MITSUBISHI ELECTRIC

SPLIT-TYPE AIR CONDITIONERS

Changes for the Better

Mitsubishi Electric Quality

Wrap Yourself in Comfort and Quiet
Eco-conscious Technologies from Japan

Full Product Line Catalogue 2016

TENTATIVE

for a greener tomorrow eco Changes

Doing Our Part to Create a Better Future for All...

Core Environmental Policy

The Mitsubishi Electric Group promotes sustainable development and is committed to protecting and restoring the global environment through technology, through all its business activities, and through the actions of its employees.

Environmental Vision 2021

Making Positive Contributions to the Earth and its People through Technology and Action

Preventing Global Warming

- Reduce CO_2 emissions from product usage by 30%
- Reduce total CO_2 emissions from production by 30%
- Aim to reduce CO_2 emissions from power generation

Creating a Recycling-Based Society

- Reduce, reuse and recycle "3Rs" products reduce resources used by 30%
- Zero emissions from manufacturing reducing the direct landfill of waste to zero

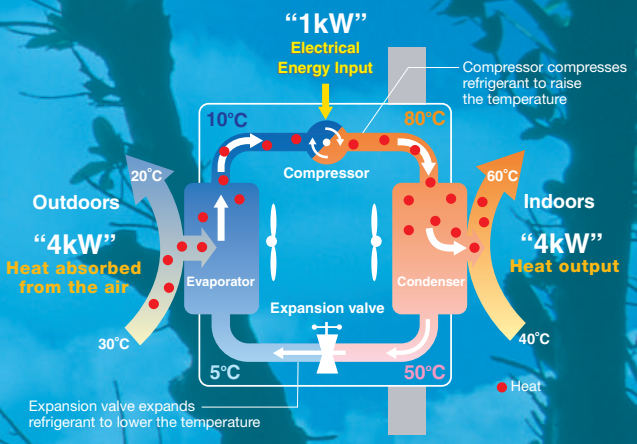
Ensuring Harmony with Nature Fostering Environmental Awareness

Mitsubishi Electric reflects the essence of this policy and vision in all aspects of its air conditioner business as well.

Preventing Global Warming
Heat pump technology inspires Mitsubishi Electric to design air conditioners that harmonize comfort and ecology.

Heat Pump Principle (When Heating) <Case of COP 4.0>

Refrigerant and Heat Circulation



Mitsubishi Electric develops technologies to balance comfort and ecology, achieving greater efficiency in heat pump operation.

	Comfort	Ecology
1. Inverter	Faster start-up and more stable indoor temperature than non-inverter units.	Fewer On/Off operations than with non-inverter, saving energy.
2. 3D i-see Sensor	Since the positions of people can be detected, airflow can be set to personal taste, such as in airflow path or protected from the wind. The ability to adjust to individual preferences realizes more comfortable air conditioning.	Since the number of people in a room can be detected, energy-saving operation is adjusted or the power is turned off automatically. Efficient air conditioning with less waste is realized.
3. Flash Injection	Achieves high heating capacity even at low temperatures, plus faster start-up compared to conventional inverters.	Expands the region covered by heat pump heating system.

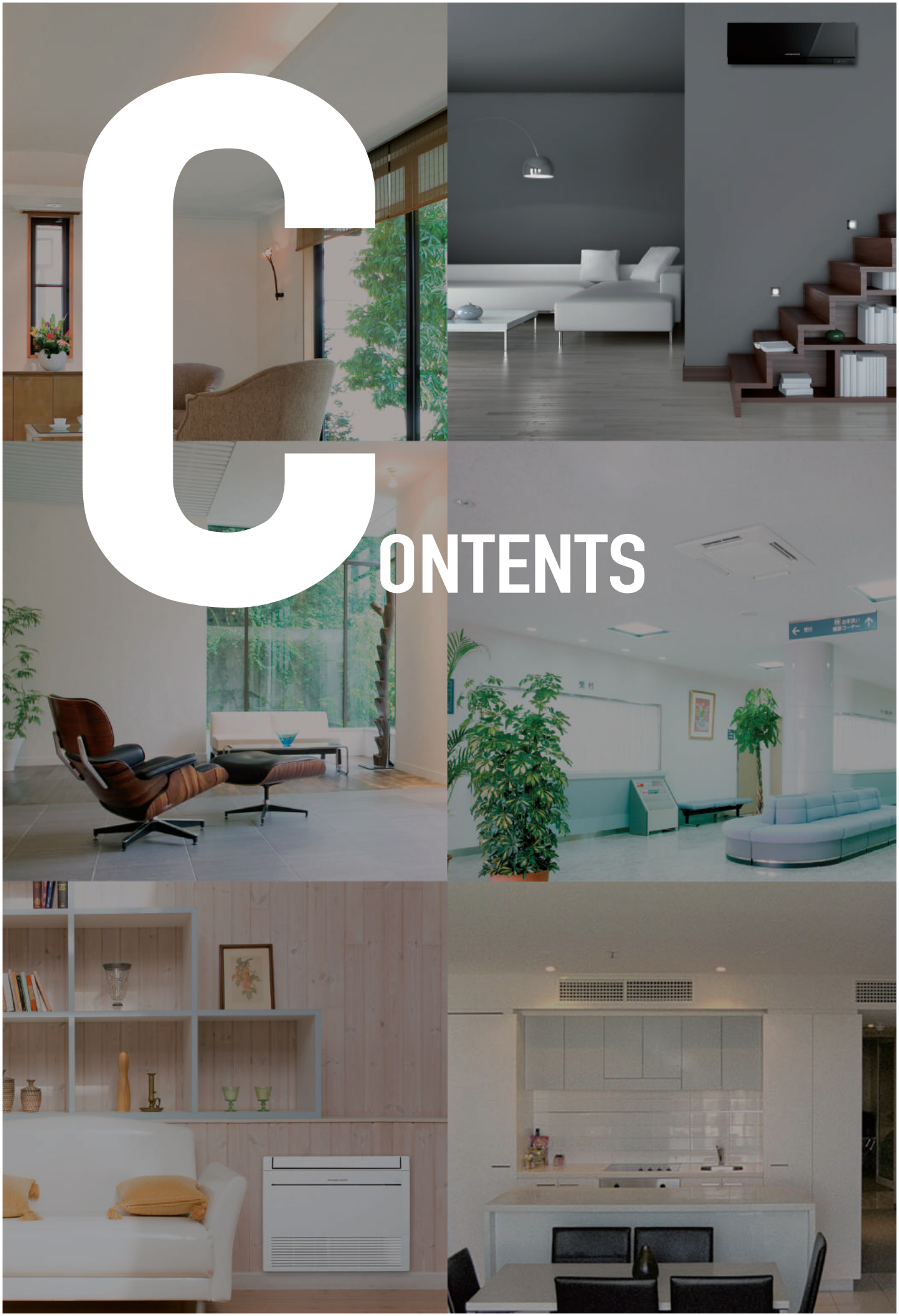
Creating a Recycling-Based Society

1. All models are designed for RoHS and WEEE compliance.*
2. Mitsubishi Electric develops downsizing technology to reduce materials use.

* WEEE and RoHS directives: The Waste Electrical and Electronic Equipment (WEEE) Directive is a recycling directive for this type of equipment, while the Restrictions of Hazardous Substances (RoHS) Directive is an EU directive restricting the use of six specified substances in electronic and electrical devices. In the EU, it is no longer possible (from July 2006) to sell products containing any of the six substances.

Ensuring Harmony with Nature / Fostering Environmental Awareness

In striving to heighten the eco-awareness of its employees, Mitsubishi Electric provides education in RoHS, WEEE and other environmental regulations, along with environmental education targeting second and third-year workers.



CONTENTS

Air Conditioners

AIR-TO-WATER

LOSSNAY SYSTEM

LINE-UP

M SERIES

INVERTER Models

Model Name		1.5kW	1.8kW	2.0kW	2.2kW	2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	Page
		1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	
Wall-mounted	MSZ-F Series 					SINGLE H	SINGLE H		SINGLE H			31
	MSZ-E Series 		MXZ connection only S·B		MXZ connection only S·B	SINGLE S·B H	SINGLE S·B H	SINGLE S·B	SINGLE S·B			35
	MSZ-S Series 	MXZ connection only		MXZ connection only								37
						SINGLE	SINGLE	SINGLE	SINGLE			37
	MSZ-G Series 									SINGLE	SINGLE	37
	MSZ-D Series 					SINGLE	SINGLE					41
	MSZ-H Series MSZ-HJ60/71  MSZ-HJ25/35/50					SINGLE	SINGLE		SINGLE	SINGLE	SINGLE	43
Compact floor	MFZ Series 					SINGLE	SINGLE		SINGLE			45
1-way cassette	MLZ Series 					MXZ connection only	MXZ connection only		MXZ connection only			47

H : Outdoor unit with freeze-prevention heater is available.
S·B: Indoor units are available in three colours; Silver, Black and White.

S SERIES

INVERTER Models

Model Name		2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	8.0kW	10.0kW	14.0kW	20.0kW	Page
		1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	
2 x 2 cassette	SLZ Series 	SINGLE	SINGLE		SINGLE	SINGLE						55
Compact ceiling-concealed	SEZ Series 	SINGLE L	SINGLE L		SINGLE L	SINGLE L	SINGLE L					59

L : Indoor units are available in two types; with or without the wireless remote controller.

Indoor Combinations

SINGLE 1 outdoor unit & 1 indoor unit
TWIN 1 outdoor unit & 2 indoor units
TRIPLE 1 outdoor unit & 3 indoor units
QUADRUPLE 1 outdoor unit & 4 indoor units

MXZ SERIES

INVERTER Models

Model Name	Capacity Class	Wall-mounted	Floor-standing	Cassette	Ceiling-concealed	Ceiling-suspended	Page
up to 6 indoor units MXZ-6D122VA 	12.2kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	89
up to 5 indoor units MXZ-5E102VA 	10.2kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	89
up to 4 indoor units MXZ-4E83VA 	8.3kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	89
up to 4 indoor units MXZ-4E72VA	7.2kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50/60	SEZ-KD25/35/50/60 PEAD-RP60	PCA-RP50/60	89
up to 3 indoor units MXZ-3E68VA 	6.8kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50/60	SEZ-KD25/35/50/60 PEAD-RP60	PCA-RP50/60	89
up to 3 indoor units MXZ-3E54VA	5.4kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50	SEZ-KD25/35/50 PEAD-RP50	PCA-RP50	89
up to 2 indoor units MXZ-2D53VA (H)	5.3kW <1-phase>	MSZ-FH25/35 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50	MFZ-KJ25/35	MLZ-KA25/35	SEZ-KD25/35		89
up to 2 indoor units MXZ-2D42VA2 	4.2kW <1-phase>	MSZ-FH25/35 MSZ-EF18/22/25/35 MSZ-SF15/20/25/35	MFZ-KJ25/35	MLZ-KA25/35	SEZ-KD25/35		89
up to 2 indoor units MXZ-2D33VA2	3.3kW <1-phase>	MSZ-FH25 MSZ-EF18/22/25 MSZ-SF15/20/25	MFZ-KJ25	MLZ-KA25 SLZ-KF25	SEZ-KD25		89
up to 3 indoor units MXZ-3DM50VA 	5.0kW <1-phase>	MSZ-HJ25/35/50 MSZ-DM25/35					91
up to 2 indoor units MXZ-2DM40VA 	4.0kW <1-phase>	MSZ-HJ25/35 MSZ-DM25/35					91
up to 4 indoor units MXZ-4E83VAHZ 	8.3kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KF25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	111
up to 2 indoor units MXZ-2E53VAHZ 	5.3kW <1-phase>	MSZ-FH25/35 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50	MFZ-KJ25/35	MLZ-KA25/35 SLZ-KF25/35	SEZ-KD25/35		111

POWERFUL HEATING SERIES

INVERTER Models

Model Name			2.5kW	3.5kW	5.0kW	5.3kW	7.1kW	8.3kW	10.0kW	12.5kW	Page
			1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1- & 3-phase	3-phase	
ZUBADAN ZUBADAN	4-way cassette	PLA Series 							SINGLE TWIN	SINGLE TWIN	99/105
	Wall-mounted	PKA Series 							SINGLE TWIN		99/107
	Ceiling-concealed	PEAD-JA Series 							SINGLE TWIN	SINGLE TWIN	99/108
Wall-mounted		MSZ-FH VEHZ Series 	SINGLE H	SINGLE H	SINGLE H						101/109
Compact floor		MFZ-KJ VEHZ Series 	SINGLE H	SINGLE H	SINGLE H						110
Multi split		MXZ-E VAHZ Series 				2PORT H		4PORT H			103/111

H: Freeze-prevention heater is included as standard equipment.

LINE-UP

P SERIES

POWER INVERTER Models

Model Name		3.5kW	5.0kW	6.0kW	7.1kW
		1-phase	1-phase	1-phase	1-phase
4-way cassette	PLA Series 	SINGLE	SINGLE	SINGLE	SINGLE TWIN
Ceiling-concealed	PEAD-JA Series 	SINGLE	SINGLE	SINGLE	SINGLE TWIN
	PEA Series 				
Wall-mounted	PKA Series 	SINGLE	SINGLE	SINGLE	SINGLE TWIN
Ceiling-suspended	PCA-KAQ Series 	SINGLE	SINGLE	SINGLE	SINGLE TWIN
Ceiling-suspended for Professional Kitchen	PCA-HAQ Series 				SINGLE
Floor-standing	PSA Series 				SINGLE

STANDARD INVERTER Models

Model Name		3.5kW	5.0kW	6.0kW	7.1kW
		1-phase	1-phase	1-phase	1-phase
4-way cassette	PLA Series 	SINGLE	SINGLE	SINGLE	SINGLE
Ceiling-concealed	PEAD-JA Series 	SINGLE	SINGLE	SINGLE	SINGLE
	PEA Series 				
Wall-mounted	PKA Series 				
Ceiling-suspended	PCA-KAQ Series 	SINGLE	SINGLE	SINGLE	SINGLE
Ceiling-suspended for Professional Kitchen	PCA-HAQ Series 				
Floor-standing	PSA Series 				

Indoor Combinations

SINGLE 1 outdoor unit & 1 indoor unit
TWIN 1 outdoor unit & 2 indoor units
TRIPLE 1 outdoor unit & 3 indoor units
QUADRUPLE 1 outdoor unit & 4 indoor units

	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	40.0kW	50.0kW	Page
	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	3-phase	3-phase	
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			65
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			71
				SINGLE	SINGLE	SINGLE*	SINGLE*	74
	SINGLE TWIN	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE			76
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			79
			TWIN		TRIPLE			80
	SINGLE	SINGLE	SINGLE TWIN	TWIN	TWIN TRIPLE			84

*1 indoor unit requires 2 outdoor units.

	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	40.0kW	50.0kW	Page
	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	3-phase	3-phase	
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			65
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			71
				SINGLE	SINGLE	SINGLE*	SINGLE*	74
	SINGLE TWIN	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE			76
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			79
			TWIN		TRIPLE			80
	SINGLE	SINGLE	SINGLE TWIN	TWIN	TWIN TRIPLE			84

*1 indoor unit requires 2 outdoor units.

NEW ECODESIGN DIRECTIVE

WHAT IS THE ErP DIRECTIVE?

The Ecodesign Directive for Energy-related Products (ErP Directive) establishes a framework to set mandatory standards for ErPs sold in the European Union (EU). The ErP directive introduces new energy-efficiency ratings across various product categories and affects how products such as computers, vacuum cleaners, boilers and even windows are classified in terms of environmental performance.
Regulations that apply to air conditioning systems of rated capacity up to 12kW came into effect as of January 1, 2013. Based the use of future-orientated technologies, Mitsubishi Electric is one step ahead of these changes, with our air conditioning systems already achieving compliance with these new regulations.

NEW ENERGY LABEL AND MEASUREMENTS

Under regulation 2011/626/EU, supplementing directive 2010/30/EU, air conditioning systems are newly classified into energy-efficiency classes on the basis of a new energy labelling system, which includes three new classes: A^{+}, A^{++} and A^{+++}.
Revisions to the measurement points and calculations of the seasonal energy efficiency ratio (SEER) and seasonal coefficient of performance (SCOP) has resulted in changes to how air conditioning systems are classified into energy-efficiency classes.
Specifically, for cooling mode, air conditioning systems must achieve at least class B. For heating mode, air conditioning systems must achieve at least a SCOP value of 3.8.

■New Energy Efficiency Label

SEER and SCOP
The SEER (Seasonal Energy Efficiency Ratio) value indicates the seasonal energy efficiency value in the cooling mode. The SCOP (Seasonal Coefficient of Performance) value refers to the seasonal efficiency in the heating mode.

Energy efficiency classes from A+++ to D SCOP in heating mode

A+++	> 5,1
A++	> 4,6
A+	> 4,0
A	> 3,4
B	> 3,1
C	> 2,8
D	< 2,5

Energy efficiency classes from A+++ to D SEER in cooling mode

A+++	> 8,5
A++	> 6,1
A+	> 5,6
A	> 5,1
B	> 4,6
C	> 4,1
D	< 3,6

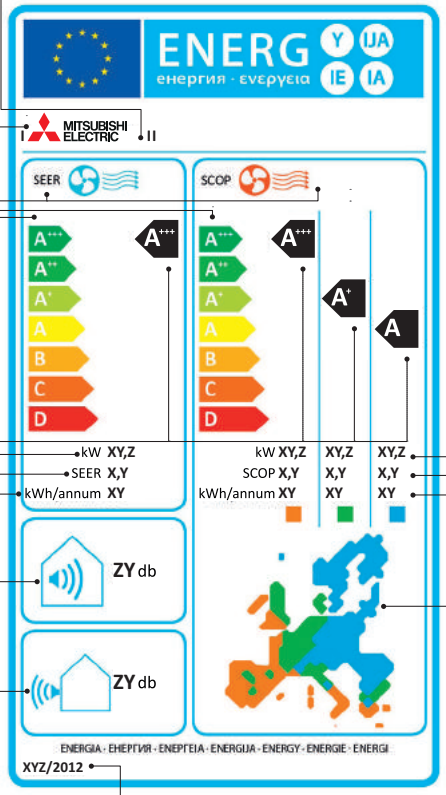
Energy efficiency class
Energy efficiency class of the unit in cooling and heating mode of the unit model

In the heating mode, the indication for the unit model is shown for all three climate zones.

Nominal capacity in cooling mode
SEER value
Annual power consumption for cooling

Operating noise, indoors/outdoors
The sound power level is an important sound energy parameter for assessing a sound source. Contrary to the sound pressure - the sound power is independent of the location of the source and/or the receiver. Maximally admissible values are:

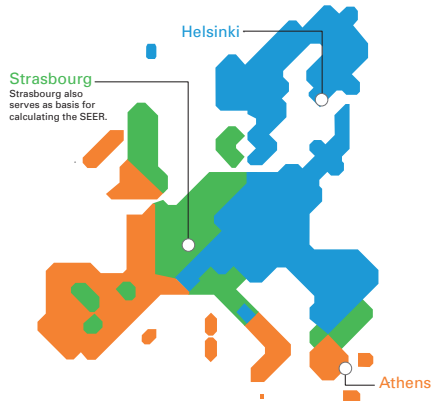
Cooling capacity ≤ 6 kW		Cooling capacity > 6 kW ≤ 12 kW	
Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
60dB(A)	65dB(A)	60dB(A)	70dB(A)



Name or trademark of the manufacturer
Name of the unit/designation of model
Time reference
Indication on label data
Nominal capacity in heating mode
SCOP value
Annual power consumption for heating
Climate zones
For heating mode, the EU is divided into three climate zones for calculation and classification purposes. This aims at calculating the energy efficiency taking into consideration the actual regional ambient temperatures.

■Climate Zones for Heating Mode

Reference climate zones for calculating the SCOP
Since the climate conditions have a great influence on the operating behaviour in the heat pump mode, three climate zones have been stipulated for the EU: warm, moderate, cold. The measurement points are homogenous at 12°C, 7°C, 2°C and –7°C.



Warm (Athens)

Partial load	Temperature conditions Outdoors DB	Outdoors WB	Indoors DB
–	–	–	20°C
100%	2°C	1°C	20°C
64%	7°C	6°C	20°C
29%	12°C	11°C	20°C

Moderate (Strasbourg)

Partial load	Temperature conditions Outdoors DB	Outdoors WB	Indoors DB
88%	–7°C	–8°C	20°C
54%	2°C	1°C	20°C
35%	7°C	6°C	20°C
15%	12°C	11°C	20°C

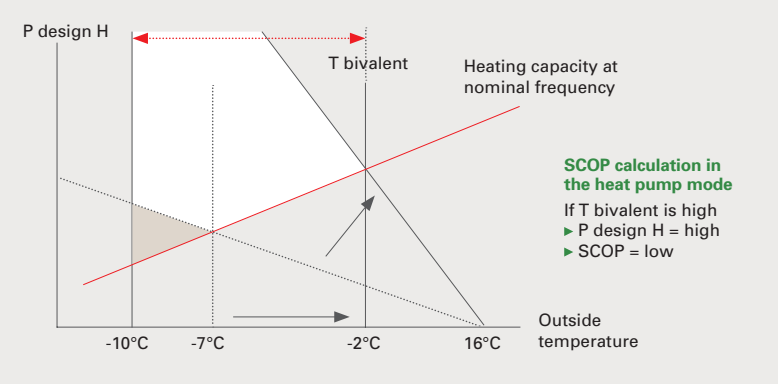
Cold (Helsinki)

Partial load	Temperature conditions Outdoors DB	Outdoors WB	Indoors DB
61%	–7°C	–8°C	20°C
37%	2°C	1°C	20°C
24%	7°C	6°C	20°C
11%	12°C	11°C	20°C

SEER/SCOP

Air conditioning systems were previously assessed using the energy-efficiency rating (EER), which evaluated efficiency in cooling mode, and the coefficient of performance (COP), which defined the efficiency, or the ratio of consumed and output power, in heating mode. Under this system, assessments were not truly reflective of performance as they were based on a single measurement point, which led to manufacturers optimising products accordingly in order to achieve higher efficiency ratings. SEER and SCOP address this problem by including seasonal variation in the ratings via use of realistic measurement points. For cooling mode, measurements at outside temperatures of 20, 25, 30 and 35°C are incorporated and weighted in accordance with climate data for Strasbourg, which is used as a single reference point for the whole EU. For instance, for partial-load operation, which represents more than 90% of operation, there is a correspondingly high weighting for the efficiency classification. For heating mode, a comprehensive temperature profile for the whole EU was not possible, so the EU has been divided into three climate zones, north, central and south, and load profiles created. The same measurement points, at outside temperatures of 12, 7, 2 and –7°C, are used for all three zones.

■SCOP Calculation



Technical Terms with Respect to the SCOP

P design H: Corresponds to a heating load of 100%. The value depends on the selected bivalence point.

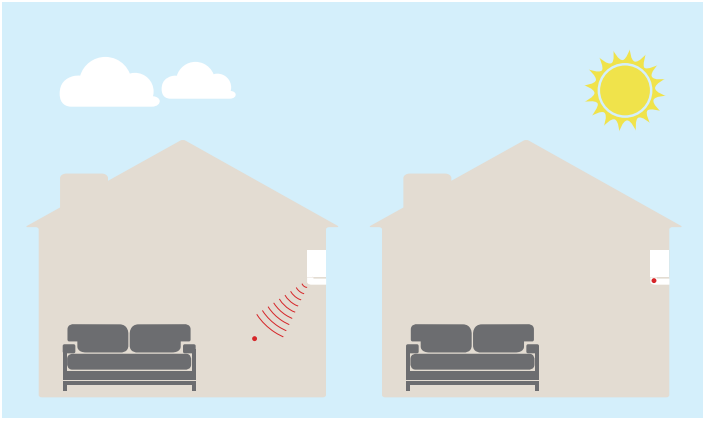
T design: Outside temperature which determines the P design H point. The latter is determined from the area conditions.

T bivalent: Corresponds to the lowest temperature at which full heating performance can be achieved with the heat pump (without additional heating). This point can be freely selected within the prescribed temperature ranges (T design - T bivalent).

SOUND PRESSURE LEVEL

Consumers will also receive more information on the noise levels emitted by split-system air conditioners to help them make their purchasing decision. Specifically, the sound power level of indoor and outdoor units is to be indicated in decibels as an objective parameter. Knowing the sound power makes it possible to calculate sound emissions while considering distance and radiation characteristics, which is beneficial because it allows the noise levels of different air conditioning systems to be compared regardless of the usage location and how the sound pressure is measured. This is an improvement on sound pressure values which are usually measured at an approximate distance of 1m where all modern split-system air conditioning systems tend to be very quiet at an average of 21 decibels.

■Sound Pressure vs Sound Power Level



Sound pressure level dB(A)
The sound pressure level is a sound field parameter which indicates the perceived operating noise of an indoor unit within a certain distance.

Sound power level dB(A)
The sound power is an acoustic parameter which describes the source strength of a sound generator and is thus independent of the distance to the receiver location.

DC Inverter INVERTER TECHNOLOGIES

Mitsubishi Electric inverters ensure superior performance including the optimum control of operation frequency. As a result, optimum power is applied in all heating/cooling ranges and maximum comfort is achieved while consuming minimal energy. Fast, comfortable operation and amazingly low running cost — That's the Mitsubishi Electric promise.

INVERTERS — HOW THEY WORK

Inverters electronically control the electrical voltage, current and frequency of electrical devices such as the compressor motor in an air conditioner. They receive information from sensors monitoring operating conditions, and adjust the revolution speed of the compressor, which directly regulates air conditioner output. Optimum control of operation frequency results in eliminating the consumption of excessive electricity and providing the most comfortable room environment.

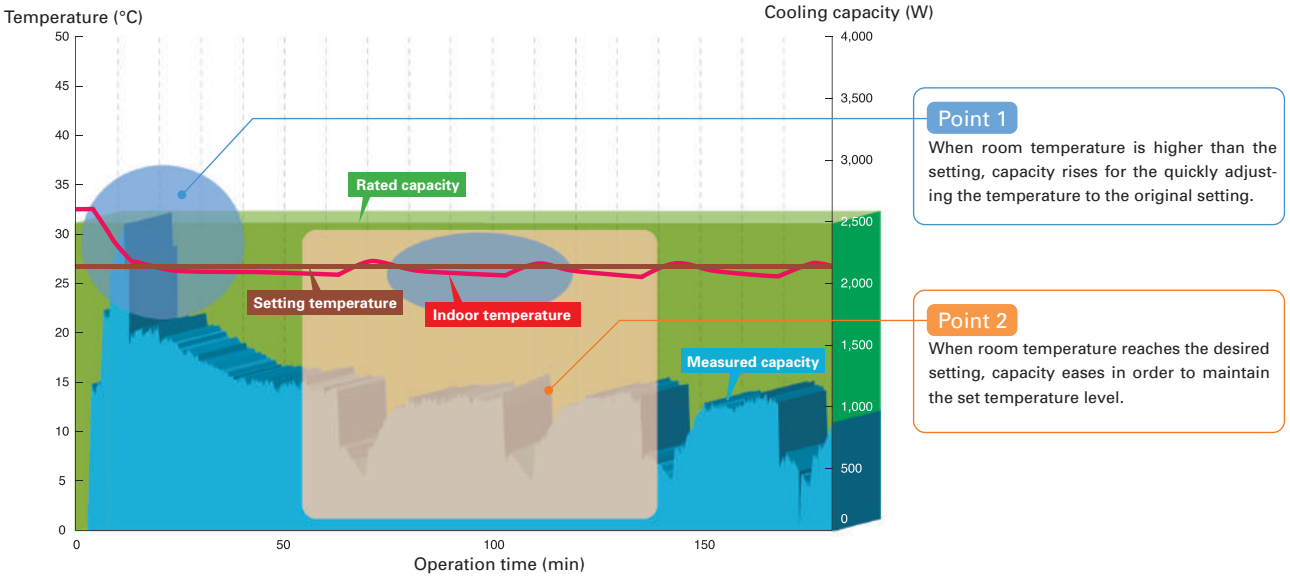
ECONOMIC OPERATION

Impressively low operating cost is a key advantage of inverter air conditioners. We've combined advanced inverter technologies with cutting-edge electronics and mechanical technologies to achieve a synergistic effect that enables improvements in heating/cooling performance efficiency. Better performance and lower energy consumption are the result.

TRUE COMFORT

Simple comparison of air conditioner operation control with and without inverter.

■ Inverter Operation Image (cooling mode)



Point 1 Quick & Powerful

Increasing the compressor motor speed by controlling the operation frequency ensures powerful output at start-up, brings the room temperature to the comfort zone faster than units not equipped with an inverter. Hot rooms are cooled, and cold rooms are heated faster and more efficiently.

Point 2 Room Temperature Maintained

The compressor motor operating frequency and the change of room temperature are monitored to calculate the most efficient waveform to maintain the room temperature in the comfort zone. This eliminates the large temperature swings common with non-inverter systems, and guarantees a pleasant, comfortable environment.

KEY TECHNOLOGIES

Our Rotary Compressor

Our rotary compressors use our original "Poki-Poki Motor" and "Heat Caulking Fixing Method" to realise downsizing and higher efficiency, and are designed to match various usage scenes in residential to commercial applications. Additionally, development of an innovative production method known as "Divisible Middle Plate" realises further size/weight reductions and increased capacity while also answering energy-efficiency needs.

Our Scroll Compressor

Our scroll compressors are equipped with an advanced frame compliance mechanism that allows self-adjustment of the position of the orbiting scroll according to pressure load and the accuracy of the fixed scroll position. This minimises gas leakage in the scroll compression chamber, maintains cooling capacity and reduces power loss.

MORE ADVANTAGES WITH MITSUBISHI ELECTRIC

Joint Lap DC Motor

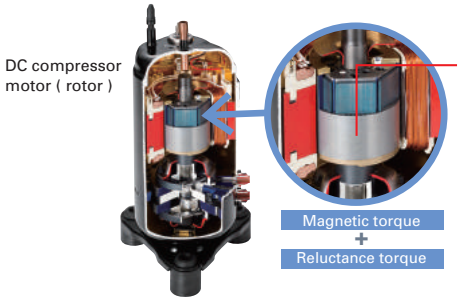
Mitsubishi Electric has developed a unique motor, called the "Poki-Poki Motor" in Japan, which is manufactured using a joint lapping technique. This innovative motor operates based on a high-density, high-magnetic force, leading to extremely high efficiency and reliability.

Magnetic Flux Vector Sine Wave Drive

This drive device is actually a microprocessor that converts the compressor motor's electrical current waveform from a conventional waveform to a sine wave (180°conductance) to achieve higher efficiency by raising the motor winding utilisation ratio and reducing energy loss.

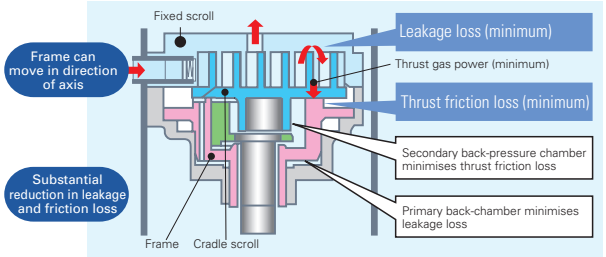
Reluctance DC Rotary Compressor

Powerful neodymium magnets are used in the rotor of the reluctance DC motor. More efficient operation is realised by strong magnetic and reluctance torques produced by the magnets.



Highly Efficient DC Scroll Compressor

Higher efficiency has been achieved by adding a frame compliance mechanism to the DC scroll compressor. The mechanism allows movement in the axial direction of the frame supporting the cradle scroll, thereby greatly reducing leakage and friction loss, and ensuring extremely high efficiency at all speeds.



Heat Caulking Fixing Method

To fix internal parts in place, a "Heat Caulking Fixing Method" is used, replacing the former arc spot welding method. Distortion of internal parts is reduced, realising higher efficiency.

DC Fan Motor

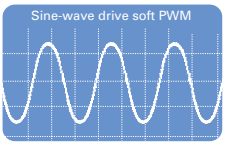
A highly efficient DC motor drives the fan of the outdoor unit. Efficiency is much higher than an equivalent AC motor.

Vector-Wave Eco Inverter

This inverter monitors the varying compressor motor frequency and creates the most efficient waveform for the motor speed. As the result, operating efficiency in all speed ranges is improved, less power is used and annual electricity cost is reduced.

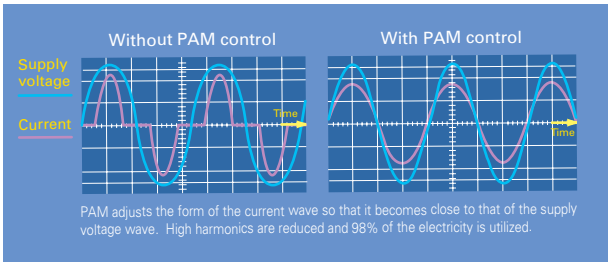
Smooth wave pattern

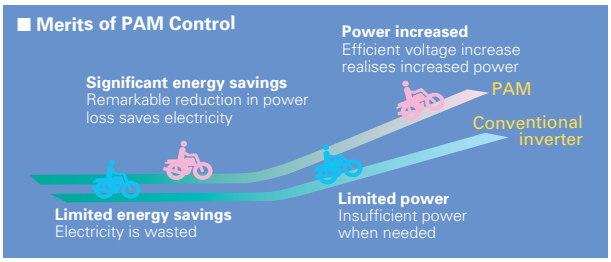
Inverter size has been reduced using insert-molding, where the circuit pattern is molded into the synthetic resin. To ensure quiet operation, soft PWM control is used to prevent the metallic whine associated with conventional inverters.



PAM (Pulse Amplitude Modulation)

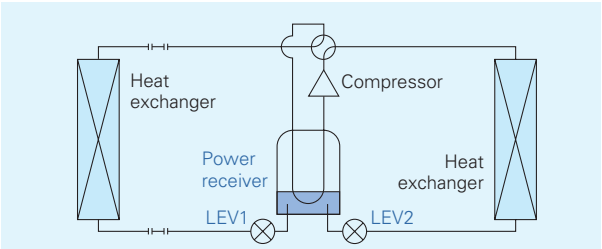
PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.





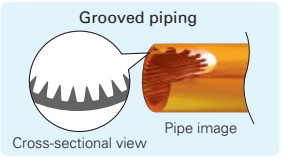
Power Receiver and Twin LEV Control

Mitsubishi Electric has developed a power receiver and twin linear expansion valves (LEVs) circuit that optimise compressor performance. This technology ensures optimum control in response to operating waveform and outdoor temperature. Operating efficiency has been enhanced by tailoring the system to the characteristics of R410A refrigerant.



Grooved Piping

High-performance grooved piping is used in heat exchangers to increase the heat exchange area.

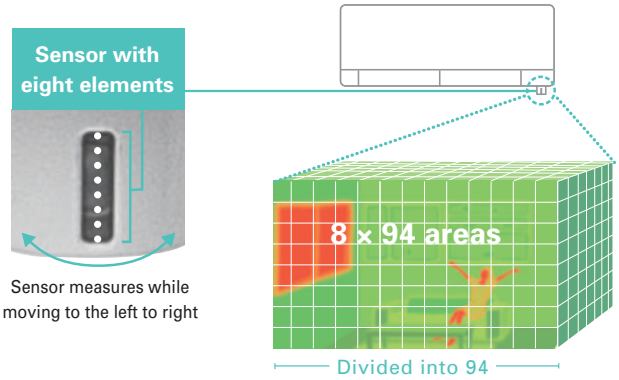


FUNCTIONS (1)

i-see Sensor

3D i-see Sensor for M SERIES

The FH Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge where people are in the room, thus allowing creation of features such as "Indirect airflow," to avoid airflow hitting people directly, and "direct airflow" to deliver airflow to where people are.



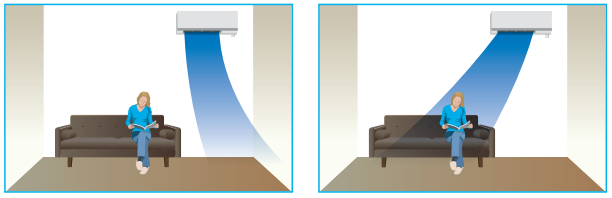
(Image)

Indirect Airflow

The indirect airflow setting can be used when the flow of air feels too strong or direct. For example, it can be used during cooling to avert airflow and prevent body temperature from becoming excessively cooled.

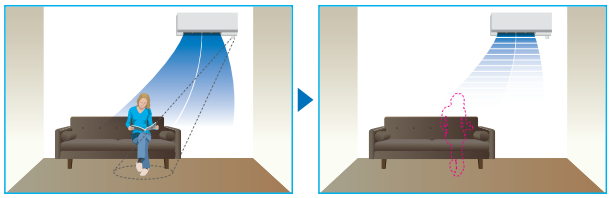
Direct Airflow

This setting can be used to directly target airflow at people such as for immediate comfort when coming indoors on a hot (cold) day.



Absence Detection

The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.



The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

3D i-see Sensor for S SERIES

Detects number of people

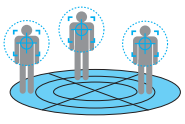
The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced power-saving mode. Depending on the setting, it can also stop the operation.

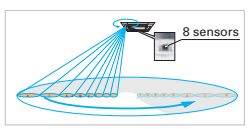
Detects people's position

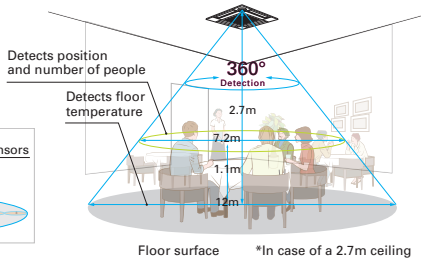
Once a person is detected, the angle of the vane is automatically adjusted. Each vane can be indenpendently set to "Direct Airflow" or "Indirect Airflow" according to taste.

Highly accurate people detection

A total of eight sensors rotate a full 360° in 3-minute intervals. In addition to detecting human body temperature, our original algorithm also detects people's positions and the number of people.







Detects number of people

Room occupancy energy-saving mode

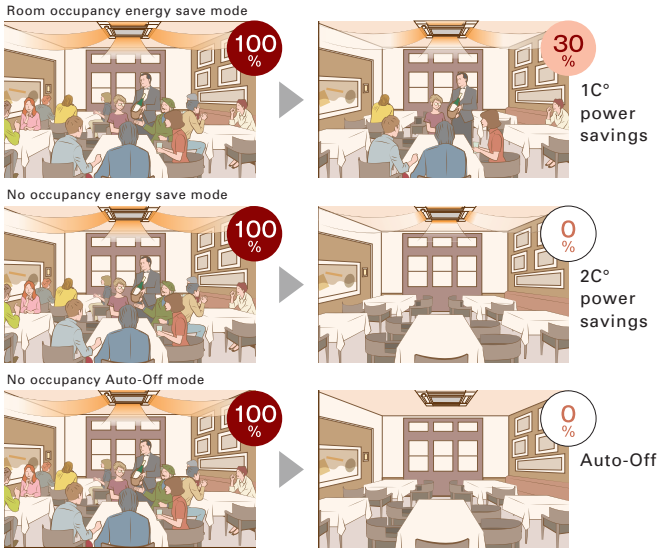
The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time in order to save air-conditioning power. When the occupancy rate is approximately 30%, air-conditioning power equivalent to 1°C during both cooling and heating operation is saved. The temperature is controlled according to the number of people.

No occupancy energy-saving mode

When 3D i-see Sensor detects that no one is the room, the system is switched to a pre-set power-saving mode. If the room remains unoccupied for more than 60min, air-conditioning power equivalent to 2°C during both cooling and heating operation is saved. This contributes to preventing waste in terms of heating and cooling.

No occupancy Auto-OFF mode

When the room remains unoccupied for a pre-set period of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10min, ranging from 60 to 180 min.

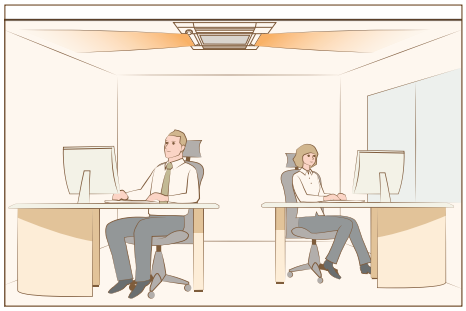


*PAR-32MAA is required for each setting

Detects people's position

Direct/Indirect settings*

The horizontal airflow spreads across the ceiling. When set to "Indirect Airflow" uncomfortable drafty-feeling is eliminated completely!

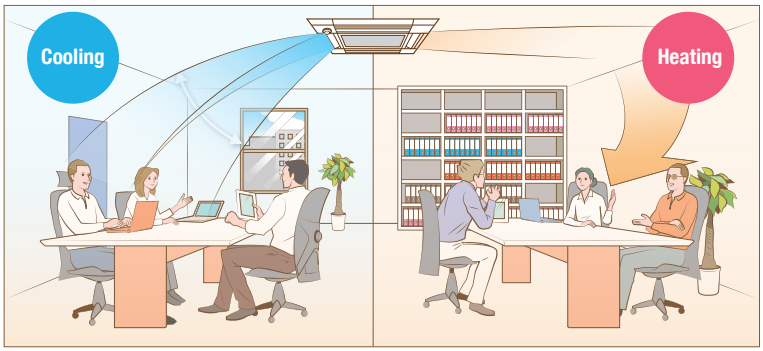


*PAR-32MAA is required for each setting.

Seasonal airflow*

When cooling
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.

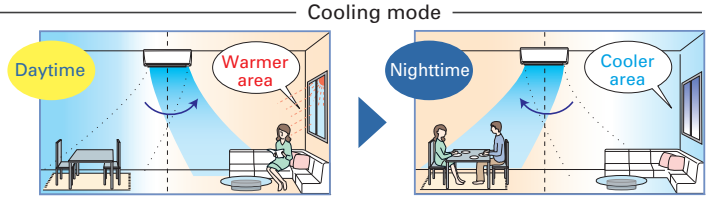
When heating
The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.



*PAR-32MAA is required for each setting.

Area Temperature Monitor

The "i-see Sensor" monitors the whole room in sections and directs the airflow to areas of the room where the temperature does not match the temperature setting. (When cooling the room, if the middle of the room is detected to be hotter, more airflow is directed towards it.) This eliminates unnecessary heating /cooling and contributes to lower electricity costs.



ENERGY-SAVING

Econo Cool Energy-Saving Feature

"Econo Cool" is an intelligent temperature control feature that adjusts the amount of air directed towards the body based on the air-outlet temperature. The setting temperature can be raised by as much as 2°C without any loss in comfort, thereby realising a 20% gain in energy efficiency. *(Function only available during manual cooling operation.)*

	Conventional	Econo Cool
Ambient temperature	35°C	35°C
Set temperature	25°C	27°C
Perceived temperature	30°C	29.3°C

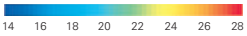
Econo Cool Mode

A comfortable room environment is maintained even when setting the temperature 2°C higher than the conventional cooling mode.

Econo Cool on

Conventional cooling mode

Temperature distribution (°C)



Demand Function (Onsite Adjustment)

The demand function can be activated when the unit is equipped with a commercially available timer or an On/Off switch is added to the CNDM connector (option) on the control board of the outdoor unit. Energy consumption can be reduced up to 100% of the normal consumption according to the signal input from outside.

[Example: Power Inverter Series]
Limit energy consumption by changing the settings of SW7-1, SW2 and SW3 on the control board of the outdoor unit. The following settings are possible.

SW7-1	SW2	SW3	Energy consumption
ON	OFF	OFF	100%
	ON	OFF	75%
	ON	ON	50%
	OFF	ON	0% (Stop)

✻PUHZ outdoor only

ATTRACTIVE

Pure White

Pure white is adopted for the unit colour; white expressing the essence of cleanliness and easily matching virtually all interior décor.

Auto Vane

The vane closes automatically when the air conditioner is not running, concealing the air outlet and creating a flat surface that is aesthetically appealing.

AIR QUALITY

Plasma Quad

Plasma Quad attacks bacteria and viruses from inside the unit using a strong curtain-like electrical field and discharge of electric current across the whole inlet-air opening of the unit.

Air Cleaning Filter

The filter is charged with static electricity, enabling it to attract and capture dust particulates that regular filters don't.

Fresh-air Intake

Indoor air quality is enhanced by the direct intake of fresh exterior air.

Anti-allergy Enzyme Filter

The anti-allergy enzyme filter works to trap allergens such as molds and bacteria and decompose them using enzymes retained in the filter.

High-efficiency Filter

This high-performance filter has a much finer mesh compared to standard filters, and is capable of capturing minute particulates floating in the air that were not previously caught.

Nano Platinum Filter

The filter has a large capture area and incorporates nanometre-sized platinum-ceramic particles that work to kill bacteria and deodourise the circulating air.

Catechin Filter

Catechin is a bioflavonoid by-product of green tea with both antiviral and antioxidant qualities. It also has an excellent deodourising effect, which is why Mitsubishi Electric uses the compound in its air conditioner filters. In addition to improving air quality, it prevents the spreading of bacteria and viruses throughout the room. Easily removed for cleaning and maintenance, when the filter is washed regularly the deodourising action is rated to last more than 10 years.

Oil Mist Filter

The oil mist filter prevents oil mist from penetrating into the inner part of the air conditioner.

Long-life Filter

A special process for the entrapment surface improves the filtering effect, making the maintenance cycle longer than that of units equipped with conventional filters.

Filter Check Signal

Air conditioner operating time is monitored, and the user is notified when filter maintenance is necessary.

Electrostatic Anti-allergy Enzyme Filter

This function features both the Air Cleaning Filter and Anti-allergy Enzyme Filter.

AIR DISTRIBUTION

Double Vane

Double vane separates the airflow in the different directions to deliver airflow not only across a wide area of the room, but also simultaneously to two people in different locations.

Horizontal Vane

The air outlet vane swings up and down so that the airflow is spread evenly throughout the room.

Vertical Vane

The air outlet fin swings from side to side so that the airflow reaches every part of the room.

High Ceiling Mode

In the case of rooms with high ceilings, the outlet-air volume can be increased to ensure that air is circulated all the way to the floor.

Low Ceiling Mode

If the room has a low ceiling, the airflow volume can be reduced for less draft.

Auto Fan Speed Mode

The airflow speed mode adjusts the fan speed of the indoor unit automatically according to the present room conditions.

FUNCTIONS (2)

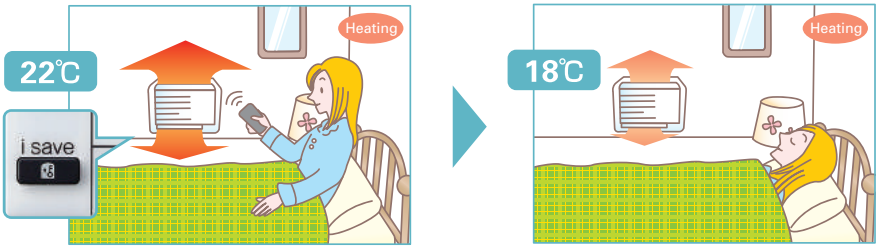
CONVENIENCE

On/Off Operation Timer

Use the remote controller to set the times of turning the air conditioner On/Off.

"i save" Mode

"i save" is a simplified setting function that recalls the preferred (preset) temperature by pressing a single button on the remote controller. Press the same button twice in repetition to immediately return to the previous temperature setting.
Using this function contributes to comfortable waste-free operation, realising the most suitable air conditioning settings and saving on power consumption when, for example, leaving the room or going to bed.



✻ Temperature can be preset to 10°C when heating in the "i-save" mode.

Auto Changeover

The air conditioner automatically switches between heating and cooling modes to maintain the desired temperature.

Auto Restart

Especially useful at the time of power outages, the unit turns back on automatically when power is restored.

Low-temperature Cooling

Intelligent fan speed control in the outdoor unit ensures optimum performance even when the outside temperature is low.

Low-noise Operation (Outdoor Unit)

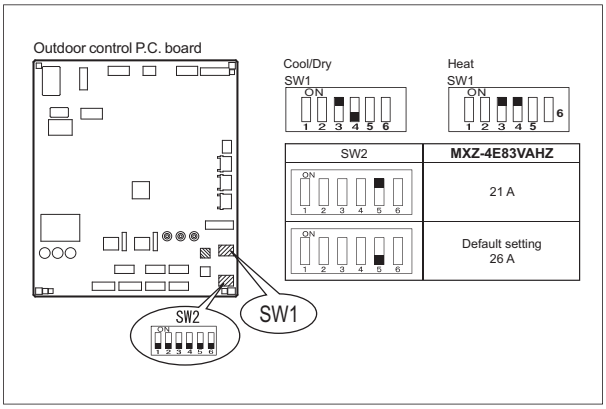
System operation can be adjusted to prioritise less noise from the outdoor unit over air conditioning performance.

Ampere Limit Adjustment

Dip switch settings can be used to adjust the maximum electrical current for operation. This function is highly recommended for managing energy costs.

*Maximum capacity is lowered with the use of this function.

■ Dip Switch Setting (Board for MXZ-5E102)



Operation Lock

To accommodate specific use applications, cooling or heating operation can be specified when setting the control board of the outdoor unit. A convenient option when a system needs to be configured for exclusive cooling or heating service.

Weekly Timer Built-in Weekly Timer Function

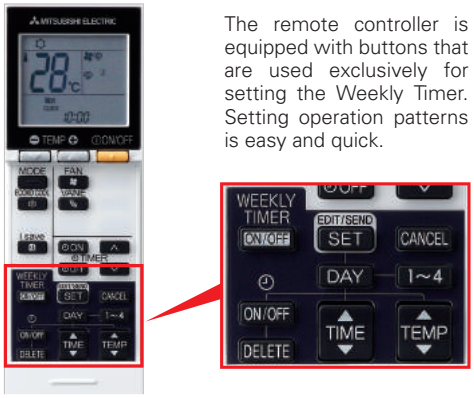
Easily set desired temperatures and operation ON/OFF times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ **Example Operation Pattern (Winter/Heating mode)**

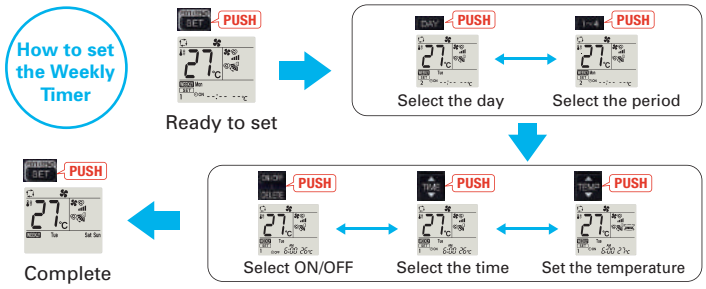
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00	Automatically turned off during work hours					Midday is warmer, so the temperature is set lower	
14:00							
16:00							
18:00	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C
20:00	Automatically turns on, synchronized with arrival at home					Automatically raises temperature setting to match time when outside-air temperature is low	
22:00							
(during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
	Automatically lowers temperature at bedtime for energy-saving operation at night						

Settings **Pattern Settings:** Input up to four settings for each day
Settings: •Start/Stop operation •Temperature setting ✻The operation mode cannot be set.

■Easy set-up using dedicated buttons



The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired patterns into the remote controller memory. Pushing the "CANCEL" button will end the set-up process without sending the operation patterns to the indoor unit).
- It takes a few seconds to transmit the Weekly Timer operation patterns to the indoor unit. Please continue to point the remote controller at the indoor unit until all data has been sent.

SYSTEM CONTROL

PAR-32MAA/PAC-YT52CRA

Units are compatible for use with the PAR-32MAA or PAC-YT52CRA remote controller, which has a variety of management functions.

Group Control System Group Control

The same remote controller is capable of controlling the operational status of up to 16 refrigerant systems.

M-NET connection M-NET Connection

Units can be connected to MELANS system controllers (M-NET controllers) such as the AG-150A.

COMPO COMPO (Simultaneous Multi-unit Operation)

Multiple indoor units can be connected to a single outdoor unit. (Depending on the unit combination, connection of up to four units is possible; however, all indoor units must operate at the same settings.)

MXZ connection MXZ Connection

Connection to the MXZ multi-split outdoor unit is possible.

Wi-Fi Interface Wi-Fi Interface

Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.

FUNCTIONS (3)

INSTALLATION

Cleaning-free Pipe Reuse

It is possible to reuse the same piping. It allows cleaning-free renewal of air conditioning systems that use R22 or R410 refrigerant.

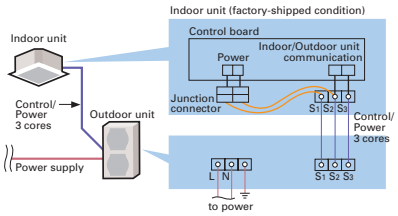
Reuse of Existing Wiring

Wiring recycling problem solved! Compatible with other wiring connection methods*

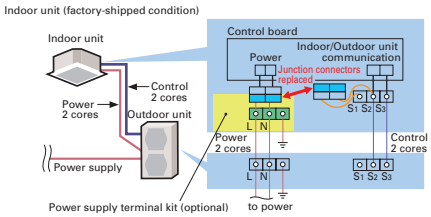
The wiring method has been improved, making it possible to use methods different from that utilized for control and power supply. Units are compatible with the dual harness control line/power line method and the separate power supply method. Using a power supply terminal kit, wire can be efficiently reused at the time of system renewal regardless of the method the existing system uses.

* Optional. Usage may be limited due to wiring type diameter.

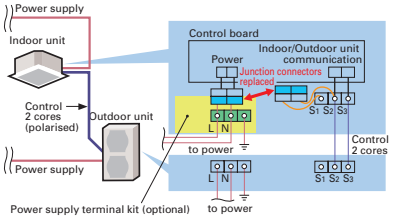
Single Harness Control/Power Line Method (Current method)



Dual Harness Control Line/Power Line Method



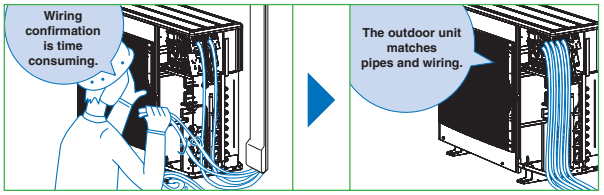
Separate Power Supply Method



Wiring/Piping Correction Function*

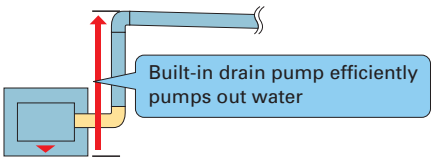
The push of a single button is all that is required to confirm that piping and wiring are properly connected. Corrections are made automatically if a wiring error is detected, eliminating the need for complicated wiring confirmation work when expanding the number of rooms served.

* This function cannot be used when the outdoor temperature is below 0°C. The correction process requires 10–20 minutes, and only works when the unit is set to the Cooling mode.



Drain Pump

A built-in drain pump enables drain piping to be raised.



Flare Connection

Flare connection to cooling pipe work is possible.

Pump Down Switch

Enables smooth and easy recovery of refrigerant. Simply press the "Pump Down" switch before moving or changing the unit.

Outdoor unit control circuit board

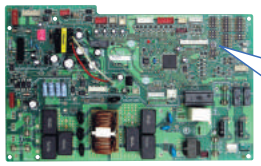
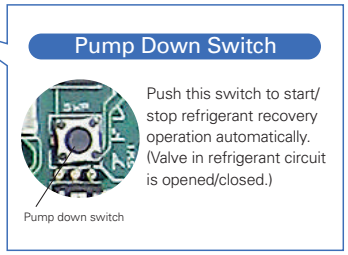


*Photo of Model PUHZ-P100



MAINTENANCE

Quick Clean Body

Exclusive Quick Clean Kit (Optional)

Our exclusive "Quick Clean Kit" can be easily connected to a household vacuum cleaner for quick and easy cleaning of the heat exchanger.*

*Wearing gloves is highly recommended when cleaning the heat exchanger, because touching it with bare hands can cause injury.

Self-Diagnostic Function (Check Code Display)

Check codes are displayed on the remote controller or the operation indicator to inform the user of malfunctions detected.

Failure Recall Function

Operation failures are recorded, allowing confirmation when needed.

FUNCTION LIST (1)

Category		Icon			M series																													
		Combination	Indoor unit		MSZ-FH25/35/50VE						MSZ-EF18/22/25/35/42/50VE2(W)(B)(S)						MSZ-SF15/20VA					MSZ-SF25/35/42/50VE2						MSZ-GF60/71VE					
			Outdoor unit		MUZ -FH	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	MUZ -EF	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	MUZ -SF	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	MUZ -GF	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D
Technology			DC Inverter		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Joint Lap DC Motor		●	●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	72/83VA	●	
			Magnetic Flux Vector Sine Wave Drive																															
			Reluctance DC Rotary Compressor					4E	●	●				4E	●	●			4E	●	●				4E	●	●			4E	●	●
			Highly Efficient DC Scroll Compressor																															
			Heating Caulking (Compressor)		●	●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	72/83VA	●			●	●	72/83VA	●			●	72/83VA	●	
			DC Fan Motor		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Vector-Wave Eco Inverter																															
			PAM (Pulse Amplitude Modulation)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Power Receiver and Twin LEV Control				●	72					●	72				●	72					●	72				●	72		
			Grooved Piping		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Function	I-see Sensor		Felt Temperature Control (3D i-see Sensor)		●	●	●	●	●	●																								
			AREA Temperature Monitor		●	●	●	●	●	●																								
	Energy Saving		Econo Cool Energy-saving Feature		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Standby Power Consumption Cut		●						●											●						●						
			Demand Function																															
	Attractive		Pure White		●	●	●	●	●	●	VIEW	VIEW	VIEW	VIEW	VIEW	VIEW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Auto Vane		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Air Quality		Plasma Quad		●	●	●	●	●	●																								
			Fresh-air Intake																															
			Anti-allergy Enzyme Filter																															
			Electrostatic Anti-allergy Enzyme Filter		●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			High-efficiency Filter																															
			Catechin Filter																															
			Nano Platinum Filter								●	●	●	●	●	●						●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Oil Mist Filter																															
			Long-life Filter																															
			Filter Check Signal																															
	Air Distribution		Double Vane		●	●	●	●	●	●																								
			Horizontal Vane		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Vertical Vane		●	●	●	●	●	●																								
			High Ceiling Mode																															
			Silent Mode																															
			Auto Fan Speed Mode		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Convenience		On/off Operation Timer		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			"i save" Mode		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Auto Changeover		●	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1
			Auto Restart		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Low-temperature Cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Low-noise Operation (Outdoor Unit)			●	●	●	●	●		●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●
			Ampere Limit Adjustment			2E		4E	●	●		2E		4E	●	●	2E		4E	●	●		2E		4E	●	●			4E	●	●		
			Operation Lock			●	●	●	●	●		●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●
			Built-in Weekly Timer Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Rotation, Back-up and 2nd Stage Cut-in Functions																															
	System Control		PAR-32MAA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			PAC-YT52CRA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			Centralised On/Off Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			System Group Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			M-NET Connection *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			COMPO *4																															
			MXZ Connection			●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2	●*2
	Installation		Cleaning-free Pipe Reuse		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Reuse of Existing Wiring																															
			Wiring/Piping Correction Function			●	●	●	●	●		●	●	●	●	●		●	●	●	●		●	●	●	●	●		●	●	●	●	●	●
			Drain Pump																															
			Pump Down Switch																															
			Flare Connection		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Maintenance		Self-Diagnosis Function (Check Code Display)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Failure Recall Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

*1 When multiple indoor units connected to an MXZ outdoor unit are running at the same time, simultaneous cooling and heating is not possible.
*2 For the possible connectivity of MXZ outdoor units and indoor units, please refer to the list on page 93 for details.
*3 Please refer to "System Control" on pages 29-30 for details.
*4 Please refer to page 18 for details.
*5 SLZ-KF60VA cannot be connected to MXZ.

M series																		S series											
MSZ-DM25/35VA			MSZ-HJ25/35/50VA			MSZ-HJ60/71VA	MFZ-KJ25/35/50VE						MLZ-KA25/35/50VA					SLZ-KF25/35/50/60VA *5						SEZ-KD25/35/50/60/71VAL/VAQ					
MUZ -DM	MXZ -2DM	MXZ -3DM	MUZ -HJ	MXZ -2DM	MXZ -3DM	MUZ -HJ	MUFZ -KJ	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	SUZ -KA	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D	SUZ -KA	MXZ -2D/E	MXZ -3D	MXZ -4D/E	MXZ -5E	MXZ -6D
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	72/83VA	●		●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	●	72/83VA	●	
										4E	●	●			4E	●	●				4E	●	●				4E	●	●
35	●	●	35	●	●	●	●	●	●	72/83VA	●		●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	●	72/83VA	●	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		●			●				●	72				●	72					●	72					●	72		
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
																		Opt	Opt	Opt	Opt	Opt	Opt						
																		Opt	Opt	Opt	Opt	Opt	Opt						
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●												
							●																						
●	●	●	●	●	●	●	●	●	●	●	●	●						●	●	●	●	●	●						
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
																		●	●	●	●	●	●						
							●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt												
													Opt	Opt	Opt	Opt	Opt												
																		●	●	●	●	●	●						
																		●	●	●	●	●	●						
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
													●	●	●	●	●	●	●	●	●	●	●						
													●	●	●	●	●	●	●	●	●	●	●						
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
							●	●	●	●	●	●																	
							●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1	●*1
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●		●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●		●	●			●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●
	●	●		●	●			2E		4E	●	●	2E		4E	●	●		2E		4E	●	●		2E		4E	●	●
	●	●		●	●			●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●
							●																						
Opt	Opt	Opt					Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Opt	Opt	Opt					Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Opt	Opt	Opt					Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Opt	Opt	Opt					Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Opt	Opt	Opt					Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	●*2	●*2		●*2	●*2			●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●		●	●			●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●
													●	●	●	●	●	●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

- The figures listed in the table are "only when combined with an outdoor unit with the appropriate capacity range".
- Opt: Separate parts must be purchased.

FUNCTION LIST (2)

Category		Icon	Combination	P SERIES																	
			Indoor unit	PLA-(Z)RP35/50/60/71/100/125/140BA								PEAD-RP35/50/60/71/100/125/140JA(L)Q								PEA-RP200/250/400/500GAQ	
			Outdoor unit	PUHZ-SHW	PUHZ-ZRP	PUHZ-P	SUZ-KA	MXZ-3D	MXZ-4D/E	MXZ-5E	MXZ-6D	PUHZ-SHW	PUHZ-ZRP	PUHZ-P	SUZ-KA	MXZ-3D	MXZ-4D/E	MXZ-5E	MXZ-6D	PUHZ-ZRP	PUHZ-P
Technology		DC Inverter		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Joint Lap DC Motor			35-71		●	●	72/83VA	●			35-71		●	●	72/83VA	●			
		Magnetic Flux Vector Sine Wave Drive		●	●	●						●	●	●						●	●
		Reluctance DC Rotary Compressor				100-140			4E	●	●			100-140			4E	●	●		
		Highly Efficient DC Scroll Compressor		●	100-250	200/250						●	100-250	200/250						●	●
		Heating Caulking (Compressor)			35-71		●	●	72/83VA	●			35-71		●	●	72/83VA	●			
		DC Fan Motor		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Vector-Wave Eco Inverter		●	●	●						●	●	●						●	●
		PAM(Pulse Amplitude Modulation)		●	35-140	100-140	●	●	●	●	●	●	35-140	100-140	●	●	●	●	●		
		Power Receiver and Twin LEV Control		●	35-140			●	72			●	35-140			●	72				
		Grooved Piping		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Functions	i-see Sensor	Felt Temperature Control (3D i-see Sensor)																			
		AREA Temperature Monitor																			
	Energy Saving	Econo Cool Energy-saving Feature																			
		'I-Feel' Control																			
		Demand Function		Opt	Opt	Opt						Opt	Opt	Opt						Opt	Opt
	Attractive	Pure White		●	●	●	●	●	●	●	●										
		Auto Vane		●	●	●	●	●	●	●	●										
	Air Quality	Plasma Quad																			
		Fresh-air Intake		●	●	●	●	●	●	●	●										
		Anti-allergy Enzyme Filter																			
		High-efficiency Filter		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt										
		Catechin Filter																			
		Oil Mist Filter																			
		Long-life Filter		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Filter Check Signal		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Air Distribution	Horizontal Vane		●	●	●	●	●	●	●	●										
		Vertical Vane																			
		High Ceiling Mode		●	●	●	●	●	●	●	●										
		Low Ceiling Mode		●	●	●	●	●	●	●	●										
		Auto Fan Speed Mode		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Convenience	On/off Operation Timer		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		"i save" Mode																			
		Auto Changeover		●	●	●	●	●*1	●*1	●*1	●*1	●	●	●	●	●	●	●	●	●	●
		Auto Restart		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-temperature Cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-noise Operation (Outdoor Unit)		●	●	●		●	●	●	●	●	●	●		●	●	●	●	●	●
		Ampere Limit Adjustment		112/140	60-140V 200/250				4E	●	●	112/140	60-140V 200/250				4E	●	●	●	
		Operation Lock						●	●	●	●										
		Built-in Weekly Timer Function																			
		Rotation, Back-up and 2nd Stage Cut-in Functions		Opt	Opt	Opt						Opt	Opt	Opt							
		Dual set point *6			●	200/250							●	200/250						●	●
	System Control	PAR-32MAA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		PAC-YT52CRA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Centraliesd On/Off Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		
		System Group Control *3		●	●	●	Opt	Opt	Opt	Opt	Opt	●	●	●	Opt	Opt	Opt	Opt	Opt	●	●
		M-NET Connection *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		COMPO *4		●	71-250	●						●	71-250	●							
		MXZ Connection						●*2	●*2	●*2	●*2					●*2	●*2	●*2	●*2		
	Installation	Cleaning-free Pipe Reuse		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Reuse of Existing Wiring		Opt	Opt	Opt						Opt	Opt	Opt							
		Wiring/Piping Correction Function						●	●	●	●					●	●	●	●		
		Drain Pump		●	●	●	●	●	●	●	●	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5		
		Pump Down Switch		●	●	●						●	●	●						●	●
		Flare Connection		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Maintenance	Quick Clean Body																			
		Self-Diagnosis Function (Check Code Display)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Failure Recall Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

*1 When multiple indoor units connected to an MXZ outdoor unit are running at the same time, simultaneous cooling and heating is not possible.
*2 For the possible connectivity of MXZ outdoor units and indoor units, please refer to the list on page 93 for details.
*3 Please refer to "System Control" on pages 29-30 for details.
*4 Please refer to page 18 for details.
*5 PEAD-RP JALQ are not equipped with a drain pump.
*6 This function is only available with PAR-32MAA.

	P series															
	PKA-RP35/50HAL		PKA-RP60/71/100KAL			PCA-RP35/50/60/71/100/125/140KAQ							PCA-RP71HAQ		PSA-RP71/100/125/140KA	
	PUHZ-ZRP	PUHZ-P	PUHZ-SHW	PUHZ-ZRP	PUHZ-P	PUHZ-ZRP	PUHZ-P	SUZ-KA	MXZ-3D	MXZ-4D/E	MXZ-5E	MXZ-6D	PUHZ-ZRP	PUHZ-P	PUHZ-ZRP	PUHZ-P
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	35-71			60-71		50-71		●	●	●	●	●	71		71	
	●	●	●	●	●	●	●						●	●	●	●
		100-140			100-140		100-140			4E	●	●		100/125		100-140
	100-200	200	●	100-250	200/250	100-250	200/250						100-250	250	100-250	200/250
	35-71			35-71		35-71		●	●	72			35-71		35-71	
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●						●	●	●	●
	35-140	100-140	●	60-140	100-140	50-140	100-140	●	●	●	●	●	71-140	125/140	71-140	100-140
	35-140		●	60-140		35-140			●	72	●	●	71-140		71-140	
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Opt	Opt	Opt	Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt
	●	●	●	●	●	●	●	●	●	●	●	●			●	●
	●	●	●	●	●	●	●	●	●	●	●	●				
						●	●	●	●	●	●	●	●	●		
						Opt	Opt	Opt	Opt	Opt	Opt	Opt				
													●	●		
						●	●	●	●	●	●	●			●	●
	Opt	Opt	Opt	Opt	Opt	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●				
															●	●
						●	●	●	●	●	●	●				
						●	●	●	●	●	●	●				
	●	●	●	●	●	●	●	●	●	●	●	●				
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●*1	●*1	●*1	●*1	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●
	60-140V 200/250		112/140	60-140V 200/250		60-140V 200/250				4E	●	●	71-140V 200/250		71-140V 200/250	
									●	●	●	●				
	Opt	Opt	Opt	Opt	Opt	●	●		●	●	●	●	●	●		
	●	200		●	200/250	●	200/250									
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	●	●	Opt	●	●	●	●	●	●	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	71-250	●	●	71-250	●	71-250	●						71-250	●	71-250	●
									●*2	●*2	●*2	●*2				
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Opt	Opt	Opt	Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt
									●	●	●	●				
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt				
	●	●	●	●	●	●	●						●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

• If a numerical figure is listed, the feature is only available with the outdoor unit of that capacity.
• Opt: Optional parts must be purchased.

CONTROL TECHNOLOGIES

PAR-32MAA

User-friendly Deluxe Remote Controller with Excellent Operability and Visibility

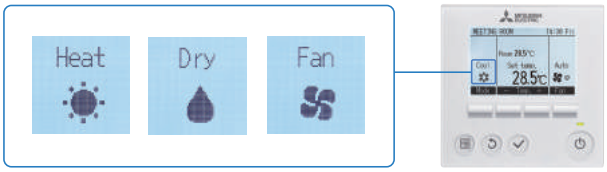
Easy To Read & Easy To Use

Full Dot Liquid-crystal Display Adopted

Easier to read thanks to use of a full dot liquid-crystal display with backlight, and easier to use owing to adopting a menu format that has reduced the number of operating buttons.

Display Example [Operation Mode]

Full Dot LCD



Multi-language Display

Multi-language

Control panel operation in eight different languages

Choose the desired language, among the following languages.

English	Spanish	Italian	Turkish
French	Greek	Portuguese	Swedish

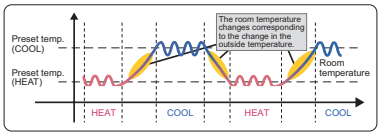
Temperature Control

Dual set point

Two preset temperatures

When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the COOL or HEAT mode and keep the room temperature within the preset range.

Operation pattern during Auto (dual set point) mode



*Please refer to the function list on pages 23-24 for the combination of the available units.

Energy-efficient Control

Operation Control Functions

Energy-Saving Schedule

Precise control of power consumption

The amount of power consumed in each time period is managed so that the demand value is not exceeded. The demand control function can be set to start and finish in 5-minute units. Additionally, the level can be adjusted to 0, 50, 60, 70, 80 or 90% of maximum capacity, and up to 4 patterns can be set per day. Air-conditioning operation is automatically controlled to ensure that electricity in excess of the contracted volume is not consumed.

■Setting pattern example

Start time		Finish time	Capacity savings
8:15	→	12:00	80%
12:00	→	13:00	50%
13:00	→	17:00	90%
17:00	→	21:00	50%

Auto-return

Prevents wasteful operation by automatically returning to the preset temperature after specified operating time

After adjusting the temperature for initial heating in winter or cooling on a hot summer day, it is easy to forget to return the temperature setting to its original value. The Auto-return function automatically resets the temperature back to the original setting after a specified period of time, thereby preventing overheating/overcooling. The Auto-return activation time can be set in 10-minute units, in a range between 30 and 120 minutes.

*Auto-return cannot be used when Temperature Range Restrictions is in use.

Night Setback

Keep desired room temperatures automatically

This function monitors the room temperature and automatically activates the heating mode when the temperature drops below the preset minimal temperature setting. It has the same function for cooling, automatically activating the cooling mode when the temperature rises above the preset maximum temperature setting.

Auto-off Timer

Turns heating/cooling off automatically after preset time elapses

When using Auto-off Timer, even if one forgets to turn off the unit, operation stops automatically after the preset time elapses, thereby preventing wasteful operation. Auto-off Timer can be set in 10-minute units, in a range between 30 minutes and 4 hours. Eliminates all anxiety about forgetting to turn off the unit.

Recommended for Meeting room Changing room

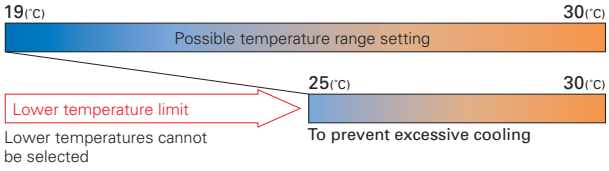
Temperature Range Restriction

Temperature Range Restriction prevents overheating/overcooling

Using a temperature that is 1°C lower/higher for heating/cooling results in a 10% reduction in power consumption.* Temperature Range Restriction limits the maximum and minimum temperature settings, contributing to the prevention of overheating/overcooling.

*In-house calculations

Cooling/Dry (Setting example of minimum temp. in 25°C)



Recommended for Office Restaurant

Operation Lock

Fixed temperature setting promotes energy savings

In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous operation or tampering.

Recommended for Office School Public hall Hospital Computer server facility

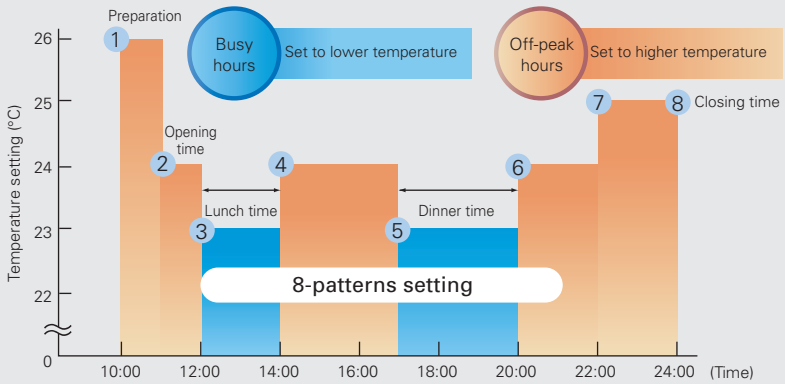
Weekly Timer

Set up to 8 patterns per day including temperature control

The Weekly Timer enables the setting of operation start and finish times and adjusting the temperature as standard features. Up to 8 patterns per day can be set, providing operation that matches the varying conditions of each period, such as the number of customers in the store.

*Weekly Timer cannot be used when On/Off Timer is in use.

■ Setting Example
(restaurant in summer time)



Necessary to change temperature settings for cooling/heating times.
*Joint research conducted with Japan Facility Solutions, Inc.

CONTROL TECHNOLOGIES

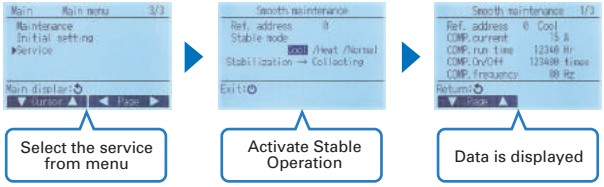
Installation/Maintenance Support Functions

Smooth Maintenance

Outdoor unit data accessed immediately, enabling fast maintenance (only PUHZ type)

Using the Stable Operation Control (fixed frequency) of the Smooth Maintenance function, the operating status of the inverter can be checked easily via the screen on the remote controller.

■ Smooth Maintenance Function Operating Procedure



Display information (11 items)

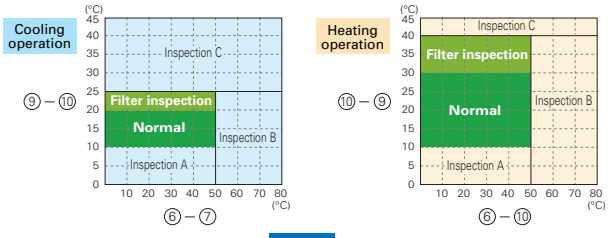
Compressor		⑥	OU TH4 temp. (°C)
①	COMP. current (A)	⑦	OU TH6 temp. (°C)
②	COMP. run time (Hr)	⑧	OU TH7 temp. (°C)
③	COMP. ON/OFF (times)	Indoor Unit	
④	COMP. frequency (Hz)	⑨	IU air temp. (°C)
Outdoor Unit		⑩	IU HEX temp. (°C)
⑤	Sub cool (°C)	⑪	IU filter operating time* (Hr)

*IU filter operating time is the time elapsed since filter was reset.

Inspection Guidelines

The computed temperature difference is plotted as in the graph below and operating status is determined.

		Item
Cooling	Temp. difference	(⑥ OU TH4 temp.) – (⑦ OU TH6 temp.)
		(⑨ IU air temp.) – (⑩ IU HEX temp.)
Heating		(⑥ OU TH4 temp.) – (⑩ IU HEX temp.)
		(⑩ IU HEX temp.) – (⑨ IU air temp.)



Result

Normal	Normal operating status.
Filter inspection	Filter may be blocked.*1
Inspection A	Capacity is reduced. Detailed inspection is necessary.
Inspection B	Refrigerant level is low.
Inspection C	Filter or indoor unit heat exchanger is blocked.

*1: Due to indoor and outdoor temperatures, "Filter inspection" may be displayed even if the filter is not blocked.

* The above graphs are based on trial data. Results may vary depending on installation/temperature conditions.

- Stable operation may not be possible under the following temperature conditions:
  a) In cooling mode when the outdoor induction temperature is over 40°C or the indoor induction temperature is below 23°C.
  b) In heating mode when the outdoor induction temperature is over 20°C or when the indoor induction temperature is over 25°C.
- If the above temperature conditions do not apply and stable operation is not achieved after 30 minutes has passed, please inspect the units.
- The operating status may change due to frost on the outdoor heat exchanger.

Manual Vane Angle Setting (4-way ceiling cassette)

Direction of vertical airflow for each vane can be set

Setting the vertical airflow direction for each individual vane can be performed simply via illustrated display. Seasonal settings such as switching between cooling and heating are easily changed as well.

Auto-descending Panel Operation

Easily raise/lower panels using the remote controller

Auto-descending panel operation is available as an option. Panels can be raise/lower using a button on the wired remote controller. Filter cleaning can be performed easily.

Refrigerant Leakage Check

Easily check refrigerant leakage

The Mr. Slim Power Inverter units come equipped with a useful "Refrigerant Leakage Check" function. Using a wired remote controller, it is easy to check if refrigerant has been lost over a long period of use. This reduces service time and gives an added sense of safety.

Silent Mode

Three outdoor noise level setting

The outdoor noise level can be reduced on demand according to the surrounding environment. Select from three setting mode: standard mode (rated), silent mode and ultra-silent mode.

Initial Password Setting

Password for initial settings

A password is required (default setting is "0000") for initial settings such as time and display language.

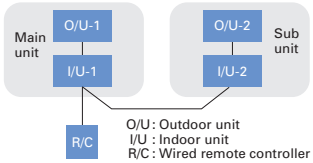
Rotation Back-up Rotation, Back-up and 2nd Stage Cut-in Functions (PAR-32MAA)

(1) Rotation and Back-up Functions

Function Outline

- Main and sub units take turns operating according to a rotation interval setting.
- If one unit malfunctions, the other unit automatically begins operation (Back-up function)

System Image



(2) 2nd Stage Cut-in Function

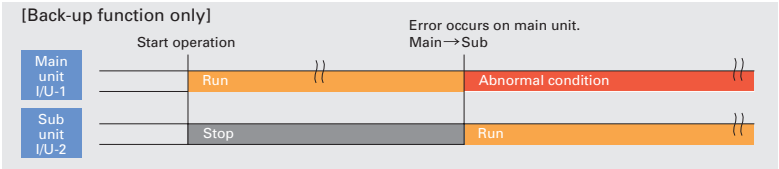
Function Outline

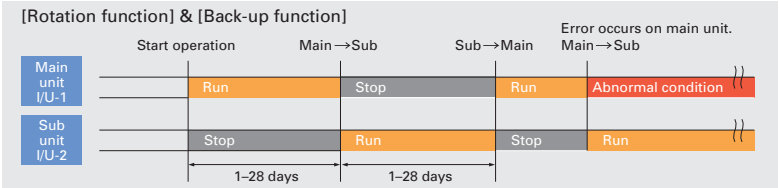
- Number of units operating is based on room temperature and predetermined settings.
- When room temperature rises above the desired setting, the standby unit starts (2-unit operation).
- When the room temperature falls 4°C below the predetermined setting, the standby unit stops (1-unit operation).

System Constraint

- This function is only available for rotation operation and when the back-up function is in cooling mode.

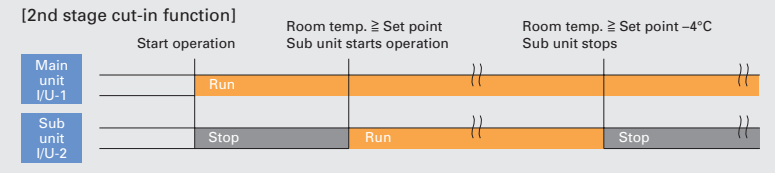
Operation Pattern



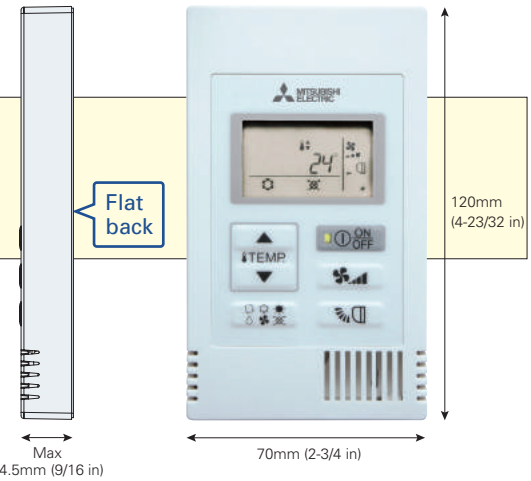


(Ex: When the request code is "313", each unit operates alternately in daily cycle.)

Operation Pattern



Simple MA Remote Controller
PAC-YT52CRA



Backlit LCD

Features a liquid-crystal display (LCD) with backlight for operation in dark conditions.

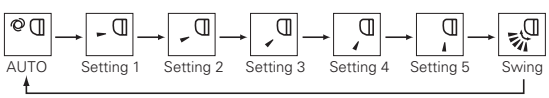
Flat Back

The slim and flat-back shape makes installation easier without requiring a hole in the wall. Thickness is 14.5mm or less.

Vane Angle Setting

The vane button has been added to allow users to change the airflow direction (ceiling-cassette and wall-mounted units).

Pressing the button will switch the vane direction.

