

2010



NEW PRODUCTS 2010 // HEATING AND COOLING SYSTEMS

EVERY



EVERY
INSTALLATION
MATTERS



INSTALL

MATTERS

heating and cooling systems



PANASONIC HEATING AND COOLING SYSTEMS TECHNOLOGY MAKES US BETTER

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

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

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

EVERYTHING MATTERS

healthyair

NEW
2010



AQUAREA AIR WATER HEAT PUMP RANGE

Panasonic has created Aquarea, a groundbreaking low energy system for heating and domestic hot water production, even at extreme outdoor temperatures. Aquarea guarantees you unbeatable performance and comfort. An outdoor unit, which can be backed up by solar panels, heats the water used both for domestic use and for radiators or radiant floors. The system can also be connected to the existing central heating system or to solar panels.

NEW
2010



DOMESTIC RANGE

More than ever before, Panasonic has developed a range of products designed for you and your clients. The main new feature in the Domestic line is, without doubt, the Etherea range.

With its innovative design, high efficiency and incomparable purification system, the range has been designed with your clients in mind.

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

NEW
2010



VRF FS MULTI RANGE

The brand new product in the VRF range is the FS Multi system, which draws on Panasonic's experience in the heating and air-conditioning of large buildings. This is the only VRF range that incorporates Etherea indoor design units, available in white mother-of-pearl or silver grey. It is ideal for industrial or domestic installations.



COMMERCIAL RANGE

The semi-industrial range is constantly expanding so that you can always offer your clients the best solutions: high performance, silent machines and a complete range of ducts, cassettes and ceiling installations. Our machines are designed for you and are easy to install – enabling you to be increasingly competitive. Furthermore, we help you to improve the energy efficiency of your installations with Panasonic's new, extremely efficient enthalpy regenerator.



ENERGY RECOVERY VENTILATION RANGE

Energy recovery ventilators offer ventilation which increases comfort and saves energy. They efficiently recover the heat lost in ventilation during the heat recovery process. Energy consumption is dramatically reduced by using a counter-flow heat exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings.



VRF INDUSTRIAL RANGE

And to cap it all, the industrial range considerably improves efficiency thanks to all of Panasonic's efforts in this area – large buildings benefit from a high-level of comfort with less consumption – showing that the company is serious in its wager to conserve the environment.



PANASONIC'S NEW AQUAREA AIR TO WATER SYSTEM MAXIMUM EFFICIENCY EVEN AT -20°C

NEW
2010

AQUAREA
engineered for high performance



FOR COMFORTABLE AND SUSTAINABLE HEATING AND COOLING

Low cost and environmentally friendly, Panasonic's Aquarea air-water system is designed to heat, cool and supply domestic hot water. A quick return on your investment and good news for the planet.

AN IDEAL HEATING SOLUTION FOR NEW AND OLD BUILDINGS:

- A wide range from 7 to 16 kW, single and three phase, stand-alone and split-unit
- High-efficiency heat pump technology down to an outside temperature of -20°C
- Reduces energy costs with its COP of 4.67*
- Reduces energy consumption and CO2 emissions
- Provides cooling in summer
- Highly flexible:
 - Connects to an existing heating system
 - Connects to solar panels
- Provides anti-shock protection with its unique ELCB system (Panasonic's earth-leakage circuit breaker)

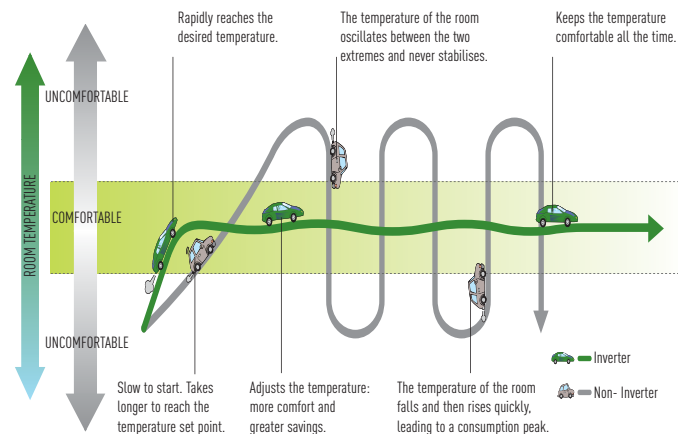
* COP: energy efficiency in heating mode. COP of 4.67 for the 12 kW WH-UD12CE5 model at an outside temperature of 7 °C, and for water input and output temperatures of 30 °C and 35 °C (to EN 14511-2).

UP TO 78% ENERGY SAVINGS

Panasonic's Aquarea heat pump provides a saving of up to 78% on household electrical expenses. For example, the Aquarea system has a COP coefficient of 4.67: for every kW of electricity consumed, it returns 4.67 kW of energy, i.e. 3.67 kW more than a conventional electrical heating system, which adds up to a 78% saving.

INVERTER+ COMPRESSOR FOR EVEN GREATER EFFICIENCY

With over 100 million compressors supplied, Panasonic has demonstrated its status as leader and the excellent quality and reliability of its heat pumps. With a Panasonic Inverter+ compressor, you can save up to 30% energy compared to a traditional system.



eco ideas

high efficiency heating
INVERTER+

down to -20°C
in the heat pump
OUTDOOR TEMPERATURE

THE CONTROL PANEL

The control panel allows perfect temperature control based on the outdoor temperature, providing maximum efficiency and comfort. The control panel controls the heating temperature and the hot water cylinder temperature very simply.



SCREEN FILTER

The 400 µm screen filter protects the water exchanger from impurities and comes standard on the Aquarea hydraulic module.

TWO EARTH LEAKAGE CUT-OUTS

The Aquarea hydraulic module has 2 differential cut-outs ensuring maximum safety in the event of a short circuit.

MAXIMUM EFFICIENCY EVEN AT -7 °C

The Aquarea range has been specially designed to provide maximum efficiency even at extreme temperatures.

		7 kW	9 kW	12 kW	14 kW	16 kW
Outside temperature 7°C	Power (kW)	7.00	9.00	12.00	14.00	16.00
	COP	4.40	4.10	4.67	4.50	4.23
Outside temperature -7°C	Power (kW)	5.15	5.90	10.00	10.70	11.40
	COP	2.65	2.50	2.7	2.62	2.55

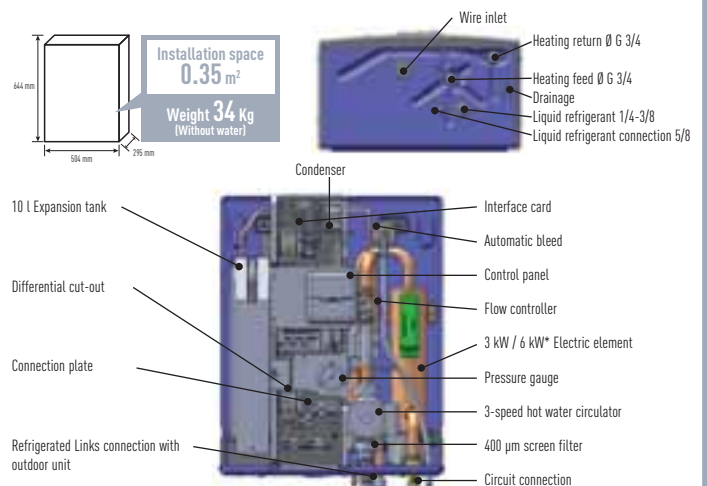
Conditions :

Water input temperature: 30 °C

Water output temperature: 35 °C

HIGHLY COMPACT, EASY-TO-INSTALL UNITS

Very easy to install, with a highly compact hydraulic module (only 644 x 504 x 295 mm for the 7 kW module).



