>Soft Dry Operation Mode</b></p> <p>Starts with cooling to dehumidify. Then provides continuous breeze at low frequency to keep room dry without much change in temperature.</p>	

<p> <b>Personal Airflow Creation</b></p> <p>Vertical and horizontal air flow patterns can be combined as desired to gain the greatest possible comfort, with operation possible even from a distance by remote control.</p> <p>• <b>Up &amp; Down Airflow — 5 Patterns + Auto</b></p>  <p>When you don't want airflow directed right at you. When you want direct airflow. When you want to warm yourself thoroughly from the feet up.</p> <p>• <b>Left &amp; Right Airflow — 5 Patterns + Auto</b></p>  <p>To focus the airflow to one side of the room. To focus the airflow to the centre. For uniform airflow throughout the room.</p>	<p> <b>Auto Changeover (Inverter)</b></p> <p> <b>Auto Changeover</b></p> <p>Sensors measure the room and outside temperatures periodically. Based on these temperatures and the set temperature, the microcomputer determines the most suitable operating mode as time passes.</p> <p><b>Auto Changeover System</b></p>  <pre> graph TD     A[Set temperature] --&gt; B[Room temperature]     A --&gt; C[Outdoor temperature]     B --&gt; D[Evaluates the three temperatures and selects the operating mode accordingly]     C --&gt; D     D --&gt; E[Heat]     D --&gt; F[Dry]     D --&gt; G[Cool]     style D fill:#e0f2e0     style E fill:#d9e1f2     style F fill:#d9e1f2     style G fill:#d9e1f2     E --&gt; H["* at \"AUTO\" operation"]   </pre> <p><b>Automatic Operation Mode (Cooling)</b></p> <p>When the Automatic Operation button is pressed, the optimum mode (cooling, soft dry) is selected based on data from the Intake Air Sensor. The desired temperature setting can also be set (Low, Normal or High).</p> <p><b>Hot Start Control</b></p> <p>On the start of heating cycle and after defrost cycle, the indoor fan will start up once the indoor heat exchanger is warm.</p> <p><b>Circulation Operation Mode</b></p> <p>This mode circulates the air in the room, to minimize differences in air temperature.</p> <p><b>Low Ambient Cooling</b></p> <p>Room cooling is possible even when the outside temperature drops as low as -15°C. This unit is designed to withstand conditions where cooling is required even during cold winter months, such as in computer rooms where the equipment heat must be controlled.</p>	<p><b>Convenient</b></p> <p> <b>24-Hour ON &amp; OFF Real Setting Timer</b></p> <p>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.</p> <p> <b>12-Hour ON &amp; OFF Timer</b></p> <p> <b>LCD Wireless Remote Controller</b></p> <p> <b>Bilingual Sticker</b></p> <p>This sticker, in the language* of the country in which it is used, makes operation easier with fast and simple confirmation of button functions.</p> <p>*Select from 8 languages (French, German, Spanish, Dutch, Portuguese, Italian, Greek, or Russian)</p> <p><b>Reliable</b></p> <p> <b>Random Auto Restart</b></p> <p>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 and walls are nearer too.</p> <p> <b>Long Piping</b></p> <p>The basic piping can be extended, allowing the outdoor unit to be installed farther away from the indoor unit and providing greater installation flexibility.</p>  <p>*The graph refers to the CS-W28BK5/V28BK5 *Extendable length varies by model. *If the piping is extended past the basic pipe length, there's an extra charge for additional refrigerant.</p> <p> <b>Top-Panel Maintenance Access</b></p> <p>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.</p> <p> <b>Self-Diagnostic Function</b></p> <p>Should a malfunction occur, the unit diagnoses the problem and shows the corresponding alphanumeric code. This allows quicker servicing.</p>	

Not all features found on all models.