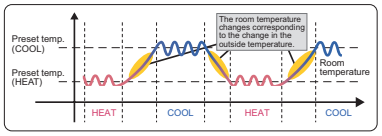


Dual set point

Two preset temperatures

When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the COOL or HEAT mode and keep the room temperature within the preset range.

Operation pattern during Auto (dual set point) mode



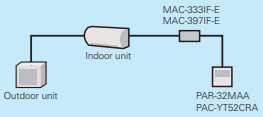
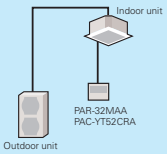
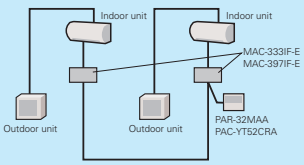
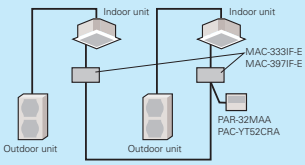
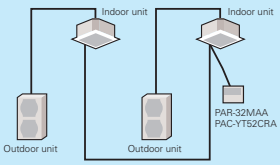
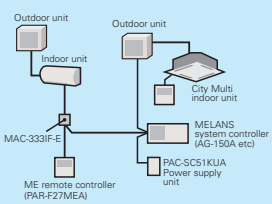
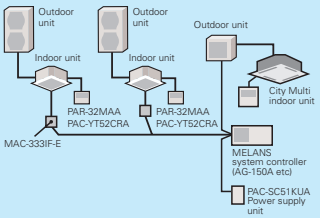
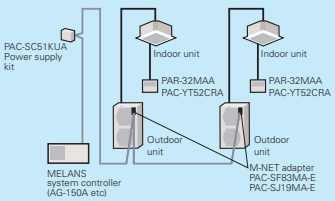
*Please refer to the function list on pages 23-24 for the combination of the available units.

* The settable vane directions vary depending on the indoor unit model to be connected.
* If the unit has no vane function, the vane direction cannot be set. In this case, the vane icon flashes when the button is pressed.

SYSTEM CONTROL

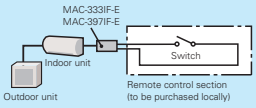
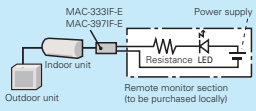
Versatile system controls can be realised using optional parts, relay circuits, control panels, etc.

MAJOR SYSTEM CONTROL

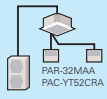
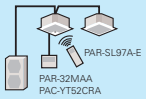
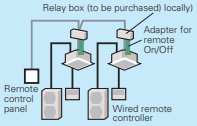
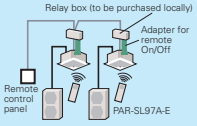
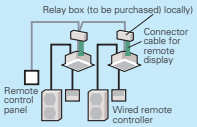
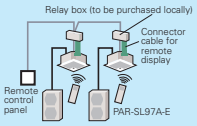
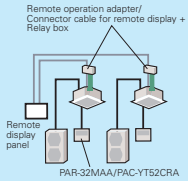
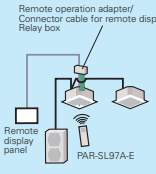
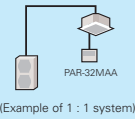
	System Examples		
Indoor Unit	M Series Indoor Unit	S Series & P Series Indoor Unit	P Series Indoor Unit
Outdoor Unit	M Series and MXZ Series Outdoor	S Series and MXZ Series Outdoor	P Series Outdoor
PAR-32MAA Control **PAC-YT52CRA Control**			
Details	• Wired remote controller can be connected to indoor unit	Standard equipment (for indoor units compatible with wired remote controllers)	
Major Optional Parts Required	• MAC-333IF-E or MAC-397IF-E (Interface) • PAR-32MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)	• PAR-32MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)	
System Group Control			
Details	• One remote controller can control plural air conditioners with the same settings simultaneously. • One remote controller can control up to 16 refrigerant systems. (When connected to a MXZ unit, MAC-333IF-E or MAC-397IF-E is counted as one system.) • Up to two remote controller can be connected.		
Major Optional Parts Required	• MAC-333IF-E or MAC-397IF-E (Interface) • PAR-32MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)		• PAR-32MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)
M-NET Connections			
Details	• Group of air conditioners can be controlled by MELANS system controller (M-NET).		
Major Optional Parts Required	• MAC-333IF-E (M-NET Interface) • MELANS System controller • PAC-SC51KUA (power supply unit)		• PAC-SF83MA-E or PAC-SJ19MA-E (M-NET converter) • MELANS System controller • PAC-SC51KUA (power supply unit)

OTHERS

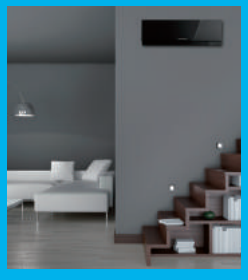
For M Series Indoor Units (New A-control Models Only)

	System Examples	Connection Details	Control Details	Major Optional Parts Required
1 Remote On/Off Operation • Air conditioner can be started/stopped remotely. (1 and 2 can be used in combination)		Connect the interface to the air conditioner. Then connect the locally purchased remote controller to the terminal in the interface.	On/Off operation is possible from a remote location.	• **MAC-333IF-E or MAC-397IF-E** (Interface) • Parts for circuit such as relay box, lead wire, etc. (to be purchased locally)
2 Remote Display of Operation Status • The On/Off status of air conditioners can be confirmed remotely. (1 and 2 can be used in combination)		Connect the interface to the air conditioner. Then connect the locally purchased remote controller to the terminal in the interface.	The operation status (On/Off) or error signals can be monitored from a remote location.	• **MAC-333IF-E or MAC-397IF-E** (Interface) • Parts for circuit to be purchased locally (DC power source needed) • External power source (12V DC) is required when using MAC-333IF-E.

For P Series and S Series Indoor Units

	System Examples		Details	Major Optional Parts Required
	Wired remote controller	Wireless remote controller		
A 2-remote Controller Control With two remote controllers, control can be performed locally and remotely from two locations.	 * Set "Main" and "Sub" remote controllers. (Example of 1 : 1 system)	 * When using wired and wireless remote controllers (Example of Simultaneous Twin)	• Up to two remote controllers can be connected to one group. • Both wired and wireless remote controllers can be used in combination.	• Wired Remote Controller **PAR-32MAA** **PAC-YT52CRA** (for PKA, **PAC-SH29TC-E** is required) • Wireless Remote Controller **PAR-SL97A-E** (Except for SLZ) • Wireless Remote Controller Kit for PCA **PAR-SL99B-E**
B Operation Control by Level Signal Air conditioner can be started/stopped remotely. In addition, On/Off operation by local remote controller can be prohibited/permitted.	 (Example of 1 : 1 system x 2)	 (Example of 1 : 1 system x 2)	• Operation other than On/Off (e.g., adjustment of temperature, fan speed, and airflow) can be performed even when remote controller operation is prohibited. • Timer control is possible with an external timer.	• Adapter for remote On/Off **PAC-SE55RA-E** • Relay box (to be purchased locally) • Remote control panel (to be purchased locally)
C Operation Control by Pulse Signal	 (Example of 1 : 1 system x 2)	 (Example of 1 : 1 system x 2)	• The pulse signal can be turned On/Off. • Operation/emergency signal can be received at a remote location.	• Connector cable for remote display **PAC-SA88HA-E / PAC-725AD** **(10 pcs. x PAC-SA88HA-E)** • Relay box (to be purchased locally) • Remote control panel (to be purchased locally)
D Remote Display of Operating Status Operating status can be displayed at a remote location.	 (Example of 1 : 1 system)	 (Example of Simultaneous Twin)	• Operation/emergency signal can be received at a remote location (when channeled through the **PAC-SF40RM-E** → no-voltage signal, when channeled through the **PAC-SA88HA-E** → DC 12V signal).	• Remote display panel (to be purchased locally) • Connector cable for remote display **PAC-SA88HA-E / PAC-725AD** **(10 pcs. x PAC-SA88HA-E)** • Relay box (to be purchased locally) • Remote operation adapter **PAC-SF40RM-E** *Unable to use with wireless remote controller
E Timer Operation Allows On/Off operation with timer *For control by an external timer, refer to B Operation Control by Level Signal.	 (Example of 1 : 1 system)		• **Weekly Timer:** On/Off and up to 8 pattern temperatures can be set for each calendar day. (Initial setting) • **On/Off Timer:** On/Off can be set once each within 72 hr in intervals of 5-minute units. • **Auto-off Timer:** Operation will be switched off after a certain time elapse. Set time can be changed from 30 min. to 4 hr. at 10 min. intervals. *Simple Timer and Auto-off Timer cannot be used at the same time.	Standard functions of **PAR-32MAA**

M SERIES



SELECTION

Choose the model that best matches room conditions.

STEP 1 SELECT SERIES

A multiple series line-up to choose from, each with various outstanding features. In addition to inverter-equipped models, constant-speed, floor-standing and cassette models can be selected. Choose the best series to match usage needs.

Wall-mounted Units

MSZ-F SERIES

GOOD DESIGN

DC Inverter | Super energy-saving | SEER A+++ (25/35) | SCOP A+++ (25/35) | Ultra-quiet (25/35) | Cooling Heating | MXZ connection

MSZ-E SERIES

GOOD DESIGN

DC Inverter | SEER A+++ (25/35) | SCOP A++ (25/35) | Cooling Heating | MXZ connection

MSZ-S SERIES

GOOD DESIGN

DC Inverter | SEER A++ | SCOP A+ | Cooling Heating | MXZ connection

MSZ-G SERIES

DC Inverter | SEER A++ | SCOP A+ | Cooling Heating | MXZ connection

MSZ-H SERIES

MSZ-HJ60/71

MSZ-HJ25/35/50

DC Inverter | SEER A+ (50/60/71) | SCOP A+ (50/60/71) | Cooling Heating | MXZ connection

Floor-standing

MFZ SERIES

GOOD DESIGN

DC Inverter | Cooling Heating | MXZ connection | SEER A+++ (25) | SCOP A+

Cassette Units

MLZ SERIES

DC Inverter | Cooling Heating | MXZ connection

✻ MXZ connection only

DC Inverter Inverter | Super energy-saving Super energy-saving | SEER A SCOP A Energy Rank | Ultra-quiet Ultra-quiet operation | Cooling Heating Cooling and heating operation

MXZ connection Compatible for connection to MXZ Series system

✻ To confirm compatibility with the MXZ Series multi-type system, refer to the MXZ Series page.

STEP 2 SELECT OUTDOOR UNIT

Some outdoor units in the line-up have heaters for use in cold regions. Units with an "H" in the model name are equipped with heaters.

Heater Installed

MUZ-FH25/35VEHZ
MUZ-EF25/35VEH
MUZ-SF25/35/42VEH
MUFZ-KJ25/35VEHZ

MUZ-FH50VEHZ
MUZ-SF50VEH
MUFZ-KJ50VEHZ

Selecting a Heater-equipped Model

In regions with the following conditions, there is a possibility that water resulting from condensation on the outdoor unit when operating in the heating mode will freeze and not drain from the base.

1) Cold outdoor temperatures (temperature does not rise above 0˚C all day)
2) Areas where dew forms easily (in the mountains, valleys(surrounded by mountains), near a forest, near unfrozen lakes, ponds, rivers or hot springs), or areas with snowfall

To prevent water from freezing in the base, it is recommended that a unit with a built-in heater be purchased. Please ask your dealer representative about the best model for you.

霧ヶ峰 KIRIGAMINE

MSZ-F SERIES

MSZ-FH25/35/50VE2

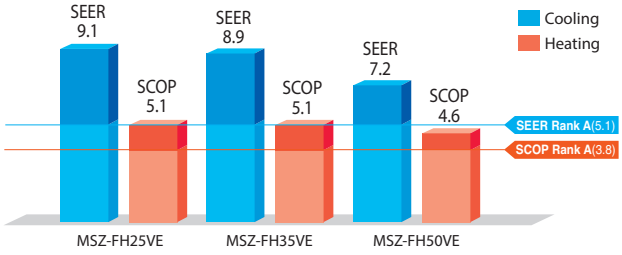
GOOD DESIGN

The F Series is designed for optimum cooling/heating performance as well as operational comfort. Quiet, energy-saving operation is supported by some of Mitsubishi Electric's latest technologies. Advanced functions such as "3D i-see Sensor" temperature control and the Plasma Quad air purification system raise room comfort levels to new heights.

High Energy Efficiency

DC Inverter 25/35 SEER A+++ 25/35 SCOP A+++

Power consumption has been reduced for the cooling and heating modes thanks to the incorporation of our newest inverter technologies. The high energy efficiency of the Size 25 units has obtained a rating of more than 5.0 for both seasonal coefficient of performance (SCOP) and seasonal energy efficiency rating (SEER).

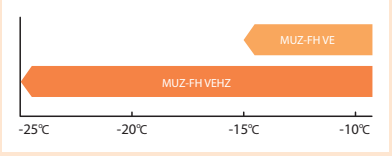


Hyper Heating

The Hyper Heating feature is incorporated, realizing powerful heating even in the harsh cold. Even users in cold regions can comfortably rely on the MSZ-FH Series for all their heating needs.

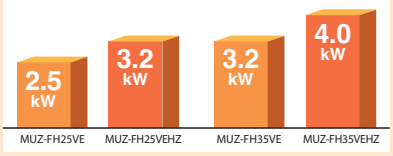
Operation Guaranteed at Outside Temperature of -25°C

MUZ-FH VEHZ can be operated at outside temperatures as low as -25°C, so there are no concerns about use even in very cold climates.



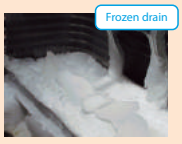
Rated Capacity Demonstrated at Outside Temperatures of -15°C

With rated capacity ensured at outside temperature as low as -15°C, the FH Series can be relied upon to properly warm living spaces even in severe cold snaps.



Freeze-prevention Heater Equipped as Standard (VEHZ)

The Freeze-prevention heater prevents lowered capacity due to the drain freezing and also inhibits operation shutdowns.



Without Freeze-prevention heater

With Freeze-prevention heater

Selecting a Heater-equipped Model

In regions with the following conditions, there is a possibility that water resulting from condensation on the outdoor unit when operating in the heating mode will freeze and not drain from the base.

1) Cold outdoor temperatures (temperature does not rise above 0°C all day)
2) Areas where dew forms easily (in the mountains, valleys(surrounded by mountains), near a forest, near unfrozen lakes, ponds, rivers or hot springs), or areas with snowfall

To prevent water from freezing in the base, it is recommended that a unit with a built-in heater be purchased. Please ask your dealer representative about the best model for you.

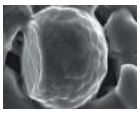
Plasma Quad

Air, like water, is something we use everyday unconsciously. Yet, clean, fresh air is a vital part of creating a healthy space for humans. Achieving this healthy air is Plasma Quad, a plasma-based filter system that effectively removes four kinds of air pollutants; namely, bacteria, viruses, allergens and dust, which the air contains countless particles of.

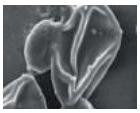
Bacteria

Test results have confirmed that Plasma Quad neutralizes 99% of bacteria in 115 minutes in a 25m² test space.

Plasma Quad off



Plasma Quad on

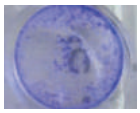


〈Test No.〉KRCES-Bio.Test Report No.23_0371

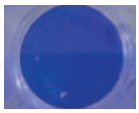
Viruses

Test results have confirmed that Plasma Quad neutralizes 99% of virus particles in 65 minutes in a 25m² test space.

Without Plasma Quad



With Plasma Quad



* Hepatic cells turn transparent when affected by a virus.

〈Test No.〉vrc.center, SMC No.23-002

Effective deodorizing using the air-purifying filter

Allergens

In a test, air containing cat fur and pollen was passed through the air cleaning device at the low airflow setting. Before and after measurements confirm that Plasma Quad neutralizes 94% of cat fur and 98% of pollen.

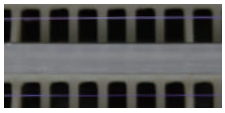
〈Test No.〉ITEA No.12M-RPTFEBO22

Dust

In a test, air containing dust and ticks was passed through the air cleaning device at the low airflow setting. Before and after measurements confirm that Plasma Quad removes 88.6% of dust and ticks.

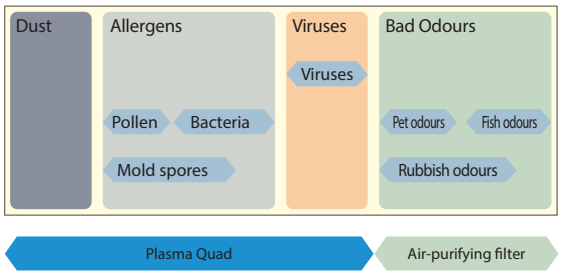
〈Test No.〉ITEA No.12M-RPTFEBO22

(Image)



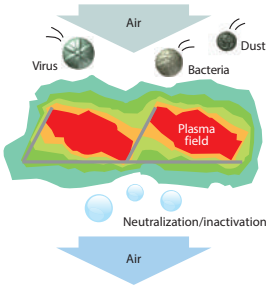
[Effective Range]

Macro ← Particulate size → Nano

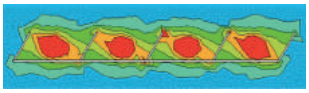


Principle of Plasma Quad

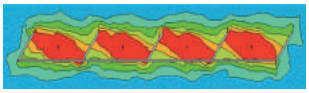
Plasma Quad attacks bacteria and viruses from inside the unit using a strong curtain-like electrical field and discharge of electric current across the whole inlet-air opening of the unit. Tungsten discharge electrodes are used as they provide both discharge capacity and strength. In addition, through flattening the standard, round form of the field to a ribbon-like shape, a strong electrical field is produced.



Round:

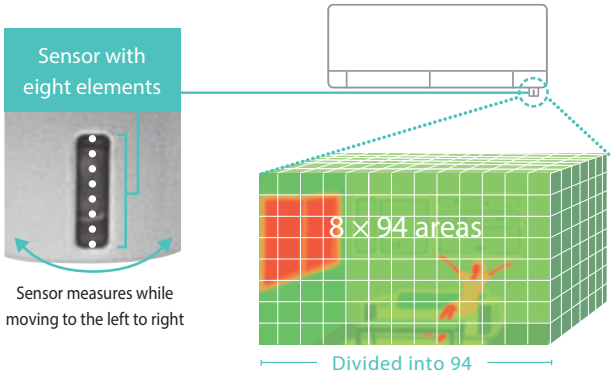


Flattened: a strong electrical field is produced.



3D i-see Sensor

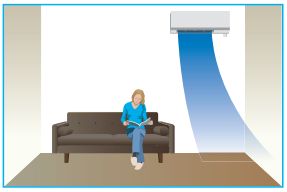
The FH Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge where people are in the room, thus allowing creation of features such as "Indirect airflow," to avoid airflow hitting people directly, and "direct airflow" to deliver airflow to where people are.



(Image)

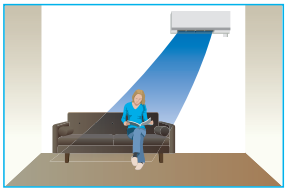
Indirect Airflow

The indirect airflow setting can be used when the flow of air feels too strong or direct. For example, it can be used during cooling to avert airflow and prevent body temperature from becoming excessively cooled.



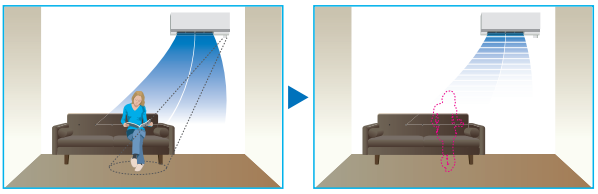
Direct Airflow

This setting can be used to directly target airflow at people such as for immediate comfort when coming indoors on a hot (cold) day.



Absence Detection

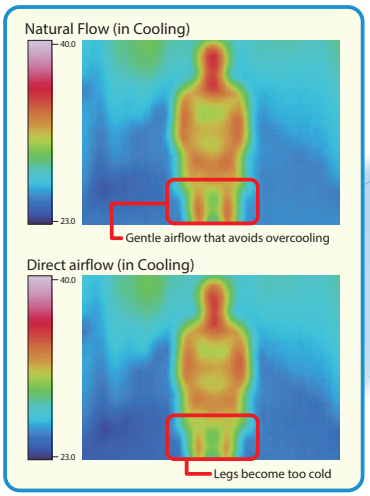
The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.

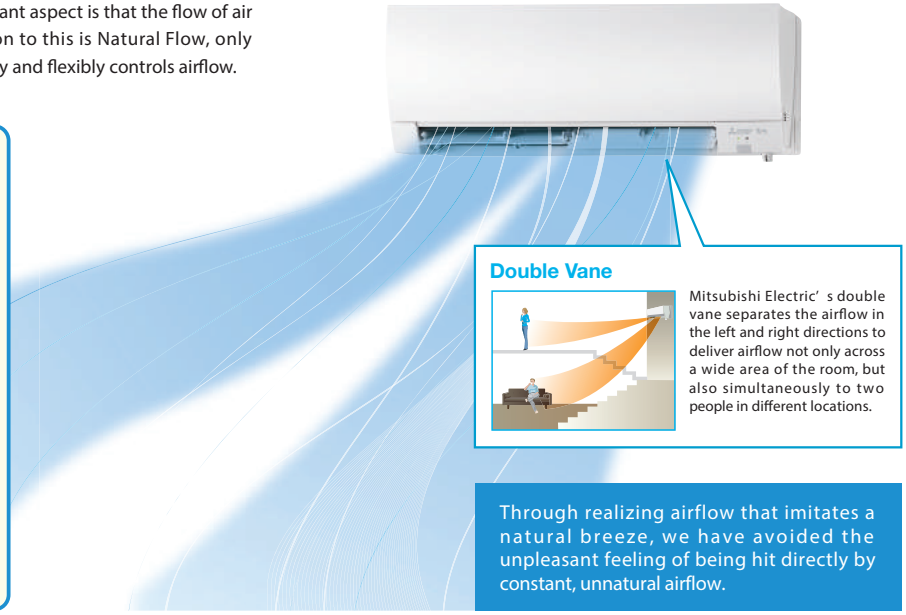


The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

Natural Flow

To create "healthy" airflow, the most important aspect is that the flow of air feels natural. Mitsubishi Electric' s solution to this is Natural Flow, only possible thanks to our technology that freely and flexibly controls airflow.



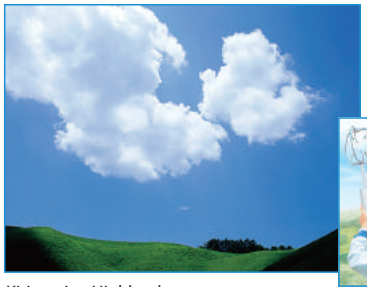


Double Vane

Mitsubishi Electric' s double vane separates the airflow in the left and right directions to deliver airflow not only across a wide area of the room, but also simultaneously to two people in different locations.

Through realizing airflow that imitates a natural breeze, we have avoided the unpleasant feeling of being hit directly by constant, unnatural airflow.

Base data for Natural Flow

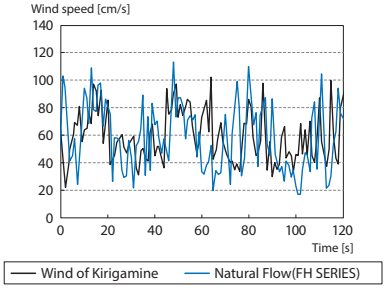


Kirigamine Highland

measuring actual data of natural wind

Kirigamine Highland is one of the most famous sightseeing spots in Japan, and is visited by a large number of people for its pleasant and comfortable environment. At Mitsubishi Electric, we have attempted to recreate this Kirigamine Highland comfort. As part of development, seeking to create a natural airflow, we measured actual data on the refreshing breezes of Kirigamine Highland. Through imitating the natural waveforms of this data, we have been able to recreate almost-imperceptible currents of gently comforting airflow.

Analysis of natural wind



MSZ-F SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | Joint Lap | DC Fan Motor | PAM | Grooved Piping | SEER 25/35 A+++ | SCOP 25/35 A+++

Indoor Unit

GOOD DESIGN

MSZ-FH25/35/50VE2

Outdoor Unit

MUZ-FH25/35VE

MUZ-FH50VE

Remote Controller

3D i-see Sensor | AREA | HUMAN | Econo Cool | Pure White | AUTO VANE | Plasma Quad | Electrostatic Anti-allergy | SWING HORIZONTAL | SWING VERTICAL | Natural Flow | AUTO | i save | Weekly Timer | | ACO

Auto Restart | Low Temp Cooling | Optional | Group Control Optional | M-NET connection Optional | Wi-Fi Interface Optional | MXZ connection | Cleaning-free, pipe route | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-FH25VE(2)	MSZ-FH35VE(2)	MSZ-FH50VE(2)
Outdoor Unit				MUZ-FH25VE	MUZ-FH35VE	MUZ-FH50VE
Refrigerant				R410A(*1)		
Power Supply	Source			Outdoor Power supply		
	Outdoor (V / Phase / Hz)			230/Single/50		
Cooling	Design load		kW	2.5	3.5	5.0
	Annual electricity consumption (*2)		kWh/a	96	138	244
	SEER (*4)			9.1	8.9	7.2
		Energy efficiency class		A+++	A+++	A++
	Capacity	Rated	kW	2.5	3.5	5.0
		Min-Max	kW	1.4-3.5	0.8-4.0	1.9-6.0
	Total Input	Rated	kW	0.485	0.820	1.380
Heating (Average Season)(*5)	Design load		kW	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)
	Declared Capacity	at reference design temperature	kW	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)
		at bivalent temperature	kW	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)
		at operation limit temperature	kW	2.5(-15°C)	3.2(-15°C)	5.2(-15°C)
	Back up heating capacity		kW	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	819	986	1372
	SCOP (*4)			5.1	5.1	4.6
		Energy efficiency class		A+++	A+++	A++
	Capacity	Rated	kW	3.2	4.0	6.0
		Min-Max	kW	1.8-5.5	1.0-6.3	1.7-8.7
	Total Input	Rated	kW	0.580	0.800	1.480
Operating Current (Max)			A	9.6	10.0	14.0
Indoor Unit	Input	Rated	kW	0.029	0.029	0.031
	Operating Current(Max)		A	0.4	0.4	0.4
	Dimensions	H*W*D	mm	305(+17)-925-234	305(+17)-925-234	305(+17)-925-234
	Weight		kg	13.5	13.5	13.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet))	Cooling	m^3/min	3.9-4.7-6.3-8.6-11.6	3.9-4.7-6.3-8.6-11.6	6.4-7.4-8.6-10.1-12.4
		Heating	m^3/min	4.0-4.7-6.4-9.2-13.2	4.0-4.7-6.4-9.2-13.2	5.7-7.2-9.0-11.2-14.6
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	20-23-29-36-42	21-24-29-36-42	27-31-35-39-44
		Heating	dB(A)	20-24-29-36-44	21-24-29-36-44	25-29-34-39-46
	Sound Level (PWL)	Cooling	dB(A)	58	58	60
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330
	Weight		kg	37	37	55
	Air Volume	Cooling	m^3/min	31.3	33.6	48.8
		Heating	m^3/min	31.3	33.6	51.3
	Sound Level (SPL)	Cooling	dB(A)	46	49	51
		Heating	dB(A)	49	50	54
	Sound Level (PWL)	Cooling	dB(A)	60	61	64
	Operating Current (Max)		A	9.6	9.6	13.6
	Breaker Size		A	9.2	10	16
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35 / 12.7
	Max.Length	Out-In	m	20	20	30
	Max.Height	Out-In	m	12	12	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

KIRIGAMINE 禅 ZEN

MSZ-E SERIES

MSZ-EF18-50VE3B

GOOD DESIGN

Developed to complement modern interior room décor, Kirigamine ZEN air conditioners are available in three colours specially chosen to blend in naturally wherever installed.

Stylish Line-up Matches Any Room Décor

The streamlined wall-mounted indoor units have eloquent silver-bevelled edges, expressing sophistication and quality. Combining impressively low power consumption and quiet yet powerful performance, these units provide a best-match scenario for diverse interior designs while simultaneously ensuring maximum room and energy savings.

Energy-efficient Operation

DC Inverter

25-35 SEER A+++

25-42* SCOP A++

*except for VEH

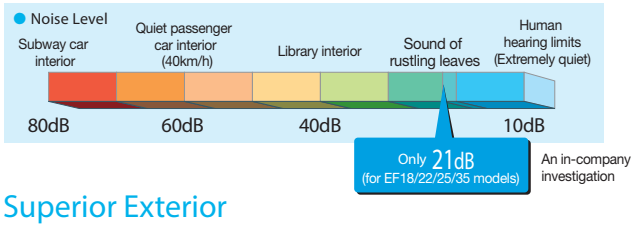
All models in the series have achieved high energy-savings rating, and are contributing to reduced energy consumption in homes, offices and a range of other settings. Offered in a variety of output capacities and installation patterns, the vast applicability promises an ideal match for any user.

Outdoor / Indoor	Rank A for single connection	Compatibility								
	MUZ-EF25/35VE(H) MUZ-EF42/50VE	MXZ								
		2D33VA	2D40VA	2D53VA	3D54VA	3D68VA	4D72VA	4D83VA	5D102VA	6C122VA
MSZ-EF18VE2	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF22VE2	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF25VE2	A+++/A++(A++*)	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF35VE2	A+++/A++(A++*)		✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF42VE2	A++/A++			✓	✓	✓	✓	✓	✓	✓
MSZ-EF50VE2	A++/A+			✓	✓	✓	✓	✓	✓	✓

*VEH

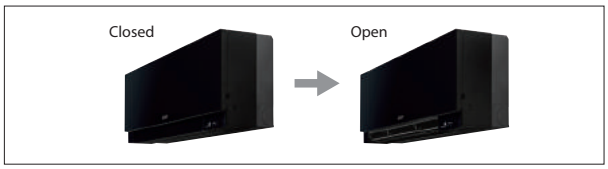
Quiet Comfort All Day Long

Mitsubishi Electric's advanced "Silent Mode" fan speed setting provides super-quiet operation as low as 21dB for EF18/22/25/35 models. This unique feature makes the Kirigamine ZEN series ideal for use in any situation.



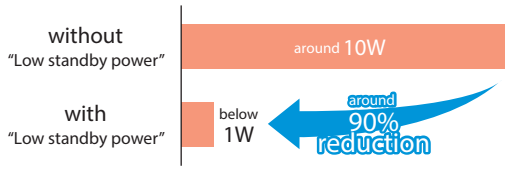
Superior Exterior and Operating Design Concept

The indoor unit of the Kirigamine ZEN keeps its amazingly thin form even during operation. The only physical change notable is the movement of the variable vent. As a result, a slim attractive look is maintained.



Low Standby Power

Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



Outdoor Units for Cold Region (25/35)

Single split-type outdoor units are available in both standard and heater-equipped units. An electric heater is installed in each unit to prevent freezing in cold outdoor environments

Standard Units

MUZ-EF25/35VE

Heater Installed

MUZ-EF25/35VEH

MSZ-E SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | Joint Lap | DC Fan Motor | PAM | Grooved Piping | SEER 25 - 35 A+++ | SCOP 25 - 42 A++ *except for VEH

Indoor Unit

GOOD DESIGN

MSZ-EF18/22/25/35/42/50VE3W White

MSZ-EF18/22/25/35/42/50VE3S Silver

MSZ-EF18/22/25/35/42/50VE3B* Black

*Soft-dry Cloth is enclosed with Black models.

Outdoor Unit

MUZ-EF25/35VE(H),42VE

MUZ-EF50VE

Remote Controller

Econo Cool | AUTO VANE | Electrostatic Anti-allergy (Optional) | Nano Platinum | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart | Low Temp Cooling | Centralised On/Off (Optional) | Group Control (Optional) | Wi-Fi Interface (Optional)

MXZ connection | Cleaning-free, pipe reuse | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump							
Indoor Unit				MSZ-EF18VE2(3)	MSZ-EF22VE2(3)	MSZ-EF25VE2(3)	MSZ-EF25VE2(3)	MSZ-EF35VE2(3)	MSZ-EF35VE2(3)	MSZ-EF42VE2(3)	MSZ-EF50VE2(3)
Outdoor Unit				for MXZ connection		MUZ-EF25VE	MUZ-EF25VEH	MUZ-EF35VE	MUZ-EF35VEH	MUZ-EF42VE	MUZ-EF50VE
Refrigerant				R410A(*1)							
Power Supply	Source			Outdoor Power supply							
	Outdoor (V / Phase / Hz)			230/Single/50							
Cooling	Design load		kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0
	Annual electricity consumption (*2)		kWh/a	-	-	103	103	144	144	192	244
	SEER (*4)			-	-	8.5	8.5	8.5	8.5	7.7	7.2
		Energy efficiency class		-	-	A+++	A+++	A+++	A+++	A++	A++
	Capacity	Rated	kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0
		Min-Max	kW	-	-	1.2-3.4	1.2-3.4	1.4-4.0	1.4-4.0	0.9-4.6	1.4-5.4
	Total Input	Rated	kW	-	-	0.545	0.545	0.910	0.910	1.280	1.560
Heating (Average Season)(*5)	Design load		kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)	3.8(-10°C)	4.2(-10°C)
	Declared Capacity	at reference design temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)	3.8(-10°C)	4.2(-10°C)
		at bivalent temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)	3.8(-10°C)	4.2(-10°C)
		at operation limit temperature	kW	-	-	2.0(-15°C)	1.6(-20°C)	2.4(-15°C)	1.7(-20°C)	3.4(-15°C)	3.5(-15°C)
	Back up heating capacity		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	-	-	716	730	882	910	1155	1309
	SCOP (*4)			-	-	4.7	4.6	4.6	4.5	4.6	4.5
		Energy efficiency class		-	-	A++	A++	A++	A+	A++	A+
	Capacity	Rated	kW	-	-	3.2	3.2	4.0	4.0	5.4	5.8
		Min-Max	kW	-	-	1.1-4.2	1.1-4.2	1.8-5.5	1.8-5.5	1.4-6.3	1.6-7.5
	Total Input	Rated	kW	-	-	0.700	0.700	0.955	0.955	1.460	1.565
Operating Current (Max)			A	-	-	7.3	7.3	8.5	8.5	9.5	12.4
Indoor Unit	Input	Rated	kW	0.027	0.027	0.027	0.027	0.031	0.031	0.031	0.034
	Operating Current(Max)		A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	Dimensions	H*W*D	mm	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195
	Weight		kg	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet))	Cooling	m^3/min	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	5.8 - 6.6 - 7.7 - 8.9 - 10.3	5.8 - 6.8 - 7.9 - 9.3 - 11.0
		Heating	m^3/min	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 12.7	4.0 - 4.6 - 6.2 - 8.9 - 12.7	5.5 - 6.3 - 7.8 - 9.9 - 12.7	6.4 - 7.3 - 9.0 - 11.1 - 13.2
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	21 - 23 - 29 - 36 - 42	21 - 23 - 29 - 36 - 42	21 - 23 - 29 - 36 - 42	21 - 23 - 29 - 36 - 42	21 - 24 - 29 - 36 - 42	21 - 24 - 29 - 36 - 42	28 - 31 - 35 - 39 - 42	30 - 33 - 36 - 40 - 43
		Heating	dB(A)	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 30 - 38 - 46	21 - 24 - 30 - 38 - 46	28 - 30 - 35 - 41 - 48	30 - 33 - 37 - 43 - 49
	Sound Level (PWL)	Cooling	dB(A)	-	-	60	60	60	60	60	60
Outdoor Unit	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285	880-840-330
	Weight		kg	-	-	30	30	35	35	35	54
	Air Volume	Cooling	m^3/min	-	-	32.6	32.6	33.6	33.6	35.2	44.6
		Heating	m^3/min	-	-	32.2	32.2	33.6	33.6	33.6	44.6
	Sound Level (SPL)	Cooling	dB(A)	-	-	47	47	49	49	50	52
		Heating	dB(A)	-	-	48	48	50	50	51	52
	Sound Level (PWL)	Cooling	dB(A)	-	-	58	58	61	61	62	65
	Operating Current (Max)		A	-	-	7.0	7.0	8.2	8.2	9.2	12.0
	Breaker Size		A	-	-	10	10	10	10	10	16
Ext. Piping	Diameter	Liquid/Gas	mm	-	-	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max.Length	Out-In	m	-	-	20	20	20	20	20	30
	Max.Height	Out-In	m	-	-	12	12	12	12	12	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

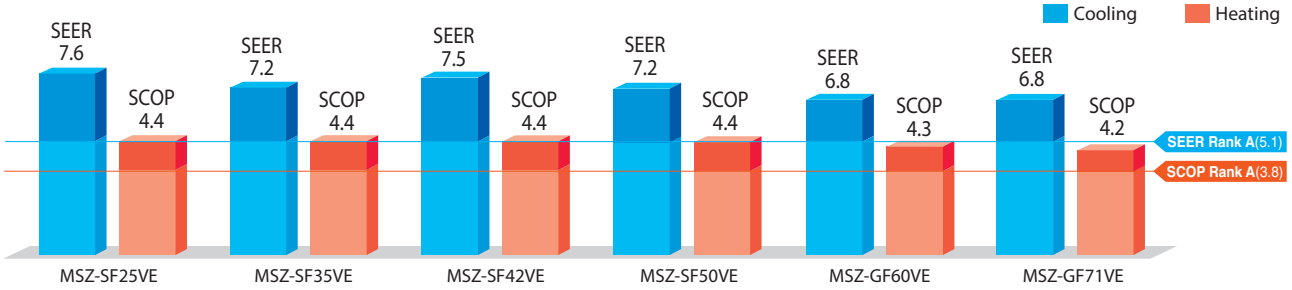
MSZ-S SERIES
MSZ-G SERIES

Introducing a compact and stylish indoor unit with amazingly quiet performance. Not only are neat installations in small bedrooms possible, increase energy-savings by selecting the optimal capacity required for each room.

"Rank A⁺⁺/A⁺" Energy Savings Achieved for Entire Range of Series

DC Inverter 25-71 SEER A⁺⁺ 25-71 SCOP A⁺

All models in the series, from the low-capacity 25 to the high-capacity 71, have achieved the "Rank A⁺⁺" for SEER and "Rank A⁺" for SCOP as energy-savings rating. For home use, such as in bedrooms and living rooms, to light commercial use, such as in offices, our air conditioners are contributing to reduced energy consumption in a wide range.



Wide Line-up

Eight different indoor units (Model 15-71) are available to meet your diversified air conditioning needs.

MSZ-SF15 / 20VA*
*for MXZ connection

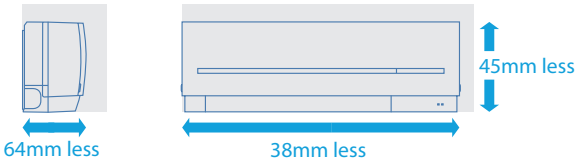
MSZ-SF25 / 35 / 42 / 50VE3

MSZ-GF60 / 71VE2

Compact and Stylish (MSZ-SF15/20VA)

The stylish, square indoor unit adds a touch of class to any room interior. The compact design is 64mm thinner than our previous indoor unit with the lowest output capacity (MSZ-GE22VA).

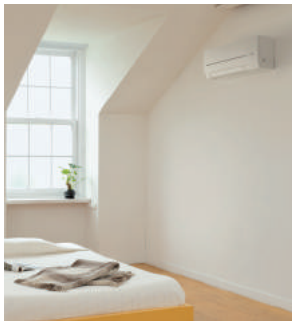
Comparison with our previous model GE



Family Design (MSZ-SF15/20/25/35/42/50)

Models in the 25-50 class are introduced as single-split units while retaining the popular design of the SF15/20VA* as indoor units exclusively for multi-systems. From small rooms to living rooms, it is possible to coordinate residences with a unified design.

*Size may vary.



"Weekly Timer"

Easily set desired temperatures and operation start/stop times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ Example Operation Pattern (Winter/Heating mode)

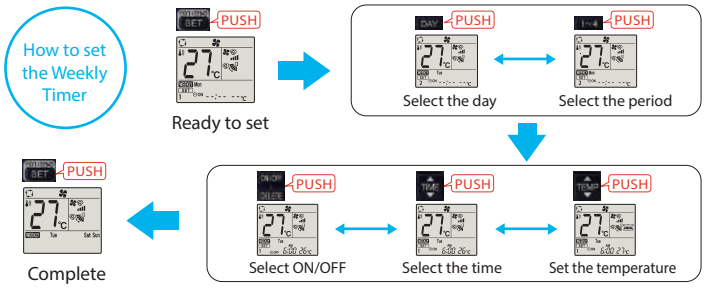
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00	Automatically turned off during work hours					Midday is warmer, so the temperature is set lower	
14:00							
16:00							
18:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
20:00	Automatically turns on, synchronized with arrival at home					Automatically raises temperature setting to match time when outside-air temperature is low	
22:00							
(during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
	Automatically lowers temperature at bedtime for energy-saving operation at night						

Settings

Pattern Settings: Input up to four settings for each day
Settings: ·Start/Stop operation ·Temperature setting ✻The operation mode cannot be set.

■ Easy set-up using dedicated buttons

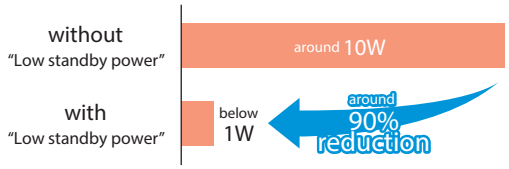
The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



·Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired patterns into the remote controller memory. Pushing the "CANCEL" button will end the set-up process without sending the operation patterns to the indoor unit).
·It takes a few seconds to transmit the Weekly Timer operation patterns to the indoor unit. Please continue to point the remote controller at the indoor unit until all data has been sent.
·When "Weekly Timer" is set, temperature can not be set 10°C.

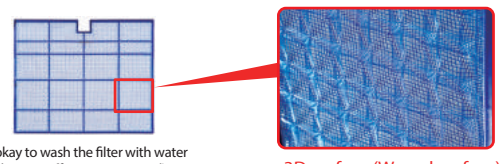
Low Standby Power

Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



Air Purifying Filter

This filter incorporates Silver-ionized agents that generate stable antibacterial and deodourising effects. The size of the three-dimensional surface has been increased as well, enlarging the filter capture area. These features give the Purifying Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort yet an-other level.

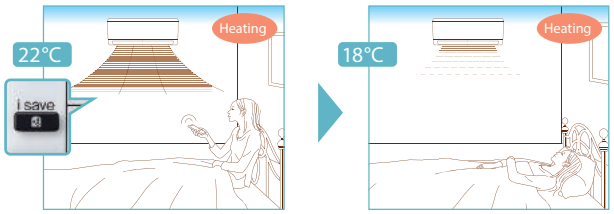


✻ It is okay to wash the filter with water (air-cleaning effect is maintained)

3D surface (Waved surface)

"i save" Mode

"i save" is a simplified setting function that recalls the preferred (preset) temperature by pressing a single button on the remote controller. Press the same button twice in repetition to immediately return to the previous temperature setting. Using this function contributes to comfortable, waste-free operation, realising the most suitable air conditioning settings and saving on power consumption when, for example, leaving the room or going to bed.



✻ Temperature can be preset to 10°C when heating in the "i-save" mode.

Outdoor Units for Cold Region (25/35/42/50)

Single split-type outdoor units are available in both standard and heater-equipped units. An electric heater is installed in each unit to prevent freezing in cold outdoor environments.

Standard Units

MUZ-SF25/35/42VE MUZ-SF50VE

Heater Installed

MUZ-SF25/35/42VEH MUZ-SF50VEH

MSZ-S SERIES

DC Inverter

Indoor Unit

MSZ-SF15/20VA

GOOD DESIGN

Outdoor Unit

For MXZ Connection Only

Remote Controller

Econo Cool | Pure White | AUTO VANE | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart | Optional | Group Control (Optional) | M-NET connection (Optional) | Wi-Fi Interface (Optional) | MXZ connection | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump					
Indoor Unit				MSZ-SF15VA	MSZ-SF20VA	MSZ-SF25VE2(3)	MSZ-SF25VE2(3)	MSZ-SF35VE2(3)	MSZ-SF35VE2(3)
Outdoor Unit				for MXZ connection		MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH
Refrigerant				R410A(*1)					
Power Supply	Source			Outdoor Power supply					
	Outdoor (V / Phase / Hz)			230/Single/50					
Cooling	Design load		kW	-	-	2.5	2.5	3.5	3.5
	Annual electricity consumption (*2)		kWh/a	-	-	116	116	171	171
	SEER (*4)			-	-	7.6	7.6	7.2	7.2
		Energy efficiency class		-	-	A++	A++	A++	A++
	Capacity	Rated	kW	-	-	2.5	2.5	3.5	3.5
		Min-Max	kW	-	-	0.9-3.4	0.9-3.4	1.1-3.8	1.1-3.8
	Total Input	Rated	kW	-	-	0.600	0.600	1.080	1.080
Heating (Average Season)(*5)	Design load		kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
	Declared Capacity	at reference design temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
		at bivalent temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
		at operation limit temperature	kW	-	-	2.0(-15°C)	1.6(-20°C)	2.2(-15°C)	1.6(-20°C)
	Back up heating capacity		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	-	-	764	790	923	948
	SCOP (*4)			-	-	4.4	4.3	4.4	4.3
		Energy efficiency class		-	-	A+	A+	A+	A+
	Capacity	Rated	kW	-	-	3.2	3.2	4.0	4.0
		Min-Max	kW	-	-	1.0-4.1	1.0-4.1	1.3-4.6	1.3-4.6
	Total Input	Rated	kW	-	-	0.780	0.780	1.030	1.030
Operating Current (Max)			A	-	-	8.4	8.4	8.5	8.5
Indoor Unit	Input	Rated	kW	0.017	0.019	0.024	0.024	0.027	0.027
	Operating Current(Max)		A	0.17	0.19	0.2	0.2	0.3	0.3
	Dimensions	H*W*D	mm	250-760-168	250-760-168	299-798-195	299-798-195	299-798-195	299-798-195
	Weight		kg	7.7	7.7	10	10	10	10
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet)	Cooling	m^3/min	3.5 - 3.9 - 4.6 - 5.5 - 6.4	3.5 - 3.9 - 4.6 - 5.5 - 6.9	3.2 - 4.1 - 5.6 - 7.2 - 9.1	3.2 - 4.1 - 5.6 - 7.2 - 9.1	3.2 - 4.1 - 5.6 - 7.2 - 9.1	3.2 - 4.1 - 5.6 - 7.2 - 9.1
		Heating	m^3/min	3.7 - 4.4 - 5.0 - 6.0 - 6.8	3.7 - 4.4 - 5.0 - 6.0 - 7.3	3.0 - 4.1 - 6.7 - 8.2 - 10.3	3.0 - 4.1 - 6.7 - 8.2 - 10.3	3.0 - 4.1 - 6.7 - 8.3 - 11.0	3.0 - 4.1 - 6.7 - 8.3 - 11.0
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19(*6) - 24 - 30 - 36 - 42	19(*6) - 24 - 30 - 36 - 42	19(*6) - 24 - 30 - 36 - 42	19(*6) - 24 - 30 - 36 - 42
		Heating	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19(*6) - 24 - 34 - 39 - 45	19(*6) - 24 - 34 - 39 - 45	19(*6) - 24 - 34 - 40 - 46	19(*6) - 24 - 34 - 40 - 46
	Sound Level (PWL)	Cooling	dB(A)	59	60	57	57	57	57
Outdoor Unit	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285
	Weight		kg	-	-	31	31	31	31
	Air Volume	Cooling	m^3/min	-	-	31.1	31.1	35.9	35.9
		Heating	m^3/min	-	-	30.7	30.7	35.9	35.9
	Sound Level (SPL)	Cooling	dB(A)	-	-	47	47	49	49
		Heating	dB(A)	-	-	48	48	50	50
	Sound Level (PWL)	Cooling	dB(A)	-	-	58	58	62	62
	Operating Current (Max)		A	-	-	8.2	8.2	8.2	8.2
	Breaker Size		A	-	-	10	10	10	10
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52
	Max.Length	Out-In	m	-	-	20	20	20	20
	Max.Height	Out-In	m	-	-	12	12	12	12
Guaranteed Operating Range (Outdoor)		Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.
(*6) For single use: only 19dB(A). For multi use (MXZ): 21dB(A).

MSZ-S SERIES
MSZ-G SERIES

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

DC Inverter · Joint Lap · DC Fan Motor · PAM · Grooved Piping · SEER A++ · SCOP A+

Indoor Unit

MSZ-SF25/35/42/50VE3

MSZ-GF60/71VE2

Outdoor Unit

MUZ-SF25/35/42VE(H)

MUZ-SF50VE(H)
MUZ-GF60/71VE

Remote Controller

Econo Cool · Pure White · AUTO VANE · Anti-allergy Enzyme (Optional) · Electrostatic Anti-allergy (Optional) · Nano Platinum · SWING · SWING · AUTO · WIDE&LONG · Weekly Timer · i save · ACO · Auto Restart · Low Temp Cooling

Optional · Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional) · MXZ connection · Cleaning-free pipe reuse · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump					
Indoor Unit				MSZ-SF42VE2(3)	MSZ-SF42VE2(3)	MSZ-SF50VE2(3)	MSZ-SF50VE2(3)	MSZ-GF60VE(2)	MSZ-GF71VE(2)
Outdoor Unit				MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH	MUZ-GF60VE	MUZ-GF71VE
Refrigerant				R410A(*1)					
Power Supply	Source			Outdoor Power supply					
	Outdoor (V / Phase / Hz)			230/Single/50					
Cooling	Design load		kW	4.2	4.2	5	5	6.1	7.1
	Annual electricity consumption (*2)		kWh/a	196	196	246	246	311	364
	SEER (*4)			7.5	7.5	7.2	7.2	6.8	6.8
		Energy efficiency class		A++	A++	A++	A++	A++	A++
	Capacity	Rated	kW	4.2	4.2	5	5	6.1	7.1
		Min-Max	kW	0.8-4.5	0.8-4.5	1.4-5.4	1.4-5.4	1.4-7.5	2.0-8.7
	Total Input	Rated	kW	1.340	1.340	1.660	1.660	1.790	2.130
Heating (Average Season)(*5)	Design load		kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)
	Declared Capacity	at reference design temperature	kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)
		at bivalent temperature	kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)
		at operation limit temperature	kW	3.4 (-15°C)	2.2 (-20°C)	3.4 (-15°C)	2.3 (-20°C)	3.7 (-15°C)	5.4 (-15°C)
	Back up heating capacity		kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
	Annual electricity consumption (*2)		kWh/a	1215	1242	1351	1380	1489	2204
	SCOP (*4)			4.4	4.3	4.4	4.3	4.3	4.2
		Energy efficiency class		A+	A+	A+	A+	A+	A+
	Capacity	Rated	kW	5.4	5.4	5.8	5.8	6.8	8.1
		Min-Max	kW	1.3-6.0	1.3-6.0	1.4-7.3	1.4-7.3	2.0-9.3	2.2-9.9
	Total Input	Rated	kW	1.580	1.58	1.7	1.7	1.81	2.23
Operating Current (Max)			A	9.5	9.5	12.3	12.3	14.5	16.6
Indoor Unit	Input	Rated	kW	0.027	0.027	0.035	0.035	0.062	0.058
	Operating Current(Max)		A	0.3	0.3	0.3	0.3	0.5	0.5
	Dimensions	H*W*D	mm	299-798-195	299-798-195	299-798-195	299-798-195	325-1100-238	325-1100-238
	Weight		kg	10	10	10	10	16	16
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet)	Cooling	m^3/min	4.7 - 5.8 - 6.7 - 7.9 - 9.1	4.7 - 5.8 - 6.7 - 7.9 - 9.1	5.1 - 6.2 - 7.0 - 8.2 - 9.9	5.1 - 6.2 - 7.0 - 8.2 - 9.9	9.8-11.3-13.4-15.6-18.3	9.7-11.5-13.3-15.4-17.8
		Heating	m^3/min	4.7 - 5.8 - 7.2 - 9.1 - 11.4	4.7 - 5.8 - 7.2 - 9.1 - 11.4	5.1 - 6.4 - 8.0 - 9.8 - 12.0	5.1 - 6.4 - 8.0 - 9.8 - 12.0	9.8-11.3-13.4-15.6-18.3	10.2-11.5-13.3-15.4-17.8
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	26(*6) - 31 - 34 - 38 - 42	26(*6) - 31 - 34 - 38 - 42	28(*7) - 33 - 36 - 40 - 45	28(*7) - 33 - 36 - 40 - 45	29 - 37 -41 - 45 - 49	30 - 37 - 41 - 45 - 49
		Heating	dB(A)	26(*6) - 31 - 36 - 42 - 47	26(*6) - 31 - 36 - 42 - 47	28(*7) - 33 - 38 - 43 - 49	28(*7) - 33 - 38 - 43 - 49	29 - 37 - 41 - 45 - 49	30 - 37 - 41 - 45 - 49
	Sound Level (PWL)	Cooling	dB(A)	57	57	58	58	65	65
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330	880-840-330	880-840-330	880-840-330
	Weight		kg	35	35	55	55	50	53
	Air Volume	Cooling	m^3/min	35.2	35.2	44.6	44.6	49.2	50.1
		Heating	m^3/min	33.6	33.6	44.6	44.6	49.2	48.2
	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52	55	55
		Heating	dB(A)	51	51	52	52	55	55
	Sound Level (PWL)	Cooling	dB(A)	63	63	65	65	65	65
	Operating Current (Max)		A	9.2	9.2	12	12	14	16.1
	Breaker Size		A	10	10	16	16	20	20
Ext. Piping	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7	6.35/15.88	9.52/15.88
	Max.Length	Out-In	m	20	20	30	30	30	30
	Max.Height	Out-In	m	12	12	15	15	15	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.
(*6) For single use: only 26dB(A), For multi use (MXZ): 28dB(A).
(*7) For single use: only 28dB(A), For multi use (MXZ): 30dB(A).

MSZ-D SERIES

Compact, high-performance indoor and outdoor units and advanced inverter technologies provide superior energy savings and comfort in all rooms.

MSZ-DM25/35VA

Stylish Design with Flat Panel Front

A stylish flat panel design is employed for the front of the indoor unit. The simple look matches room aesthetics.

Advanced Inverter Control – Efficient Operation All the Time

DC Inverter SEER A+ SCOP A+

Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A+" rating for both 25 and 35 classes.

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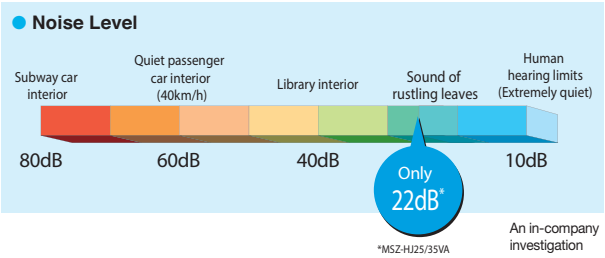
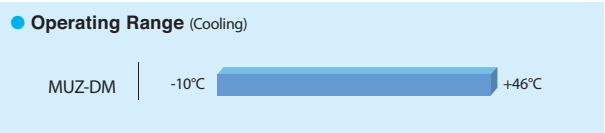
Silent Operation

Quiet, relaxing space is within reach. Operational noise is a low 22dB (25/35 classes). Operation is so silent you might even forget the air conditioner is on.



Wide operating range

In order to satisfy a larger type of applications, operating range in cooling mode is possible until -10 °C of outdoor temperature.



Multi-functional connectors added

Thanks to built-in multi-functional connectors, MSZ-DM series can be connected to several accessories. This allows unit control through wired remote controller, M-net connection and MELCloud compatibility.

Compact Units

The widths of both indoor and outdoor units are compact, making installation in smaller, tighter spaces possible.

Indoor Unit: MSZ-DM25/35VA

Only 799mm width

Outdoor Unit: MUZ-DM25/35VA

Only 699mm width

MSZ-D SERIES

Indoor Unit

MSZ-DM25/35VA

Outdoor Unit

MUZ-DM25/35VA

Remote Controller

Type				Inverter Heat Pump	
Indoor Unit				MSZ-DM25VA	MSZ-DM35VA
Outdoor Unit				MUZ-DM25VA	MUZ-DM35VA
Refrigerant				R410A(*1)	
Power Supply	Source			Indoor Power supply	
	Outdoor (V / Phase / Hz)			230V/Single/50Hz	
Cooling	Design load		kW	2.5	3.1
	Annual electricity consumption (*2)		kWh/a	151	193
	SEER (*4)			5.8	5.7
		Energy efficiency class		A+	A+
	Capacity	Rated	kW	2.5	3.15
		Min-Max	kW	1.3 - 3.0	1.4 - 3.5
	Total Input	Rated	kW	0.730	1.040
Heating (Average Season)(*5)	Design load		kW	1.9 (-10°C)	2.4 (-10°C)
	Declared Capacity	at reference design temperature	kW	1.9 (-10°C)	2.4 (-10°C)
		at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)
		at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)
	Back up heating capacity		kW	0.0 (-10°C)	0.0 (-10°C)
	Annual electricity consumption (*2)		kWh/a	649	781
	SCOP (*4)			4.1	4.5
		Energy efficiency class		A+	A+
	Capacity	Rated	kW	3.15	3.6
		Min-Max	kW	0.9 - 3.5	1.1 - 4.1
	Total Input	Rated	kW	0.870	0.995
Operating Current (Max)			A	5.8	6.5
Indoor Unit	Input	Rated	kW	NA	NA
	Operating Current(Max)		A	NA	NA
	Dimensions	H*W*D	mm	290-799-232	290-799-232
	Weight		kg	9	9
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet))	Cooling	m^3/min	3.8 - 5.5 - 7.3 - 9.5	3.8 - 5.7 - 7.8 - 10.9
		Heating	m^3/min	3.5 - 5.5 - 7.5 - 10.0	3.5 - 5.5 - 7.5 - 10.3
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45
		Heating	dB(A)	23 - 30 - 37 - 43	23 - 30 - 37 - 44
	Sound Level (PWL)	Cooling	dB(A)	57	60
Outdoor Unit	Dimensions	H*W*D	mm	538-699-249	538-699-249
	Weight		kg	24	25
	Air Volume	Cooling	m^3/min	31.5	31.5
		Heating	m^3/min	31.5	31.5
	Sound Level (SPL)	Cooling	dB(A)	50	51
		Heating	dB(A)	50	51
	Sound Level (PWL)	Cooling	dB(A)	63	64
	Operating Current (Max)		A	5.8	6.5
	Breaker Size		A	10	10
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52
	Max.Length	Out-In	m	20	20
	Max.Height	Out-In	m	12	12
Guaranteed Operating Range (Outdoor)		Cooling	°C	-10 ~ +46	-10 ~ +46
		Heating	°C	-10 ~ +24	-10 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

MSZ-H SERIES

Compact, high-performance indoor and outdoor units and advanced inverter technologies provide superior energy savings and comfort in all rooms.

Stylish Design with Flat Panel Front

A stylish flat panel design is employed for the front of the indoor unit. The simple look matches room aesthetics.

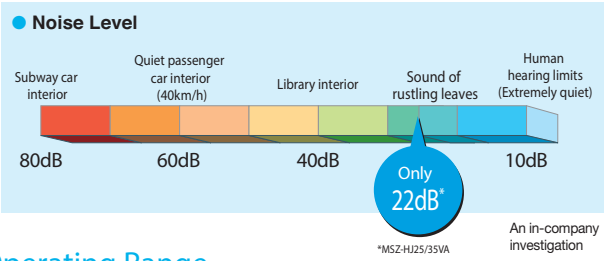
Advanced Inverter Control – Efficient Operation All the Time

DC Inverter | 25/35 SEER A | 25/35 SCOP A | 50/60/71 SEER A+ | 50/60/71 SCOP A+

Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A" rating for 25/35 classes and "A+" for 50/60/71 classes.

Silent Operation

Quiet, relaxing space is within reach. Operational noise is a low 22dB (25/35 classes). Operation is so silent you might even forget the air conditioner is on.



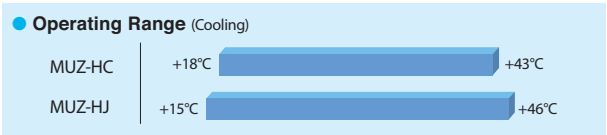
Long Piping Length

Compared to previous models, the piping length is significantly increased, further enhancing the ease and flexibility of installation.

	MSZ-HJ60/71	MSZ-HJ25/35/50	MSZ-HC
Max piping length	30m	20m	10m
Max piping height difference	15m	12m	5m

Operating Range

As a result of an extended operating range in cooling, these models accommodate a wider range of usage environments and applications than previous models.



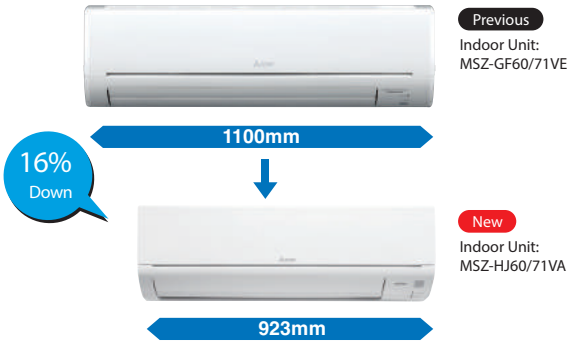
Compact Units

The widths of both indoor and outdoor units are compact, making installation in smaller, tighter spaces possible.

Indoor Unit: MSZ-HJ25/35/50VA

Outdoor Unit: MUZ-HJ25/35VA

Compared to previous models, width is down by 16%.



MSZ-H SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | Joint Lap | 50/60/71 DC Fan Motor | PAM | Grooved Piping | 50/60/71 SEER A+ | 50/60/71 SCOP A+

Indoor Unit

MSZ-HJ25/35/50VA

MSZ-HJ60/71VA

Outdoor Unit

MUZ-HJ25/35VA

MUZ-HJ50VA

MUZ-HJ60/71VA

Remote Controller

Econo Cool | Pure White | AUTO VANE | Catechin (Optional) | SWING | AUTO | | Auto Restart | Cleaning-free pipe region | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump				
Indoor Unit				MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA
Outdoor Unit				MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA
Refrigerant				R410A(*1)				
Power Supply	Source			Indoor Power supply				
	Outdoor (V / Phase / Hz)			230V/Single/50Hz				
Cooling	Design load		kW	2.5	3.1	5.0	6.1	7.1
	Annual electricity consumption (*2)		kWh/a	171	212	292	354	441
	SEER (*4)			5.1	5.1	6.0	6.0	5.6
		Energy efficiency class		A	A	A+	A+	A+
	Capacity	Rated	kW	2.5	3.15	5.0	6.1	7.1
		Min-Max	kW	1.3 - 3.0	1.4 - 3.5	1.3 - 5.0	1.7 - 7.1	1.8 - 7.1
	Total Input	Rated	kW	0.730	1.040	2.050	1.900	2.330
Heating (Average Season)(*5)	Design load		kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	Declared Capacity	at reference design temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
		at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
		at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	Back up heating capacity		kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
	Annual electricity consumption (*2)		kWh/a	698	885	1267	1544	1854
	SCOP (*4)			3.8	3.8	4.2	4.1	4.0
		Energy efficiency class		A	A	A+	A+	A+
	Capacity	Rated	kW	3.15	3.6	5.4	6.8	8.1
		Min-Max	kW	0.9 - 3.5	1.1 - 4.1	1.4 - 6.5	1.5 - 8.4	1.5 - 8.5
	Total Input	Rated	kW	0.870	0.995	1.480	1.970	2.440
Operating Current (Max)			A	5.8	6.5	9.8	12.5	12.5
Indoor Unit	Input	Rated	kW	0.020	0.021	0.037	0.055	0.055
	Operating Current(Max)		A	0.3	0.3	0.4	0.5	0.5
	Dimensions	H*W*D	mm	290-799-232	290-799-232	290-799-232	305-923-250	305-923-250
	Weight		kg	9	9	9	13	13
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)/(Dry/Wet))	Cooling	m^3/min	3.8 - 5.5 - 7.3 - 9.5	3.8 - 5.7 - 7.8 - 10.9	6.3 - 9.1 - 11.1 - 12.9	9.3 - 12.2 - 15.0 - 19.9	10.0 - 12.2 - 15.0 - 19.9
		Heating	m^3/min	3.5 - 5.5 - 7.5 - 10.0	3.5 - 5.5 - 7.5 - 10.3	6.1 - 8.3 - 11.1 - 14.3	9.4 - 12.5 - 16.0 - 19.9	10.3 - 12.7 - 16.4 - 19.9
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45	28 - 36 - 40 - 45	31 - 38 - 44 - 50	33 - 38 - 44 - 50
		Heating	dB(A)	23 - 30 - 37 - 43	23 - 30 - 37 - 44	27 - 34 - 41 - 47	31 - 38 - 44 - 49	33 - 38 - 44 - 49
	Sound Level (PWL)	Cooling	dB(A)	57	60	60	65	65
Outdoor Unit	Dimensions	H*W*D	mm	538-699-249	538-699-249	550-800-285	880-840-330	880-840-330
	Weight		kg	24	25	36	55	55
	Air Volume	Cooling	m^3/min	31.5	31.5	36.3	47.9	49.3
		Heating	m^3/min	31.5	31.5	34.8	47.9	47.9
	Sound Level (SPL)	Cooling	dB(A)	50	50	50	55	55
		Heating	dB(A)	50	50	51	55	55
	Sound Level (PWL)	Cooling	dB(A)	63	64	64	65	66
	Operating Current (Max)		A	5.5	6.2	9.4	12	12
	Breaker Size		A	10	10	12	16	16
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7	6.35/15.88	9.52/15.88
	Max.Length	Out-In	m	20	20	20	30	30
	Max.Height	Out-In	m	12	12	12	15	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	+15 ~ +46	+15 ~ +46	+15 ~ +46	+15 ~ +46	+15 ~ +46
		Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

MFZ SERIES

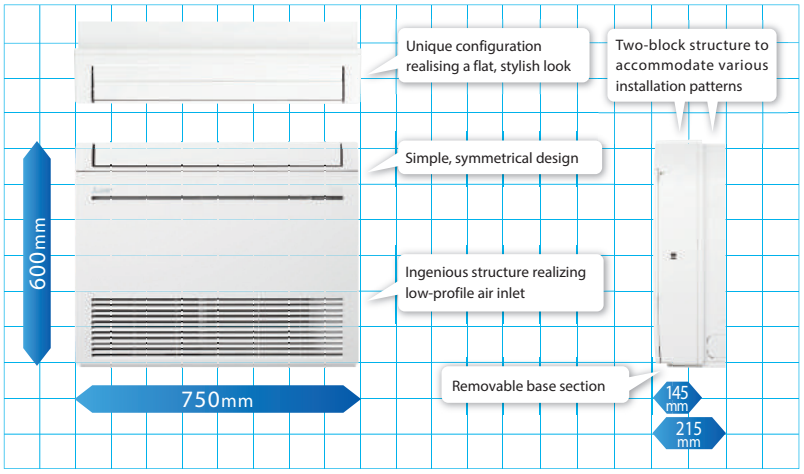
High Capacity, Energy Savings and a Design in Harmony with Living Spaces
Raise the Value of Your Room to the Next Level.

MFZ-KJ25/35/50VE2

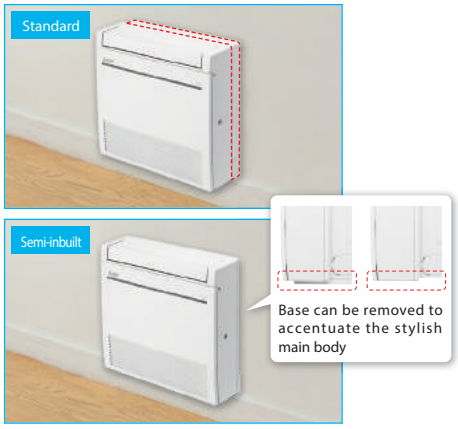
GOOD DESIGN

Simple , Flat Design

Uneven surfaces have been smoothed to provide a simple design with linear beauty, harmonised with all types of interiors.



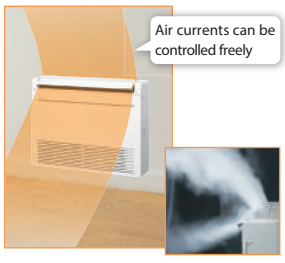
Images of installed unit



Multi-flow Vane

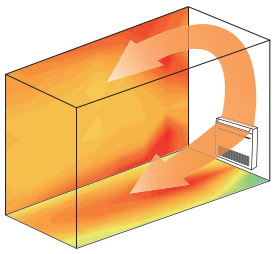
Three uniquely shaped vanes control the airflow and allow the freedom to customize comfort according to preferences.

When heating

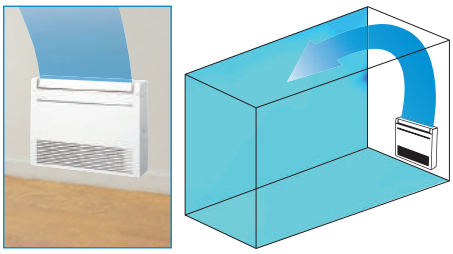


Rapid heating

Warm air is blown out in a downward direction and then sucked back into the unit to quickly raise the temperature of the air being blown out.



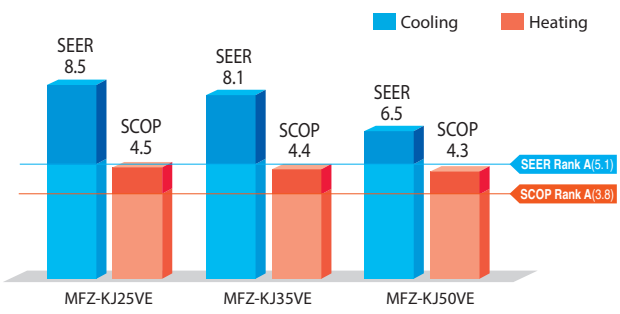
When cooling



*The downward airflow is also possible as well as heating.

Excellent Energy-saving Performance

SEER A+++ (25) and SCOP A+ (25/35/50) ratings have been achieved through development focusing on compliance with European energy-related product (ErP) regulations.



Weekly Timer
(Introduced in response to market demand)

Temperature settings and On/Off control can be managed over a period of one week using the Weekly Timer. Up to eight setting patterns per calendar day are possible.

Trouble-free Installation and Maintenance

Using the original installation plate that comes as standard equipment, installation of the unit is a snap. Levelling adjusters are provided, preventing damage to the wall. Generous pipe length (20–30 metres) is provided, so there is no need to worry about distance to the outdoor unit. All units are equipped with an automatic self-diagnostics function as well. Simply access the trouble log recall mode for instant trouble-shooting.

MFZ-KJ SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | DC Fan Motor | PAM | Grooved Piping | SEER A+++ | SCOP A+

Indoor Unit

GOOD DESIGN

MFZ-KJ25/35/50VE2

Outdoor Unit

MUFZ-KJ25/35VE

MUFZ-KJ50VE

Remote Controller

Econo Cool | Pure White | AUTO VANE | Anti-allergy Enzyme | Nano Platinum | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart | Low Temp Cooling | Optional | Group Control | Optional | M-NET connection | Optional

Wi-Fi Interface | Optional | MXZ connection | Cleaning-free, pipe reuse | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MFZ-KJ25VE(2)	MFZ-KJ35VE(2)	MFZ-KJ50VE(2)
Outdoor Unit				MUFZ-KJ25VE	MUFZ-KJ35VE	MUFZ-KJ50VE
Refrigerant				R410A(*1)	R410A(*1)	R410A(*1)
Power Supply	Source			Outdoor power supply		
	Outdoor(V/Phase/Hz)			230 / Single / 50		
Cooling	Design load		kW	2.5	3.5	5.0
	Annual electricity consumption(*2)		kWh/a	102	150	266
	SEER(*4)			8.5	8.1	6.5
		Energy efficiency class		A+++	A++	A++
	Capacity	Rated	kW	2.5	3.5	5.0
		Min-Max	kW	0.5 - 3.4	0.5 - 3.7	1.6 - 5.7
	Total Input	Rated	kW	0.540	0.940	1.410
Heating (Average Season)	Design load		kW	3.4(-10℃)	3.5(-10℃)	4.4(-10℃)
	Declared Capacity	at reference design temperature	kW	3.4(-10℃)	3.5(-10℃)	4.4(-10℃)
		at bivalent temperature	kW	3.4(-10℃)	3.5(-10℃)	4.4(-10℃)
		at operation limit temperature	kW	2.4(-15℃)	2.9(-15℃)	6.0(-15℃)
	Back up heating capacity		kW	0.0(-10℃)	0.0(-10℃)	0.0(-10℃)
	Annual electricity consumption(*2)		kWh/a	1059	1110	1406
	SCOP(*4)			4.5	4.4	4.3
		Energy efficiency class		A+	A+	A+
	Capacity	Rated	kW	3.4	4.3	6.0
		Min-Max	kW	1.2 - 4.6	1.2 - 5.5	2.2 - 8.2
	Total Input	Rated	kW	0.770	1.100	1.610
Operating Current (Max)			A	9.4	9.4	14.0
Indoor Unit	Input	Rated	kW	0.016	0.016	0.038
	Operating Current(Max)		A	0.17	0.17	0.34
	Dimensions	H*W*D	mm	600-750-215	600-750-215	600-750-215
	Weight		kg	15	15	15
	Air Volume	Cooling	m3/min	3.9 - 4.9 - 5.9 - 7.1 - 8.2	3.9 - 4.9 - 5.9 - 7.1 - 8.2	5.6 - 6.7 - 8.0 - 9.3 - 10.6
	(SLo-Lo-Mid-Hi-SHi(*3))	Heating	m3/min	3.9 - 5.1 - 6.2 - 7.7 - 9.7	3.9 - 5.1 - 6.2 - 7.7 - 9.7	6.0 - 7.4 - 9.4 - 11.6 - 14.0
	Sound Level (SPL)	Cooling	dB(A)	20 - 25 - 30 - 35 - 39	20 - 25 - 30 - 35 - 39	27 - 31 - 35 - 39 - 44
	(SLo-Lo-Mid-Hi-SHi(*3))	Heating	dB(A)	19 - 25 - 30 - 35 - 41	19 - 25 - 30 - 35 - 41	29 - 35 - 40 - 45 - 50
	Sound Level (PWL)	Cooling	dB(A)	49	50	56
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330
	Weight		kg	37	37	55
	Air Volume	Cooling	m3/min	31.3	31.3	45.8
		Heating	m3/min	33.6	33.6	45.8
	Sound Level (SPL)	Cooling	dB(A)	46	47	49
		Heating	dB(A)	51	51	51
	Sound Level (PWL)	Cooling	dB(A)	59	60	63
	Operating Current(Max)		A	9.2	9.2	13.6
	Breaker Size		A	10	10	16
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7
	Max.Length	Out-In	m	20	20	30
	Max.Height	Out-In	m	12	12	15
Guaranteed Operating Range [Outdoor]		Cooling	℃	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	℃	-15 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

(*3) SHi: Super High

(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".

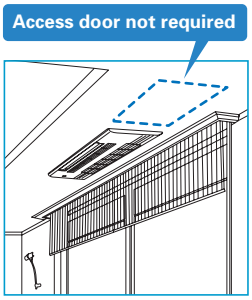
MLZ SERIES

Introducing a new type of ceiling cassette for the Multi-Split Series with streamed interior dimensions and a sharp, sleek appearance.


MLZ-KA25/35/50VA

Ceiling Mounted

Installing the ceiling-mounted MLZ Series unit in a room creates a more spacious feel that enhances room comfort. This overhead format is also an excellent solution when lighting equipment is installed at the centre of the room and fixtures such as book shelves are mounted on wall surfaces.



Slim Body

The new units are designed with a slim body (only 175mm high), ensuring easy installation even when low ceiling cavities limit installation space. The need for ceiling cavity service space is also eliminated, further reducing the dimensions required for installation.

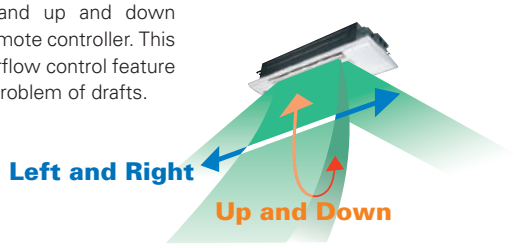
Set Airflow According to Ceiling Height

Dual-level airflow selection is engineered to accommodate specific ceiling heights. This is a key feature for adjusting airflow effectively when it is either too strong or too weak due to being mismatched with the height of the ceiling.

	25	35	50
Standard	2.4m	2.4m	2.4m
High ceiling	2.7m	2.7m	2.7m

Auto Vane Control

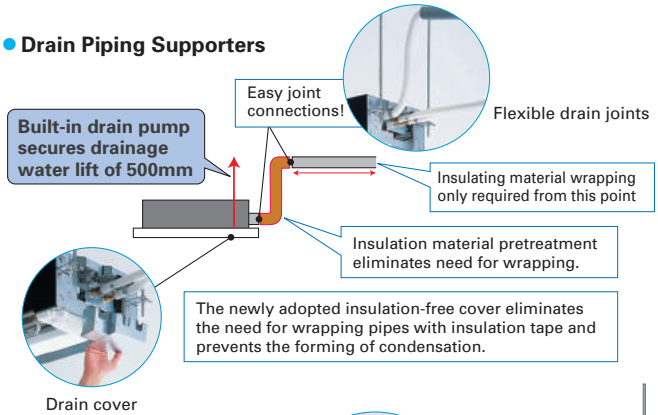
Outlet vanes can be moved left and right, and up and down using the remote controller. This improved airflow control feature solves the problem of drafts.



Easy Installation

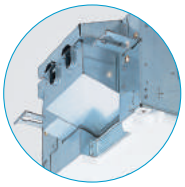
A built-in drain pump (500mm lift) and flexible drain joints make attaching the drain hose in the ceiling cavity easy, resulting in simple and fast installation. Tight yet flexible fittings eliminate the need of wrapping with heat-insulation tape, and ensure that pipe and drain cover connections are free of condensation.

● Drain Piping Supporters

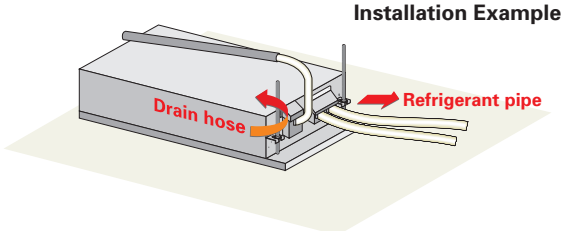


● Easy Mounting Plate

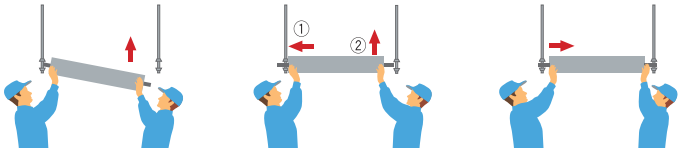
Suspension work simplified with well-designed mounting plates



Installation Example



Flexible drain joints simplify drain piping work in narrow ceiling areas



Secure one side

① Push the unit to the other side
② Secure the opposite side

Move unit to the centre

MLZ-KA SERIES

DC Inverter

Indoor Unit

MLZ-KA25/35/50VA

Outdoor Unit

For MXZ Connection Only

Remote Controller

Panel

MLP-440W

Econo Cool | AUTO VANE | Anti-allergy Enzyme (Optional) | Catechin (Optional) | SWING | High Ceiling | AUTO | ACO | Auto Restart | (Optional) | Group Control (Optional) | M-NET connection (Optional) | Wi-Fi Interface (Optional) | MXZ connection | Drain Lift Up | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MLZ-KA25VA	MLZ-KA35VA	MLZ-KA50VA
Outdoor Unit				for MXZ connection		
Refrigerant				R410A(*1)		
Power Supply	Source			Outdoor Power supply		
	Outdoor (V / Phase / Hz)			230V / Single / 50Hz		
Cooling	Design load		kW	-	-	-
	Annual electricity consumption (*2)		kWh/a	-	-	-
	SEER (*4)			-	-	-
		Energy efficiency class		-	-	-
	Capacity	Rated	kW	-	-	-
		Min-Max	kW	-	-	-
	Total Input	Rated	kW	-	-	-
Heating (Average Season)	Design load		kW	-	-	-
	Declared Capacity	at reference design temperature	kW	-	-	-
		at bivalent temperature	kW	-	-	-
		at operation limit temperature	kW	-	-	-
	Back up heating capacity		kW	-	-	-
	Annual electricity consumption (*2)		kWh/a	-	-	-
	SCOP (*4)			-	-	-
		Energy efficiency class		-	-	-
	Capacity	Rated	kW	-	-	-
		Min-Max	kW	-	-	-
	Total Input	Rated	kW	-	-	-
Operating Current (Max)			A	0.4	0.4	0.4
Indoor Unit	Input	Rated	kW	0.040	0.040	0.040
	Operating Current(Max)		A	-	-	-
	Dimensions	H*W*D	mm	175-1102-360	175-1102-360	175-1102-360
	Weight		kg	15	15	15
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)/Dry/Wet))	Cooling	m^3/min	7.2-8.0-8.8	7.3-8.4-9.4	8.3-9.8-11.4
		Heating	m^3/min	7.0-8.2-9.2	7.7-8.8-9.9	8.8-10.3-11.8
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	29-32-35	31-34-37	34-38-43
		Heating	dB(A)	28-32-36	31-35-38	34-39-43
	Sound Level (PWL)	Cooling	dB(A)	52	54	60
Panel	Dimensions	H*W*D	mm	34-1200-414	34-1200-414	34-1200-414
	Weight		kg	3.5	3.5	3.5
Outdoor Unit	Dimensions	H*W*D	mm	-	-	-
	Weight		kg	-	-	-
	Air Volume	Cooling	m^3/min	-	-	-
		Heating	m^3/min	-	-	-
	Sound Level (SPL)	Cooling	dB(A)	-	-	-
		Heating	dB(A)	-	-	-
	Sound Level (PWL)	Cooling	dB(A)	-	-	-
	Operating Current (Max)		A	-	-	-
	Breaker Size		A	-	-	-
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7
	Max.Length	Out-In	m	-	-	-
	Max.Height	Out-In	m	-	-	-
Guaranteed Operating Range (Outdoor)		Cooling	℃	-	-	-
		Heating	℃	-	-	-

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".