* 3 kW for 7 and 9 kW, and 6 kW for 12, 14 and 16 kW.



BI-BLOC // SEMI-CONNECTIVITY		HEATING ONLY				
OUTDOOR UNIT // SINGLE-PHASE 220V		WH-UD07CE5	WH-UD09CE5	WH-UD12CE5*	WH-UD14CE5*	WH-UD16CE5*
Heating Capacity at +7°C	kW	7.00	9.00	12.00	14.00	16.00
COP at +7°C with heating water temperature at 35°C	W/W	4.4	4.1	4.67	4.5	4.23
Heating Capacity at -7°C	kW	5.15	5.90	10.00	10.70	11.40
COP at -7°C with heating water temperature at 35°C	W/W	2.65	2.50	2.70	2.62	2.55
Power input	kW	1.59	2.20	2.57	3.11	3.78
Sound pressure level	dB(A)	48	49	50	51	53
Dimensions (H x W x D)	mm	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Pipe Diameter	Liquid	mm (inch)	6.35 (1/4)	6.35 (1/4)	9.53 (3/8)	9.53 (3/8)
	Gas	mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Pipe Length Range Min / Max	m	3 / 30	3 / 30	3 / 40	3 / 40	3 / 40
I/D & O/D Hight Difference	m	20	20	20	20	20
Operation Range	Outdoor Ambient	°C	-20 / 35	-20 / 35	-20 / 35	-20 / 35
	Water Outlet (at -2/-7/-15 °C)** °C	55	55	55	55	55
INDOOR UNIT // SINGLE-PHASE 220V		WH-SDH07C3E5	WH-SDH09C3E5	WH-SDH12C6E5	WH-SDH14C6E5	WH-SDH16C6E5
Dimensions (H x W x D)	mm	644 x 504 x 295	644 x 504 x 295	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Water pipe connector	mm (inch)	19.05 (3/4)	19.05 (3/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)
Heating water flow $\Delta T=5$ K, 35°C	m³/h	12	16	2.1	2.4	2.8
Connection to solar kit and boiler		No	No	No	No	No



BI-BLOC. HIGH-CONNECTIVITY		HEATING ONLY*					HEATING AND COOLING*				
OUTDOOR UNIT // SINGLE-PHASE 220V		WH-UD07CE5-A	WH-UD09CE5-A	WH-UD12CE5-A	WH-UD14CE5-A	WH-UD16CE5-A	WH-UD07CE5-A	WH-UD09CE5-A	WH-UD12CE5-A	WH-UD14CE5-A	WH-UD16CE5-A
OUTDOOR UNIT // THREE-PHASE 400V		WH-UD09CE8-A	WH-UD12CE8-A	WH-UD14CE8-A	WH-UD16CE8-A	WH-UD16CE8-A	WH-UD09CE8-A	WH-UD12CE8-A	WH-UD14CE8-A	WH-UD16CE8-A	WH-UD16CE8-A
Heating Capacity at +7°C	kW	7.00	9.00	12.00	14.00	16.00	7.00	9.00	12.00	14.00	16.00
COP at +7°C with heating water temperature at 35°C	W/W	4.4	4.1	4.67	4.5	4.23	4.4	4.1	4.67	4.5	4.23
Heating Capacity at -7°C	kW	5.15	5.90	10.00	10.70	11.40	5.15	5.90	10.00	10.70	11.40
COP at -7°C with heating water temperature at 35°C	W/W	2.65	2.50	2.70	2.62	2.55	2.65	2.50	2.70	2.62	2.55
Power input	kW	1.59	2.20	2.57	3.11	3.78	1.59	2.20	2.57	3.11	3.78
Sound pressure level	dB(A)	48	49	50	51	53	48	49	50	51	53
Dimensions (H x W x D)	mm	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Pipe Diameter	Liquid	mm (inch)	6.35 (1/4)	6.35 (1/4)	9.53 (3/8)	9.53 (3/8)	6.35 (1/4)	6.35 (1/4)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)
	Gas	mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Pipe Length Range Min / Max	m	3 / 30	3 / 30	3 / 40	3 / 40	3 / 40	3 / 30	3 / 30	3 / 40	3 / 40	3 / 40
I/D & O/D Hight Difference	m	20	20	20	20	20	20	20	20	20	20
Operation Range	Outdoor Ambient	°C	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35
	Water Outlet (at -2/-7/-15 °C)** °C	55	55	55	55	55	55	55	55	55	55
INDOOR UNIT // SINGLE-PHASE 220V		WH-SDF07C3E5	WH-SDF09C3E5	WH-SDF12C6E5	WH-SDF14C6E5	WH-SDF16C6E5	WH-SDC07C3E5	WH-SDC09C3E5	WH-SDC12C6E5	WH-SDC14C6E5	WH-SDC16C6E5
INDOOR UNIT // THREE-PHASE 400V		WH-SDF09C9E8	WH-SDF12C9E8	WH-SDF14C9E8	WH-SDF16C9E8	WH-SDF16C9E8	WH-SDC09C9E8	WH-SDC12C9E8	WH-SDC14C9E8	WH-SDC16C9E8	WH-SDC16C9E8
Dimensions (H x W x D)	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Water pipe connector	mm (inch)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)
Heating water flow $\Delta T=5$ K, 35°C	m³/h	1.2	1.6	2.1	2.4	2.8	1.2	1.6	2.1	2.4	2.8
Connection to solar kit and boiler		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

