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 2018

for a greener tomorrow eco Changes

⚠ 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 equipments and heat pumps contain a fluorinated greenhouse gas, R410A (GWP: 2088) or R32 (GWP: 675). *These GWP values are based on Regulation (EU) No.517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP: 1975), R32 (GWP: 550)
- When installing or relocating or servicing our air-conditioning equipment, use only the specified refrigerant (R410A or R32) 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.

MITSUBISHI ELECTRIC CORPORATION
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CE

ENVIRONMENTAL VISION 2021 TECHNOLOGY & ACTION

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New publication, effective Apr. 2018.
Specifications are subject to change without notice.

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

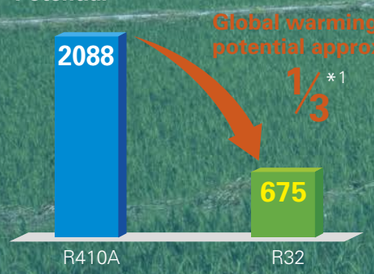
- Reduce, reuse and recycle "3Rs" products reduce resources used by 30%
- Zero emissions from manufacturing reducing the direct landfill of waste to zero

Ensuring Harmony with Nature Fostering Environmental Awareness

The New Refrigerant R32

The new R32 refrigerant has a global warming potential approximately 1/3*1 that of our current refrigerant, R410A; thereby dramatically reducing the negative impact more than ever. Actively introducing the new R32 refrigerant to suppress global warming, Mitsubishi Electric continues to promote manufacturing while considering the environment.

Comparison of Global Warming Potential



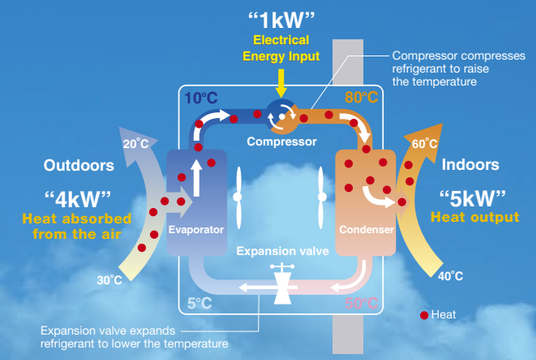
*1: Source: IPCC 4th Assessment Report, global warming potential (GWP) 100-year value. Comparison of 2088 (R410A) and 675 (R32).

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 5.0>

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.

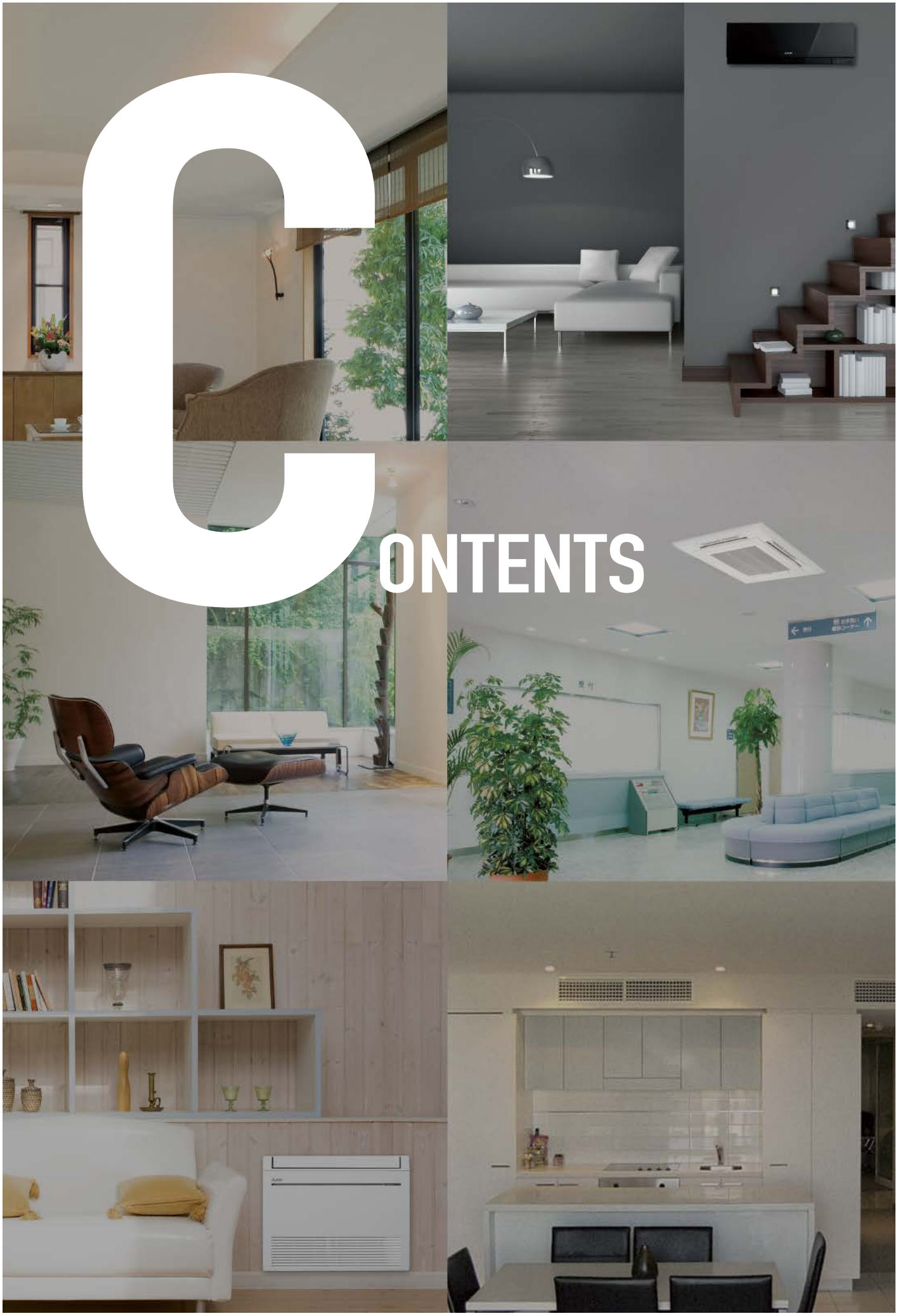
Creating a Recycling-Based Society

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.



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Air Conditioners

M/S/P/Multi/Zubadan/ATW

LOSSNAY SYSTEM

New releases in 2018

MSZ-A SERIES

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MSZ-AP/25/35/42/50VG P.19

MLZ-KP SERIES

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R410A

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R32

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MITSUBISHI ELECTRIC Air Conditioner
Certified By GUINNESS WORLD RECORDS*

RECORD HOLDER

Longest running cross-flow-fan air conditioner brand
49 years and 258 days

*This record was certified on 27th June 2017

MITSUBISHI ELECTRIC Air Conditioner was officially awarded a GUINNESS WORLD RECORDS title,as the world's Longest running cross-flow-fan air conditioner brand (known as "Kirigamine" in Japan).

P SERIES Standard Inverter

R410A

PUHZ-P100/125/140V(Y)KA P.58

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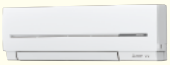
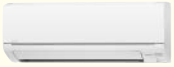
PUHZ-SW75/100V(Y)AA

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-L Series R32 R410A *1 		W·V·R·B Multi connection only			W·V·R·B SINGLE	W·V·R·B SINGLE		W·V·R·B SINGLE	W·V·R·B SINGLE		13
	MSZ-A Series R32 R410A *1 MSZ-AP15-20VF 	Multi connection only		Multi connection only								19
	MSZ-AP25-50VG 					SINGLE H	SINGLE H	SINGLE H	SINGLE H			19
	MSZ-F Series R410A 					SINGLE	SINGLE		SINGLE			25
	MSZ-E Series R32 *2 R410A 		W·S·B Multi connection only		W·S·B Multi connection only	W·S·B SINGLE H	W·S·B SINGLE H	W·S·B SINGLE	W·S·B SINGLE			27
	MSZ-S Series R410A MSZ-SF15/20VA 	Multi connection only		Multi connection only								29
	MSZ-SF25/35/42/50VE3 					SINGLE H	SINGLE H	SINGLE H	SINGLE H			29
	MSZ-G Series R410A 									SINGLE	SINGLE	29
	MSZ-W Series R410A 					SINGLE	SINGLE					33
	MSZ-D Series R410A 					SINGLE	SINGLE					35
	MSZ-H Series R410A MSZ-HJ60/71  MSZ-HJ25/35/50					SINGLE	SINGLE		SINGLE	SINGLE	SINGLE	37
Compact floor	MFZ Series R410A 					SINGLE	SINGLE		SINGLE			39
1-way cassette	MLZ Series R32 R410A 					Multi connection only	Multi connection only		Multi connection only			41

*1: R410A is for Multi connection.
*2: R32 is for MXZ connection.