Specification on Warmer Condition

Type				Inverter Heat Pump					
Indoor Unit				MSZ-FH25VE(2)		MSZ-FH35VE(2)		MSZ-FH50VE(2)	
Outdoor Unit				MUZ-FH25VE	MUZ-FH25VEHZ	MUZ-FH35VE	MUZ-FH35VEHZ	MUZ-FH50VE	MUZ-FH50VEHZ
Refrigerant				R410A (*1)					
Cooling	Design load		kW	2.5	2.5	3.5	3.5	5.0	5.0
	Annual electricity consumption (*2)		kWh/a	96	96	138	138	244	244
	SEER			9.1	9.1	8.9	8.9	7.2	7.2
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)
		at bivalent temperature	kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)
		at operation limit temperature	kW	2.5 (−15°C)	1.7 (−25°C)	3.2 (−15°C)	2.6 (−25°C)	5.2 (−15°C)	3.8 (−25°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	376	397	429	471	614	787
	SCOP			6.3	6.3	6.5	4.8 / 6.5	5.7	5.9
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}

Type				Inverter Heat Pump					
Indoor Unit				MSZ-EF25VE2(3)		MSZ-EF35VE2(3)		MSZ-EF42VE2(3)	MSZ-EF50VE2(3)
Outdoor Unit				MUZ-EF25VE	MUZ-EF25VEH	MUZ-EF35VE	MUZ-EF35VEH	MUZ-EF42VE	MUZ-EF50VE
Refrigerant				R410A (*1)					
Cooling	Design load		kW	2.5	2.5	3.5	3.5	4.2	5.0
	Annual electricity consumption (*2)		kWh/a	103	103	144	144	192	244
	SEER			8.5	8.5	8.5	8.5	7.7	7.2
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.3 (2°C)
		at bivalent temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.3 (2°C)
		at operation limit temperature	kW	2.0 (−15°C)	1.6 (−20°C)	2.4 (−15°C)	1.7 (−20°C)	3.4 (−15°C)	3.5 (−15°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	304	304	396	396	491	557
	SCOP			6.0	6.0	5.7	5.7	6.0	5.8
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}

Type				Inverter Heat Pump							
Indoor Unit				MSZ-SF25VE2(3)		MSZ-SF35VE2(3)		MSZ-SF42VE2(3)		MSZ-SF50VE2(3)	
Outdoor Unit				MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH	MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH
Refrigerant				R410A (*1)							
Cooling	Design load		kW	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0
	Annual electricity consumption (*2)		kWh/a	116	116	171	171	196	196	246	246
	SEER			7.6	7.6	7.2	7.2	7.5	7.5	7.2	7.2
		Energy efficiency class		A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.1 (2°C)	2.3 (2°C)	2.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.1 (2°C)	2.3 (2°C)	2.3 (2°C)
		at bivalent temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.1 (2°C)	2.3 (2°C)	2.3 (2°C)
		at operation limit temperature	kW	2.0 (−15°C)	1.6 (−20°C)	2.2 (−15°C)	1.6 (−20°C)	3.4 (−15°C)	2.2 (−20°C)	3.4 (−15°C)	2.3 (−20°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	337	337	923 / 418	417	507	507	563	563
	SCOP			5.4	5.4	5.4	5.4	5.8	5.8	5.7	5.7
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}

Type				Inverter Heat Pump	
Indoor Unit				MSZ-GF60VE(2)	MSZ-GF71VE(2)
Outdoor Unit				MUZ-GF60VE	MUZ-GF71VE
Refrigerant				R410A (*1)	
Cooling	Design load		kW	6.1	7.1
	Annual electricity consumption (*2)		kWh/a	311	364
	SEER			6.8	6.8
		Energy efficiency class		A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	2.5 (2°C)	3.7 (2°C)
	Declared Capacity	At reference design temperature	kW	2.5 (2°C)	3.7 (2°C)
		at bivalent temperature	kW	2.5 (2°C)	3.7 (2°C)
		at operation limit temperature	kW	3.7 (−15°C)	5.4 (−15°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	664	963
	SCOP (*4)			5.3	5.4
		Energy efficiency class		A^{+++}	A^{+++}

Type				Inverter Heat Pump		
Indoor Unit				MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA
Outdoor Unit				MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA
Refrigerant				R410A (*1)		
Cooling	Design load		kW	2.5	3.1	5.0
	Annual electricity consumption (*2)		kWh/a	171	212	292
	SEER			5.1	5.1	6.0
		Energy efficiency class		A	A	A^{+}
Heating (Warmer Season)	Design load		kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
	Declared Capacity	at reference design temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
		at bivalent temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
		at operation limit temperature	kW	1.9 (−10°C)	2.4 (−10°C)	3.8 (−10°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	356	426	539
	SCOP			4.3	4.3	5.5
		Energy efficiency class		A^{+}	A^{+}	A^{+++}

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

Specification on Warmer Condition

Type				Inverter Heat Pump					
Model		Indoor		MFZ-KJ25VE(2)		MFZ-KJ35VE(2)		MFZ-KJ50VE(2)	
		Outdoor		MUFZ-KJ25VE	MUFZ-KJ25VEHZ	MUFZ-KJ35VE	MUFZ-KJ35VEHZ	MUFZ-KJ50VE	MUFZ-KJ50VEHZ
Sound power levels on cooling mode		Inside	dB	49	49	50	50	56	56
		Outside	dB	59	59	60	60	63	63
Refrigerant				R410A GWP 1975 (*1)					
Cooling	SEER			8.5	8.5	8.1	8.1	6.5	6.5
	Energy efficiency class			A^{+++}	A^{+++}	A^{++}	A^{++}	A^{++}	A^{++}
	Annual electricity consumption (*2)		kWh/a	102	102	150	150	266	266
	Design load		kW	2.5	2.5	3.5	3.5	5.0	5.0
Heating (Average season/ Warmer season)	SCOP			4.5/5.1	4.4/5.4	4.4/5.3	4.3/5.4	4.3/5.8	4.2/5.7
	Energy efficiency class			A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}
	Annual electricity consumption (*2)		kWh/a	1059/511	1104/490	1110/499	1158/510	1406/579	1467/603
	Design load		kW	3.4 (−10°C)/1.9 (2°C)	3.5 (−10°C)/1.9 (2°C)	3.5 (−10°C)/1.9 (2°C)	3.6 (−10°C)/2.0 (2°C)	4.4 (−10°C)/2.4 (2°C)	4.5 (−10°C)/2.5 (2°C)
	Declared Capacity	at reference design temperature	kW	3.4 (−10°C)/1.9 (2°C)	3.5 (−10°C)/1.9 (2°C)	3.5 (−10°C)/1.9 (2°C)	3.6 (−10°C)/2.0 (2°C)	4.4 (−10°C)/2.4 (2°C)	4.5 (−10°C)/2.5 (2°C)
		at bivalent temperature	kW	3.4 (−10°C)/1.9 (2°C)	3.5 (−10°C)/1.9 (2°C)	3.5 (−10°C)/1.9 (2°C)	3.6 (−10°C)/2.0 (2°C)	4.4 (−10°C)/2.4 (2°C)	4.5 (−10°C)/2.5 (2°C)
		at operation limit temperature	kW	2.4 (−15°C)/2.4 (−15°C)	1.6 (−25°C)/1.6 (−25°C)	2.9 (−15°C)/2.9 (−15°C)	2.3 (−25°C)/2.3 (−25°C)	6.0 (−15°C)/6.0 (−15°C)	3.3 (−25°C)/3.3 (−25°C)
	Back up heating capacity		kW	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)

Type				Inverter Heat Pump					
Model		Indoor		MSZ-FH25VE(2)		MSZ-FH35VE(2)		MSZ-FH50VE(2)	
		Outdoor		MUZ-FH25VE	MUZ-FH25VEHZ	MUZ-FH35VE	MUZ-FH35VEHZ	MUZ-FH50VE	MUZ-FH50VEHZ
Sound power levels on cooling mode		Inside	dB	58	58	58	58	60	60
		Outside	dB	60	60	61	61	64	64
Refrigerant				R410A GWP 1975 (*1)					
Cooling	SEER			9.1	9.1	8.9	8.9	7.2	7.2
	Energy efficiency class			A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{++}	A^{++}
	Annual electricity consumption (*2)		kWh/a	96	96	138	138	244	244
	Design load		kW	2.5	2.5	3.5	3.5	5.0	5.0
Heating (Average season/ Warmer season)	SCOP			5.1/6.3	4.9/6.3	5.1/6.5	4.8/6.5	4.6/5.7	4.2/5.9
	Energy efficiency class			A^{+++}/A^{+++}	A^{++}/A^{+++}	A^{+++}/A^{+++}	A^{++}/A^{+++}	A^{++}/A^{+++}	A^{+}/A^{+++}
	Annual electricity consumption (*2)		kWh/a	819/376	924/397	986/429	1173/471	1372/614	2006/787
	Design load		kW	3.0 (−10°C)/1.7 (2°C)	3.2 (−10°C)/1.8 (2°C)	3.6 (−10°C)/2.0 (2°C)	4.0 (−10°C)/2.2 (2°C)	4.5 (−10°C)/2.5 (2°C)	6.0 (−10°C)/3.3 (2°C)
	Declared Capacity	at reference design temperature	kW	3.0 (−10°C)/1.7 (2°C)	3.2 (−10°C)/1.8 (2°C)	3.6 (−10°C)/2.0 (2°C)	4.0 (−10°C)/2.2 (2°C)	4.5 (−10°C)/2.5 (2°C)	6.0 (−10°C)/3.3 (2°C)
		at bivalent temperature	kW	3.0 (−10°C)/1.7 (2°C)	3.2 (−10°C)/1.8 (2°C)	3.6 (−10°C)/2.0 (2°C)	4.0 (−10°C)/2.2 (2°C)	4.5 (−10°C)/2.5 (2°C)	6.0 (−10°C)/3.3 (2°C)
		at operation limit temperature	kW	2.5 (−15°C)/2.5 (−15°C)	1.7 (−25°C)/1.7 (−25°C)	3.2 (−15°C)/3.2 (−15°C)	2.6 (−25°C)/2.6 (−25°C)	5.2 (−15°C)/5.2 (−15°C)	3.8 (−25°C)/3.8 (−25°C)
	Back up heating capacity		kW	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)

Type				Inverter Heat Pump					
Model		Indoor		MSZ-EF25VE2(3)		MSZ-EF35VE2(3)		MSZ-EF42VE2(3)	MSZ-EF50VE2(3)
		Outdoor		MUZ-EF25VE	MUZ-EF25VEH	MUZ-EF35VE	MUZ-EF35VEH	MUZ-EF42VE	MUZ-EF50VE
Sound power levels on cooling mode		Inside	dB	60	60	60	60	60	60
		Outside	dB	58	58	61	61	62	65
Refrigerant				R410A GWP 1975 (*1)					
Cooling	SEER			8.5	8.5	8.5	8.5	7.7	7.2
	Energy efficiency class			A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{++}	A^{++}
	Annual electricity consumption (*2)		kWh/a	103	103	144	144	192	244
	Design load		kW	2.5	2.5	3.5	3.5	4.2	5.0
Heating (Average season/ Warmer season)	SCOP			4.7/6.0	4.6/6.0	4.6/5.7	4.5/5.7	4.6/6.0	4.5/5.8
	Energy efficiency class			A^{++}/A^{+++}	A^{++}/A^{+++}	A^{++}/A^{+++}	A^{+}/A^{+++}	A^{++}/A^{+++}	A^{+}/A^{+++}
	Annual electricity consumption (*2)		kWh/a	716/304	730/304	882/396	910/396	1155/491	1309/557
	Design load		kW	2.4 (−10°C)/1.3 (2°C)	2.4 (−10°C)/1.3 (2°C)	2.9 (−10°C)/1.6 (2°C)	2.9 (−10°C)/1.6 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.2 (−10°C)/2.3 (2°C)
	Declared Capacity	at reference design temperature	kW	2.4 (−10°C)/1.3 (2°C)	2.4 (−10°C)/1.3 (2°C)	2.9 (−10°C)/1.6 (2°C)	2.9 (−10°C)/1.6 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.2 (−10°C)/2.3 (2°C)
		at bivalent temperature	kW	2.4 (−10°C)/1.3 (2°C)	2.4 (−10°C)/1.3 (2°C)	2.9 (−10°C)/1.6 (2°C)	2.9 (−10°C)/1.6 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.2 (−10°C)/2.3 (2°C)
		at operation limit temperature	kW	2.0 (−15°C)/2.0 (−15°C)	1.6 (−20°C)/1.6 (−20°C)	2.4 (−15°C)/2.4 (−15°C)	1.7 (−20°C)/1.7 (−20°C)	3.4 (−15°C)/3.4 (−15°C)	3.5 (−15°C)/3.5 (−15°C)
	Back up heating capacity		kW	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)

Type				Inverter Heat Pump							
Model		Indoor		MSZ-SF25VE2(3)		MSZ-SF35VE2(3)		MSZ-SF42VE2(3)		MSZ-SF50VE2(3)	
		Outdoor		MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH	MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH
Sound power levels on cooling mode		Inside	dB	57	57	57	57	57	57	58	58
		Outside	dB	58	58	62	62	63	63	65	65
Refrigerant				R410A GWP 1975 (*1)							
Cooling	SEER			7.6	7.6	7.2	7.2	7.5	7.5	7.2	7.2
	Energy efficiency class			A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}
	Annual electricity consumption (*2)		kWh/a	116	116	171	171	196	196	246	246
	Design load		kW	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0
Heating (Average season/ Warmer season)	SCOP			4.4/5.4	4.3/5.4	4.4/5.4	4.3/5.4	4.4/5.8	4.3/5.8	4.4/5.7	4.3/5.7
	Energy efficiency class			A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{+++}
	Annual electricity consumption (*2)		kWh/a	764/337	790/337	923/418	948/417	1215/507	1242/507	1351/563	1380/563
	Design load		kW	2.4 (−10°C)/1.3 (2°C)	2.4 (−10°C)/1.3 (2°C)	2.9 (−10°C)/1.6 (2°C)	2.9 (−10°C)/1.6 (2°C)	3.8 (−10°C)/2.1 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.2 (−10°C)/2.3 (2°C)	4.2 (−10°C)/2.3(2°C)
	Declared Capacity	at reference design temperature	kW	2.4 (−10°C)/1.3 (2°C)	2.4 (−10°C)/1.3 (2°C)	2.9 (−10°C)/1.6 (2°C)	2.9 (−10°C)/1.6 (2°C)	3.8 (−10°C)/2.1 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.2 (−10°C)/2.3 (2°C)	4.2 (−10°C)/2.3 (2°C)
		at bivalent temperature	kW	2.4 (−10°C)/1.3 (2°C)	2.4 (−10°C)/1.3 (2°C)	2.9 (−10°C)/1.6 (2°C)	2.9 (−10°C)/1.6 (2°C)	3.8 (−10°C)/2.1 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.2 (−10°C)/2.3 (2°C)	4.2 (−10°C)/2.3 (2°C)
		at operation limit temperature	kW	2.0 (−15°C)/2.0 (−15°C)	1.6 (−20°C)/1.6 (−20°C)	2.2 (−15°C)/2.2 (−15°C)	1.6 (−20°C)/1.6 (−20°C)	3.4 (−15°C)/3.4 (−15°C)	2.2 (−20°C)/2.5 (−20°C)	3.4 (−15°C)/3.4 (−15°C)	2.3 (−20°C)/2.3 (−20°C)
	Back up heating capacity		kW	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)

Type				Inverter Heat Pump					
Model		Indoor		MSZ-GF60VE(2)	MSZ-GF71VE(2)	MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA
		Outdoor		MUZ-GF60VE	MUZ-GF71VE	MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA
Sound power levels on cooling mode		Inside	dB	65	65	57	60	60	65	65
		Outside	dB	65	65	63	64	64	65	66
Refrigerant				R410A GWP 1975 (*1)		R410A GWP 1975 (*1)				
Cooling	SEER			6.8	6.8	5.1	5.1	6.0	6.0	5.6
	Energy efficiency class			A^{++}	A^{++}	A	A	A^{+}	A^{+}	A^{+}
	Annual electricity consumption (*2)		kWh/a	311	364	171	212	292	354	441
	Design load		kW	6.1	7.1	2.5	3.1	5.0	6.1	7.1
Heating (Average season/ Warmer season)	SCOP			4.3/5.3	4.2/5.4	3.8/4.3	3.8/4.3	4.2/5.5	4.1/5.1	4.0/4.9
	Energy efficiency class			A^{+}/A^{+++}	A^{+}/A^{+++}	A/A^{+}	A/A^{+}	A^{+}/A^{+++}	A^{+}/A^{+++}	A^{+}/A^{++}
	Annual electricity consumption (*2)		kWh/a	1489/664	2204/963	698/356	885/426	1267/539	1544/674	1854/813
	Design load		kW	4.6 (−10°C)/2.5 (2°C)	6.7 (−10°C)/3.7 (2°C)	1.9 (−10°C)/1.1 (2°C)	2.4 (−10°C)/1.3 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.6 (−10°C)/2.5 (2°C)	5.4 (−10°C)/2.9 (2°C)
	Declared Capacity	at reference design temperature	kW	4.6 (−10°C)/2.5 (2°C)	6.7 (−10°C)/3.7 (2°C)	1.9 (−10°C)/1.1 (2°C)	2.4 (−10°C)/1.3 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.6 (−10°C)/2.5 (2°C)	5.4 (−10°C)/2.9 (2°C)
		at bivalent temperature	kW	4.6 (−10°C)/2.5 (2°C)	6.7 (−10°C)/3.7 (2°C)	1.9 (−10°C)/1.1 (2°C)	2.4 (−10°C)/1.3 (2°C)	3.8 (−10°C)/2.1 (2°C)	4.6 (−10°C)/2.5 (2°C)	5.4 (−10°C)/2.9 (2°C)
		at operation limit temperature	kW	3.7 (−15°C)/3.7 (−15°C)	5.4 (−15°C)/5.4 (−15°C)	1.9 (−10°C)/1.9 (−10°C)	2.4 (−10°C)/2.4 (−10°C)	3.8 (−10°C)/3.8 (−10°C)	4.6 (−10°C)/4.6 (−10°C)	5.4 (−10°C)/5.4 (−10°C)
	Back up heating capacity		kW	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)	0.0 (−10°C)/0.0 (2°C)

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

S

SERIES

SELECTION

Series line-up consists of two types of indoor units.
Choose the model that best matches room conditions.

STEP 1 SELECT INDOOR UNIT

Select the optimal unit and capacity required to match room construction and air conditioning requirements.

GOOD DESIGN

Units without Remote Controller

SLZ-KF25VA2
SLZ-KF35VA2
SLZ-KF50VA2
SLZ-KF60VA2

*Requires PAR-32MAA or PAC-YT52CRA
or PAR-SL97A-E remote controller.

Grilles

SLP-2FA (only panel)
SLP-2FAL (with Signal Receiver)
SLP-2FAE (with 3D i-see Sensor)
SLP-2FALE (with 3D i-see Sensor and Signal Receiver)
SLP-2FALM (with Wireless Remote Controller)

Units without Remote Controller

SEZ-KD25VAQ
SEZ-KD35VAQ
SEZ-KD50VAQ
SEZ-KD60VAQ
SEZ-KD71VAQ

*Requires PAR-32MAA or PAC-YT52CRA remote controller.

Units with Wireless Remote Controller

SEZ-KD25VAL
SEZ-KD35VAL
SEZ-KD50VAL
SEZ-KD60VAL
SEZ-KD71VAL

STEP 2 SELECT OUTDOOR UNIT

There is one outdoor unit for respective indoor units.

SUZ-KA25/35VA5

SUZ-KA50/60/71VA5

✻To confirm compatibility with the MXZ Series multi-type system, refer to the MXZ Series page.

SLZ SERIES

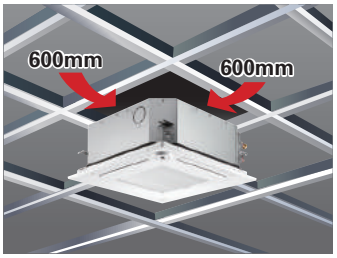
Compact, lightweight ceiling cassette units with 4-way air outlets prc
maximum comfort by evenly distributing airflow throughout the entire room.

SLZ-KF25/35/50/60VA2

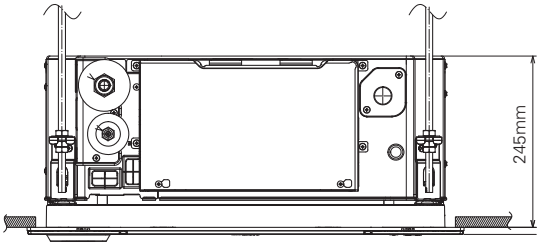
GOOD DESIGN

New design

The straight-line form introduced has resulted in a beautiful square design.
Its high affinity ensures the ability to blend in seamlessly with any interior.
The indoor unit is an ideal match for office or store use.
Of course, design matched 2×2 (600mm*600mm) ceiling construction specifications.



The height above ceiling of 245mm



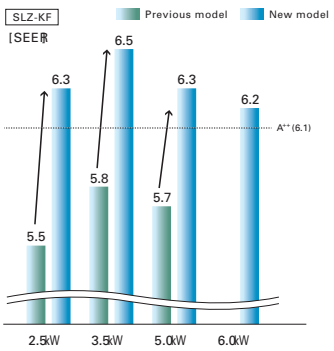
The height above ceiling of 245mm enables fitting into narrow ceiling space. Installation is simple, even when the ceiling spaces are narrow to make the ceilings higher.
Of course, in addition to our products, replacing competitors' product is simplified too.

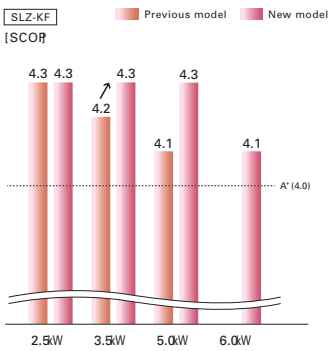
Lineup

	25	35	50	60
SLZ-KA	●	●	●	
SLZ-KF	●	●	●	●

6.0kW has been introduced to expand the lineup. The diverse selection enables the best solution for both customer and location.

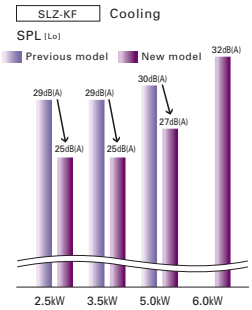
Energy-saving Performance





The energy-saving performance increased approximately 10%, achleving a SEER rating of ~~A~~

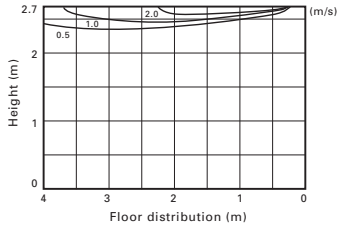
Quietness



The sound level has been reduced by 2-4dB thanks to the introduction of a 3D turbo fan, for quieter and more comfortable air conditioning.

Horizontal Airflow

[Airflow distribution]*
SLZ-KF60VA.TH
Flow angle,cooling at 20°C (ceiling height 2.7m)



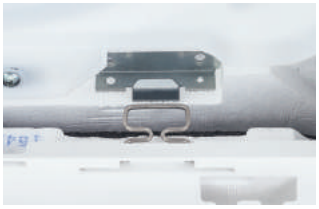
*Vane angle: Horizontal

The new airflow control completely eliminates that uncomfortable drafty-feeling with the introduction of a horizontal airflow that spreads across the ceiling. The ideal airflow for offices and restaurants.

Easy installation

Temporary hanging hook

The structure of the panel has been revised and is now equipped with a temporary hanging hook. This has improved work efficiency during temporary panel installation.



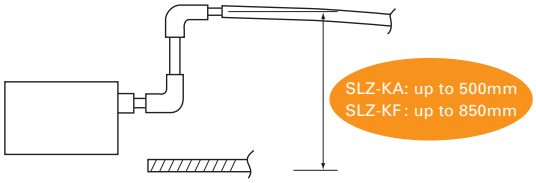
No need to remove screws

Installation is possible without removing the screws for control box simply loosen them. This eliminates the risk of losing screws.

■ Corner panel

■ Control box cover

Drain lift



As the result of using a larger drain pan, the maximum drain lifting height has been increased from 500mm to 850mm, greatly enhancing construction flexibility compared to the existing model.

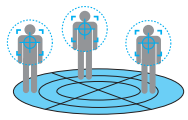
3D i-see Sensor for S SERIES

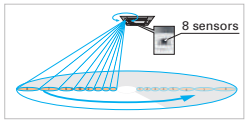
Detects number of people

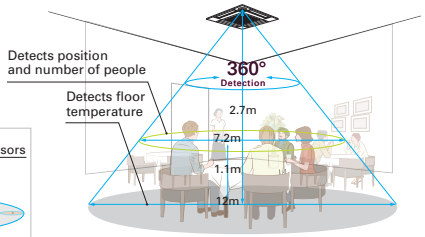
3D i-see Sensor detects the number of people in the room and sets the air-conditioning power accordingly. This make automatic power-saving operation possible in places where the number of people entering and exiting is large. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced power-saving mode. Depending on the setting, it will save additional capacity or stop operation altogether.

Detects people's position

Once the position of a person is detected, the duct angle of the vane is automatically adjusted in that direction. Each vane can be independently set to "block wind" or "not block wind" according to taste.







Detects number of people

Room occupancy energy-saving mode

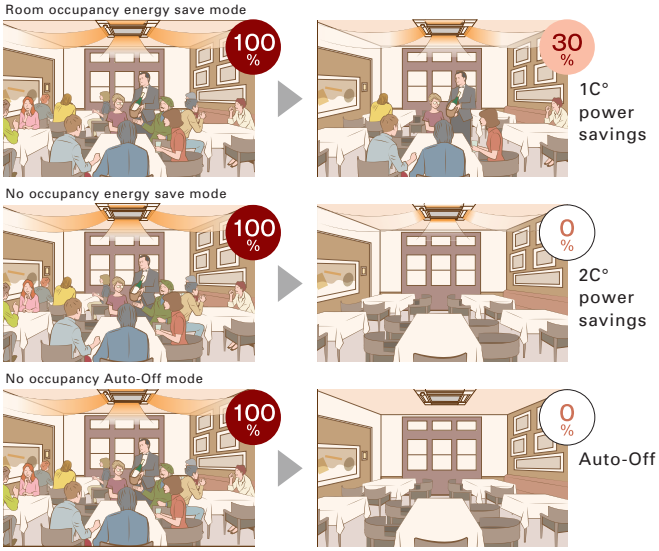
The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time in order to save air-conditioning power. When the occupancy rate is approximately 30%, air-conditioning power equivalent to 1°C during both cooling and heating operation is saved. The temperature is controlled according to the number of people.

No occupancy energy-saving mode

When 3D i-see Sensor detects that no one is the room, the system is switched to a pre-set power-saving mode. If the room remains unoccupied for more than 60min, air-conditioning power equivalent to 2°C during both cooling and heating operation is saved. This contributes to preventing waste in terms of heating and cooling.

No occupancy Auto-OFF mode

When the room remains unoccupied for a pre-set period of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10min, ranging from 60 to 180 min.

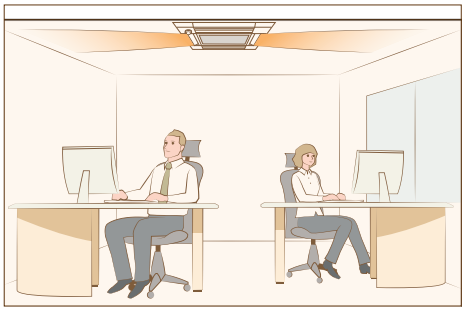


*PAR-32MAA is required for each setting

Detects people's position

Direct/Indirect settings*

Some people do not like the feel of wind, some want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, it is possible to choose to block or not block the wind for each vane.

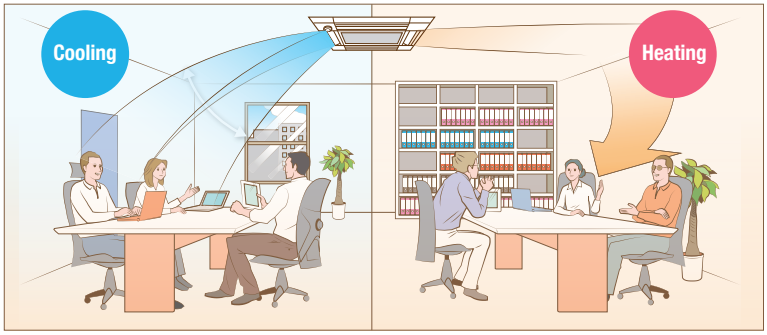


*PAR-32MAA is required for each setting.

Seasonal airflow*

<When cooling>
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.

<When heating>
The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.



*PAR-32MAA is required for each setting.

SLZ-KF SERIES

DC Inverter · Joint Lap · Rare Earth Magnet · DC Fan Motor · PAM · Grooved Piping · Heat Caulking Fixing Method

Indoor Unit

GOOD DESIGN

SLZ-KF25/35/50/60VA

Grilles

SLP-2FA (only panel)
SLP-2FAL (with signal receiver)
SLP-2FAE (with 3D i-see Sensor)
SLP-2FALE (with signal receiver and 3D i-see Sensor)
SLP-2FALM (with Wireless Remote Controller)

Outdoor Unit

SUZ-KA25/35VA5

SUZ-KA50/60VA

Remote Controller

*optional

*optional

*optional

Pure White · AUTO VANE · Fresh-air Intake · Long Life · VA Check! · SWING · ACO · Auto Restart · Low Temp Cooling · Optional · Group Control · Optional · M-NET connection · Optional · Wi-Fi Interface · Optional · MXZ connection · Drain Lift Up · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump			
Indoor Unit				SLZ-KF25VA2	SLZ-KF35VA2	SLZ-KF50VA2	SLZ-KF60VA2
Outdoor Unit				SUZ-KA25VA5	SUZ-KA35VA5	SUZ-KA50VA5	SUZ-KA60VA5
Refrigerant				R410A*1			
Power Supply	**Source**			Outdoor power supply			
	Outdoor (V/Phase/Hz)			230 / Single / 50			
Cooling	**Capacity**	Rated	kW	2.6	3.5	4.6	5.6
		Min - Max	kW	1.5 - 3.2	1.4 - 3.9	2.3 - 5.2	2.3 - 6.5
	Total Input	Rated	kW	0.684	0.972	1.394	1.767
	Design Load		kW	2.6	3.5	4.6	5.6
	Annual Electricity Consumption*2		kWh/a	144	188	256	316
	SEER			6.3	6.5	6.3	6.2
		Energy Efficiency Class		A++	A++	A++	A++
Heating (Average Season)	**Capacity**	Rated	kW	3.2	4.0	5.0	6.4
		Min - Max	kW	1.3 - 4.2	1.7 - 5.0	1.7 - 6.0	2.5 - 7.4
	Total Input	Rated	kW	0.886	1.108	1.558	2.278
	Design Load		kW	2.2	2.6	3.6	4.6
	Declared Capacity	at reference design temperature	kW	2.0 (–10°C)	2.3 (–10°C)	3.2 (–10°C)	4.0 (–10°C)
		at bivalent temperature	kW	2.0 (–7°C)	2.3 (–7°C)	3.2 (–7°C)	4.0 (–7°C)
		at operation limit temperature	kW	2.0 (–10°C)	2.3 (–10°C)	3.2 (–10°C)	4.0 (–10°C)
	Back Up Heating Capacity		kW	0.2	0.3	0.4	0.4
	Annual Electricity Consumption*2		kWh/a	716	845	1172	1572
	SCOP			4.3	4.3	4.3	4.1
		Energy Efficiency Class		A+	A+	A+	A+
Operating Current (max)			A	7.2	8.4	12.3	14.4
Indoor Unit	**Input**	Rated	kW	0.02	0.02	0.03	0.04
	Operating Current (max)		A	0.20	0.24	0.32	0.43
	Dimensions <Panel>	H × W × D	mm	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>
	Weight <Panel>		kg	15 <3>	15 <3>	15 <3>	15 <3>
	Air Volume [Lo-Mid-Hi]		m^3/min	6.5 - 7.5 - 8.5	6.5 - 8.0 - 9.5	7.0 - 9.0 - 11.5	7.5 - 11.5 - 13.0
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	25 - 28 - 31	25 - 30 - 34	27 - 34 - 39	32 - 40 - 43
	Sound Level (PWL)		dB(A)	48	51	56	60
Outdoor Unit	**Dimensions**	H × W × D	mm	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330	880 - 840 - 330
	Weight		kg	30	35	54	50
	Air Volume	Cooling	m^3/min	32.6	36.3	44.6	40.9
		Heating	m^3/min	34.7	34.8	44.6	49.2
	Sound Level (SPL)	Cooling	dB(A)	47	49	52	55
		Heating	dB(A)	48	50	52	55
	Sound Level (PWL)	Cooling	dB(A)	58	62	65	65
	Operating Current (max)		A	7.0	8.2	12.0	14.0
	Breaker Size		A	10	10	20	20
Ext. Piping	**Diameter**	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88
	Max. Length	Out-In	m	20	20	30	30
	Max. Height	Out-In	m	12	12	30	30
Guaranteed Operating Range [Outdoor]		Cooling	°C	–10 ~ +46	–10 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–10 ~ +24	–10 ~ +24	–10 ~ +24	–10 ~ +24

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

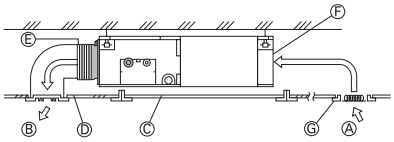
SEZ SERIES

This concealed ceiling-mounted indoor unit series is compact, and fits easily into rooms with lowered ceilings. Highly reliable energy-saving performance makes it a best match choice for concealed unit installations.

SEZ-KD25-71VAQ/VAL

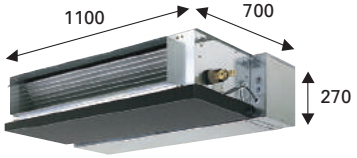
Compact Ceiling-concealed Units

Only the intake-air grille and outlet vents are visible when using this ceiling-concealed indoor unit. The rest of the unit is conveniently hidden in the ceiling cavity, essentially leaving the ceiling and walls free of bulky looking devices and maintaining a high-class interior décor. The compact units require minimal space and can be installed in buildings with lowered ceilings, where exposed units were the rule in the past.



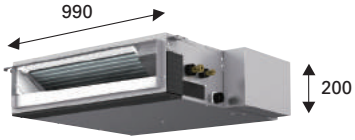
Ⓐ Air inlet
Ⓑ Air outlet
Ⓒ Access door
Ⓓ Ceiling surface
Ⓔ Canvas duct
Ⓕ Air filter
Ⓖ Inlet grille

Dimension Comparison



SEZ-KA35VA

Width reduced by **110mm**



Height reduced by **70mm**

SEZ-KD35VAQ

Increased Selection of Fan Speeds and Static Pressure Levels

DC fan motor settings have been increased to accommodate more application needs. Three fan speed settings (Low, Medium and High) and four static pressure levels (5, 15, 35 and 50Pa) are now available.

	External Static Pressure
SEZ-KC25VA	5 Pa
SEZ-KA35-71VA	30/50 Pa
SEZ-KD25-71VA	5/15/35/50 Pa

Four Levels Available for All Models

We've lowered the minimum static pressure level, resulting in less room noise when the optimum static pressure is selected.

	SPL (Low Fan Mode)	
	SEZ-KA	SEZ-KD
External Static Pressure	30 Pa	15 Pa
35	30dB	23dB
50	31dB	30dB
60	32dB	30dB
71	32dB	30dB

Maximum noise reduced by 7dB

Drain Pump (Optional)

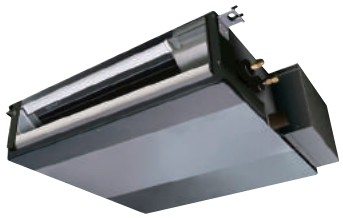
The PAC-KE07DM-E drain pump is now available as an option. With the pump, a drain hose length of up to 550mm can be used, adding to increased installation possibilities.

SEZ-KD SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | Joint Lap | DC Rotary | Rare Earth Magnet | DC Fan Motor | PAM | Grooved Piping | Heat Caulking Fixing Method

Indoor Unit



SEZ-KD25/35/50/60/71VAQ (Requires Wired Remote Controller)
SEZ-KD25/35/50/60/71VAL (Wireless Remote Controller is enclosed)

Outdoor Unit

SUZ-KA25/35VA5

SUZ-KA50/60/71VA5

Remote Controller

Enclosed in
SEZ-KD25/35/50/60/71VAL

*optional
(for SEZ-KD VAQ)

*optional
(for SEZ-KD VAQ)

AUTO | ACO | Auto Restart | Low Temp Cooling | VAQ Optional | Group Control Optional | M-NET connection Optional | Wi-Fi Interface Optional | MXZ connection | Drain Lift Up Optional | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump				
Indoor Unit				SEZ-KD25VAQ/VAL	SEZ-KD35VAQ/VAL	SEZ-KD50VAQ/VAL	SEZ-KD60VAQ/VAL	SEZ-KD71VAQ/VAL
Outdoor Unit				SUZ-KA25VA5	SUZ-KA35VA5	SUZ-KA50VA5	SUZ-KA60VA5	SUZ-KA71VA5
Refrigerant				R410A*1				
Power Supply	**Source**			Outdoor power supply				
	Outdoor (V/Phase/Hz)			230 / Single / 50				
Cooling	**Capacity**	Rated	kW	2.5	3.5	5.1	5.6	7.1
		Min - Max	kW	1.5 - 3.2	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.3
	Total Input	Rated	kW	0.730	1.010	1.580	1.740	2.210
	Design Load		kW	2.5	3.5	5.1	5.6	7.1
	Annual Electricity Consumption*2		kWh/a	168	219	313	376	477
	SEER*3			5.2	5.6	5.7	5.2	5.2
		Energy Efficiency Class		A	A+	A+	A	A
Heating (Average Season)	**Capacity**	Rated	kW	2.9	4.2	6.4	7.4	8.1
		Min - Max	kW	1.3 - 4.5	1.7 - 5.0	1.7 - 7.2	2.5 - 8.0	2.6 - 10.4
	Total Input	Rated	kW	0.803	1.130	1.800	2.200	2.268
	Design Load		kW	2.2	2.8	4.6	5.5	6.0
	Declared Capacity	at reference design temperature	kW	1.9 (–10°C)	2.5 (–10°C)	4.1 (–10°C)	4.5 (–10°C)	5.3 (–10°C)
		at bivalent temperature	kW	1.9 (–7°C)	2.5 (–7°C)	4.1 (–7°C)	4.8 (–7°C)	5.3 (–7°C)
		at operation limit temperature	kW	1.9 (–10°C)	2.5 (–10°C)	4.1 (–10°C)	4.5 (–10°C)	5.3 (–10°C)
	Back Up Heating Capacity		kW	0.3	0.3	0.5	1.0	0.7
	Annual Electricity Consumption*2		kWh/a	808	979	1653	1878	2202
	SCOP*3			3.8	4.0	3.9	4.1	3.8
		Energy Efficiency Class		A	A+	A	A+	A
Operating Current (max)			A	7.4	8.7	12.7	14.7	17.0
Indoor Unit	**Input**	Rated	kW	0.040	0.050	0.070	0.070	0.100
	Operating Current (max)		A	0.4	0.5	0.7	0.7	0.9
	Dimensions <Panel>	H × W × D	mm	200 - 790 - 700	200 - 990 - 700	200 - 990 - 700	200 - 1190 - 700	200 - 1190 - 700
	Weight <Panel>		kg	18	21	23	27	27
	Air Volume [Lo-Mid-Hi]		m^3/min	6 - 7 - 9	7 - 9 - 11	10 - 13 - 15	12 - 15 - 18	12 - 16 - 20
	External Static Pressure		Pa	5 / 15 / 35 / 50	5 / 15 / 35 / 50	5 / 15 / 35 / 50	5 / 15 / 35 / 50	5 / 15 / 35 / 50
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	22 - 25 - 29	23 - 28 - 33	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39
	Sound Level (PWL)		dB(A)	50	53	57	58	60
Outdoor Unit	**Dimensions**	H × W × D	mm	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330	880 - 840 - 330	880 - 840 - 330
	Weight		kg	30	35	54	50	53
	Air Volume	Cooling	m^3/min	32.6	36.3	44.6	40.9	50.1
		Heating	m^3/min	34.7	34.8	44.6	49.2	48.2
	Sound Level (SPL)	Cooling	dB(A)	47	49	52	55	55
		Heating	dB(A)	48	50	52	55	55
	Sound Level (PWL)	Cooling	dB(A)	58	62	65	65	69
	Operating Current (max)		A	7.0	8.2	12.0	14.0	16.1
	Breaker Size		A	10	10	20	20	20
Ext. Piping	**Diameter**	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	20	20	30	30	30
	Max. Height	Out-In	m	12	12	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling	°C	–10 ~ +46	–10 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–10 ~ +24	–10 ~ +24	–10 ~ +24	–10 ~ +24	–10 ~ +24

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 SEER/SCOP are measured at ESP 35Pa.

P

SERIES

SELECTION

Line-up includes a selection of eight indoor units and four series of outdoor units.
Easily construct a system that best matches room air conditioning needs.

STEP 1 SELECT INDOOR UNIT

Select the optimum indoor unit and capacity based on room size and shape.

4-way ceiling-cassette
PLA-ZRP BA
PLA-RP BA

Ceiling-concealed
PEAD-JA(L)Q

Floor-standing
PSA-KA

Ceiling-suspended
PCA-KAQ

Professional Kitchen
PCA-HAQ

Wall-mounted
PKA-HAL

Wall-mounted
PKA-KAL

Ceiling-concealed
PEA-GAQ

STEP 2 SELECT OUTDOOR UNIT

The best outdoor unit for the system depends on the combination of functions desired (e.g. energy savings, system capacity, long pipe length).
Check the specifications of the system you need, and then select the optimum outdoor unit series.

Power Inverter

PUHZ-ZRP100/125/140/200/250 PUHZ-ZRP60/71 PUHZ-ZRP35/50

Standard Inverter

PUHZ-P200/250 PUHZ-P125/140 PUHZ-P100 SUZ-KA50/60/71* SUZ-KA35*

* Some indoor units cannot be used with this unit.

To confirm compatibility with the MXZ Series, refer to the MXZ Series page.

STEP 3 SELECT COMBINATION

Choose the installation pattern for the indoor units. (In the case of a multi-system, distribution piping is necessary, so please select the necessary piping as well.)

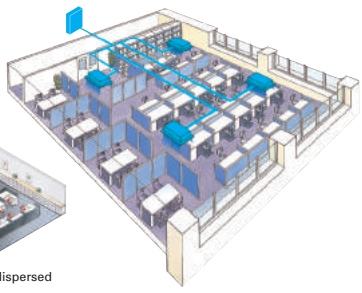
Single System

Simultaneous Multi-System

Twin Allows simultaneous operation of two indoor units on one floor.

Triple Can cover a large-scale space or dispersed installation on the same floor.

Quadruple Realises the optimum temperature distribution even in a large space.



Connectable Combinations for Inverter Units (PUHZ-ZRP / PUHZ-RP / PUHZ-P)

Outdoor Unit Capacity	Indoor Unit Capacity		
	Twin 50 : 50	Triple 33 : 33 : 33	Quadruple 25 : 25 : 25 : 25
71	35 × 2	—	—
100	50 × 2	—	—
125	60 × 2	—	—
140	71 × 2	50 × 3	—
200	100 × 2	60 × 3	50 × 4
250	125 × 2	71 × 3	60 × 4
Distribution Pipe	MSDD-50TR-E MSDD-50WR-E	MSDT-111R-E	MSDF-1111R-E

Notes: 1) Indoor unit combinations with floor-standing (PS) units and other types are impossible.
2) The distribution pipe listed is required for simultaneous multi-systems.

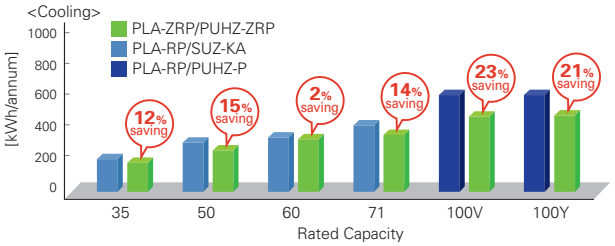
Power Inverter SERIES

Our new Power Inverter Series is designed to achieve industry-leading seasonal energy-efficiency through use of new technologies and high-performance compressor. Installation is now even easier thanks to outdoor units with a side-flow configuration, a maximum piping length of 120m and pipe-replacement technologies.

Industry-leading Energy Efficiency in New Seasonal Ratings

Industry-leading energy efficiency has been achieved through optimisation of a newly designed compressor and use of the latest energy-saving technologies. The new Power Inverter Series, designed to realise outstanding seasonal energy-efficiency, achieves high energy-efficiency rankings of A^{+} or A^{++} for both cooling and heating in most categories. Annual power consumption has been drastically reduced to realise savings in operating cost.

Annual electricity consumption comparison (PLA-ZRP/PUHZ-ZRP vs PLA-RP/PUHZ-RP)



✻ Results are based on our own simulations. Actual power consumption may vary depending on how and where the units are used.

Energy Rank (Cooling/Heating)

Series		35V	50V	60V	71V	100V
4-way ceiling cassette	PLA-ZRP BA	A^{++}/A^{++}	A^{++}/A^{++}	A^{++}/A^{+}	A^{++}/A^{+}	A^{++}/A^{++}
	PLA-RP BA	A^{++}/A^{+}	A^{+}/A^{+}	A^{+}/A	A^{++}/A^{+}	A^{++}/A^{+}
Wall-mounted	PKA-HAL/KAL	A^{+}/A	A/A^{+}	A^{++}/A^{+}	A^{++}/A^{+}	A^{++}/A^{+}
Ceiling-suspended	PCA-KAQ	A^{++}/A^{+}	A^{+}/A^{+}	A^{++}/A^{+}	A^{++}/A^{+}	A^{+}/A
	PCA-HAQ	–	–	–	A^{+}/A	–
Floor-standing	PSA-KA	–	–	–	A^{++}/A^{+}	A^{+}/A^{+}
Ceiling-concealed	PEAD-JAQ	A^{+}/A^{+}	A^{+}/A^{+}	A^{++}/A^{+}	A^{+}/A	A^{+}/A^{+}

✻ The ErP Directive (Lot 10) applies to air conditioners of rated capacity up to 12kW.

ADVANCED ENERGY-SAVING TECHNOLOGIES

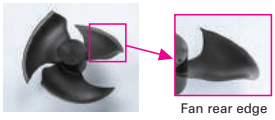
Highly efficient fan for outdoor unit

Fan opening of 550mm <100-250>

The opening for the fan in the outdoor unit is 550mm in diameter. By exchanging heat more efficiently, this will contribute to energy-saving and low noise level.

Improved fan <100–250>

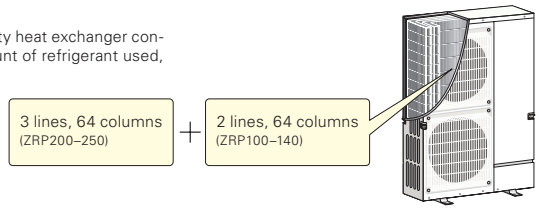
A newly designed fan has been adopted, increasing airflow capacity and reducing operation noise.



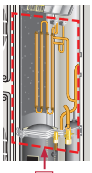
Highly efficient heat exchanger

High-density heat exchanger <100–250>

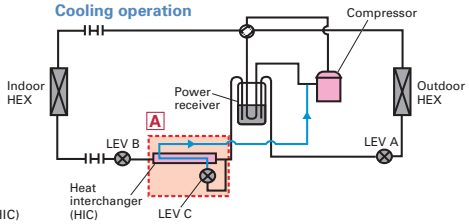
ZRP 100-250 use 7.94mm-diameter pipe. The high-density heat exchanger contributes to efficient heat exchange and reduces the amount of refrigerant used, which is better for the environment.



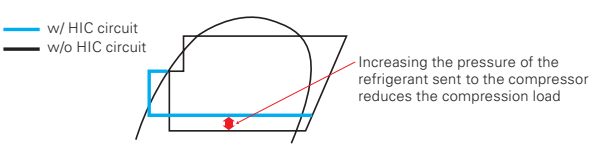
Heat Interchanger (HIC) Added <140>



Heat Interchanger (HIC)



A HIC circuit has been added to improve energy efficiency during cooling operation. Liquid refrigerant is rerouted, transformed into a gas state and injected back into the system to increase overall pressure of the refrigerant being sent to the compressor, thereby reducing the load on the compressor and raising efficiency.



Side-flow Outdoor Units

All operating capacities have been unified to the side-flow configuration. Even for locations requiring large capacities, the small footprint of these outdoor units enable them to be used anywhere.

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140/200/250

Twin Rotary Compressor (PUHZ-ZRP35/50/60/71)

Powerful yet high-efficiency rotary compressors that make use of Mitsubishi Electric technologies to achieve industry-leading energy efficiency under the new seasonal ratings. Annual power consumption has been significantly reduced compared to conventional units thanks to original Mitsubishi Electric technologies: "Poki-Poki Motors", "Heat Caulking Fixing Method, "Divisible Middle Plate" and "Flat Induction Pipe."

DC Scroll Compressor (PUHZ-ZRP100/125/140/200/250)

Our newly developed DC scroll compressor realises higher efficiency at partial load, which accounts for most of the operating time in both cooling and heating modes. The asymmetrically shaped scroll contributes to higher SEER and SCOP values and greatly reduces the annual power consumption. Compression efficiency is also improved through optimised compression and reduction of refrigerant pressure loss.

3-phase Power-supply Inverter (100–250)

Incorporation of a 3-phase power-supply realises a dramatic reduction in operating current. This special technology is equipped in outdoor units to ensure compliance with electromagnetic compatibility regulations in Europe.

Operating current comparison (for combinations using 4-way ceiling cassettes)

Power Supply		PUHZ-ZRP100YKA2	PUHZ-ZRP125YKA2	PUHZ-ZRP140YKA2
3-phase	Max.	8.7	10.3	12.1
	Breaker size	16	16	16
Power Supply		PUHZ-ZRP100VKA2	PUHZ-ZRP125VKA2	PUHZ-ZRP140VKA2
1-phase	Max.	27.2	27.3	29.1
	Breaker size	32	32	40

Long Pipe Length

The maximum piping length is 100m*, enabling wide-ranging layout possibilities for unit installation.

Model	Max. Pipe Length	Max. Height Difference
PUHZ-ZRP35/50	50m	30m
PUHZ-ZRP60/71	50m	30m
PUHZ-ZRP100/125/140	75m	30m
PUHZ-ZRP200/250	100m	30m

When the total control/power cable length exceeds 80m, separate power sources are required for the indoor and outdoor units. (An optional power-supply terminal kit is needed for indoor units with no power-supply terminal block.)
*PUHZ-ZRP200/250 only

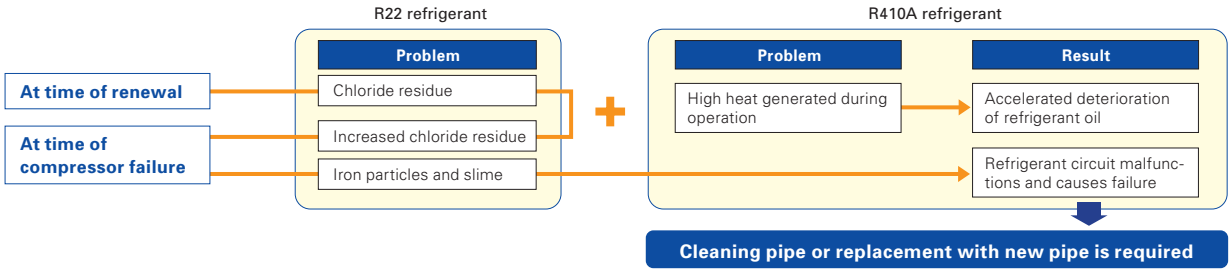
Cleaning-free Pipe Reuse Technology

Ability to use existing piping reduces pipe waste and replacement time

No Need to Clean at the Time of System Renewal*

Chloride residue builds up in existing pipes and becomes a source of trouble. In addition, the iron particles and slime produced as a result of compressor failure lead to problems. To counter this, various original Mitsubishi Electric technologies have been combined to enable the introduction of "cleaning-free pipe reuse."

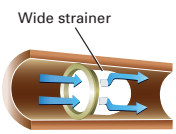
Why can't existing piping be used?



Mitsubishi Electric's Original Replacement Technologies

Countermeasure for Problem 1

Technology 1
Original High-quality Filtration
Our original high-quality filtration device called the "wide strainer" is equipped inside the refrigerant inlet and outlet pipe. The "wide strainer" traps iron particles and realises cleaning-free pipe reuse. In addition, improvements to the metal used in the bearings of our new scroll compressors realise more robust units.



Countermeasure for Problem 2

Technology 2
Friction Reduction (moving parts in compressor)
Friction inside the compressor is reduced by using an original Mitsubishi Electric technology called the "Heat Caulking Fixing Method" or coating the edge of the blade in the scroll compressor, thereby suppressing the increase in temperature that causes refrigerant oil deterioration.

Existing piping can be used without cleaning

***Cautions when using existing piping**
- When removing an old air conditioning unit, please make sure to perform the pump-down process and recover the refrigerant and refrigerant oil.
- Check to ensure that the piping diameter and thickness match Mitsubishi Electric specifications.
- Check to ensure that the flare is compatible with R410A.

PLA-ZRP35/50/60/71/100/125/140BA
PLA-RP35/50/60/71/100/125/140BA

PLA SERIES

A complete line-up including deluxe units that offer added energy savings. The incorporation of wide air-outlet and the "i-see Sensor" enhances airflow distribution control, achieving an enhanced level of comfort throughout the room. The synergy of higher energy efficiency and more comfortable room environment results in the utmost user satisfaction.

Deluxe 4-way Cassette Line-up

For users seeking even further energy-savings, Mitsubishi Electric offers complete deluxe units (PLA-ZRP) for the complete line-up of models in this series from 35–140. Compared to the standard models (PLA-RP), deluxe models provide additional energy-savings, contributing to a significant reduction in electricity costs.

■**Line-up**

Series \ Model	35	50	60	71	100	125	140
Deluxe 4-way Cassette (PLA-ZRP)	● PLA-ZRP35BA	● PLA-ZRP50BA	● PLA-ZRP60BA	● PLA-ZRP71BA	● PLA-ZRP100BA	● PLA-ZRP125BA	● PLA-ZRP140BA
Standard 4-way Cassette (PLA-RP)	● PLA-RP35BA	● PLA-RP50BA	● PLA-RP60BA	● PLA-RP71BA	● PLA-RP100BA	● PLA-RP125BA	● PLA-RP140BA2

■**Key Technologies for Higher Energy Efficiency**

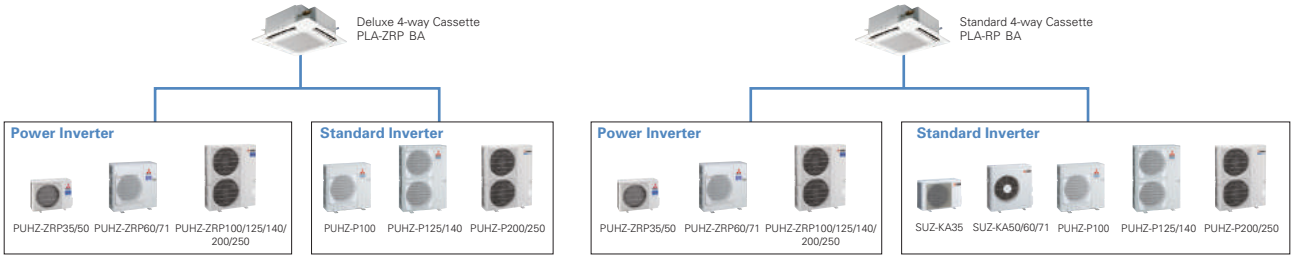
New Heat Exchanger Design

Heat exchanger fin size and pitch have been changed, raising energy efficiency.

Pre-grooved Piping

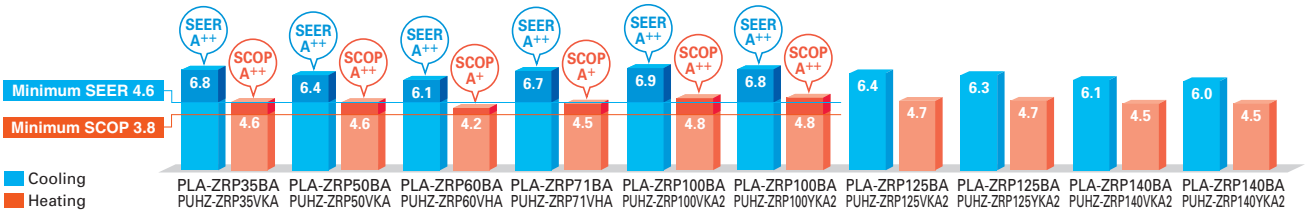
High-performance pre-grooved piping is utilised, increasing the heat exchange area.

■**Indoor/Outdoor Unit Combinations**



"Rank A++/A+" Energy Savings Achieved for Deluxe 4-way Cassette

Our new deluxe 4-way cassette indoor units combined with newly designed Power Inverter outdoor units (PUHZ-ZRP) achieve industry-leading seasonal efficiency for both cooling and heating: all rank A++ for cooling and A+ or higher for heating.



✻ For products with capacity over 10.0kW, SEER/SCOP values are measured based on EN14825. These values are for reference purposes only.

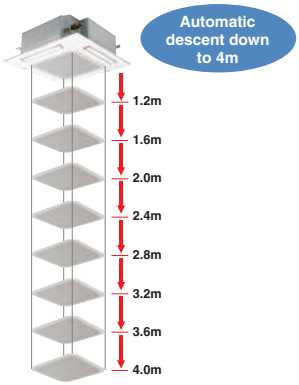
Automatic Grille Lowering Function (PLP-6BAJ)

An automatic grille lowering function is available for easy filter maintenance. Special wired and wireless remote controllers can be used to lower the grille for maintenance.

The grille can be lowered a maximum of 4m from the ceiling in 8 steps, thus enabling easy cleaning of the air filter. Cleaning of the filter is an important factor for saving energy.

Grille Elevation Remote Controller
(comes with the automatic elevation panel)

Wired Remote Controller



Optimum Airflow

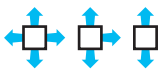
Individual Vane Settings

Optimum airflow settings provide maximum comfort throughout the room.

In addition to the selection of variable airflow patterns (i.e., 2-, 3- or 4-way), this function allows the independent selection of vertical airflow levels for each vane, thereby maintaining a comfortable room environment with even temperature distribution.

2-, 3-, 4-way airflow pattern selection

*Optional shuffle placement is required for 2- and 3-way patterns.



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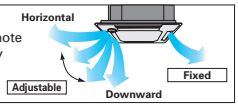
Airflow direction at each vane can be set using the wired remote controller. This function is only available when indoor unit connects with PUHZ series.



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72 airflow patterns

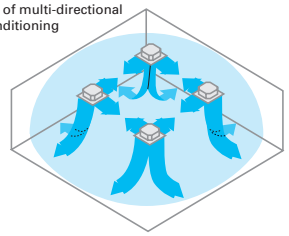
Wide Airflow

Wide-angle outlets distribute airflow to all corners of the room.

The outlets are larger than those of previous models and the shape has been improved for better wide-angle ventilation.

Previous model

Image of multi-directional air conditioning



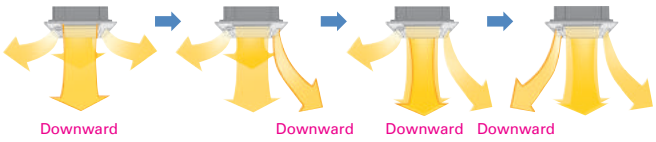
Individual Vane Setting + **Wide Airflow**

The combination of individual vane setting, which enables the optimal outlet setting for each room layout, and the wide airflow function works to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.

Wave Airflow – Thoroughly warming all corners of the room!

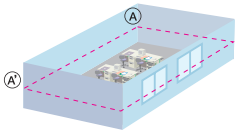
Wave Airflow Operation

"Wave Airflow" is essentially the advanced control of the vanes directing the airflow from the unit. Blown-air is repeated dispersed from the unit in horizontal and downward directions at time-lagged intervals to provide uniform heating throughout the room.

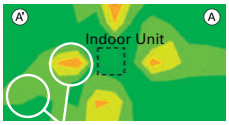


✻ Wave Airflow is possible only when using the heating mode

Thermograph of Wave Control Effect



Horizontal Airflow



Temperature gap
Uneven temperature distribution

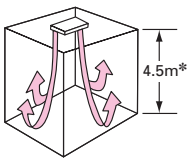
Wave Airflow

Temperature gap is minimized.
Warm air is supplied throughout the room, minimizing uneven temperature distribution.

Temperature distribution comparison approximately 20min after turning on a PLA-RP71BA 4-Way ceiling cassette. The measurement point for comparison is a plane 1.2m above the floor.

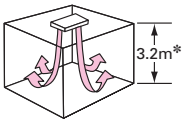
Equipped with High- and Low-ceiling Modes

Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match room height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.

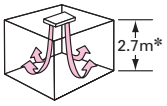


4-way airflow with high-ceiling setting

✻ 100-140 class



4-way airflow with standard setting



4-way airflow with low-ceiling setting

■ Airflow Range

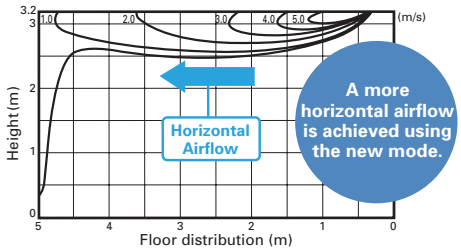
Model / Airflow pattern	35-71 class			100-140 class		
	High-ceiling setting	Standard setting	Low-ceiling setting	High-ceiling setting	Standard setting	Low-ceiling setting
4-Way	3.5m	2.7m	2.5m	4.5m	3.2m	2.7m
3-Way	3.5m	3.0m	2.7m	4.5m	3.6m	3.0m
2-Way	3.5m	3.3m	3.0m	4.5m	4.0m	3.3m

Horizontal Airflow

A "Horizontal Airflow" function has been added to reduce drafty-feeling distribution. Horizontal Airflow prevents cold drafts from striking the body directly, thereby keeping the body from becoming over-chilled.

[Airflow Distribution]

PLA-RP125BA
Flow angle, cooling at 20°C (ceiling height 3.2m)



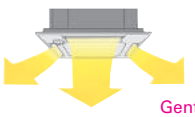
✻ Smudge spots on the ceiling may form where the airflow is not evenly distributed.

Automatic Air-speed Adjustment

An automatic air-speed mode that adjusts airflow speed automatically is adopted to maintain comfortable room conditions at all times. This setting automatically adjusts the air-speed to conditions that match the room environment.

At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool the room.

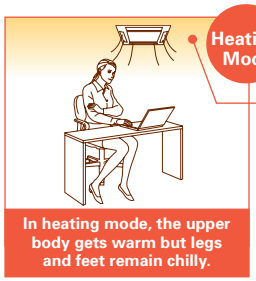
When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable comfortable heating/cooling operation.



DOES HAVING COLD FEET BOTHER YOU?

The "i-see Sensor" is the answer to your problems!

i-see Sensor



In heating mode, the upper body gets warm but legs and feet remain chilly.

Even though the temperature on the remote controller is at a preset temperature, the temperature at floor level remains cold. As a result, there's no feeling of getting warmer.

When cooling, the legs and feet get too cold, chilling the entire body.

At the beginning of operation, the room is nice and cool; but before long the temperature at floor level drops, causing the feeling of being too cold.

"i-see Sensor" temperature-sensing technology improves energy efficiency and enhances room comfort

The "i-see Sensor" is an innovative Mitsubishi Electric technology that uses a radiation-based sensor to monitor temperature throughout an entire room. When connected to the air conditioner control panel, i-see Sensor works to maximize room comfort.

■ i-see Sensor Panel

PLP-6BAE

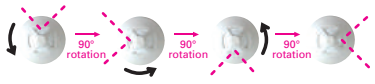
or

■ Corner Panel Only (Option)

PAC-SA1 ME-E

■ i-see Sensor Operation

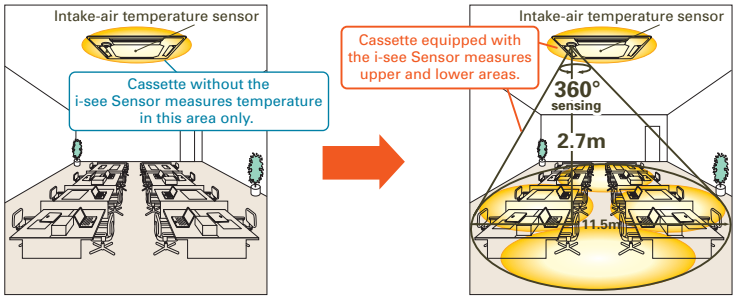
The i-see Sensor rotates 90° at intervals of 5 sec, accurately measuring the temperature throughout the room (covering entire floor space).



A comfortable room environment cannot be maintained by monitoring only the temperature at the ceiling.

Without "i-see Sensor"

Only intake-air temperature at the ceiling was measured, tending to overlook uneven temperature distribution at floor level.

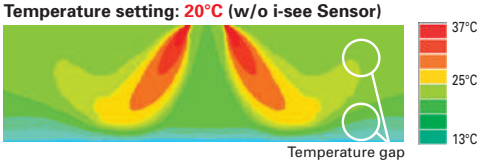


Equipped with 4-Way Ceiling "i-see Sensor"

Both the floor temperature and intake-air temperature are measured to provide operation that creates a comfortable room environment from ceiling to floor.

In Heating Mode — When you want the temperature felt to be 20°

Temperature setting: 20°C (w/o i-see Sensor)

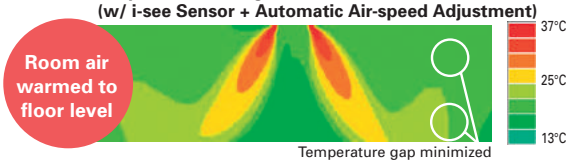


Temperature felt: 17°C (floor level 14°C)

Warm air rises to the ceiling. This causes poor heating at floor level, leaving legs and feet feeling cold.

Temperature setting: 20°C (w/ i-see Sensor + Automatic Air-speed Adjustment)

Room air warmed to floor level



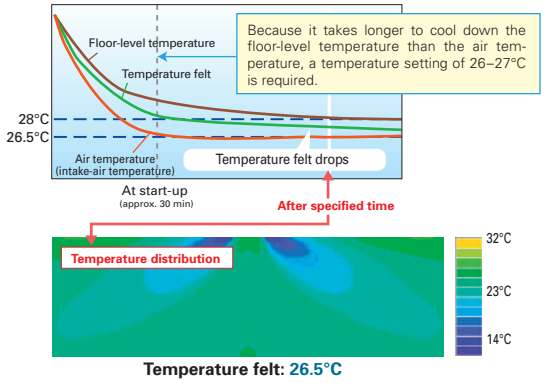
Temperature felt: 20°C (floor level 20°C)

The i-see Sensor detects the temperature at the floor while the Automatic Air-speed Adjustment eliminates uneven temperature distribution by thoroughly warming the air down to the floor.

In Cooling Mode — When you want the temperature felt to be 28°C

Comfortable without excess chilliness

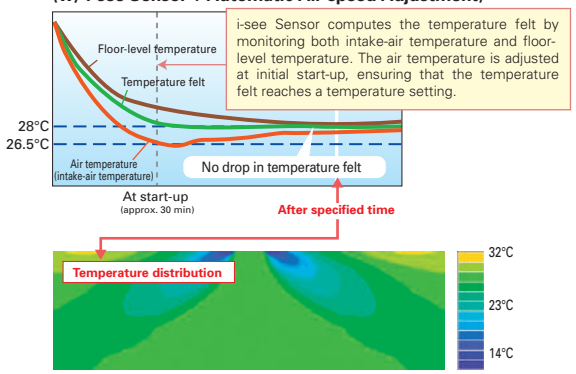
Temperature setting: 26–27°C (w/o i-see Sensor)



Temperature felt: 26.5°C

The temperature felt drops according to the drop in floor-level temperature. If the floor-level temperature is not monitored during long cooling operation, the temperature felt becomes chilly.

Temperature setting: 28°C (w/ i-see Sensor + Automatic Air-speed Adjustment)



Temperature Felt: 28°C

Air temperature is adjusted according to the floor temperature to keep the temperature felt at 28°C.

SERIES SELECTION

Power Inverter Series

Indoor Unit

PLA-ZRP35/50/60/71/100/125/140BA

Standard Panel
PLP-6BA (only Panel)
PLP-6BALM (with wireless remote controller)

Automatic Filter Elevation Panel
PLP-6BAJ (only Panel)

Standard Panel with "i-see Sensor"
PLP-6BAE (only Panel)
PLP-6BALME (with wireless remote controller)

Outdoor Unit

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140

For Multi
(Twin/Triple/Quadruple)

PUHZ-ZRP71

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional

Optional

✻ Enclosed in PLP-6BALM/PLP-6BALME

Standard Inverter Series

Indoor Unit

PLA-RP35/50/60/71/100/125/140BA

Standard Panel
PLP-6BA (only Panel)
PLP-6BALM (with wireless remote controller)

Automatic Filter Elevation Panel
PLP-6BAJ (only Panel)

Standard Panel with "i-see Sensor"
PLP-6BAE (only Panel)
PLP-6BALME (with wireless remote controller)

Outdoor Unit

For Single

SUZ-KA35

SUZ-KA50/60/71

PUHZ-P100

PUHZ-P125/140

For Multi (Twin/Triple/Quadruple)

PUHZ-P100

PUHZ-P125/140

PUHZ-P200/250

Remote Controller

Optional

Optional

✻ Enclosed in PLP-6BALM/PLP-6BALME

PLZ-ZRP/RP BA Indoor Unit Combinations

Indoor unit combinations shown below are possible.

Indoor Unit Combination		Outdoor Unit Capacity																			
		For Single									For Twin						For Triple			For Quadruple	
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR-E				MSDD-50WR-E		MSDT-111R-E			MSDF-1111R-E	
Standard Inverter (PUHZ-P & SUZ)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	–	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E			MSDD-50WR-E		MSDT-111R-E			MSDF-1111R-E	

PLZ-RP SERIES

POWER INVERTER

EUROVENT CERTIFIED PERFORMANCE

Type				Inverter Heat Pump									
Indoor Unit				PLA-ZRP35BA	PLA-ZRP50BA	PLA-ZRP60BA	PLA-ZRP71BA	PLA-ZRP100BA		PLA-ZRP125BA		PLA-ZRP140BA	
Outdoor Unit				PUHZ-ZRP35VKA	PUHZ-ZRP50VKA	PUHZ-ZRP60VHA	PUHZ-ZRP71VHA	PUHZ-ZRP100VKA2	PUHZ-ZRP100YKA2	PUHZ-ZRP125VKA2	PUHZ-ZRP125YKA2	PUHZ-ZRP140VKA2	PUHZ-ZRP140YKA2
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VKA・VKA2・VHA:230 / Single / 50, YKA2:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.79	1.43	1.78	1.77	2.16	2.16	3.87	3.87	4.37	4.37
	EER			–	–	–	–	–	–	3.23	3.23	3.07	3.07
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
	Annual Electricity Consumption*2		kWh/a	185	272	350	370	484	493	685	695	770	781
	SEER			6.8	6.4	6.1	6.7	6.9	6.8	6.4	6.3	6.1*4	6.0*4
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.6 - 5.2	2.5 - 7.3	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	0.86	1.57	2.04	1.99	2.60	2.60	3.67	3.67	4.70	4.70
	COP			–	–	–	–	–	–	3.81	3.81	3.40	3.40
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.4	3.8	4.4	4.7	7.8	7.8	9.3	9.3	10.6	10.6
	Declared Capacity	at reference design temperature	kW	2.4 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at bivalent temperature	kW	2.4 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at operation limit temperature	kW	2.2 (–11°C)	3.7 (–11°C)	2.8 (–20°C)	3.5 (–20°C)	5.8 (–20°C)	5.8 (–20°C)	7.0 (–20°C)	7.0 (–20°C)	7.9 (–20°C)	7.9 (–20°C)
	Back Up Heating Capacity		kW	0	0	0	0	0	0	0	0	0	0
	Annual Electricity Consumption*2		kWh/a	729	1162	1462	1476	2275	2275	2778	2778	3324	3324
	SCOP			4.6	4.6	4.2	4.5	4.8	4.8	4.7*4	4.7*4	4.5*4	4.5*4
		Energy Efficiency Class		A++	A++	A+	A+	A++	A++	–	–	–	–
Operating Current (max)			A	13.3	13.3	19.3	19.5	27.2	8.7	27.3	10.3	29.1	14.1
Indoor Unit	Input	Rated	kW	0.04	0.04	0.04	0.05	0.08	0.08	0.09	0.09	0.12	0.12
	Operating Current (max)		A	0.28	0.30	0.30	0.45	0.74	0.74	0.80	0.80	1.07	1.07
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840 <35 - 950 - 950>				298 - 840 - 840 <35 - 950 - 950>					
	Weight <Panel>		kg	23 <6>	23 <6>	23 <6>	25 <6>	26 <6>	26 <6>	27 <6>	27 <6>	27 <6>	27 <6>
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	11-13-15-16	12-14-16-18	12-14-16-18	17-19-21-23	20-23-26-30	20-23-26-30	22-25-28-31	22-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	27-28-29-31	28-29-31-32	28-29-31-32	28-30-34-36	32-34-37-40	32-34-37-40	34-36-39-41	34-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	54	55	55	58	65	65	66	66	70	70
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	67	67	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
		Heating	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	48	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current (max)		A	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	75	75	75	75	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–11 ~ +21	–11 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PLZ-P SERIES

STANDARD INVERTER

EUROVENT CERTIFIED PERFORMANCE

Type				Inverter Heat Pump									
Indoor Unit				PLA-RP35BA	PLA-RP50BA	PLA-RP60BA	PLA-RP71BA	PLA-RP100BA		PLA-RP125BA		PLA-RP140BA2	
Outdoor Unit				SUZ-KA35VA5	SUZ-KA50VA5	SUZ-KA60VA5	SUZ-KA71VA5	PUHZ-P100VHA4	PUHZ-P100YHA2	PUHZ-P125VHA3	PUHZ-P125YHA	PUHZ-P140VHA3	PUHZ-P140YHA
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VA5・VHA3・VHA4:230 / Single / 50, YHA・YHA2:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.5	6.1	7.1	9.4	9.4	12.3	12.3	13.6	13.6
		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	4.9 - 11.2	4.9 - 11.2	5.5 - 14.0	5.5 - 14.0	5.5 - 15.0	5.5 - 15.0
	Total Input	Rated	kW	1.090	1.660	1.910	2.100	3.120	3.120	4.090	4.090	5.210	5.210
	EER			–	–	–	–	–	–	3.01	3.01	2.61	2.61
		EEL Rank		–	–	–	–	–	–	B	B	D	D
	Design Load		kW	3.6	5.5	6.1	7.1	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	210	321	355	429	628	628	–	–	–	–
	SEER			6.0	6.0	6.0	5.8	5.2	5.2	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A+	A	A	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.7 - 5.0	1.7 - 7.2	2.5 - 8.0	2.6 - 10.2	4.5 - 12.5	4.5 - 12.5	5.0 - 16.0	5.0 - 16.0	5.0 - 18.0	5.0 - 18.0
	Total Input	Rated	kW	1.040	1.750	2.060	2.247	3.280	3.280	4.110	4.110	4.980	4.980
	COP			–	–	–	–	–	–	3.41	3.41	3.21	3.21
		EEL Rank		–	–	–	–	–	–	B	B	C	C
	Design Load		kW	2.6	4.3	4.6	5.8	8.0	8.0	–	–	–	–
	Declared Capacity	at reference design temperature	kW	2.3 (–10°C)	3.8 (–10°C)	4.0 (–10°C)	4.7 (–10°C)	6.3 (–10°C)	6.3 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.3 (–7°C)	3.8 (–7°C)	4.1 (–7°C)	5.1 (–7°C)	7.1 (–7°C)	7.1 (–7°C)	–	–	–	–
		at operation limit temperature	kW	2.3 (–10°C)	3.8 (–10°C)	4.0 (–10°C)	4.7 (–10°C)	5.0 (–15°C)	5.0 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	0.3	0.5	0.6	1.1	1.7	1.7	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	867	1503	1562	1913	2945	2945	–	–	–	–
	SCOP			4.2	4.0	4.1	4.3	3.8	3.8	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A+	A	A	–	–	–	–
Operating Current (max)			A	8.4	12.4	14.4	16.6	28.9	13.9	29.0	14.0	30.5	14.0
Indoor Unit	Input	Rated	kW	0.03	0.05	0.05	0.07	0.14	0.14	0.15	0.15	0.15	0.15
	Operating Current (max)		A	0.22	0.36	0.36	0.51	0.94	0.94	1.00	1.00	1.00	1.00
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840 <35 - 950 - 950>				298 - 840 - 840 <35 - 950 - 950>					
	Weight <Panel>		kg	22 <6>	22 <6>	23 <6>	23 <6>	25 <6>	25 <6>	25 <6>	25 <6>	27 <6>	27 <6>
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	11-12-13-15	12-14-16-18	12-14-16-18	14-16-18-21	20-23-26-30	20-23-26-30	22-25-28-31	22-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	27-28-29-31	28-29-31-32	28-29-31-32	28-30-32-34	32-34-37-40	32-34-37-40	34-36-39-41	34-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	54	55	55	56	62	62	63	63	70	70
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 - 285		880 - 840 - 330		943 - 950 - 330 (+30)		1350 - 950 - 330 (+30)			
	Weight		kg	35	54	50	53	75	77	99	101	99	101
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	60.0	60.0	100.0	100.0	100.0	100.0
		Heating	m³/min	34.8	44.6	49.2	48.2	60.0	60.0	100.0	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	50	50	51	51	52	52
		Heating	dB(A)	50	52	55	55	54	54	55	55	56	56
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	71	71	73	73
	Operating Current (max)		A	8.2	12.0	14.0	16.1	28.0	13.0	28.0	13.0	29.5	13.0
	Breaker Size		A	10	20	20	20	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	20	30	30	30	50	50	50	50	50	50
	Max. Height	Out-In	m	12	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–10 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–10 ~ +24	–10 ~ +24	–10 ~ +24	–10 ~ +24	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PLZ-RP SERIES
POWER INVERTER

Type				Inverter Heat Pump									
Indoor Unit				PLA-RP35BA	PLA-RP50BA	PLA-RP60BA	PLA-RP71BA	PLA-RP100BA		PLA-RP125BA		PLA-RP140BA2	
Outdoor Unit				PUHZ-ZRP35VKA	PUHZ-ZRP50VKA	PUHZ-ZRP60VHA	PUHZ-ZRP71VHA	PUHZ-ZRP100VKA2	PUHZ-ZRP100YKA2	PUHZ-ZRP125VKA2	PUHZ-ZRP125YKA2	PUHZ-ZRP140VKA2	PUHZ-ZRP140YKA2
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VKA・VKA2・VHA:230 / Single / 50, YKA2:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.5	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.88	1.43	1.90	1.87	2.21	2.21	3.99	3.99	4.40	4.40
	EER			–	–	–	–	–	–	3.13	3.13	3.05	3.05
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.5	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
	Annual Electricity Consumption*2		kWh/a	189	311	371	387	511	522	875	886	849	860
	SEER			6.5	5.6	5.7	6.4	6.5	6.4	5.0*4	4.9*4	5.5*4	5.5*4
		Energy Efficiency Class		A++	A+	A+	A++	A++	A++	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.6 - 5.2	2.5 - 7.3	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	0.96	1.82	2.17	2.21	2.95	2.95	3.91	3.91	4.76	4.76
	COP			–	–	–	–	–	–	3.58	3.58	3.36	3.36
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.3	3.8	4.4	4.7	7.8	7.8	9.3	9.3	10.6	10.6
	Declared Capacity	at reference design temperature	kW	2.3 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at bivalent temperature	kW	2.3 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at operation limit temperature	kW	2.2 (–11°C)	3.7 (–11°C)	2.8 (–20°C)	3.5 (–20°C)	5.8 (–20°C)	5.8 (–20°C)	7.0 (–20°C)	7.0 (–20°C)	7.9 (–20°C)	7.9 (–20°C)
	Back Up Heating Capacity		kW	0	0	0	0	0	0	0	0	0	0
	Annual Electricity Consumption*2		kWh/a	750	1313	1576	1521	2511	2511	3304	3304	3746	3746
	SCOP			4.3	4.1	3.9	4.3	4.3	4.3	3.9*4	3.9*4	4.0*4	4.0*4
		Energy Efficiency Class		A+	A+	A	A+	A+	A+	–	–	–	–
Operating Current (max)			A	13.2	13.4	19.4	19.5	27.4	8.9	27.5	10.5	29.1	14.1
Indoor Unit	Input	Rated	kW	0.03	0.05	0.05	0.07	0.14	0.14	0.15	0.15	0.16	0.16
	Operating Current (max)		A	0.22	0.36	0.36	0.51	0.94	0.94	1.00	1.00	1.07	1.07
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840		<35 - 950 - 950>		298 - 840 - 840 <35 - 950 - 950>					
	Weight <Panel>		kg	22 <6>	22 <6>	23 <6>	23 <6>	25 <6>	25 <6>	25 <6>	25 <6>	27 <6>	27 <6>
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	11-12-13-15	12-14-16-18	12-14-16-18	14-16-18-21	20-23-26-30	20-23-26-30	22-25-28-31	22-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	27-28-29-31	28-29-31-32	28-29-31-32	28-30-32-34	32-34-37-40	32-34-37-40	34-36-39-41	34-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	54	55	55	56	62	62	63	63	70	70
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	67	67	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
		Heating	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	48	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current (max)		A	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	75	75	75	75	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–11 ~ +21	–11 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PLZ-P SERIES
STANDARD INVERTER

Type				Inverter Heat Pump					
Indoor Unit				PLA-ZRP100BA		PLA-ZRP125BA		PLA-ZRP140BA	
Outdoor Unit				PUHZ-P100VHA4	PUHZ-P100YHA2	PUHZ-P125VHA3	PUHZ-P125YHA	PUHZ-P140VHA3	PUHZ-P140YHA
Refrigerant				R410A*1					
Power Supply	Source			Outdoor power supply					
	Outdoor (V/Phase/Hz)			230 / Single / 50	400 / Three / 50	230 / Single / 50	400 / Three / 50	230 / Single / 50	400 / Three / 50
Cooling	Capacity	Rated	kW	9.4	9.4	12.3	12.3	13.6	13.6
		Min - Max	kW	4.9 - 11.2	4.9 - 11.2	5.5 - 14.0	5.5 - 14.0	5.5 - 15.0	5.5 - 15.0
	Total Input	Rated	kW	3.082	3.082	4.020	4.020	5.171	5.171
	EER			-	–	3.06	3.06	2.63	2.63
		EEL Rank		-	–	B	B	D	D
	Design Load		kW	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	610	610	–	–	–	–
	SEER			5.4	5.4	–	–	–	–
		Energy Efficiency Class		A	A	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	4.5 - 12.5	4.5 - 12.5	5.0 - 16.0	5.0 - 16.0	5.0 - 18.0	5.0 - 18.0
	Total Input	Rated	kW	3.137	3.137	3.989	3.989	4.938	4.938
	COP			–	–	3.51	3.51	3.24	3.24
		EEL Rank		–	–	B	B	C	C
	Design Load		kW	8.0	8.0	–	–	–	–
	Declared Capacity	at reference design temperature	kW	6.3 (–10°C)	6.3 (–10°C)	–	–	–	–
		at bivalent temperature	kW	7.1 (–7°C)	7.1 (–7°C)	–	–	–	–
		at operation limit temperature	kW	5.0 (–15°C)	5.0 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	1.7	1.7	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	2800	2800	–	–	–	–
	SCOP			4.0	4.0	–	–	–	–
		Energy Efficiency Class		A+	A+	–	–	–	–
Operating Current (max)			A	28.7	13.7	28.8	13.8	30.6	14.1
Indoor Unit	Input	Rated	kW	0.08	0.08	0.09	0.09	0.12	0.12
	Operating Current (max)		A	0.74	0.74	0.80	0.80	1.07	1.07
	Dimensions <Panel>	H × W × D	mm	298 - 840 - 840 <35 - 950 - 950>					
	Weight <Panel>		kg	26 <6>	26 <6>	27 <6>	27 <6>	27 <6>	27 <6>
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	20 - 23 - 26 - 30	20 - 23 - 26 - 30	22 - 25 - 28 - 31	22 - 25 - 28 - 31	24 - 26 - 29 - 32	24 - 26 - 29 - 32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	32 - 34 - 37 - 40	32 - 34 - 37 - 40	34 - 36 - 39 - 41	34 - 36 - 39 - 41	36 - 39 - 42 - 44	36 - 39 - 42 - 44
	Sound Level (PWL)		dB(A)	65	65	66	66	70	70
Outdoor Unit	Dimensions	H × W × D	mm	943 - 950 - 330 (+30)		1350 - 950 - 330 (+30)			
	Weight		kg	75	77	99	101	99	101
	Air Volume	Cooling	m³/min	60.0	60.0	100.0	100.0	100.0	100.0
		Heating	m³/min	60.0	60.0	100.0	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	50	50	51	51	52	52
		Heating	dB(A)	54	54	55	55	56	56
	Sound Level (PWL)	Cooling	dB(A)	70	70	71	71	73	73
	Operating Current (max)		A	28.0	13.0	28.0	13.0	29.5	13.0
	Breaker Size		A	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	50	50
	Max. Height	Out-In	m	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PEAD SERIES

PEAD-RP35/50/60/71/100/125/140JA(L)Q

The thin, ceiling-concealed indoor units of this series are the perfect answer for the air conditioning needs of buildings with minimum ceiling installation space and wide-ranging external static pressure. Energy-saving efficiency has been improved, reducing electricity consumption and contributing to a further reduction in operating cost.