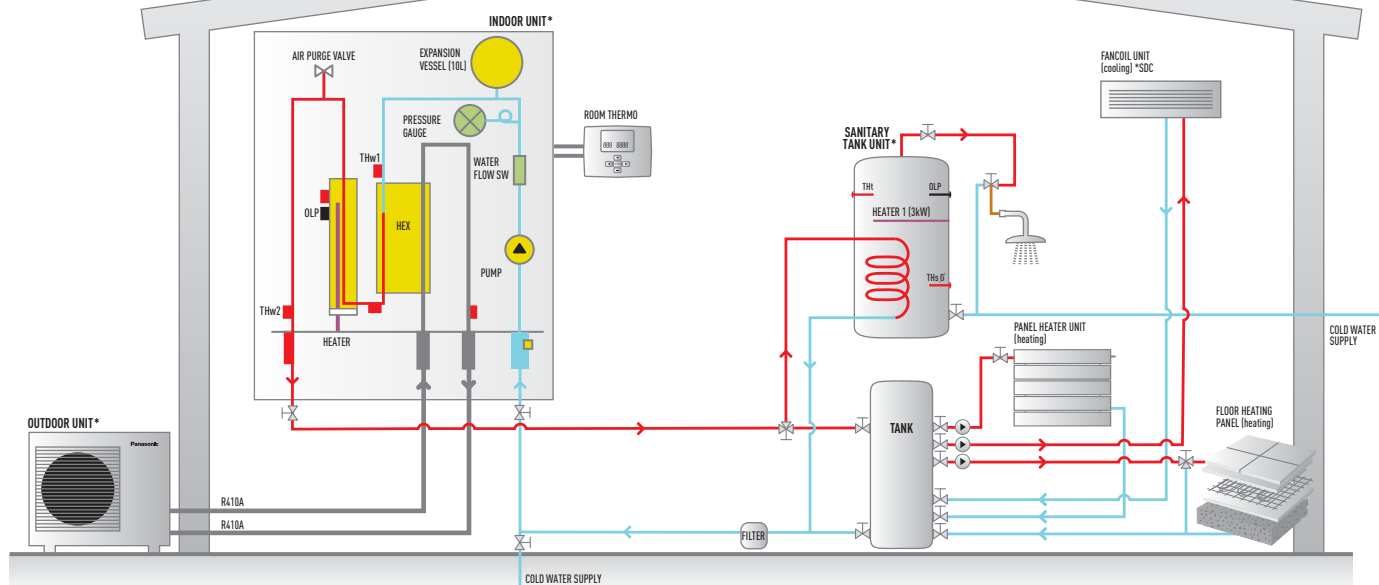


MONO-BLOC. HIGH-CONNECTIVITY		HEATING ONLY*				HEATING AND COOLING*			
OUTDOOR UNIT // SINGLE-PHASE 220V		WH-MDF09C3E5	WH-MDF12C6E5	WH-MDF14C6E5	WH-MDF16C6E5	WH-MDC09C3E5	WH-MDC12C6E5	WH-MDC14C6E5	WH-MDC16C6E5
OUTDOOR UNIT // THREE-PHASE 400V		WH-MDF09C3E8	WH-MDF12C9E8	WH-MDF14C9E8	WH-MDF16C9E8	WH-MDC09C3E8	WH-MDC12C9E8	WH-MDC14C9E8	WH-MDC16C9E8
Heating Capacity at +7°C	kW	9.00	12.00	14.00	16.00	9.00	12.00	14.00	16.00
COP at +7°C with heating water temperature at 35°C	W/W	4.1	4.67	4.5	4.23	4.1	4.67	4.5	4.23
Heating Capacity at -7°C	kW	5.90	10.00	10.70	11.40	5.90	10.00	10.70	11.40
COP at -7°C with heating water temperature at 35°C	W/W	2.70	2.70	2.62	2.55	2.70	2.70	2.62	2.55
Power input	kW	2.20	2.57	3.11	3.78	2.20	2.57	3.11	3.78
Sound pressure level	dB(A)	49	50	51	53	49	50	51	53
Dimensions (H x W x D)	mm	1.283x1.440x360	1.283x1.440x360	1.283x1.440x360	1.283x1.440x360	1.283x1.440x360	1.283x1.440x360	1.283x1.440x360	1.283x1.440x360
Operation Range	Outdoor Ambient	°C	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35	-20 / 35
	Water Outlet (at -2/-7/-15°C)** °C	55	55	55	55	55	55	55	55
Water pipe connector	mm (inch)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)	19.05 (3/4)	31.75 (1 1/4)	31.75 (1 1/4)	31.75 (1 1/4)
Heating water flow $\Delta T=5$ K, 35°C	m³/h	1.6	2.1	2.4	2.8	1.6	2.1	2.4	2.8
Connection to solar kit and boiler		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

SANITARY TANK		WH-TD20B3E5*	WH-TD30B3E5*
Water volume	L	198	287
Max. water temperature	°C	75	75
Dimensions	Height	mm	1.150
	Diameter	mm	580
Weight	kg	46	60
Electric heater	kW	3	3
Power supply	φ / V / Hz	Single-phase / 230 / 50	Single-phase / 230 / 50
Material inside tank		Steel inoxidable	Steel inoxidable