H : Outdoor unit with freeze-prevention heater is available.
W·S·B: Indoor units are available in three colours; White, Black and Silver.
W·V·R·B: Indoor units are available in four colours; Natural White, Pearl White, Ruby Red, and Onyx Black.

S SERIES

INVERTER Models

Model Name		1.5kW	2.5kW	3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	Page
		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 R32 R410A 	Multi connection only	SINGLE	SINGLE	SINGLE	SINGLE	✻1 TWIN	✻1 TWIN ✻1 TRIPLE	✻1 TWIN ✻1 TRIPLE ✻1 QUARDRUPLE	✻1 TRIPLE ✻1 QUARDRUPLE	49
Compact ceiling-concealed	SEZ Series R32 R410A 		✻2 SINGLE	✻2 SINGLE	✻2 SINGLE	✻2 SINGLE	✻2 SINGLE				53

✻1 Only for R410A connection
✻2 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

P SERIES

Eco-conscious Power Inverter Models

Model Name		3.5kW 1-phase	5.0kW 1-phase	6.0kW 1-phase	7.1kW 1-phase	10.0kW 1- & 3-phase	12.5kW 1- & 3-phase	14.0kW 1- & 3-phase	Page
4-way cassette	PLA Series R32 R410A 	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	59
Ceiling-concealed	PEAD Series R32 R410A 	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	67
Wall-mounted	PKA Series R32 R410A 	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	TWIN	TWIN TRIPLE	74
Ceiling-suspended	PCA-KA Series R32 R410A 	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	79

POWER INVERTER Models / STANDARD INVERTER Models

Model Name		3.5kW 1-phase	5.0kW 1-phase	6.0kW 1-phase	7.1kW 1-phase	10.0kW 1- & 3-phase	12.5kW 1- & 3-phase	14.0kW 1- & 3-phase	20.0kW 3-phase	25.0kW 3-phase	Page
4-way cassette	PLA Series R410A 	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	59
Ceiling-concealed	PEAD Series R410A 	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	67
	PEA Series R410A 								SINGLE	SINGLE	72
Wall-mounted	PKA Series R410A 					SINGLE TWIN	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	74
Ceiling-suspended	PCA-KA Series R410A 	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	79
for Professional Kitchen	PCA-HA Series* R410A 				SINGLE			TWIN		TRIPLE	80
Floor-standing	PSA Series R410A 					SINGLE	SINGLE	SINGLE TWIN	TWIN	TWIN TRIPLE	86

* Power Inverter Models only

LINE-UP

MXZ SERIES

INVERTER Models

Model Name	Capacity Class	Page
up to 2 indoor units MXZ-2F33VF R32	3.3kW <1-phase>	91
up to 2 indoor units MXZ-2F42VF R32	4.2kW <1-phase>	91
up to 2 indoor units MXZ-2F53VF(H) R32	5.3kW <1-phase>	91
up to 3 indoor units MXZ-3F54VF R32	5.4kW <1-phase>	91
up to 3 indoor units MXZ-3F68VF R32	6.8kW <1-phase>	91
up to 4 indoor units MXZ-4F72VF R32	7.2kW <1-phase>	91

Model Name	Capacity Class	Page
up to 2 indoor units MXZ-2D33VA R410A	3.3kW <1-phase>	93
up to 2 indoor units MXZ-2D42VA2 R410A	4.2kW <1-phase>	93
up to 2 indoor units MXZ-2D53VA (H)2 R410A	5.3kW <1-phase>	93
up to 3 indoor units MXZ-3E54VA R410A	5.4kW <1-phase>	93
up to 3 indoor units MXZ-3E68VA R410A	6.8kW <1-phase>	93
up to 4 indoor units MXZ-4E72VA R410A	7.2kW <1-phase>	93
up to 4 indoor units MXZ-4E83VA R410A	8.3kW <1-phase>	93
up to 5 indoor units MXZ-5E102VA R410A	10.2kW <1-phase>	93
up to 6 indoor units MXZ-6D122VA R410A	12.2kW <1-phase>	93
up to 2 indoor units MXZ-2DM40VA R410A	4.0kW <1-phase>	95
up to 3 indoor units MXZ-3DM50VA R410A	5.0kW <1-phase>	95

PUMY SERIES

INVERTER Models

Model Name	12.5kW 1 & 3-phase	14.0kW 1 & 3-phase	15.5kW 1 & 3-phase	22.4kW 3-phase	Page
PUMY-SP R410A	✓	✓	✓		97
PUMY-P R410A	✓	✓	✓	✓	99

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

POWERFUL HEATING SERIES

INVERTER Models

Model Name			2.5kW 1-phase	3.5kW 1-phase	5.0kW 1-phase	5.3kW 1-phase	8.3kW 1-phase	10.0kW 1- & 3-phase	12.5kW 3-phase	Page
Wall-mounted		MSZ-L VGHZ Series R410A	SINGLE H	SINGLE H	SINGLE H					107
		MSZ-F VEHZ Series R410A	SINGLE H	SINGLE H	SINGLE H					107
Compact floor		MFZ VEHZ Series R410A	SINGLE H	SINGLE H	SINGLE H					111
ZUBADAN	4-way cassette	PLA Series R32 R410A						SINGLE TWIN	SINGLE TWIN	114
ZUBADAN	Ceiling-concealed	PEAD Series R32 R410A						SINGLE TWIN	SINGLE TWIN	116
ZUBADAN	Wall-mounted	PKA Series R32 R410A						SINGLE TWIN		117
Multi split		MXZ-E VAHZ Series R410A				2PORT H	4PORT H			118

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

AIR TO WATER SERIES

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	Coming soon PUHZ-W85, PUHZ-W112	

Split type	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity (≥16kW)*
ZUBADAN New Generation		NEW PUHZ-SHW80/112AA, PUHZ-SHW80/112/140	PUHZ-SHW230
POWER INVERTER	PUHZ-SW50	PUHZ-SW75, NEW PUHZ-SW75/100AA, PUHZ-SW100/120	PUHZ-SW160/200
Eco Inverter	SUHZ-SW45		

ATA/ATW Hybrid system	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity (≥16kW)*
Mr.SLIM+		PUHZ-FRP71	
PUMY + ecodan		PUMY-P112/125/140	

*Rated capacity is at conditions A2W35. (according to EN14511)

M SERIES


MITSUBISHI ELECTRIC Air Conditioner
Certified By GUINNESS WORLD RECORDS
RECORD HOLDER

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-L SERIES R32 R410A ✻1

GOOD DESIGN AWARD 2016 BEST 100

25/35/50 SEER A+++ 25/35 SCOP A+++ 25/35 MXZ connection

MSZ-A SERIES R32 R410A ✻1

MSZ-AP25-50VG

MSZ-AP15-20VF

25/35 SEER A+++ 25-50 SCOP A++ MXZ connection

reddot award 2018 winner

MSZ-F SERIES R410A

25/35 SEER A+++ 25/35 SCOP A+++ MXZ connection

MSZ-E SERIES R32 R410A ✻2

25/35 SEER A+++ 25/35 SCOP A++ MXZ connection

reddot award 2015 winner

MSZ-S SERIES R410A

MSZ-SF25-50VE

MSZ-SF15/20VA

SEER A++ SCOP A+ MXZ connection

MSZ-G SERIES R410A

SEER A++ SCOP A+ MXZ connection

MSZ-W SERIES R410A

SEER A SCOP A

MSZ-D SERIES R410A

SEER A+ SCOP A+ MXZ connection

MSZ-H SERIES R410A MSZ-HJ60/71

MSZ-HJ25/35/50

50/60/71 SEER A 50/60/71 SCOP A MXZ connection

Floor-standing

MFZ SERIES R410A

25 SEER A+++ SCOP A+ MXZ connection

Cassette Units

MLZ SERIES R32 R410A

MXZ connection

✻3 Multi connection only

SEER A SCOP A Energy Rank

MXZ connection Compatible for connection to MXZ Series system

R32 R32 Refrigerant

R410A R410A Refrigerant

✻1 R410 is for multi connection.
✻2 R32 is for MXZ connection.
✻3 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-AP25/35/42/50VGH
MUZ-EF25/35VEH
MUZ-SF25/35/42/50VEH

MUZ-LN25/35VG

Hyper Heating
MUZ-LN25/35/50VGHZ
MUZ-FH25/35/50VEHZ
MUFZ-KJ25/35/50VEHZ

MUZ-LN50VG

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.