Compact Indoor Units

The height of the models from 35–140 has been unified to 250mm. Compared to the previous PEAD-RP EA model, the height has been reduced by as much as 75mm (models 100–140), making installation in low ceilings with minimal clearance space possible.

PEAD-RP JA(L)Q

Reduction of **75mm** (models 100–140) compared to PEAD-EA

External Static Pressure

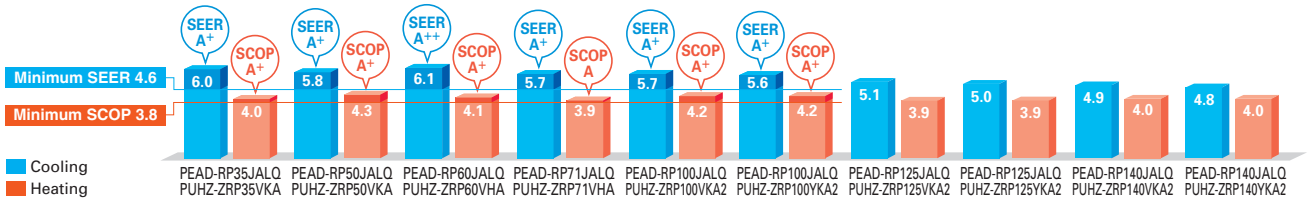
External static pressure conversion can be set up to five stages. Capable of being set to a maximum of 150Pa, units are applicable to a wide range of building types.

■ External static pressure setting

Series	35	50	60	71	100	125	140
PEAD-RP EA	30/70Pa			70/130 (with optional motor) Pa			
PEAD-RP GA	–	–	10/50/70Pa			–	–
PEAD-RP JA	**35/50/70/100/150Pa**						

ErP Lot 10-compliant, Achieving High Energy Efficiency of SEER/SCOP Rank A+ and A++

A direct-current (DC) fan motor is installed in the indoor unit, increasing the seasonal energy efficiency of the newly designed Power Inverter Series (PUHZ-ZRP) and resulting in compliance of the full-capacity models with ErP Lot 10 and energy rankings of A+/A++ for cooling and A/A+ for heating. This contributes to an impressive reduction in the cost of annual electricity.



✻ For products with capacity over 10.0kW, SEER/SCOP values are measured based on EN14825. These values are for reference purposes only.

Drain Pump Option Available with All Models

The line-up consists of two types, models with or without a built-in drain pump.

PEAD-RP JAQ → Drain pump built-in

PEAD-RP JALQ → No drain pump

✻ Units with an "L" included at the end of the model name are not equipped with a drain pump.

SERIES SELECTION

Power Inverter Series

Indoor Unit

PEAD-RP35/50/60/71/100/125/140

Outdoor Unit

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140

For Multi
(Twin/Triple/Quadruple)

PUHZ-ZRP71

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional

Optional

Optional

Standard Inverter Series

Indoor Unit

PEAD-RP35/50/60/71/100/125/140

Outdoor Unit

For Single

SUZ-KA35

SUZ-KA50/60/71

PUHZ-P100

PUHZ-P125/140

For Multi (Twin/Triple/Quadruple)

PUHZ-P100

PUHZ-P125/140

PUHZ-P200/250

Remote Controller

Optional

Optional

Optional

PEAD-RP JA Indoor Unit Combinations

Indoor unit combinations shown below are possible.

Indoor Unit Combination		Outdoor Unit Capacity																			
		For Single									For Twin						For Triple			For Quadruple	
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR-E				MSDD-50WR-E		MSDT-111R-E			MSDF-1111R-E	
Standard Inverter (PUHZ-P&SUZ)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	–	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E			MSDD-50WR-E		MSDT-111R-E			MSDF-1111R-E	

PEDZ-RP JA SERIES

POWER INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Long Life · Check! · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent · Ampere Limit (60-140V/200/250) · Rotation Back-up (PUHZ, Optional) · Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional) · COMPO

Cleaning-free, pipe reuse · Wiring Reuse (Optional) · Drain Lift Up (JAQ) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump									
Indoor Unit				PEAD-RP35JA(L)Q	PEAD-RP50JA(L)Q	PEAD-RP60JA(L)Q	PEAD-RP71JA(L)Q	PEAD-RP100JA(L)Q		PEAD-RP125JA(L)Q		PEAD-RP140JA(L)Q	
Outdoor Unit				PUHZ-ZRP35VKA	PUHZ-ZRP50VKA	PUHZ-ZRP60VHA	PUHZ-ZRP71VHA	PUHZ-ZRP100VKA2	PUHZ-ZRP100YKA2	PUHZ-ZRP125VKA2	PUHZ-ZRP125YKA2	PUHZ-ZRP140VKA2	PUHZ-ZRP140YKA2
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VKA・VHA:230 / Single / 50, YKA:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.3	6.2 - 15.3
	Total Input	Rated	kW	0.89 (0.87)	1.44 (1.42)	1.65 (1.63)	2.01 (1.99)	2.43 (2.41)	2.43 (2.41)	3.86 (3.83)	3.86 (3.83)	4.32 (4.29)	4.32 (4.29)
	EER*5			–	–	–	–	–	–	3.24 (3.26)	3.24 (3.26)	3.10 (3.12)	3.10 (3.12)
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
	Annual Electricity Consumption*2		kWh/a	228 (211)	317 (301)	366 (351)	446 (428)	593 (583)	602 (592)	875 (858)	886 (873)	980 (956)	991 (976)
	SEER*5			5.6 (6.0)	5.5 (5.8)	5.8 (6.1)	5.6 (5.7)	5.6 (5.7)	5.5 (5.6)	5.0 (5.1)*4	4.9 (5.0)*4	4.8 (4.9)*4	4.7 (4.8)*4
		Energy Efficiency Class		A+ (A+)	A (A+)	A+ (A++)	A+ (A+)	A+ (A+)	A (A+)	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.6 - 5.2	2.5 - 7.3	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	0.95	1.50	1.79	2.03	2.60	2.60	3.51	3.51	4.07	4.07
	COP*5			–	–	–	–	–	–	3.99	3.99	3.93	3.93
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.4	3.8	4.4	4.9	7.8	7.8	9.3	9.3	10.6	10.6
	Declared Capacity	at reference design temperature	kW	2.4 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.9 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at bivalent temperature	kW	2.4 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.9 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at operation limit temperature	kW	2.2 (–11°C)	3.7 (–11°C)	2.8 (–20°C)	3.7 (–20°C)	5.8 (–20°C)	5.8 (–20°C)	7.0 (–20°C)	7.0 (–20°C)	7.9 (–20°C)	7.9 (–20°C)
	Back Up Heating Capacity		kW	0	0	0	0	0	0	0	0	0	0
	Annual Electricity Consumption*2		kWh/a	839	1231	1513	1762	2627	2627	3370	3370	3763	3763
	SCOP*5			4.0	4.3	4.1	3.9	4.2	4.2	3.9*4	3.9*4	4.0*4	4.0*4
		Energy Efficiency Class		A+	A+	A+	A	A+	A+	–	–	–	–
Operating Current (max)			A	14.1	14.4	20.6	21.0	29.2	10.7	29.3	12.3	30.8	15.8
Indoor Unit	Input [Cooling / Heating]	Rated	kW	0.09 (0.07) / 0.07	0.11 (0.09) / 0.09	0.12 (0.10) / 0.10	0.17 (0.15) / 0.15	0.25 (0.23) / 0.23	0.25 (0.23) / 0.23	0.36 (0.34) / 0.34	0.36 (0.34) / 0.34	0.39 (0.37) / 0.37	0.39 (0.37) / 0.37
	Operating Current (max)		A	1.07	1.39	1.62	1.97	2.65	2.65	2.76	2.76	2.78	2.78
	Dimensions <Panel>	H × W × D	mm	250-900-732		250-1100-732		250-1400-732				250-1600-732	
	Weight <Panel>		kg	26 (25)	28 (27)	33 (32)	33 (32)	41 (40)	41 (40)	43 (42)	43 (42)	47 (46)	47 (46)
	Air Volume [Lo-Mid-Hi]		m³/min	10.0-12.0-14.0	12.0-14.5-17.0	14.5-18.0-21.0	17.5-21.0-25.0	24.0-29.0-34.0	24.0-29.0-34.0	29.5-35.5-42.0	29.5-35.5-42.0	32.0-39.0-46.0	32.0-39.0-46.0
	External Static Pressure		Pa	35 / 50 / 70 / 100 / 150									
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	23 - 27 - 30	26 - 31 - 35	25 - 29 - 33	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	33 - 36 - 40	34 - 38 - 43	34 - 38 - 43
	Sound Level (PWL)		dB(A)	52	57	55	58	61	61	65	65	66	66
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	67	67	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
		Heating	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	48	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current (max)		A	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	75	75	75	75	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–11 ~ +21	–11 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.
*5 EER/COP and SEER/SCOP for RP35~71 are measured at ESP 35Pa, for RP100 at ESP 37Pa, for RP125/140 at ESP 50Pa.

PEDZ-P JA SERIES

STANDARD INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (PUHZ, Optional) · Long Life · Check! · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent (PUHZ) · Rotation Back-up (PUHZ, Optional) · Group Control (PUHZ, Optional) · Group Control (SUZ, Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional) · COMPO (PUHZ)

Cleaning-free, pipe reuse · Wiring Reuse (PUHZ, Optional) · Drain Lift Up (JAQ) · Pump Down (PUHZ) · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump									
Indoor Unit				PEAD-RP35JA(L)Q	PEAD-RP50JA(L)Q	PEAD-RP60JA(L)Q	PEAD-RP71JA(L)Q	PEAD-RP100JA(L)Q		PEAD-RP125JA(L)Q		PEAD-RP140JA(L)Q	
Outdoor Unit				SUZ-KA35VA5	SUZ-KA50VA5	SUZ-KA60VA5	SUZ-KA71VA5	PUHZ-P100VHA4	PUHZ-P100YHA2	PUHZ-P125VHA3	PUHZ-P125YHA	PUHZ-P140VHA3	PUHZ-P140YHA
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VA5・VHA3・VHA4:230 / Single / 50, YHA・YHA2:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	4.9	5.7	7.1	9.4	9.4	12.3	12.3	13.6	13.6
		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	4.9 - 11.2	4.9 - 11.2	5.5 - 14.0	5.5 - 14.0	5.5 - 15.0	5.5 - 15.0
	Total Input	Rated	kW	1.050 (1.030)	1.480 (1.460)	1.670 (1.650)	2.080 (2.060)	3.120 (3.102)	3.120 (3.102)	4.220 (4.200)	4.220 (4.200)	4.520 (4.500)	4.520 (4.500)
	EER*4			–	–	–	–	–	–	2.91 (2.93)	2.91 (2.93)	3.01 (3.02)	3.01 (3.02)
		EEL Rank		–	–	–	–	–	–	C	C	B	B
	Design Load		kW	3.6	4.9	5.7	7.1	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	229 (213)	318 (301)	351 (335)	429 (413)	716 (694)	716 (694)	–	–	–	–
	SEER*4			5.5 (5.9)	5.4 (5.7)	5.6 (5.9)	5.8 (6.0)	4.6 (4.7)	4.6 (4.7)	–	–	–	–
		Energy Efficiency Class		A (A+)	A (A+)	A+ (A+)	A+ (A+)	B	B	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	5.9	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.7 - 5.0	1.7 - 7.2	2.5 - 8.0	2.6 - 10.2	4.5 - 12.5	4.5 - 12.5	5.0 - 16.0	5.0 - 16.0	5.0 - 18.0	5.0 - 18.0
	Total Input	Rated	kW	1.110	1.620	1.930	2.040	3.103	3.103	3.870	3.870	4.430	4.430
	COP*4			–	–	–	–	–	–	3.62	3.62	3.61	3.61
		EEL Rank		–	–	–	–	–	–	A	A	A	A
	Design Load		kW	2.8	4.4	4.5	6.0	8.0	8.0	–	–	–	–
	Declared Capacity	at reference design temperature	kW	2.5 (–10°C)	3.9 (–10°C)	4.1 (–10°C)	5.3 (–10°C)	6.3 (–10°C)	6.3 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.5 (–7°C)	3.9 (–7°C)	4.1 (–7°C)	5.3 (–7°C)	7.1 (–7°C)	7.1 (–7°C)	–	–	–	–
		at operation limit temperature	kW	2.5 (–10°C)	3.9 (–10°C)	4.1 (–10°C)	5.3 (–10°C)	5.0 (–15°C)	5.0 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	0.3	0.5	0.5	0.7	1.7	1.7	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	980	1466	1569	2153	2945	2945	–	–	–	–
	SCOP*4			4.0	4.2	4.0	3.9	3.8	3.8	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A	A	A	–	–	–	–
Operating Current (max)			A	9.3	13.4	15.6	18.1	30.7	15.7	30.8	15.8	32.3	15.8
Indoor Unit	Input [Cooling / Heating]	Rated	kW	0.09 (0.07) / 0.07	0.11 (0.09) / 0.09	0.12 (0.10) /0.10	0.17 (0.15) / 0.15	0.25 (0.23) / 0.23	0.25 (0.23) / 0.23	0.36 (0.34) / 0.34	0.36 (0.34) / 0.34	0.39 (0.37) / 0.37	0.39 (0.37) / 0.37
	Operating Current (max)		A	1.07	1.39	1.62	1.97	2.65	2.65	2.76	2.76	2.78	2.78
	Dimensions <Panel>	H × W × D	mm	250-900-732		250-1100-732		250-1400-732				250-1600-732	
	Weight <Panel>		kg	26 (25)	28 (27)	33 (32)	33 (32)	41 (40)	41 (40)	43 (42)	43 (42)	47 (46)	47 (46)
	Air Volume [Lo-Mid-Hi]		m³/min	10.0 - 12.0 - 14.0	12.0-14.5-17.0	14.5-18.0-21.0	17.5-21.0-25.0	24.0-29.0-34.0	24.0-29.0-34.0	29.5-35.5-42.0	29.5-35.5-42.0	32.0-39.0-46.0	32.0-39.0-46.0
	External Static Pressure		Pa	35 / 50 / 70 / 100 / 150									
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	23 - 27 - 30	26 - 31 - 35	25 - 29 - 33	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	33 - 36 - 40	34 - 38 - 43	34 - 38 - 43
	Sound Level (PWL)		dB(A)	52	57	55	58	61	61	65	65	66	66
Outdoor Unit	Dimensions	H × W × D	mm	550-800-285		880-840-330		943-950-330(+30)		1350-950-330(+30)			
	Weight		kg	35	54	50	53	75	77	99	101	99	101
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	60.0	60.0	100.0	100.0	100.0	100.0
		Heating	m³/min	34.8	44.6	49.2	48.2	60.0	60.0	100.0	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	50	50	51	51	52	52
		Heating	dB(A)	50	52	55	55	54	54	55	55	56	56
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	71	71	73	73
	Operating Current (max)		A	8.2	12.0	14.0	16.1	28.0	13.0	28.0	13.0	29.5	13.0
	Breaker Size		A	16	20	20	20	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	20	30	30	30	50	50	50	50	50	50
	Max. Height	Out-In	m	12	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling	°C	–10 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3
		Heating	°C	–10 ~ +24	–10 ~ +24	–10 ~ +24	–10 ~ +24	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21

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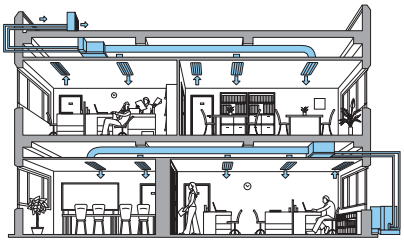
PEA SERIES

PEA-RP200/250/400/500GAQ

For elegance and style, the PEA Series compliments the room environment with an aesthetically pleasing ceiling installation and a vast line-up of performance functions. Long pipe work installation is supported, increasing freedom in the placement of indoor units.

Flexible Duct Design Enables Use of High-pressure Static Fan

A flexible duct design and 150Pa external static high-pressure are incorporated. The increased variation in airflow options ensures operation that best matches virtually all room layouts.



Long Refrigerant Piping Length

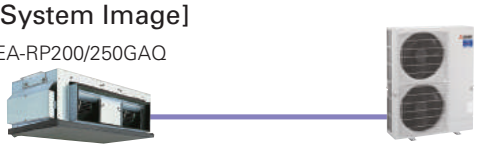
With the addition of more refrigerant, the maximum length for refrigerant piping has been increased to 100 metres. As a result, it is much easier to create the optimum layout for unit installation.

		Power Inverter Connection		Standard Inverter Connection	
		Max. Length	Max. Height	Max. Length	Max. Height
PEA-RP	200	100m	30m	70m	30m
	250	100m	30m	70m	30m
	400	100m	30m	70m	30m
	500	100m	30m	70m	30m

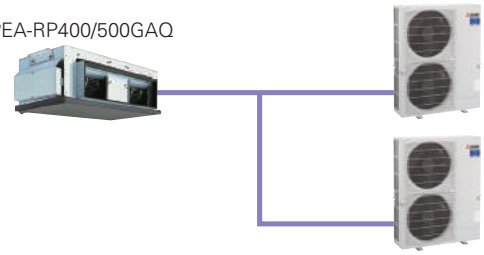
Wide-ranging Line-up from 20–50kW – Extensive Array of Choices to Match Building Size

[System Image]

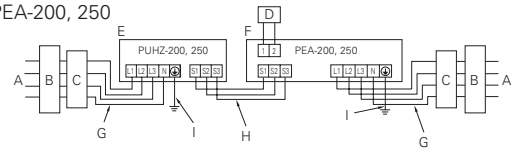
PEA-RP200/250GAQ



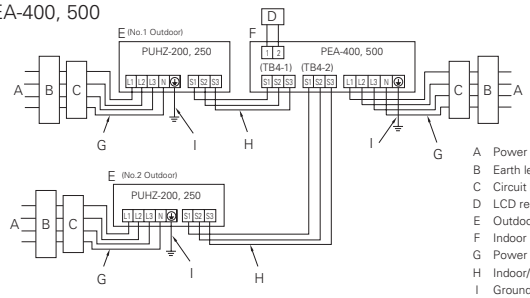
PEA-RP400/500GAQ



• For PEA-200, 250



• For PEA-400, 500



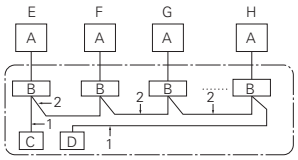
A Power supply
B Earth leakage breaker
C Circuit breaker or local switch
D LCD remote controller
E Outdoor unit
F Indoor unit
G Power cable wiring
H Indoor/Outdoor connection wiring
I Grounding

PAR-32MAA Group Control

The PAR-32MAA remote controller can control up to 16 systems* as a group, and is ideal for supporting the integrated management of building air conditioners.

*Count each set of PEA-RP400 and PEA-RP500 as two systems as two outdoor units are connected.

• For PEA-200, 250



A Outdoor unit
B Indoor unit
C Main remote controller
D Subordinate remote controller
E Standard (Refrigerant address = 00)
F Refrigerant address = 01
G Refrigerant address = 02
H Refrigerant address = 15

LINE-UP

Indoor Unit

PEA-RP200/250/400/500GAQ

Outdoor Unit

✻ Two units are used when connecting PEA-RP400/500GAQ.

Power Inverter Series

PUHZ-ZRP200/250

Standard Inverter Series

PUHZ-P200/250

Remote Controller

Optional

Optional

PEZ-RP SERIES
POWER INVERTER

DC Inverter, Vector Sine Wave, DC Scroll, Rare Earth Magnet, DC Fan Motor, Vector-Wave, Power Receiver, Grooved Piping, Demand Control (Optional), ACO, Auto Restart, Low Temp Cooling, Silent, Ampere Limit, Optional, Group Control, M-NET connection (Optional), Wi-Fi Interface (Optional), Cleaning-free, pipe reuse, Pump Down, Flare connection, Self Diagnosis, Failure Recall

Type					Inverter Heat Pump			
Indoor Unit					PEA-RP200GAQ	PEA-RP250GAQ	PEA-RP400GAQ	PEA-RP500GAQ
Outdoor Unit					PUHZ-ZRP200YKA	PUHZ-ZRP250YKA	PUHZ-ZRP200YKA x 2	PUHZ-ZRP250YKA x 2
Refrigerant					R410A*1			
Power Supply	Source				Outdoor power supply			
	Outdoor (V/Phase/Hz)				400 / Three / 50			
Cooling	Capacity	Rated		kW	19.0	22.0	38.0	44.0
		Min - Max		kW	9.0 - 22.4	11.2 - 27.0	18.0 - 44.8	22.4 - 54.0
	Total Input	Rated		kW	6.46	8.31	12.47	17.10
	EER				2.94	2.65	3.05	2.57
		EEL Rank			–	–	–	–
Heating (Average Season)	Capacity	Rated		kW	22.4	27.0	44.8	54.0
		Min - Max		kW	9.5 - 25.0	12.5 - 31.0	18.0 - 50.0	25.0- 62.0
	Total Input	Rated		kW	6.94	8.94	13.43	18.36
	COP				3.23	3.02	3.34	2.94
		EEL Rank			–	–	–	–
Operating Current (max)					21.0	23.3	41.8	47.4
Indoor Unit	Input [Cooling / Heating]	Rated		kW	1.000	1.180	1.550	2.840
	Operating Current (max)			A	2.0	2.3	3.8	5.4
	Dimensions	H x W x D		mm	400 - 1400 - 634	400 - 1600 - 634	595 - 1947 - 764	
	Weight			kg	70	77	130	133
	Air Volume [Lo-Mid-Hi]			m^3/min	52.0 - 65.0	64.0 - 80.0	120.0	160.0
	External Static Pressure			Pa	150	150	150	150
	Sound Level (SPL) [Lo-Mid-Hi]			dB(A)	48 - 51	49 - 52	52*2	53*2
	Sound Level (PWL)			dB(A)	15	15	15	15
Outdoor Unit	Dimensions	H x W x D		mm	1338 - 1050 - 330(+40)		1338 - 1050 - 330(+40)	
	Weight			kg	135	135	135	135
	Air Volume	Cooling		m^3/min	140	140	140	140
		Heating		m^3/min	140	140	140	140
	Sound Level (SPL)	Cooling		dB(A)	59	59	59	59
		Heating		dB(A)	62	62	62	62
	Sound Level (PWL)	Cooling		dB(A)	77	77	77	77
	Operating Current (max)			A	19.0	21.0	19.0	21.0
	Breaker Size			A	32	32	32	32
Ext. Piping	Diameter	Liquid / Gas		mm	9.52 / 25.4	12.7 / 25.4	9.52 / 25.4	12.7 / 25.4
	Max. Length	Out-In		m	100	100	100	100
	Max. Height	Out-In		m	30	30	30	30
Guaranteed Operating Range [Outdoo		Cooling*3		℃	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
		Heating		℃	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21

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*4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PEZ-P SERIES
STANDARD INVERTER

DC Inverter, Vector Sine Wave, DC Scroll, Rare Earth Magnet, DC Fan Motor, Vector-Wave, Grooved Piping, Demand Control (Optional), ACO, Auto Restart, Low Temp Cooling, Silent, Optional, Group Control, M-NET connection (Optional), Wi-Fi Interface (Optional), Cleaning-free, pipe reuse, Pump Down, Flare connection, Self Diagnosis, Failure Recall

Type					Inverter Heat Pump			
Indoor Unit					PEA-RP200GAQ	PEA-RP250GAQ	PEA-RP400GAQ	PEA-RP500GAQ
Outdoor Unit					PUHZ-P200YKA	PUHZ-P250YKA	PUHZ-P200YKA x 2	PUHZ-P250YKA x 2
Refrigerant					R410A*1			
Power Supply	Source				Outdoor power supply			
	Outdoor (V/Phase/Hz)				400 / Three / 50			
Cooling	Capacity	Rated		kW	19.0	22.0	38.0	44.0
		Min - Max		kW	9.0 - 22.4	11.2 - 27.0	18.0 - 44.8	22.4 - 54.0
	Total Input	Rated		kW	6.64	8.71	12.83	17.90
	EER				2.86	2.53	2.96	2.46
		EEL Rank			–	–	–	–
Heating (Average Season)	Capacity	Rated		kW	22.4	27.0	44.8	54.0
		Min - Max		kW	9.5 - 25.0	12.5 - 31.0	18.0 - 50.0	25.0- 62.0
	Total Input	Rated		kW	7.10	9.31	13.75	19.10
	COP				3.15	2.90	3.26	2.83
		EEL Rank			–	–	–	–
Operating Current (max)					21.0	23.3	41.8	47.4
Indoor Unit	Input [Cooling / Heating]	Rated		kW	1.000	1.180	1.550	2.840
	Operating Current (max)			A	2.0	2.3	3.8	5.4
	Dimensions	H x W x D		mm	400 - 1400 - 634	400 - 1600 - 634	595 - 1947 - 764	
	Weight			kg	70	77	130	133
	Air Volume [Lo-Mid-Hi]			m^3/min	52.0 - 65.0	64.0 - 80.0	120.0	160.0
	External Static Pressure			Pa	150	150	150	150
	Sound Level (SPL) [Lo-Mid-Hi]			dB(A)	48 - 51	49 - 52	52*2	53*2
	Sound Level (PWL)			dB(A)	15	15	15	15
Outdoor Unit	Dimensions	H x W x D		mm	1338 - 1050 - 330(+40)		1338 - 1050 - 330(+40)	
	Weight			kg	127	135	127	135
	Air Volume	Cooling		m^3/min	140	140	140	140
		Heating		m^3/min	140	140	140	140
	Sound Level (SPL)	Cooling		dB(A)	58	59	58	59
		Heating		dB(A)	60	62	60	62
	Sound Level (PWL)	Cooling		dB(A)	78	77	78	77
	Operating Current (max)			A	19.0	21.0	19.0	21.0
	Breaker Size			A	32	32	32	32
Ext. Piping	Diameter	Liquid / Gas		mm	9.52 / 25.4	12.7 / 25.4	9.52 / 25.4	12.7 / 25.4
	Max. Length	Out-In		m	70	70	70	70
	Max. Height	Out-In		m	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3		℃	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
		Heating		℃	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21

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PKA SERIES

The compact, wall-mounted indoor units offer the convenience of simple installation, and a large product line-up (RP35-RP100 models) ensures a best-match solution. Designed for highly efficient energy savings, the PKA Series is the answer to your air conditioning needs.

PKA-RP35/50HAL

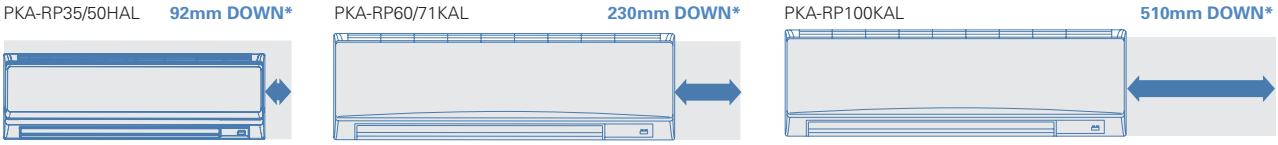
PKA-RP60/71/100KAL

Flat Panel & Pure White Finish

A flat panel layout has been adopted for all models. Pursuing a design that harmonizes with virtually any interior, the unit colour has been changed from white to pure white.

Compact Indoor Units

Indoor unit width has been reduced by as much as 510mm (RP100). Units take up much less space, greatly increasing installation possibilities.



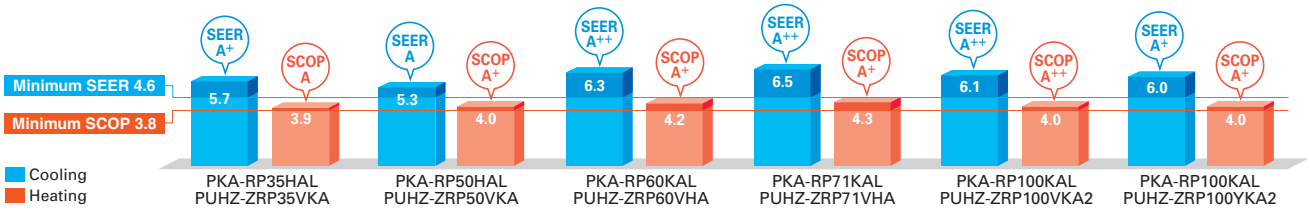
*Compared to PKA-RP35/50GAL

*Compared to PKA-RP60/71FAL

*Compared to PKA-RP100FAL

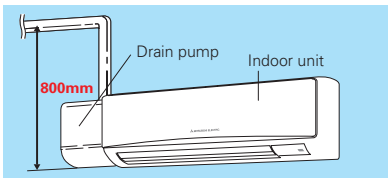
ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

Highly efficient indoor unit heat exchangers and and newly designed power inverters (PUHZ-ZRP) contribute to an amazing reduction in electricity consumption throughout a year, and have resulted in models in the full-capacity range attaining the rank A, A+ and A++ energy savings rating.



Drain Pump Option Available with All Models

Installation of the drain pump enables a drain outlet as high as 800mm above the base of the indoor unit. Drain water can be discharged easily even if the surface where the wall-mounted unit does not have direct access outside, increasing the degree of freedom for installation.



Multi-function Wired Remote Controller

In addition to using the wireless remote controller that comes as standard equipment, PAR-32MAA and PAC-YT52CRA wired remote controllers can be used as well.

✻Connection to PAR-32MAA/PAC-YT52CRA requires PAC-SH29TC-E (optional).

Main Functions

- Night Setback
- Energy- saving Mode
- Multi Language
- Weekly Timer
- Refrigerant Leak Check

✻For details, please refer to pages 25-28.

SERIES SELECTION

Power Inverter Series

Indoor Unit

PKA-RP35/50HAL

PKA-RP60/71/100KAL

Outdoor Unit

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100

For Multi
(Twin/Triple/Quadruple)

PUHZ-ZRP71

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional (✻)

Optional (✻)

Standard Inverter Series

Indoor Unit

PKA-RP35/50HAL

PKA-RP60/71/100KAL

Outdoor Unit

For Single

PUHZ-P100

For Multi
(Twin/Triple/Quadruple)

PUHZ-P100

PUHZ-P125/140

PUHZ-P200/250

Remote Controller

Optional (✻)

Optional (✻)

(✻) PAC-SH29TC-E is required (optional)

PKZ-RP HA/KA Indoor Unit Combinations

Indoor unit combinations shown below are possible.

Indoor Unit Combination		Outdoor Unit Capacity																			
		For Single									For Twin						For Triple			For Quadruple	
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)		35x1	50x1	60x1	71x1	100x1	–	–	–	–	35x2	50x2	60x2	71x2	100x2	–	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR-E				MSDD-50WR-E	–	MSDT-111R-E			MSDF-1111R-E	
Standard Inverter (PUHZ-P)		–	–	–	–	100x1	–	–	–	–	–	50x2	60x2	71x2	100x2	–	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E			MSDD-50WR-E	–	MSDT-111R-E			MSDF-1111R-E	

PKZ-RP SERIES
POWER INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Pure White · AUTO VANE · Check! (Optional) · SWING · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent · Ampere Limit (60-140V/200/250) · Rotation Back-up (Optional) · (Optional) · Group Control (Optional) · M-NET connection (Optional)

Wi-Fi Interface (Optional) · COMPO · Cleaning-free pipe route · Wiring Reuse (Optional) · Drain Lift Up (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump					
Indoor Unit				PKA-RP35HAL	PKA-RP50HAL	PKA-RP60KAL	PKA-RP71KAL	PKA-RP100KAL	
Outdoor Unit				PUHZ-ZRP35VKA	PUHZ-ZRP50VKA	PUHZ-ZRP60VHA	PUHZ-ZRP71VHA	PUHZ-ZRP100VKA2	PUHZ-ZRP100YKA2
Refrigerant				R410A*1					
Power Supply	Source			Outdoor power supply					
	Outdoor (V/Phase/Hz)			VKA • VHA:230 / Single / 50, YKA:400 / Three / 50					
Cooling	Capacity	Rated	kW	3.6	4.6	6.1	7.1	9.5	9.5
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4
	Total Input	Rated	kW	0.94	1.41	1.60	1.80	2.40	2.40
	EER			–	–	–	–	–	–
		EEL Rank		–	–	–	–	–	–
	Design Load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual Electricity Consumption*2		kWh/a	221	304	336	381	539	550
	SEER			5.7	5.3	6.3	6.5	6.1	6.0
		Energy Efficiency Class		A+	A	A++	A++	A++	A+
Heating (Average Season)	Capacity	Rated	kW	4.1	5.0	7.0	8.0	11.2	11.2
		Min - Max	kW	1.6 - 5.2	2.5 - 7.3	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0
	Total Input	Rated	kW	1.07	1.50	1.96	2.19	3.04	3.04
	COP			–	–	–	–	–	–
		EEL Rank		–	–	–	–	–	–
	Design Load		kW	2.4	3.3	4.4	4.7	7.8	7.8
	Declared Capacity	at reference design temperature	kW	2.4 (–10°C)	3.3 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)
		at bivalent temperature	kW	2.4 (–10°C)	3.3 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)
		at operation limit temperature	kW	2.2 (–11°C)	3.2 (–11°C)	2.8 (–20°C)	3.5 (–20°C)	5.8 (–20°C)	5.8 (–20°C)
	Back Up Heating Capacity		kW	0	0	0	0	0	0
	Annual Electricity Consumption*2		kWh/a	847	1160	1473	1532	2608	2608
	SCOP			3.9	4.0	4.2	4.3	4.1	4.1
		Energy Efficiency Class		A	A+	A+	A+	A+	A+
Operating Current (max)			A	13.4	13.4	19.4	19.4	27.1	8.6
Indoor Unit	Input	Rated	kW	0.04	0.04	0.06	0.06	0.08	0.08
	Operating Current (max)		A	0.4	0.4	0.43	0.43	0.57	0.57
	Dimensions <Panel>	H x W x D	mm	295 - 898 - 249		365 - 1170 - 295			
	Weight <Panel>		kg	13	13	21	21	21	21
	Air Volume [Lo-Mid-Hi]		m³/min	9 - 10.5 - 12	9 - 10.5 - 12	18 - 20 - 22	18 - 20 - 22	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	36 - 40 - 43	36 - 40 - 43	39 - 42 - 45	39 - 42 - 45	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL)		dB(A)	60	60	64	64	65	65
Outdoor Unit	Dimensions	H x W x D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)	
	Weight		kg	43	46	67	67	116	123
	Air Volume	Cooling	m³/min	45.0	45.0	55.0	55.0	110.0	110.0
		Heating	m³/min	45.0	45.0	55.0	55.0	110.0	110.0
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49
		Heating	dB(A)	46	46	48	48	51	51
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69
	Operating Current (max)		A	13.0	13.0	19.0	19.0	26.5	8.0
	Breaker Size		A	16	16	25	25	32	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–11 ~ +21	–11 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PKZ-P SERIES
STANDARD INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Pure White · AUTO VANE · Check! (Optional) · SWING · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent · Rotation Back-up (Optional) · (Optional) · Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional)

COMPO · Cleaning-free pipe route · Wiring Reuse (Optional) · Drain Lift Up (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump	
Indoor Unit				PKA-RP100KAL	
Outdoor Unit				PUHZ-P100VHA4	PUHZ-P100YHA2
Refrigerant				R410A*1	
Power Supply	Source			Outdoor power supply	
	Outdoor (V/Phase/Hz)			230 / Single / 50	400 / Three / 50
Cooling	Capacity	Rated	kW	9.4	9.4
		Min - Max	kW	4.9 - 11.2	4.9 - 11.2
	Total Input	Rated	kW	3.120	3.120
	Design Load		kW	9.4	9.4
	Annual Electricity Consumption*2		kWh/a	686	686
	SEER			4.8	4.8
		Energy Efficiency Class		B	B
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2
		Min - Max	kW	4.5 - 12.5	4.5 - 12.5
	Total Input	Rated	kW	3.490	3.490
	Design Load		kW	7.0	7.0
	Declared Capacity	at reference design temperature	kW	5.6 (–10°C)	5.6 (–10°C)
		at bivalent temperature	kW	6.2 (–7°C)	6.2 (–7°C)
		at operation limit temperature	kW	4.5 (–15°C)	4.5 (–15°C)
	Back Up Heating Capacity		kW	1.4	1.4
	Annual Electricity Consumption*2		kWh/a	2579	2579
	SCOP			3.8	3.8
		Energy Efficiency Class		A	A
Operating Current (max)			A	28.6	13.6
Indoor Unit	Input	Rated	kW	0.08	0.08
	Operating Current (max)		A	0.57	0.57
	Dimensions <Panel>	H x W x D	mm	365 - 1170 - 295	
	Weight <Panel>		kg	21	21
	Air Volume [Lo-Mid-Hi]		m³/min	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL)		dB(A)	65	65
Outdoor Unit	Dimensions	H x W x D	mm	943 - 950 - 330 (+30)	
	Weight		kg	75	77
	Air Volume	Cooling	m³/min	60.0	60.0
		Heating	m³/min	60.0	60.0
	Sound Level (SPL)	Cooling	dB(A)	50	50
		Heating	dB(A)	54	54
	Sound Level (PWL)	Cooling	dB(A)	70	70
	Operating Current (max)		A	28.0	13.0
	Breaker Size		A	32	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50
	Max. Height	Out-In	m	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46
		Heating	°C	–15 ~ +21	–15 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PCA–KA SERIES

PCA-RP35/50/60/71/100/125/140KAQ

A stylish new indoor unit design and airflow settings for both high- and low-ceiling interiors expand installation possibilities. Together with exceptional energy-saving performance, these units are the solution to diversified air conditioning needs.

Stylish Indoor Unit Design

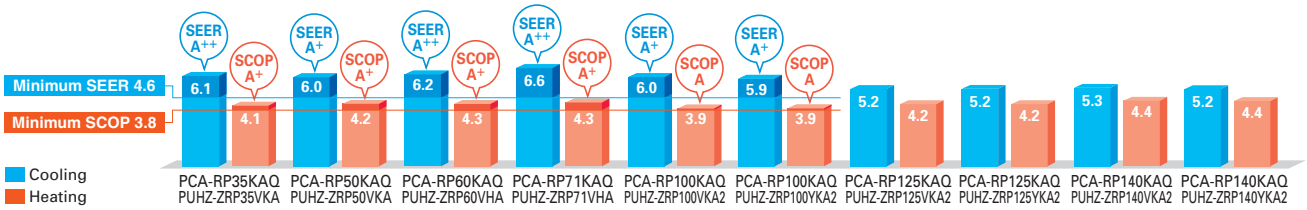
A stylish square-like design is adopted for the indoor units of all models. As a result, the units blend in better with the ceiling.

PCA-GA

PCA-KAQ

ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

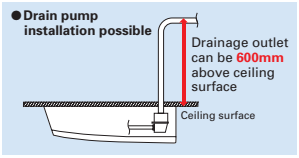
A direct-current (DC) fan motor is isntalled in the indoor unit, increasing the seasonal energy efficiency of newly designed Power Inverter series (PUHZ-ZRP) and resulting in the full capacity models comply ErP Lot 10 with energy ranking A+/A++ for cooling and A/A+ for heating. This contribute to an impressive reduction in the cost of annual electricity.



✻ For products with capacity over 10.0kW, SEER/SCOP values are measured based on EN14825. These values are for reference purposes only.

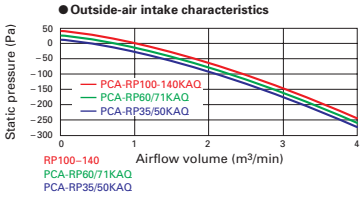
Optional Drain Pump for Full-capacity Models

The pumping height of the optional drain pump has been increased from 400mm to 600mm, expanding flexibility in choosing unit location during installation work.



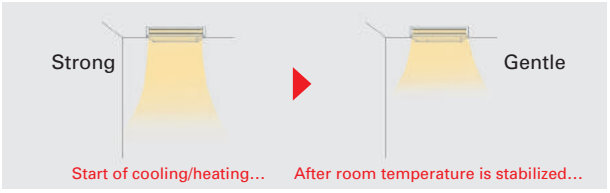
Outside-air Intake

Units are equipped with a knock-out hole that enables the induction of fresh outside-air.



Equipped with Automatic Air-speed Adjustment

In addition to the conventional 4-speed setting, units are now equipped with an automatic air-speed adjustment mode. This setting automatically adjusts the air-speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool the room. When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable comfortable heating/cooling operation.



Equipped with High- /Low-ceiling Modes

Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match room height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.

Capacity	High ceiling	Standard ceiling	Low ceiling
35	3.5m	2.7m	2.5m
50	3.5m	2.7m	2.5m
60	3.5m	2.7m	2.5m
71	3.5m	2.7m	2.5m
100	4.2m	3.0m	2.6m
125	4.2m	3.0m	2.6m
140	4.2m	3.0m	2.6m

PCA–HA SERIES

PCA-RP71HAQ

Standard features include a strong carbon-black stainless steel body and built-in oil mist filter to prevent oil from getting into the unit providing a comfortable air conditioning environment in kitchens that use open-flame cooking.

Tough on Oily Smoke

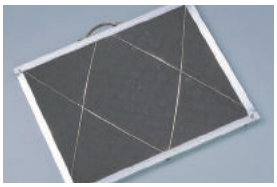
A durable stainless steel casing that is resistant to oil and grease is provided to protect the surface of the body. Grimy dirt and stains are removed easily, enabling the unit to be kept clean at all times.

High-performance Oil Mist Filter

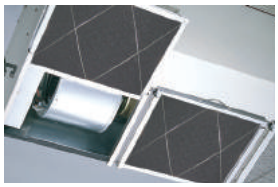
A high-performance heavy-duty oil mist filter is included as standard equipment. The filtering system is more efficient than conventional filters, thereby effectively reducing the oily smoke entering the air conditioner. The filter is disposable, thereby enabling trouble-free cleaning and maintenance.

Oil Mist Filter Cleaning

When used in kitchens, the oil mist filter should be replaced once every two months. The system comes with 12 filters elements. After these have been used, optional elements (PAC-SG38KF-E) can be purchased.



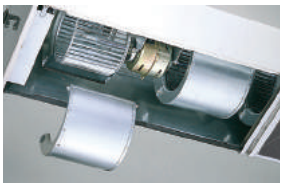
Oil mist filter



Pull the handle to easily slide the filter out

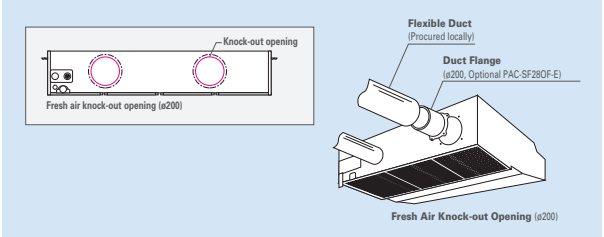
Easy Maintenance – Even for Cleaning the Fan

A separate fan casing that can be disassembled in sections is adopted to ensure easy fan cleaning. Drain pan cleaning onsite is also no problem owing to the use of a pipe connector that is easily removed.



Fresh Outside-air Intake (Option)

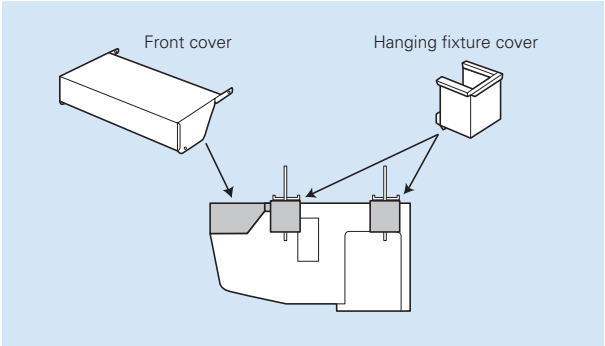
There is a knock-out opening on the rear panel of the unit that can be used to bring fresh air into the unit. This helps to improve ventilation and make the kitchen comfortable.



Notes: 1) A fresh-air duct flange is required (sold separately)
2) Intake air is not 100% fresh (outside) air.

Cosmetic Front and Hanging Fixture Covers (Option)

Cosmetic covers are available to prevent the collection of dust and grime on the main body and hanging fixture sections.



SERIES SELECTION

Power Inverter Series

Indoor Unit

PCA-RP35/50/60/71/100/125/140KAQ

Outdoor Unit

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140

For Multi
(Twin/Triple/Quadruple)

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional

Optional

Optional

Standard Inverter Series

Indoor Unit

PCA-RP35/50/60/71/100/125/140KAQ

Outdoor Unit

For Single

SUZ-KA35

SUZ-KA50/60/71

PUHZ-P100

PUHZ-P125/140

For Multi
(Twin/Triple/
Quadruple)

PUHZ-P100

PUHZ-P125/140

PUHZ-P200/250

Remote Controller

Optional

Optional

Optional

PCZ-RP KA Indoor Unit Combinations

Indoor unit combinations shown below are possible.

Indoor Unit Combination	Outdoor Unit Capacity																			
	For Single									For Twin						For Triple			For Quadruple	
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E			MSDD-50WR-E		MSDT-111R-E			MSDF-1111R-E	
Standard Inverter (PUHZ-P&SUZ)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	–	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E			MSDD-50WR-E		MSDT-111R-E			MSDF-1111R-E	

SERIES SELECTION

Power Inverter Series

Indoor Unit

PCA-RP71HAQ

Outdoor Unit

For Single

PUHZ-ZRP71

For Multi (Twin/Triple)

PUHZ-ZRP140/250

Remote Controller

Optional

Optional

Optional

PCZ-RP HA Indoor Unit Combinations

Indoor unit combinations shown below are possible.

Indoor Unit Combination	Outdoor Unit Capacity																			
	For Single									For Twin						For Triple			For Quadruple	
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)	–	–	–	71x1	–	–	–	–	–	–	–	–	71x2	–	–	–	–	71x3	–	–
Distribution Pipe	–	–	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E	–	–	–	–	MSDT-111R-E	–	–
Standard Inverter (PUHZ-P)	–	–	–	–	–	–	–	–	–	–	–	–	71x2	–	–	–	–	71x3	–	–
Distribution Pipe	–	–	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E	–	–	–	–	MSDT-111R-E	–	–

PCZ-RP KA SERIES

POWER INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Pure White · AUTO VANE · Fresh-air Intake · High-efficiency (Optional) · Long Life · Check! · SWING · High Ceiling · Low Ceiling · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent

60-140V/200/250 Ampere Limit · Rotation Back-up (Optional) · (Optional) · Group Control · M-NET connection (Optional) · Wi-Fi Interface (Optional) · COMPO · MXZ connection · Cleaning-free pipe route · Wiring Reuse (Optional) · Drain Lift Up (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump									
Indoor Unit				PCA-RP35KAQ	PCA-RP50KAQ	PCA-RP60KAQ	PCA-RP71KAQ	PCA-RP100KAQ		PCA-RP125KAQ		PCA-RP140KAQ	
Outdoor Unit				PUHZ-ZRP35VKA	PUHZ-ZRP50VKA	PUHZ-ZRP60VHA	PUHZ-ZRP71VHA	PUHZ-ZRP100VKA2	PUHZ-ZRP100YKA2	PUHZ-ZRP125VKA2	PUHZ-ZRP125YKA2	PUHZ-ZRP140VKA2	PUHZ-ZRP140YKA2
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VKA • VHA:230 / Single / 50, YKA:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.86	1.34	1.66	1.82	2.42	2.42	3.98	3.98	3.95	3.95
	EER			–	–	–	–	–	–	3.14	3.14	3.39	3.39
	EEL Rank			–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
	Annual Electricity Consumption*2		kWh/a	206	292	347	375	553	560	834	844	882	893
	SEER			6.1	6.0	6.2	6.6	6.0	5.9	5.2*4	5.2*4	5.3*4	5.2*4
	Energy Efficiency Class			A++	A+	A++	A++	A+	A+	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	5.5	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.6-5.2	2.5 - 6.6	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	1.02	1.45	1.93	2.20	3.04	3.04	3.80	3.80	4.57	4.57
	COP			–	–	–	–	–	–	3.68	3.68	3.50	3.50
	EEL Rank			–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.4	3.8	4.4	4.7	7.8	7.8	9.3	9.3	10.6	10.6
	Declared Capacity	at reference design temperature	kW	2.4 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at bivalent temperature	kW	2.4 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at operation limit temperature	kW	2.2 (–11°C)	3.7 (–11°C)	2.8 (–20°C)	3.5 (–20°C)	5.8 (–20°C)	5.8 (–20°C)	7.0 (–20°C)	7.0 (–20°C)	7.9 (–20°C)	7.9 (–20°C)
	Back Up Heating Capacity		kW	0	0	0	0	0	0	0	0	0	0
	Annual Electricity Consumption*2		kWh/a	815	1257	1458	1519	2837	2837	3097	3097	3366	3366
	SCOP			4.1	4.2	4.3	4.3	3.9	3.9	4.2*4	4.2*4	4.4*4	4.4*4
	Energy Efficiency Class			A+	A+	A+	A+	A	A	–	–	–	–
Operating Current (max)			A	13.3	13.4	19.4	19.4	27.2	8.7	27.3	10.3	28.9	13.9
Indoor Unit	Input	Rated	kW	0.04	0.05	0.06	0.06	0.09	0.09	0.11	0.11	0.14	0.14
	Operating Current (max)		A	0.29	0.37	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions <Panel>	H × W × D	mm	230 - 960 - 680		230 - 1280 - 680				230 - 1600 - 680			
	Weight <Panel>		kg	24	25	32	32	36	36	38	38	39	39
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	10-11-12-14	10-11-13-15	15-16-17-19	16-17-18-20	22-24-26-28	22-24-26-28	23-25-27-29	23-25-27-29	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	31-33-36-39	32-34-37-40	33-35-37-40	35-37-39-41	37-39-41-43	37-39-41-43	39-41-43-45	39-41-43-45	41-43-45-48	41-43-45-48
	Sound Level (PWL)		dB(A)	60	60	60	62	63	63	65	65	68	68
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	67	67	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
		Heating	m³/min	45.0	45.0	55.0	55.0	110.0	110.0	120.0	120.0	120.0	120.0
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	48	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current (max)		A	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	75	75	75	75	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–11 ~ +21	–11 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PCZ-P KA SERIES

STANDARD INVERTER

EUROVENT CERTIFIED PERFORMANCE

PUHZ Demand Control (Optional) · Pure White · AUTO VANE · Fresh-air Intake · High-efficiency (Optional) · Long Life · Check! · SWING · High Ceiling · Low Ceiling · AUTO · ACO · Auto Restart · Low Temp Cooling · PUHZ Silent

PUHZ Rotation Back-up (Optional) · (Optional) · PUHZ Group Control · SUZ Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional) · PUHZ COMPO · MXZ connection · Cleaning-free pipe route · PUHZ Wiring Reuse (Optional) · Drain Lift Up (Optional) · PUHZ Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump									
Indoor Unit				PCA-RP35KAQ	PCA-RP50KAQ	PCA-RP60KAQ	PCA-RP71KAQ	PCA-RP100KAQ		PCA-RP125KAQ		PCA-RP140KAQ	
Outdoor Unit				SUZ-KA35VA5	SUZ-KA50VA5	SUZ-KA60VA5	SUZ-KA71VA5	PUHZ-P100VHA4	PUHZ-P100YHA2	PUHZ-P125VHA3	PUHZ-P125YHA	PUHZ-P140VHA3	PUHZ-P140YHA
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VA5 • VHA3 • VHA4:230 / Single / 50, YHA • YHA2:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.0	5.7	7.1	9.4	9.4	12.3	12.3	13.6	13.6
		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	4.9 - 11.2	4.9 - 11.2	5.5 - 14.0	5.5 - 14.0	5.5 - 15.0	5.5 - 15.0
	Total Input	Rated	kW	1.050	1.550	1.720	2.060	3.130	3.130	4.090	4.090	4.840	4.840
	EER			–	–	–	–	–	–	3.01	3.01	2.81	2.81
	EEL Rank			–	–	–	–	–	–	B	B	C	C
	Design Load		kW	3.6	5.0	5.7	7.1	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	214	307	332	414	645	645	–	–	–	–
	SEER			5.9	5.7	6.0	6.0	5.1	5.1	–	–	–	–
	Energy Efficiency Class			A+	A+	A+	A+	A	A	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	5.5	6.9	7.9	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.7 - 5.0	1.7 - 6.6	2.5 - 8.0	2.6 - 10.2	4.5 - 12.5	4.5 - 12.5	5.0 - 16.0	5.0 - 16.0	5.0 - 18.0	5.0 - 18.0
	Total Input	Rated	kW	1.130	1.520	1.910	2.180	3.280	3.280	4.120	4.120	4.690	4.690
	COP			–	–	–	–	–	–	3.40	3.40	3.41	3.41
	EEL Rank			–	–	–	–	–	–	C	C	B	B
	Design Load		kW	2.6	4.0	4.8	5.8	8.0	8.0	–	–	–	–
	Declared Capacity	at reference design temperature	kW	2.3 (–10°C)	3.6 (–10°C)	4.0 (–10°C)	5.2 (–10°C)	6.3 (–10°C)	6.3 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.3 (–7°C)	3.6 (–7°C)	4.3 (–7°C)	5.2 (–7°C)	7.1 (–7°C)	7.1 (–7°C)	–	–	–	–
		at operation limit temperature	kW	2.3 (–10°C)	3.6 (–10°C)	4.0 (–10°C)	5.2 (–10°C)	5.0 (–15°C)	5.0 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	0.3	0.4	0.8	0.6	1.7	1.7	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	887	1398	1678	2028	2945	2945	–	–	–	–
	SCOP			4.1	4.0	4.0	4.0	3.8	3.8	–	–	–	–
	Energy Efficiency Class			A+	A+	A+	A+	A	A	–	–	–	–
Operating Current (max)			A	8.5	12.4	14.4	16.5	28.7	13.7	28.8	13.8	30.4	13.9
Indoor Unit	Input	Rated	kW	0.04	0.05	0.06	0.06	0.09	0.09	0.11	0.11	0.14	0.14
	Operating Current (max)		A	0.29	0.37	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions <Panel>	H × W × D	mm	230-960-680		230-1280-680				230-1600-680			
	Weight <Panel>		kg	24	25	32	32	36	36	38	38	39	39
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	10-11-12-14	10-11-13-15	15-16-17-19	16-17-18-20	22-24-26-28	22-24-26-28	23-25-27-29	23-25-27-29	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	31-33-36-39	32-34-37-40	33-35-37-40	35-37-39-41	37-39-41-43	37-39-41-43	39-41-43-45	39-41-43-45	41-43-45-48	41-43-45-48
	Sound Level (PWL)		dB(A)	60	60	60	62	63	63	65	65	68	68
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 - 285		880 - 840 - 330		943 - 950 - 330 (+30)		1350 - 950 - 330 (+30)			
	Weight		kg	35	54	50	53	75	77	99	101	99	101
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	60.0	60.0	100.0	100.0	100.0	100.0
		Heating	m³/min	34.8	44.6	49.2	48.2	60.0	60.0	100.0	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	50	50	51	51	52	52
		Heating	dB(A)	50	52	55	55	54	54	55	55	56	56
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	71	71	73	73
	Operating Current (max)		A	8.2	12.0	14.0	16.1	28.0	13.0	28.0	13.0	29.5	13.0
	Breaker Size		A	10	20	20	20	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	20	30	30	30	50	50	50	50	50	50
	Max. Height	Out-In	m	12	30	30	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling	°C	–10 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3	–15 ~ +46*3
		Heating	°C	–10 ~ +24	–10 ~ +24	–10 ~ +24	–10 ~ +24	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15~21	–15 ~ +21	–15 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PCZ-RP HA SERIES

POWER INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) | Fresh-air Intake | Oil Mist Filter | Check! | ACO | Auto Restart | Low Temp Cooling | Silent | Ampere Limit | Rotation Back-up (Optional) | (Optional) | Group Control | M-NET connection (Optional) | COMPO | Cleaning-free pipe reuse

Wiring Reuse (Optional) | Pump Down | Flare connection | Self Diagnosis | Failure Recall

Type					Inverter Heat Pump
Indoor Unit					PCA-RP71HAQ
Outdoor Unit					PUHZ-ZRP71VHA
Refrigerant					R410A*1
Power Supply	**Source**				Outdoor power supply
	Outdoor (V/Phase/Hz)				230 / Single / 50
Cooling	**Capacity**	Rated		kW	7.1
		Min - Max		kW	3.3 - 8.1
	Total Input	Rated		kW	2.17
	EER				–
		EEL Rank			–
	Design Load			kW	7.1
	Annual Electricity Consumption*2			kWh/a	447
	SEER				5.6
		Energy Efficiency Class			A+
Heating (Average Season)	**Capacity**	Rated		kW	7.6
		Min - Max		kW	3.5 - 10.2
	Total Input	Rated		kW	2.35
	COP				–
		EEL Rank			–
	Design Load			kW	4.7
	Declared Capacity	at reference design temperature		kW	4.7 (–10°C)
		at bivalent temperature		kW	4.7 (–10°C)
		at operation limit temperature		kW	3.5 (–20°C)
	Back Up Heating Capacity			kW	0
	Annual Electricity Consumption*2			kWh/a	1751
	SCOP				3.8
		Energy Efficiency Class			A
Operating Current (max)				A	19.4
Indoor Unit	**Input**	Rated		kW	0.09
	Operating Current (max)			A	0.43
	Dimensions <Panel>	H × W × D		mm	280 - 1136 - 650
	Weight <Panel>			kg	41
	Air Volume [Lo-Hi]			m^3/min	17 - 19
	Sound Level (SPL) [Lo-Hi]			dB(A)	34 - 38
	Sound Level (PWL)			dB(A)	56
Outdoor Unit	**Dimensions**	H × W × D		mm	943 - 950 - 330 (+30)
	Weight			kg	67
	Air Volume	Cooling		m^3/min	55.0
		Heating		m^3/min	55.0
	Sound Level (SPL)	Cooling		dB(A)	47
		Heating		dB(A)	48
	Sound Level (PWL)	Cooling		dB(A)	67
	Operating Current (max)			A	19.0
	Breaker Size			A	25
Ext. Piping	**Diameter**	Liquid / Gas		mm	9.52 / 15.88
	Max. Length	Out-In		m	50
	Max. Height	Out-In		m	30
Guaranteed Operating Range [Outdoor]		Cooling*3		°C	–15 ~ +46
		Heating		°C	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

*3 Optional air protection guide is required where ambient temperature is lower than –5°C.

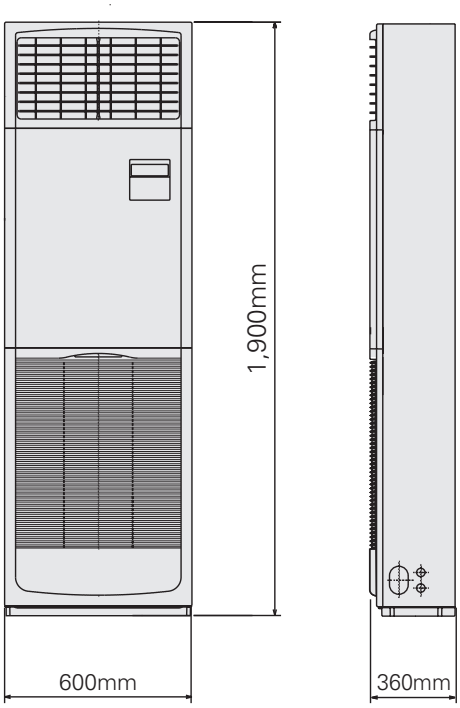
PSA SERIES

Installation of this floor-standing series is easy and quick.
An excellent choice when there is a sudden need for an air conditioner to be installed.

Quick and Easy Installation, Space-saving and Design That Compliments Any Interior

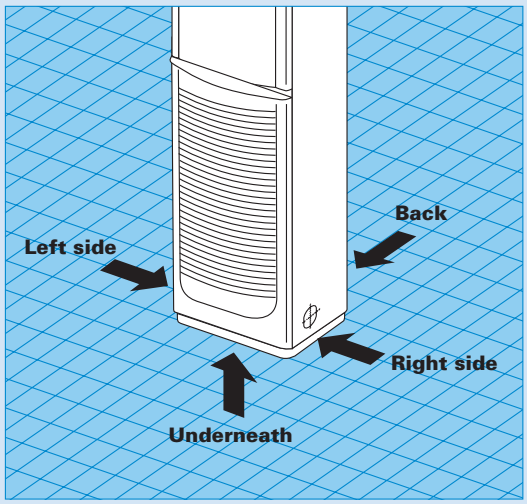
The floor-standing indoor unit is mounted on the floor, enabling quick installation. Its compact body requires only minimal space.

● PSA-RP71KA



4-way pipe work connections enable greater freedom in installation

Remarkable freedom in choosing installation sites is allowed by providing piping connection to the indoor unit in four places: left side, back, from underneath and on the right side of the unit. Even installation in the corner of a room is easy.



Built-in Remote Controller

Easy Operation with Built-in PAR-21MAA Remote Controller
Icon, letter and number visibility are improved with the adoption of a dot liquid-crystal display (LCD), and operation management functions have been increased.

Main Functions

- Multi-language Display
- Limited Temperature Range Setting
- Auto-off Timer
- Operation Lock
- Weekly Timer

SERIES SELECTION

Power Inverter Series

Indoor Unit

PSA-RP71/100/125/140KA

Outdoor Unit

For Single

PUHZ-ZRP71

PUHZ-ZRP100/125/140

For Multi (Twin/Triple)

PUHZ-ZRP140/200/250

Remote Controller

Built-in

Standard Inverter Series

Indoor Unit

PSA-RP71/100/125/140KA

Outdoor Unit

For Single

PUHZ-P100

PUHZ-P125/140

For Multi (Twin/Triple)

PUHZ-P140

PUHZ-P200/250

Remote Controller

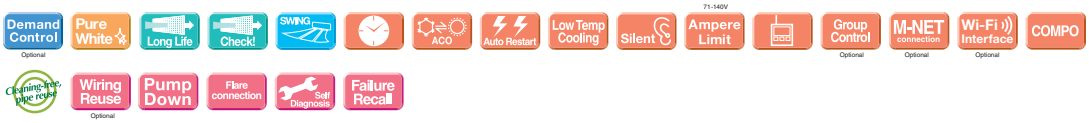
Built-in

PSZ-RP KA Indoor Unit Combinations

Indoor unit combinations shown below are possible.

Indoor Unit Combination		Outdoor Unit Capacity																			
		For Single									For Twin						For Triple			For Quadruple	
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)		–	–	–	71x1	100x1	125x1	140x1	–	–	–	–	–	71x2	100x2	125x2	–	–	71x3	–	–
	Distribution Pipe	–	–	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E	MSDD-50WR-E		–	–	MSDT-111R-E	–	–
Standard Inverter (PUHZ-P)		–	–	–	–	100x1	125x1	140x1	–	–	–	–	–	71x2	100x2	125x2	–	–	71x3	–	–
	Distribution Pipe	–	–	–	–	–	–	–	–	–	–	–	–	MSDD-50TR-E	MSDD-50WR-E		–	–	MSDT-111R-E	–	–

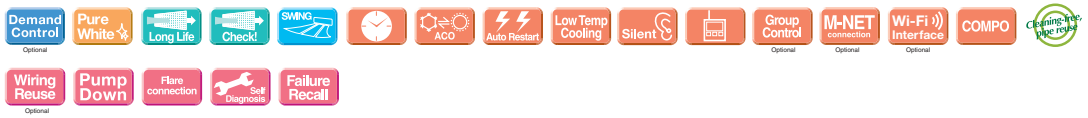
PSZ-RP SERIES
POWER INVERTER



Type				Inverter Heat Pump						
Indoor Unit				PSA-RP71KA	PSA-RP100KA		PSA-RP125KA		PSA-RP140KA	
Outdoor Unit				PUHZ-ZRP71VHA	PUHZ-ZRP100VKA2	PUHZ-ZRP100YKA2	PUHZ-ZRP125VKA2	PUHZ-ZRP125YKA2	PUHZ-ZRP140VKA2	PUHZ-ZRP140YKA2
Refrigerant				R410A*1						
Power Supply	Source			Outdoor power supply						
	Outdoor (V/Phase/Hz)			VKA • VHA:230 / Single / 50, YKA:400 / Three / 50						
Cooling	Capacity	Rated	kW	7.1	9.5	9.5	12.5	12.5	13.4	13.4
		Min - Max	kW	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	1.89	2.50	2.50	4.09	4.09	4.06	4.06
	EER			–	–	–	3.06	3.06	3.30	3.30
		EEL Rank		–	–	–	–	–	–	–
	Design Load		kW	7.1	9.5	9.5	12.5	12.5	13.4	13.4
	Annual Electricity Consumption*2		kWh/a	396	595	606	847	885	872	883
	SEER			6.3	5.6	5.5	5.0*4	4.9*4	5.3*4	5.3*4
		Energy Efficiency Class		A++	A+	A	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	7.6	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	2.21	3.08	3.08	4.24	4.24	4.79	4.79
	COP			–	–	–	3.30	3.30	3.34	3.34
		EEL Rank		–	–	–	–	–	–	–
	Design Load		kW	4.7	7.8	7.8	9.3	9.3	10.6	10.6
	Declared Capacity	at reference design temperature	kW	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at bivalent temperature	kW	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	9.3 (–10°C)	9.3 (–10°C)	10.6 (–10°C)	10.6 (–10°C)
		at operation limit temperature	kW	3.5 (–20°C)	5.8 (–20°C)	5.8 (–20°C)	7.0 (–20°C)	7.0 (–20°C)	7.9 (–20°C)	7.9 (–20°C)
	Back Up Heating Capacity		kW	0	0	0	0	0	0	0
	Annual Electricity Consumption*2		kWh/a	1666	2761	2761	3285	3285	3331	3331
	SCOP			4.0	4.0	4.0	4.0*4	4.0*4	4.4*4	4.4*4
		Energy Efficiency Class		A+	A+	A+	–	–	–	–
Operating Current (max)			A	19.4	27.2	8.7	27.2	10.2	28.7	13.7
Indoor Unit	Input	Rated	kW	0.06	0.11	0.11	0.11	0.11	0.11	0.11
	Operating Current (max)		A	0.4	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions <Panel>	H × W × D	mm	1900 - 600 - 360						
	Weight <Panel>		kg	46	46	46	46	46	48	48
	Air Volume [Lo-Mid-Hi]		m³/min	20 - 22 - 24	25 - 28 - 30	25 - 28 - 30	25 - 28 - 31	25 - 28 - 31	25 - 28 - 31	25 - 28 - 31
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	40 - 42 - 44	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51
	Sound Level (PWL)		dB(A)	60	65	65	66	66	66	66
Outdoor Unit	Dimensions	H × W × D	mm	943-950-330 (+30)	1338-1050-330(+40)					
	Weight		kg	67	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	55.0	110.0	110.0	120.0	120.0	120.0	120.0
		Heating	m³/min	55.0	110.0	110.0	120.0	120.0	120.0	120.0
	Sound Level (SPL)	Cooling	dB(A)	47	49	49	50	50	50	50
		Heating	dB(A)	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	67	69	69	70	70	70	70
	Operating Current (max)		A	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		A	25	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	75	75	75	75	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21	–20 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PSZ-P SERIES
STANDARD INVERTER



Type				Inverter Heat Pump					
Indoor Unit				PSA-RP100KA	PSA-RP100KA	PSA-RP125KA	PSA-RP125KA	PSA-RP140KA	PSA-RP140KA
Outdoor Unit				PUHZ-P100VHA4	PUHZ-P100YHA2	PUHZ-P125VHA3	PUHZ-P125YHA	PUHZ-P140VHA3	PUHZ-P140YHA
Refrigerant				R410A*1					
Power Supply	Source			Outdoor power supply					
	Outdoor (V/Phase/Hz)			VHA3 • VHA4:230 / Single / 50, YHA • YHA2:400 / Three / 50					
Cooling	Capacity	Rated	kW	9.4	9.4	12.3	12.3	13.6	13.6
		Min - Max	kW	4.9 - 11.2	4.9 - 11.2	5.5 - 14.0	5.5 - 14.0	5.5 - 15.0	5.5 - 15.0
	Total Input	Rated	kW	3.120	3.120	4.380	4.380	5.640	5.640
	EER			–	–	2.81	2.81	2.41	2.41
		EEL Rank		–	–	C	C	E	E
	Design Load		kW	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	716	716	–	–	–	–
	SEER			4.6	4.6	–	–	–	–
		Energy Efficiency Class		B	B	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	4.5 - 12.5	4.5 - 12.5	5.0 - 16.0	5.0 - 16.0	5.0 - 18.0	5.0 - 18.0
	Total Input	Rated	kW	3.280	3.280	4.980	4.980	5.690	5.690
	COP			–	–	2.81	2.81	2.81	2.81
		EEL Rank		–	–	D	D	D	D
	Design Load		kW	8.0	8.0	–	–	–	–
	Declared Capacity	at reference design temperature	kW	6.3 (–10°C)	6.3 (–10°C)	–	–	–	–
		at bivalent temperature	kW	7.1 (–7°C)	7.1 (–7°C)	–	–	–	–
		at operation limit temperature	kW	5.0 (–15°C)	5.0 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	1.7	1.7	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	2945	2945	–	–	–	–
	SCOP			3.8	3.8	–	–	–	–
		Energy Efficiency Class		A	A	–	–	–	–
Operating Current (max)			A	28.7	13.7	28.7	13.7	30.2	13.7
Indoor Unit	Input	Rated	kW	0.11	0.11	0.11	0.11	0.11	0.11
	Operating Current (max)		A	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions <Panel>	H × W × D	mm	1900 - 600 - 360					
	Weight <Panel>		kg	46	46	46	46	48	48
	Air Volume [Lo-Mid-Hi]		m³/min	25 - 28 - 30	25 - 28 - 30	25 - 28 - 31	25 - 28 - 31	25 - 28 - 31	25 - 28 - 31
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51
	Sound Level (PWL)		dB(A)	65	65	66	66	66	66
Outdoor Unit	Dimensions	H × W × D	mm	943 - 950 - 330 (+30)		1350 - 950 - 330 (+30)			
	Weight		kg	75	77	99	101	99	101
	Air Volume	Cooling	m³/min	60.0	60.0	100.0	100.0	100.0	100.0
		Heating	m³/min	60.0	60.0	100.0	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	50	50	51	51	52	52
		Heating	dB(A)	54	54	55	55	56	56
	Sound Level (PWL)	Cooling	dB(A)	70	70	71	71	73	73
	Operating Current (max)		A	28.0	13.0	28.0	13.0	29.5	13.0
	Breaker Size		A	32	16	32	16	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	50	50
	Max. Height	Out-In	m	30	30	30	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C. *4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

MULTI SPLIT SERIES

SELECTION

Choose from seven types of indoor units and twelve outdoor units that can run up to six indoor units each.
Create the system that best matches room shapes and number of rooms.

STEP 1 SELECT INDOOR UNITS

Select the indoor unit to be installed in each room.

Wall-mounted


MSZ-FH


MSZ-EF


MSZ-SF (15·20)


MSZ-SF (25-50)


MSZ-GF

Floor-standing


MFZ-KJ

Cassette


SLZ-KF


PLA


MLZ-KA

Ceiling-suspended


PCA

Ceiling-concealed


SEZ-KD


PEAD

STEP 2 SELECT OUTDOOR UNITS

Select the best outdoor unit based on the number of indoor units and overall system capacity required.

2-port Connect up to 2 indoor units


MXZ-2D33VA(2)
MXZ-2D42VA(2)
MXZ-2D53VA(H)

3-port Connect up to 3 indoor units


MXZ-3E54VA
MXZ-3E68VA

4-port Connect up to 4 indoor units


MXZ-4E72VA


MXZ-4E83VA

HYPER HEATING*

2-port
Connect up to 2 indoor units


MXZ-2E53VAHZ

5-port Connect up to 5 indoor units


MXZ-5E102VA

6-port Connect up to 6 indoor units


MXZ-6D122VA

4-port
Connect up to 4 indoor units


MXZ-4E83VAHZ

*Refer to page101 and page 109 for detailed information.

STEP 3 CHECK SYSTEM COMPATIBILITY

Possible combinations depends on the outdoor unit chosen. Please check the following points.

Check Indoor Units	Refer to the "Indoor Unit Compatibility Table" to check if the indoor units selected can be used with the outdoor unit selected. (Indoor units not listed in the table cannot be used.)
Check Indoor Unit Capacity Combination	Refer to the "Combination Table" to check if the capacity combination of the indoor unit selected is connectable. (Combinations not listed cannot be connected.)

If the desired combination cannot be found, please change either the indoor or outdoor unit to match one of the combinations shown in the tables.

MXZ SERIES

Advancements in the MXZ Series include efficiency and flexibility in system expansion capabilities. The best solution when requiring multi-system air conditioning needs.

2-port

MXZ-2D33VA(2)
MXZ-2D42VA(2)
MXZ-2D53VA(H)

3-port 4-port

MXZ-3E54VA
MXZ-3E68VA
MXZ-4E72VA

4-port 5-port

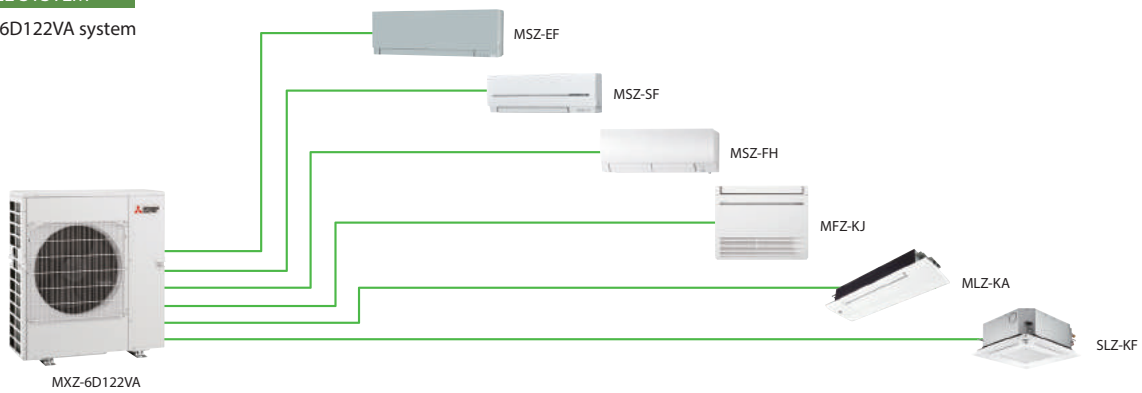
MXZ-4E83VA
MXZ-5E102VA

6-port

MXZ-6D122VA

EXAMPLE SYSTEM

MXZ-6D122VA system



Handle Up to 6 Rooms with a Single Outdoor Unit

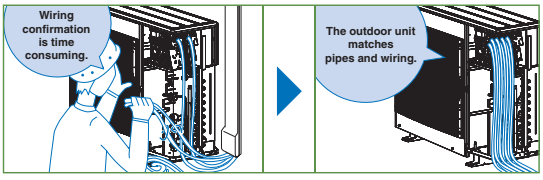
The MXZ Series offers a ten-system line-up to choose from, ranging between 3.3 and 12.2kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

Support Functions

Wiring/Piping Correction Function* (3D54/3D68/4D72/4E83/5E102/6D122)

Simply press a single button to confirm if wiring and piping are properly connected. Wiring errors are corrected automatically when discovered. This eliminates the need to confirm complicated wiring connections when expanding the system. (For details, refer to the outdoor unit installation manual.)

* Function cannot be used when the outdoor temperature is below 0°C.
The correction process requires 10–20 minutes to complete and must be conducted with the unit set to the "Cooling" mode.



Ampere Limit Adjustment* (4E83/5E102/6D122)

Dipswitch settings can be used to adjust the maximum electrical current for operation. This function is highly recommended for managing energy costs. (For details, refer to the outdoor unit installation manual.)

* Maximum capacity is lowered with the use of this function.

Operation Lock

To accommodate specific use applications, cooling or heating operation can be specified when setting the control board of the outdoor unit. A convenient option when a system needs to be configured for exclusive cooling or heating service. (For details, refer to the outdoor unit installation manual.)

MXZ SERIES
INVERTER MULTI

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | 2D-4E83 Joint Lap | 4E83-6D DC Rotary | DC Fan Motor | PAM | 3D-4D72 Power Receiver | Grooved Piping

Type (Inverter Multi - Split Heat Pump)				Up to 2 Indoor Units				Up to 3 Indoor Units		Up to 4 Indoor Units		Up to 5 Indoor Units
Indoor Unit				Please refer to (*4)								
Outdoor Unit				N: MXZ-2D33VA(2)	N: MXZ-2D42VA(2)	N: MXZ-2D53VA	N: MXZ-2D53VAH	N: MXZ-3E54VA2	N: MXZ-3E68VA	N: MXZ-4E72VA	MXZ-4E83VA	MXZ-5E102VA
Refrigerant				R410A*1								
Power Supply	Source			Outdoor power supply								
	Outdoor (V/Phase/Hz)			230 / Single / 50								
Cooling	Capacity	Rated	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
		Min - Max	kW	1.1 - 3.8	1.1 - 4.4	1.1 - 5.6	1.1 - 5.6	2.9 - 6.8	2.9 - 8.4	3.7 - 8.8	3.7 - 9.2	3.9 - 11.0
	Input (Indoor+Outdoor)	Rated	kW	0.90	1.00	1.54	1.54	1.35	2.19	2.25	2.44	3.15
	Design Load		kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
	Annual Electricity Consumption*2		kWh/a	211	219	262	262	295	425	443	460	537
	SEER*4			5.5	6.7	7.1	7.1	6.4	5.6	5.7	6.3	6.6
		Energy Efficiency Class*4		A	A++	A++	A++	A++	A+	A+	A++	A++
Heating (Average Season)	Capacity	Rated	kW	4.0	4.5	6.4	6.4	7.0	8.6	8.6	9.3	10.5
		Min - Max	kW	1.0 - 4.1	1.0 - 4.8	1.0 - 7.0	1.0 - 7.0	2.6 - 9.0	2.6 - 10.6	3.4 - 10.7	3.4 - 11.6	4.1 - 14.0
	Input (Indoor+Outdoor)	Rated	kW	0.96	0.93	1.70	1.70	1.59	2.38	2.28	2.00	2.34
	Design Load		kW	2.7	3.2	4.5	4.5	5.0	6.8	7.0	8.7	8.9
	Declared Capacity	at reference design temperature	kW	2.1	2.7	3.7	3.6	4.00	5.4	5.6	7.1	7.3
		at bivalent temperature	kW	2.4	3.0	4.0	4.0	4.49	6.0	6.2	7.8	7.9
		at operation limit temperature	kW	1.7	2.3	3.3	3.0	3.17	4.4	4.7	6.0	6.3
	Back Up Heating Capacity		kW	0.6	0.5	0.8	0.9	1.00	1.4	1.4	1.6	1.6
	Annual Electricity Consumption*2		kWh/a	926	1065	1507	1546	1751	2466	2516	2884	2958
	SCOP*4			4.1	4.2	4.2	4.1	4.0	3.9	3.9	4.2	4.2
		Energy Efficiency Class*4		A+	A+	A+	A+	A+	A	A	A+	A+
Max. Operating Current (Indoor+Outdoor)			A	10.0	12.2	12.2	12.2	18.0	18.0	18.0	21.4	21.4
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800(+69) - 285(+59.5)				710 - 840(+30) - 330(+66)			796 - 950 - 330	
	Weight		kg	32	37	37	38	58	58	59	62	63
	Air Volume	Cooling	m³/min	32.9	27.7	32.9	32.9	42.1	42.1	42.1	55.6	65.1
		Heating	m³/min	33.7	33.3	33.3	33.3	43.0	43.0	43.0	55.6	68.0
	Sound Level (SPL)	Cooling	dB(A)	49	46	50	50	50	50	50	49	52
		Heating	dB(A)	50	51	53	53	53	53	53	51	56
	Sound Level (PWL)	Cooling	dB(A)	63	60	64	64	64	64	64	61	65
	Breaker Size		A	10	15	15	15	25	25	25	25	25
Ext. Piping	Diameter	Liquid	mm	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 3	6.35 × 3	6.35 × 4	6.35 × 4	6.35 × 5
		Gas	mm	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 3	9.52 × 3	12.7×1+9.52×3	12.7×1+9.52×3	12.7×1+9.52×4
	Total Piping Length (max)		m	20	30	30	30	50	60	60	70	80
	Each Indoor Unit Piping Length (max)		m	15	20	20	20	25	25	25	25	25
	Max. Height		m	10	15 (10)*3	15 (10)*3	15 (10)*3	15 (10)*3	15 (10)*3	15 (10)*3	15 (10)*3	15 (10)*3
	Chargeless Length		m	20	20	20	20	40	40	40	25	0
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46
		Heating	℃	–15 ~ +24	–15 ~ +24	–15 ~ +24	–20 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24

N: Please refer to the NOTE below.