*Preliminar data ** Outside temperature

AQUAREA APPLIED TO RADIANT FLOOR AND DHW HEAT PUMP, UD-SDH / UD-SDF / UD-SDC SERIES

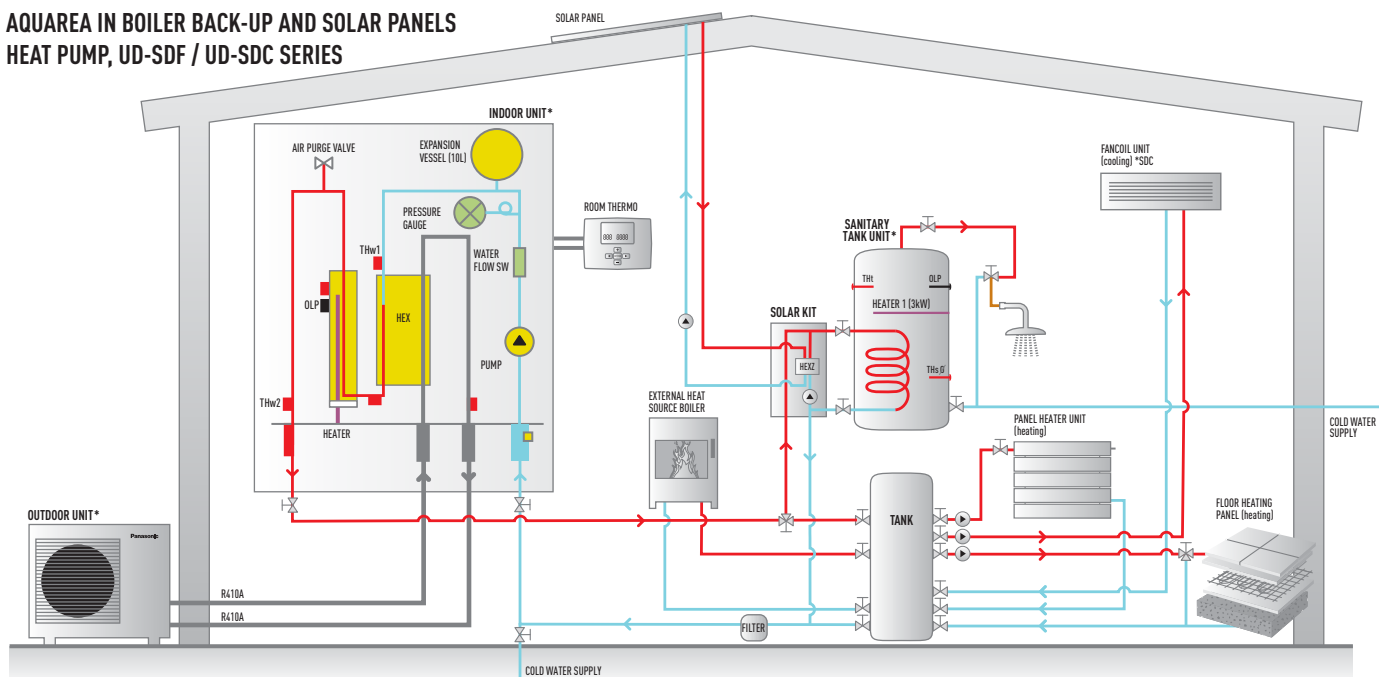


* Panasonic supplies the outdoor unit, the indoor unit, the sanitary tank and a 3-way on/off valve (included with the sanitary tank)

- Hot water production with TD series cylinder
- Heating
- Cooling (only for the UD-SDC series)
- Optional connection of a thermostat (UD-SDF / UD-SDC series only)

SCHEMATIC DIAGRAM

AQUAREA IN BOILER BACK-UP AND SOLAR PANELS HEAT PUMP, UD-SDF / UD-SDC SERIES



* Panasonic supplies the outdoor unit, the indoor unit, the sanitary tank and a 3-way on/off valve (included with the sanitary tank)

- Hot water production with TD series cylinder
- Heating with boiler backup
- Cooling (UD-SDC series only)
- Connection of solar panels possible
- Possible connection of a thermostat

SCHEMATIC DIAGRAM



NEW
2010

~~ETHEREA~~
designed to care for you



24h
quality air control

PATROL SENSOR

pure air system

e-ION PLUS

perfect
humidity air

MILD DRY

A
energy
saving air

INVERTER

movement
sensor for
30%
savings

ECO PATROL

20dB
silent air

SUPER QUIET

healthy air

energy saving

PANASONIC'S NEW ETHEREA UNITS OFFER MAXIMUM EFFICIENCY IN EVERY SENSE.

They ensure minimum consumption, thanks to the new Eco Patrol system, which intuitively senses the level of human presence in a room and their level of activity and adjusts output accordingly. This feature, together with the Inverter+ system, provides up to 71% energy savings on Heat Pump, and up to 60% energy savings on cooling only.

ECO PATROL

THE ECO PATROL SENSOR OPTIMISES OPERATION AS CONDITIONS CHANGE

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

It senses people's movements.

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

It senses the entire room in real-time.

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

High-Precision Sensing

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



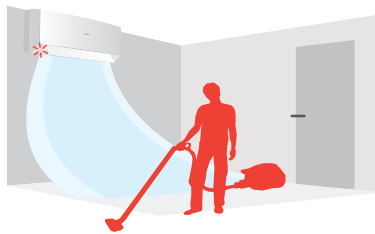
DETECTION

SENSES HUMAN PRESENCE AND ACTIVITY LEVEL

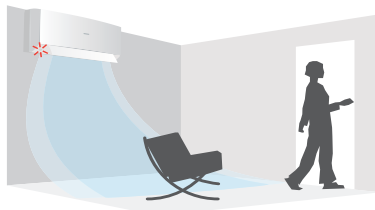


ANALYSIS

RECORDS IF THERE ARE ANY CHANGES.
WHEN THE ACTIVITY LEVEL GOES UP...



WHEN EVERYONE LEAVES...



ADJUSTEMENT

INCREASES OR DECREASES POWER ACCORDINGLY.
HIGHER-POWER OPERATION PROVIDES UNINTERRUPTED COOLING



MAXIMUM COMFORT

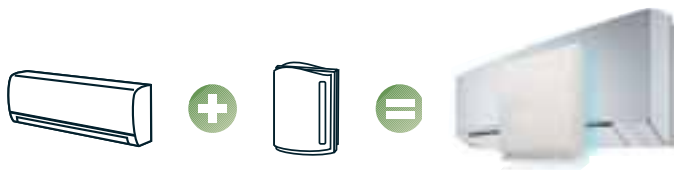
LOW-POWER OPERATION SAVES ENERGY



MAXIMUM SAVINGS

2-IN-1 VALUE WITH AN AIR PURIFIER

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



AIR CONDITIONER:
MOISTURE (DEHUMIDIFYING ONLY) CONTROL.
TEMPERATURE CONTROL.

AIR PURIFIER:
DUST COLLECTION.
INACTIVATING VIRUSES,
BACTERIA, MOULD.

PURE AIR SYSTEM:
MOISTURE (DEHUMIDIFYING ONLY) CONTROL.
TEMPERATURE CONTROL.
DUST COLLECTION.
INACTIVATING VIRUSES, BACTERIA,
MOULD.



MILD DRY COOLING

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

Maintains an RH (Relative Humidity) up to 10% higher than cooling operation.

Ideal when sleeping with the air conditioner on.



DETECTS NEWLY DESIGNED PATROL SENSOR

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

CATCHES & INACTIVATES E-ION ACTION

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

CAPTURES ELECTRICALLY E-ION FILTER

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



NEW ETHEREA RANGE

- 30% saving thanks to the new Eco Patrol motion sensor.
- New design over the entire range. A new curved shape making it more compact and more attractive.
- Available in silver grey (XE range) and in white mother-of-pearl (E range).
- Outdoor units identical for the XE and E ranges.
- Extremely economical. Energy classification A (improved COP).
- e-ion plus air purifying system with Mild Dry function.
- Super-silent 20 dB.



FOR XE/E7, XE/E9 AND XE/E12

XE



KIT-XE7-LKE // KIT-XE9-LKE // KIT-XE12-LKE // KIT-XE15-LKE // KIT-XE18-LKE // KIT-XE21-LKE

E



KIT-E7-LKE // KIT-E9-LKE // KIT-E12-LKE // KIT-E15-LKE // KIT-E18-LKE // KIT-E21-LKE // KIT-E24-LKE // KIT-E28-LKE



RE RANGE

- Whole range entirely redesigned
- Energy classification A
- New capacity RE15
- Triple anti-allergen filter (anti-allergic and guaranteed for 10 years)
- Breeze mode (RE9/12)
- Silent 22 DB (RE9/12)



RE



KIT-RE9/12/15/18/24-JKE-1

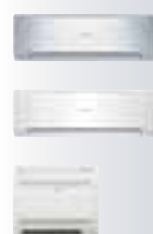


MULTI-SPLIT AND FREE MULTI

- New outside units. Inverter 4.4 kW to 13.6 kW. Up to 4 indoor units can be connected.
- Possible to connect units of size 21 (6 kW) in split wall and cassette
- Multi for the house: Etherea range, dual-flow console: emphasis on design, a range of indoor units from 2.2 kW to 6 kW
- Multi for tertiary-sector applications or for offices: ductable, 60x60 cassette and console/ceiling mounting; range from 2.8 kW to 6 kW.