MSZ-LN18/25/35/50/60VGR

R32
Single / Multi

R410A
Multi

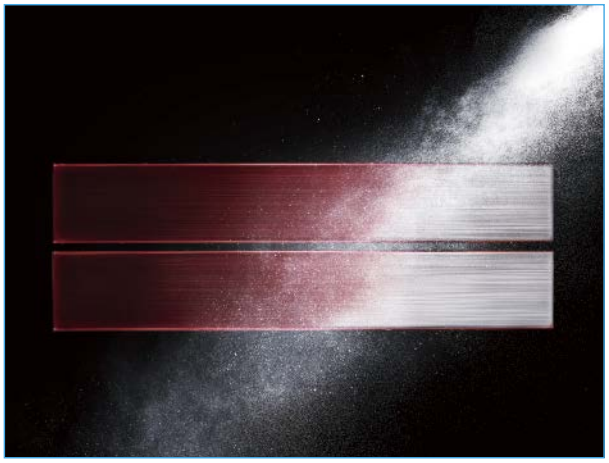
MSZ-L SERIES

GOOD DESIGN AWARD 2016
BEST 100

Developed to complement modern interior room décor, the LN Series is available in four colours specially chosen to blend in naturally wherever installed. Not only the sophisticated design, but also the optimum energy efficiency and operational comfort add even more value to this series.

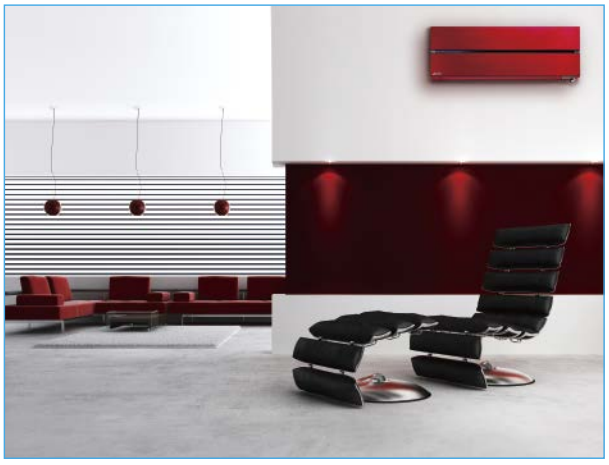
Luminous and Luxurious Design

Natural White, Pearl White, Ruby Red, and Onyx Black. LN Series indoor units are available in four colours to match various lifestyles. The appearance of the indoor unit differs depending on the lighting in the room, attracting the attention of everyone that enters the room.



Master craftsmanship painting technology has resulted in a refined design, giving the finish deep colour and a premium quality feel.

Pearl White blends in with any interior.



Ruby Red gives an accent to the room, affording timeless elegance to sophisticated interiors.

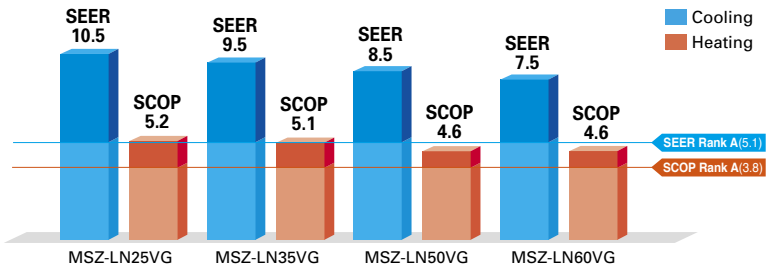
Onyx Black matches darker interiors, creating a comfortable environment.

Not only the indoor units, but the wireless remote controllers come in four colours as well. Each remote controller matches the indoor unit. Even the textures are the same.

Pearl White | Ruby Red | Onyx Black | Natural White

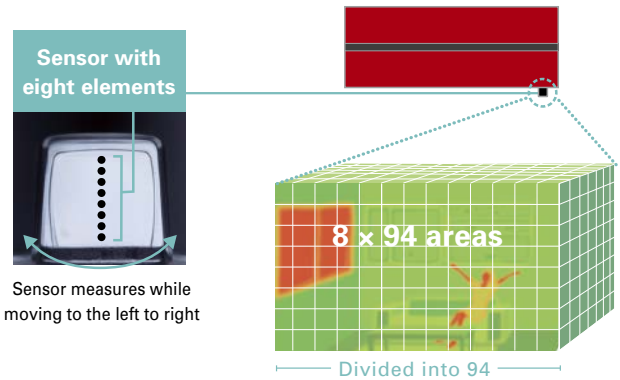
High Energy Efficiency

Optimum cooling/heating performance is another feature for the LN series. Models from capacities 25 to 50 have achieved the "Rank A^{+++}" for SEER, and models for capacities 25 and 35 have achieved the "Rank A^{+++}" for SCOP as well.



3D i-see Sensor

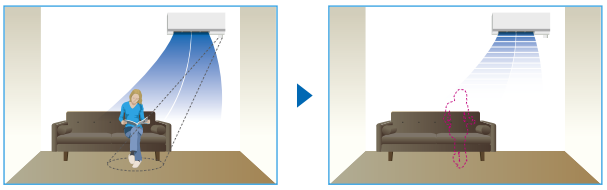
The LN Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge 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)

No occupancy energy-saving mode

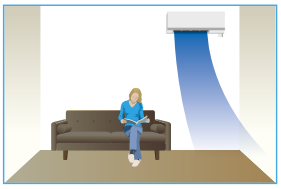
The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.



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.

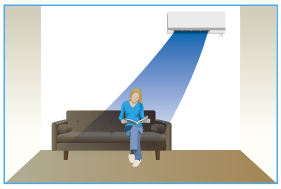
Indirect Airflow

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.



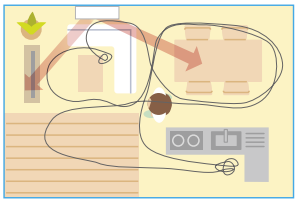
Direct Airflow

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

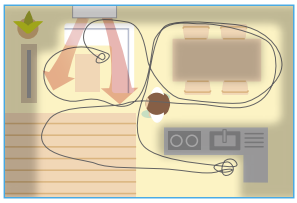


Even Airflow *LN Series only

Normal swing mode



Even airflow mode

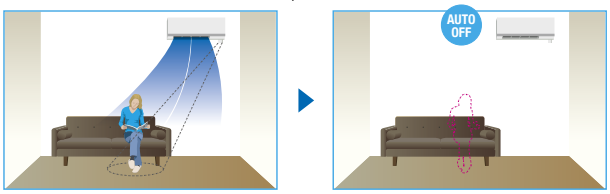


The airflow is distributed equally throughout the room, even to spaces where there is no human movement.

The 3D i-see sensor memorizes human movement and furniture positions, and efficiently distributes airflow.

No occupany Auto-OFF mode *LN Series only

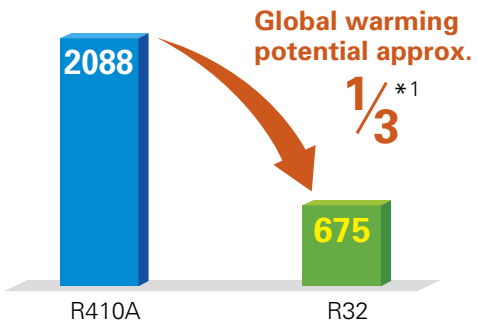
The sensors detect whether or not there are people in the room. When there is no one in the room, the unit turns off automatically.



R32 Refrigerant

The new R32 refrigerant has a global warming potential approximately 1/3*1 that of our current refrigerant, R410A; thereby dramatically reducing the negative impact more than ever. Actively introducing the new R32 refrigerant to suppress global warming, Mitsubishi Electric continues to promote manufacturing while considering the environment.

Comparison of Global Warming Potential

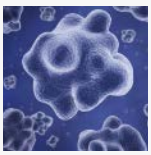


*1: Source: IPCC 4th Assessment Report, global warming potential (GWP) 100-year value. Comparison of 2088(R410A) and 675 (R32).