Type (Inverter Multi - Split Heat Pump)				Up to 6 Indoor Units
Indoor Unit				Please refer to (*5)
Outdoor Unit				MXZ-6D122VA
Refrigerant				R410A*1
Power Supply	Source			Outdoor power supply
	Outdoor (V/Phase/Hz)			230 / Single / 50
Cooling	Capacity	Rated	kW	12.2
		Min - Max	kW	3.5 - 13.5
	Input*5	Rated	kW	3.66
	EER*6			3.33
		EEL Rank		A
Heating	Capacity	Rated	kW	14.0
		Min - Max	kW	3.5 - 16.5
	Input*5	Rated	kW	3.31
	COP*6			4.23
		EEL Rank		A
Operating Current (max)*5			A	26.8
Outdoor Unit	Dimensions	H × W × D	mm	1048 - 950 - 330
	Weight		kg	88
	Air Volume	Cooling	m³/min	63.0
		Heating	m³/min	77.0
	Sound Level (SPL)	Cooling	dB(A)	55
		Heating	dB(A)	57
	Sound Level (PWL)	Cooling	dB(A)	69
	Breaker Size		A	32
Ext. Piping	Diameter	Liquid	mm	6.35×6
		Gas	mm	12.7×1+9.52×5
	Total Piping Length (max)		m	80
	Each Indoor Unit Piping Length (max)		m	25
	Max. Height		m	15 (10)*3
	Chargeless Length		m	30
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46
		Heating	℃	–15 ~ +24

NOTE
When connecting the MFZ-KJ series indoor unit(s) to this outdoor unit, charge additional refrigerant according to the instructions in the diagram below.

MXZ-2D33VA

No. of MFZ-KJ indoor units	Pipe length (L)	Maximum amount of refrigerant
	~20m	
1 unit	100g additional (Total 1250g)	1250g
2 units	Not available (Only one MFZ-KJ series indoor unit can be connected.)	

MXZ-2D42VA MXZ-2D53VA MXZ-2D53VAH

No. of MFZ-KJ indoor units	Pipe length (L)		Maximum amount of refrigerant
	~20m	~30m	
1 unit	100g additional (Total 1400g)	100g+{(L-20)m×20g/m)}	1600g
2 units	200g additional (Total 1500g)	200g+{(L-20)m×20g/m)}	1700g

MXZ-3D54VA2

No. of MFZ-KJ indoor units	Pipe length (L)		Maximum amount of refrigerant
	~40m	~50m	
1 unit	100g additional (Total 2800g)	100g+{(L-40)m×20g/m)}	3000g
2 units	200g additional (Total 2900g)	200g+{(L-40)m×20g/m)}	3100g
3 units	300g additional (Total 3000g)	300g+{(L-40)m×20g/m)}	3200g

MXZ-3D68VA MXZ-4D72VA

No. of MFZ-KJ indoor units	Pipe length (L)		Maximum amount of refrigerant
	~40m	~60m	
1 unit	100g additional (Total 2800g)	100g+{(L-40)m×20g/m)}	3200g
2 units	200g additional (Total 2900g)	200g+{(L-40)m×20g/m)}	3300g
3 units	300g additional (Total 3000g)	300g+{(L-40)m×20g/m)}	3400g

Number of MFZ-KJ should be one or two when connected to MXZ-4D72VA. If three and more MFZ-KJ are connected, use other outdoor units, such as MXZ-3D68VA and MXZ-4E83VA.

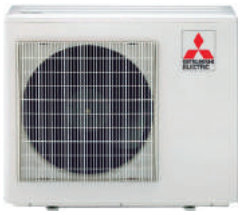
*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 If the outdoor unit is installed higher than the indoor unit, max. height is reduced to 10m.
*4 EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-2D33VA → MSZ-SF15VA + MSZ-EF18VE
MXZ-2D42VA → MSZ-EF18VE2 + MSZ-EF25VE2
MXZ-2D53VA(H) → MSZ-EF18VE2 + MSZ-EF35VE2
MXZ-3D54VA2 → MSZ-EF18VE2 + MSZ-EF18VE2 + MSZ-EF18VE2
MXZ-3D68VA → MSZ-EF18VE2 + MSZ-EF25VE2 + MSZ-EF25VE2
MXZ-4D72VA → MSZ-EF18VE2 + MSZ-EF18VE2 + MSZ-EF18VE2 + MSZ-EF18VE2
MXZ-4E83VA → MSZ-EF18VE2 + MSZ-EF18VE2 + MSZ-EF22VE2 + MSZ-EF25VE2
MXZ-5E102VA → MSZ-EF18VE2 + MSZ-EF18VE2 + MSZ-EF22VE2 + MSZ-EF22VE2 + MSZ-EF22VE2
*5 Power input and operating current (max) figures are for outdoor unit only
*6 EER/COP, EEL rank, values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-6D122VA → MSZ-EF22VE × 6

MXZ-DM SERIES

Multi-port outdoor units exclusively for MSZ-HJ and MSZ-DM indoor units.

2-port

MXZ-2DM40VA



3-port

MXZ-3DM50VA

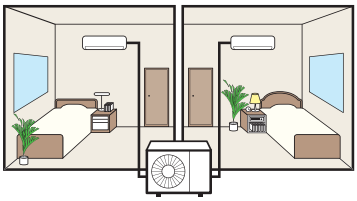
Stylish Design with Flat Panel Front

A stylish flat panel design is employed for the front of the indoor unit.
The simple look matches room aesthetics.

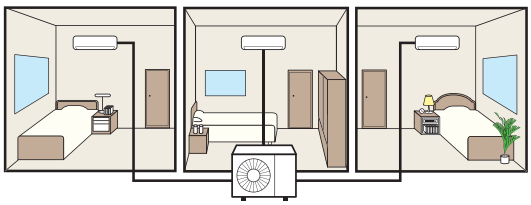
Easy to create various combinations

Wide range of simple combinations only possible using multi-port outdoor units.

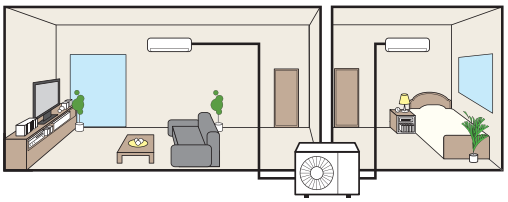
Two bedrooms



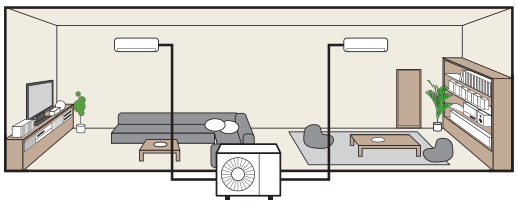
Three bedrooms



Living room and one bedroom



Wide living room

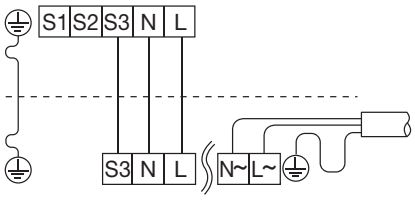


Attention MXZ-DM is exclusively for connection to MSZ-HJ and MSZ-DM.
Please check to make sure that wiring is done correctly.

For MXZ-DM

MSZ-DM

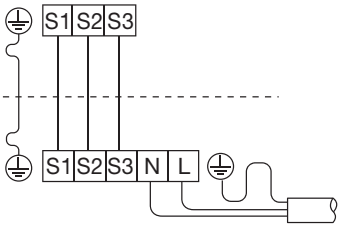
MXZ-2DM
MXZ-3DM



For other MXZ models

MSZ

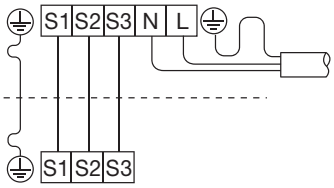
MXZ



For MSZ-DM/MUZ-DM

MSZ-DM

MUZ-DM



MXZ-DM SERIES

INVERTER MULTI

Type (Inverter Multi - Split Heat Pump)					Up to 2 Indoor Units	Up to 3 Indoor Units
Indoor Unit					Please refer to (*4)	
Outdoor Unit					MXZ-2DM40VA	MXZ-3DM50VA
Refrigerant					R410A*1	
Power Supply	Source				Outdoor power supply	
	Outdoor (V/Phase/Hz)				230 / Single / 50	
Cooling	Capacity		Rated	kW	4.0	5.0
	Input*4		Rated	kW	1.05	1.13
	EER*4				3.81	4.42
			EEL Rank*4		A	A
	Design Load			kW	4.0	5.0
	Annual Electricity Consumption*2			kWh/a	226	283
	SEER*4				6.1	6.1
			Energy Efficiency Class*4		A++	A++
Heating (Average Season)	Capacity		Rated	kW	4.3	6.0
	Input		Rated	kW	1.16	1.31
	COP*4				3.71	4.58
			EEL Rank*4		A	A
	Design Load			kW	3.2	4.0
	Declared Capacity	at reference design temperature		kW	2.73	3.34
		at bivalent temperature		kW	3.01	3.73
		at operation limit temperature		kW	2.27	2.70
	Back Up Heating Capacity			kW	0.47	0.66
	Annual Electricity Consumption*2			kWh/a	1105	1455
	SCOP*4				4.0	3.8
			Energy Efficiency Class*4		A+	A
Operating Current (max)				A	12.2	18.0
Outdoor Unit	Dimensions		H × W × D	mm	550 - 800 (+69) - 285 (+59.5)	710 - 840 (+30) - 330 (+66)
	Weight			kg	32	57
	Air Volume		Cooling	m^3/min	29.2	37.5
			Heating	m^3/min	27.7	39.6
	Sound Level (SPL)		Cooling	dB(A)	48	50
			Heating	dB(A)	52	53
	Sound Level (PWL)		Cooling	dB(A)	63	64
	Operating Current		Cooling	A	5.1	5.0
			Heating	A	5.6	5.8
	Breaker Size			A	15	25
Ext. Piping	Port Diameter		Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3
	Total Piping Length (max)			m	30	50
	Each Indoor Unit Piping Length (max)			m	20	25
	Max. Height			m	15 (10)*3	15 (10)*3
	Chargeless Length			m	20	40
Guaranteed Operating Range [Outdoor]			Cooling	℃	–10 ~ +46	
			Heating	℃	–15 ~ +24	

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

*2 Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.

*3 If the outdoor unit is installed higher than the indoor unit, max hight is reduced to 10m.

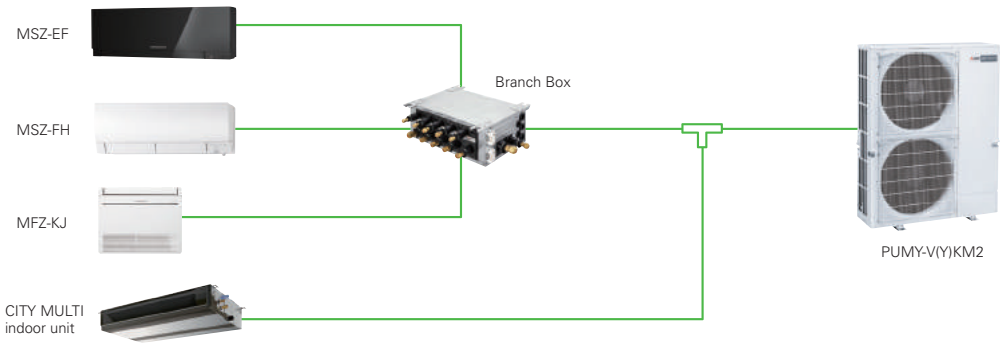
*4 EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-2DM40VA MSZ-DM25VA + MSZ-DM25VA
MXZ-3DM50VA MSZ-DM25VA + MSZ-DM25VA + MSZ-DM25VA

PUMY SERIES

Air conditioning system supports replacement work by simplifying the installation process. Ideal for supporting renewal needs at small offices and stores, home offices, etc.

PUMY-P112/125/140VKM2
PUMY-P112/125/140YKM2

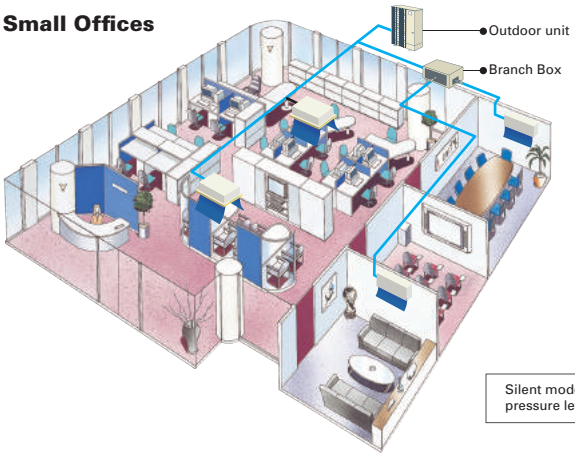
EXAMPLE SYSTEM



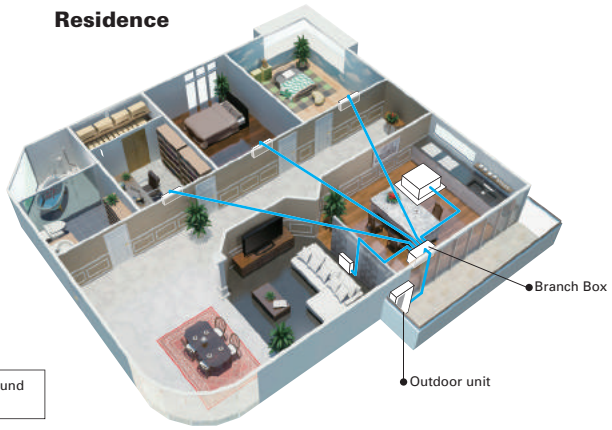
The two-pipe zoned system designed for Heat Pump Operation

PUMY series make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively.
With a wide range of indoor unit line-up in connection with a flexible piping system, PUMY series can be configured for all applications. Up to 12 indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

Small Offices



Residence

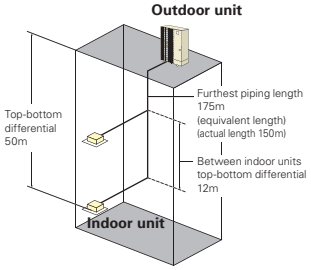


Silent mode can reduce sound pressure level by 3dB(A)

[P112–140V/YKM2]

Refrigerant Piping Lengths	Maximum meters
Total length	300
Maximum allowable length	150 (175 equivalent)
Farthest indoor from first branch	30

Vertical differentials between units	Maximum meters
Indoor/outdoor (outdoor higher)	50
Indoor/outdoor (outdoor lower)	40
Indoor/indoor	12



PUMY SERIES
INVERTER MULTI

Model				PUMY-P112VKM2	PUMY-P125VKM2	PUMY-P140VKM2	PUMY-P112YKM2	PUMY-P125YKM2	PUMY-P140YKM2
Power Source				1-phase 220 - 240V 50Hz			3-phase 380 - 415V 50Hz		
Cooling Capacity (nominal)		*1	kW	12.5	14.0	15.5	12.5	14.0	15.5
	Power Input		kW	2.79	3.46	4.52	2.79	3.46	4.52
	Current Input		A	12.87 - 12.32 - 11.80	15.97 - 15.27 - 14.64	20.86 - 19.95 - 19.12	4.46 - 4.24 - 4.09	5.53 - 5.26 - 5.07	7.23 - 6.87 - 6.62
	EER		kW/kW	4.48	4.05	3.43	4.48	4.05	3.43
Temp. Range of Cooling*5	Indoor Temp.		W.B.	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C
	Outdoor Temp.		D.B.	-5.0 - 46°C	-5.0 - 46°C	-5.0 - 46°C	-5.0 - 46°C	-5.0 - 46°C	-5.0 - 46°C
Heating Capacity (nominal)		*2	kW	14.0	16.0	18.0	14.0	16.0	18.0
	Power Input		kW	3.04	3.74	4.47	3.04	3.74	4.47
	Current Input		A	14.03 - 13.42 - 12.86	17.26 - 16.51 - 15.82	20.63 - 19.73 - 18.91	4.86 - 4.62 - 4.45	5.98 - 5.68 - 5.48	7.15 - 6.79 - 6.55
	COP		kW/kW	4.61	4.28	4.03	4.61	4.28	4.03
Temp. Range of Heating	Indoor Temp.		D.B.	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C
	Outdoor Temp.		W.B.	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C
Indoor Unit Connectable	Total Capacity			50 to 130% of outdoor unit capacity					
	Model / Quantity		City Multi	15 - 140/9	15 - 140/10	15 - 140/12	15 - 140/9	15 - 140/10	15 - 140/12
			Branch Box	15 - 100/8	15 - 100/8	15 - 100/8	15 - 100/8	15 - 100/8	15 - 100/8
			Mixed System	15 - 140*3/10	15 - 140*3/10*4	15 - 140*3/10*4	15 - 140*3/10	15 - 140*3/10*4	15 - 140*3/10*4
Sound Pressure Level (measured in anechoic room)			dB <A>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53
Refrigerant Piping Diameter	Liquid Pipe		mm	9.52 Flare					
	Gas Pipe		mm	15.88 Flare					
Fan	Type x Quantity			Propeller Fan x 2					
	Air Flow Rate		m^3/min	110					
			L/s	1,883					
			cfm	3,884					
	Motor Output		kW	0.06 + 0.06					
Compressor	Type x Quantity			Scroll hermetic compressor x 1					
	Starting Method			Inverter					
	Motor Output		kW	2.9	3.5	3.9	2.9	3.5	3.9
External Dimensions (H x W x D)			mm	1,338×1,050×330 (+25)					
Weight			kg	122			125		

*1,*2 Nominal conditions

	Indoor	Outdoor	Piping Length	Level Difference
Cooling	27°C DB / 19°C WB	35°C	7.5m	0m
Heating	20°C DB	7°C DB / 6°C WB	7.5m	0m

*3 Up to P100 when connecting via branch box.
*4 Up to 11 units when connecting via 2 branch boxes
*5 10 to 46°C D.B.: When connecting PKFY-P15/20/25VBM, PFFY-P20/25/32VKM and PFFY-P20/25/32VLE(R)M type indoor unit.

Type				Branch Box			
Model Name				PAC-MK51BC	PAC-MK31BC	PAC-MK51BCB	PAC-MK31BCB
Connectable Number of Indoor Units				Max. 5	Max. 3	Max. 5	Max. 3
Power Supply	Source			Outdoor power supply, Branch Box / Outdoor separate power supply			
	Outdoor (V/Phase/Hz)			Single phase, 220/230/240V, 50Hz, Single phase, 220V, 60Hz			
Total Input			kW	0.003			
Operating Current			A	0.05			
Dimensions	H x W x D		mm	170 - 450 - 280			
Weight			kg	7.4	6.7	7.0	6.5
Piping [diameter]	Branch [Indoor Side]	Liquid	mm	6.35 x 5	6.35 x 3	6.35 x 5	6.35 x 3
		Gas	mm	9.52 x 4, 12.7 x 1	9.52 x 3	9.52 x 4, 12.7 x 1	9.52 x 3
	Main [Outdoor Side]	Liquid	mm	9.52			
		Gas	mm	15.88			
	Connection Method			Flared		Brazed	
Wiring	to Indoor Unit			3-wire + Earth wire			
	to Outdoor Unit			3-wire + Earth wire			

Indoor Unit Compatibility Table

Possible combinations of outdoor units and indoor units are shown below.

Indoor Unit			Outdoor Unit / Inverter Models Heat pump type												
			MXZ-2D33VA *4	MXZ-2D42VA *4	MXZ-2D53VA/H *4	MXZ-2E53VAHZ *4	MXZ-2DM40VA *4	MXZ-3D54VA2 *4	MXZ-3D68VA *4	MXZ-3DM50VA *4	MXZ-4D72VA *4	MXZ-4E83VA *4	MXZ-4E83VAHZ *4	MXZ-5E102VA *4	MXZ-6D122VA *4
M series	Wall-Mounted	MSZ-FH25VE(2)	●	●	●	●		●	●		●	●	●	●	●
		MSZ-FH35VE(2)		●	●	●		●	●		●	●	●	●	●
		MSZ-FH50VE(2)						●	●		●	●	●	●	●
		MSZ-SF15VA	●	●	●	●		●	●		●	●	●	●	●
		MSZ-SF20VA	●	●	●	●		●	●		●	●	●	●	●
		MSZ-SF25VE2(3)	●	●	●	●		●	●		●	●	●	●	●
		MSZ-SF35VE2(3)		●	●	●		●	●		●	●	●	●	●
		MSZ-SF42VE2(3)			●	●		●	●		●	●	●	●	●
		MSZ-SF50VE2(3)			●	●		●	●		●	●	●	●	●
		MSZ-GF60VE(2)							●*2		●*2	●	●	●	●
		MSZ-GF71VE(2)										●	●	●	●
		MSZ-EF18VE2(3)W/B/S	●	●	●	●		●	●		●	●	●	●	●
		MSZ-EF22VE2(3)W/B/S	●	●	●	●		●	●		●	●	●	●	●
		MSZ-EF25VE2(3)W/B/S	●	●	●	●		●	●		●	●	●	●	●
		MSZ-EF35VE2(3)W/B/S		●	●	●		●	●		●	●	●	●	●
		MSZ-EF42VE2(3)W/B/S			●	●		●	●		●	●	●	●	●
		MSZ-EF50VE2(3)W/B/S			●	●		●	●		●	●	●	●	●
	Floor-Standing	MFZ-KJ25VE(2)	●*5*6	●*5	●*5	●		●*5	●*5		●*8	●	●	●	●
		MFZ-KJ35VE(2)		●*5	●*5	●		●*5	●*5		●*8	●	●	●	●
		MFZ-KJ50VE(2)						●*5	●*5		●*8	●	●	●	●
	1-way Cassette	MLZ-KA25VA	●	●	●	●		●	●		●	●	●	●	●
		MLZ-KA35VA		●	●	●		●	●		●	●	●	●	●
		MLZ-KA50VA						●	●		●	●	●	●	●
	Wall-Mounted	MSZ-DM25VA					●			●					
		MSZ-DM35VA					●			●					
		MSZ-HJ25VA					●			●					
		MSZ-HJ35VA					●			●					
		MSZ-HJ50VA								●					
		MSZ-HJ60VA													
		MSZ-HJ71VA													
S series	4-way Cassette	SLZ-KF25VA	●			●		●	●		●	●	●	●	●
		SLZ-KF35VA				●		●	●		●	●	●	●	●
		SLZ-KF50VA						●	●		●	●	●	●	●
		SLZ-KF60VA													
	Ceiling-Concealed	SEZ-KD25VAQ *3	●	●	●	●		●	●		●	●	●	●	●
		SEZ-KD25VAL *3	●	●	●	●		●	●		●	●	●	●	●
		SEZ-KD35VAQ		●	●	●		●	●		●	●	●	●	●
		SEZ-KD35VAL		●	●	●		●	●		●	●	●	●	●
		SEZ-KD50VAQ						●	●		●	●	●	●	●
		SEZ-KD50VAL						●	●		●	●	●	●	●
		SEZ-KD60VAQ							●		●	●	●	●	●
		SEZ-KD60VAL							●		●	●	●	●	●
		SEZ-KD71VAQ										●	●	●	●
		SEZ-KD71VAL										●	●	●	●
P series	4-way Cassette	PLA-RP50BA						●	●		●	●	●*7	●	●
		PLA-RP60BA							●		●	●	●*7	●	●
		PLA-RP71BA										●	●*7	●	●
	Ceiling-Suspended	PCA-RP50KAQ						●	●		●	●	●*7	●	●
		PCA-RP60KAQ							●		●	●	●*7	●	●
		PCA-RP71KAQ										●	●*7	●	●
	Ceiling-Concealed	PEAD-RP50JAQ						●*1	●*1		●*1	●*1	●*1*7	●*1	●*1
		PEAD-RP50JALQ						●*1	●*1		●*1	●*1	●*1*7	●*1	●*1
		PEAD-RP60JAQ										●*1	●*1*7	●*1	●*1
		PEAD-RP60JALQ										●*1	●*1*7	●*1	●*1
		PEAD-RP71JAQ										●*1	●*1*7	●*1	●*1
		PEAD-RP71JALQ										●*1	●*1*7	●*1	●*1

*1 Maximum total current of indoor units: 3A or less.
*2 The combination is still under evaluation.
*3 SEZ-KD25 cannot be connected with MXZ-2D(E)/3D/4E/5E when total capacity of connected indoor units is equivalent to outdoor capacity (capacity ratio is 1).
*4 MXZ outdoor units are not designed to operate with a single indoor unit with one-to-one piping work. Please install at least two indoor units.
*5 When connecting the MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please refer to page 88.
*6 Regarding MXZ-2D33, the second unit should be a different type in the case of selecting one MFZ-KJ.
*7 P series cannot be connected with MXZ-4E83VAHZ when ampere limit adjustment function is operated.
*8 If connecting four indoor units to the MXZ-4D72VA, up to two units can be connected to each MFZ-KJ.

Conditions for specifications

Temperature conditions are based on JIS B8616.

Cooling	Indoor	27˚C DB, 19˚C WB
	Outdoor	35˚C DB, 24˚C WB
Heating	Indoor	20˚C DB
	Outdoor	7˚C DB, 6˚C WB

Refrigerant piping length ; 5m

The figures for total input are based on the following voltages.

Series	Indoor unit	Outdoor unit
M Series S Series P Series (except for PEA) MXZ Series POWERFUL HEATING Series	–	VE,VA,VHA,VKA:230V/Single phase/50Hz YA,YHA,YKA:400V/Three phase/50Hz
PEA Series	400V/Three phase/50Hz	400V/Three phase/50Hz

Sound pressure level

• The sound pressure measurement is conducted in an anechoic chamber.

• The actual sound level depends on the distance from the unit and the acoustic environment.

How to read a model name

1) M & S Series

M	M : M Series S : S Series
S	"S"= Wall-mounted , "F"= Compact floor-standing , "E"= Compact ceiling-concealed , "L"= 4- or 1-way cassette , "U"= Outdoor unit
Z	"Z"= Inverter heat pump , "H"= Fixed-speed heat pump , "blank"= Cooling only
–	
F	Series
H	Generation
25	Rated cooling capacity (kW base)
V	230V / Single phase / 50Hz
E	"A"= R410A with new A control , "B"= R410A with conventional control , "E"= R410A with new A control & ErP correspondance
HZ	"HZ"= Hyper Heating model , "H"= Anti-freeze heater equipped model , "S"= Silver indoor unit , "W"= White indoor unit , "B"= Black indoor unit

2) P Series

P	P Series
U	"K"= Wall-mounted , "S"= Floor-standing , "L"= 4-way cassette , "E"= Ceiling-concealed , "C"= Ceiling-suspended , "U"= Outdoor unit
H	"H"= For heating and cooling , "blank"= Cooling only
Z	"Z"= Inverter , "blank"= Fixed-speed
–	
ZRP/RP/P SHW	"ZRP"/"RP"= R410A & cleaning-free pipe reuse , "P"=R410A "SH"= Powerful heating ZUBADAN , "W"= can be used as air to water application
71	Rated cooling capacity (kW base)
V	"V"= 230V / Single phase / 50Hz , "Y"= 400V / Three phase / 50Hz
H	Generation
A	"A"= A control

3) MXZ Series

M	M Series
X	Multi-system outdoor unit (heat pump)
Z	Inverter heat pump
–	
4	Maximum number of connectable indoor units
D/E/DM	Generation / Type
72	Rated cooling capacity (kW base)
V	"V"= 230V / Single phase / 50Hz
A	"A"= R410A with new A control
HZ	"HZ"= Hyper Heating model , "H"= Anti-freeze heater equipped model

POWERFUL HEATING

SERIES

SELECTION

Line-up consists of two series.
Choose the series that best matches the building layout.

ZUBADAN SERIES

The line-up includes outdoor unit models 112-140 class and three types of indoor units.

Outdoor Unit

PUHZ-SHW112VHA
PUHZ-SHW112/140YHA

Indoor Unit

4-way cassette

PLA Series

Ceiling-concealed

PEAD Series

Wall-mounted

PKA Series

MSZ-FH/MFZ-KJ VEHZ SERIES

The line-up includes outdoor models 25–50

Outdoor Unit

MUZ-FH25/35VEHZ
MUFZ-KJ25/35VEHZ

MUZ-FH50VEHZ
MUFZ-KJ50VEHZ

Indoor Unit

Wall-mounted

MSZ-FH25/35/50VE

Floor-standing

MFZ-KJ25/35/50VE

MXZ-VAHZ SERIES

Outdoor Unit

MXZ-2E53VAHZ

MXZ-4E83VAHZ

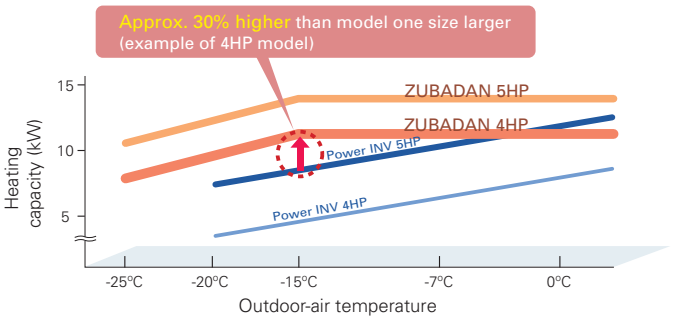
ZUBADAN SERIES

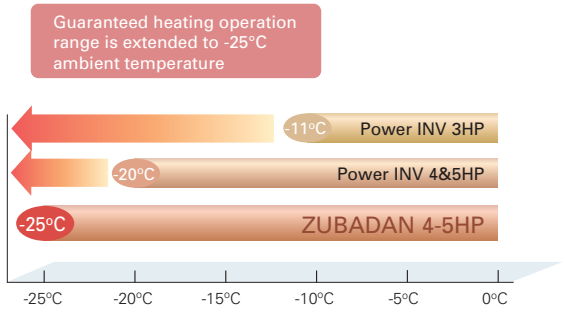
The ZUBADAN Series incorporates an original Flash Injection technology that improves the already high heating capacity of the system. This new member of the series line-up ensures comfortable heat pump-driven heating performance in cold regions.

✻Units in photo are Japanese models.
European model specifications are different.

Improved Heating Performance

Mitsubishi Electric's unique "Flash Injection" circuit achieves remarkably high heating performance. This technology has resulted in an excellent heating capacity rating in outdoor temperatures as low as -15°C, and the guaranteed heating operation range of the heating mode has been extended to -25°C. Accordingly, the heat-pump units of the ZUBADAN Series are perfect for warming homes in the coldest of regions.



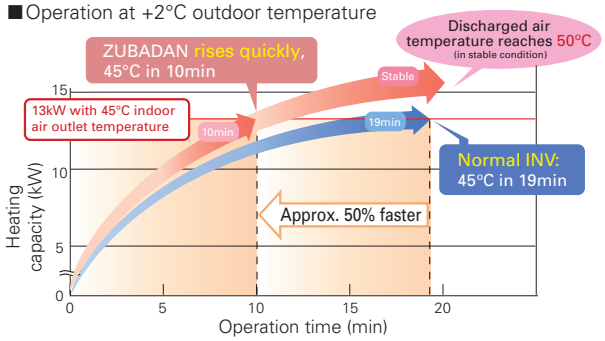


Enhanced Comfort

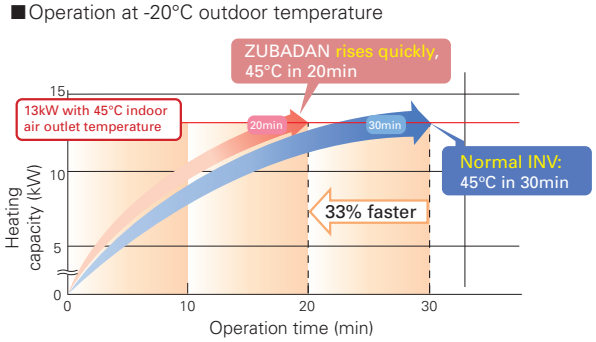
The Flash Injection circuit improves start-up and recover from the defrosting operation. A newly introduced defrost operation control also improves defrost frequency. These features enable the temperature to reach the set temperature more quickly, and contribute to maintaining it at the desired setting.

Quick Start-up

■Operation at +2°C outdoor temperature



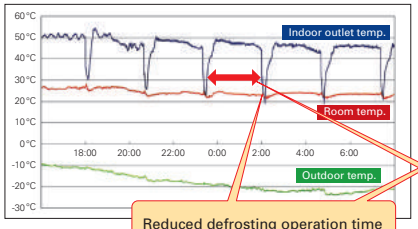
■Operation at -20°C outdoor temperature



ZUBADAN Defrost Control and Faster Recovery from Defrost Operation

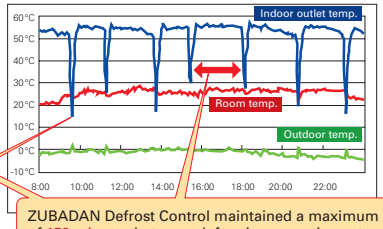
Field Test Results: Office building in Asahikawa, Hokkaido, Japan

■Operation data for 25 Jan. 2005



Reduced defrosting operation time from 4 to 3 minutes.

■Operation data for 2 Dec. 2004

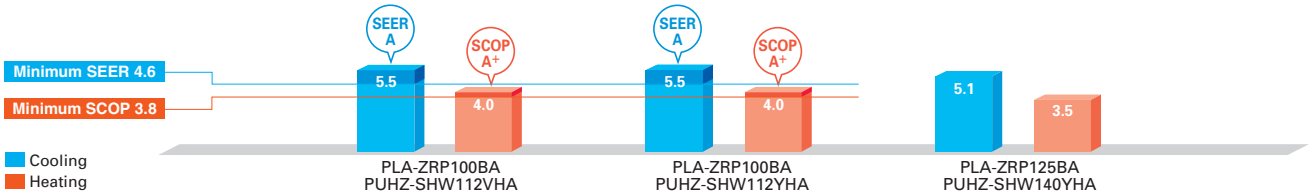


ZUBADAN Defrost Control maintained a maximum interval of 150 minutes between defrosting operations at outdoor temperatures of approximately -20°C and 0°C.

Installation example

ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A and A+

Powerful heating yet annaully high energy efficiency in both cooling and heating, achieving rank A and A+.

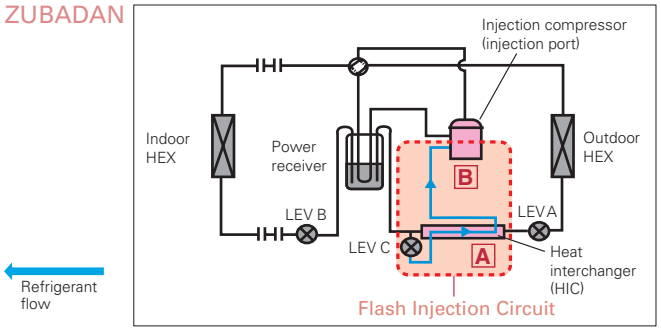


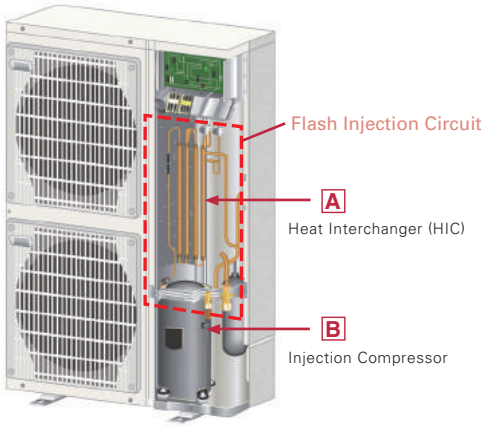
✻ For products with capacity over 12.0kW, SEER/SCOP values are measured based on EN14825. These values are for reference purposes only.

Mitsubishi Electric's Flash Injection Technology The Key to High Heating Performance at Low Outdoor Temperatures

■Flash Injection Circuit

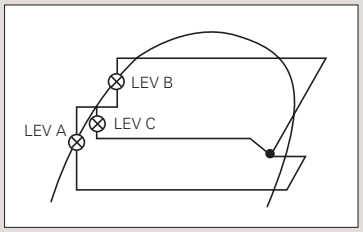
ZUBADAN





The ZUBADAN Series is equipped with Mitsubishi Electric's original Flash Injection Circuit, which is comprised of a bypass circuit and heat interchanger (HIC). The HIC transforms rerouted liquid refrigerant into a gas-liquid state to lower compression load. This process ensures excellent heating performance even when the outdoor temperature drops very low.
In traditional units, when the outdoor temperature is low, the volume of refrigerant circulating in the compressor decreases due to the drop in refrigerant pressure and the protection from overheating caused by high compression, thereby reducing heating capacity. The Flash Injection Circuit injects refrigerant to maintain the refrigerant circulation volume and compressor operation load, thereby maintaining heating capacity.

Mollier Chart Image Representing Flash Injection Circuit Operation



A Heat Interchanger (HIC)

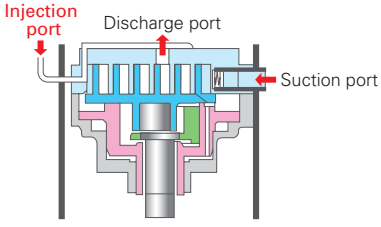
HIC cross-sectional view

Purpose: Transform liquid refrigerant into liquid-gas state

Effect: Injection circuit increases energy efficiency

The compressor is subjected to a heavy load when compressing liquid refrigerant, and the result is lower operation efficiency. The addition of HIC supports refrigerant heat exchange at two different pressure levels. The heat-exchange process transforms the injected liquid refrigerant into a gas liquid state, thereby decreasing the load on the compressor during the compression process.

B Injection Compressor



Purpose: To increase the volume of refrigerant being circulated

Effect: Improves heating capacity at low outdoor temperatures, and enables higher indoor-air outlet temperature adjustment and higher defrost operation speed

Refrigerant passes from the HIC into the compressor through the injection port. Having two refrigerant inlets makes it possible to raise the volume of refrigerant being circulated when the outdoor temperature is low and at the start of heating operation.

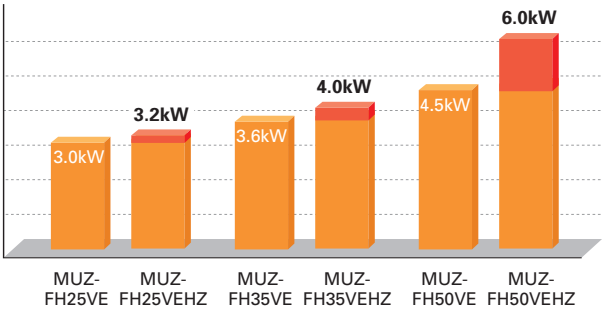
FH VEHZ SERIES

Unlike conventional air conditioning systems, the FH Series doesn't lose heating capacity when it's cold outside. Original technologies ensure excellent heating performance under extremely low outdoor temperatures and an impressive guaranteed operating range.

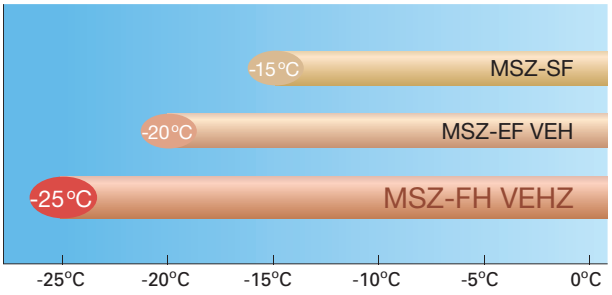
Unparalleled Heating Performance

FH Series outdoor units are equipped with a high-output compressor that provides enhanced heating performance under low outdoor temperatures. The heating operation range is extended down to -25°C.

Declared Capacity (at reference design temperature)



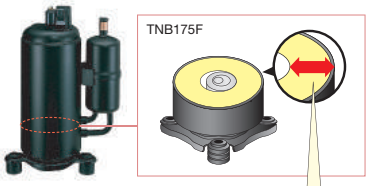
Operation Range



Compact, Powerful Compressor

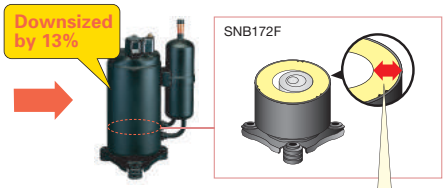
A special manufacturing technology, "Heat Caulking Fixing Method," has been introduced to reduce compressor size while maintaining a high compressor output. This technology enables the installation of a powerful compressor in compact MUZ outdoor units. As a result, excellent heating performance is achieved when operating in cold outdoor environments.

Compressor fixed using conventional method (Arc spot-welded method)



Outer layer must be thick enough to hold the cylinder.

Compressor fixed using Heat Caulking Fixing Method

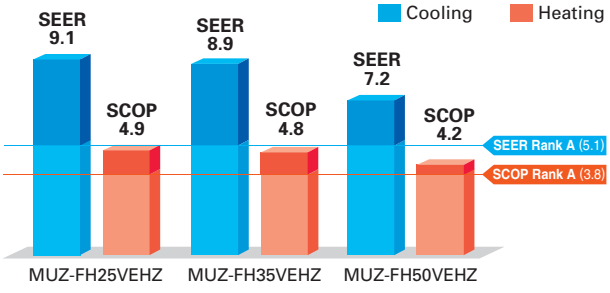


Compressor size reduced while maintaining same cylinder inner diameter.

High Energy Efficiency – Energy Rank of A+ or higher for All Models

DC Inverter

With indoor units that combine functionality, design and capacity and outdoor units equipped with a high-efficiency compressor, the MUZ-FH VEHZ simultaneously achieves high heating capacity and energy-saving performance.



Freeze-prevention Heater Equipped as Standard

The Freeze-prevention heater restricts lowered capacity and operation shutdowns caused by the drain water freezing. This supports stable operation in low-temperature environments.

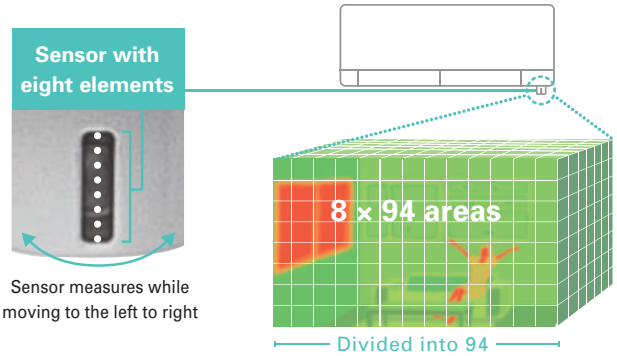
Operation Guaranteed at Outside Temperature of –25°C

Without Freeze-prevention heater

With Freeze-prevention heater

3D i-see Sensor

The FH Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge where people are in the room, thus allowing creation of features such as "Indirect airflow," to avoid airflow hitting people directly, and "direct airflow" to deliver airflow to where people are.



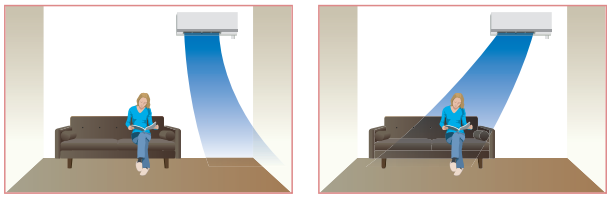
(Image)

Indirect Airflow

The indirect airflow setting can be used when the flow of air feels too strong or direct. For example, it can be used during cooling to avert airflow and prevent body temperature from becoming excessively cooled.

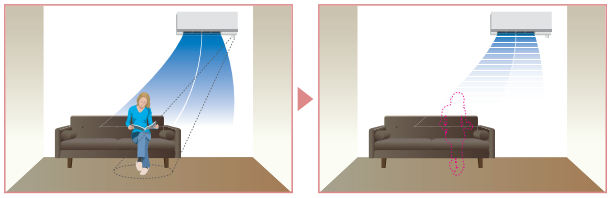
Direct Airflow

This setting can be used to directly target airflow at people such as for immediate comfort when coming indoors on a hot (cold) day.



Absence Detection

The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.



The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

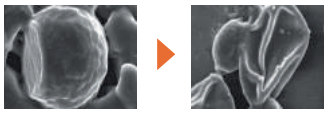
Plasma Quad

Air, like water, is something we use everyday unconsciously. Yet, clean, fresh air is a vital part of creating a healthy space for humans. Achieving this healthy air is Plasma Quad, a plasma-based filter system that effectively removes four kinds of air pollutants; namely, bacteria, viruses, allergens and dust, which the air contains countless particles of.

Bacteria

Test results have confirmed that Plasma Quad neutralizes 99% of bacteria in 115 minutes in a 25m³ test space.

Plasma Quad off / Plasma Quad on

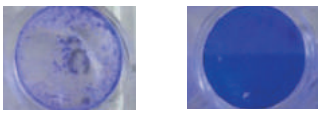


<Test No.> KRCES-Bio.Test Report No.23_0317

Viruses

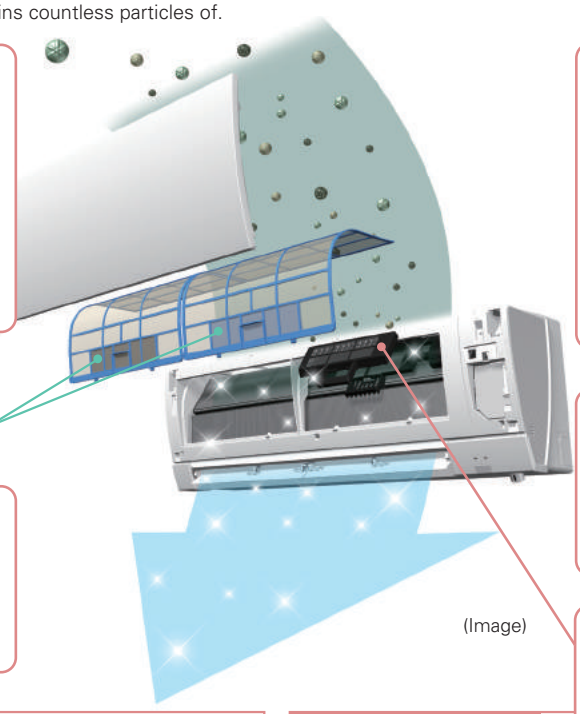
Test results have confirmed that Plasma Quad neutralizes 99% of virus particles in 65 minutes in a 25m³ test space.

Without Plasma Quad / With Plasma Quad



* Hepatic cells turn transparent when affected by a virus.

<Test No.> vrc.center, SMC No.23-002

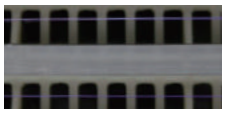


(Image)

Dust

In a test, air containing dust and ticks was passed through the air cleaning device at the low airflow setting. Before and after measurements confirm that Plasma Quad removes 88.6% of dust and ticks.

<Test No.> ITEA No.12M-RPTFEBO22



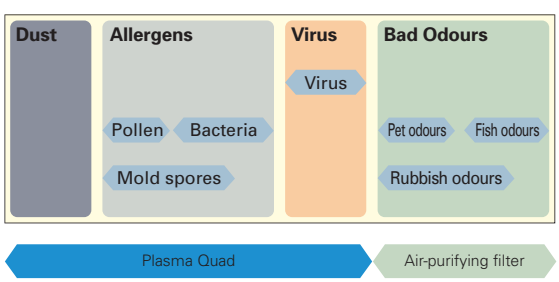
Allergens

In a test, air containing cat fur and pollen was passed through the air cleaning device at the low airflow setting. Before and after measurements confirm that Plasma Quad neutralizes 94% of cat fur and 98% of pollen.

<Test No.> ITEA No.12M-RPTFEBO22

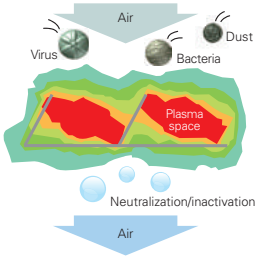
[Effective Range]

Macro ← Particulate size → Nano

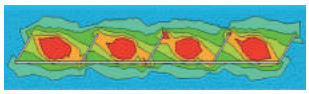


Principle of Plasma Quad

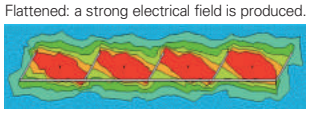
Plasma Quad attacks bacteria and viruses from inside the unit using a strong curtain-like electrical field and discharge of electric current across the whole inlet-air opening of the unit. Tungsten discharge electrodes are used as they provide both discharge capacity and strength. In addition, through flattening the standard, round form of the field to a ribbon-like shape, a strong electrical field is produced.



Round:



Flattened: a strong electrical field is produced.

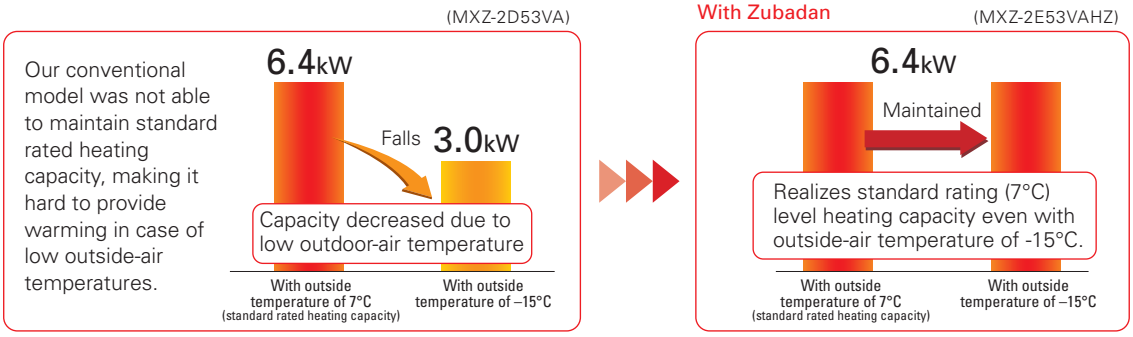


MXZ–VAHZ SERIES

New hyper-heating MXZ allows you to create an oasis of comfort throughout your home and office in the rooms you use most, any time of the year.

Standard rated heating capacity is maintained even when the outside-air temperature drops to –15°C.

Maintains high capacity output even when outside-air temperature is low.

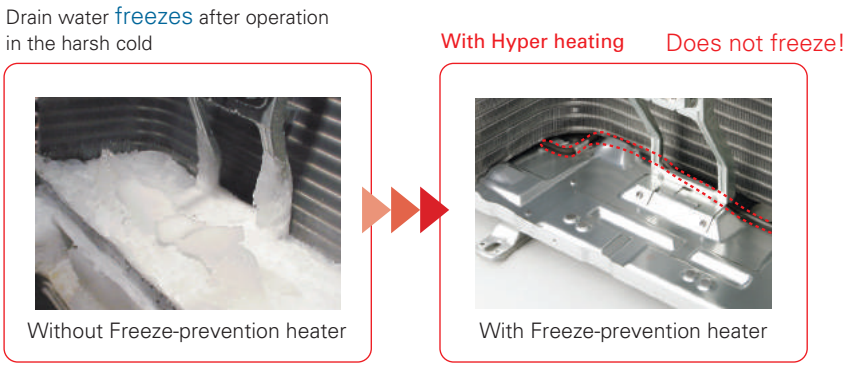


Can operate at outside-air temperature of –25°C

1. Incorporated key parts resistant to cold of up to –25°C after rigorous selection.
2. Printed circuit board-core of the air conditioner—is coated on both sides to protect it in harsh environments.

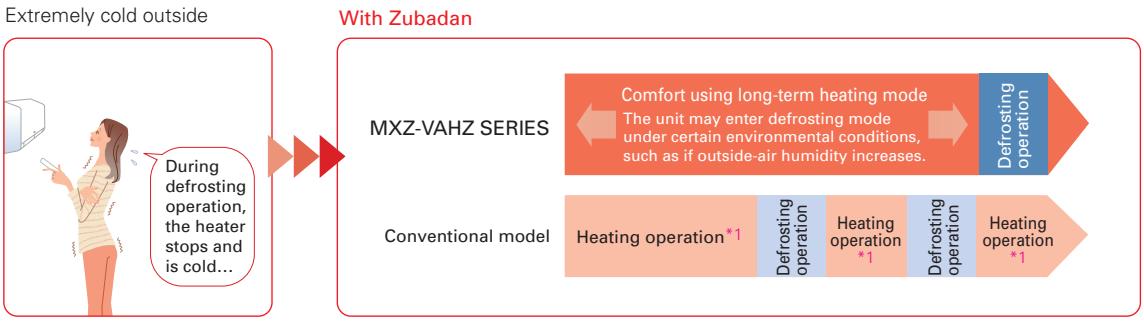
Freeze-prevention heater standard equipment

Prevents capacity loss and operation from stopping due to drain water freezing.



Continuous heating for long periods

Wasteful defrosting operation suppressed to enable more comfortable long-term continuous heating.

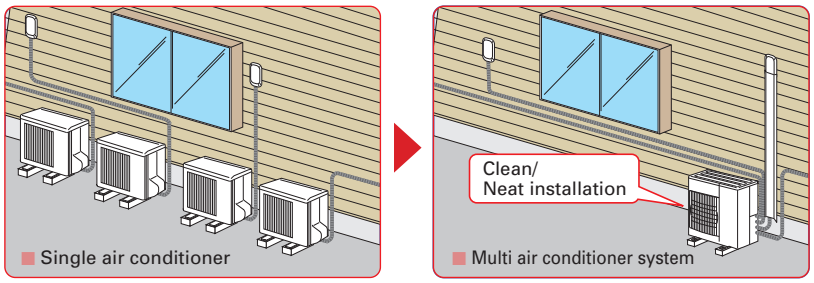


*1: Conventional model performs continuous heating approximately 30min up to a maximum of 90min.

One outdoor unit supports multiple indoor units.

With MXZ-VAHZ, one outdoor unit can cool and heat up to six rooms. They can be installed neatly in sites with limited space such as condominium balconies.

*Please note that cooling and heating modes cannot be run simultaneously in different rooms.



EXAMPLE SYSTEM

MXZ-4E83VAHZ system

Freedom of combinations in cold region greatly enhanced

The variety of indoor unit connection options in cold regions, restricted until now, has been greatly increased.
Increased design freedom.

OUTDOOR UNITS

2-room use

MXZ-2E53VAHZ

4-room use

MXZ-4E83VAHZ

INDOOR UNITS

Wall-mounted

MSZ-FH

MSZ-EF

MSZ-SF

MSZ-GF

Floor-standing

MFZ-KJ

Cassette

SLZ-KF

MLZ-KA

*1

PLA

Ceiling-suspended

*1

PCA

Ceiling-concealed

SEZ-KD

*1

PEAD

*1: P series cannot be connect with MXZ-4E83VAHZ when ampere limit adjustment function is operated.

PLZ-SHW SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter · Vector Sine Wave · DC Scroll · Rare Earth Magnet · DC Fan Motor · Vector-Wave · PAM · Power Receiver · Grooved Piping · ZUBADAN

Indoor Unit

PLA-ZRP100/125BA

Standard Panel
PLP-6BA (only Panel)
PLP-6BALM (with wireless remote controller)

Automatic Filter Elevation Panel
PLP-6BAJ (only Panel)

Standard Panel with "i-see Sensor"
PLP-6BAE (only Panel)
PLP-6BALME (with wireless remote controller)

Outdoor Unit

PUHZ-SHW112VHA(-BS)
PUHZ-SHW112/140YHA(-BS)

Remote Controller

Enclosed in
PLP-6BALM/PLP-6BALME

*optional

*optional

i-see Sensor (Optional) · Demand Control (Optional, 100/125) · Pure White · AUTO VANE · Fresh-air Intake · High-efficiency (Optional) · Long Life · Check! · SWING · High Ceiling · Low Ceiling · AUTO · ACO · Auto Restart · Low Temp Cooling

Silent · Ampere Limit · Rotation Back-up (Optional) · (Optional) · Group Control · M-NET connection (Optional) · Wi-Fi Interface (Optional) · COMPO · Cleaning-free pipe route · Wiring Reuse (Optional) · Drain Lift Up · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				PLA-ZRP100BA		PLA-ZRP125BA
Outdoor Unit				PUHZ-SHW112VHA(-BS)	PUHZ-SHW112YHA(-BS)	PUHZ-SHW140YHA(-BS)
Refrigerant				R410A*1		
Power Supply	**Source**			Outdoor power supply		
	Outdoor (V/Phase/Hz)			VHA:230 / Single / 50, YHA:400 / Three / 50		
Cooling	**Capacity**	Rated	kW	10.0	10.0	12.5
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0
	Total Input	Rated	kW	2.786	2.786	4.449
	EER			–	–	2.81
		EEL Rank		–	–	–
	Design Load		kW	10.0	10.0	12.5
	Annual Electricity Consumption*2		kWh/a	633	633	856
	SEER			5.5	5.5	5.1*4
		Energy Efficiency Class		A	A	–
Heating (Average Season)	**Capacity**	Rated	kW	11.2	11.2	14.0
		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
	Total Input	Rated	kW	2.667	2.667	3.879
	COP			–	–	3.61
		EEL Rank		–	–	–
	Design Load		kW	12.7	12.7	15.8
	Declared Capacity	at reference design temperature	kW	11.2	11.2	14.0
		at bivalent temperature	kW	11.2	11.2	14.0
		at operation limit temperature	kW	9.4	9.4	9.5
	Back Up Heating Capacity		kW	1.5	1.5	1.8
	Annual Electricity Consumption*2		kWh/a	4420	4420	6213
	SCOP			4.0	4.0	3.5*4
		Energy Efficiency Class		A^+	A^+	–
Operating Current (max)			A	35.7	13.7	13.8
Indoor Unit	**Input**	Rated	kW	0.08	0.08	0.09
	Operating Current (max)		A	0.74	0.74	0.80
	Dimensions <Panel>	H × W × D	mm	298-840-840 <35-950-950>		
	Weight <Panel>		kg	26 <6>	26 <6>	27 <6>
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/min	20 - 23 - 26 - 30	20 - 23 - 26 - 30	22 - 25 - 28 - 31
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	32 - 34 - 37 - 40	32 - 34 - 37 - 40	34 - 36 - 39 - 41
	Sound Level (PWL)		dB(A)	65	65	66
Outdoor Unit	**Dimensions**	H × W × D	mm	1350 - 950 - 330 (+30)		
	Weight		kg	120	134	134
	Air Volume	Cooling	m^3/min	100.0	100.0	100.0
		Heating	m^3/min	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	51	51	51
		Heating	dB(A)	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69	69
	Operating Current (max)		A	35.0	13.0	13.0
	Breaker Size		A	40	16	16
Ext. Piping	**Diameter**	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	75	75	75
	Max. Height	Out-In	m	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	℃	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	℃	–25 ~ +21	–25 ~ +21	–25 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C.
*4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PLZ-SHW SERIES

Indoor Unit

PLA-RP100/125BA

Standard Panel
PLP-6BA (only Panel)
PLP-6BALM (with wireless remote controller)
Automatic Filter Elevation Panel
PLP-6BAJ (only Panel)
Standard Panel with "i-see Sensor"
PLP-6BAE (only Panel)
PLP-6BALME (with wireless remote controller)

Outdoor Unit

PUHZ-SHW112VHA(-BS)
PUHZ-SHW112/140YHA(-BS)

Remote Controller

Enclosed in
PLP-6BALM/PLP-6BALME

*optional

*optional

Type				Inverter Heat Pump		
Indoor Unit				PLA-RP100BA		PLA-RP125BA
Outdoor Unit				PUHZ-SHW112VHA(-BS)	PUHZ-SHW112YHA(-BS)	PUHZ-SHW140YHA(-BS)
Refrigerant				R410A*1		
Power Supply	Source			Outdoor power supply		
	Outdoor (V/Phase/Hz)			VHA:230 / Single / 50, YHA:400 / Three / 50		
Cooling	Capacity	Rated	kW	10.0	10.0	12.5
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0
	Total Input	Rated	kW	2.850	2.850	4.449
	EER			–	–	2.81
		EEL Rank		–	–	–
	Design Load		kW	10.0	10.0	12.5
	Annual Electricity Consumption*2		kWh/a	661	661	858
	SEER			5.3	5.3	5.1*4
		Energy Efficiency Class		A	A	–
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2	14.0
		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
	Total Input	Rated	kW	2.794	2.794	3.879
	COP			–	–	3.61
		EEL Rank		–	–	–
	Design Load		kW	12.7	12.7	15.8
	Declared Capacity	at reference design temperature	kW	11.2	11.2	14.0
		at bivalent temperature	kW	11.2	11.2	14.0
		at operation limit temperature	kW	9.4	9.4	9.5
	Back Up Heating Capacity		kW	1.5	1.5	1.8
	Annual Electricity Consumption*2		kWh/a	4445	4445	6506
	SCOP			4.0	4.0	3.4*4
		Energy Efficiency Class		A^+	A^+	–
Operating Current (max)			A	35.7	13.7	13.8
Indoor Unit	Input	Rated	kW	0.14	0.14	0.15
	Operating Current (max)		A	0.94	0.94	1.00
	Dimensions <Panel>	H × W × D	mm	298-840-840 <35-950-950>		
	Weight <Panel>		kg	25 <6>	25 <6>	25 <6>
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/min	20 - 23 - 26 - 30	20 - 23 - 26 - 30	22 - 25 - 28 - 31
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	32 - 34 - 37 - 40	32 - 34 - 37 - 40	34 - 36 - 39 - 41
	Sound Level (PWL)		dB(A)	62	62	63
Outdoor Unit	Dimensions	H × W × D	mm	1350 - 950 - 330 (+30)		
	Weight		kg	120	134	134
	Air Volume	Cooling	m^3/min	100.0	100.0	100.0
		Heating	m^3/min	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	51	51	51
		Heating	dB(A)	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69	69
	Operating Current (max)		A	35.0	13.0	13.0
	Breaker Size		A	40	16	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	75	75	75
	Max. Height	Out-In	m	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	℃	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	℃	–25 ~ +21	–25 ~ +21	–25 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C.
*4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

PKZ-SHW SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter · Vector Sine Wave · DC Scroll · Rare Earth Magnet · DC Fan Motor · Vector+Wave · PAM · Power Receiver · Grooved Piping · ZUBADAN

Indoor Unit

PKA-RP100KAL

Outdoor Unit

PUHZ-SHW112VHA(-BS)
PUHZ-SHW112/140YHA(-BS)

Remote Controller

*optional

*optional

Demand Control (Optional) · Pure White · AUTO VANE · Check! (Optional) · SWING · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent · Ampere Limit · Rotation Back-up (Optional) · (Optional) · Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional)

COMPO · Cleaning-free pipe route · Wiring Reuse (Optional) · Drain Lift Up (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump	
Indoor Unit				PKA-RP100KAL	
Outdoor Unit				PUHZ-SHW112VHA(-BS)	PUHZ-SHW112YHA(-BS)
Refrigerant				R410A*1	
Power Supply	Source			Outdoor power supply	
	Outdoor (V/Phase/Hz)			VHA:230 / Single / 50, YHA:400 / Three / 50	
Cooling	Capacity	Rated	kW	10.0	10.0
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4
	Total Input	Rated	kW	2.924	2.924
	Design Load		kW	10.0	10.0
	Annual Electricity Consumption*2		kWh/a	673	673
	SEER			5.2	5.2
		Energy Efficiency Class		A	A
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2
		Min - Max	kW	4.5 - 14.0	4.5 - 14.0
	Total Input	Rated	kW	3.103	3.103
	Design Load		kW	12.7	12.7
	Declared Capacity	at reference design temperature	kW	11.2	11.2
		at bivalent temperature	kW	11.2	11.2
		at operation limit temperature	kW	9.4	9.4
	Back Up Heating Capacity		kW	1.5	1.5
	Annual Electricity Consumption*2		kWh/a	4664	4664
	SCOP			3.8	3.8
		Energy Efficiency Class		A	A
Operating Current (max)			A	35.6	13.6
Indoor Unit	Input	Rated	kW	0.08	0.08
	Operating Current (max)		A	0.57	0.57
	Dimensions <Panel>	H × W × D	mm	365 - 1170 - 295	
	Weight <Panel>		kg	21	21
	Air Volume [Lo-Mid-Hi]		m^3/min	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL)		dB(A)	65	65
Outdoor Unit	Dimensions	H × W × D	mm	1350 - 950 - 330 (+30)	
	Weight		kg	120	134
	Air Volume	Cooling	m^3/min	100.0	100.0
		Heating	m^3/min	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	51	51
		Heating	dB(A)	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69
	Operating Current (max)		A	35.0	13.0
	Breaker Size		A	40	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	75	75
	Max. Height	Out-In	m	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	–15 ~ +46	–15 ~ +46
		Heating	°C	–25 ~ +21	–25 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C.

PEDZ-SHW JA SERIES

Indoor Unit

PEAD-RP100/125JA(L)Q

Outdoor Unit

PUHZ-SHW112VHA(-BS)
PUHZ-SHW112/140YHA(-BS)

Remote Controller

*optional

*optional

*optional

Type				Inverter Heat Pump		
Indoor Unit				PEAD-RP100JA(L)Q		PEAD-RP125JA(L)Q
Outdoor Unit				PUHZ-SHW112VHA(-BS)	PUHZ-SHW112YHA(-BS)	PUHZ-SHW140YHA(-BS)
Refrigerant				R410A*1		
Power Supply	Source			Outdoor power supply		
	Outdoor (V/Phase/Hz)			VHA:230 / Single / 50, YHA:400 / Three / 50		
Cooling	Capacity	Rated	kW	10.0	10.0	12.5
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0
	Total Input	Rated	kW	2.924 (2.904)	2.924 (2.904)	3.895 (3.875)
	EER			–	–	3.21 (3.22)
		EEL Rank		–	–	–
	Design Load		kW	10.0	10.0	12.5
	Annual Electricity Consumption*2		kWh/a	729 (714)	729 (714)	906 (892)
	SEER			4.8 (4.9)	4.8 (4.9)	4.8 (4.9)*4
		Energy Efficiency Class		B	B	–
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2	14.0
		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
	Total Input	Rated	kW	3.103	3.103	3.879
	COP			–	–	3.61
		EEL Rank		–	–	–
	Design Load		kW	12.7	12.7	15.8
	Declared Capacity	at reference design temperature	kW	11.2	11.2	14.0
		at bivalent temperature	kW	11.2	11.2	14.0
		at operation limit temperature	kW	9.4	9.4	9.5
	Back Up Heating Capacity		kW	1.5	1.5	1.8
	Annual Electricity Consumption*2		kWh/a	4664	4664	6072
	SCOP			3.8	3.8	3.6*4
		Energy Efficiency Class		A	A	–
Operating Current (max)			A	37.7	15.7	15.8
Indoor Unit	Input [Cooling / Heating]	Rated	kW	0.25 (0.23) / 0.23	0.25 (0.23) / 0.23	0.36 (0.34) / 0.34
	Operating Current (max)		A	2.65	2.65	2.76
	Dimensions	H × W × D	mm	250 - 1400 - 732		
	Weight		kg	41 (40)	41 (40)	43 (42)
	Air Volume [Lo-Mid-Hi]		m^3/min	24.0 - 29.0 - 34.0	24.0 - 29.0 - 34.0	29.5 - 35.5 - 42.0
	External Static Pressure		Pa	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40
	Sound Level (PWL)		dB(A)	61	61	65
Outdoor Unit	Dimensions	H × W × D	mm	1350 - 950 - 330 (+30)		
	Weight		kg	120	134	134
	Air Volume	Cooling	m^3/min	100.0	100.0	100.0
		Heating	m^3/min	100.0	100.0	100.0
	Sound Level (SPL)	Cooling	dB(A)	51	51	51
		Heating	dB(A)	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69	69
	Operating Current (max)		A	35.0	13.0	13.0
	Breaker Size		A	40	16	16
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	75	75	75
	Max. Height	Out-In	m	30	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	℃	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	℃	–25 ~ +21	–25 ~ +21	–25 ~ +21

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*3 Optional air protection guide is required where ambient temperature is lower than –5°C.
*4 SEER/SCOP values are measured based on EN14825. These values are reference purpose only.

MSZ-FH VEHZ SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter · Joint Lap · DC Fan Motor · PAM · Grooved Piping · SEER 25-35 A+++ · SCOP 25-35 A++

Indoor Unit

GOOD DESIGN

MSZ-FH25/35/50VE2

Outdoor Unit

MUZ-FH25/35VEHZ

MUZ-FH50VEHZ

Remote Controller

3D i-see Sensor · AREA · HUMAN · Econo Cool · Pure White · AUTO VANE · Plasma Quad · Electrostatic Anti-allergy (Optional) · SWING · SWING · Natural Flow · AUTO · Weekly Timer · i save · ACO

Auto Restart · Low Temp Cooling · Optional · Group Control · Optional · M-NET connection · Optional · Wi-Fi Interface · Optional · MXZ connection · Cleaning-free pipe reuse · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-FH25VE(2)	MSZ-FH35VE(2)	MSZ-FH50VE(2)
Outdoor Unit				MUZ-FH25VEHZ	MUZ-FH35VEHZ	MUZ-FH50VEHZ
Refrigerant				R410A (*1)		
Power Supply	Source			Outdoor power supply		
	Outdoor (V/Phase/Hz)			230 / Single / 50		
Cooling	Design Load		kW	2.5	3.5	5.0
	Annual Electricity Consumption (*2)		kWh/a	96	138	244
	SEER (*4)			9.1	8.9	7.2
		Energy Efficiency Class		A^{+++}	A^{+++}	A^{++}
	Capacity	Rated	kW	2.5	3.5	5.0
		Min - Max	kW	0.8 - 3.5	0.8 - 4.0	1.9 - 6.0
	Total Input	Rated	kW	0.485	0.820	1.380
Heating (Average Season)(*5)	Design Load		kW	3.2	4.0	6.0
	Declared Capacity	at reference design temperature	kW	3.2	4.0	6.0
		at bivalent temperature	kW	3.2	4.0	6.0
		at operation limit temperature	kW	1.7	2.6	3.8
	Back Up Heating Capacity		kW	0.0	0.0	0.0
	Annual Electricity Consumption (*2)		kWh/a	924	1173	2006
	SCOP (*4)			4.9	4.8	4.2
		Energy Efficiency Class		A^{++}	A^{++}	A^{+}
	Capacity	Rated	kW	3.2	4.0	6.0
		Min - Max	kW	1.0 - 6.3	1.0 - 6.6	1.7 - 8.7
	Total Input	Rated	kW	0.580	0.800	1.480
Operating Current (max)			A	9.6	10.5	14.0
Indoor Unit	Input	Rated	kW	0.029	0.029	0.031
	Operating Current (max)		A	0.4	0.4	0.4
	Dimensions	H × W × D	mm	305 (+17) - 925 - 234		
	Weight		kg	13.5	13.5	13.5
	Air Volume (SLo-Lo-Mid-Hi-SHi (*3) (Dry/Wet))	Cooling	m^3/min	3.9 - 4.7 - 6.3 - 8.6 - 11.6 (10.5)	3.9 - 4.7 - 6.3 - 8.6 - 11.6 (10.5)	6.4 - 7.4 - 8.6 - 10.1 - 12.4
		Heating	m^3/min	4.0 - 4.7 - 6.4 - 9.2 - 13.2	4.0 - 4.7 - 6.4 - 9.2 - 13.2	5.7 - 7.2 - 9.0 - 11.2 - 14.6
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi (*3))	Cooling	dB(A)	20 - 23 - 29 - 36 - 42	21 - 24 - 29 - 36 - 42	27 - 31 - 35 - 39 - 44
		Heating	dB(A)	20 - 24 - 29 - 36 - 44	21 - 24 - 29 - 36 - 44	25 - 29 - 34 - 39 - 46
	Sound Level (PWL)		dB(A)	58	58	60
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 - 285		880 - 840 - 330
	Weight		kg	37	37	55
	Air Volume	Cooling	m^3/min	31.3	33.6	48.8
		Heating	m^3/min	31.3	33.6	51.3
	Sound Level (SPL)	Cooling	dB(A)	46	49	51
		Heating	dB(A)	49	50	54
	Sound Level (PWL)	Cooling	dB(A)	60	61	64
	Operating Current (max)		A	9.2	10.1	13.6
	Breaker Size		A	10	12	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max. Length	Out-In	m	20	20	30
	Max. Height	Out-In	m	12	12	15
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–10 ~ +46	–10 ~ +46
		Heating	℃	–25 ~ +24	–25 ~ +24	–25 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

MFZ-KJ SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter · DC Fan Motor · PAM · Grooved Piping · SEER A+++ · SCOP A+

Indoor Unit

GOOD DESIGN

MFZ-KJ25/35/50VE2

Outdoor Unit

MUFZ-KJ25/35VEHZ

MUFZ-KJ50VEHZ

Remote Controller

Econo Cool · Pure White · AUTO VANE · Anti-allergy Enzyme · Nano Platinum · SWING · AUTO · i save · ACO · Auto Restart · Low Temp Cooling · Optional · Group Control · Optional · M-NET connection · Optional · Wi-Fi Interface · Optional

Cleaning-free pipe route · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MFZ-KJ25VE(2)	MFZ-KJ35VE(2)	MFZ-KJ50VE(2)
Outdoor Unit				MUFZ-KJ25VEHZ	MUFZ-KJ35VEHZ	MUFZ-KJ50VEHZ
Refrigerant				R410A (*1)		
Power Supply	Source			Outdoor power supply		
	Outdoor (V/Phase/Hz)			230 / Single / 50		
Cooling	Design Load		kW	2.5	3.5	5.0
	Annual Electricity Consumption (*2)		kWh/a	102	150	266
	SEER (*4)			8.5	8.1	6.5
		Energy Efficiency Class		A^{+++}	A^{++}	A^{++}
	Capacity	Rated	kW	2.5	3.5	5.0
		Min - Max	kW	0.5 - 3.4	0.5 - 3.7	1.6 - 5.7
	Total Input	Rated	kW	0.540	0.940	1.410
Heating (Average Season)	Design Load		kW	3.5	3.6	4.5
	Declared Capacity	at reference design temperature	kW	3.5	3.6	4.5
		at bivalent temperature	kW	3.5	3.6	4.5
		at operation limit temperature	kW	1.6	2.3	3.3
	Back Up Heating Capacity		kW	0.0	0.0	0.0
	Annual Electricity Consumption (*2)		kWh/a	1104	1158	1467
	SCOP (*4)			4.4	4.3	4.2
		Energy Efficiency Class		A^{+}	A^{+}	A^{+}
	Capacity	Rated	kW	3.4	4.3	6.0
		Min - Max	kW	1.2 - 5.1	1.2 - 5.8	2.2 - 8.4
	Total Input	Rated	kW	0.770	1.100	1.610
Operating Current (max)			A	4.42	3.91	3.73
Indoor Unit	Input	Rated	kW	0.016	0.016	0.038
	Operating Current (max)		A	0.17	0.17	0.34
	Dimensions	H × W × D	mm	600 - 750 - 215		
	Weight		kg	15	15	15
	Air Volume (SLo-Lo-Mid-Hi-SHi (*3)(Dry/Wet))	Cooling	m^3/min	3.9 - 4.9 - 5.9 - 7.1 - 8.2	3.9 - 4.9 - 5.9 - 7.1 - 8.2	5.6 - 6.7 - 8.0 - 9.3 - 10.6
		Heating	m^3/min	3.9 - 5.1 - 6.2 - 7.7 - 9.7	3.9 - 5.1 - 6.2 - 7.7 - 9.7	6.0 - 7.4 - 9.4 - 11.6 - 14.0
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi (*3))	Cooling	dB(A)	20 - 25 - 30 - 35 - 39	20 - 25 - 30 - 35 - 39	27 - 31 - 35 - 39 - 44
		Heating	dB(A)	19 - 25 - 30 - 35 - 41	19 - 25 - 30 - 35 - 41	29 - 35 - 40 - 45 - 50
	Sound Level (PWL)		dB(A)	49	50	56
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 - 285		880 - 840 - 330
	Weight		kg	37	37	55
	Air Volume	Cooling	m^3/min	31.3	31.3	45.8
		Heating	m^3/min	33.6	33.6	45.8
	Sound Level (SPL)	Cooling	dB(A)	46	47	49
		Heating	dB(A)	51	51	51
	Sound Level (PWL)	Cooling	dB(A)	59	60	63
	Operating Current (max)		A	9.2	10	13.6
	Breaker Size		A	10	12	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max. Length	Out-In	m	20	20	30
	Max. Height	Out-In	m	12	12	15
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–10 ~ +46	–10 ~ +46
		Heating	℃	–25 ~ +24	–25 ~ +24	–25 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".

MXZ-VAHZ SERIES

Outdoor Unit

MXZ-2E53VAHZ

MXZ-4E83VAHZ

Type				Inverter Heat Pump	
Indoor Unit				Please refer to*4 *5	
Outdoor Unit				MXZ-2E53VAHZ	MXZ-4E83VAHZ
Refrigerant				R410A*1	
Power Supply	**Source**			Outdoor power supply	
	Outdoor (V/Phase/Hz)			230 / Single / 50	
Cooling	**Capacity**	Rated	kW	5.3	8.3
		Min - Max	kW	1.1 - 6.0	3.5 - 9.2
	Total Input	Rated	kW	1.29	2.25
	Design Load		kW	5.3	8.3
	Annual Electricity Consumption*2		kWh/a	282	447
	SEER*4			6.5	6.5
		Energy Efficiency Class*4		A++	A++
Heating (Average Season)	**Capacity**	Rated (7°C)	kW	6.4	9.0
		Rated (–7°C)	kW	6.4	9.0
		Rated (–15°C)	kW	6.4	9.0
		Min - Max	kW	1.0 - 7.0	3.5 - 11.6
	Total Input	Rated	kW	1.36	1.90
	Design Load		kW	6.4	10.1
	Declared Capacity	at reference design temperature	kW	6.4	9.0
		at bivalent temperature	kW	6.4	9.0
		at operation limit temperature	kW	2.4	2.5
	Back Up Heating Capacity		kW	0.0	1.1
	Annual Electricity Consumption*2		kWh/a	2165	3446
	SCOP			4.1	4.1
		Energy Efficiency Class*4		A+	A+
Max. Operating Current (Indoor+Outdoor)			A	15.6	28.0
Outdoor Unit	**Dimensions**	H × W × D	mm	796 × 950 × 330	1048 × 950 × 330
	Weight		kg	61	87
	Air Volume	Cooling	m^3/min	47.0	63.0
		Heating	m^3/min	47.0	77.0
	Sound Level (SPL)	Cooling	dB(A)	45	53
		Heating	dB(A)	47	57
	Sound Level (PWL)	Cooling	dB(A)	55	66
	Breaker Size		A	16	30
Ext. Piping	**Diameter**	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35× 4 / 12.7 × 1+9.52× 3
	Total Piping Length (max)		m	30	70
	Each Indoor Unit Piping Length (max)		m	20	25
	Max. Height		m	15 (10) *3	15 (10) *3
	Chargeless Length		m	20	25
Guaranteed Operating Range [Outdoor]		Cooling	°C	–10 ~ +46	–10 ~ +46
		Heating	°C	–25 ~ +24	–25 ~ +24

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2 , over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results.
Actual energy consumption will depend on how the appliance is used and where it is located.
*3 If the outdoor unit is installed higher than the indoor unit, max. height is reduced to 10m.
*4 EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-2E53VAHZ MSZ-EF18VE + MSZ-EF35VE
MXZ-4E83VAHZ MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE
*5 Indoor unit compatibility table is shown on page 93.

To ensure full capacity in cold and snowy regions...

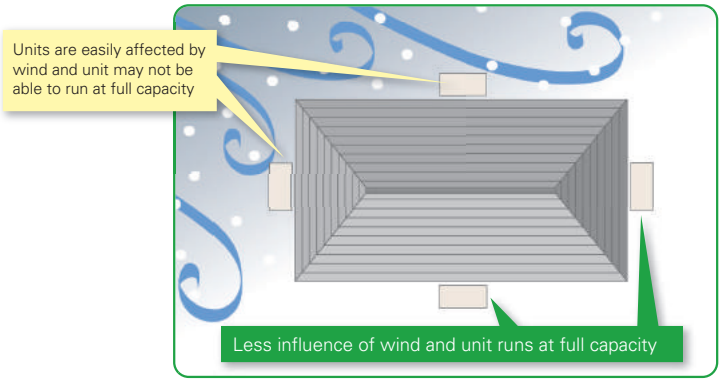
3 Important Points to Remember When Installing the Outdoor Unit

✻RAC/PAC (inc. Air to Water) /MXZ

Wind and snow can significantly reduce capacity.
Be sure to check the infomation below and install the outdoor unit correctly.