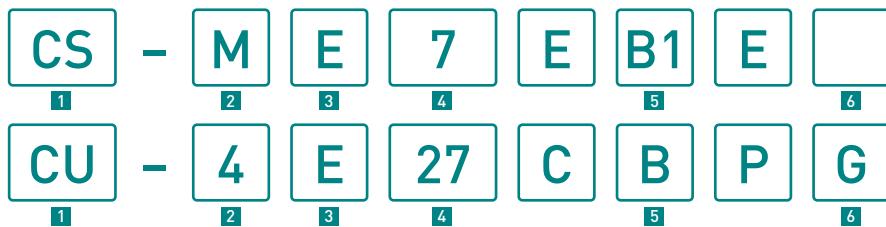
# Feature Comparison

			Single Inverter Split											
			Wall-Mounted					Floor or Ceiling		Cassette (4-way)	Hide-Away			
			CS-XE9EKE CS-XE12EKE	CS-TE9DKE CS-TE12DKE	CS-E9DKEW CS-E12DKEW CS-E15EKEA CS-E15DKEW	CS-E18DKEW CS-E21DKEA CS-E18EKEA CS-E21EKEA CS-E24EKE CS-E28EKE	CS-PE9DKE CS-PE12DKE	CS-E15DTEW CS-E18DTEW CS-E21DTEW	CS-E15DB4EW CS-E18DB4EW CS-E21DB4ES CS-E15DD3EW	CS-E18DD3EW	CS-ME7DKEG CS-E9DKEW CS-E12DKEW CS-E15DKEW	CS-E18DKEW		
Healthy Air Quality		Auto Filter Cleaning Function	●											
		Ion Freshener			●	●	●					●	●	
		Supersonic Air Purifying System				●	●					●	●	
		SUPER allere-buster filter (long-life)	●	●	●	●	●	(Option)	(Option)	(Option)		●	●	
		Air Quality Indicator						●						
		Anti-Mould, One-Touch Air Filter	●	●	●	●	●	●	●	●		●	●	
		Odour-Removing Function	●	●	●	●	●	●	●	●	●	●	●	
		Removable, Washable Panel	●	●	●	●	●			●		●	●	
		Ventilation Control	●											
Comfortable		Inverter Control	●	●	●	●	●	●	●	●	●	●	●	
		Quiet Mode	●	●	●	●	●		●	●	●	●	●	
		Powerful Mode	●	●	●	●	●		●	●	●	●	●	
		Soft Dry Operation Mode	●	●	●	●	●		●	●	●	●	●	
		Personal Airflow Creation	●		●	●	●					●	●	
		Airflow Direction Control (Up & Down)		●				●	●	●				
		Sleep Mode												
		Economy Mode												
		Auto Changeover (Inverter)	●	●	●	●	●	●	●	●	●	●	●	
		Auto Changeover												
		Automatic Operation Mode (Cooling)												
Convenient		Hot Start Control	●	●	●	●	●	●	●	●	●	●	●	
		Circulation Operation Mode												
		Low Ambient Cooling			(E15EKEA)	(E18EKEA)	(E21EKEA)							
Reliable		24-Hour ON&OFF Real Setting Timer	●	●	●	●	●		●	●	●	●	●	
		12-Hour ON&OFF Timer						●						
		LCD Wireless Remote Controller	●	●	●	●	●	●	●	●	●	●	●	
		Bilingual Sticker	●	●	●	●	●	●	●	●	●	●	●	

Multi Inverter Split				Single Split										Multi Split
Floor or Ceiling	Cassette (1-way)	Cassette (4-way)	Hide-Away	Wall-Mounted						Floor or Ceiling			Wall-Mounted	
CS-ME10DTEG CS-E15DTEW CS-E18DTEW	CS-ME7EB1E CS-ME10EB1E CS-ME12EB1E CS-ME14EB1E	CS-E15DB4EW CS-E18DB4EW	CS-E15DD3EG CS-E15DD3EW CS-E18DD3EW	CS-W7DKE CS-W9DKE CS-W12DKE	CS-V7DKE CS-V9DKE CS-V12DKE	CS-W18DKE CS-W24DKE	CS-V18DKE CS-V24DKE	CS-V28EKE	CS-PW9DKE CS-PW12DKE	CS-PW18DKE	CS-W12CTP CS-W18CTP CS-W24CTP	CS-V12CTP CS-V18CTP CS-V24CTP	CS-MV7EKE CS-MV9EKE CS-MV12EKE	
				•	•	•	•	•					•	
				•	•	•	•	•					•	
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30m/20m*(E15/18) 50m/25m*(E18/23) 70m/25m*(E27)	50m/25m*(E18/23) 70m/25m*(E27)	50m/25m*(E18/23) 70m/25m*(E27)	30m/20m*(E15/18) 50m/25m*(E23) 70m/25m*(E27)	10m(W7/W9) 15m(W12)	10m(V7/V9) 15m(V12)	25m	25m	30m	10m(PW9) 15m(PW12)	25m	15m(W12) 25m(W18/W24)	15m(V12) 25m(V18/V24)	15m(Total)	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	