MULTI FOR THE HOUSE



MULTI FOR TERTIARY-SECTOR APPLICATIONS OR FOR OFFICES



DOMESTIC RANGE

WALL MOUNTED ETHEREA // INVERTER+ // SILVER



FOR E7, E9 AND E12

	COOLING CAPACITY kW (Min. - Max.)	EER	HEATING CAPACITY kW (Min. - Max.)	COP	SOUND POWER* dB Cool/Heat	DIMENSION* mm (H x W x D)
KIT-XE7-LKE	2.05 (0.70-2.40)	4.36 A	2.80 (0.70-4.00)	4.41 A	20 / 20	290 x 870 x 204
KIT-XE9-LKE	2.50 (0.80-3.00)	4.67 A	3.40 (0.80-5.00)	4.63 A	20 / 20	290 x 870 x 204
KIT-XE12-LKE	3.50 (0.80-4.00)	3.87 A	4.40 (0.80-6.70)	4.04 A	20 / 20	290 x 870 x 204
KIT-XE15-LKE	4.20 (0.80-5.00)	3.33 A	5.30 (0.80-6.80)	3.68 A	25 / 29	290 x 870 x 204
KIT-XE18-LKE	5.00 (0.90-6.00)	3.40 A	5.80 (0.90-8.00)	3.77 A	34 / 34	290 x 1070 x 235
KIT-XE21-LKE	6.30 (0.90-7.10)	2.85 C	7.20 (0.90-8.50)	3.43 B	34 / 34	290 x 1070 x 235

WALL MOUNTED ETHEREA // INVERTER+ // WHITE



FOR E7, E9 AND E12

KIT-E7-LKE	2.05 (0.70-2.40)	4.36 A	2.80 (0.70-4.00)	4.41 A	20 / 20	290 x 870 x 204
KIT-E9-LKE	2.50 (0.80-3.00)	4.67 A	3.40 (0.80-5.00)	4.63 A	20 / 20	290 x 870 x 204
KIT-E12-LKE	3.50 (0.80-4.00)	3.87 A	4.40 (0.80-6.70)	4.04 A	20 / 20	290 x 870 x 204
KIT-E15-LKE	4.20 (0.80-5.00)	3.33 A	5.30 (0.80-6.80)	3.68 A	25 / 29	290 x 870 x 204
KIT-E18-LKE	5.00 (0.90-6.00)	3.40 A	5.80 (0.90-8.00)	3.77 A	34 / 34	290 x 1070 x 235
KIT-E21-LKE	6.30 (0.90-7.10)	2.85 C	7.20 (0.90-8.50)	3.43 B	34 / 34	290 x 1070 x 235
KIT-E24-LKE	6.80 (0.90-8.10)	3.21 A	8.60 (0.90-9.90)	3.23 C	35 / 35	290 x 1070 x 235
KIT-E28-LKE	7.65 (0.90-8.60)	3.01 B	9.60 (0.90-11.00)	2.91 D	35 / 35	290 x 1070 x 235

WALL MOUNTED RE TYPE // STANDARD INVERTER



KIT-RE9-JKE-1	2.50 (0.90-3.00)	3.57 A	3.30 (0.90-4.10)	4.02 A	22 / 25	290 x 848 x 204
KIT-RE12-JKE-1	3.50 (0.90-3.90)	3.47 A	4.25 (0.90-5.10)	3.79 A	22 / 25	290 x 848 x 204
KIT-RE15-JKE-1	4.20 (1.00-4.60)	3.33 A	5.00 (0.90-6.80)	3.61 A	29 / 28	290 x 848 x 204
KIT-RE18-JKE-1	5.00 (0.90-6.00)	3.40 A	5.80 (0.90-8.00)	3.77 A	37 / 37	290 x 1070 x 235
KIT-RE24-JKE-1	6.80 (0.90-8.10)	3.21 A	8.60 (0.90-9.90)	3.23 C	38 / 38	290 x 1070 x 235

FLOOR CONSOLE TYPE // INVERTER+



KIT-E9-GFEW-1	2.50 (0.80-3.00)	4.39 A	3.60 (0.80-5.00)	4.16 A	23 / 23	600 x 700 x 210
KIT-E12-GFEW-1	3.50 (0.80-3.80)	3.63 A	4.80 (0.80-6.10)	3.64 A	24 / 23	600 x 700 x 210
KIT-E18-GFEW-1	5.00 (0.90-5.60)	3.23 A	5.80 (0.90-7.10)	3.63 A	32 / 32	600 x 700 x 210

SPLIT FLOOR OR CEILING // INVERTER



KIT-E15-DTE	4.15 (0.90-4.55)	3.22 A	5.17 (0.90-6.30)	3.34 C	34 / 30	540 x 1028 x 200
KIT-E18-DTE	5.00 (0.90-5.40)	3.01 B	6.10 (0.90-7.60)	3.35 C	36 / 32	540 x 1028 x 200
KIT-E21-DTE	5.80 (0.90-6.60)	3.01 B	6.80 (0.90-8.10)	3.42 B	38 / 34	540 x 1028 x 200

ETHEREA MULTI SPLIT



2x1	KIT-2XE/E77-LBE	4.50 (1.50-5.00)	3.66 A	5.40 (1.10-7.00)	4.62 A	26 / 26	290 x 870 x 204 [x2]
	KIT-2XE/E79-LBE	4.50 (1.50-5.20)	3.66 A	5.40 (1.10-7.00)	4.62 A	26 / 26	290 x 870 x 204 [x2]
	KIT-2XE/E712-LBE	4.50 (1.50-5.20)	3.60 A	5.40 (1.10-7.00)	4.62 A	26 / 26	290 x 870 x 204 [x2]
	KIT-2XE/E99-LBE	4.80 (1.50-5.20)	3.66 A	5.60 (1.10-7.20)	4.48 A	26 / 26	290 x 870 x 204 [x2]
	KIT-2XE/E99-LKE	4.80 (1.50-5.20)	3.66 A	5.60 (1.10-7.20)	4.48 A	26 / 26	290 x 870 x 204 [x2]
	KIT-2XE/E912-LKE	5.00 (1.50-5.30)	3.36 A	5.60 (1.10-7.20)	4.55 A	26 / 26	290 x 870 x 204 [x2]
3x1	KIT-3XE/E7712-LBE	5.20 (1.50-5.40)	3.42 A	5.60 (1.10-7.20)	4.63 A	29 / 29	290 x 870 x 204 [x2]
	KIT-3XE/E7712-LBE	6.80 (2.50-8.10)	3.42 A	8.60 (3.20-9.00)	4.39 A	26 / 26	290 x 870 x 204 [x3]
	KIT-3XE/E7715-LBE	6.80 (2.60-8.20)	3.45 A	8.60 (3.20-8.80)	4.43 A	26 / 26	290 x 870 x 204 [x3]
4x1	KIT-4XE/E77712-LBE	6.80 (1.90-8.80)	4.15 A	8.60 (3.00-10.60)	4.65 A	26 / 26	290 x 870 x 204 [x4]
	KIT-4XE/E77715-LBE	6.80 (1.90-8.80)	4.15 A	8.60 (3.00-10.60)	4.65 A	26 / 26	290 x 870 x 204 [x4]
	KIT-4XE/E77712-LKE	8.00 (2.80-8.90)	3.76 A	9.40 (3.40-10.50)	4.43 A	26 / 26	290 x 870 x 204 [x4]
	KIT-4XE/E77715-LKE	8.00 (2.80-8.90)	3.76 A	9.40 (3.40-10.50)	4.50 A	26 / 26	290 x 870 x 204 [x4]