1 Installation Location

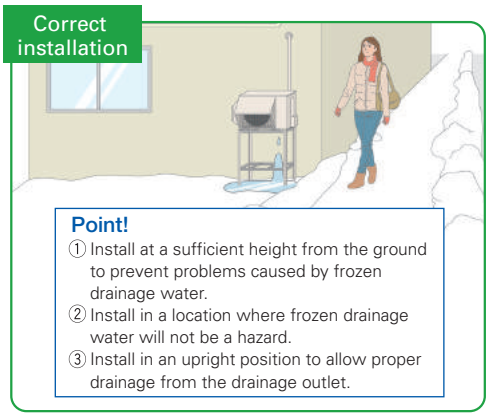
Be aware of the prevailing wind direction in winter and install the outdoor unit where it is as sheltered as possible.

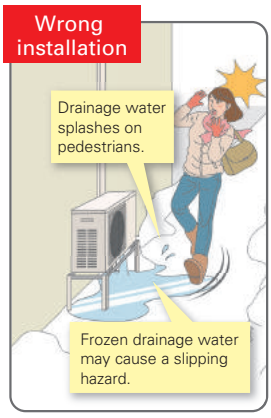


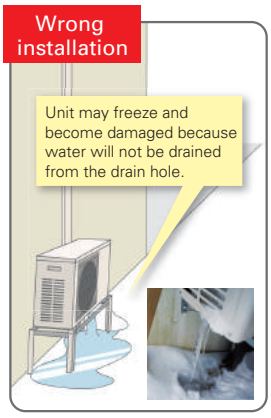
2 Measures for Drainage of Water

Case 1: Unit is installed close to passage (walkway)

Do not install the unit close to passage as drainage water from the unit may freeze and cause a slipping hazard.

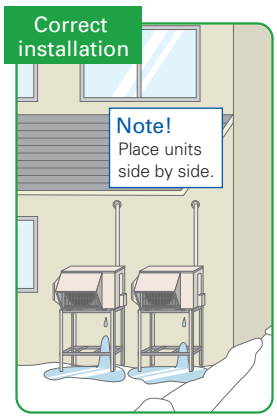


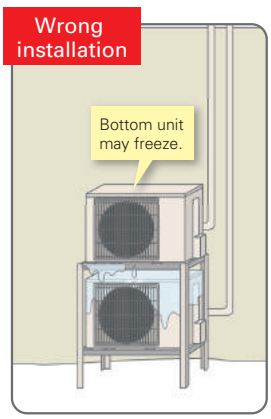




Case 2: Multiple units are installed

Do not install units on top of one another as it may cause frozen drainage water on the bottom unit.





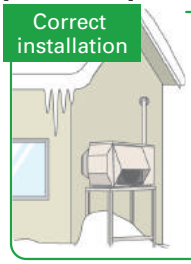
3 Measures for Snow

Unit is installed on the ground

To avoid the adverse effects of snow and frozen drainage water, install the unit on a stand to ensure a sufficient height from the ground.

[RAC / PAC / MXZ]

Correct installation

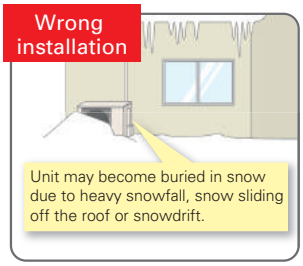


Point!

①Install at a position/height to prevent the unit being buried in snow*1 and the adverse effects of frozen drainage water.*2
②Install so as to avoid the effects of snow or snowdrift.
③Install so as to avoid the damage from falling snow or icicles.

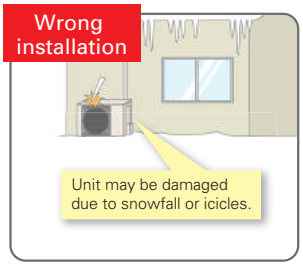
*1 Install at a height above the highest snowfall depth.
*2 Even for correct installations, dripping drainage water may form an icicle which needs to be cleared away regularly to prevent a blocked drainage outlet.

Wrong installation



Unit may become buried in snow due to heavy snowfall, snow sliding off the roof or snowdrift.

Wrong installation

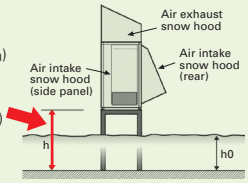


Unit may be damaged due to snowfall or icicles.

Use a stand to add sufficient height to protect the unit's heat exchanger from snow and prevent icicles forming during defrost operation.

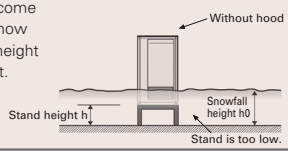
Correct installation

Minimum height (h) should be higher than the highest snowfall depth (h0) +20cm



Wrong installation

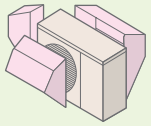
Unit may become covered in snow if the stand height is insufficient.



Install snow protection hood as necessary

[RAC / PAC / MXZ]

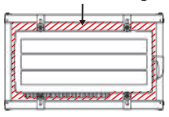
Correct installation



Point!

Install the snow protection hood or other cover in snowy regions.

Necessity of accessories (drain socket & centralised drain pan, stand, snow protection hood, base heater)

	Snowy region	Cold region	Remarks
	Countermeasures for snow	Countermeasures for freezing	
Drain socket, Centralised drain pan	Not used	Not used	Prevents freezing
Stand	Needed	Needed	[RAC / PAC / MXZ] 1. Install so as to prevent the unit being buried in snow (at a height greater than the highest snowfall depth). Be sure that the stand does not obstruct drainage. 2. Install so as to prevent damage to the unit due to frozen drainage water (icicles). <Correct> Clearance to prevent snow accumulating. 
Snow protection hood	Needed *When the installation position is subject to snowfall.	—	1. Prevents heat exchanger from being covered in snow. 2. Prevents snow accumulating inside the air duct.
Base heater	—	Needed	[RAC / PAC / MXZ] Outdoor units equipped with a heater for cold regions are those with an "H" in the model name. For the cold-climate zone, use of a unit with a heater is strongly recommended. Even for the moderate-climate zone use of a unit with a heater is recommended for regions subject to high humidity in winter.

⚠ CAUTION About disposal of drainage water

When the unit is installed in cold or snowy regions :

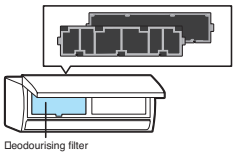
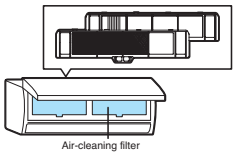
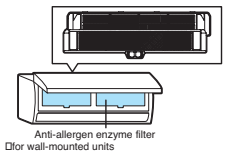
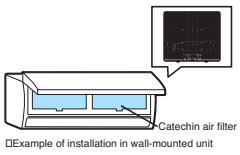
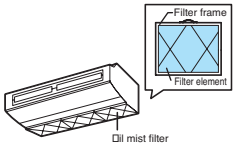
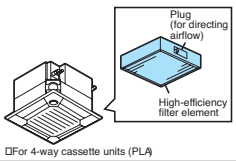
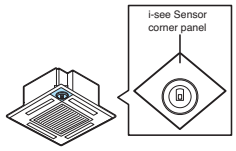
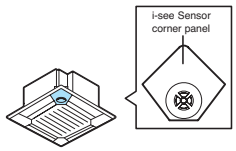
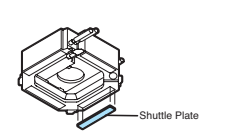
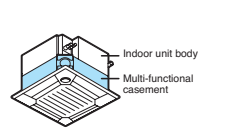
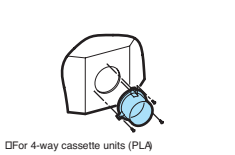
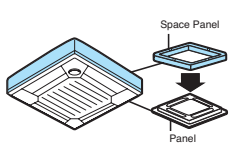
Drainage water may freeze in the drain socket/hose and prevent the fan from rotating.

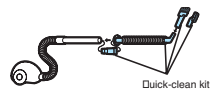
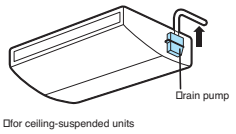
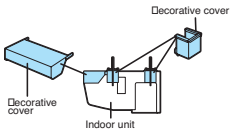
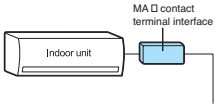
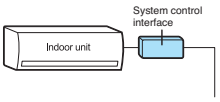
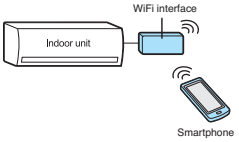
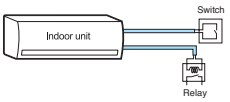
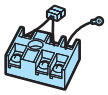
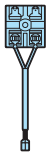
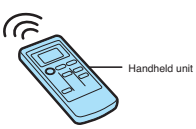
Do not attach a drain socket packaged as an accessory to the unit.

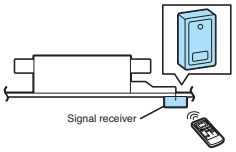
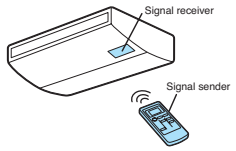
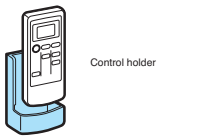
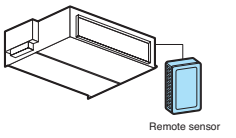
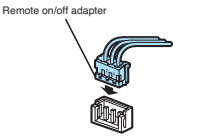
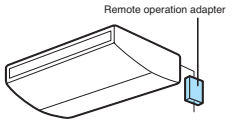
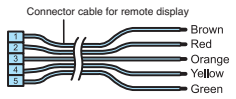
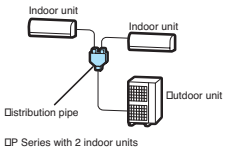
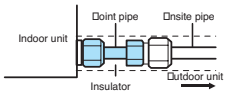
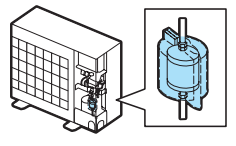
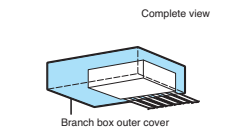
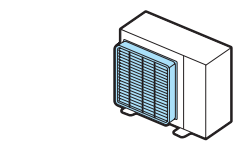
✻ In the case that fitting a drain socket is absolutely necessary, steps must be taken so that the drainage water does not freeze. For more information, please consult Mitsubishi Electric or one of its dealers/resellers.

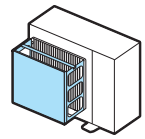
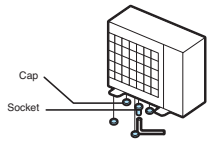
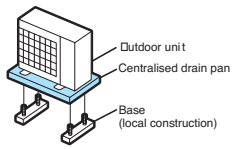
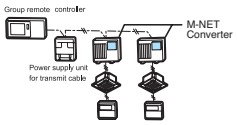
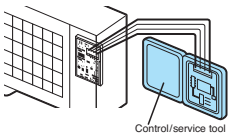
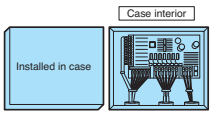
Arrangement for snow protection hood	[RAC / PAC / MXZ] Separately sold parts are available for some models. Please consult Mitsubishi Electric or one of its dealers/resellers at the time of purchase for details.

Major Optional Parts

Part Name	Description
Deodourising Filter Captures small foul-smelling substances in the air.	
Air-cleaning Filter Removes fine dust particles from the air by means of static electricity.	
Anti-allergen Enzyme Filter Captures the bacteria, pollen and other allergens in the air and neutralises them with the enzyme in the filter.	
Catechin Air Filter Contains catechin, which has antiviral and antibacterial characteristics.	
Oil Mist Filter Element Filter element (12 pieces) that blocks the oil mist for ceiling-suspended models used in professional kitchens.	
High-efficiency Filter Element Element for high-efficiency filter. Removes fine dust particles from the air.	
3D i-see Sensor Corner Panel for SLZ Corner panel holding the 3D i-see Sensor.	
i-see Sensor Corner Panel for PLA Corner panel holding the i-see Sensor.	
Shuttle Plate Plate for blocking an air outlet of the 4-way cassette (PLA) indoor unit.	
Multi-functional Casement Casement for fresh-air intake and attaching the high-efficiency filter element (optional).	
Fresh-air Intake Duct Flange Flange attachment for adding a duct to take in fresh air from outside.	
Space Panel Decorative cover for the installation when the ceiling height is low.	

Part Name	Description
Quick-clean Kit Cleaning tool to remove dust on the filter, fan and heat exchanger. This tool can be easily connected to a household vacuum cleaner for quick, convenient cleaning of the units.	
Drain Pump Pumps drain water to a point higher than that where the unit is installed.	
Decorative Cover To be attached to the upper section of ceiling-suspended models for professional kitchen use. Helps prevent dust accumulation.	
MA & Contact Terminal Interface Interface for connecting with the PAR-32MAA remote controller and PAC-YT52CRA, and to relay operation signals.	
System Control Interface Interface to connect with M-NET controllers.	
Wi-Fi Interface Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.	
Connector Cable This product is an adaptor which inputs the incoming signals from an open/close switch to the air conditioner and outputs the on/off signals from the air conditioner to the back-up heater.	
Power Supply Terminal Kit Terminal bed to change the power supply from outdoor power supply to separate indoor/outdoor power supplies.	
Wired Remote Controller Advanced deluxe remote controller with full-dot liquid-crystal display and backlight. Equipped with convenient functions like night-setback.	
Simple Wired Remote Controller Remote controller with liquid-crystal display, and backlight function for operation in dark location.	
Remote Controller Terminal Block Kit for PKA The terminal block is used as a relay to wire an indoor unit and to two remote controllers or to wire a remote controller and multiple indoor units in order to perform group control.	
Wireless Remote Controller Signal Sender Handheld unit for sending operation signals to the indoor unit.	

Part Name	Description
Wireless Remote Controller Signal Receiver Receives operation signals from the wireless remote controller handheld unit.	
Wireless Remote Controller Kit (Sender & Receiver) Remote controller handheld unit (signal sender) and receiver (signal receiver) for ceiling-suspended units.	
Control Holder Holder for storing the remote controller.	
Remote Sensor Sensor to detect the room temperature at remote positions.	
Remote On/Off Adapter Connector for receiving signals from the local system to control the on/off function.	
Remote Operation Adapter Adapter to display the operation status and control on/off function from a distance.	
Connector Cable for Remote Display Connector used to display the operation status and control on/off function from a distance.	
Distribution Pipe Branch pipe for P Series simultaneous multi-system use, or to connect two branch boxes for MXZ-8B140V(Y)A/160V(Y)A systems.	
Joint Pipe Part for connecting refrigerant pipes of different diametres.	
Liquid Refrigerant Dryer Removes water and minute particles from refrigerant pipes.	
Branch Box Outer Cover Casement for branch boxes.	
Air Discharge Guide Changes the direction of air being exhausted from the outdoor unit.	

Part Name	Description
Air Protection Guide Protects the outdoor unit from the wind.	
Drain Socket A set of caps to cover unnecessary holes at the bottom of the outdoor unit, and a socket to guide drain water to the local drain pipe.	
Centralised Drain Pan Catches drain water generated by the outdoor unit.	
M-NET Converter Used to connect P Series A-control models to M-NET controllers.	
Control/Service Tool Monitoring tool to display operation and self-diagnosis data.	
Step Interface Interface for adjusting the capacity of inverter-equipped outdoor units. (For further details, refer to pg. 130.)	

Wi-Fi Interface (MELCloud™)

MELCloud is a new Cloud based solution for controlling your Mitsubishi Electric Air Conditioning or Heating systems either locally or remotely by PC, Tablet or Smartphone via the Internet.

Remote control

MELCloud allows you to take control of your Mitsubishi Electric systems from anywhere in the world as long as you have internet access. So forgetting to turn off your air conditioning or heating system when away on holiday is no longer a problem.

Additional functions

MELCloud also provides some new functions, such as localised weather information, frost protection, 7 day multi programmable timer and holiday mode, with more features planned for the future.

User types

MELCloud has been designed for wide range of users from single users with single air conditioning or heating systems in a single building, up to larger user who may have multiple properties and multiple systems that they wish to monitor and control.

Whichever type of user you are, MELCloud can provide you with required control and access you need for modern living.

Remote operation can be achieved as long as you have a connected system and you have an internet connection at the location of your equipment.

Local operation is also possible if you close to where the system that you wish to control is, but simply to not wish to use the local controller and have your PC, Tablet or Smartphone to hand. Please note this is not direct connection via router, local cotnrol still requires internet connection to work.

Optional Parts List <Indoor>

Indoor Unit			Option	Filter																	Softdry cloth	i-see Sensor Corner Panel	3D i-see Sensor Corner Panel	Shutter Plate	Multi-functional Casement	Fresh-air Intake Duct Flange		Space Panel	Quick-clean Kit
				Anti-allergy Enzyme Filter		Electrostatic Anti-allergy Enzyme Filter			Deodourising Filter	Catechin Air filter	Oil Mist Filter Element	High-efficiency Filter Element				Filter Box														
				MAC-408 FT-E	MAC-171 FT-E	MAC-2310 FT	MAC-2320 FT	MAC-2330 FT	MAC-3000FT-E	MAC-3004 CF-E	PAC-SG38 KF-E	PAC-SH59 KF-E	PAC-SH88 KF-E	PAC-SH89 KF-E	PAC-SH90 KF-E	PAC-KE92 TB-E	PAC-KE93 TB-E	PAC-KE94 TB-E	PAC-KE95 TB-E	MAC-1001 CL-E	PAC-SA1 ME-E	PAC-SF1 ME-E	PAC-SH51 SP-E	PAC-SH53 TM-E	PAC-SH65 OF-E	PAC-SF28 OF-E	PAC-SH48 AS-E	MAC-093 SS-E
M SERIES	Wall - mounted	MSZ-FH25VE					●	●																					
		MSZ-FH35VE					●	●																					
		MSZ-FH50VE					●	●																					
		MSZ-EF18VE2(W)(B)(S)				●														●									
		MSZ-EF22VE2(W)(B)(S)				●														●									
		MSZ-EF25VE2(W)(B)(S)				●														●									
		MSZ-EF35VE2(W)(B)(S)				●														●									
		MSZ-EF42VE2(W)(B)(S)				●														●									
		MSZ-EF50VE2(W)(B)(S)				●														●									
		MSZ-SF15VA																											
		MSZ-SF20VA																											
		MSZ-SF25VE2				●																							
		MSZ-SF35VE2				●																							
		MSZ-SF42VE2				●																							
		MSZ-SF50VE2				●																							
		MSZ-GF60VE			●																								
		MSZ-GF71VE			●																								
		MSZ-DM25VE																											
		MSZ-DM35VE																											
		MSZ-HJ25VA																											
		MSZ-HJ35VA																											
		MSZ-HJ50VA																											
		MSZ-HJ60VA																											
		MSZ-HJ71VA																											
	Floor - standing	MFZ-KJ25VE	●																										
		MFZ-KJ35VE	●																										
		MFZ-KJ50VE	●																										
	1-way cassette	MLZ-KA25VA		●						●																			
		MLZ-KA35VA		●						●																			
		MLZ-KA50VA		●						●																			
S SERIES	4-way cassette	SLZ-KF25VA																				●							
		SLZ-KF35VA																				●							
		SLZ-KF50VA																				●							
		SLZ-KF60VA																				●							
	Ceiling - concealed	SEZ-KD25VAQ/VAL																											
		SEZ-KD35VAQ/VAL																											
		SEZ-KD50VAQ/VAL																											
		SEZ-KD60VAQ/VAL																											
		SEZ-KD71VAQ/VAL																											
P SERIES	4-way Cassette	PLA-RP35BA										●										●		●	●	●		●	
		PLA-RP50BA										●										●		●	●	●		●	
		PLA-RP60BA										●										●		●	●	●		●	
		PLA-RP71BA										●										●		●	●	●		●	
		PLA-RP100BA										●										●		●	●	●		●	
		PLA-RP125BA										●										●		●	●	●		●	
		PLA-RP140BA2										●										●		●	●	●		●	
		PLA-ZRP35BA										●										●		●	●	●		●	
		PLA-ZRP50BA										●										●		●	●	●		●	
		PLA-ZRP60BA										●										●		●	●	●		●	
		PLA-ZRP71BA										●										●		●	●	●		●	
		PLA-ZRP100BA										●										●		●	●	●		●	
		PLA-ZRP125BA										●										●		●	●	●		●	
		PLA-ZRP140BA										●										●		●	●	●		●	
	Ceiling - concealed	PEAD-RP35JAQ														●													
		PEAD-RP35JALQ														●													
		PEAD-RP50JAQ														●													
		PEAD-RP50JALQ														●													
		PEAD-RP60JAQ															●												
		PEAD-RP60JALQ															●												
		PEAD-RP71JAQ															●												
		PEAD-RP71JALQ															●												
		PEAD-RP100JAQ																●											
		PEAD-RP100JALQ																●											
		PEAD-RP125JAQ																●											
		PEAD-RP125JALQ																●											
		PEAD-RP140JAQ																	●										
		PEAD-RP140JALQ																	●										
		PEA-RP200GAQ																											
		PEA-RP250GAQ																											
		PEA-RP400GAQ																											
		PEA-RP500GAQ																											
	Wall - mounted	PKA-RP35HAL																											
		PKA-RP50HAL																											
		PKA-RP60KAL																											
		PKA-RP71KAL																											
		PKA-RP100KAL																											
	Ceiling - suspended	PCA-RP35KAQ											●																
		PCA-RP50KAQ											●																
		PCA-RP60KAQ												●															
		PCA-RP71KAQ												●															
		PCA-RP100KAQ													●														
		PCA-RP125KAQ													●														
		PCA-RP140KAQ													●														
		PCA-RP71HAQ										●																●		
	Floor - standing	PSA-RP71KA																											
		PSA-RP100KA																											
		PSA-RP125KA																											
		PSA-RP140KA																											

*1 P Series indoor units can be used in combination with SUZ or MXZ outdoor units. *2 MAC-333IF-E or MAC-397IF-E is required. *3 Unable to use with wireless remote controller.
*4 Two interface components required for each indoor unit. *5 Refrigerant address must be set to 00. *6 PAC-SH29TC-E is required.

Drain Pump						Decorative Cover		System Control Interface	MA & Contact Terminal Interface	Wi-Fi Interface	Connector Cable		Power Supply Terminal Kit				Wired Remote Controller			Wireless Remote Controller						Remote Sensor	Remote On/Off Adapter	Remote Operation Adapter	Connector Cable for Remote Display
																	Controller		Terminal Block kit for PKA	Signal Sender	Signal Receiver			Controller Kit (Sender & Receiver)	Controller Holder				
PAC-SH94DM-E	PAC-SH75DM-E	PAC-SH83DM-E	PAC-SH84DM-E	PAC-SH85DM-E	PAC-KE07DM-E	PAC-SF81KC-E	PAC-SF82KC-E	MAC-333IF	MAC-397IF-E	MAC-557IF-E	MAC-1702RA-E	MAC-1710RA-E	PAC-SG94HR-E	PAC-SG96HR-E	PAC-SG97HR-E	PAC-SH52HR-E	PAR-32MAA	PAC-YT52CRA	PAC-SH29TC-E	PAR-SL97A-E	PAR-SA9CA-E	PAR-SF9FA	PAR-SA9FA-E	PAR-SL94B-E	MAC-1200RC	PAC-SE41TS-E	PAC-SE55RA-E	PAC-SF40RM-E	PAC-SA88HA-E
								●	●	●	●	●					●*2	●*2											
								●	●	●	●	●					●*2	●*2											
								●	●	●	●	●					●*2	●*2											
								●	●	●							●*2	●*2											
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								●	●	●							●*2	●*2											
								●	●	●							●*2	●*2											
								●	●	●							●	●		●		●				●	●	●*3	●
								●	●	●							●	●		●		●				●	●	●*3	●
								●	●	●							●	●		●		●				●	●	●*3	●
								●	●	●							●	●		●		●				●	●	●*3	●
					●			●	●	●							VAQ	VAQ		●	●					●	●	●*3	●
					●			●	●	●							VAQ	VAQ		●	●					●	●	●*3	●
					●			●	●	●							VAQ	VAQ		●	●					●	●	●*3	●
					●			●	●	●							VAQ	VAQ		●	●					●	●	●*3	●
					●			●	●	●							VAQ	VAQ		●	●					●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●	●	●						●	●	●		●			●			●	●	●*3	●
								●	●	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
								●*1	●*1	●						●	●	●		●			●			●	●	●*3	●
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								●*1	●*1	●					●		●	●		●	●					●	●	●*3	●
								●*1	●*1	●					●		●	●		●	●					●	●	●*3	●
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								●*1	●*1	●					●		●	●		●	●					●	●	●*3	●
								●*1	●*1	●					●		●	●		●	●					●	●	●*3	●
								●*1	●*1	●					●		●	●		●	●					●	●	●*3	●
								●*1	●*1	●					●		●	●		●	●					●	●	●*3	●
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								●*4									●	●								●	●*5		
	●							●*1	●*1	●			●				●*6	●*6	●	●						●	●		●
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Optional Parts List <Outdoor>

Outdoor Unit			Distribution Pipe				Joint Pipe												Liquid Refrigerant Dryer		
			For Twin (50:50)		For Triple (33:33:33)	For Quadruple (25:25:25:25)	Unit ø6.35 --> Pipe ø9.52	Unit ø9.52 --> Pipe ø12.7	Unit ø15.88 --> Pipe ø19.05	Unit ø9.52 --> Pipe ø15.88		Unit ø6.35 --> Pipe ø9.52		Unit ø9.52 --> Pipe ø12.7		Unit ø12.7 --> Pipe ø9.52		Unit ø12.7 --> Pipe ø15.88		For pipe ø6.35	For pipe ø9.52	For pipe ø12.7
			MSDD-50TR-E	MSDD-50WR-E	MSDT-111R-E	MSDF-1111R-E	PAC-SG72 RJ-E	PAC-SG73 RJ-E	PAC-SG75 RJ-E	Flare PAC-SG76 RJ-E	Brazed PAC-SG76 RJB-E	Flare PAC-493 PI	Brazed PAC-SG77 RJB-E	Flare MAC-A454 JP-E	Brazed PAC-SG78 RJB-E	Flare MAC-A455 JP-E	Brazed PAC-SG79 RJB-E	Flare MAC-A456 JP-E	Brazed PAC-SG80 RJB-E	PAC-SG81 DR-E	PAC-SG82 DR-E	PAC-SG85 DR-E
M SERIES	F Series	MUZ-FH25VE																			
		MUZ-FH25VEHZ																			
		MUZ-FH35VE																			
		MUZ-FH35VEHZ																			
		MUZ-FH50VE																			
		MUZ-FH50VEHZ																			
	E Series	MUZ-EF25VE																			
		MUZ-EF25VEH																			
		MUZ-EF35VE																			
		MUZ-EF35VEH																			
		MUZ-EF42VE																			
		MUZ-EF50VE																			
	S Series	MUZ-SF25VE																			
		MUZ-SF25VEH																			
		MUZ-SF35VE																			
		MUZ-SF35VEH																			
		MUZ-SF42VE																			
		MUZ-SF42VEH																			
		MUZ-SF50VE																			
		MUZ-SF50VEH																			
	G Series	MUZ-GF60VE																			
		MUZ-GF71VE																			
	H Series	MUZ-HJ25VA																			
		MUZ-HJ35VA																			
		MUZ-HJ50VA																			
		MUZ-HJ60VA																			
		MUZ-HJ71VA																			
	Compact floor	MUFZ-KJ25VE																			
		MUFZ-KJ25VEHZ																			
		MUFZ-KJ35VE																			
		MUFZ-KJ35VEHZ																			
		MUFZ-KJ50VE																			
		MUFZ-KJ50VEHZ																			
S SERIES		SUZ-KA25VA5						●													
		SUZ-KA35VA5						●													
		SUZ-KA50VA5																			
		SUZ-KA60VA5																			
		SUZ-KA71VA5																			
POWERFUL HEATING		PUHZ-SHW112VHA	●																	●	
		PUHZ-SHW112YHA	●																	●	
		PUHZ-SHW140YHA	●																	●	
P SERIES	Power Inverter	PUHZ-ZRP35VKA					●												●		
		PUHZ-ZRP50VKA					●												●		
		PUHZ-ZRP60VHA						●	●											●	
		PUHZ-ZRP71VHA	●					●	●											●	
		PUHZ-ZRP100VKA2	●					●	●											●	
		PUHZ-ZRP100YKA2	●					●	●											●	
		PUHZ-ZRP125VKA2	●					●	●											●	
		PUHZ-ZRP125YKA2	●					●	●											●	
		PUHZ-ZRP140VKA2	●		●			●	●											●	
		PUHZ-ZRP140YKA2	●		●			●	●											●	
		PUHZ-ZRP200YKA		●	●	●		●												●	
		PUHZ-ZRP250YKA		●	●	●															●
	Standard Inverter	PUHZ-P100VHA4	●																	●	
		PUHZ-P125VHA3	●																	●	
		PUHZ-P140VHA3	●		●															●	
		PUHZ-P200YKA		●	●	●														●	
		PUHZ-P250YKA		●	●	●															●
		PUHZ-P100YHA2	●																	●	
		PUHZ-P125YHA	●																	●	
		PUHZ-P140YHA	●		●															●	
MXZ SERIES		MXZ-2D33VA																			
		MXZ-2D42VA																			
		MXZ-2D53VA(H)												●							
		MXZ-2E53VAHZ												●							
		MXZ-3D54VA2												●							
		MXZ-3D68VA								●				●							
		MXZ-4D72VA								●				●		●		●			
		MXZ-4E83VA								●		●		●		●		●			
		MXZ-4E83VAHZ								●		●		●		●		●			
		MXZ-5E102VA								●		●		●		●		●			
		MXZ-6D122VA								●		●		●		●		●			
		MXZ-2HJ40VA																			
		MXZ-3HJ50VA												●							

*1 Operation in “AUTO” step mode only: make sure to turn OFF “SW2-6” and put “TH5” (2 phose pipe thermistor) at the appropriate position.

Air Outlet Guide								Air Protection Guide			Drain Socket			Freeze-prevention Heater (for Drain Pan)			Centralized Drain Pan			M-NET Adapter	M-NET Converter		Control/ Service Tool	Step Interface	Insulation for Accumlator	
MAC-889 SG	MAC-881 SG	MAC-856 SG	MAC-886 SG-E	MAC-883 SG	PAC-SJ07 SG-E	PAC-SG59 SG-E	PAC-SH96 SG-E	PAC-SJ06 AG-E	PAC-SH63 AG-E	PAC-SH95 AG-E	PAC-SJ08 DS-E	PAC-SG60 DS-E	PAC-SG61 DS-E	MAC-643 BH-E	MAC-644 BH-E	PAC-645 BH-E	PAC-SG63 DP-E	PAC-SG64 DP-E	PAC-SH97 DP-E	PAC-IF01 MNT-E	PAC-SJ19 MA-E	PAC-SF83 MA-E	PAC-SK52ST	1 PC board w/attachment kit attachment kit PAC-IF012B-E	MAC-892 INS-E	MAC-893 INS-E
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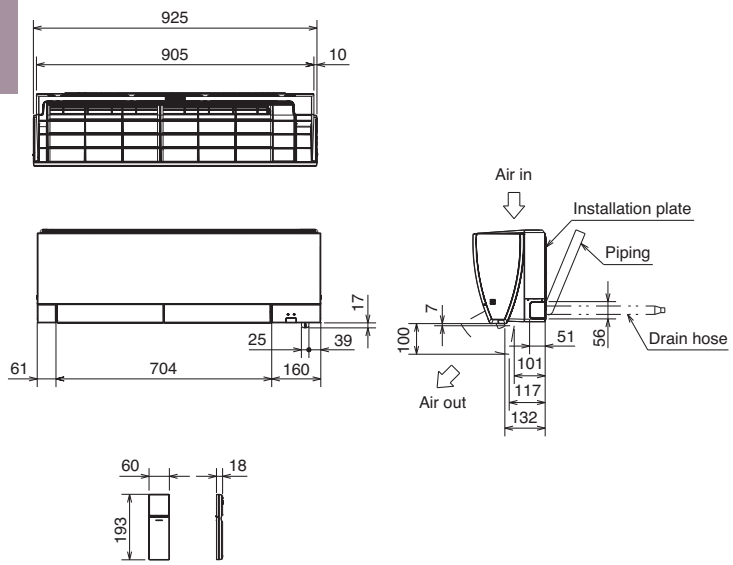
External Dimensions

M SERIES

Unit : mm

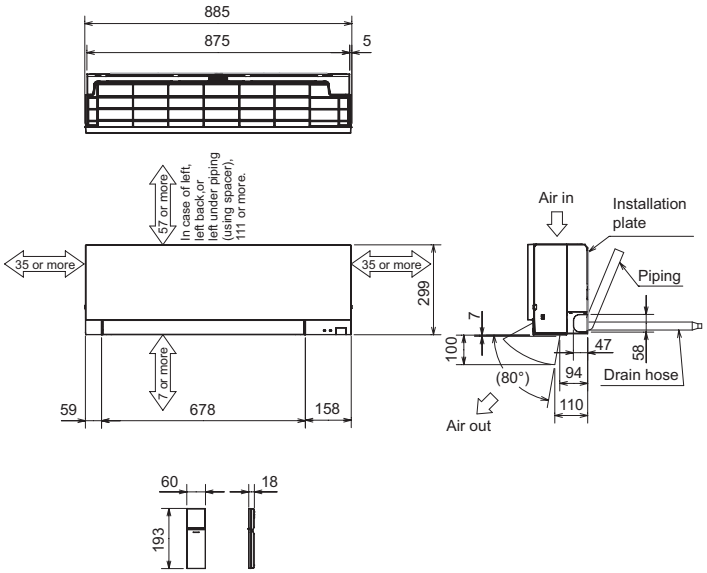
MSZ-FH25VE(2) MSZ-FH35VE(2) MSZ-FH50VE(2)

INDOOR UNIT



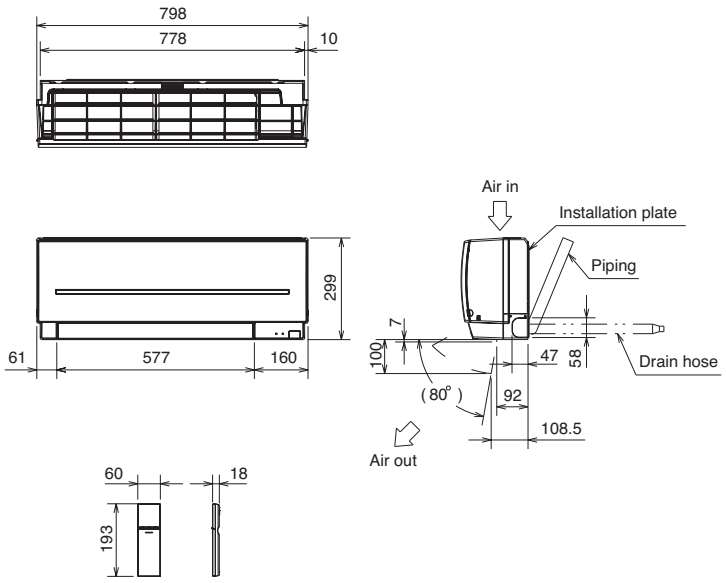
MSZ-EF18VE2(3)(W)(B)(S) MSZ-EF22VE2(3)(W)(B)(S)
MSZ-EF25VE2(3)(W)(B)(S) MSZ-EF35VE2(3)(W)(B)(S)
MSZ-EF42VE2(3)(W)(B)(S) MSZ-EF50VE2(3)(W)(B)(S)

INDOOR UNIT



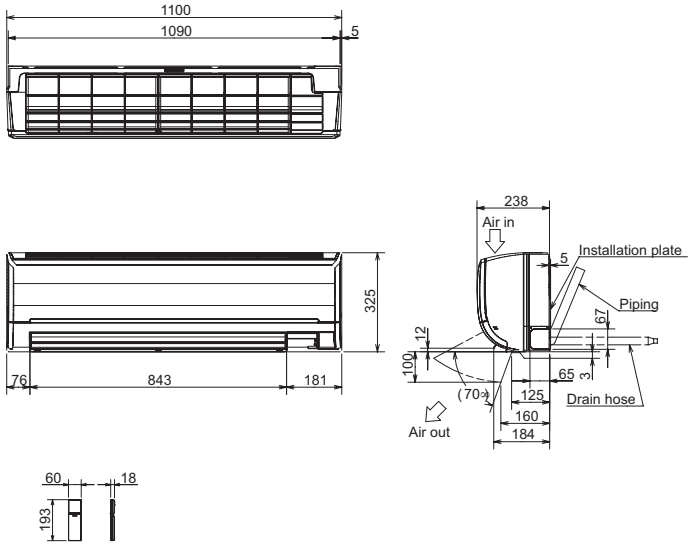
MSZ-SF25VE2(3) MSZ-SF35VE2(3)
MSZ-SF42VE2(3) MSZ-SF50VE2(3)

INDOOR UNIT



MSZ-GF60VE(2) MSZ-GF71VE(2)

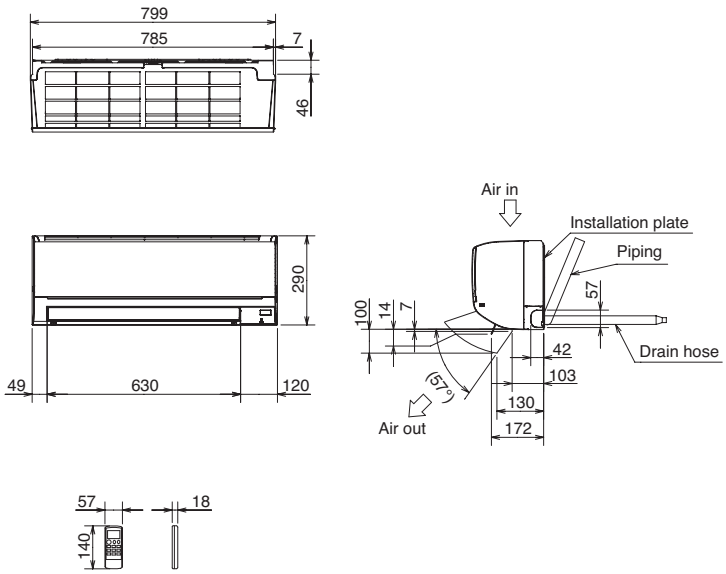
INDOOR UNIT



Unit: mm

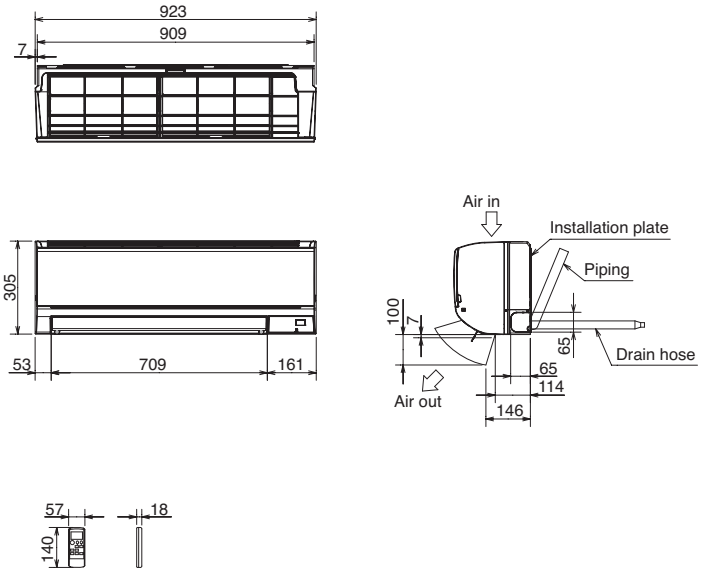
MSZ-HJ25VA MSZ-HJ35VA MSZ-HJ50VA MSZ-DM25VA MSZ-DM35VA

INDOOR UNIT



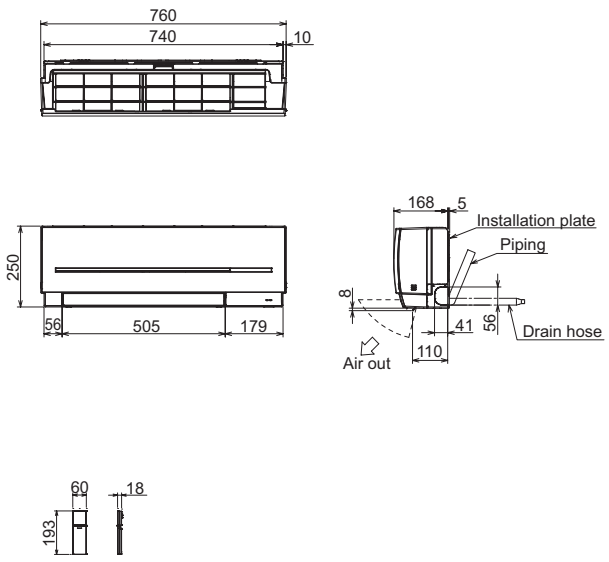
MSZ-HJ60VA MSZ-HJ71VA

INDOOR UNIT



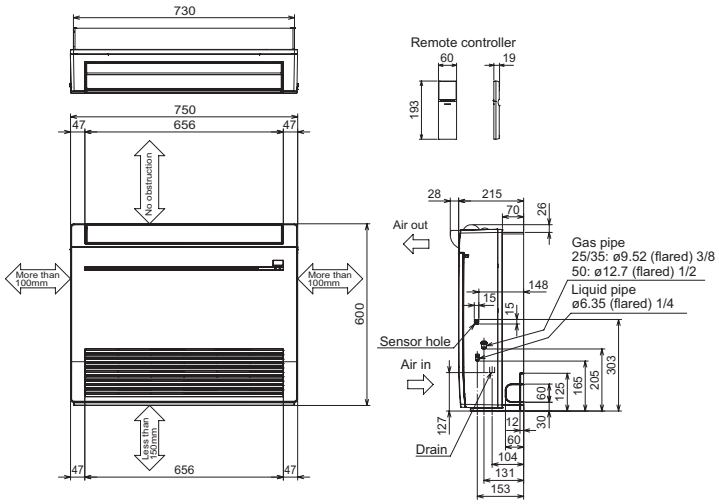
MSZ-SF15VA MSZ-SF20VA

INDOOR UNIT



MFZ-KJ25VE(2) MFZ-KJ35VE(2) MFZ-KJ50VE(2)

INDOOR UNIT

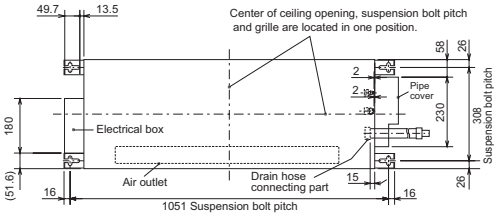


Unit : mm

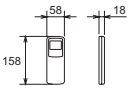
MLZ-KA25VA MLZ-KA35VA MLZ-KA50VA

INDOOR UNIT

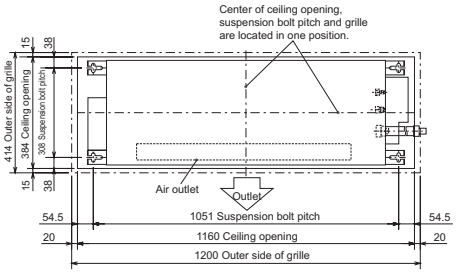
(Top)



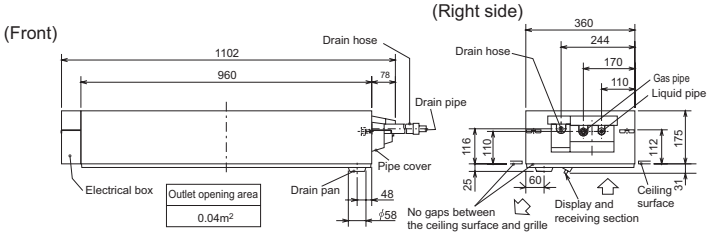
Wireless remote controller



(Top)

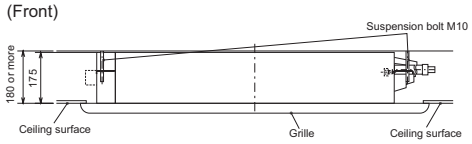


(Front)

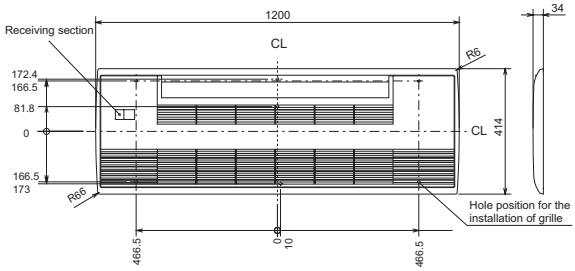


(Right side)

(Front)



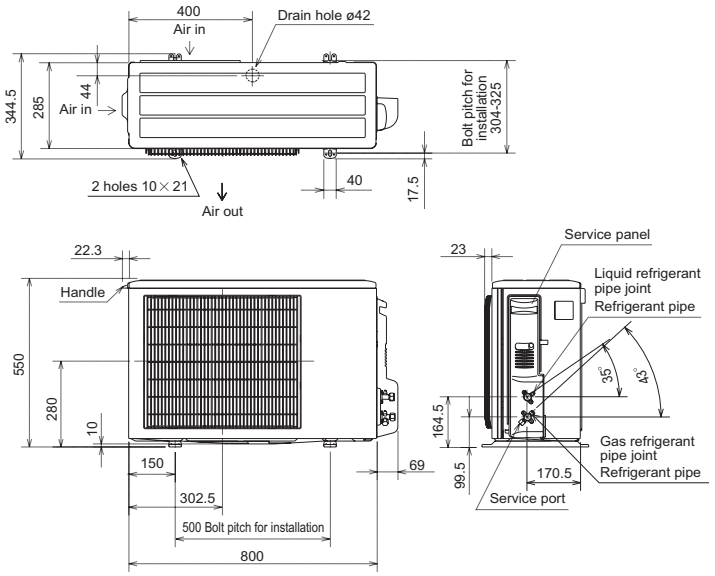
Grille (MLP-440W)



Unit: mm

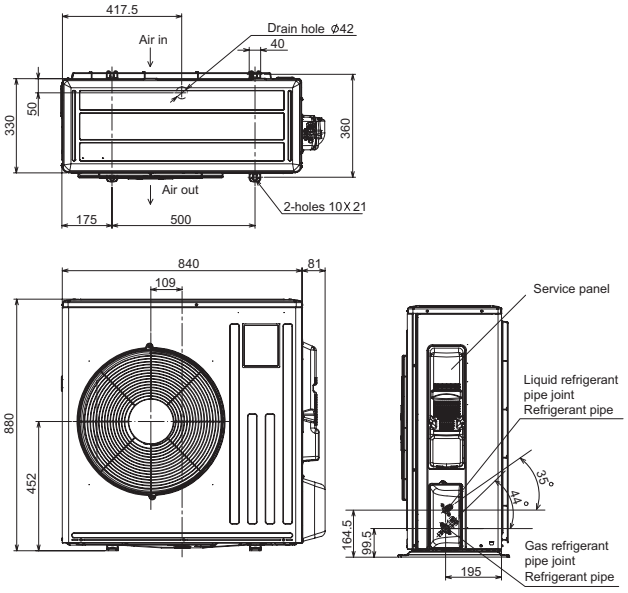
MUZ-FH25VE MUZ-FH35VE
MUZ-FH25VEHZ MUZ-FH35VEHZ
MUZ-EF25VE MUZ-EF25VEH
MUZ-EF35VE MUZ-EF35VEH
MUZ-EF42VE
MUZ-SF25VE MUZ-SF25VEH MUZ-SF35VE
MUZ-SF35VEH MUZ-SF42VE MUZ-SF42VEH
MUZ-HJ50VA
MUFZ-KJ25VE MUFZ-KJ35VE
MUFZ-KJ25VEHZ MUFZ-KJ35VEHZ

OUTDOOR UNIT



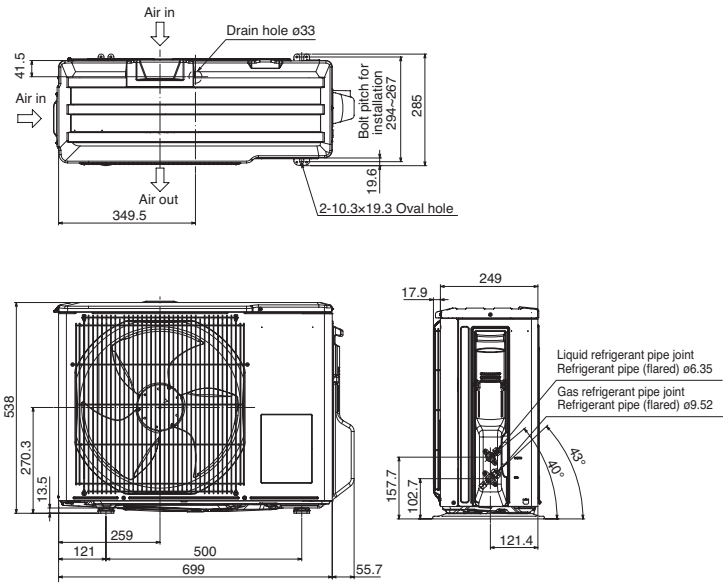
MUZ-FH50VE MUZ-FH50VEHZ
MUZ-EF50VE
MUZ-SF50VE MUZ-SF50VEH
MUZ-GF60VE MUZ-GF71VE
MUZ-HJ60VA MUZ-HJ71VA
MUFZ-KJ50VE MUFZ-KJ50VEHZ

OUTDOOR UNIT



MUZ-HJ25VA MUZ-HJ35VA
MUZ-DM25VA MUZ-DM35VA

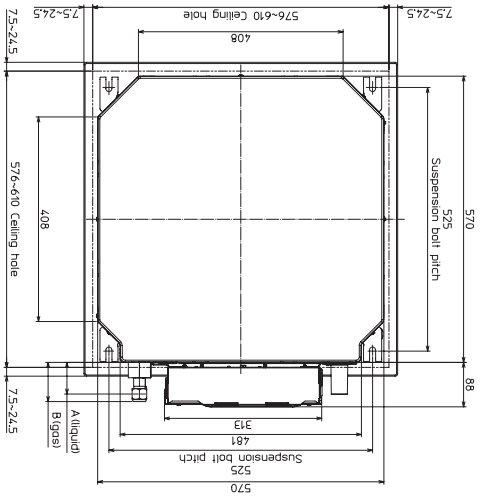
OUTDOOR UNIT



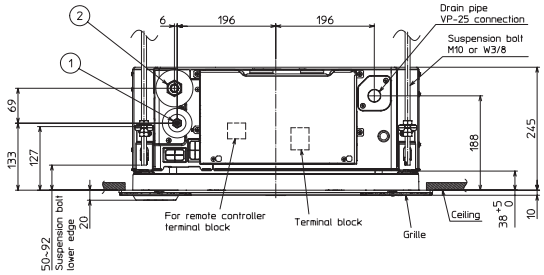
Unit : mm

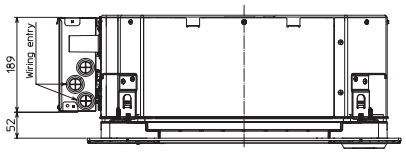
SLZ-KF25VA SLZ-KF35VA
SLZ-KF50VA SLZ-KF60VA

INDOOR UNIT



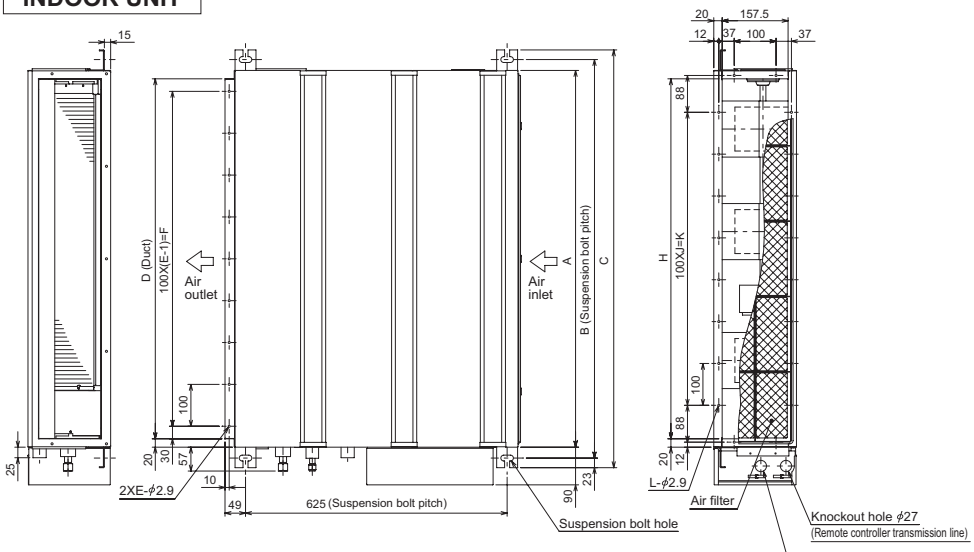
Models	① Refrigerent pipe (liquid)	② Refrigerent pipe (gas)	A	B
SLZ-KF25VA SLZ-KF35VA	ϕ6.35mm flared connection 1/4F	ϕ9.52mm flared connection 3/8F	63mm	72mm
SLZ-KF50VA	ϕ6.35mm flared connection 1/4F	ϕ12.7mm flared connection 1/2F	63mm	78mm
SLZ-KF60VA	ϕ6.35mm flared connection 1/4F	ϕ15.88mm flared connection 5/8F	63mm	78mm

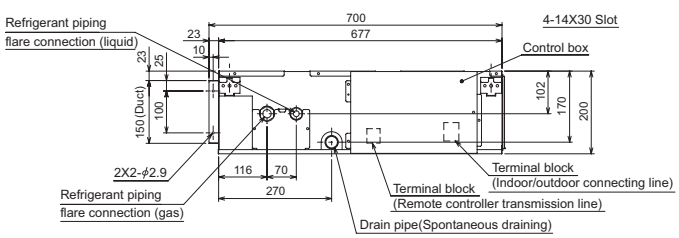




SEZ-KD25VAQ SEZ-KD35VAQ SEZ-KD50VAQ SEZ-KD60VAQ SEZ-KD71VAQ
SEZ-KD25VAL SEZ-KD35VAL SEZ-KD50VAL SEZ-KD60VAL SEZ-KD71VAL

INDOOR UNIT





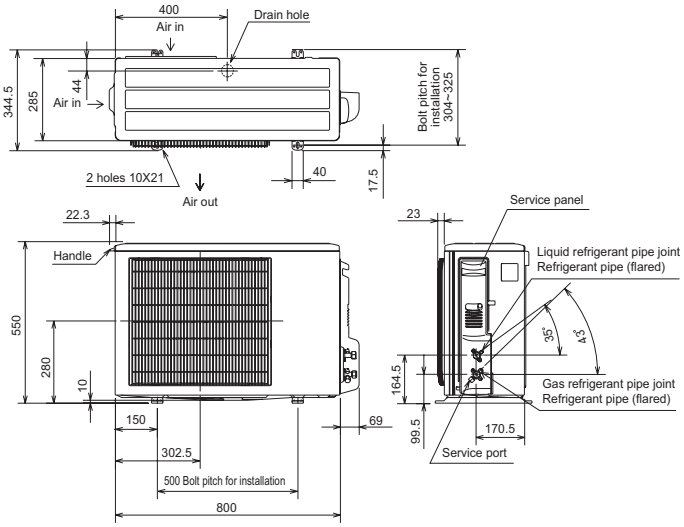
Model	A	B	C	D	E	F	G	H	J	K	L
SEZ-KD25VAL/VAQ	700	752	798	660	7	600	800	660	5	500	16
SEZ-KD35VAL/VAQ	900	952	998	860	9	800	1000	860	7	700	20
SEZ-KD50VAL/VAQ											
SEZ-KD60VAL/VAQ	1100	1152	1198	1060	11	1000	1200	1060	9	900	24
SEZ-KD71VAL/VAQ											

Notes:
1. Use M10 bolts for suspension (purchase locally).
2. Keep service space for maintenance at the bottom.
3. This chart is based on the SEZ-KD50VAL/VAQ, which has three fans.
   SEZ-KD25, 35VAL/VAQ has two fans, and SEZ-KD60, 71VAL/VAQ has four fans.
4. If an inlet duct is used, remove the air filter supplied with the unit,
   and install a locally purchased filter on the suction side.

Unit : mm

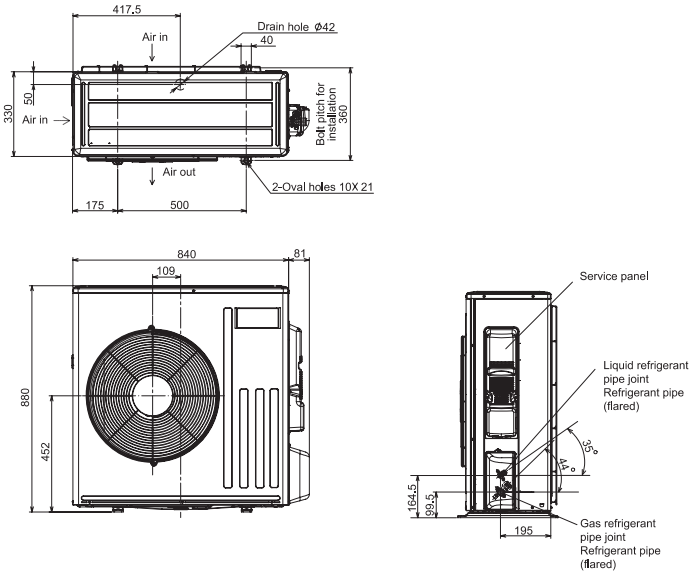
SUZ-KA25VA5 SUZ-KA35VA5

OUTDOOR UNIT



SUZ-KA50VA5 SUZ-KA60VA5 SUZ-KA71VA5

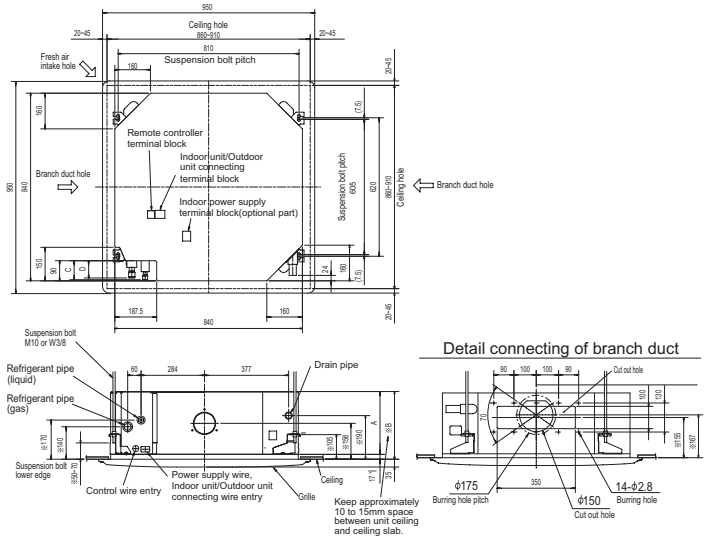
OUTDOOR UNIT



Unit : mm

PLA-RP35BA PLA-RP50BA PLA-RP60BA PLA-RP71BA PLA-RP100BA PLA-RP125BA PLA-RP140BA2 PLA-ZRP35BA PLA-ZRP50BA PLA-ZRP60BA PLA-ZRP71BA PLA-ZRP100BA PLA-ZRP125BA PLA-ZRP140BA

INDOOR UNIT

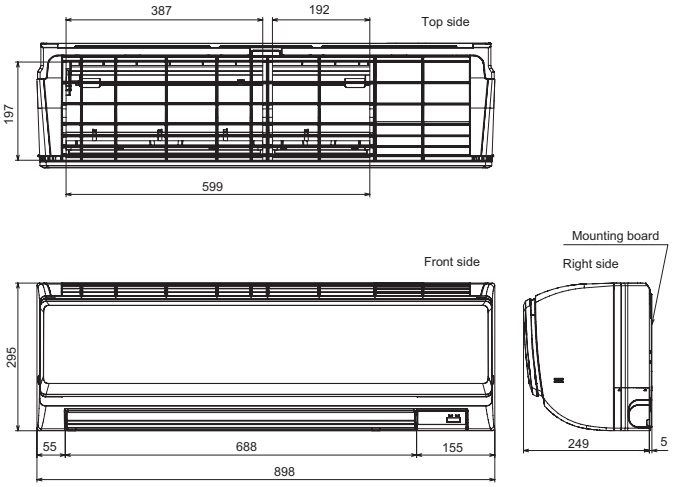


Models	A	B	C	D	E
PLA-RP35/50BA	241	258	80	74	400
PLA-RP60BA			87		
PLA-RP71BA					
PLA-RP100,125BA PLA-RP140BA2	281	298	85	77	440

Models	A	B	C	D	E
PLA-ZRP35BA	241	258	80	74	400
PLA-ZRP50BA					
PLA-ZRP60BA			87		
PLA-ZRP71BA	281	298	85	77	440
PLA-ZRP100BA					
PLA-ZRP125BA					
PLA-ZRP140BA					

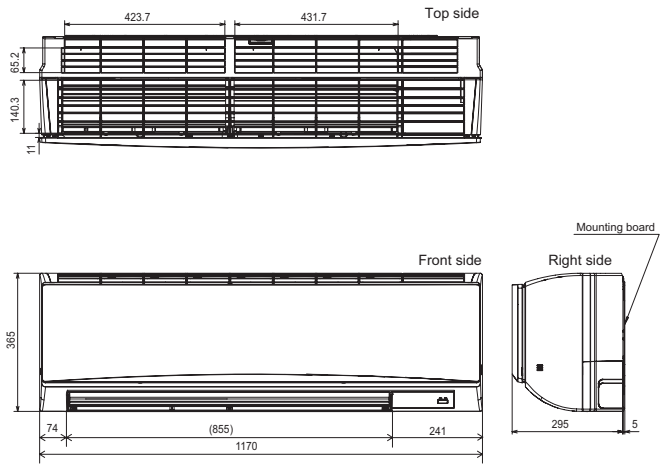
PKA-RP35HAL PKA-RP50HAL

INDOOR UNIT



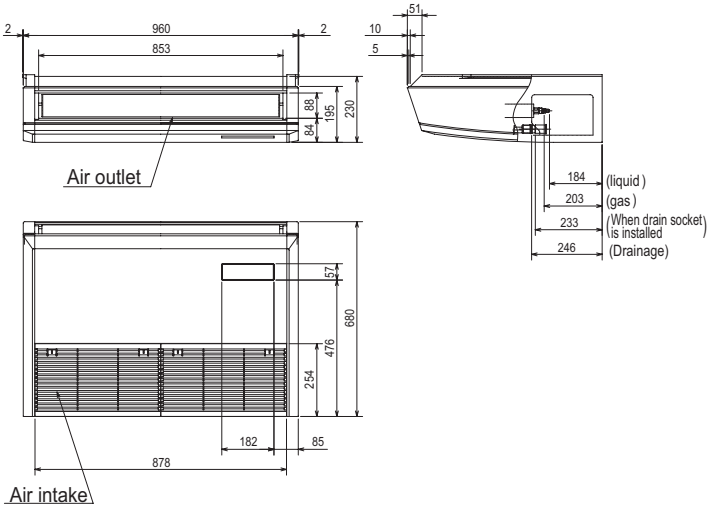
PKA-RP60KAL PKA-RP71KAL PKA-RP100KAL

INDOOR UNIT



PCA-RP35KAQ PCA-RP50KAQ

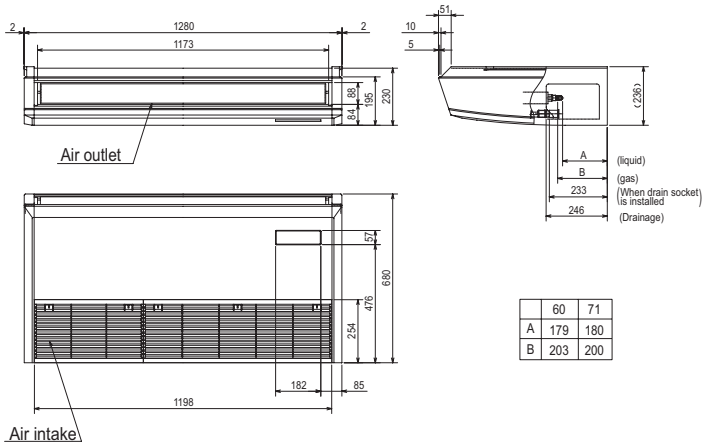
INDOOR UNIT



Unit : mm

PCA-RP60KAQ PCA-RP71KAQ

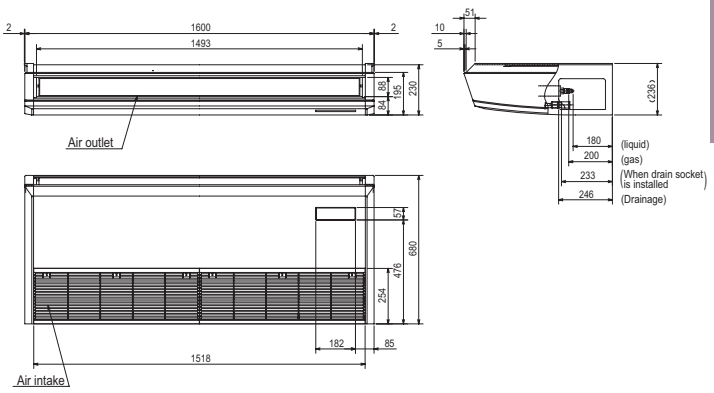
INDOOR UNIT



	60	71
A	179	180
B	203	200

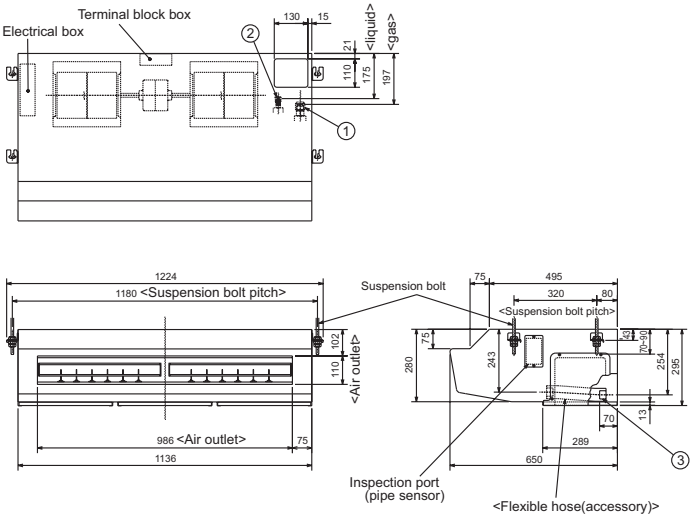
PCA-RP100KAQ PCA-RP125KAQ PCA-RP140KAQ

INDOOR UNIT



PCA-RP71HAQ

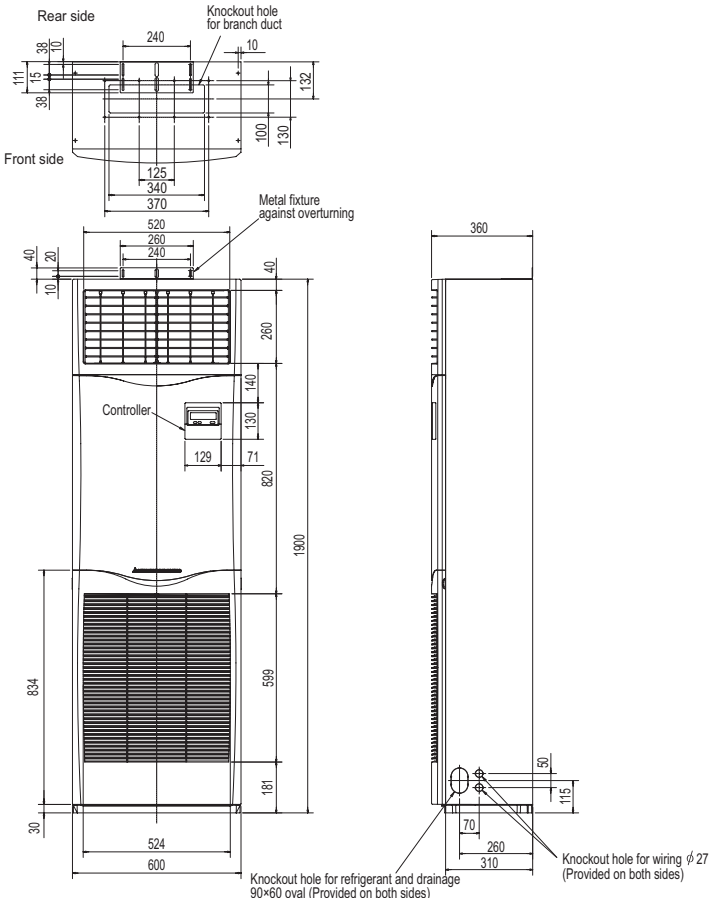
INDOOR UNIT



①Refrigerant pipe connection(gas pipe side/flared connection)
②Refrigerant pipe connection(liquid pipe side/flared connection)
③Flexible hose(accessory) →Drainage pipe connection

PSA-RP71KA PSA-RP100KA PSA-RP125KA PSA-RP140KA

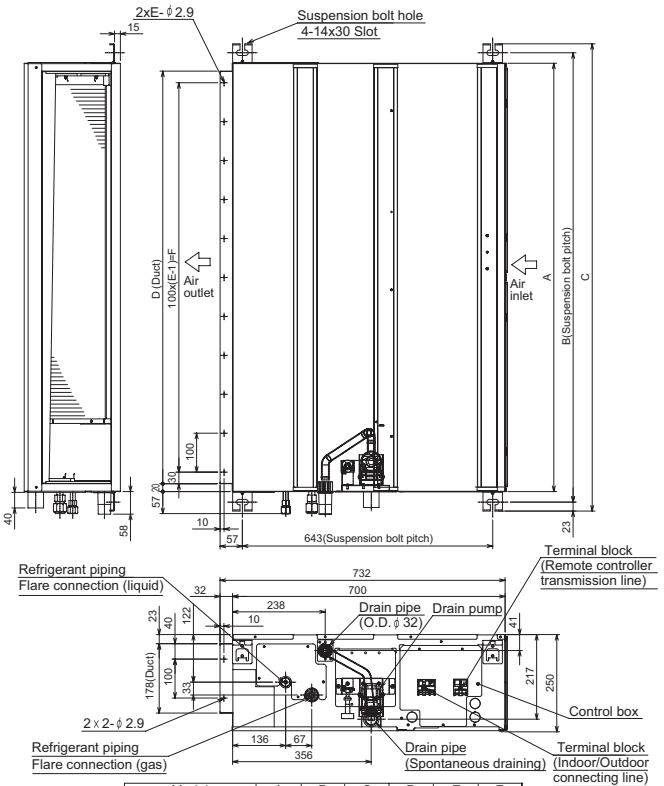
INDOOR UNIT



Unit : mm

PEAD-RP35JAQ PEAD-RP50JAQ PEAD-RP60JAQ PEAD-RP71JAQ PEAD-RP100JAQ PEAD-RP125JAQ PEAD-RP140JAQ

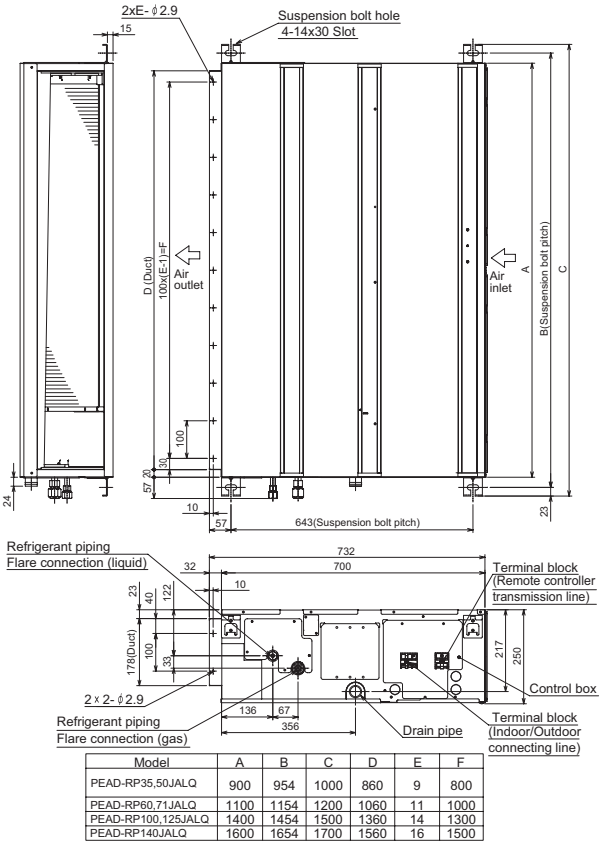
INDOOR UNIT



Model	A	B	C	D	E	F
PEAD-RP35,50JAQ	900	954	1000	860	9	800
PEAD-RP60,71JAQ	1100	1154	1200	1060	11	1000
PEAD-RP100,125JAQ	1400	1454	1500	1360	14	1300
PEAD-RP140JAQ	1600	1654	1700	1560	16	1500

PEAD-RP35JALQ PEAD-RP50JALQ PEAD-RP60JALQ PEAD-RP71JALQ PEAD-RP100JALQ PEAD-RP125JALQ PEAD-RP140JALQ

INDOOR UNIT



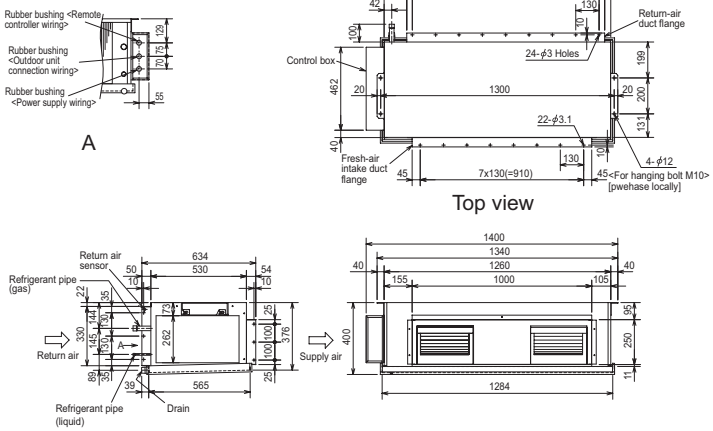
Model	A	B	C	D	E	F
PEAD-RP35,50JALQ	900	954	1000	860	9	800
PEAD-RP60,71JALQ	1100	1154	1200	1060	11	1000
PEAD-RP100,125JALQ	1400	1454	1500	1360	14	1300
PEAD-RP140JALQ	1600	1654	1700	1560	16	1500

Unit : mm

PEA-RP200GAQ

INDOOR UNIT

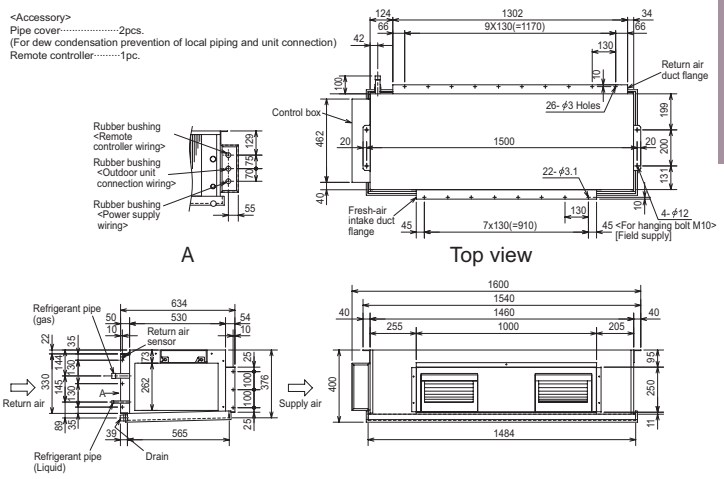
<Accessory>
Pipe cover·····2pcs.
(For dew condensation prevention of local piping and unit connection)
Remote controller·····1pc.



PEA-RP250GAQ

INDOOR UNIT

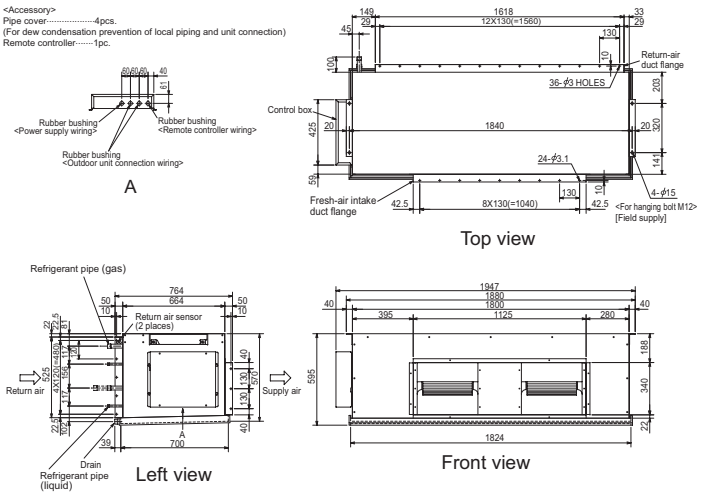
<Accessory>
Pipe cover·····2pcs.
(For dew condensation prevention of local piping and unit connection)
Remote controller·····1pc.



PEA-RP400GAQ PEA-RP500GAQ

INDOOR UNIT

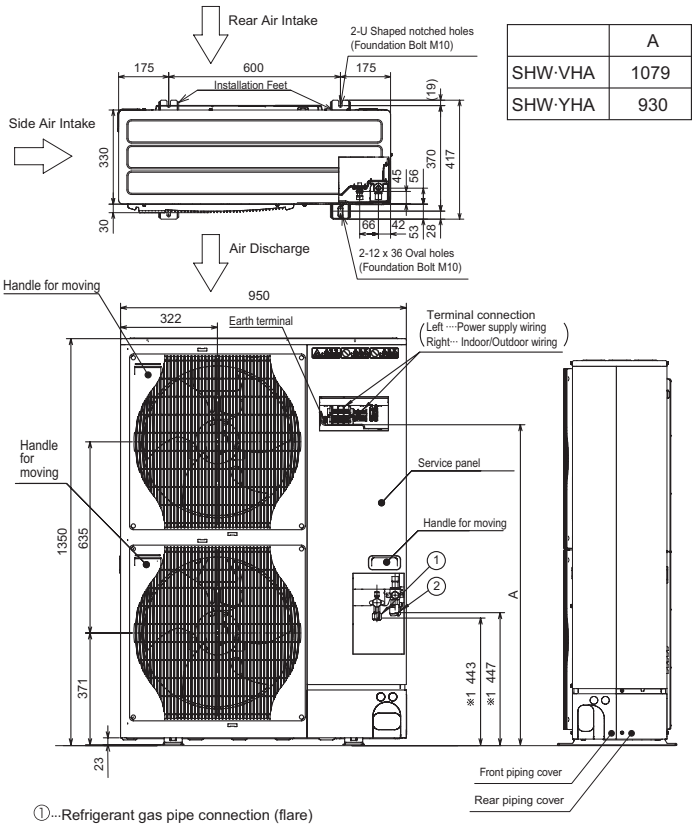
<Accessory>
Pipe cover·····4pcs.
(For dew condensation prevention of local piping and unit connection)
Remote controller·····1pc.



Unit : mm

PUHZ-SHW80VHA PUHZ-SHW112VHA PUHZ-SHW112YHA PUHZ-SHW140YHA

OUTDOOR UNIT

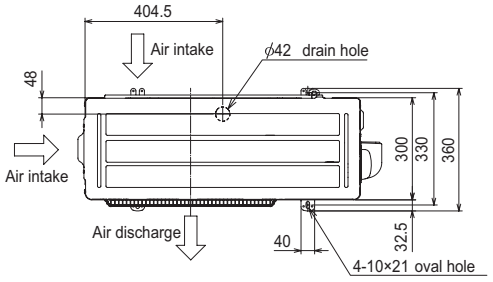


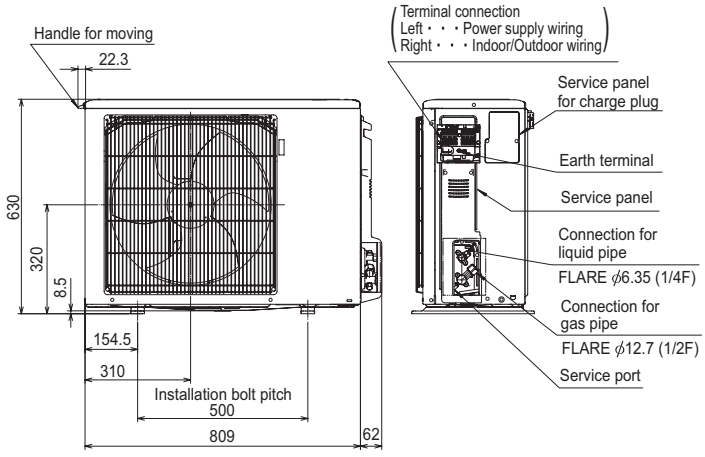
	A
SHW·VHA	1079
SHW·YHA	930

①···Refrigerant gas pipe connection (flare)
②···Refrigerant liquid pipe connection (flare)
※···Indicates stop valve connection location.