Plasma Quad Plus

Plasma Quad Plus is a plasma-based filter system that effectively removes six kinds of air pollutants. Plasma Quad Plus captures mold and allergens more effectively than Plasma Quad. It can also capture PM2.5 and particles smaller than 2.5μm, creating healthy living spaces for all.

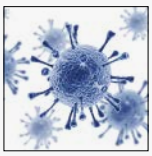
Bacteria



Test results have confirmed that Plasma Quad Plus neutralizes 99% of bacteria in 162 minutes in a 25m^3 test space.

<Test No.> KRCES-Bio. Test Report No. 2016-0118

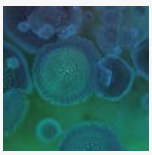
Viruses



Test results have confirmed that Plasma Quad Plus neutralizes 99% of virus particles in 72 minutes in a 25m^3 test space.

<Test No.> vrc.center, SMC No. 28-002

Molds



Test results have confirmed that Plasma Quad Plus neutralizes 99% of mold in 135 minutes in a 25m^3 test space.

<Test No.> Japan Food Research Laboratories Test Report No. 16069353001-0201

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 Plus neutralizes 98% of cat fur and pollen.

<Test No.> ITEA Report No. T1606028

PM2.5

Test results have confirmed that Plasma Quad Plus removes 99% of PM2.5 in 145 minutes in a 28m^3 test space.

<In-company investigation>

Dust

Test results have confirmed that Plasma Quad Plus removes 99.7% of dust and mites.

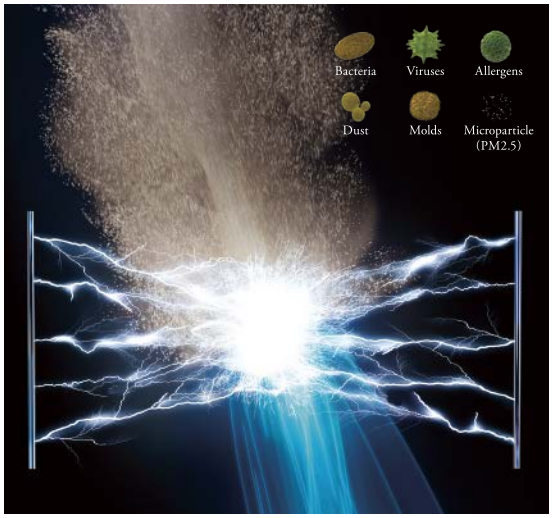
<Test No.> ITEA Report No. T1606028

Model	Name	Method	Bacteria	Viruses	Molds	Allergens	Dust	PM2.5*
FH Series	Plasma Quad	One-Stage Plasma	A	A	B	B	C	
LN Series	Plasma Quad Plus	Two-Stage Plasma	A	A	A	A	A	A

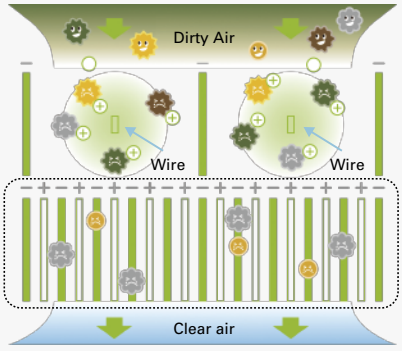
A: Highly effective
B: Effective
C: Partially effective

*PM2.5:
Particles smaller than 2.5μm

Image of Plasma Quad Plus



Principle of Plasma Quad Plus



Dust, PM2.5
Viruses
Bacteria
Mold
Allergens

1st stage

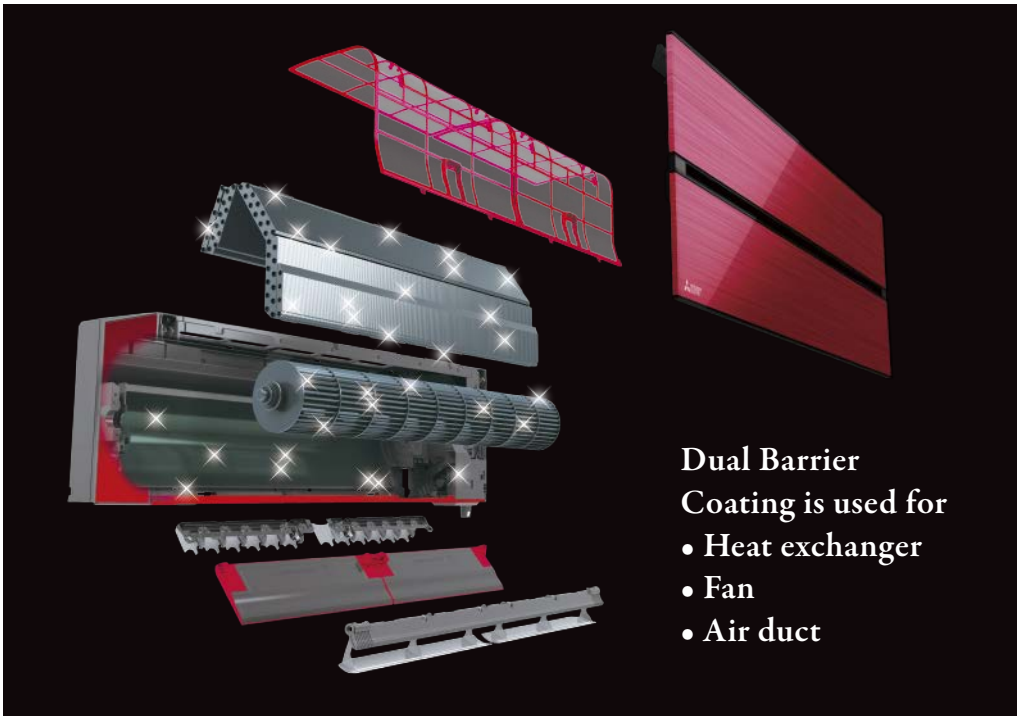
- Make plasma.
- Break mold and allergens. Inhibit viruses.
- Dust and PM2.5 given an electrical charge (+).

2nd stage

- Make a strong electrical field.
- The charged dust and PM2.5 (+) are absorbed in the strong electrical field (–).

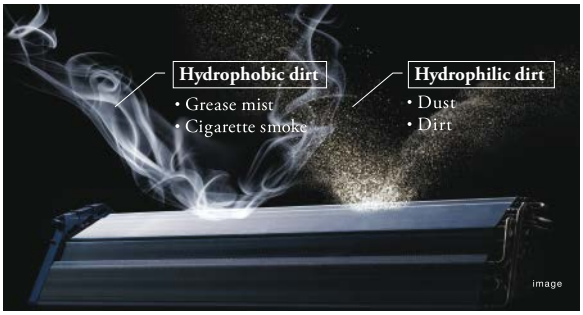
Dual Barrier Coating

A two-barrier coating prevents dust and greasy dirt from getting into the air conditioner.

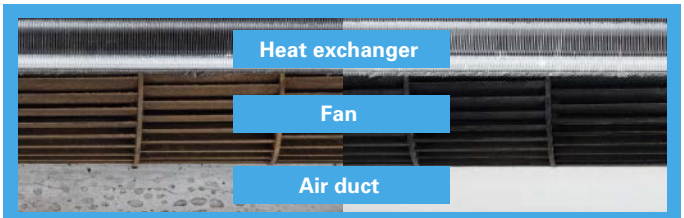


State-of-the-art coating technology

Dirt is generally classified into two groups: hydrophilic dirt such as fiber dust and sand dust, and hydrophobic dirt such as oil and cigarette smoke. Mitsubishi Electric's dual barrier coating works as a two-barrier coating with blended "fluorine particles" that prevent hydrophilic dirt penetration and "hydrophilic particles" that prevent hydrophobic dirt from getting into the air conditioner. This dual coating on the inner surface keeps the air conditioner clean year-round.



Comparison of dirt on heat exchanger, fan and air duct (in-house comparison)



No dual barrier coating (image after 10 years) Dual barrier coating used

The inside of the indoor unit gets dirty after many years of usage.

Heat exchanger		Fan	
New	10 years later (image)	New	10 years later (image)

Consequences when the inside of the indoor unit is left dirty.

- Deterioration in energy efficiency.
- Musty smell from the unit.