* Indoor unit

FREE MULTI INDOOR UNITS FOR FREE MULTI COMBINATIONS

CAPACITY	7 - 2.2 kW	9/10 - 2.8 kW	12 - 3.2 kW	15 - 4 kW	18 - 5 kW	21 - 6 kW
SPLIT ETHEREA // SILVER OR WHITE // INVERTER+	 CS-XE/E7LKEW	 CS-XE/E9LKEW	 CS-XE/E12LKEW	 CS-XE/E15LKEW ¹⁾	 CS-XE/E18LKEW ¹⁾	 CS-XE/E21LKEW ¹⁾
LOW STATIC PRESSURE HIDE AWAY // INVERTER+	 CS-E10KD3EA	 CS-E15JD3EA ¹⁾	 CS-E18JD3EA ¹⁾			
4 WAY CASSETTE 60x60 // INVERTER+	 CS-E10KB4EA	 CS-E15HB4EA ¹⁾	 CS-E18HB4EA ¹⁾	 CS-E21JB4EA ¹⁾		
FLOOR CONSOLE // INVERTER+	 CS-E9GFEW	 CS-E12GFEW	 CS-E18GFEW ¹⁾			
FLOOR/CEILING CONSOLE // INVERTER+	 CS-ME10DTEG	 CS-E15DTEW ¹⁾	 CS-E18DTEW ¹⁾			

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



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



PATROL SENSOR. Air is monitored both during air conditioner operation and when switched off. When dirt is detected, the air purifying function starts up to immediately clean the air in the room.



E-ION PLUS AIR PURIFYING SYSTEM. Active e-ions are shot out to catch and inactivate airborne bacteria and mould. The positively charged mega filter attracts dust to thoroughly clean the room.



MILD DRY. 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.



ANTIALLERGIC FILTER. The filter eliminates the allergens it captures. It combines three functions in one (anti-allergen, anti-virus and anti-bacteria) to keep room air clean and healthy.



SOFT BREEZE MODE. The Soft Breeze mode eliminates excess humidity with a soft breeze and gives you the feeling of well-being without significant temperature changes.



INVERTER PLUS SYSTEM. The Inverter plus range provides greater efficiency, more comfort and less noise than classic inverter units. This is Panasonic's top-end, environmentally friendly range. It is the range of the future within your reach today. Energy saving A+ products improve on the characteristics of standard air conditioners by over 20% regarding a standard A class. This means 20% less consumption and 20% off your electric bill.



SUPER QUIET MODE. Thanks to its latest generation compressor and its twin blade fan, our outdoor unit is one of the most silent on the market. The indoor unit emits an almost imperceptible 23 dB. And this can be reduced by 3 dB, bringing the sound level to an almost inaudible point.



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


**NEW
2010**

NEW FS MULTI

WITH UNIQUE ETHEREA WALL MOUNTED (WHITE AND SILVER), DESIGNER INDOOR UNITS ARRIVE TO PROFESSIONAL APPLICATIONS!

The FS Multi is the new range of VRF which capitalises on Panasonic's experience in air conditioning buildings and large surface areas with its Urban Multi series and VRF - R410A technology. Ideal for commercial areas as well as for use in the home, the FS Multi always meets the requirements of the most demanding customers.

THE ADVANTAGES OF PANASONIC'S FS MULTI

- Up to 6 different indoor unit types.
- Up to 30 indoor units in total, from 2.2 kW to 9 kW.
- Possibility to connect a unique wall type Etherea design, white and silver.
- 3 outdoor unit ratings: 4,5 and 6 HP, single-phase.
- Panasonic Inverter technology with R410A gas, for greater comfort and economy with lower consumption.
- Ease of installation. Thanks to the reduced dimensions of the outdoor unit it can be taken to the roof of the building in a lift.
- Easy control in a centralised or individual form, or even by computer control with a range of functions for achieving optimum climate management in your business.
- Allows you to choose the best option depending on architectural needs and decoration criteria.

OUTDOOR UNITS

A new outdoor unit design which is more adapted to today's building and architectural requirements.

- Up to 8 indoor units can be connected.
- Capacities from 11.2 to 15.5 kW.
- A 30 m difference in elevation.

—ETHEREA—
designed to care for you



MINI-VRF OUTDOOR UNIT		4 HP	5 HP	6 HP
		U-4LA1E5	U-5LA1E5	U-6LA1E5
Cooling Capacity	kW	11.2	14	15.5
Heating Capacity	kW	12.5	16	18
Maximum Connection Ratio	%	130	130	130
Indoor unit selection allowance		from 5.6 kW to 14.5 kW within max 6 indoor	from 7.0 kW to 18.2 kW within max 8 indoor	from 7.7 kW to 20.1 kW within max 8 indoor
Power consumption Cooling / Heating	kW	3.10 / 3.04	4.31 / 3.97	5.15 / 4.69
EER	Cooling	- 3.61 A	3.25 A	3.01 B
COP	Heating	- 4.11 A	4.03 A	3.84 A
Operating current Cooling / Heating	A	14.20 / 13.90	19.80 / 18.10	23.50 / 21.40
Starting current	A	14	20	24
Max current	A	22.5	26	29
Maximum power input	kW	4.4 in cooling / 4.7 in heating	5.7 at cooling/heating	6.2 at cooling/heating
Power source	V/Hz	230 / 50	230 / 50	230 / 50
Recommended fuse size	A	30	30	30
Sound pressure level Cooling / Heating	dB(A)	52 / 54	53 / 55	55 / 57
Sound power	dB	74	72	71
Dimension	H x W x D	mm 1340 x 900 x 350	1340 x 900 x 350	1340 x 900 x 350
Net weight	kg	115	123	123
Air flow rate	m³/min	92	95	98
Outdoor temperature Cooling / Heating	°C	-5 to +43 / -15 to +24	-5 to +43 / -15 to +24	-5 to +43 / -15 to +24
Pipe length (min. - max.)	m	20-90	20-90	20-90
Height difference ID - OD	m	30	30	30
Pipe diameter Liquid / Gas	mm (inch)	9.52 (3/8) / 15.88 (5/8)	9.52 (3/8) / 15.88 (5/8)	9.52 (3/8) / 15.88 (5/8)

EXAMPLE OF CORRECT COMBINATION:

Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)
Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW) + S-36YA1E5 (3.6 kW)
Total capacity of indoor units selected: 8.6 kW.