PUHZ-ZRP35VKA PUHZ-ZRP50VKA

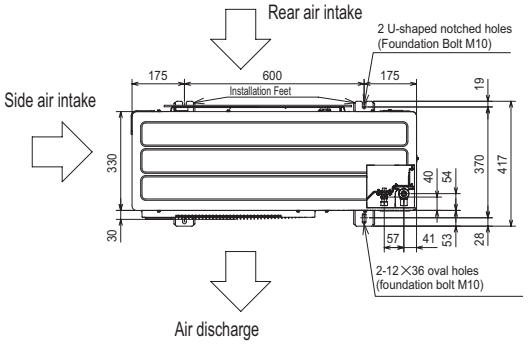
OUTDOOR UNIT

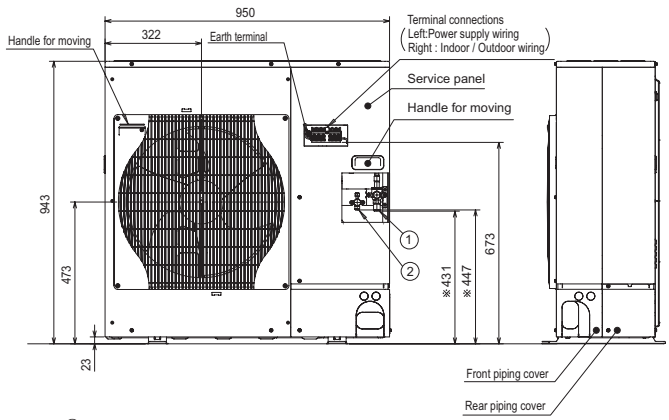




PUHZ-ZRP60VHA PUHZ-ZRP71VHA

OUTDOOR UNIT

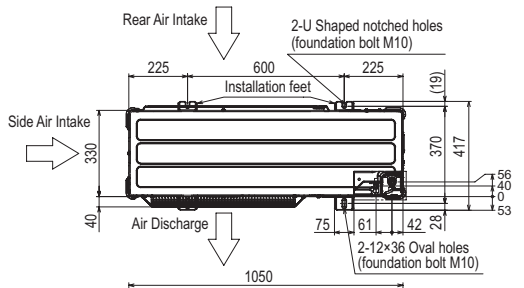


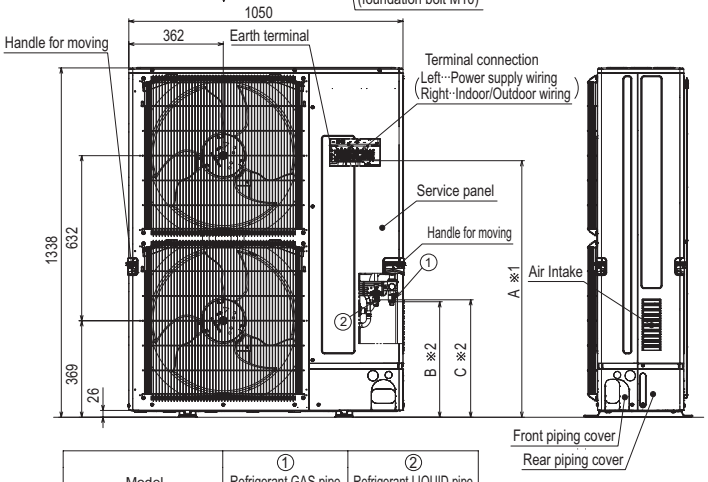


①···Refrigerant gas pipe connection (flare)
②···Refrigerant liquid pipe connection (flare)
※···Indicates stop valve connection location.

PUHZ-ZRP100VKA2 PUHZ-ZRP125VKA2 PUHZ-ZRP140VKA2 PUHZ-ZRP100YKA2 PUHZ-ZRP125YKA2 PUHZ-ZRP140YKA2

OUTDOOR UNIT





Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUHZ-ZRP100~140YKA2.UK	ø15.88 (5/8F)	ø9.52 (3/8F)

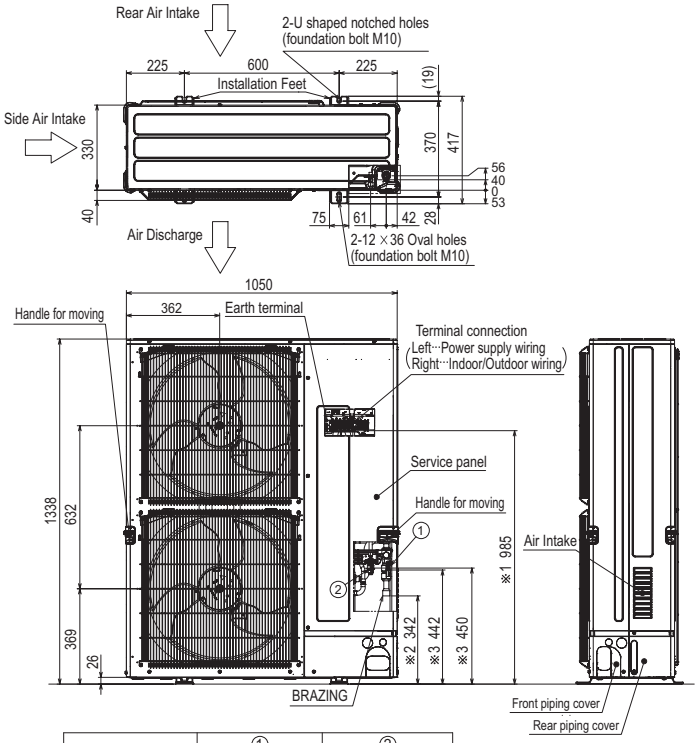
Model	A	B	C
PUHZ-ZRP100~140VKA2.UK	1067	442	450
PUHZ-ZRP100~140YKA2.UK	919	442	450

※1···Indication of Terminal connection location.
※2···Indication of STOP VALVE connection location.

Unit : mm

PUHZ-ZRP200YKA PUHZ-ZRP250YKA

OUTDOOR UNIT

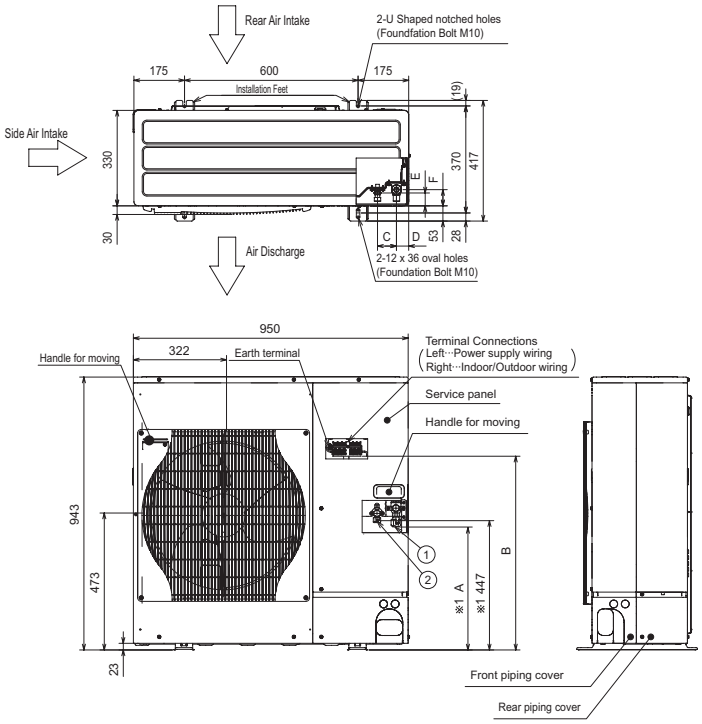


Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUHZ-ZRP200YKA.UK	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-ZRP250YKA.UK	ø19.05 (3/4F)	ø12.7 (1/2F)

※1···Indication of Terminal connection location.
※2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
※3···Indication of STOP VALVE connection location.

PUHZ-P100VHA4 PUHZ-P100YHA2

OUTDOOR UNIT

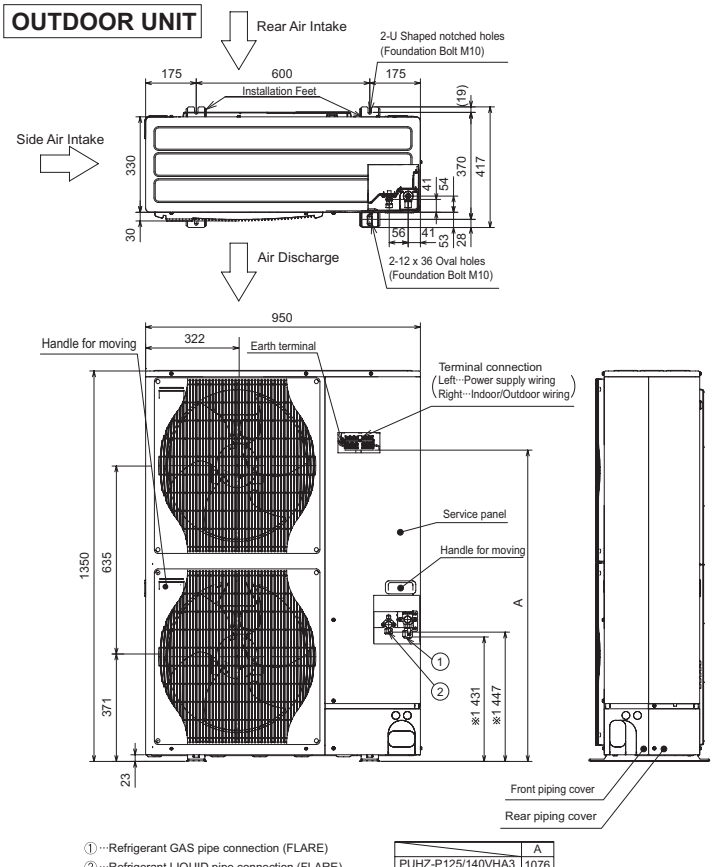


①···Refrigerant GAS pipe connection (FLARE)
②···Refrigerant LIQUID pipe connection (FLARE)
※1 ···Indication of STOP VALVE connection location.

	A	B	C	D	E	F
PUHZ-P100VHA4	443	670	66	42	45	56
PUHZ-P100YHA2	431	589	56	41	41	54

PUHZ-P125VHA3 PUHZ-P140VHA3 PUHZ-P125YHA PUHZ-P140YHA

OUTDOOR UNIT

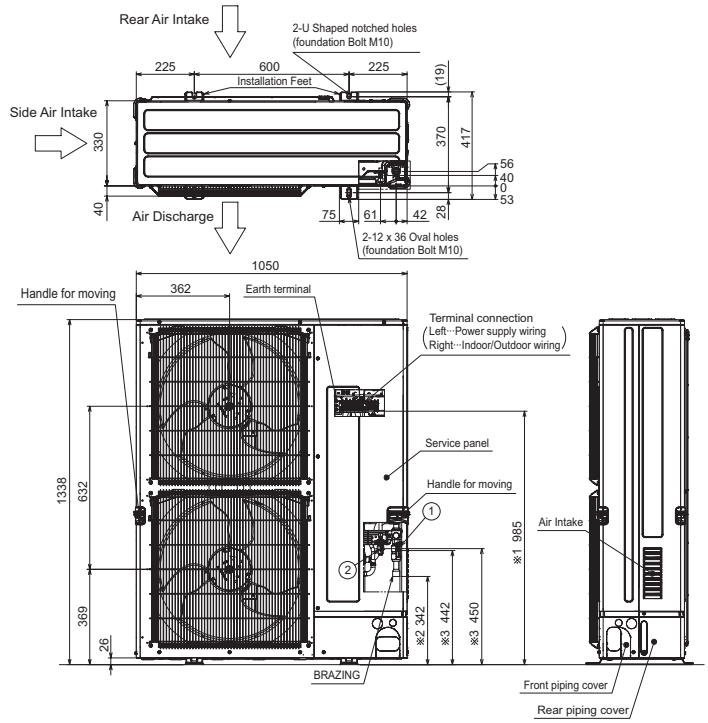


①···Refrigerant GAS pipe connection (FLARE)
②···Refrigerant LIQUID pipe connection (FLARE)
※1 ···Indication of STOP VALVE connection location.

	A
PUHZ-P125/140VHA3	1076
PUHZ-P125/140YHA	994

PUHZ-P200YKA PUHZ-P250YKA

OUTDOOR UNIT



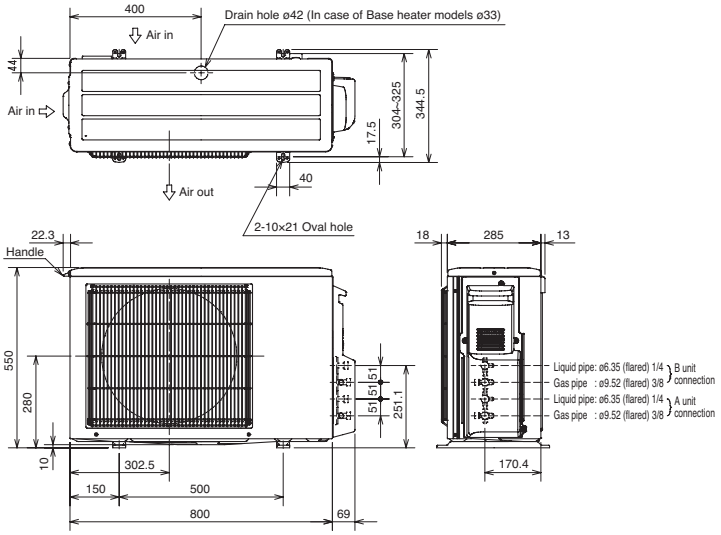
Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUHZ-P200YKA.UK	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-P250YKA.UK	ø19.05 (3/4F)	ø12.7 (1/2F)

※1···Indication of Terminal connection location.
※2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
※3···Indication of STOP VALVE connection location.

Unit : mm

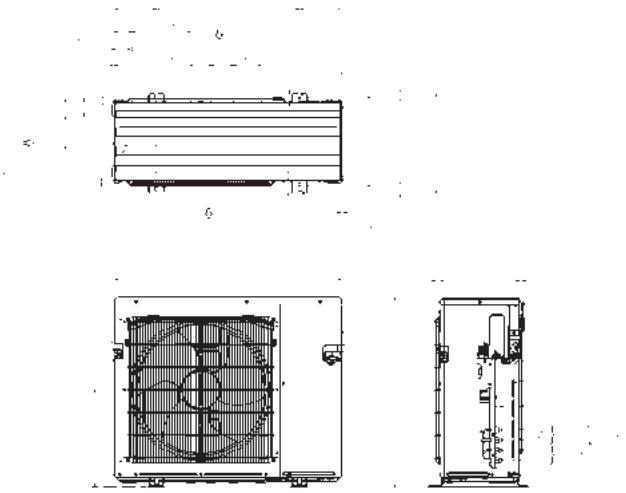
MXZ-2D33VA MXZ-2D42VA(2) MXZ-2D53VA(2) MXZ-2D53VAH MXZ-2DM40VA

OUTDOOR UNIT



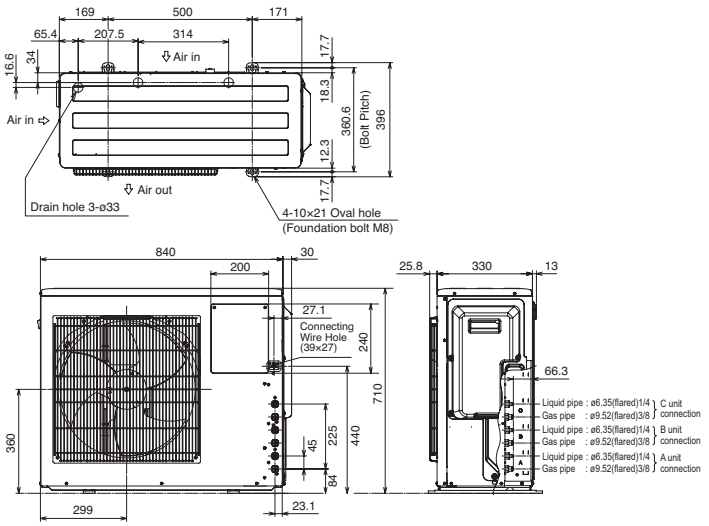
MXZ-2E53VAHZ

OUTDOOR UNIT



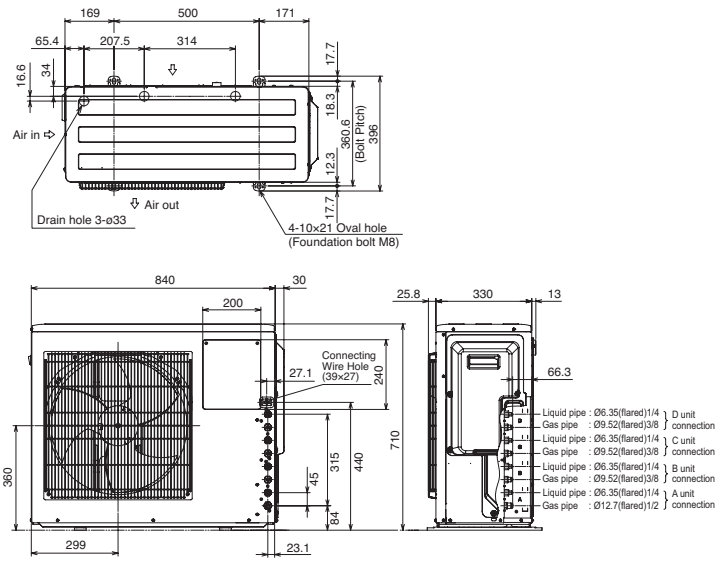
MXZ-3E54VA MXZ-3E68VA MXZ-3DM50VA

OUTDOOR UNIT



MXZ-4E72VA

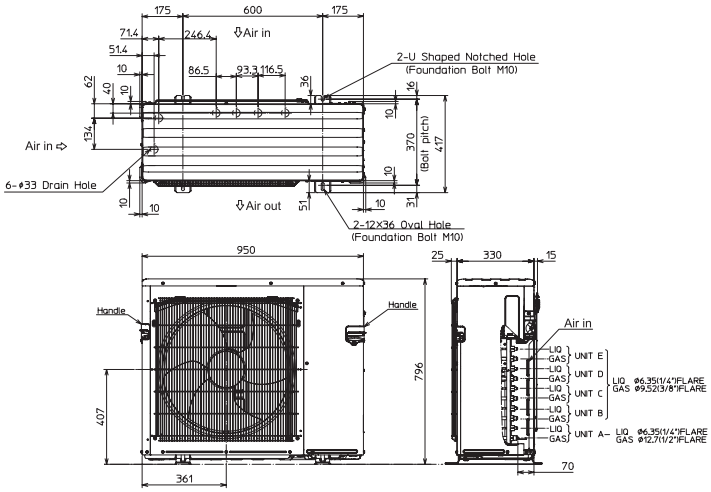
OUTDOOR UNIT



Unit : mm

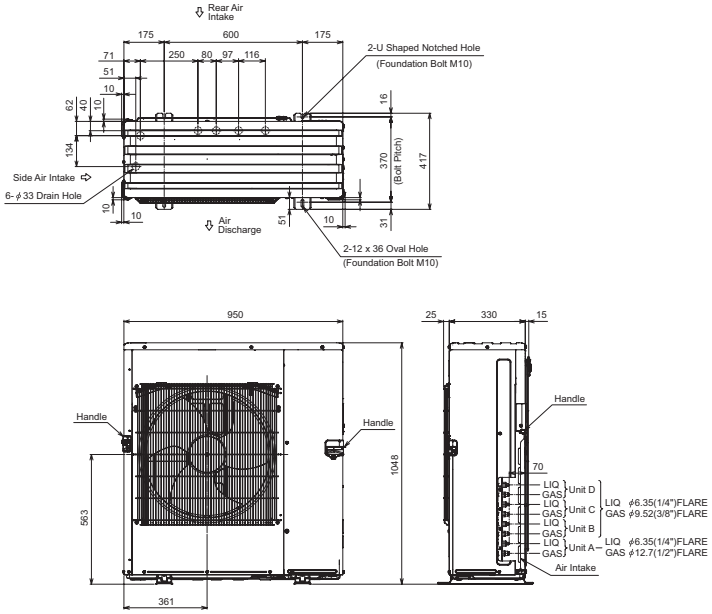
MXZ-4E83VA MXZ-5E102VA

OUTDOOR UNIT



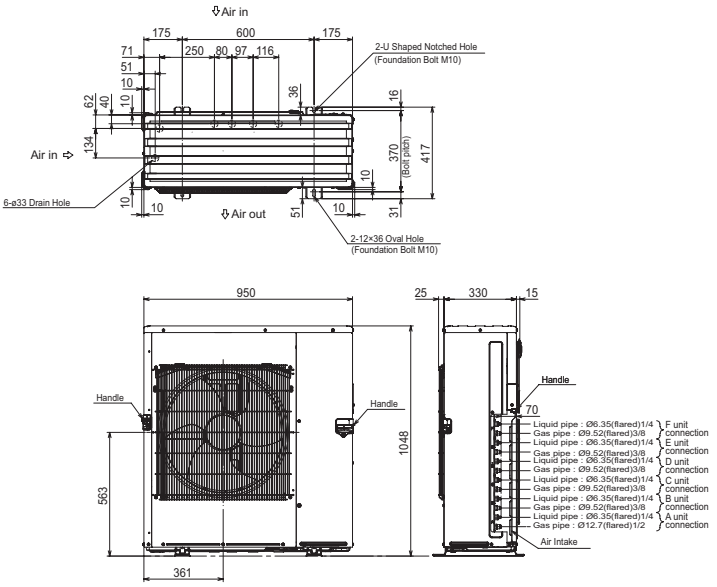
MXZ-4E83VAHZ

OUTDOOR UNIT



MXZ-6D122VA

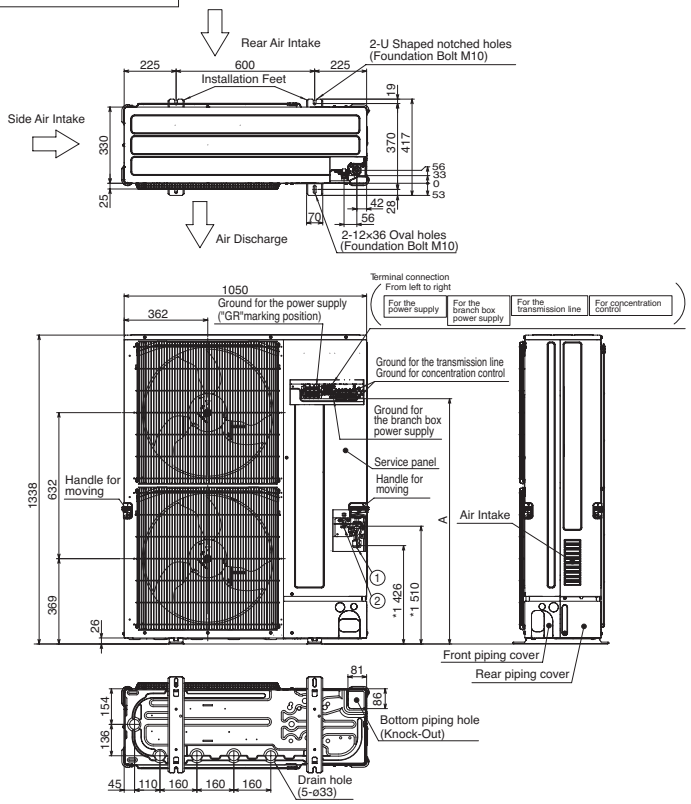
OUTDOOR UNIT



Unit : mm

PUMY-P112/125/140VKM2
PUMY-P112/125/140YKM2

OUTDOOR UNIT



Example of Notes

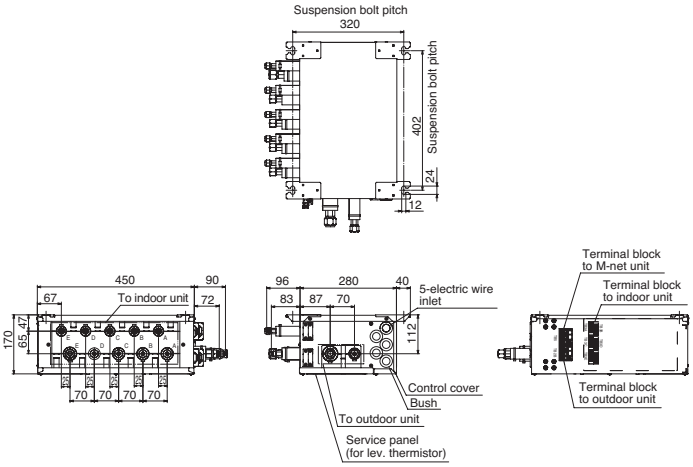
①…Refrigerant GAS pipe connection (FLARE) ø15.88 (5/8F)
②…Refrigerant LIQUID pipe connection (FLARE) ø9.52 (3/8F)
*1 …Indication of STOP VALVE connection location.

Model	A
PUMY-P112/125/140VKM2	1062
PUMY-P112/125/140YKM2	909

PAC-MK51BC

Suspension bolt: W3/W8 (M10)

Branch box



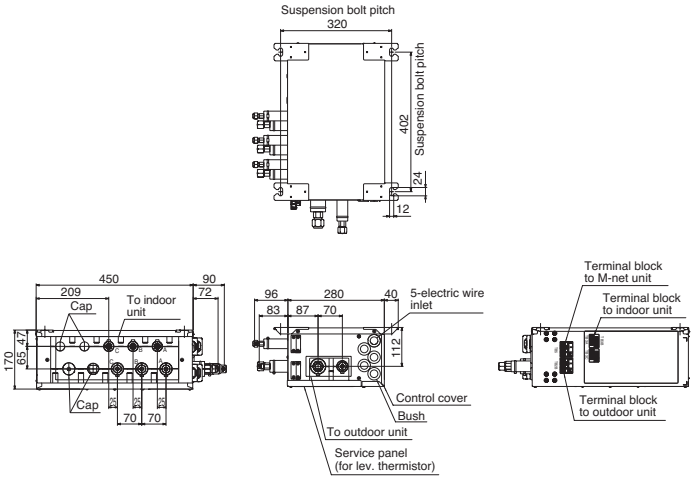
Suspension bolt : W3/8(M10)
Refrigerant pipe flared connection

	A	B	C	D	E	To outdoor unit
Liquid pipe	1/4F	1/4F	1/4F	1/4F	1/4F	3/8F
Gas pipe	3/8F	3/8F	3/8F	3/8F	1/2F	5/8F

PAC-MK31BC

Suspension bolt: W3/W8 (M10)

Branch box



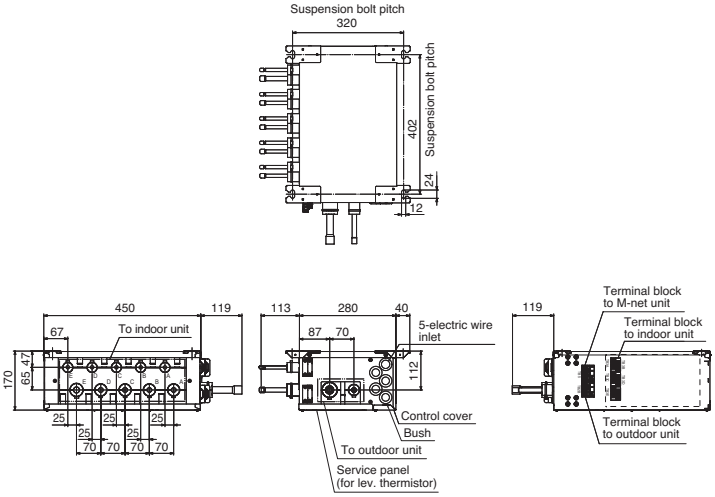
Suspension bolt : W3/8(M10)
Refrigerant pipe flared connection

	A	B	C			To outdoor unit
Liquid pipe	1/4F	1/4F	1/4F			3/8F
Gas pipe	3/8F	3/8F	3/8F			5/8F

PAC-MK51BCB

Suspension bolt: W3/W8 (M10)

Branch box



Suspension bolt : W3/8(M10)
Refrigerant pipe brazed connection

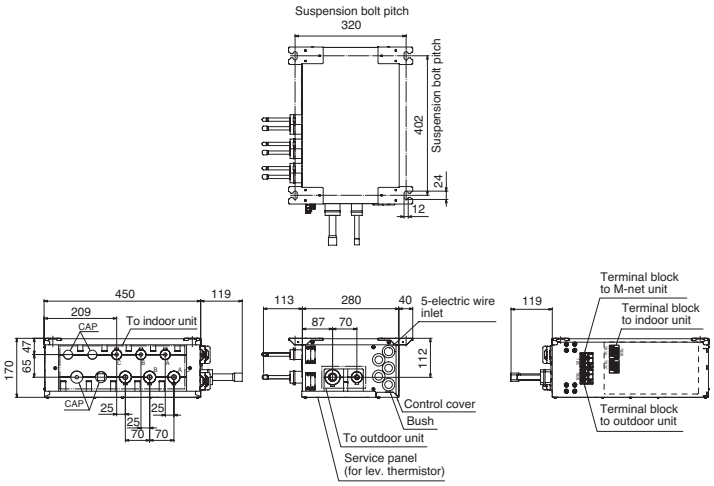
	A	B	C	D	E	To outdoor unit
Liquid pipe	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52
Gas pipe	ø9.52	ø9.52	ø9.52	ø9.52	ø12.7	ø15.88

Unit : mm

PAC-MK31BCB

Suspension bolt: W3/W8 (M10)

Branch box



Suspension bolt : W3/8(M10)

Refrigerant pipe brazed connection

	A	B	C			To outdoor unit
Liquid pipe	ø6.35	ø6.35	ø6.35			ø9.52
Gas pipe	ø9.52	ø9.52	ø9.52			ø15.88

Piping Installation

M SERIES

Single type

Series	Class <Outdoor unit>	Maximum Piping Length (m)	Maximum Height Difference (m)	Maximum Number of Bends
		Total length (A)	Outdoor unit - Indoor unit (H)	Total number
MSZ-F MFZ-KJ	25 / 35	20	12	10
	50	30	15	10
MSZ-E	25 / 35 / 42	20	12	10
	50	30	15	10
MSZ-S	25 / 35 / 42	20	12	10
	50	30	15	10
MSZ-G	60 / 71	30	15	10
MSZ-D	25 / 35	20	12	10
MSZ-H	25 / 35 / 50	20	12	10
	60 / 71	30	15	10

S SERIES & P SERIES

Single type

Series	Class <Outdoor unit>	Maximum Piping Length (m)	Maximum Height Difference (m)	Maximum Number of Bends
		Total length (A)	Outdoor unit - Indoor unit (H)	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	30	15
POWER INVERTER (PUHZ-ZRP)	35 / 50 / 60 / 71	50	30	15
	100 / 125 / 140	75	30	15
	200 / 250	100	30	15
STANDARD INVERTER (PUHZ-P & SUZ)	25 / 35	20	12	10
	50 / 60 / 71	30	30	10
	100 / 125 / 140	50	30	15
	200 / 250	70	30	15

Twin type

Series	Class <Outdoor unit>	Maximum Piping Length (m)			Maximum Height Difference (m)		Maximum Number of Bends
		Total length A+B+C	Pipe length difference from distribution pipe |B-C|	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	8	20	30	1	15
POWER INVERTER (PUHZ-ZRP)	71	50	8	20	30	1	15
	100 / 125 / 140	75	8	20	30	1	15
	200 / 250	100	8	30	30	1	15
STANDARD INVERTER (PUHZ-P)	100 / 125 / 140	50	8	20	30	1	15
	200 / 250	70	8	30	30	1	15

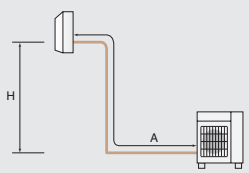
Triple type

Series	Class <Outdoor unit>	Maximum Piping Length (m)			Maximum Height Difference (m)		Maximum Number of Bends
		Total length A+B+C+D	Pipe length difference from distribution pipe |B-C|	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
POWER INVERTER (PUHZ-ZRP)	140	75	8	20	30	1	15
	200 / 250	100	8	30	30	1	15
STANDARD INVERTER (PUHZ-P)	140	50	8	20	30	1	15
	200 / 250	70	8	28	30	1	15

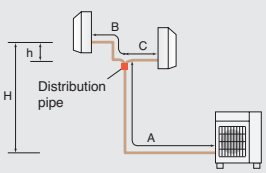
Quadruple type

Series	Class <Outdoor unit>	Maximum Piping Length (m)			Maximum Height Difference (m)		Maximum Number of Bends
		Total length A+B+C+D+E	Pipe length difference from distribution pipe |B-C|	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
POWER INVERTER (PUHZ-ZRP)	200 / 250	100	8	30	30	1	15
STANDARD INVERTER (PUHZ-P)	200 / 250	70	8	22	30	1	15

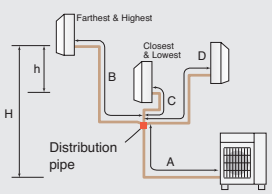
Single type



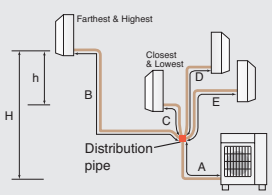
Twin type Total length A+B+C



Triple type Total length A+B+C+D



Quadruple type Total length A+B+C+D+E



MXZ SERIES

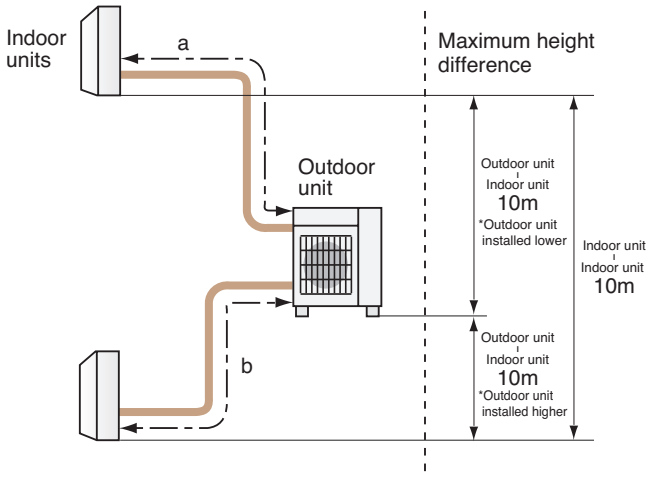
MXZ-2D33VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	15m
Total length (a+b)	20m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	15
Total number (a+b)	20

* When connecting MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

Regarding MXZ-2D33, the second unit should be a different type in the case of selecting one MFZ-KJ.



MXZ-2D42VA(2)

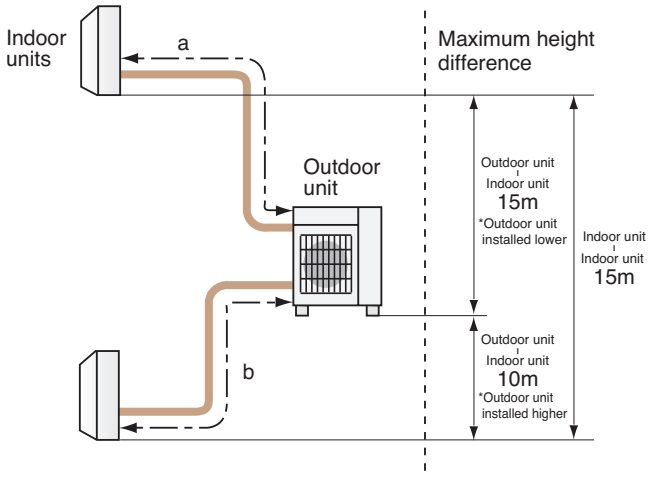
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	20
Total number (a+b)	30

MXZ-2D53VA(2)(H), MXZ-2E53VAHZ

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	20
Total number (a+b)	30



* When connecting MFZ-KJ Series indoor unit to MXZ-2D42VA or MXZ-2D53VA(H), additional refrigerant is required. For details, please contact Mitsubishi Electric.

MXZ-3E54VA

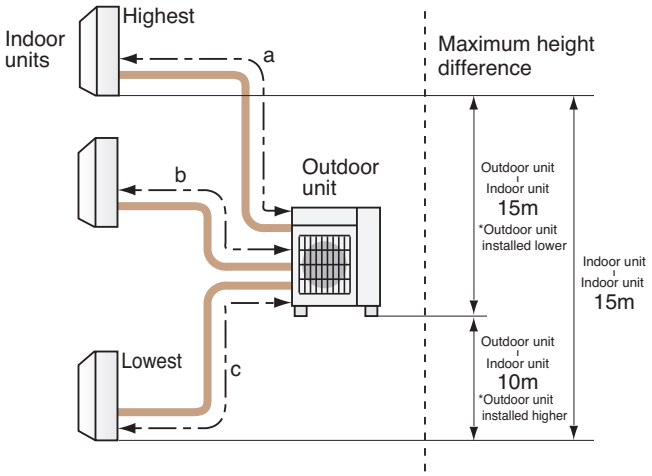
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c)	25m
Total length (a+b+c)	50m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c)	25
Total number (a+b+c)	50

MXZ-3E68VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c)	25m
Total length (a+b+c)	60m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c)	25
Total number (a+b+c)	60



* When connecting MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

MXZ SERIES

MXZ-4E72VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d)	25m
Total length (a+b+c+d)	60m

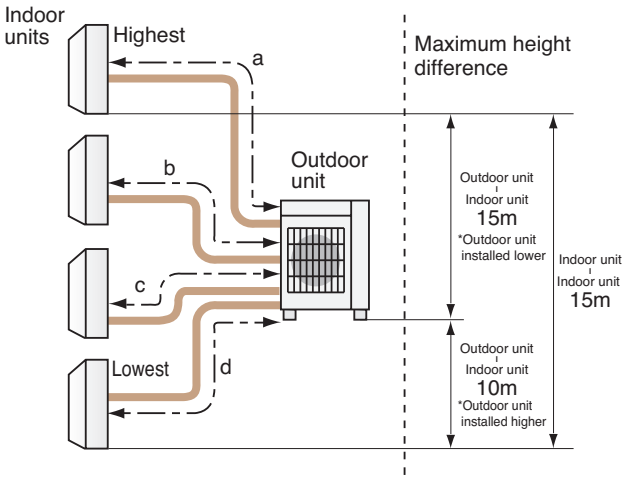
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d)	25
Total number (a+b+c+d)	60

* When connecting MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

MXZ-4E83VA, MXZ-4E83VAHZ

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d)	25m
Total length (a+b+c+d)	70m

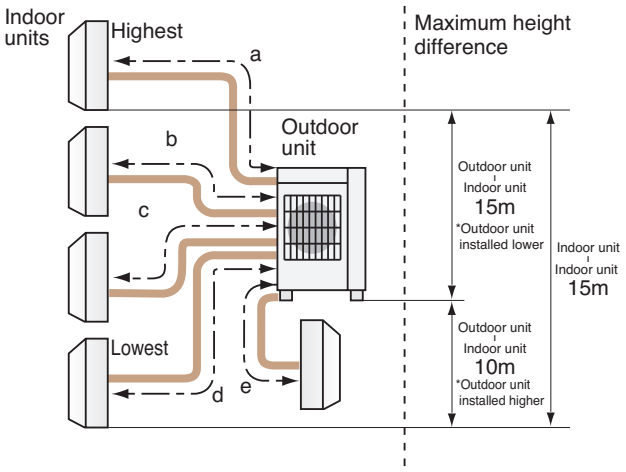
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d)	25
Total number (a+b+c+d)	70



MXZ-5E102VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d,e)	25m
Total length (a+b+c+d+e)	80m

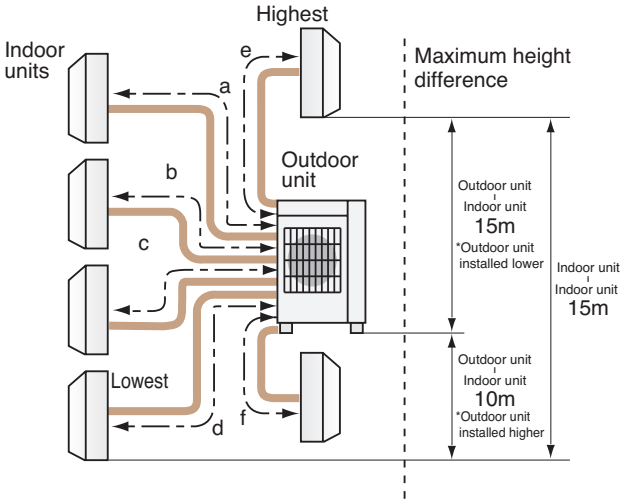
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e)	25
Total number (a+b+c+d+e)	80



MXZ-6D122VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d,e,f)	25m
Total length (a+b+c+d+e+f)	80m

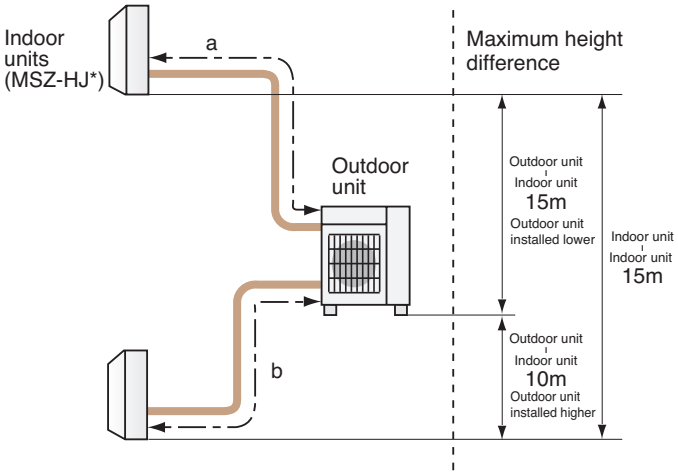
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e,f)	25
Total number (a+b+c+d+e+f)	80



MXZ-2DM40VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	20
Total number (a+b)	30

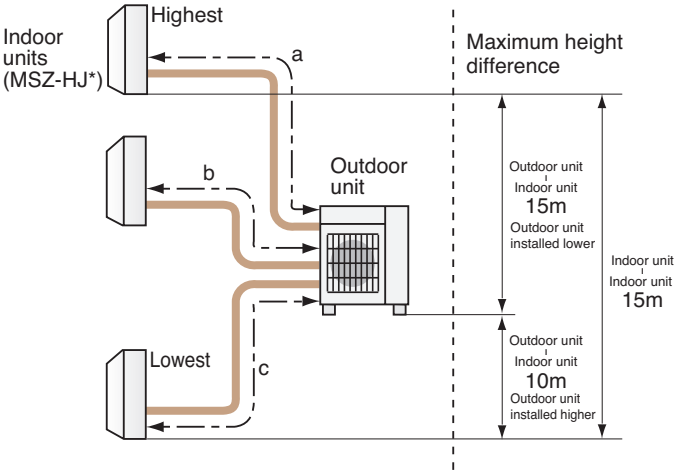


*Only MSZ-HJ model is connectable.

MXZ-3DM50VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c)	25m
Total length (a+b+c)	50m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c)	25
Total number (a+b+c)	50

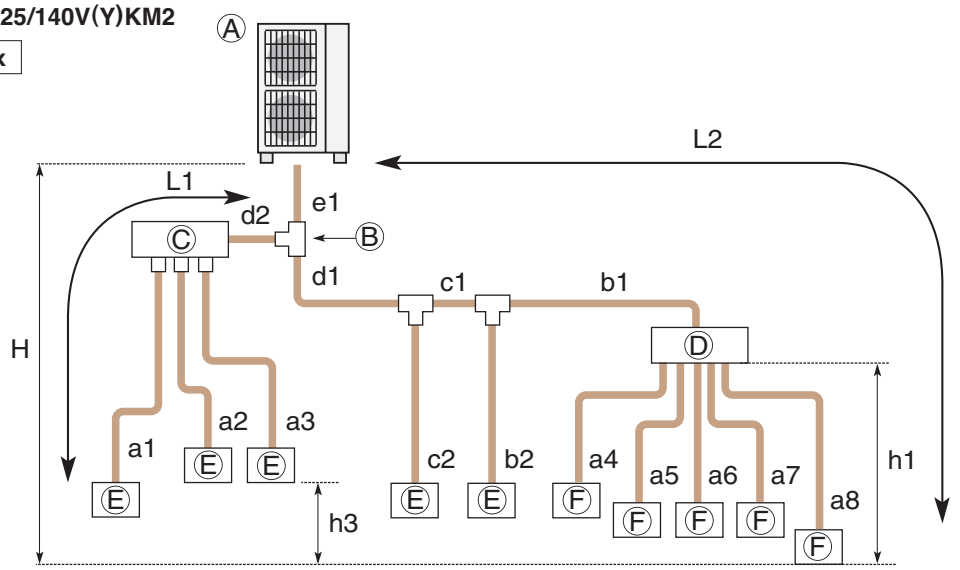


*Only MSZ-HJ model is connectable.

PUMY SERIES

PUMY-P112/125/140V(Y)KM2

1-Branch box

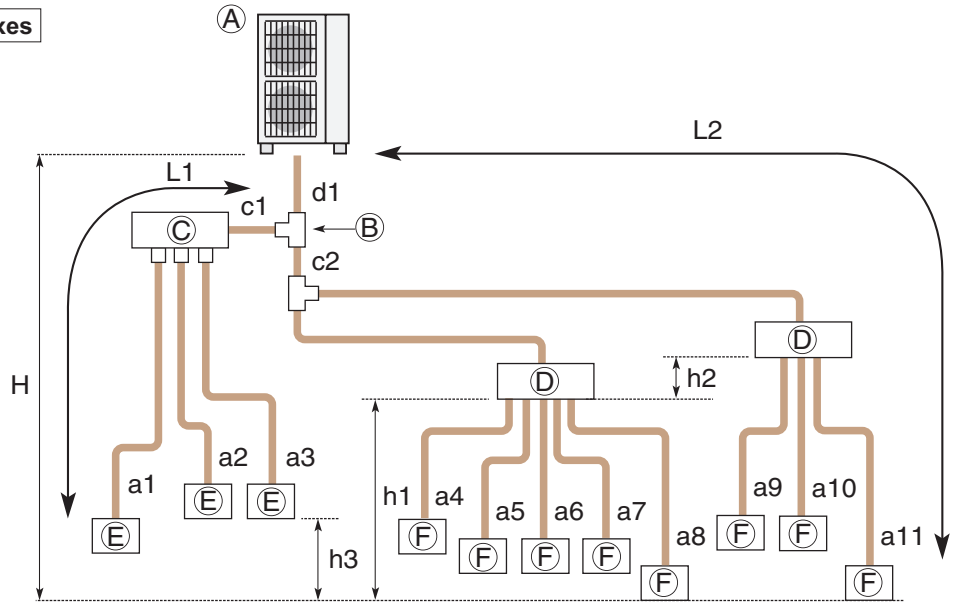


Ⓐ Outdoor Unit
Ⓑ First joint
Ⓒ Branch header (CMY)
Ⓓ Branch box (PAC-MK31/51)
Ⓔ CITY MULTI Indoor unit
Ⓕ M/S/P series Indoor unit

Permissible length (One-way)	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 300 m
	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 85 m
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 80 m
	Piping length between outdoor unit and branch box	e1 + d1 + c1 + b1 ≦ 55 m
	Farthest piping length from the first joint	d1 + c1 + b1 or d1 + c1 + b2 ≦ 30 m
	Farthest piping length after branch box	a8 ≦ 25 m
	Total piping length between branch boxes and indoor units	a4 + a5 + a6 + a7 + a8 ≦ 95 m
Permissible height difference (One-way)	In indoor/outdoor section (H)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
		H ≦ 40 m (In case of outdoor unit is set lower than indoor unit)
	In branch box/indoor unit section (h1)	h1 ≦ 15 m
	In each indoor unit (h3)	h3 ≦ 12 m
Number of bends		le1 + d2 + a1l, le1 + d2 + a2l, le1 + d2 + a3l, le1 + d1 + c2l, le1 + d1 + c1 + b2l, le1 + d1 + c1 + b1 + a4l, le1 + d1 + c1 + b1 + a5l, le1 + d1 + c1 + b1 + a6l, le1 + d1 + c1 + b1 + a7l, le1 + d1 + c1 + b1 + a8l ≦ 15

*1: Branch box should be placed within the level between the outdoor unit and indoor units.

2-Branch boxes



Ⓐ Outdoor Unit
Ⓑ First joint
Ⓒ Branch header (CMY)
Ⓓ Branch box (PAC-MK31/51)
Ⓔ CITY MULTI Indoor unit
Ⓕ M/S/P series Indoor unit

Permissible length (One-way)	Total piping length	d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 240 m
	Farthest piping length (L1)	d1 + c1 + a1 ≦ 85 m
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≦ 80 m
	Piping length between outdoor unit and branch boxes	d1 + c2 + b1 + b2 ≦ 55 m
	Farthest piping length from the first joint	c2 + b2 or c1 + a1 ≦ 30 m
	Farthest piping length after branch box	a11 ≦ 25 m
	Farthest branch box from outdoor unit	d1 + c2 + b2 ≦ 55 m
	Total piping length between branch boxes and indoor units	a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 95 m
Permissible height difference (One-way)	In indoor/outdoor section (H)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
		H ≦ 40 m (In case of outdoor unit is set lower than indoor unit)
	In branch box/indoor unit section (h1)	h1 + h2 ≦ 15 m
	In each branch unit (h2)	h2 ≦ 15 m
	In each indoor unit (h3)	h3 ≦ 12 m
Number of bends		ld1 + c1 + a1l, ld1 + c1 + a2l, ld1 + c1 + a3l, ld1 + c2 + b1 + a4l, ld1 + c2 + b1 + a5l, ld1 + c2 + b1 + a6l, ld1 + c2 + b1 + a7l, ld1 + c2 + b1 + a8l, ld1 + c2 + b2 + a9l, ld1 + c2 + b2 + a10l, ld1 + c2 + b2 + a11l ≦ 15

*1: Branch box should be placed within the level between the outdoor unit and indoor units.

Explanation of Terminology

Maximum piping length:
This is the maximum allowable length of the refrigerant piping. The amount of refrigerant pipe used cannot be longer than the length specified.

Total length:
The maximum allowable combined length of all the refrigerant piping between the outdoor unit and indoor unit(s).

Outdoor Unit - Indoor Unit:
The maximum allowable length of the refrigerant piping between the outdoor unit and indoor units installed when multiple units are connected to a single outdoor unit. This distance limitation refers to the maximum length between the outdoor unit and the farthest indoor unit.

Pipe length difference from distribution pipe:
The maximum allowable difference in refrigerant piping length from the distribution pipe to the farthest indoor unit and from the distribution pipe to the closest indoor unit when multiple indoor units are connected to a single outdoor unit using a distribution pipe.

Indoor Unit - Distribution Pipe:
The maximum allowable length of the refrigerant piping between indoor units and the distribution pipe when multiple indoor units are connected to a single outdoor unit.

Maximum height difference:
This is the maximum allowable height difference. It is necessary to install the air conditioning system so that the height distance is no more than the difference specified. (Specified differences may vary if the outdoor unit is installed higher or lower than the indoor units).

Outdoor unit - Indoor unit:
The maximum allowable difference in height between the outdoor unit and indoor units when installed (when multiple indoor units are connected to a single outdoor unit, this distance limitation refers to the maximum height difference between the outdoor unit and an indoor unit).

Indoor unit - Indoor unit:
The maximum allowable difference between the heights of indoor units when multiple indoor units are connected to a single outdoor unit.

Maximum number of bends:
This is the maximum allowable number of bends in the refrigerant piping. The total number of bends in the refrigerant piping used cannot exceed the number specified.

Total number:
The maximum allowable number of bends for all refrigerant piping between the outdoor unit and indoor units.

Outdoor unit - Indoor unit:
The maximum allowable number of bends between the outdoor unit and each indoor unit when multiple indoor units are connected to a single outdoor unit.

AIR TO WATER

ECODAN

"ECODAN" can heat rooms and supply domestic hot water, realising greater comfort and energy saving.

"ECODAN" – Economic, eco conscious next generation heating system

Both energy-saving and safe for the environment, the Mitsubishi Electric ECODAN incorporates a highly efficient heat pump system that captures "the heat in the air", a renewable energy resource. Equipped with advanced inverter control, meticulous temperature control assures comfortable heating, and its space-saving "All-in-one" indoor unit is easy to install. These energy-saving, high comfort and simple installation characteristics have drawn the ECODAN heating system into the spotlight centre stage.

Excellent ECODAN's heating performance, even at low outdoor temperature!

INDOOR UNIT

Hydro box, cylinder unit

Reversible hydro box, Reversible cylinder unit

OUTDOOR UNIT

Packaged type	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity (≧16kW)*
ZUBADAN		 PUHZ-HW112/140	
POWER INVERTER	 PUHZ-W50	 PUHZ-W85  NEW PUHZ-W112	

Split type	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity*
ZUBADAN New Generation		 PUHZ-SHW80/112/140	 PUHZ-SHW230
POWER INVERTER	 PUHZ-SW50	 PUHZ-SW75  PUHZ-SW100/120	 NEW PUHZ-SW160/200
Eco Inverter	 NEW SUHZ-SW45		
Mr.SLIM+		 PUHZ-FRP71	

*Rated capacity is at conditions A2W35. (according to EN14511)

New eco-design directive

What is the ErP Directive?

The Ecodesign Directive for Energy-related Products (ErP Directive) established a framework to set mandatory standards for ErPs sold in the European Union (EU). The ErP Directive introduces new energy efficiency ratings across various product categories. It affects how products such as computers, vacuum cleaners, boilers and even windows are classified in terms of environmental performance. Labelling regulations that apply to our ATW heat pumps come into effect as of September 26, 2015.

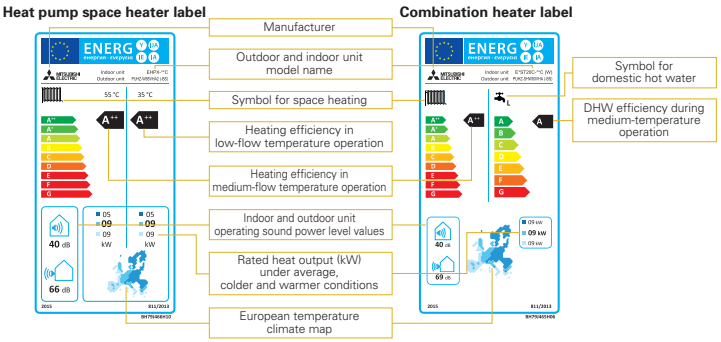
New energy label and measurements

Under directive 2009/125/EC, ATW heat pumps of up to 70kW are required to show their heating efficiency on the energy label. The purpose of the energy label is to inform customers about the energy efficiency of a heating unit. The efficiency for space heating is ranked from A^{++} to G. In the case of domestic hot water, it is from A to G.
A package label is also required if the ECODAN heat pump is installed with a controller and/or a solar system or additional heater. All ECODAN units* are already rated as A^{++} for heating at both 55°C and 35°C and A for domestic hot water, which are the highest efficiency ranks.

*Except for our ATA/ATW hybrid system Mr. SLIM+

Product label

This label is for individual heating units, such as an ECODAN heat pump. Typically, the space heater label is used for ECODAN systems with a hydro box, and the combination heater label is used for ECODAN systems with a cylinder unit.



These labels are delivered with all ECODAN outdoor units.

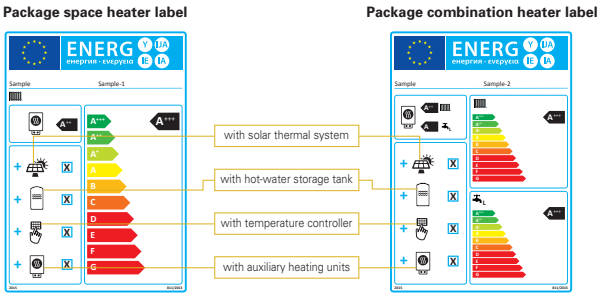
What is the package label?

A heating system can use several energy-related products, such as a controller or solar thermal system. Therefore, a label showing the efficiency of the total heating system is required. The category range is defined from A^{+++} to G.
Creating the package label is the responsibility of the installers and distributors. A useful tool on the Mitsubishi Electric website is available to easily create the labels for ECODAN products and controllers.

erp.mitsubishielectric.eu/erp/options

Package label

This label is for heating systems that use several energy-related products, such as a controller or a solar thermal system.



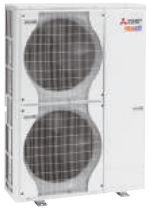
Customised package labels including ECODAN heat pumps and FTC5 controller can be created on the Mitsubishi Electric website.

Designed for Optimal Heating

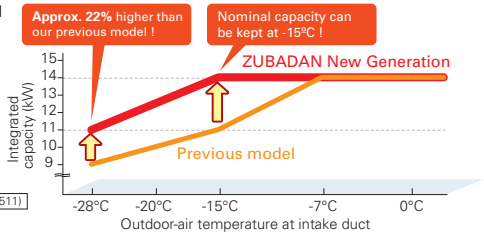
ZUBADAN New Generation (Split type)

Reliable performance in low-temperature outdoor air

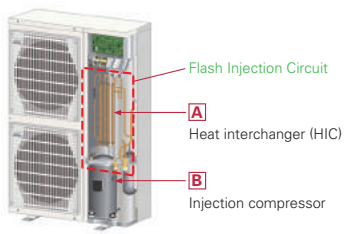
ZUBADAN New Generation provides powerful heating in cold regions where most heat pumps cannot perform very well. Its rated heating capacity is maintained even in outdoor temperatures as low as –15°C, even when flow temperature needs to be higher. That means it can be trusted to provide comfortable heating during severe winter months.

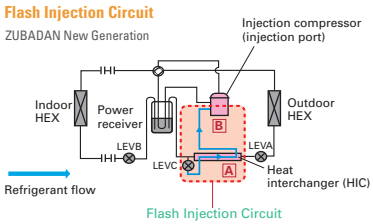


● Benefits ZUBADAN New Generation
Example:
PUHZ-SHW140YHA



Mitsubishi Electric's Flash Injection Technology
The key to high heating performance at low outdoor temperatures





The Flash Injection Circuit is an original technology. A heat exchange process at point A (heat interchanger) transforms liquid refrigerant into a two-phase, gas-liquid state and then compresses the gas-liquid refrigerant at point B (injection compressor). This circuit secures a sufficient flow rate of refrigerant for heating when outdoor temperatures are very low. Thanks to improving the heat interchanger and introducing a new injection compressor, the Flash Injection Circuit is now more powerful.

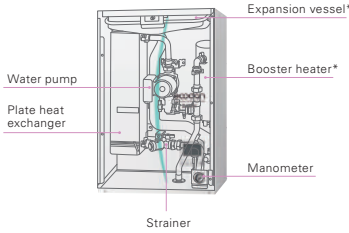
Indoor units

New all-in-one compact indoor unit

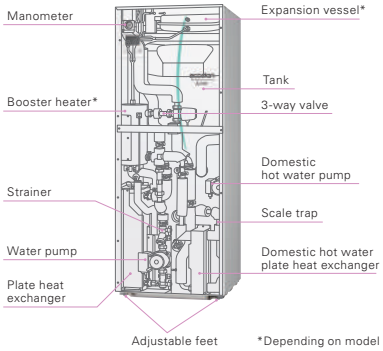
Easy to install and low maintenance

- All-in-one: Key functional components are incorporated
- Compact cylinder unit: Just 1600mm in height
- Compact hydro box: Only 600×600mm footprint
- Easy installation: Factory fitted pressure relief valve
- Easy service: Relevant parts are located at the front of the unit for easy maintenance
- Easy transport: Handles attached on front and back (cylinder unit)

Hydro box (Split type)



Cylinder unit (Split type)



*Depending on model

Larger capacity system NEW

Outdoor units

PUHZ-SW160/200YKA
SHW230YKA2

Indoor units

EHSE-YM9EC, EHSE-MEC, ERSE-YM9EC, ERSE-MEC

Our 8–10HP ECODAN heat pumps, only available with a hydro box connection, are suitable for large houses and small businesses where a high heating load is necessary. Our latest generation of 8–10HP Power Inverter outdoor units can now reach 60°C maximum flow temperature instead of 53°C previously. The new 8–10HP hydro box is available in both heating only and reversible and can be connected to a customised capacity domestic hot water tank.

High-performance for domestic hot water re-charge NEW

External plate heat exchanger – more energy savings using ECODAN's unique and innovative technologies

Save energy in domestic hot water operations

Thanks to an external plate heat exchanger, ECODAN offers much higher domestic hot water efficiency. Compared to our previous model, domestic hot water recharge efficiency is improved by approximately 17%*1, thereby reducing operating costs.

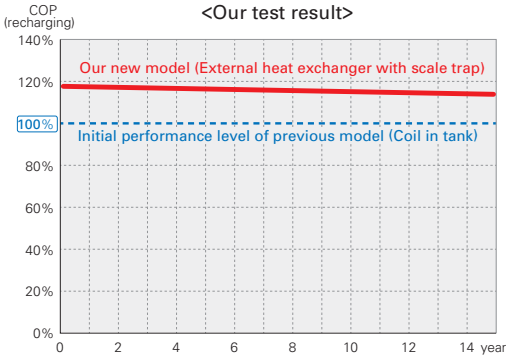
Avoid performance loss due to scale

A scale trap is incorporated after the plate heat exchanger to capture calcium scale particles, thus maintaining the high performance of the external plate heat exchanger. (Just a 3% reduction during 15 years*2).

Lighter weight

Compared to our previous model, the cylinder unit is up to 15kg lighter*.
This is thanks to the coil incorporated in the tank which has been removed and replaced by a much lighter plate heat exchanger.

*Comparison between EHST20C-VM2C and EHST20C-VM2B.



<*1, *2> Usage condition Tank temperature: 10 degree to 60 degree
Heating up time: 1 hour per 1 day
Supersaturation of $CaCO_3$: 50
*15 years accelerated testing

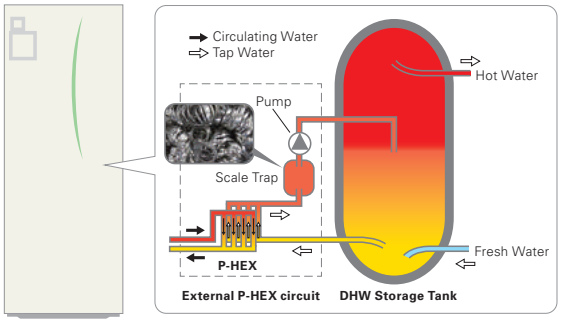
Optimised stratification for better comfort

Thanks to the L-shaped inlet pipe from the plate heat exchanger, stratification is well maintained after re-charge.
You do not need to worry about running out of hot water the same as with a conventional coil in tank.
Supply water temperature can be kept high until all the hot water in the tank has been used.

The secret behind our external plate heat exchanger system

Thanks to the unique plate heat exchanger and scale trap technology, a more efficient performance is achieved. In conventional systems, there is a risk of calcium scale building up on the heat-exchange plate if it is exposed to tap water directly. Therefore, it is difficult to use plate-based heat exchangers to heat tap water. To resolve this problem, ECODAN is equipped with a "scale trap" that catches homogeneous calcium nuclei in the tap water before it has a chance to grow into large scales, thereby inhibiting build-up in the external heat exchanger. ECODAN can use a plate heat exchanger to heat tap water, resulting in much higher domestic hot water performance.

Notice: In the case of the special conditions such as very hard tap water, please consult with a specialist before installation.



Unique technology of ECODAN

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

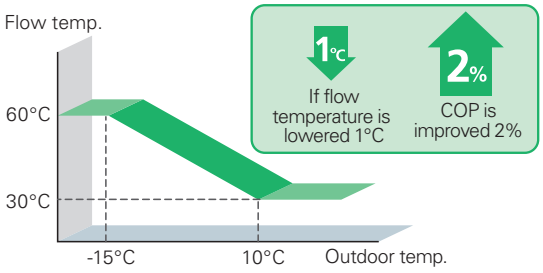
Auto Adaptation

Maximize energy savings while retaining comfort at all times

Regarding the relation of flow temperature and unit performance, a 1°C drop in the flow temperature improves the coefficient of performance (COP) of the ATW system by 2%. This means that energy savings are dramatically affected by controlling the flow temperature in the system.

In a conventional system controller, the flow temperature is determined based on the pre-set heat curve depending on the actual outdoor temperature. However, this requires a complicated setting to achieve the optimal heat curve.

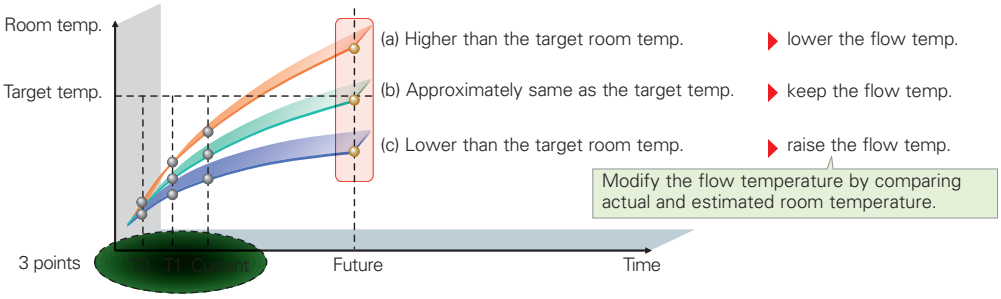
■ Heat curve setting (Example)



Mitsubishi Electric's Auto Adaptation function automatically tracks changes in the actual room temperature and outdoor temperature and adjusts the flow temperature accordingly.

Aiming to realise further comfort and energy savings, Mitsubishi Electric is proud to introduce a revolutionary new controller. Our advanced Auto Adaptation function measures the room temperature and outdoor temperature, and then calculates the required heating capacity for the room. Simply stated, the flow temperature is automatically controlled according to the required heating capacity, while optimal room temperature is maintained at all times, ensuring the appropriate heating capacity and preventing energy from being wasted. Furthermore, by estimating future changes in room temperature, the system works to prevent unnecessary increases and decreases in the flow temperature.
Accordingly, Auto Adaptation maximises both comfort and energy savings without the need for complicated settings.

■ Future room temperature estimation



Two-zone control (for heating/cooling) NEW

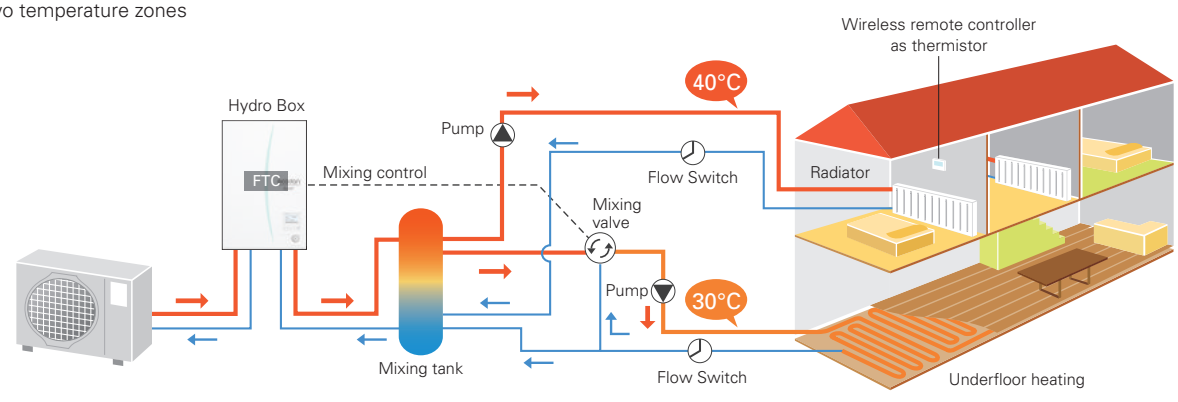
Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

Simultaneously control two different zones

Using ECODAN, it is possible to control two different flow temperatures, thereby managing two different heating load requirements. The system can adjust and maintain two flow temperatures when different temperatures are required for different rooms; for example, controlling a flow temperature of 40°C for the bedroom radiators and another flow temperature of 30°C for the living room floor heating.
Another feature of this model is that two-zone cooling control is now possible. Using these functions it is easy to maintain the most comfortable temperature in each room and to save energy too.

■ Two temperature zones



*Items such as mixing tank, mixing valve flow switch and pumps are not included and need to be purchased locally.

Multiple unit control

Connect up to 6 units – Automatic control of multiple units for bigger capacity and better efficiency

Settings can be performed using an SD card.

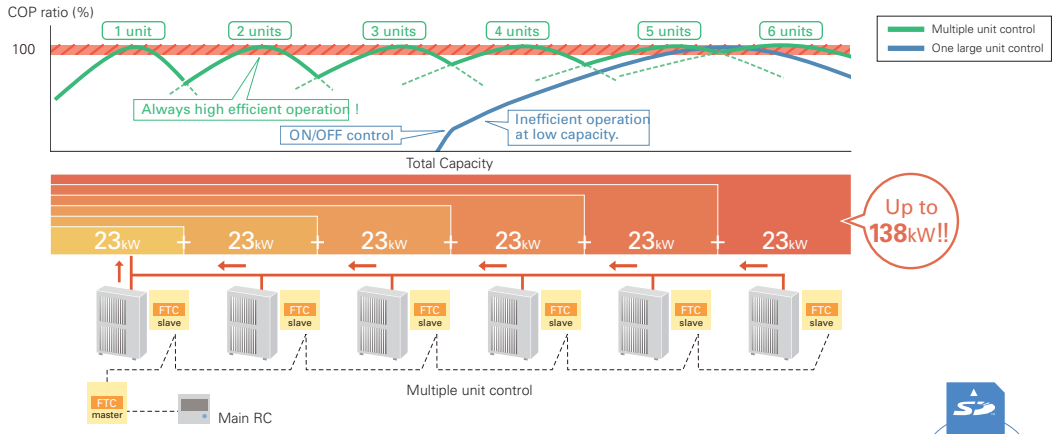
*SD logo is a trademark of SD-3C, LLC

A maximum of 6 units* can be configured according to the heating/cooling load of the building. The most efficient number of operating units is determined automatically based on heating/cooling load. This enables ECODAN to provide optimal room temperature control, and thus superior comfort for room occupants. Also incorporated is a rotation function that enables each unit to run for an equal time period.

If one of the units malfunctions when using the Multiple Unit Control, another unit can be automatically operated for back-up, thereby preventing the system operation from stopping completely.

*Only same models (same capacity) can be used.

■ Multiple unit control



Intelligent boiler interlock

An existing boiler can be used for extra heating capacity in an efficient way

Settings can be performed using an SD card.

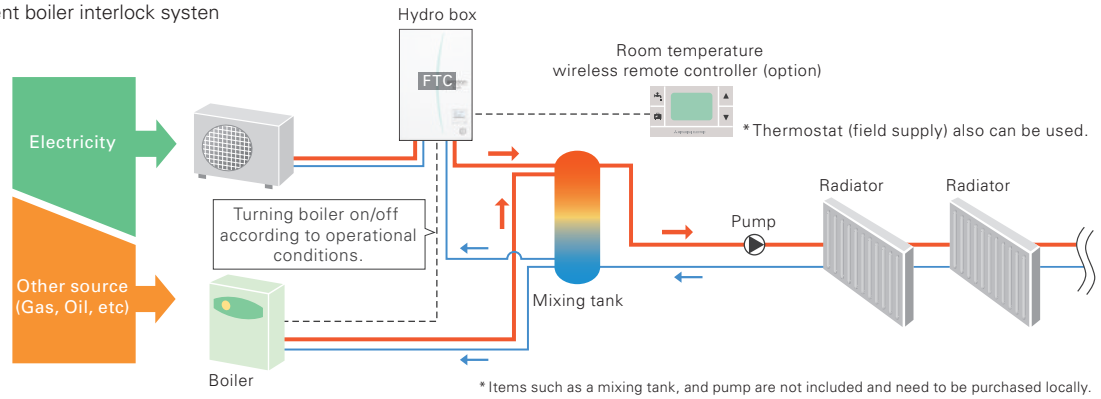
*SD logo is a trademark of SD-3C, LLC

The flexibility of ECODAN's intelligent control allows the system to be combined with the boiler currently in use. Additionally, this control can judge which heating source to use either ECODAN or the existing boiler, based on various conditions*.
In the event of one heating unit not working due to some unforeseen problem, the other heating system can be used as a back-up, thereby preventing the heating system operation from stopping completely.

*Please check below "Heat source switchover".

Intelligent system combining a boiler with ECODAN

■ Intelligent boiler interlock systen



Heat source switchover - Choose appropriate system based on needs

4 types of heat source switchover logic

① Switchover based on actual outdoor temperature
- Heat source switchover occurs when the outdoor temperature drops below a pre-set temperature.

② Switchover based on running cost
- Heat source switchover occurs by judging optimal operation based on running cost.
  *Pre-registration of the energy price of electricity, and gas or oil per 1kWh is necessary.

③ Switchover based on CO_2 emission level
- Heat source switchover occurs to minimise CO_2 emission.
  *Pre-registration of CO_2 emission amount from electricity and gas or oil is necessary.

④ Switchover can also be activated via external input
- For example, the peak cut signal from electric power company.

Remote controllers

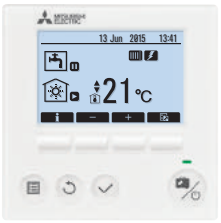
Smart user-friendly controller with stylish design

Main remote controller

- Large screen and backlight for excellent visibility, even in dark environment
- Multi-language support (supports 15 languages)
- Can be removed from main unit and installed in a remote location (up to 500m)
- Quick reading of operation data (7.5 times faster than previous model)
- Wide range of convenient functions in response to user demand

Function settings

- NEW – Energy monitoring
- NEW – Two-zone control (cooling and heating)
- NEW – Two separate schedules
- NEW – Summer time setting
- – Built-in room temperature sensors
- – Hybrid control (boiler interlock)
- – Floor drying mode
- – Weekly timer
- – Holiday mode
- – Legionella prevention
- – Error codes



Main controller

PAR-WR51R-E (Option)
Receiver

PAR-WT50R-E (Option)
Wireless remote controller

Wireless remote controller (optional)

- Built-in room temperature sensor; easy to place in the best position to detect room temperature
- Wiring work eliminated
- Simple design that is easy to operate
- Remote control from any room without needing to choose an installation location
- Backlight and big buttons that are easy to operate
- Domestic hot water boost and cancellation
- Simplified holiday mode

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

Energy monitoring NEW

View electricity consumption and heat output on the remote controller

Every end user can now easily check the energy data of the ECODAN heat pump.

Heating capacity produced

Electric energy used

Other features

– Daily, monthly and yearly data are stored and can be displayed using the main remote controller.
– External power meter and heat meter can be connected for accurate measurement.
– SD card is also available for storing data.

*Using pre-set values on the main remote controller, estimated energy consumption/output can be shown without external power and a heat meter.
Depending on operating condition and system configuration, there is some possibility to show different data from the reality.
*This function is available depending on the version of the outdoor unit model.

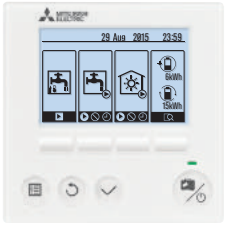
Summer time setting NEW

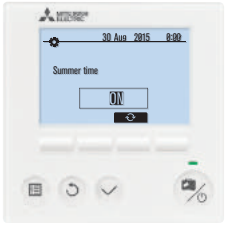
Easy adjustment for summer time

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

Just switch the summer time mode 'on' using the main remote controller and the clock in the main remote controller is adjusted to summer time hours.
This function can release the end user from clock setting tasks.





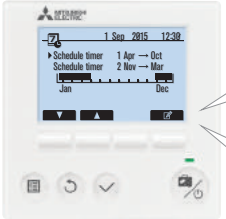
Two separate schedules NEW

Pre-setting two different schedules for winter and summer seasons

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

Two different schedule settings are available for use via the main remote controller.
These schedules can be pre-set and changed depending on the season. For example, from November to March, space heating and domestic hot water are used; however, during warm months such as from April to October, only domestic hot water is used.



<Example>

Schedule 1 Winter time
Space heating **daytime**
Domestic hot water **early morning**

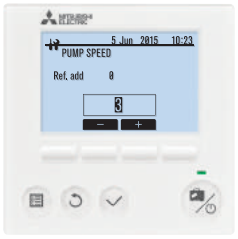
Schedule 2 Summer time
Domestic hot water **any time**

Easy commissioning

Pump for primary water circuit* speed setting possible using ECODAN's main remote controller

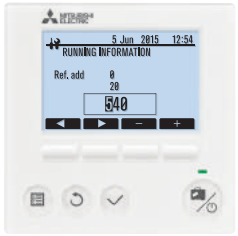
Even when the system is running, pump output can be set to one of five different settings using the main remote controller.
The person commissioning the system can adjust this speed much more easily.

*Speed setting of pump for domestic hot water is not available through the main remote controller when the system is running.



Flow sensor newly incorporated

The flow sensor is key for monitoring energy output and can also be used to detect flow error as well.
– Flow rate can be checked on the main remote controller.
– Flow rate can also be shown as graphs using the SD card tool.



Run indoor unit* without outdoor unit

During installation or situations such as an outdoor unit malfunction, the indoor unit can be operated using a heater.
While using this mode, flow and tank temperature are selectable.
Fixing and maintenance of the outdoor unit can be done without stopping heating and domestic hot water operation*.

*Models with electric heater only.
*When the indoor unit operation stops, please check all settings after the outdoor unit is connected.

SD* card

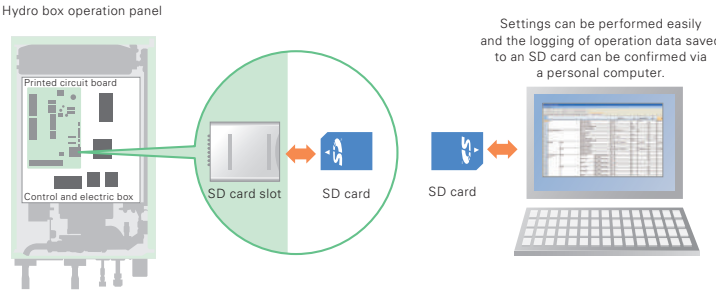
For easier settings and data logging

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

The initial setting for ECODAN is now simpler than ever before. The special software enables the required initial settings to be saved to an SD card using a personal computer. The system set-up is as easy as moving the SD card from the computer to the SD card slot in the indoor unit. Compared to the previous procedure of inputting settings using the main controller at the installation site, a remarkable reduction in set-up time has been achieved. Thus, it is ideal for busy installers.

*SD card function is only used at the time of installation.



Items that can be pre-set

Simply copying pre-set data to an SD card, the same settings can input into another unit using the SD card.

- Initial settings (time display, contact number, etc.)
- Heating settings
  - Auto adaptation
  - Heat curve
  - Two different temperature zones (heating and cooling)
- Interlocked boiler operation settings
- Holiday mode settings
- Schedule timer settings (two separate schedules)
- Domestic hot water settings
- Legionella prevention settings

All items that are set by the main controller can be set via a personal computer.

Data that can be stored

Operation data up to a month long can be stored on a single SD card (2GB).

- Consumed electrical energy
- Delivered energy
- Flow rate
- Operation time
- Defrost time
- Actual temperature
  - Room temperature
  - Flow temperature
  - Return temperature
  - Domestic hot water temperature
  - Outdoor temperature
- Error record
- Input signal
- Etc.

Split type specifications

Indoor unit

<Cylinder unit>

Model name				EHST20C-VM2C	EHST20C-VM6C	EHST20C-YM9C	EHST20C-TM9C	EHST20C-VM2EC	EHST20C-VM6EC	EHST20C-YM9EC	EHST20C-MEC	EHST20D-VM2C	EHST20D-YM9C	EHST20D-VM2EC	EHST20D-MHC	EHST20D-MEC	EHST20C-MHCW*2	EHST20D-MHCW*2
		Type		Heating only														
		Immersion heater		–	–	–	–	–	–	–	–	–	–	–	×	–	×	×
		Expansion vessel		×	×	×	×	–	–	–	–	×	×	–	×	–	×	×
		Booster heater		×	×	×	×	×	×	×	–	×	×	×	–	–	–	–
Dimensions		H×W×D	mm	1600×595×680														
Weight (empty)			kg	110	111	112	112	104	105	106	103	103	105	97	103	96	110	103
Power supply (V/Phase/Hz)				230/Single/50														
Heater	Booster heater	Power supply (V/Phase/Hz)		230/Single/50		400/Three/50	230/Three/50	230/Single/50		400/Three/50	–	230/Single/50	400/Three/50	230/Single/50	–			
		Capacity	kW	2	6 (2/4/6)	9 (3/6/9)	9 (3/6/9)	2	6 (2/4/6)	9 (3/6/9)	–	2	9 (3/6/9)	2	–			
		Current	A	9	26	13	23	9	26	13	–	9	13	9	–			
		Breaker size	A	16	32	16	32	16	32	16	–	16	16	16	–			
	Immersion heater	Power supply (V/Phase/Hz)		–											230/Single/50	–	230/Single/50	
		Capacity	kW	–											3	–	3	
		Current	A	–											13	–	13	
		Breaker size	A	–											16	–	16	
Domestic hot water tank	Volume / Material		L / –	200 / Stainless steel														
Guaranteed operating range*1	Ambient		°C	0~35*1														
	Outdoor	Heating	°C	See outdoor unit spec table														
		Cooling	°C	–														
Target temperature range	Heating	Room temperature	°C	10~30														
		Flow temperature	°C	25~60														
	Cooling	Room temperature	°C	–														
		Flow temperature	°C	–														
	DHW		°C	40~60														
	Legionella prevention		°C	60~70														
Sound pressure level (SPL)			dB (A)	28														

*1 The environment must be frost-free *2 UK model

<Hydro box>

Model name				EHSD-MEC	EHSD-MC	EHSD-VM2C	EHSD-YM9C	EHSC-MEC	EHSC-VM2C	EHSC-VM2EC	EHSC-VM6C	EHSC-VM6EC	EHSC-YM9C	EHSC-YM9EC	EHSC-TM9C	EHSE-MEC	EHSE-YM9EC
		Type		Heating only													
		Immersion heater		–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Expansion vessel		–	×	×	×	–	×	–	×	–	×	–	×	–	–
		Booster heater		–	–	×	×	–	×	×	×	×	×	×	×	–	×
Dimensions		H×W×D	mm	800×530×360												950×600×360	
Weight (empty)			kg	38	43	44	45	42	48	43	49	44	49	44	49	60	62
Power supply (V/Phase/Hz)				230/Single/50													
Heater	Booster heater	Power supply (V/Phase/Hz)		–	–	230/Single/50	400/Three/50	–	230/Single/50				400/Three/50		230/Three/50	–	400/Three/50
		Capacity	kW	–	–	2	9 (3/6/9)	–	2	2	6 (2/4/6)	6 (2/4/6)	9 (3/6/9)	9 (3/6/9)	9 (3/6/9)	–	9 (3/6/9)
		Current	A	–	–	9	13	–	9	9	26	26	13	13	23	–	13
		Breaker size	A	–	–	16	16	–	16	16	32	32	16	16	32	–	16
Guaranteed operating range*1	Ambient		°C	0~35*1													
	Outdoor	Heating	°C	See outdoor unit spec table													
		Cooling	°C	–													
Target temperature range	Heating	Room temperature	°C	10~30													
		Flow temperature	°C	25~60													
	Cooling	Room temperature	°C	–													
		Flow temperature	°C	–													
Sound pressure level (SPL)			dB (A)	28												30	

*1 The environment must be frost-free

<Reversible cylinder unit>

Model name				ERST20D-VM2C	ERST20D-MEC	ERST20C-VM2C	ERST20C-MEC
		Type		Heating and cooling			
		Immersion heater		–	–	–	–
		Expansion vessel		×	–	×	–
		Booster heater		×	–	×	–
Dimensions		H×W×D	mm	1600×595×680			
Weight (empty)			kg	103	96	110	103
Power supply (V/Phase/Hz)				230/Single/50			
Heater	Booster heater	Power supply (V/Phase/Hz)		230/Single/50	–	230/Single/50	–
		Capacity	kW	2	–	2	–
		Current	A	9	–	9	–
		Breaker size	A	16	–	16	–
	Immersion heater	Power supply (V/Phase/Hz)		–	–	–	–
		Capacity	kW	–	–	–	–
		Current	A	–	–	–	–
		Breaker size	A	–	–	–	–
Domestic hot water tank	Volume / Material		L / –	200 / Stainless steel			
Guaranteed operating range*1	Ambient		°C	0~35*1			
	Outdoor	Heating	°C	See outdoor unit spec table			
		Cooling	°C	See outdoor unit spec table (minimum 10°C*2)			
Target temperature range	Heating	Room temperature	°C	10~30			
		Flow temperature	°C	25~60			
	Cooling	Room temperature	°C	–			
		Flow temperature	°C	5~25			
	DHW		°C	40~60			
	Legionella prevention		°C	60~70			
Sound pressure level (SPL)			dB (A)	28			

*1 The environment must be frost-free
*2 If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger breaking by frozen water.