Double Flap

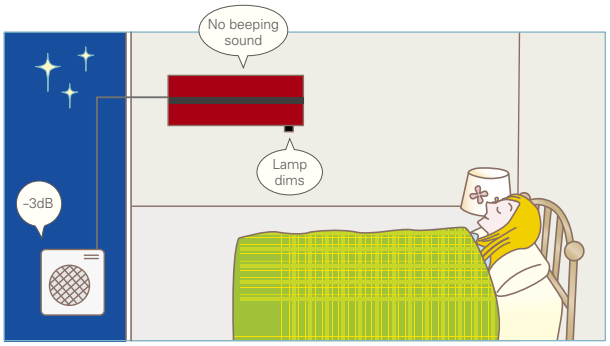
The vanes create various airflows to make each person in the room comfortable. Not only the horizontal vanes, but also the vertical vanes move independently, eliminating hot spots or cold spots throughout the room.

Night Mode

When Night Mode is activated using the wireless remote controller, air conditioner operation will switch to the following settings.

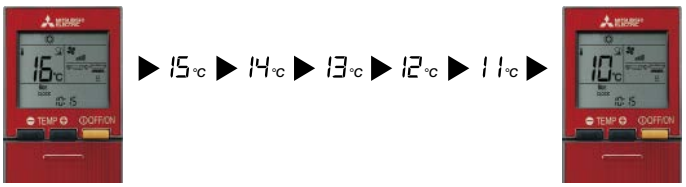
- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated operating noise specification.

*The cooling/heating capacity may drop.



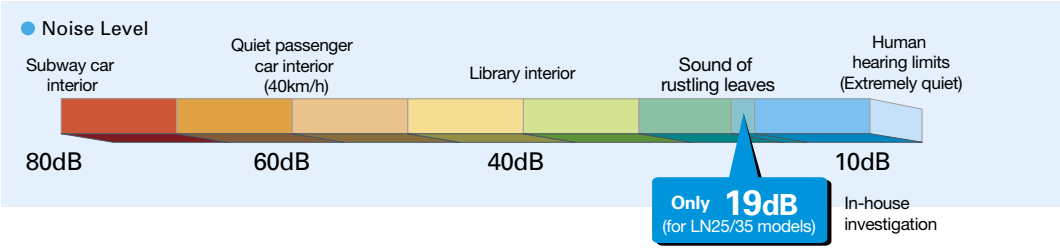
10°C Heating

During heating operation, the temperature can be set in 1°C increments down to 10°C.
This function can also be used with the Weekly Timer setting.



Quiet Operation

The indoor unit noise level is as low as 19dB for LN25/35 models, offering a peaceful inside environment.



Built-in Wi-Fi Interface

The indoor unit is equipped with a Wi-Fi Interface inside an exclusive pocket in the unit.
This eliminates the need to install a Wi-Fi interface, and also contributes to the beautiful appearance since the interface is hidden.

MSZ-L SERIES

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

DC Inverter | Joint Lap | DC Fan Motor | PAM | Grooved Piping | 25 / 35 / 50 SEER A+++ | 25 / 35 SCOP A+++

Indoor Unit / Remote Controller

R32 R410A

GOOD DESIGN AWARD 2016 BEST 100

<Pearl White>

MSZ-LN18/25/35/50/60VGV

<Ruby Red>

MSZ-LN18/25/35/50/60VGR

<Natural White>

MSZ-LN18/25/35/50/60VGW

<Onyx Black>

MSZ-LN18/25/35/50/60VGB

Outdoor Unit

R32

MUZ-LN25/35VG

MUZ-LN50VG

MUZ-LN60VG

3D i-see Sensor | AREA | HUMAN | Econo Cool | AUTO VANE | Plasma Quad Plus | Dual Barrier Coating | Double Vane | SWING | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart

Low Temp Cooling | Optional | Group Control | Optional | M-NET connection | Optional | Wi-Fi Interface | MXZ connection | 25 / 35 | 10°C | Indoor | Night | Cleaning-free pipe reuse | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump				
Indoor Unit				MSZ-LN18VG (W) (V) (R) (B)	MSZ-LN25VG (W) (V) (R) (B)	MSZ-LN35VG (W) (V) (R) (B)	MSZ-LN50VG (W) (V) (R) (B)	MSZ-LN60VG (W) (V) (R) (B)
Outdoor Unit				for MXZ connection	MUZ-LN25VG	MUZ-LN35VG	MUZ-LN50VG	MUZ-LN60VG
Refrigerant				Single: R32(*1) / Multi: R410A or R32(*1)				
Power Supply	Source			Outdoor Power Supply				
	Outdoor (V / Phase / Hz)			230 / Single / 50				
Cooling	Design load		kW	–	2.5	3.5	5.0	6.1
	Annual electricity consumption (*2)		kWh/a	–	83	128	205	285
	SEER (*4)			–	10.5	9.5	8.5	7.5
		Energy efficiency class		–	A+++	A+++	A+++	A++
	Capacity	Rated	kW	–	2.5	3.5	5.0	6.1
		Min-Max	kW	–	1.0 - 3.5	0.8 - 4.0	1.0 - 6.0	1.4 - 6.9
	Total Input	Rated	kW	–	0.485	0.820	1.380	1.790
Heating (Average Season)(*5)	Design load		kW	–	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)	6.0(-10°C)
	Declared Capacity	at reference design temperature	kW	–	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)	6.0(-10°C)
		at bivalent temperature	kW	–	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)	6.0(-10°C)
		at operation limit temperature	kW	–	2.5(-15°C)	3.2(-15°C)	4.2(-15°C)	6.0(-15°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	–	794	974	1369	1826
	SCOP (*4)			–	5.2	5.1	4.6	4.6
		Energy efficiency class		–	A+++	A+++	A++	A++
	Capacity	Rated	kW	–	3.2	4.0	6.0	6.8
		Min-Max	kW	–	0.8 - 5.4	1.0 - 6.3	1.0 - 8.2	1.8 - 9.3
	Total Input	Rated	kW	–	0.580	0.800	1.480	1.810
Operating Current (Max)			A	–	7.1	9.9	13.9	15.2
Indoor Unit	Input	Rated	kW	0.029	0.029	0.029	0.034	0.040
	Operating Current(Max)		A	0.3	0.3	0.3	0.4	0.4
	Dimensions	H*W*D	mm	307-890-233	307-890-233	307-890-233	307-890-233	307-890-233
	Weight		kg	15.5	15.5	15.5	15.5	15.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet))	Cooling	m^3/min	4.3 - 5.8 - 7.1 - 8.8 - 11.9	4.3 - 5.8 - 7.1 - 8.8 - 11.9	4.3 - 5.8 - 7.1 - 8.8 - 12.8	5.7 - 7.6 - 8.8 - 10.6 - 13.9	7.1 - 8.8 - 10.6 - 12.7 - 15.7
		Heating	m^3/min	4.0 - 5.7 - 7.1 - 8.5 - 14.4	4.0 - 5.7 - 7.1 - 8.5 - 14.4	4.3 - 5.7 - 7.1 - 8.5 - 13.7	5.4 - 6.4 - 8.5 - 10.7 - 15.7	6.6 - 9.5 - 11.5 - 13.6 - 15.7
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	19 - 23 - 29 - 36 - 42	19 - 23 - 29 - 36 - 42	19 - 24 - 29 - 36 - 43	27 - 31 - 35 - 39 - 46	29 - 37 - 41 - 45 - 49
		Heating	dB(A)	19 - 24 - 29 - 36 - 45	19 - 24 - 29 - 36 - 45	19 - 24 - 29 - 36 - 45	25 - 29 - 34 - 39 - 47	29 - 37 - 41 - 45 - 49
	Sound Level (PWL)	Cooling	dB(A)	58	58	58	60	65
Outdoor Unit	Dimensions	H*W*D	mm	–	550-800-285	550-800-285	714-800-285	880-840-330
	Weight		kg	–	35	35	40	55
	Air Volume	Cooling	m^3/min	–	31.4	31.4	40.0	50.1
		Heating	m^3/min	–	26.6	31.4	40.5	51.3
	Sound Level (SPL)	Cooling	dB(A)	–	46	49	51	55
		Heating	dB(A)	–	49	50	54	55
	Sound Level (PWL)	Cooling	dB(A)	–	60	61	64	65
	Operating Current (Max)		A	–	6.8	9.6	13.5	14.8
	Breaker Size		A	–	10	10	16	16
Ext. Piping	Diameter	Liquid/Gas	mm	–	6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7
	Max.Length	Out-In	m	–	20	20	20	30
	Max.Height	Out-In	m	–	12	12	12	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	–	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	–	-15 ~ +24	-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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