EXAMPLE OF INCORRECT COMBINATION:

Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)
Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW)
Total capacity of indoor units selected: 5.0 kW. The total indoor capacity is lower than the minimum permitted.

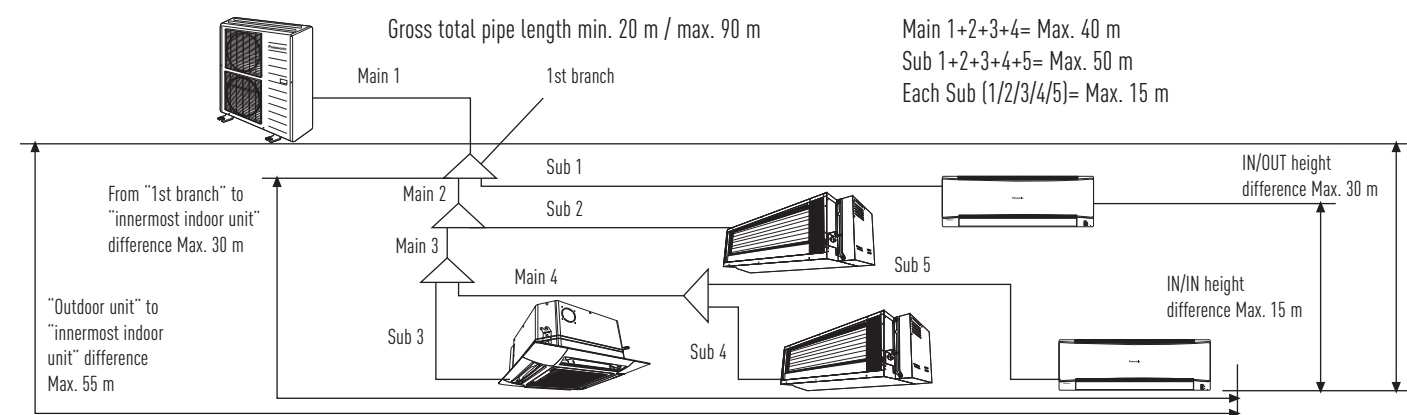
EXAMPLE OF INCORRECT COMBINATION:

Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)
Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW) + S-90UA1E5 (9.0 kW) + S-56NA1E5 (5.6 kW)
Total capacity of indoor units selected: 19.6 kW. The total indoor capacity is higher than the maximum permitted.

FS MULTI RANGE

FS MULTI RANGE		COOLING CAPACITY kW	HEATING CAPACITY kW	SOUND PRESSURE LEVEL dB* Cooling / Heating	DIMENSION mm (H x W x D)	PIPE DIAMETER Liquid / Gas mm (inch)	
WALL TYPE WHITE // KA1 SERIES // ETHEREA DESIGN		S-22KA1E5	2.2	2.5	33 / 38	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-28KA1E5	2.8	3.2	33 / 39	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-36KA1E5	3.6	4.2	34 / 42	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-45KA1E5	4.5	5.1	35 / 43	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-56KA1E5	5.6	6.4	38 / 44	290 x 1070 x 235	6.35 (1/4) / 12.70 (1/2)
		S-63KA1E5	6.3	7.1	39 / 46	290 x 1070 x 235	6.35 (1/4) / 12.70 (1/2)
		S-71KA1E5	7.1	8	40 / 48	290 x 1070 x 235	9.52 (3/8) 15.88 (5/8)
WALL TYPE SILVER // KA1 SERIES // ETHEREA DESIGN		S-22KA1E5S	2.2	2.5	33 / 38	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-28KA1E5S	2.8	3.2	33 / 39	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-36KA1E5S	3.6	4.2	34 / 42	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
		S-45KA1E5S	4.5	5.1	35 / 43	290 x 870 x 204	6.35 (1/4) / 12.70 (1/2)
CASSETTE 60X60 // YA1 SERIES		S-22YA1E5	2.2	2.5	33 / 36	260 X 575 X 575	6.35 (1/4) / 12.70 (1/2)
		S-28YA1E5	2.8	3.2	33 / 37	260 x 575 x 575	6.35 (1/4) / 12.70 (1/2)
		S-36YA1E5	3.6	4.2	34 / 38	260 x 575 x 575	6.35 (1/4) / 12.70 (1/2)
		S-45YA1E5	4.5	5.1	35 / 39	260 x 575 x 575	6.35 (1/4) / 12.70 (1/2)
		S-56YA1E5	5.6	6.4	36 / 40	260 x 575 x 575	6.35 (1/4) / 12.70 (1/2)
CASSETTE 90X90 // UA1 SERIES		S-63UA1E5	6.3	7.1	35 / 41	246 x 840 x 840	6.35 (1/4) / 12.70 (1/2)
		S-71UA1E5	7.1	8	36 / 42	246 x 840 x 840	9.52 (3/8) 15.88 (5/8)
		S-90UA1E5	9.0	10	36 / 42	246 x 840 x 840	9.52 (3/8) 15.88 (5/8)
HIDE AWAY 0-3 mmAq // NA1 SERIES		S-22NA1E5	2.2	2.5	30 / 36	200 x 900 x 550	6.35 (1/4) / 12.70 (1/2)
		S-28NA1E5	2.8	3.2	30 / 37	200 x 900 x 550	6.35 (1/4) / 12.70 (1/2)
		S-32NA1E5	3.2	3.6	31 / 38	200 x 900 x 550	6.35 (1/4) / 12.70 (1/2)
		S-36NA1E5	3.6	4.2	31 / 38	200 x 900 x 550	6.35 (1/4) / 12.70 (1/2)
		S-45NA1E5	4.5	5.1	32 / 39	200 x 900 x 550	6.35 (1/4) / 12.70 (1/2)
		S-56NA1E5	5.6	6.4	32 / 39	200 x 900 x 550	6.35 (1/4) / 12.70 (1/2)
HIDE AWAY 5-7 mmAq // MA1 SERIES		S-45MA1E5	4.5	5.1	35 / 42	250 x 780+100 x 650	6.35 (1/4) / 12.70 (1/2)
		S-56MA1E5	5.6	6.4	35 / 42	250 x 780+100 x 650	6.35 (1/4) / 12.70 (1/2)
		S-63MA1E5	6.3	7.1	36 / 43	250 x 1000+100 x 650	6.35 (1/4) / 12.70 (1/2)
		S-71MA1E5	7.1	8.0	36 / 43	250 x 1000+100 x 650	9.52 (3/8) 15.88 (5/8)
		S-90MA1E5	9.0	10	37 / 44	250 x 1000+100 x 650	9.52 (3/8) 15.88 (5/8)

REFRIGERANT PIPE LENGTH



* Not for all combinations.