<Reversible hydro box>

Model name				ERSD-VM2C	ERSC-MEC	ERSC-VM2C	ERSE-MEC	ERSE-YM9EC
		Type		Heating and cooling				
		Immersion heater		–	–	–	–	–
		Expansion vessel		×	–	×	–	–
		Booster heater		×	–	×	–	×
Dimensions		H×W×D	mm	800×530×360			950×600×360	
Weight (empty)			kg	45	43	49	61	63
Power supply (V/Phase/Hz)				230/Single/50				
Heater	Booster heater	Power supply (V/Phase/Hz)		230/Single/50	–	230/Single/50	–	400/Three/50
		Capacity	kW	2	–	2	–	9 (3/6/9)
		Current	A	9	–	9	–	13
		Breaker size	A	16	–	16	–	16
Guaranteed operating range*1	Ambient		°C	0~35*1				
	Outdoor	Heating	°C	See outdoor unit spec table				
		Cooling	°C	See outdoor unit spec table (minimum 10°C*2)				
Target temperature range	Heating	Room temperature	°C	10~30				
		Flow temperature	°C	25~60				
	Cooling	Room temperature	°C	–				
		Flow temperature	°C	5~25				
Sound pressure level (SPL)			dB (A)	28			30	

*1 The environment must be frost-free
*2 If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger breaking by frozen water.

Outdoor unit

Model name				SUHZ-SW45VA (H)*1	PUHZ-SW50VKA (-BS)	PUHZ-SW75VHA (-BS)	PUHZ-SW100V/YHA (-BS)	PUHZ-SW120V/YHA (-BS)	PUHZ-SW160YKA (-BS)	PUHZ-SW200YKA (-BS)	PUHZ-SHW80VHA	PUHZ-SHW112V/YHA	PUHZ-SHW140YHA	PUHZ-SHW230YKA2
Dimensions	H×W×D		mm	880×840×330	630×809×300	943×950×330	1350×950×330	1350×950×330	1338×1050×330	1338×1050×330	1350×950×330	1350×950×330	1350×950×330	1338×1050×330
Product weight (empty)			kg	54	43	75	118/130	118/130	136	136	120	120/134	134	149
Power supply (V / Phase / Hz)				VHA : 230/Single/50 YHA, YKA : 400/Three/50										
Heating (A7/W35)	Capacity		kW	4.50	5.50	8.00	11.20	16.00	22.00	25.00	8.00	11.20	14.00	23.00
	COP			5.06	4.42	4.40	4.45	4.10	4.20	4.00	4.65	4.46	4.22	3.65
	Power input		kW	0.889	1.244	1.818	2.517	3.902	5.238	6.250	1.720	2.511	3.318	6.301
Heating (A2/W35)	Capacity		kW	3.50	5.00	7.50	10.00	12.00	16.00	20.00	8.00	11.20	14.00	23.00
	COP			3.40/3.04	2.97	3.40	3.32	3.24	3.11	2.80	3.55	3.34	2.96	2.37
	Power input		kW	1.029/1.151	1.684	2.206	3.009	3.704	5.145	7.143	2.254	3.353	4.730	9.705
Cooling (A35/W7)	Capacity		kW	4.00	4.50	6.60	9.10	12.50	16.00	20.00	7.10	10.00	12.50	20.00
	EER			2.73	2.76	2.82	2.75	2.32	2.76	2.25	3.31	2.83	2.17	2.22
	Power input		kW	1.465	1.630	2.340	3.309	5.388	5.797	8.889	2.145	3.534	5.760	9.009
Cooling (A35/W18)	Capacity		kW	3.80	5.00	7.10	10.00	14.00	18.00	22.00	7.10	10.00	12.50	20.00
	EER			4.28	4.60	4.43	4.35	4.08	4.56	4.10	4.52	4.74	4.26	3.55
	Power input		kW	0.888	1.087	1.603	2.299	3.431	3.947	5.366	1.571	2.110	2.934	5.634
Sound pressure level (SPL)	Heating		dB (A)	52	46	51	54	54	62	62	51	52	52	59
Sound power level (PWL)	Heating		dB (A)	61	63	68	70	72	78	78	69	70	70	75
Operating current (max)			A	12.0	13.0	17.0	29.5/13.0	29.5/13.0	19.0	21.0	29.5	35.0/13.0	13.0	26.0
Breaker size			A	20	16	25	32/16	32/16	25	32	32	40/16	16	32
Piping	Diameter	Liquid/Gas	mm	6.35/12.7	6.35/12.7	9.52/15.88	9.52/15.88	9.52/15.88	9.52/25.4	12.7/25.4	9.52/15.88	9.52/15.88	9.52/15.88	12.7/25.4
	Max. length	Out-In	m	30	40	40	75	75	80	80	75	75	75	80
	Max. height	Out-In	m	30	30	30	30	30	30	30	30	30	30	30
Guaranteed operating range	Heating		°C	−15 to +24	−15 to +21	−20 to +21	−20 to +21	−20 to +21	−20 to +21	−20 to +21	−28 to +21	−28 to +21	−28 to +21	−25 to +21
	DHW		°C	−15 to +35	−15 to +35	−20 to +35	−20 to +35	−20 to +35	−20 to +35	−20 to +35	−28 to +35	−28 to +35	−28 to +35	−25 to +35
	Cooling*2		°C	−10 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46	−15 to +46

Note: based on EN 14511 (Input to circulation pump is not included.) It may differ according to the system configuration.
*1 SUHZ-SW45VAH incorporates base heater.
*2 Optional air protection guide is required where ambient temperature is lower than −5°C.

Optional parts

<Indoor unit>

Parts name	Model name	Specification	Cylinder unit															Hydro box	
			EHST20C-VM2C	EHST20C-VM6C	EHST20C-YM9C	EHST20C-TM9C	EHST20C-VM2EC	EHST20C-VM6EC	EHST20C-YM9EC	EHST20C-MEC	EHST20D-VM2C	EHST20D-YM9C	EHST20D-VM2EC	EHST20D-MEC	EHST20D-MHC	EHST20C-MHCW	EHST20D-MHCW	ERST models	E*SD or E*SC models	E*SE models
Wirelss remote controller	PAR-WT50R-E		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Wirelss receiver	PAR-WR51R-E		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Thermistors	PAC-SE41TS-E	For room temp.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
	PAC-TH011-E	For buffer and zone (flow and return temp.)	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
	PAC-TH011TK-E	For tank temp. (5m)	×	×	×	×	×	–	–	–	–	–	–	–	–	–	–	×	×	×
	PAC-TH011TKL-E	For tank temp. (30m)	×	×	×	×	×	–	–	–	–	–	–	–	–	–	–	×	×	×
	PAC-TH011HT-E	For boiler (flow and return temp.)	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Immersion heater	PAC-I03V2-E	1Ph 3kW	×	×	×	×	×	×	×	×	×	×	×	×	–	–	–	×	–	–
EHPT accessories for UK	PAC-WK01UK-E		–	–	–	–	–	–	–	–	–	–	–	–	–	×	×	–	–	–
Joint pipe	PAC-SG73RJ-E	For PUHZ-SW200YKA/ SHW230YKA2 (-BS) ø9.52→ø12.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	×
Wi-Fi interface	PAC-WF010-E		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Drain pan stand	PAC-DP01-E	D665mm H270mm W595mm N/W: 14.5kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	×*1	–	–

*1 PAC-DP01-E is necessary when you use ERST units. If you use ERST units without this parts, drain will be flowed from the base of units, in cooling mode.

<Outdoor unit>

Parts name	Model name	Eco Inverter	Power Inverter						ZUBADAN			
		SUHZ-SW45VA (H)	PUHZ-SW50VKA (-BS)	PUHZ-SW75VHA (-BS)	PUHZ-SW100V/YHA (-BS)	PUHZ-SW120V/YHA (-BS)	PUHZ-SW160YKA (-BS)	PUHZ-SW200YKA (-BS)	PUHZ-SHW80VHA	PUHZ-SHW112V/YHA	PUHZ-SHW140YHA	PUHZ-SHW230YKA2
Connector for drain hose heater signal output	PAC-SE60RA-E	–	–	×	×	×	×	×	×	×	×	×
	PAC-SE61RA-E	–	×	–	–	–	–	–	–	–	–	–
Air discharge guide	MAC-886SG-E	×	–	–	–	–	–	–	–	–	–	–
	PAC-SJ07SG-E	–	×	–	–	–	–	–	–	–	–	–
	PAC-SG59SG-E	–	–	×	×	×	–	–	×	×	×	–
	PAC-SG96SG-E	–	–	–	–	–	×	×	–	–	–	×
Air protection guide	PAC-SJ06AG-E	–	×	–	–	–	–	–	–	–	–	–
	PAC-SH63AG-E	–	–	×	×	×	–	–	×	×	×	–
	PAC-SH95AG-E	–	–	–	–	–	×	×	–	–	–	×
Drain socket	PAC-SG61DS-E	–	–	×	×	×	×	×	–	–	–	–
	PAC-SJ08DS-E	–	×	–	–	–	–	–	–	–	–	–
Centralised drain pan	PAC-SG63DP-E	–	×	–	–	–	–	–	–	–	–	–
	PAC-SG64DP-E	–	–	×	×	×	–	–	–	–	–	–
	PAC-SH97DP-E	–	–	–	–	–	×	×	–	–	–	–
Control/Service tool	PAC-SK52ST	–	×	×	×	×	×	×	×	×	×	×

Packaged type specifications

Indoor unit

<Cylinder unit>

Model name				EHPT20X-VM2C	EHPT20X-VM6C	EHPT20X-YM9C	EHPT20X-TM9C	EHPT20X-MHCW*2
		Type		Heating only				
		Immersion heater		–	–	–	–	×
		Expansion vessel		×	×	×	×	×
		Booster heater		×	×	×	×	–
Dimensions		H×W×D	mm	1600×595×680				
Weight (empty)			kg	98	99	100	100	98
Power supply (V/Phase/Hz)				230/Single/50				
Heater	Booster heater	Power supply (V/Phase/Hz)		230/Single/50		400/Three/50	230/Three/50	–
		Capacity	kW	2	6 (2/4/6)	9 (3/6/9)	9 (3/6/9)	–
		Current	A	9	26	13	23	–
		Breaker size	A	16	32	16	32	–
	Immersion heater	Power supply (V/Phase/Hz)		–	–	–	–	230/Single/50
		Capacity	kW	–	–	–	–	3
		Current	A	–	–	–	–	13
		Breaker size	A	–	–	–	–	16
Domestic hot water tank	Volume / Material		L / –	200 / Stainless steel				
Guaranteed operating range*1	Ambient		°C	0~35*1				
	Outdoor		°C	See outdoor spec table				
Target temperature range	Heating	Room temperature	°C	10~30				
		Flow temperature	°C	25~60				
	DHW		°C	40~60				
	Legionella prevention		°C	60~70				
Sound pressure level (SPL)			dB (A)	28				

*1 The environment must be frost-free *2 UK model

<Hydro box>

Model name				EHPX-VM2C	EHPX-VM6C	EHPX-YM9C
		Type		Heating only		
		Immersion heater		–	–	–
		Expansion vessel		×	×	×
		Booster heater		×	×	×
Dimensions		H×W×D	mm	800×530×360		
Weight (empty)			kg	37	38	38
Power supply (V/Phase/Hz)				230/Single/50		
Heater	Booster heater	Power supply (V/Phase/Hz)		230/Single/50	230/Single/50	400/Three/50
		Capacity	kW	2	6 (2/4/6)	9 (3/6/9)
		Current	A	9	26	13
		Breaker size	A	16	32	16
Guaranteed operating range*1	Ambient		°C	0~35*1		
	Outdoor		°C	See outdoor spec table		
Target temperature range	Heating	Room temperature	°C	10~30		
		Flow temperature	°C	25~60		
Sound pressure level (SPL)			dB (A)	28		

*1 The environment must be frost-free

Outdoor unit

Model name			PUHZ-W50VHA2 (-BS)	PUHZ-W85VHA2 (-BS)	PUHZ-W112VHA (-BS)	PUHZ-HW112YHA2 (-BS)	PUHZ-HW140VHA2 (-BS)	PUHZ-HW140YHA2 (-BS)
Dimensions	H×W×D	mm	740×950×330	943×950×330	1350×1020×330	1350×1020×330	1350×1020×330	1350×1020×330
Product weight (empty)		kg	64	79	133	148	134	148
Power supply (V / Phase / Hz)			230/Single/50	230/Single/50	230/Single/50	400/Three/50	230/Single/50	400/Three/50
Heating (A7/W35)	Capacity	kW	5.00	9.00	11.20	11.20	14.00	14.00
	COP		4.50	4.18	4.47	4.42	4.25	4.25
	Power input	kW	1.111	2.153	2.506	2.534	3.294	3.294
Heating (A2/W35)	Capacity	kW	5.00	8.50	11.20	11.20	14.00	14.00
	COP		3.50	3.17	3.34	3.11	3.11	3.11
	Power input	kW	1.429	2.681	3.353	3.601	4.502	4.502
Sound pressure level (SPL)	Heating	dB (A)	46	48	53	53	53	53
Sound power level (PWL)	Heating	dB (A)	61	66	69	67	67	67
Operating current (max)		A	13.0	23.0	29.5	13.0	35.0	13.0
Breaker size		A	16	25	32	16	40	16
Guaranteed operating range	Heating	°C	–15 to +21	–20 to +21	–20 to +21	–25 to +21	–25 to +21	–25 to +21
	DHW	°C	–15 to +35	–20 to +35	–20 to +35	–25 to +35	–25 to +35	–25 to +35
	Cooling*1	°C	–15 to +46	–15 to +46	–15 to +46	–15 to +46	–15 to +46	–15 to +46

Note: based on EN 14511 (Input to circulation pump is included.) It may differ according to the system configuration.
*1 Optional air protection guide is required where ambient temperature is lower than –5°C.

Optional parts

<Indoor unit>

Parts name	Model name	Specification	Cylinder unit					Hydro box		
			EHPT20X-VM2C	EHPT20X-VM6C	EHPT20X-YM9C	EHPT20X-TM9C	EHPT20X-MHCW	EHPX-VM2C	EHPX-VM6C	EHPX-YM9C
Wireless remote controller	PAR-WT50R-E		×	×	×	×	×	×	×	×
Wireless receiver	PAR-WR51R-E		×	×	×	×	×	×	×	×
Thermistors	PAC-SE41TS-E	For room temp.	×	×	×	×	×	×	×	×
	PAC-TH011-E	For buffer and zone (flow and return temp.)	×	×	×	×	×	×	×	×
	PAC-TH011TK-E	For tank temp.	×	×	×	×	×	×	×	×
	PAC-TH011TKL-E	For tank temp. (longer)	×	×	×	×	×	×	×	×
	PAC-TH011HT-E	For boiler (flow and return temp.)	×	×	×	×	×	×	×	×
Immersion heater	PAC-I03V2-E	1Ph 3kW	×	×	×	×	–	–	–	–
EHPT accessories for UK	PAC-WK01UK-E		–	–	–	–	×	–	–	–
Wi-Fi interface	PAC-WF010-E		×	×	×	×	×	×	×	×

<Outdoor unit>

Parts name	Model name	Power Inverter			ZUBADAN		
		PUHZ-W50VHA2(-BS)	PUHZ-W85VHA2(-BS)	PUHZ-W112VHA (-BS)	PUHZ-HW112YHA2(-BS)	PUHZ-HW140VHA2(-BS)	PUHZ-HW140YHA2(-BS)
Connector for drain hose heater signal output	PAC-SE60RA-E	×	×	×	×	×	×
Air discharge guide	PAC-SG59SG-E	×	×	×	×	×	×
Air protection guide	PAC-SH63AG-E	×	×	×	×	×	×
Drain socket	PAC-SG61DS-E	×	×	×	–	–	–
Centralised drain pan	PAC-SG64DP-E	×	×	–	–	–	–
Control/Service tool	PAC-SK52ST	–	–	–	–	–	–

Interface/Flow temperature controller

Parts name	Model name	Description
Capacity step control interface	PAC-IF011B-E	1 PC Board w/ Case
Flow temperature controllers	PAC-IF032B-E	1 PC Board w/ Case
System controllers	PAC-IF061B-E	1 PC Board w/ Case
	PAC-IF062B-E	1 PC Board w/ Case
	PAC-SIF051B-E	1 PC Board w/ Case

Note: SUHZ CANNOT be connected to these IFs.

Combination table

Type	Model name	Package type						Split type		
		Power Inverter			ZUBADAN			Eco Inverter	Power Inverter	
		PUHZ-W50VHA2	PUHZ-W85VHA2	PUHZ-W112VHA	PUHZ-HW112YHA2	PUHZ-HW140VHA2	PUHZ-HW140YHA2	SUHZ-SW45VA(H)	PUHZ-SW50VKA	PUHZ-SW75VHA
Cylinder unit	EHST20C-VM2C									●
	EHST20C-VM6C									●
	EHST20C-YM9C									●
	EHST20C-TM9C									●
	EHST20C-VM2EC									●
	EHST20C-VM6EC									●
	EHST20C-YM9EC									●
	EHST20C-MEC									●
	EHST20C-MHCW									●
	EHST20D-VM2C							●	●	
	EHST20D-MEC							●	●	
	EHST20D-MHC							●	●	
	EHST20D-MHCW							●	●	
	EHST20D-VM2EC							●	●	
	EHST20D-YM9C							●	●	
	ERST20C-MEC									●
	ERST20C-VM2C									●
	ERST20D-MEC							●	●	
	ERST20D-VM2C							●	●	
	EHPT20X-VM2C	●	●	●	●	●	●			
	EHPT20X-VM6C	●	●	●	●	●	●			
	EHPT20X-YM9C	●	●	●	●	●	●			
	EHPT20X-TM9C	●	●	●	●	●	●			
	EHPT20X-MHCW	●	●	●	●	●	●			
Hydro box	EHSC-VM2C									●
	EHSC-VM2EC									●
	EHSC-VM6C									●
	EHSC-VM6EC									●
	EHSC-YM9C									●
	EHSC-YM9EC									●
	EHSC-TM9C									●
	EHSC-MEC									●
	EHSD-VM2C							●	●	
	EHSD-YM9C							●	●	
	EHSD-MEC							●	●	
	EHSD-MC							●	●	
	ERSC-VM2C									●
	ERSC-MEC									●
	ERSD-VM2C							●	●	
	EHPX-VM2C	●	●	●	●	●	●			
	EHPX-VM6C	●	●	●	●	●	●			
	EHPX-YM9C	●	●	●	●	●	●			
	EHSE-YM9EC									
	EHSE-MEC									
	ERSE-YM9EC									
	ERSE-MEC									

Split type												
Power Inverter							Mr. SLIM+	ZUBADAN				
	PUHZ-SW100VHA	PUHZ-SW100YHA	PUHZ-SW120VHA	PUHZ-SW120YHA	PUHZ-SW160YKA	PUHZ-SW200YKA	PUHZ-FRP71VHA	PUHZ-SHW80VHA	PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA	PUHZ-SHW230YKA2
	●	●	●	●			●	●	●	●	●	
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					●	●						●
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●: Combination is available. Blank: Combination is NOT available.

Mr.SLIM+

A smart air conditioning and hot water supply system conceived from eco-conscious ideas

Mr. SLIM+ has a heat recovery function, which uses waste heat from air conditioners to heat water. Thanks to heat recovery, Mr. SLIM+ model can achieve a COP of 7.0*, resulting in intelligent systems with amazing efficiency.

*Conditions for air-to-air cooling: Indoor 27°C (dry bulb) 19°C (wet bulb); Outdoor 35°C (dry bulb)

1 unit, 2 roles – Total comfort year-round

Air conditioning and hot water supply matching the needs of each room

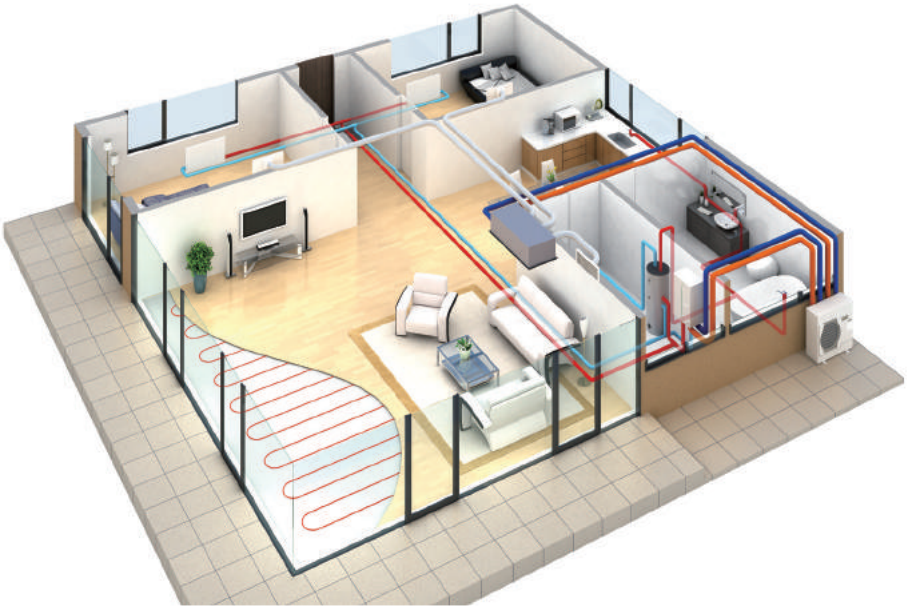
All-in-one outdoor unit (air conditioning, domestic hot water supply and hot water heating)

Mr. SLIM for Air-to-Air

Mr. SLIM+ utilizes a duct system that enables the air conditioning or heating of multiple rooms, and other indoor unit type systems that is possible to fit various applications.

ECODAN for Air-to-Water

✓Domestic hot water supply
✓Heating for multiple rooms



Various operations

Mr. SLIM / Air to Air (Air Cooling)

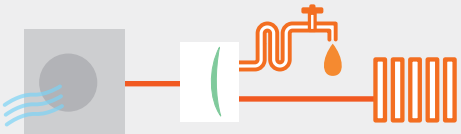
Air-to-Air cooling using Air-to-Air indoor unit

Mr. SLIM / Air to Air (Air Heating)

Air-to-Air heating using Air-to-Air indoor unit

ECODAN / Air to Water (Hot-water heating + DHW)

Air-to-Water operation using Air-to-Water indoor unit



Mr. SLIM + ECODAN / Air to Air (Air Cooling) + DHW

Heat recovery using both Air-to-Air and Air-to-Water indoor units

Specifications

Indoor unit						PLA-ZRP71BA	PKA-RP71KAL	PCA-RP71KA	PCA-RP71HA	PSA-RP71KA	PEAD-RP71JAQ	PEAD-RP71JALQ
Outdoor unit						PUHZ-FRP71VHA	PUHZ-FRP71VHA	PUHZ-FRP71VHA	PUHZ-FRP71VHA	PUHZ-FRP71VHA	PUHZ-FRP71VHA	PUHZ-FRP71VHA
Refrigerant						R410A						
Power supply		Outdoor (V / Phase / Hz)				230 / Single / 50						
Air-to-Air (ATA)	Cooling	Capacity	Rated		kW	7.1	7.1	7.1	7.1	7.1	7.1	7.1
			Min-Max		kW	3.3-8.1	3.3-8.1	3.3-8.1	3.3-8.1	3.3-8.1	3.3-8.1	3.3-8.1
		Total input	Rated		kW	1.85	1.88	1.90	2.26	1.97	2.10	2.08
		EER				3.84	3.78	3.74	3.14	3.60	3.38	3.41
		Design load			kW	7.1	7.1	7.1	7.1	7.1	7.1	7.1
		Annual electricity consumption *1			kWh/a	382	393	387	462	408	459	441
		SEER *3				6.5	6.3	6.4	5.4	6.1	5.4	5.6
			Energy-efficiency class			A++	A++	A++	A	A++	A	A+
	Heating (average season)	Capacity	Rated		kW	8.0	8.0	8.0	8.0	8.0	8.0	8.0
			Min-Max		kW	3.5-10.2	3.5-10.2	3.5-10.2	3.5-10.2	3.5-10.2	3.5-10.2	3.5-10.2
		Total input	Rated		kW	2.05	2.26	2.26	2.42	2.28	2.09	2.09
		COP				3.90	3.54	3.54	3.14	3.33	3.83	3.83
		Design load			kW	4.7	4.7	4.7	4.7	4.7	4.9	4.9
		Declared capacity	at reference design temperature		kW	4.7 (–10°C)	4.7 (–10°C)	4.7 (–10°C)	4.7 (–10°C)	4.7 (–10°C)	4.9 (–10°C)	4.9 (–10°C)
			at bivalent temperature		kW	4.7 (–10°C)	4.7 (–10°C)	4.7 (–10°C)	4.7 (–10°C)	4.7 (–10°C)	4.9 (–10°C)	4.9 (–10°C)
			at operation limit temperature		kW	3.5 (–20°C)	3.5 (–20°C)	3.5 (–20°C)	3.5 (–20°C)	3.5 (–20°C)	3.7 (–20°C)	3.7 (–20°C)
		Back-up heating capacity			kW	0	0	0	0	0	0	0
		Annual electricity consumption *1			kWh/a	1,510	1,569	1,555	1,787	1,709	1,799	1,799
		SCOP *3				4.4	4.2	4.2	3.7	3.9	3.8	3.8
			Energy-efficiency class			A+	A+	A+	A	A	A	A
Air-to-Water (ATW)	Nominal flow rate (for heating)				L/min	22.90						
	Heating *4	A7W35	Capacity		kW	8.00						
			Input		kW	1.96						
			COP			4.08						
		A2W35	Capacity		kW	7.50						
			Input		kW	2.65						
			COP			2.83						
	Heat recovery (ATA cooling & ATW) *5	W45	Capacity (ATA cooling + ATW)		kW	7.1+8.0	7.1+8.0	7.1+8.0	7.1+8.0	7.1+8.0	7.1+8.0	7.1+8.0
			Input		kW	1.90	1.93	1.95	2.31	2.02	2.15	2.13
			COP			7.95	7.82	7.74	6.54	7.48	7.02	7.09
		W55	Capacity (ATA cooling + ATW)		kW	7.1+9.0	7.1+9.0	7.1+9.0	6.4+9.0	7.1+9.0	7.1+9.0	7.1+9.0
			Input		kW	2.97	3.00	3.02	3.25	3.09	3.22	3.20
			COP			5.42	5.37	5.33	4.74	5.21	5.00	5.03
	ATW indoor unit					Cylinder unit or Hydro box (see previous page)						
Outdoor unit		Dimensions	HxWxD		mm	943-950-330 (+30)						
		Weight			kg	73	73	73	73	73	73	73
		Air volume	Cooling		m³/min	55	55	55	55	55	55	55
			Heating		m³/min	55	55	55	55	55	55	55
		Sound pressure level (SPL)	Cooling		dB(A)	47	47	47	47	47	47	47
			Heat recovery		dB(A)	47	47	47	47	47	47	47
			ATA Heating		dB(A)	48	48	48	48	48	48	48
			ATW Heating		dB(A)	48	48	48	48	48	48	48
		Sound power level (PWL)	Cooling		dB(A)	67	67	67	67	67	67	67
			Heat recovery		dB(A)	67	67	67	67	67	67	67
			ATA Heating		dB(A)	68	68	68	68	68	68	68
			ATW Heating		dB(A)	68	68	68	68	68	68	68
		Operating current (max)			A	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Breaker size			A	25	25	25	25	25	25	25
Ext.piping		Diameter	Liquid/Gas		mm	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88
		Max. length	Out-In		m	30 (for ATA) + 30 (for ATW)						
		Max. height	Out-In		m	20	20	20	20	20	20	20
Guaranteed operating range (outdoor)			Cooling *2		°C	-15~+46	-15~+46	-15~+46	-15~+46	-15~+46	-15~+46	-15~+46
			Heating		°C	-20~+21	-20~+21	-20~+21	-20~+21	-20~+21	-20~+21	-20~+21
			ATW		°C	-20~+35	-20~+35	-20~+35	-20~+35	-20~+35	-20~+35	-20~+35
			Heat recovery		°C	+7~+46	+7~+46	+7~+46	+7~+46	+7~+46	+7~+46	+7~+46

*1 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*2 Optional air protection guide is required where ambient temperature is lower than –5°C.
*3 SEER/SCOP values are measured based on EN14825.
*4 Air-to-Water values are measured based on EN14511 (Circulation pump input is not included.).
*5 Conditions for Air-to-Air cooling: Indoor 27°C (dry bulb) /19°C (wet bulb); Outdoor 35°C (dry bulb).

MELCloud (WiFi interface) for ECODAN NEW

MELCloud for fast, easy remote control and monitoring of your ECODAN

MELCloud is a new Cloud-based solution for controlling ECODAN either locally or remotely by computer, tablet or smartphone via the Internet. Setting up and remotely operating your ECODAN heating system via MELCloud is simple and straight forward. All you need is wireless computer connectivity in your home or the building where the ECODAN is installed and an Internet connection on your mobile or fixed terminal. To set up the system, the router and the ECODAN WiFi interface must be paired, and this is done simply and quickly using the WPS button found on all mainstream routers.
You can control and check ECODAN via MELCloud from virtually anywhere an Internet connection is available.
That means, thanks to MELCloud, you can use ECODAN much more easily and conveniently.

✻ MELCloud uses the PAC-WF010-E interface

Key control and monitoring features

1. **Turn system on/off**
2. **See status of each of your heating zones & adjust set points**
3. **See the status of your hot water cylinder & boost remotely**
4. **Live weather feed from ECODAN location**

   Holiday mode - Set system parameters while away
   Schedule timer - Set 7 day weekly schedule
   Frost protection - Set system to run at minimum temperature
   Error status
5. **Check energy usage report*** *Additional measuring hardware is required.

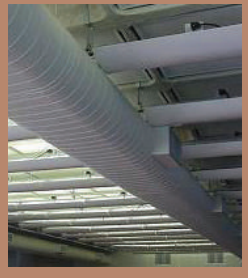
All A++ line-up!!

*except for ATA & ATW hybrid system, Mr. SLIM+

Outdoor unit	Indoor unit	For medium-temperature application							For low-temperature application						
		Seasonal space heating energy efficiency class	Water heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Water heating energy efficiency under average climate conditions	Sound power level L_{WA} indoor	Sound power level L_{WA} outdoor	Seasonal space heating energy efficiency class	Water heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Water heating energy efficiency under average climate conditions	Sound power level L_{WA} indoor	Sound power level L_{WA} outdoor
				kW	%	%	dB	dB			kW	%	%	dB	dB
SUHZ-SW45VA	EHST20D-****	A++	A	4.6	126	109	40	61	A++	A	5.0	170	109	40	61
	ERST20D-****	A++	A	4.6	128	109	40	61	A++	A	5.0	174	109	40	61
	EHSD-****	A++	–	4.6	126	–	40	61	A++	–	5.0	170	–	40	61
	ERSD-****	A++	–	4.6	128	–	40	61	A++	–	5.0	174	–	40	61
PUHZ-SW50VKA (-BS)	EHST20D-****	A++	A	4.3	125	98	40	63	A++	A	4.5	163	98	40	63
	ERST20D-****	A++	A	4.3	128	98	40	63	A++	A	4.5	167	98	40	63
	EHSD-****	A++	–	4.3	125	–	40	63	A++	–	4.5	163	–	40	63
	ERSD-****	A++	–	4.3	128	–	40	63	A++	–	4.5	167	–	40	63
PUHZ-SW75VHA (-BS)	EHST20C-****	A++	A	7.1	127	103	40	68	A++	A	7.2	165	103	40	68
	ERST20C-****	A++	A	7.1	129	103	40	68	A++	A	7.2	167	103	40	68
	EHSC-****	A++	–	7.1	127	–	40	68	A++	–	7.2	165	–	40	68
	ERSC-****	A++	–	7.1	129	–	40	68	A++	–	7.2	167	–	40	68
PUHZ-SW100VHA/YHA (-BS)	EHST20C-****	A++	A	10.0	125	103	40	70	A++	A	10.4	164	103	40	70
	ERST20C-****	A++	A	10.0	127	103	40	70	A++	A	10.4	166	103	40	70
	EHSC-****	A++	–	10.0	125	–	40	70	A++	–	10.4	164	–	40	70
	ERSC-****	A++	–	10.0	127	–	40	70	A++	–	10.4	166	–	40	70
PUHZ-SW120VHA/YHA (-BS)	EHST20C-****	A++	A	12.0	125	99	40	72	A++	A	12.9	162	99	40	72
	ERST20C-****	A++	A	12.0	127	99	40	72	A++	A	12.9	164	99	40	72
	EHSC-****	A++	–	12.0	125	–	40	72	A++	–	12.9	162	–	40	72
	ERSC-****	A++	–	12.0	127	–	40	72	A++	–	12.9	164	–	40	72
PUHZ-SW160YKA (-BS)	EHSE-****	A++	–	13.5	125	–	45	78	A++	–	15.3	161	–	45	78
	ERSE-****	A++	–	13.5	126	–	45	78	A++	–	15.3	163	–	45	78
PUHZ-SW200YKA (-BS)	EHSE-****	A++	–	15.5	128	–	45	78	A++	–	17.3	162	–	45	78
	ERSE-****	A++	–	15.5	129	–	45	78	A++	–	17.3	164	–	45	78
PUHZ-SHW80VHA (-BS)	EHST20C-****	A++	A	9.0	131	103	40	69	A++	A	9.6	171	103	40	69
	ERST20C-****	A++	A	9.0	133	103	40	69	A++	A	9.6	174	103	40	69
	EHSC-****	A++	–	9.0	131	–	40	69	A++	–	9.6	171	–	40	69
	ERSC-****	A++	–	9.0	133	–	40	69	A++	–	9.6	174	–	40	69
PUHZ-SHW112VHA/YHA (-BS)	EHST20C-****	A++	A	12.7	128	103	40	70	A++	A	13.9	167	103	40	70
	ERST20C-****	A++	A	12.7	130	103	40	70	A++	A	13.9	169	103	40	70
	EHSC-****	A++	–	12.7	128	–	40	70	A++	–	13.9	167	–	40	70
	ERSC-****	A++	–	12.7	130	–	40	70	A++	–	13.9	169	–	40	70
PUHZ-SHW140YHA (-BS)	EHST20C-****	A++	A	15.8	127	103	40	70	A++	A	17.0	164	103	40	70
	ERST20C-****	A++	A	15.8	128	103	40	70	A++	A	17.0	165	103	40	70
	EHSC-****	A++	–	15.8	127	–	40	70	A++	–	17.0	164	–	40	70
	ERSC-****	A++	–	15.8	128	–	40	70	A++	–	17.0	165	–	40	70
PUHZ-SHW230YKA2	EHSE-****	A++	–	23.0	127	–	45	75	A++	–	25.0	164	–	45	75
	ERSE-****	A++	–	23.0	128	–	45	75	A++	–	25.0	165	–	45	75
PUHZ-W50VHA2 (-BS)	EHPT20X-****	A++	A	5.0	127	99	40	61	A++	A	5.0	162	99	40	61
	EHPX-****	A++	–	5.0	127	–	40	61	A++	–	5.0	162	–	40	61
PUHZ-W85VHA2 (-BS)	EHPT20X-****	A++	A	8.5	128	97	40	66	A++	A	8.5	162	97	40	66
	EHPX-****	A++	–	8.5	128	–	40	66	A++	–	8.5	162	–	40	66
PUHZ-W112VHA (-BS)	EHPT20X-****	A++	A	10.0	125	100	40	67	A++	A	10.0	164	100	40	67
	EHPX-****	A++	–	10.0	125	–	40	67	A++	–	10.0	164	–	40	67
PUHZ-HW112YHA2 (-BS)	EHPT20X-****	A++	A	12.7	126	100	40	67	A++	A	12.7	155	100	40	67
	EHPX-****	A++	–	12.7	126	–	40	67	A++	–	12.7	155	–	40	67
PUHZ-HW140VHA2/YHA2 (-BS)	EHPT20X-****	A++	A	15.8	126	96	40	67	A++	A	15.8	157	96	40	67
	EHPX-****	A++	–	15.8	126	–	40	67	A++	–	15.8	157	–	40	67
PUHZ-FRP71VHA ATA & ATW hybrid system, Mr. SLIM+	EHST20C-****	A+	A	7.5	123	98	40	68	A++	A	7.5	163	98	40	68
	EHSC-****	A+	–	7.5	123	–	40	68	A++	–	7.5	163	–	40	68

✻ Based on COMMISSION DELEGATED REGULATION (EU) No 811/2013, average climate conditions

LOSSNAY SYSTEM



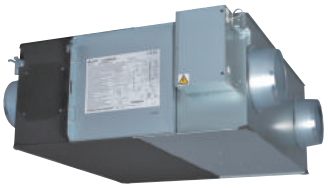
SELECTION

A line-up of three product groups that addresses a wide range of needs.

SELECT LOSSNAY

Select the most appropriate model according to factors such as the shape of the building and ventilation requirements.

LGH SERIES
Ceiling-concealed
(150–2500m^3/h)



LGH-15 to 100RVX-E

LGH-150 and 200RVX-E

LGH-150 to250RVXT-E

- Applications: Offices, Stores, Etc.
- High total heat-exchange efficiency
- Excellent airflow control (Extra High, High, Low and Extra Low)
- Multi-ventilation Mode
- Can be interconnected with other Mitsubishi Electric air conditioners
- Exclusive Lossnay remote-control system
- Mr. Slim remote controller can be used for some systems

VL SERIES
Ceiling-concealed
260m^3/h

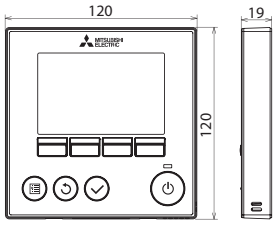
- Application: Houses, residences
- Positive/negative pressurization
- Sensible heat recovery suitable for air extraction from bathrooms and kitchens

VL SERIES
Wall-mounted
100m^3/h

- Application: Prefabricated offices (container houses), Residences, Etc.
- High/Low airflow control
- Pull-string switch

SELECT OPTIONS

Remote controller (PZ-61DR-E)



Unit:mm

Fan speed selection	4 fan speeds
Ventilation mode selection	Energy recovery / Bypass / Auto
Night-purge (time)	Any time selectable
Night-purge (fan speed)	Selectable from 4 fan speeds
Dip-switch setting and function setting from RC	Yes
Bypass temp. free setting	Yes
Heater-On temp. free setting	Yes
Fan power up after installation	Yes
0 - 10VDC external input	Yes
ON/OFF timer	Yes
Auto-Off timer	Yes
Weekly timer	Yes
Operation restrictions (ON/OFF, Ventilation mode, fan speed)	Yes
Operation restrictions (Fan speed skip setting)	Yes
Screen contrast adjustment	Yes
Language selection	Yes (8 languages)
Initializing remote controller	Yes
Filter cleaning sign	Yes
Lossnay core cleaning sign	Yes
Error indication	Yes
Error history	Yes
OA/RA/SA temp. display	Yes

High-efficiency filter

Incorporation into the main unit is simple, and filter changes can be performed via the main unit inspection opening.

Model	Number of filters per set	Applicable model	Filter material
PZ-15RFM-E	1	LGH-15RVX-E	Non combustible fiber (Polyester-polyolefin) (EU-F7)
PZ-25RFM-E	2	LGH-25RVX-E	
PZ-35RFM-E	2	LGH-35RVX-E	
PZ-50RFM-E	2	LGH-50RVX-E	
PZ-65RFM-E	2	LGH-65RVX-E	
PZ-80RFM-E	2	LGH-80RVX-E, LGH-150RVX-E (2 sets)	
PZ-100RFM-E	2	LGH-100RVX-E, LGH-200RVX-E (2 sets)	

* Options listed above are exclusively for LGH-_RVX-E models.

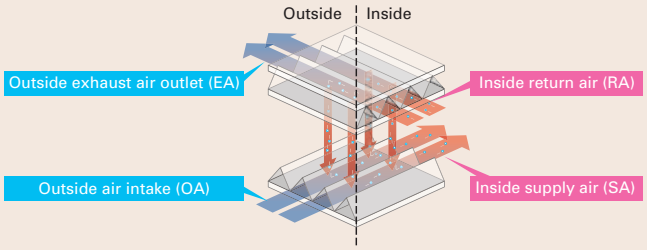
LOSSNAY SYSTEM

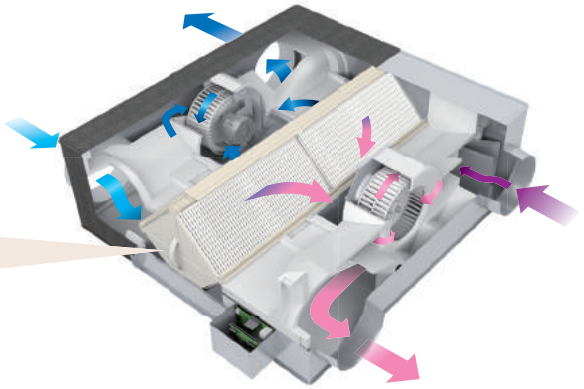
Lossnay ventilation systems are renowned industry-wide for their efficiency. They offer environment-friendly energy recovery and humidity control, and enable air conditioning systems to simultaneously provide optimum room comfort and energy savings.

Indoor Air Quality Inside a Building is Optimised Through Temperature and Humidity Exchange by Lossnay

Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.

The concept of sensible heat and latent heat exchange using Lossnay core



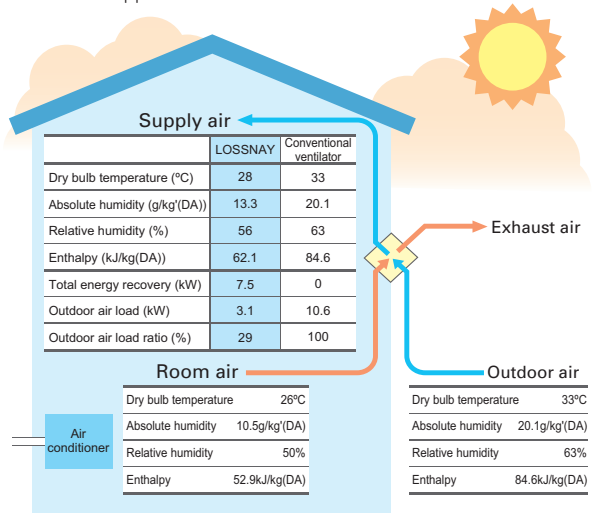


What can be Improved by Introducing Lossnay?

Ventilation with maximised comfort

In summer

Air similar to the conditions of the cooled (dehumidified) indoor air is supplied.



	LOSSNAY	Conventional ventilator
Dry bulb temperature (°C)	28	33
Absolute humidity (g/kg'(DA))	13.3	20.1
Relative humidity (%)	56	63
Enthalpy (kJ/kg(DA))	62.1	84.6
Total energy recovery (kW)	7.5	0
Outdoor air load (kW)	3.1	10.6
Outdoor air load ratio (%)	29	100

Room air	
Dry bulb temperature	26°C
Absolute humidity	10.5g/kg'(DA)
Relative humidity	50%
Enthalpy	52.9kJ/kg(DA)

Outdoor air	
Dry bulb temperature	33°C
Absolute humidity	20.1g/kg'(DA)
Relative humidity	63%
Enthalpy	84.6kJ/kg(DA)

Heat recovery calculation

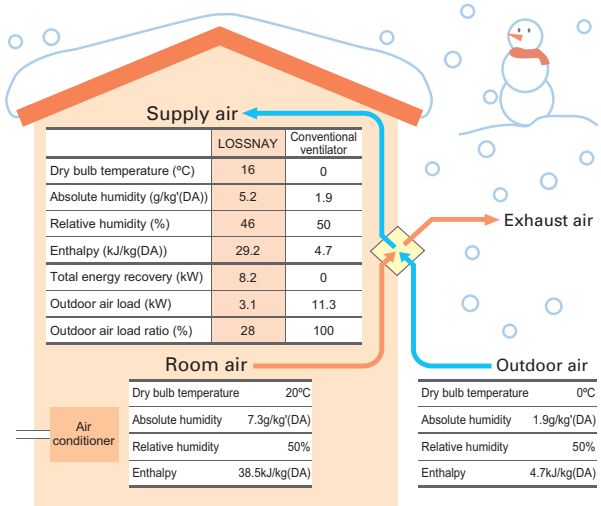
$$\text{Indoor supply-air temperature (°C)} = \text{Outdoor temperature (°C)} - \{\text{Outdoor temperature (°C)} - \text{Indoor temperature (°C)}\} \times \text{Temp recovery efficiency (\%)}$$

Calculation example: 28°C = 33°C – (33°C – 26°C) × 72%

*The above applies to the case of LGH-100RVX (fan speed 4).

In winter

Air similar to the conditions of the heated (humidified) indoor air is supplied.



	LOSSNAY	Conventional ventilator
Dry bulb temperature (°C)	16	0
Absolute humidity (g/kg'(DA))	5.2	1.9
Relative humidity (%)	46	50
Enthalpy (kJ/kg(DA))	29.2	4.7
Total energy recovery (kW)	8.2	0
Outdoor air load (kW)	3.1	11.3
Outdoor air load ratio (%)	28	100

Room air	
Dry bulb temperature	20°C
Absolute humidity	7.3g/kg'(DA)
Relative humidity	50%
Enthalpy	38.5kJ/kg(DA)

Outdoor air	
Dry bulb temperature	0°C
Absolute humidity	1.9g/kg'(DA)
Relative humidity	50%
Enthalpy	4.7kJ/kg(DA)

Heat recovery calculation

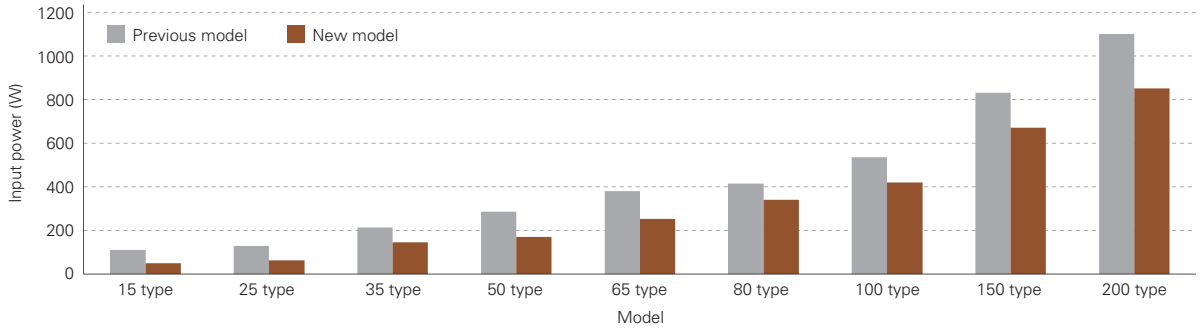
$$\text{Indoor supply-air temperature (°C)} = \{\text{Indoor temperature (°C)} - \text{Outdoor temperature (°C)}\} \times \text{Temp recovery efficiency (\%)} + \text{Outdoor temperature (°C)}$$

Calculation example: 16°C = (20°C – 0°C) × 80% + 0°C

Power Consumption Reduced Further with Introduction of DC Motor

A high efficiency DC motor has been adopted. Compared to models with an AC motor, power consumption is reduced.

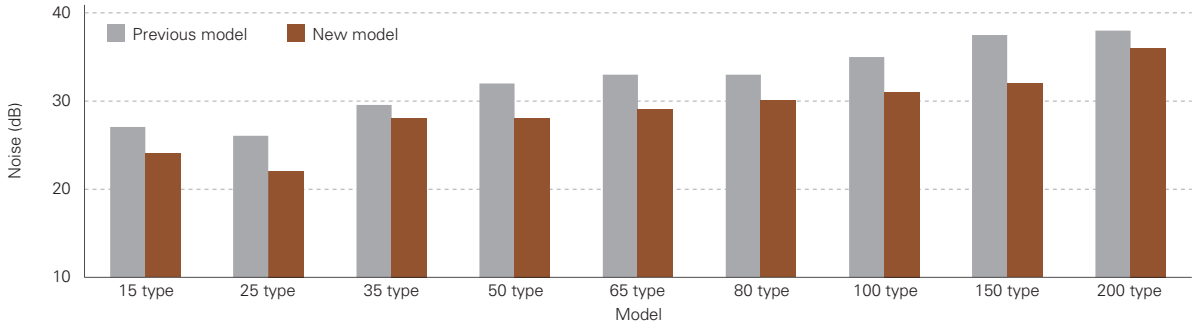
● **Comparison between new and previous power consumption (New model: Fan Speed 4, Previous model: Extra-High)**



Low Noise Design

By providing a range of air volume for each fan speed, sound levels can be reduced to achieve low noise.

● **Noise comparison between new and previous models (new model: fan speed 3, previous model: High)**



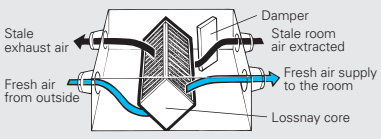
Improved External Static Pressure

External static pressure has been improved compared to previous models.
By increasing the external static pressure, highly flexible duct work becomes possible thus renewal from existing equipment is easy.

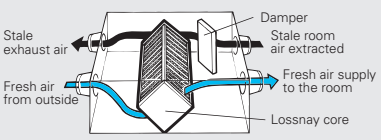
Auto Ventilation Mode has Improved [PZ-61DR-E]

With operation from PZ-61DR-E, it is possible to select manual switching or automatic switching between "Lossnay ventilation (with heat exchange)" and "Bypass ventilation (without heat exchange)".

What is Lossnay ventilation?
Room air is discharged to outside via Lossnay core. Heat exchanged outside air is supplied to the room. In summer and winter, air conditioning energy can be recovered by Lossnay unit.



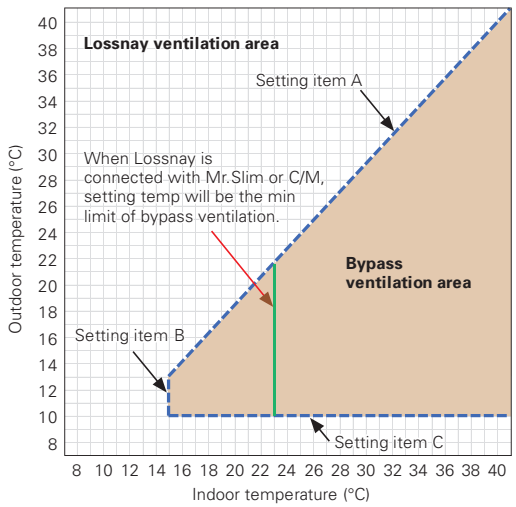
What is bypass ventilation?
Stare room air is discharged to outside without passing through the Lossnay core.
In spring and fall when air conditioning is not necessary, the unit operates in bypass ventilation mode.



With the previous model, the auto ventilation mode is based on the initial setting condition; however, with the new model it becomes possible to set three setting points, as shown in the table on the right.

*Settings can only be made using the PZ-61DR-E

● **By-pass/Lossnay ventilation map in automatic ventilation mode**



Unified Remote-control Design

The unified design of the PAR-32MAA air conditioner remote controller improves installation appearance.
Full-dot backlit LCD makes it easy to see and control the unit.

Previous remote controller

PZ-60DR-E

New remote controller

PZ-61DR-E

Air conditioner remote controller

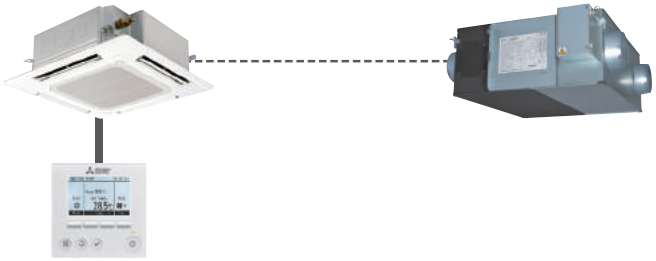
PAR-32MAA

Improved Air Volume Setting Flexibility when Simultaneously Operating with Air Conditioner

For the specified high and low air volume of the air conditioner, two types of air volumes can be selected, respectively, providing more flexible setting options.

		Previous model	New model
Mr.Slim City Multi	Low	Low	Fan Speed 1 or 2*
	High	High or Extra-High	Fan Speed 3 or 4*

*factory setting



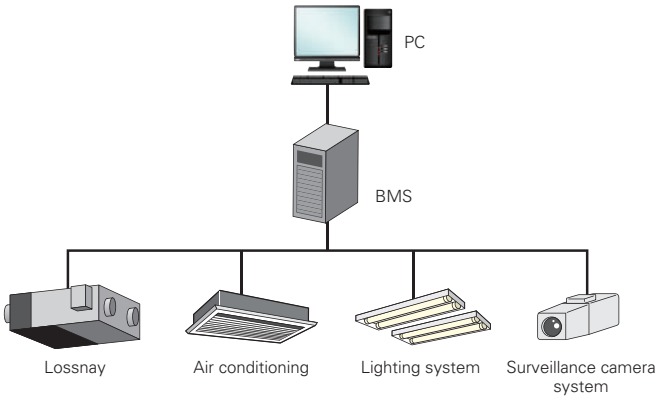
PAR-32MAA

Improved Control with a BMS System

Using a 0-10V signal from the building management system, the air volume of the Lossnay unit can be changed.

●Connection example: BMS (Building Management System)

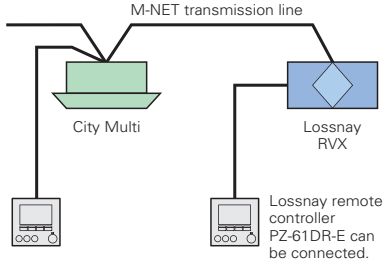
Input voltage [VDC]	Fan speed	Fan speed changing from remote controller
0 -1.0	—	Available
1.5 - 2.5	1	Not available
3.5 - 4.5	2	Not available
5.5 - 7.0	3	Not available
8.5 - 10.0	4	Not available



The New Remote Controller PZ-61DR-E Enables Simple Control Setting

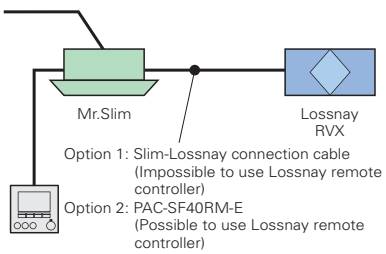
Interlocked with Air conditioners

Interlocked with City Multi

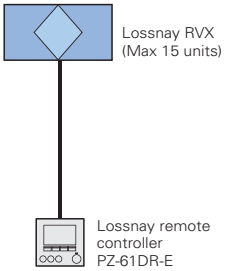


(PZ-43SMF-E can be connected however function is limited.)

Interlocked with Mr.Slim

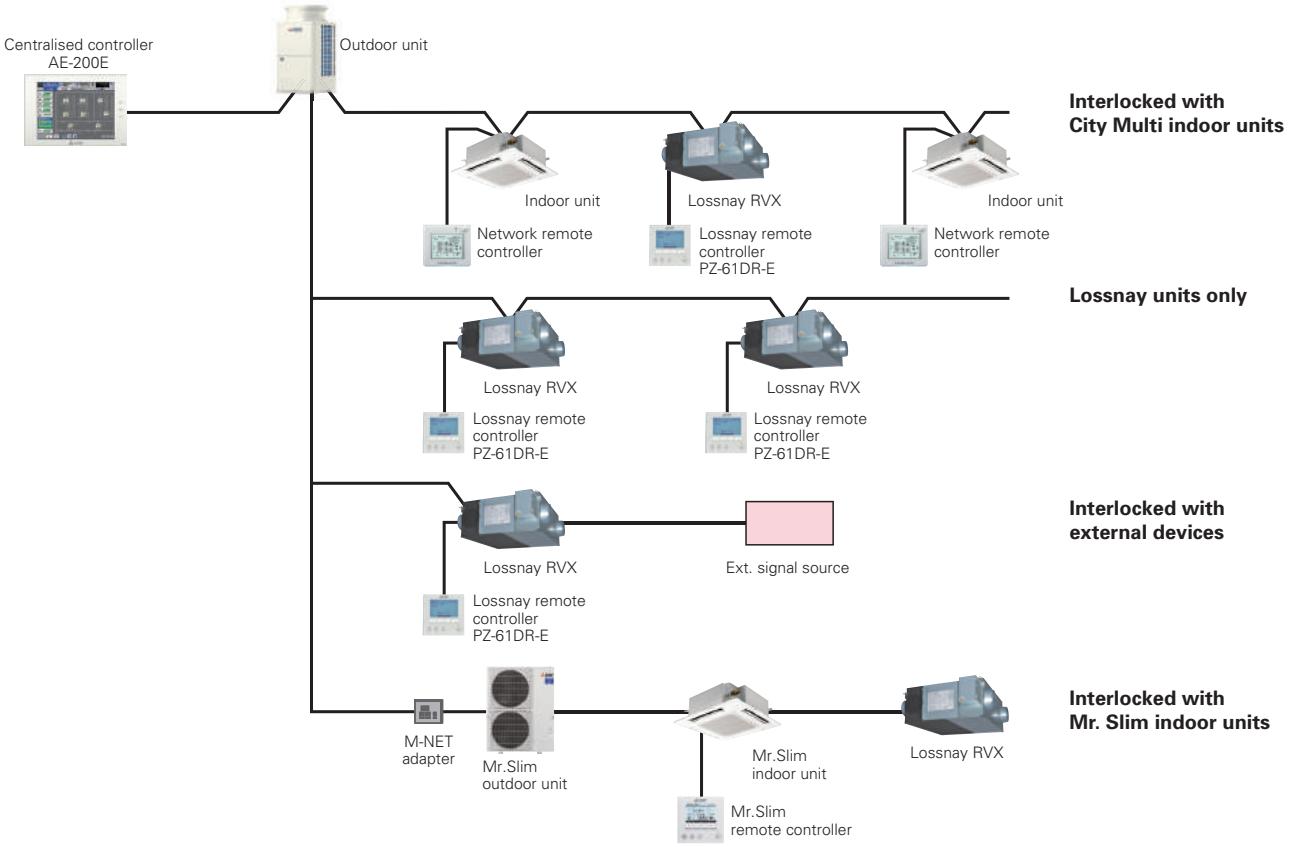


Lossnay independent



(PZ-43SMF-E can be connected however function is limited.)

Centralised Controller System



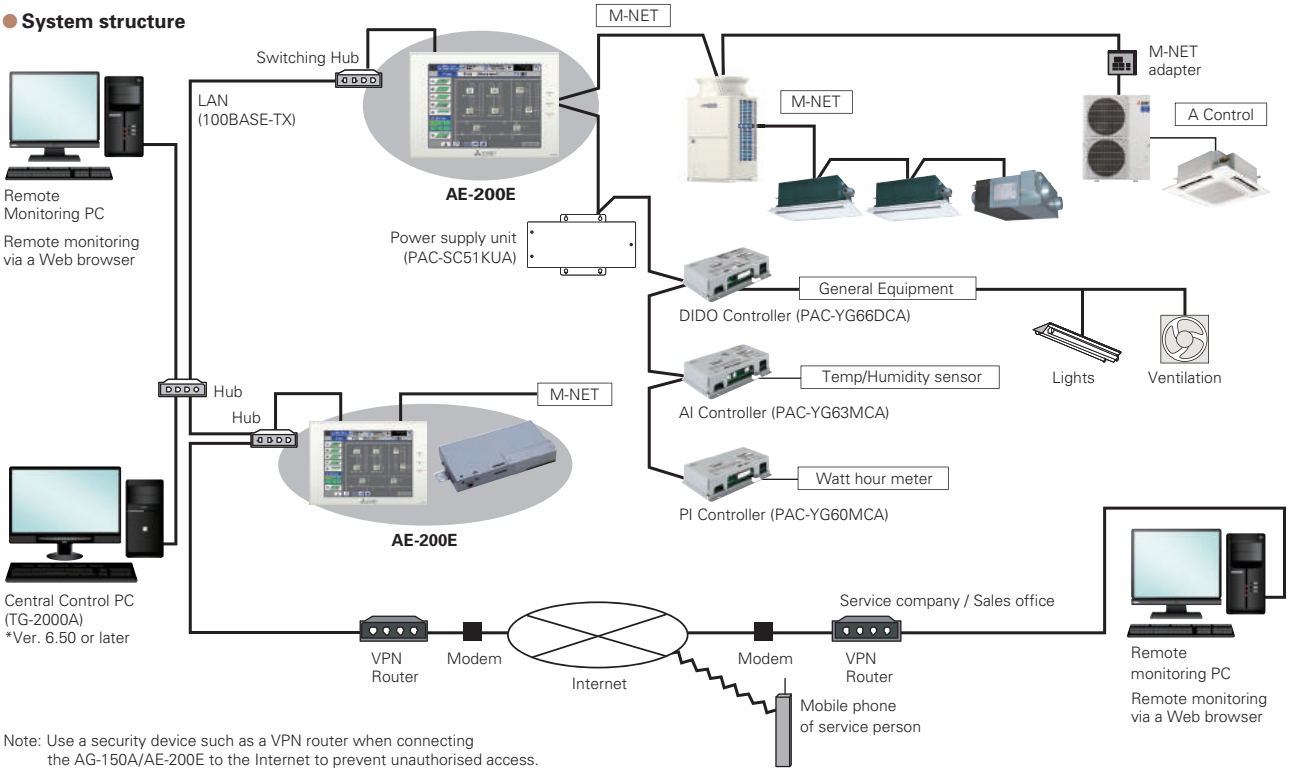
Features of New Centralised Controller "AE-200E"

In an easy and flexible manner, an optimum system can be established according to the scale of facilities.

- Implements control on up to 50 indoor units of air-conditioning equipment.
- By using three units of expansion controller "AE-50E", the centralized control is implemented for the maximum of 200 indoor units.
- Connection with PC allows implementation of control on more than 200 indoor units via Web browser.*

*Please contact your local distributor for when the feature is supported.

System structure

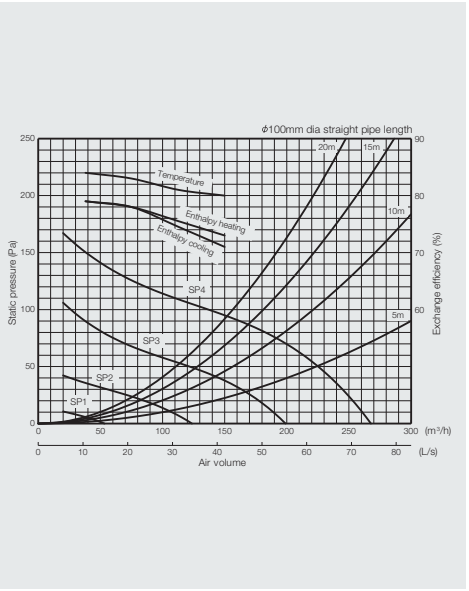


Note: Use a security device such as a VPN router when connecting the AG-150A/AE-200E to the Internet to prevent unauthorised access.

Specifications

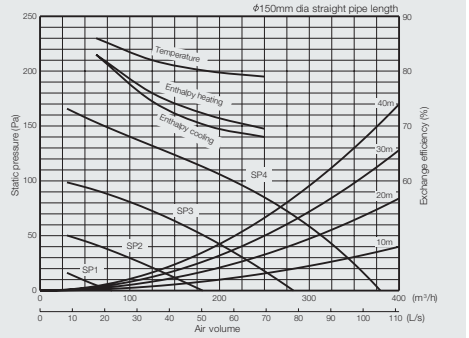
MODEL			LGH-15RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 / 50			
Energy Efficiency Class (S.E.C.)			A (-40,0)			
ErP[1] Data	Flow rate max	m^3/h	137			
	Sound power level max	dB(A)	41			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	0,40-0,41	0,24-0,25	0,15	0,10
Power input		W	49-52	28	14	7-8
Air Volume		m^3/h	150	113	75	38
External static pressure		Pa	95	53,5	24	6
Exchange temperature efficiency		%	80,0	81,0	83,0	84,0
Exchange enthalpy efficiency	Cooling	%	71,0	74,5	78,0	79
	Heating	%	73,0	75,5	78,0	79,0
Sound pressure level		dB(A)	28-29	24	19	17-18
Ducts: Nr, diameter		mm	4 x 100			
Weight		kg	20			
Dimensions	HxWxD	mm	289x610x780			
"Guaranteed Operating Range (Continuous operation)*"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

[1] According to 1254/2014 regulation

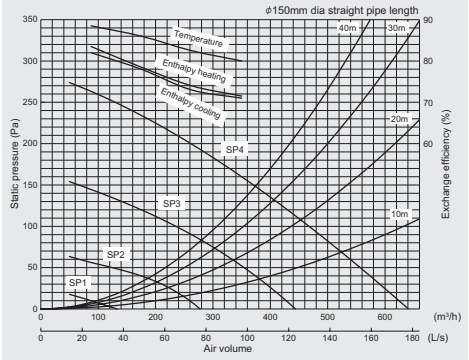


MODEL			LGH-25RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 / 50			
Energy Efficiency Class (S.E.C.)			A (-41,1)			
ErP[1] Data	Flow rate max	m^3/h	215			
	Sound power level max	dB(A)	42			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	0,48	0,28-0,29	0,16	0,10-0,11
Power input		W	62-63	33-35	16-17	8-9
Air Volume		m^3/h	250	188	125	63
External static pressure		Pa	85	48	21	5
Exchange temperature efficiency		%	79,0	80,0	82,0	86,0
Exchange enthalpy efficiency	Cooling	%	68,0	70,0	74,5	83,0
	Heating	%	69,5	72,0	76,0	83,0
Sound pressure level		dB(A)	27-27,5	22-23	20	17
Ducts: Nr, diameter		mm	4 x 150			
Weight		kg	23			
Dimensions	HxWxD	mm	289x735x780			
"Guaranteed Operating Range (Continuous operation)*"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

[1] According to 1254/2014 regulation

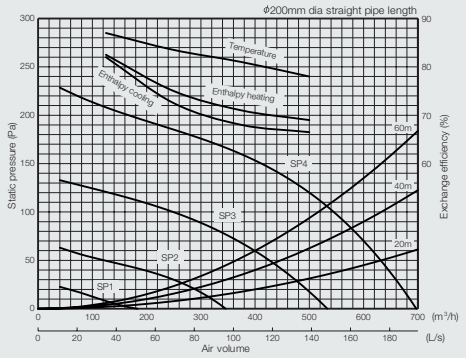


MODEL			LGH-35RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	0,98	0,54	0,26	0,12
Power input		W	140	70	31	11
Air Volume		m^3/h	350	263	175	88
External static pressure		Pa	160,00	90,00	40,00	10,00
Exchange temperature efficiency		%	80,0	82,5	86,0	88,5
Exchange enthalpy efficiency	Cooling	%	71,0	73,0	78,0	82,0
	Heating	%	71,5	74,0	78,5	83,5
Sound pressure level		dB(A)	32,0	28,0	20,0	17,0
Ducts: Nr. diameter		mm	4 x 150			
Weight		kg	30			
Dimensions	AxLxP	mm	331x874x888			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

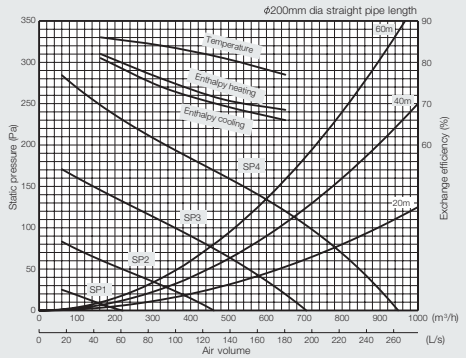


Specifications

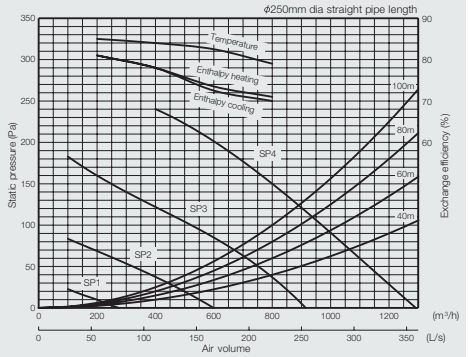
MODEL			LGH-50RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	1,15	0,59	0,26-0,27	0,13
Power input		W	165-173	78-81	32-35	12-14
Air Volume		m³/h	500	375	250	125
External static pressure		Pa	120	68	30	8
Exchange temperature efficiency		%	78,0	81,0	83,5	87,0
Exchange enthalpy efficiency	Cooling	%	66,5	68,0	72,5	82,0
	Heating	%	69,0	71,0	75,0	82,5
Sound pressure level		dB(A)	34-35	28-29	19-20	18
Ducts: Nr. diameter		mm	4 x 200			
Weight		kg	33			
Dimensions	AxLxP	mm	331x1016x888			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			



MODEL			LGH-65RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	1,65-1,72	0,90-0,86	0,39-0,38	0,15-0,16
Power input		W	252-262	131	49-47	15-17
Air Volume		m³/h	650	488	325	163
External static pressure		Pa	120	68	30	8
Exchange temperature efficiency		%	77,0	81,0	84,0	86,0
Exchange enthalpy efficiency	Cooling	%	66,0	69,5	74,0	81,0
	Heating	%	68,5	71,0	76,0	82,0
Sound pressure level		dB(A)	34,5-35,5	29	22	18
Ducts: Nr. diameter		mm	4 x 200			
Weight		kg	38			
Dimensions	AxLxP	mm	404x954x908			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

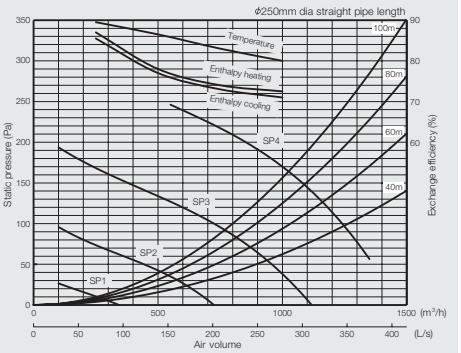


MODEL			LGH-80RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	1,82-1,97	0,83-0,86	0,36-0,40	0,15-0,16
Power input		W	335-340	151	60-64	18-20
Air Volume		m³/h	800	600	400	200
External static pressure		Pa	150	85	37,5	10
Exchange temperature efficiency		%	79,0	82,5	84,0	85,0
Exchange enthalpy efficiency	Cooling	%	70,0	72,5	78,0	81,0
	Heating	%	71,0	73,5	78,0	81,0
Sound pressure level		dB(A)	34,5-36,0	30,0	23	18
Ducts: Nr. diameter		mm	4 x 250			
Weight		kg	48			
Dimensions	AxLxP	mm	404x1004x1144			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

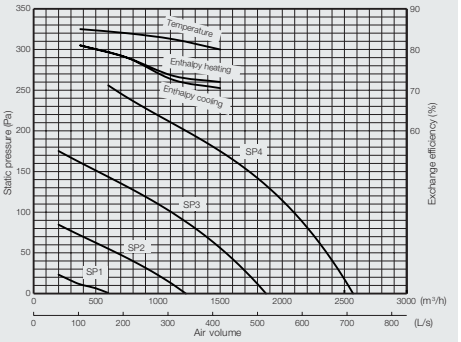


Specifications

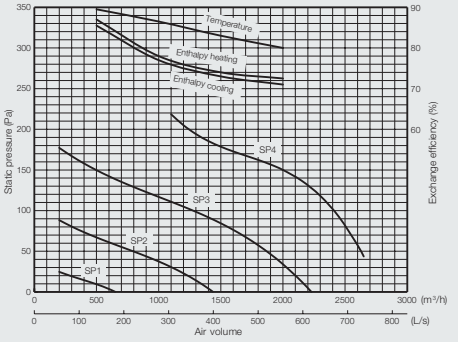
MODEL			LGH-100RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	2,50	1,20	0,50-0,51	0,17-0,19
Power input		W	420	200	75	21
Air Volume		m³/h	1000	750	500	250
External static pressure		Pa	170	95,6	42,5	10,6
Exchange temperature efficiency		%	80,0	83,0	86,5	89,5
Exchange enthalpy efficiency	Cooling	%	71,0	73,0	77,0	85,5
	Heating	%	72,5	74,0	78,0	87,0
Sound pressure level		dB(A)	37-38	31-32	23-24	18
Ducts: Nr. diameter		mm	4 x 250			
Weight		kg	54			
Dimensions	AxLxP	mm	404x1231x1144			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			



MODEL			LGH-150RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	3,71-3,85	1,75-1,78	0,70-0,78	0,29-0,30
Power input		W	670-698	311	123-124	38-44
Air Volume		m³/h	1500	1125	750	375
External static pressure		Pa	175	98,4	43,8	10,9
Exchange temperature efficiency		%	80,0	82,5	84,0	85,0
Exchange enthalpy efficiency	Cooling	%	70,5	72,5	78,0	81,0
	Heating	%	72,0	73,5	78,0	81,0
Sound pressure level		dB(A)	39,0-40,5	32-33	24-26	18
Ducts: Nr. diameter		mm	4 x 250 / 2 x (270x700)			
Weight		kg	98			
Dimensions	AxLxP	mm	808x1004x1144			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

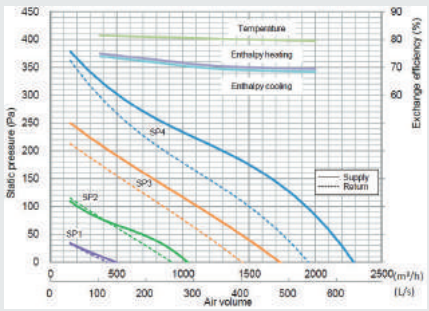


MODEL			LGH-200RVX-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	4,88-4,54	2,20-2,06	0,88-0,87	0,33-0,35
Power input		W	850-853	400-372	153-150	42-49
Air Volume		m³/h	2000	1500	1000	500
External static pressure		Pa	150	84,4	37,5	9,5
Exchange temperature efficiency		%	80,0	83,0	86,5	89,5
Exchange enthalpy efficiency	Cooling	%	71,0	73,0	77,0	85,5
	Heating	%	72,5	74,0	78,0	87,0
Sound pressure level		dB(A)	40-41	36	28-27	18-19
Ducts: Nr. diameter		mm	4 x 250 / 2 x (270x700)			
Weight		kg	110			
Dimensions	AxLxP	mm	808x1231x1144			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			

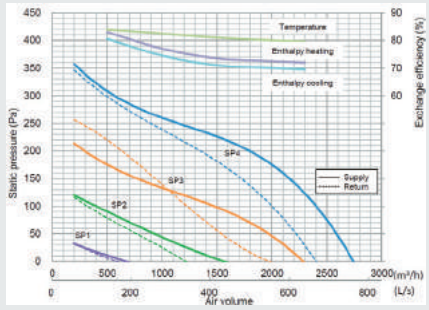


Specifications

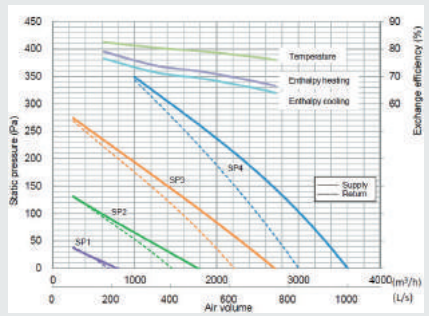
MODEL			LGH-150RVXT-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	4,30 - 3,40	2,40 - 1,80	1,10 - 0,77	0,36 - 0,31
Power input		W	792 - 625	421 - 334	176 - 134	48 - 37
Air Volume		m³/h	1500	1125	750	375
External static pressure		Pa	175	98	44	11
Exchange temperature efficiency		%	80,0	80,5	81,0	81,5
Exchange enthalpy efficiency	Cooling	%	69,0	70,0	72,0	74,0
	Heating	%	70,0	71,0	73,0	75,0
Sound pressure level		dB(A)	39,5	35,5	29,5	22,0
Ducts: Nr. diameter		mm	4 x 250 / 2 x (250x750)			
Weight		kg	156			
Dimensions	AxLxP	mm	500 x 1980 x 1500			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			



MODEL			LGH-200RVXT-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	5,40 - 5,00	2,70 - 2,20	1,10 - 0,85	0,39 - 0,34
Power input		W	1000 - 916	494 - 407	197 - 150	56 - 45
Air Volume		m³/h	2000	1500	1000	500
External static pressure		Pa	175	98	44	11
Exchange temperature efficiency		%	80,0	81,0	82,5	84,0
Exchange enthalpy efficiency	Cooling	%	70,0	71,0	74,5	80,5
	Heating	%	72,5	73,5	77,0	83,0
Sound pressure level		dB(A)	39,5	35,5	28,0	22,0
Ducts: Nr. diameter		mm	4 x 250 / 2 x (250x750)			
Weight		kg	159			
Dimensions	AxLxP	mm	500 x 1980 x 1500			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			



MODEL			LGH-250RVXT-E			
Electrical power supply	V/Phase/Hz		220-240 / 1 /50			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	7,60 - 6,90	3,60 - 3,10	1,40 - 1,30	0,57 - 0,49
Power input		W	1446 - 1298	687 - 587	244 - 212	82 - 69
Air Volume		m³/h	2500	1875	1250	625
External static pressure		Pa	175	98	44	11
Exchange temperature efficiency		%	77,0	79,0	80,5	82,5
Exchange enthalpy efficiency	Cooling	%	65,5	69,0	71,5	76,5
	Heating	%	68,0	71,5	74,0	79,0
Sound pressure level		dB(A)	43,0	39,0	32,0	24,0
Ducts: Nr. diameter		mm	4 x 250 / 2 x (250x750)			
Weight		kg	198			
Dimensions	AxLxP	mm	500 x 1980 x 1500			
"Guaranteed Operating Range (Continuous operation)"	T. ext	°C	-10 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	80			



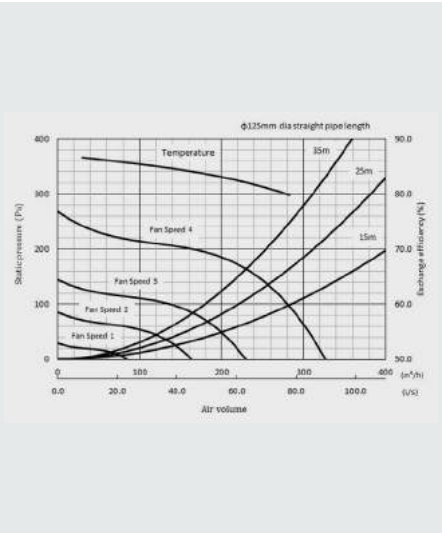
Specifications

MODELLO			VL-100EU$_5$-E	
Electrical power supply	V/Phase/Hz		220-240 / 1 / 50	
Energy Efficiency Class (S.E.C.)			B (-28,8)	
ErP[1] Data	Flow rate max	m³/h	100	
	Sound power level max	dB(A)	52	
Fan Speed			Alta	Bassa
Running current		A	-	-
Power input		W	31	15
Air Volume		m³/h	105	60
External static pressure		Pa	-	-
Exchange temperature efficiency		%	73	80
Sound pressure level		dB(A)	37	25
Weight		kg	7,5	
Dimensions	HxWxD	mm	265x620x200	

[1] According to 1254/2014 regulation

MODELLO			VL-220CZGV-E			
Electrical power supply	V/Phase/Hz		220-240 / MONOFASE /50			
Energy Efficiency Class (S.E.C.)			**A (-37,0)**			
ErP[1] Data	Flow rate max	m³/h	260			
	Sound power level max	dB(A)	44			
Fan Speed			SP4	SP3	SP2	SP1
Running current		A	0,60	0,29	0,18	0,11
Power input		W	80	35	18,5	8,5
Air Volume		m³/h	230	165	120	65
External static pressure		Pa	164	84	44	13
Exchange temperature efficiency		%	82	84	85	86
Sound pressure level		dB(A)	31,0	25,0	19,0	14,0
Ducts: Nr, diameter		mm	4 x 100			
Weight		kg	31			
Dimensions	AxLxP	mm	320x885x815			
Guaranteed Operating Range (Continuous operation)*	T. ext	°C	-15 ~ +40			
	UR ext max	%	80			
	T. int max	°C	40			
	UR int max	%	95			

[1] According to 1254/2014 regulation



⚠ NOTICE

■ Do not install indoor units in areas (e.g. mobile phone base stations) where the emission of VOCs such as phthalate compounds and formaldehyde is known to be high as this may result in a chemical reaction.

■ Our air-conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R410A.

■ When installing or relocating or servicing our air-conditioning equipment, use only the specified refrigerant (R410A) to charge the refrigerant lines.
Do not mix it with any other refrigerant and do not allow air to remain in the lines.
If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant lines, and may result in an explosion and other hazards.
The use of any refrigerant other than that specified for the system will cause mechanical failure, system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

eco Changes **for a greener tomorrow**

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

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