MSZ-A SERIES

R32 Single / Multi

R410A Multi

Introducing a compact and stylish indoor unit with various capacity, designed to match number of rooms. High performance indoor and outdoor units enabled to achieve "Rank A^{+++}" for SEER. *MSZ-AP25/35VG

GOOD DESIGN

MSZ-AP15/20VF

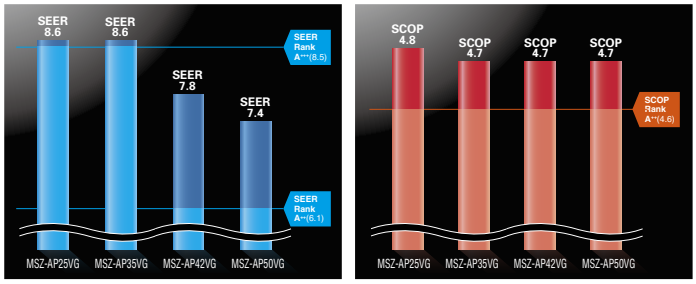
MSZ-AP25/35/42/50VG

reddot award 2018 winner

High energy saving

25/35 SEER A^{+++} 25-50 SCOP A^{++}

All models in the series, from the low-capacity 25 to the high-capacity 50, have achieved either the "Rank A^{+++}" or "Rank A^{++}" for SEER and SCOP as energy-savings rating. Our air conditioners are contributing to reduce energy consumption in a wide range.

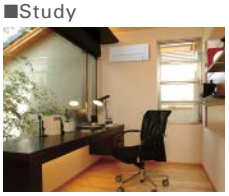


Compact and stylish

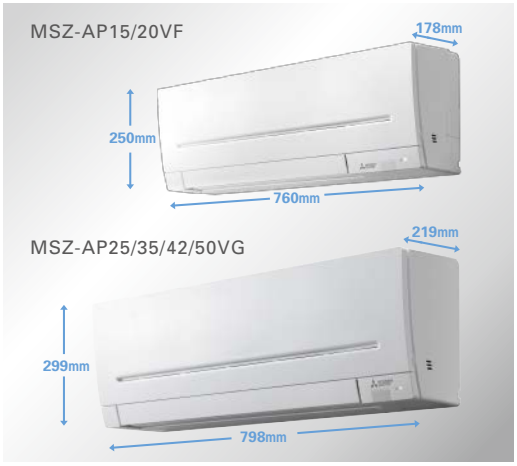
15/20 class are for multi-systems and 25-50 class are introduced as single-split and multi-systems. From small rooms to living rooms, it is possible to coordinate residences with a unified design.

■Living

■Study

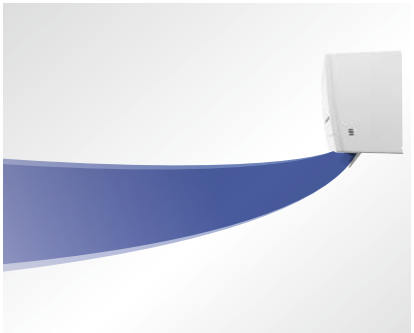


■Bedroom



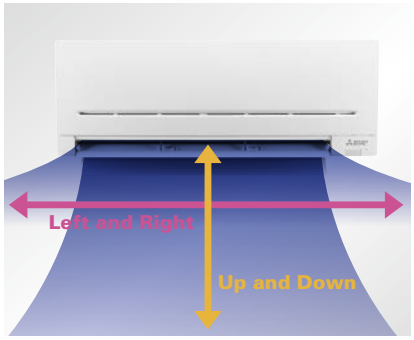
Evolved comfortable convenience function

Horizontal Airflow



The new airflow control which spreads across the ceiling eliminates the uncomfortable drafty feeling.

Auto Vane Control

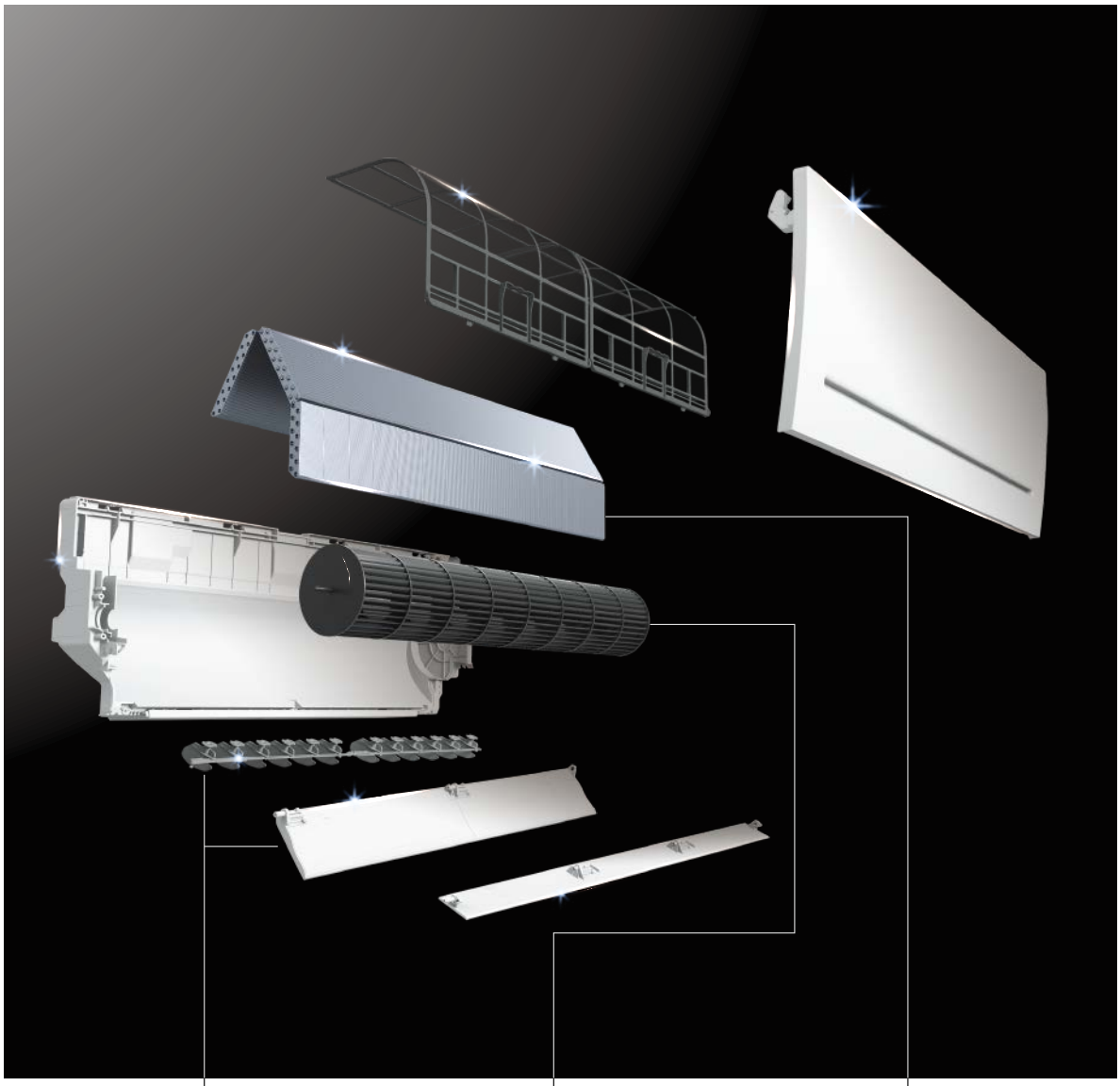


Auto vanes can be moved left and right, and up and down using the remote controller.

The Function

*Only for 25/35/42/50 models.

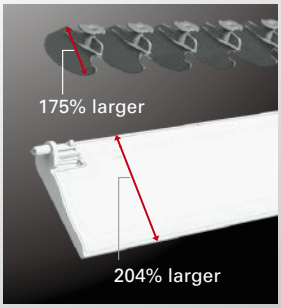
High performance and compact size are realised by refining all parts



Comfort

Vertical and Horizontal Vane

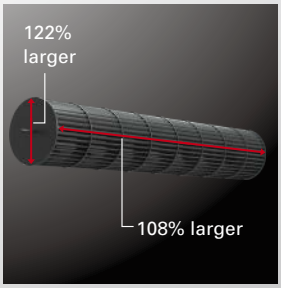
New vertical and horizontal vanes are double the size of the previous model, improving airflow control elaborately.