\* Total room / One room

## The System of Model Numbers for Split Models



1 Model Type	2 Connection Configuration / Classification	3 Function
CS : Split Type (Indoor unit) CU : Split Type (Outdoor unit) CZ : Accessories	<Indoor unit> M : Multi Split Type X : Single Split / Super Deluxe T : Single Split / Super Deluxe Slim P : Single Split / Standard No Indications : Single Split / Deluxe	<Outdoor unit> n: (n) rooms Multi
		V : Cooling only (HFC) W : Heat Pump (HFC) E : Inverter Heat Pump (HFC)
4 Capacity	5 Type	6 Other
Value = Capacity (Btu/h) x 1/1000 e.g. 18,000 Btu/h x 1/1000 = 18	K : Wall-Mounted Type T : Floor or Ceiling Dual Mountable Type B1,B4 : Cassette Type D3 : Hide-Away Type B : Flexibly connectable to various type of indoor unit	G : Outdoor power supply for Multi Split Type <Indoor unit> W : For either single or multi use S : For single use

## Optional Accessories

### Filters

#### Replacement SUPER alluru-buster filter - Long-life type (10 years)

	Applicable Models
	CZ-SA15P
	Wall-Mounted (Super Deluxe)
	CS-XE9EKE, CS-XE12EKE

Replacement: every 10 years

#### Replacement SUPER alluru-buster filter

	Applicable Models
	CZ-SA13P
	CZ-SA14P
	Wall-Mounted (Super Deluxe Slim, Standard), Floor or Ceiling

CS-E9DKEW, CS-E12DKEW, CS-E15DKEW, CS-E15EKEA, CS-E18DKEW, CS-E18EKEA, CS-E21DKE, CS-E21EKEA, CS-E24EKE, CS-E28EKE, CS-ME7DKEG, CS-W7DKE, CS-W9DKE, CS-W12DKE, CS-V7DKE, CS-V9DKE, CS-V12DKE, CS-W18DKE, CS-W24DKE, CS-V18DKE, CS-V24DKE, CS-V28EKE, CS-MV7EKE, CS-MV9EKE, CS-MV12EKE, CS-E15DB4EW, CS-E18DB4EW, CS-E21DB4ES

CS-TE9DKE, CS-TE12DKE, CS-PE9DKE, CS-PE12DKE, CS-PW9DKE, CS-PW12DKE, CS-PW18DKE, CS-E15DTEW, CS-E18DTEW, CS-E21DTE, CS-ME10DTEG

Replacement: every 3 years

### Installation Parts

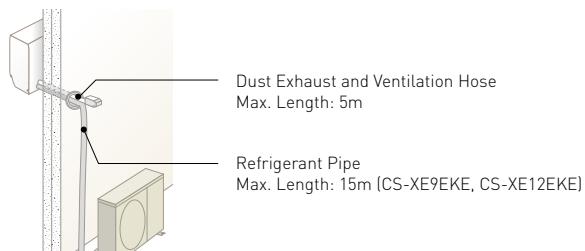
#### Dust Exhaust and Ventilation Hose (The indoor unit includes a 2-meter hose)

	Applicable Models
Extension Hose (3m)	Replacement Hose (5m) with Tip Cover
CZ-HV3P	CZ-HV5P
Can be added to the included 2-meter hose if necessary.	Use to replace the included 2-meter hose for concealed piping use. Use with the included 2-meter hose or the CZ-HV3P is not permitted. [Maximum hose length is 5 m.]
	CS-XE9EKE, CS-XE12EKE

#### Pipe Size Reducer

	Applicable Models
	CZ-MA1P
	CS-E12DKEW, CS-E15DKEW, CS-E18DKEW, CS-E15DTEW, CS-E18DTEW, CS-E15DB4EW, CS-E15DD3EW, CS-E18DB4EW, CS-E18DD3EW
CZ-MA1P	

#### Hose Extension (Maximum Length)



- Please read the Installation Manual carefully before installing the unit, and read the Operating Manual before using.
- Specifications are subject to change without notice for further improvement.
- The contents of this catalogue are effective as of November, 2005.
- Due to printing considerations, the actual colours may vary slightly from those shown.