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



COMMERCIAL RANGE

- The widest range available
- Inverter+: greater energy savings for 5 sizes (Single-phase and Three-phase) from 2.5 HP to 6 HP (from 6.3 Kw to 14 kW)
- Inverter: more compact with 8 sizes from 1 HP to 5 HP (from 2.5 kW to 12.5 kW)
- Reversible: 7 sizes from 1.5 HP to 6 HP (from 3.8 kW to 13.5 kW)



RANGE OF INDOOR UNITS

		1.0 HP	1.5 HP	2.0 HP	2.25 HP	2.5 HP	3.0 HP	4.0 HP	5.0 HP	6.0 HP	8.0 HP	10 HP
LOW STATIC PRESSURE	INVERTER+					CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5		
HIDE-AWAY	INVERTER	CS-E10KD3EA	CS-E15JD3EA	CS-E18JD3EA		CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5			
	HEAT PUMP		CS-F14DD3E5	CS-F18DD3E5		CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5		
HIGH STATIC PRESSURE	INVERTER+					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5		
HIDE-AWAY	INVERTER					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5			
	HEAT PUMP					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5		
4-WAY	INVERTER	CS-E10KB4EA	CS-E15HB4EA	CS-E18HB4EA	CS-E21HB4EA							
CASSETTES 60X60												
4-WAY	INVERTER+					CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5		
CASSETTES 90X90	INVERTER					CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5			
	HEAT PUMP		CS-F14DB4E5	CS-F18DB4E5		CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5		
CEILING	INVERTER+					CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5		
	INVERTER					CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5			
	HEAT PUMP			CS-F18DTE5		CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5		
HIGH PRESSURE	INVERTER										S-200E1DPQ1	S-250E1DPQ1
HIDE-AWAY												

RANGE OF OUTDOOR UNITS

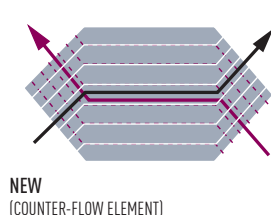
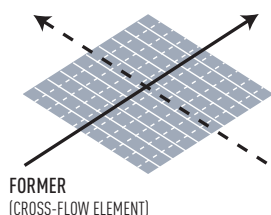
	1.0 HP	1.5 HP	2.0 HP	2.25 HP	2.5 HP	3.0 HP	4.0 HP	5.0 HP	6.0 HP	8.0 HP	10 HP
INVERTER+						CU-L24DBE5 ¹	CU-L28DBE5 ¹	CU-L34DBE5 ¹ CU-L34DBE8 ^{III}	CU-L43DBE5 ¹ CU-L43DBE8 ^{III}	CU-L50DBE8 ^{III}	
INVERTER	CU-E10HBEA ¹	CU-E15HBEA ¹	CU-E18HBEA ¹	CU-E21HBEA ¹	CU-YL24HBE5 ¹	CU-YL28HBE5 ¹	CU-YL34HBE5 ¹	CU-YL43HBE5 ¹			U-200X2XPQ ^{III} U-250X2XPQ ^{III}
HEAT PUMP	CU-B14DBE5 ¹	CU-B18DBE5 ¹			CU-B24DBE5 ¹	CU-B28DBE5 ¹ CU-B28DBE8 ^{III}	CU-B34DBE5 ¹ CU-B34DBE8 ^{III}	CU-B43DBE5 ¹ CU-B43DBE8 ^{III}	CU-B50DBE8 ^{III}		

¹ Single-phase ^{III} Three-phase

ENERGY RECOVERY VENTILATION SYSTEM RANGE

- High energy saving, up to 20%. Recovers up to 77% of the heat in the outgoing air
- Counter cross flow technology for better efficiency.
- Long life element core
- Easy installation and 20% less thickness.
- Easy connection to air conditioning units
- Super quiet units.

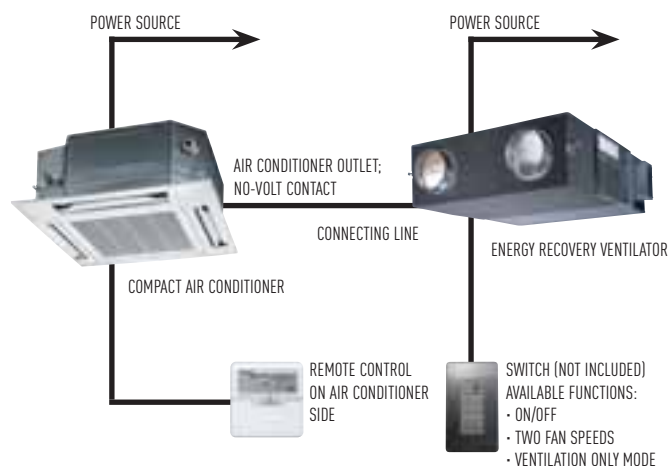
HEAT EXCHANGER CHARACTERISTICS



With the cross-flow element, air moves in a straight line across the element. With the counter-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.



TYPICAL SYSTEM LINKED TO A CASSETTE TYPE AIR CONDITIONER



Models	FY-250ZDY2	FY-350ZDY2	FY-500ZDY2	FY-800ZDY2	FY-01KZDY2A
Air Volume	250 m³/h	350 m³/h	500 m³/h	800 m³/h	1.000 m³/h

INDUSTRIAL RANGE

- MX4 heat pump range from 5 HP to 54 HP
- ME4 heat recovery range from 8 HP to 48 HP
- Single-phase MINI UM 5 range from 4 HP to 6 HP
- New three-phase MINI UM range from 4 HP to 6 HP



MX4 OUTDOOR UNITS

- Up to 34% reduction in outdoor units
- Total flexibility of air conditioning installation
- Indoor units of up to 200% of the capacity of the outdoor unit
- Pipes of up to 165 m up to 27 floors in height
- High COP combination
- Minimum space combination

ME4 OUTDOOR UNITS

- 14% more efficient than the former range on average, 20% more efficient in individual units.
- COPs and EERs of up to 4.4 and 4.2, respectively, connected at 100%.
- Up to 64 indoor units can be connected to a single outdoor unit (one third more than the previous ME3 range).



eco
ideas

'ECO IDEAS' FOR PRODUCTS

We will produce energy-efficient products

'ECO IDEAS' FOR MANUFACTURING

We will reduce CO₂ emissions across all our manufacturing sites

'ECO IDEAS' FOR EVERYBODY, EVERYWHERE

We will encourage the spread of environmental activities throughout the world

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