High Performance

Line Flow Fan

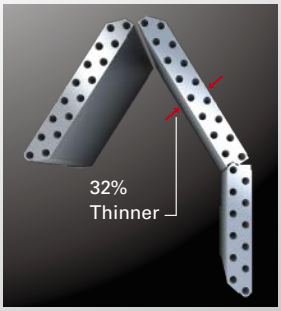
New line flow Fan is 122% larger and 108% wider than the previous model, leading to higher aerodynamic performance. Also, same sound level as the previous model.



High Performance

Heat Exchanger

New ø5 Heat exchanger enables to realise 32% thinner depth than the previous model. It realises low pressure loss leading to high performance.



"Weekly Timer"

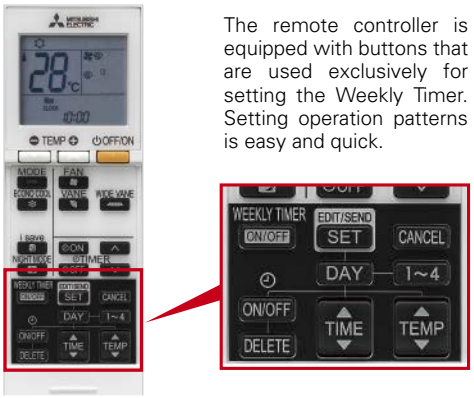
Easily set desired temperatures and operation start/stop times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ Example Operation Pattern (Winter/Heating mode)

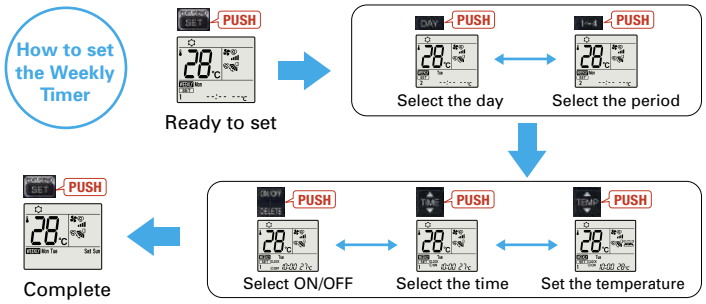
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00	Automatically turned off during work hours					Midday is warmer, so the temperature 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



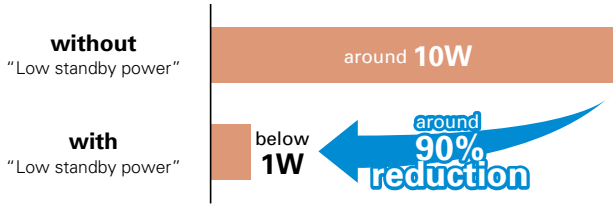
The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



- 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. (only for 15/20 models)

Low Standby Power

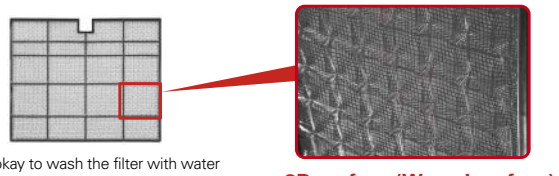
Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



Air Purifying Filter

(MSZ-AP25/35/42/50)

This filter generates 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 Air Purifying Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort yet another level.

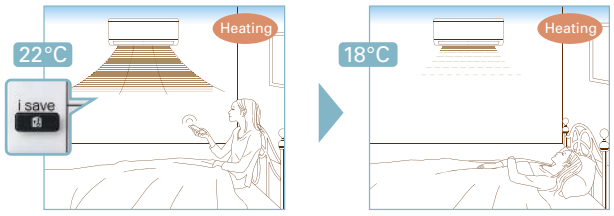


✻ It is okay to wash the filter with water (air-cleaning effect is maintained)

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. (only for 15/20 models)

Outdoor Units for Cold Region

(MSZ-AP25/35/42/50)

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.

MUZ-AP25/35/42VG MUZ-AP50VG MUZ-AP25/35/42VGH MUZ-AP50VGH

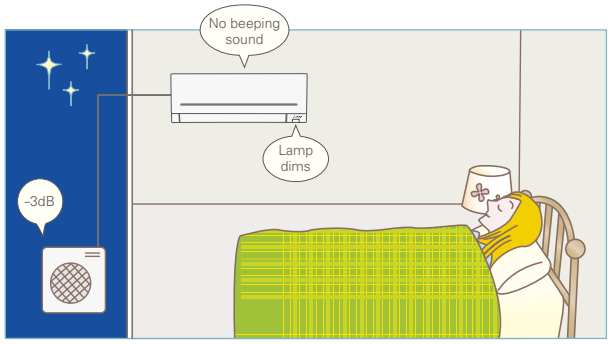
Night Mode

(MSZ-AP25/35/42/50)

When Night Mode is activated using the wireless remote controller, air conditioner operation will switch to the following settings.

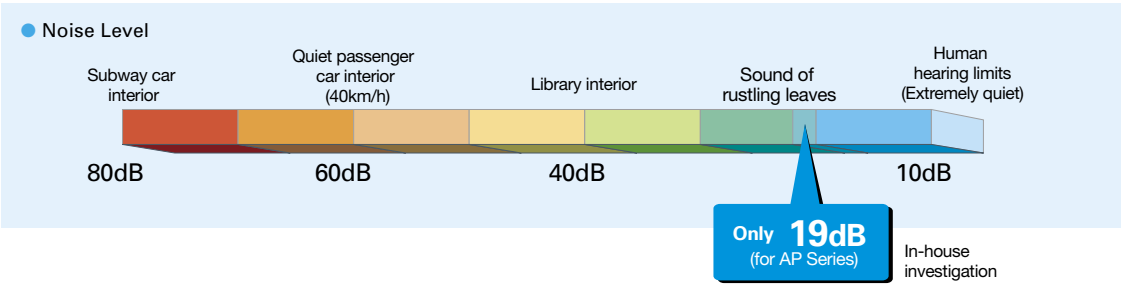
- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated operating noise specification.

*The cooling/heating capacity may drop.



Quiet Operation

The indoor unit noise level is as low as 19dB for AP Series, offering a peaceful inside environment.



Built-in Wi-Fi Interface

(MSZ-AP25/35/42/50VGK)

The indoor unit is equipped with a Wi-Fi Interface inside an exclusive pocket in the unit.
This eliminates the need to install a Wi-Fi interface, and also contributes to the beautiful appearance since the interface is hidden.

MSZ-A SERIES

Indoor Unit

R32 R410A

MSZ-AP15/20VF

reddot award 2018 winner

Outdoor Unit

For MXZ Connection Only

Remote Controller

Econo Cool | Natural 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-AP15VF	MSZ-AP20VF	MSZ-AP25VG(K)	MSZ-AP25VG(K)	MSZ-AP35VG(K)	MSZ-AP35VG(K)
Outdoor Unit				for MXZ connection		MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH
Refrigerant				Single: R32(*1) / Multi: R410A or R32(*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	-	-	101	101	142	142
	SEER (*4)			-	-	8.6	8.6	8.6	8.6
		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	0.990	0.990
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	-	-	2.4 (-15°C)	2.2 (-20°C)	2.6 (-15°C)	2.4 (-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	-	-	698	703	862	873
	SCOP (*4)			-	-	4.8	4.7	4.7	4.6
		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	-	-	7.1	7.1	8.5	8.5
Indoor Unit	Input	Rated	kW	0.017	0.019	0.026	0.026	0.026	0.026
	Operating Current(Max)		A	0.17	0.19	0.3	0.3	0.3	0.3
	Dimensions	H*W*D	mm	250-760-178	250-760-178	299-798-219	299-798-219	299-798-219	299-798-219
	Weight		kg	8.2	8.2	10.5	10.5	10.5	10.5
	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	4.9 - 5.9 - 7.1 - 8.7 - 11.4	4.9 - 5.9 - 7.1 - 8.7 - 11.4	4.9 - 5.9 - 7.1 - 8.7 - 11.4	4.9 - 5.9 - 7.1 - 8.7 - 11.4
		Heating	m^3/min	3.7 - 4.4 - 5.0 - 6.0 - 6.8	3.7 - 4.4 - 5.0 - 6.0 - 7.3	4.9 - 5.9 - 7.3 - 8.9 - 12.9	4.9 - 5.9 - 7.3 - 8.9 - 12.9	4.9 - 5.9 - 7.3 - 8.9 - 12.9	4.9 - 5.9 - 7.3 - 8.9 - 12.9
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19 - 24 - 30 - 36 - 42	19 - 24 - 30 - 36 - 42	19 - 24 - 30 - 36 - 42	19 - 24 - 30 - 36 - 42
		Heating	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19 - 24 - 34 - 39 - 45	19 - 24 - 34 - 39 - 45	19 - 24 - 31 - 38 - 45	19 - 24 - 31 - 38 - 45
	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	-	-	32.2	32.2	32.2	32.2
		Heating	m^3/min	-	-	29.8	29.8	33.8	33.8
	Sound Level (SPL)	Cooling	dB(A)	-	-	47	47	49	49
		Heating	dB(A)	-	-	48	48	50	50
	Sound Level (PWL)	Cooling	dB(A)	-	-	59	59	61	61
	Operating Current (Max)		A	-	-	6.8	6.8	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

MSZ-A SERIES

EUROVENT CERTIFIED PERFORMANCE

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

Indoor Unit

R32 R410A

GOOD DESIGN

MSZ-AP25/35/42/50VG(K)

✻VGK model Wi-Fi Interface built-in.

reddot award 2018 winner

Outdoor Unit

R32

MUZ-AP25/35/42VG(H)

MUZ-AP50VG(H)

Remote Controller

Econo Cool | Natural White | AUTO VANE | Silver-ion (Optional) | Air Purifying | SWING | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart | Low Temp Cooling | (Optional) | Group Control (Optional)

M-NET connection (Optional) | Wi-Fi Interface (VGK model) | MXZ connection | 10°C | (Indoor) | Night | Cleaning-free pipe reuse | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump			
Indoor Unit				MSZ-AP42VG(K)	MSZ-AP42VG(K)	MSZ-AP50VG(K)	MSZ-AP50VG(K)
Outdoor Unit				MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH
Refrigerant				Single: R32(*1) / Multi: R410A or R32(*1)			
Power Supply	Source			Outdoor Power supply			
	Outdoor (V / Phase / Hz)			230/Single/50			
Cooling	Design load		kW	4.2	4.2	5.0	5.0
	Annual electricity consumption (*2)		kWh/a	188	188	236	236
	SEER (*4)			7.8	7.8	7.4	7.4
		Energy efficiency class		A++	A++	A++	A++
	Capacity	Rated	kW	4.2	4.2	5.0	5.0
		Min-Max	kW	0.9-4.5	0.9-4.5	1.4-5.4	1.4-5.4
	Total Input	Rated	kW	1.300	1.300	1.550	1.550
Heating (Average Season)(*5)	Design load		kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-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)
		at bivalent temperature	kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)
		at operation limit temperature	kW	4.2 (-15°C)	3.8 (-20°C)	4.7 (-15°C)	4.2 (-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	1120	1134	1250	1275
	SCOP (*4)			4.7	4.6	4.7	4.6
		Energy efficiency class		A++	A++	A++	A++
	Capacity	Rated	kW	5.4	5.4	5.8	5.8
		Min-Max	kW	1.3-6.0	1.3-6.0	1.4-7.3	1.4-7.3
	Total Input	Rated	kW	1.490	1.490	1.600	1.600
Operating Current (Max)			A	9.9	9.9	13.6	13.6
Indoor Unit	Input	Rated	kW	0.032	0.032	0.032	0.032
	Operating Current(Max)		A	0.3	0.3	0.3	0.3
	Dimensions	H*W*D	mm	299-798-219	299-798-219	299-798-219	299-798-219
	Weight		kg	10.5	10.5	10.5	10.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))(Dry/Wet))	Cooling	m^3/min	5.4 - 6.5 - 7.7 - 9.3 - 11.4	5.4 - 6.5 - 7.7 - 9.3 - 11.4	6.0 - 7.2 - 8.4 - 10.0 - 12.6	6.0 - 7.2 - 8.4 - 10.0 - 12.6
		Heating	m^3/min	5.3 - 6.1 - 7.7 - 9.4 - 14.0	5.3 - 6.1 - 7.7 - 9.4 - 14.0	5.6 - 6.5 - 8.2 - 10.0 - 14.0	5.6 - 6.5 - 8.2 - 10.0 - 14.0
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	21 - 29 - 34 - 38 - 42	21 - 29 - 34 - 38 - 42	28 - 33 - 36 - 40 - 44	28 - 33 - 36 - 40 - 44
		Heating	dB(A)	21 - 29 - 35 - 40 - 45	21 - 29 - 35 - 40 - 45	28 - 33 - 38 - 43 - 48	28 - 33 - 38 - 43 - 48
	Sound Level (PWL)	Cooling	dB(A)	57	57	58	58
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	714-800-285	714-800-285
	Weight		kg	35	35	40	40
	Air Volume	Cooling	m^3/min	30.4	30.4	40.5	40.5
		Heating	m^3/min	32.7	32.7	40.5	40.5
	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52
		Heating	dB(A)	51	51	52	52
	Sound Level (PWL)	Cooling	dB(A)	61	61	64	64
	Operating Current (Max)		A	9.6	9.6	13.3	13.3
	Breaker Size		A	10	10	16	16
Ext. Piping	Diameter	Liquid/Gas	mm	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

霧ヶ峰 KIRIGAMINE

R410A
Single / Multi

MSZ-FH25/35/50VE2

GOOD DESIGN

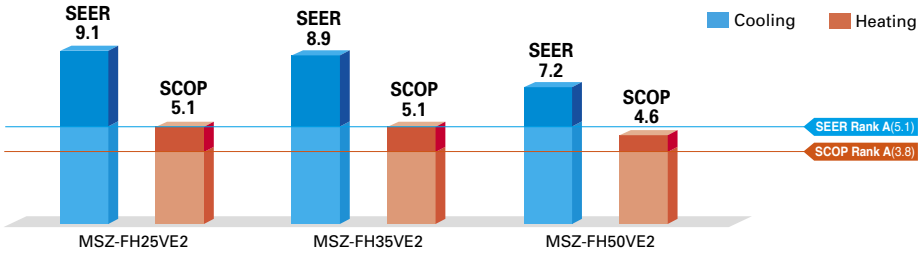
MSZ-F SERIES

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).

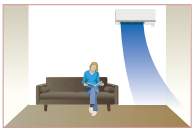


3D i-see Sensor

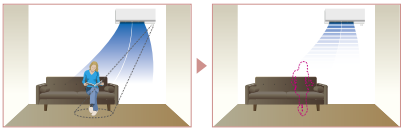
The FH Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge 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.

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.



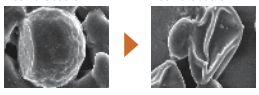
The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

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.

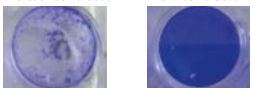
Plasma Quad off　Plasma Quad on



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

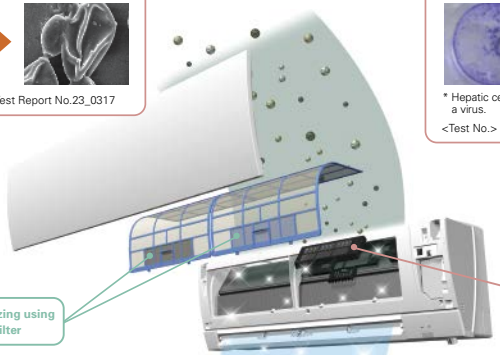
Viruses
Test results have confirmed that Plasma Quad neutralizes 99% of virus particles in 65 minutes in a 25m³ test space.

Without Plasma Quad　With Plasma Quad

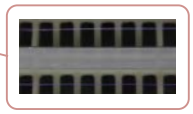


* Hepatic cells turn transparent when affected by a virus.

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



Effective deodorizing using the air-purifying filter



(Image)

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

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 R410A

GOOD DESIGN

MSZ-FH25/35/50VE2

Outdoor Unit R410A

MUZ-FH25/35VE

MUZ-FH50VE

Remote Controller

3D i-see Sensor | AREA | HUMAN | Econo Cool | Pure White | AUTO VANE | Plasma Quad | Silver-ion | Double Vane | 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 reuse | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-FH25VE2	MSZ-FH35VE2	MSZ-FH50VE2
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	9.2	9.6	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

KIRIGAMINE ZEN 禅

R32 Multi

R410A Single / Multi

MSZ-E SERIES

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

MSZ-EF18-50VE3B

reddot award 2015 winner

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

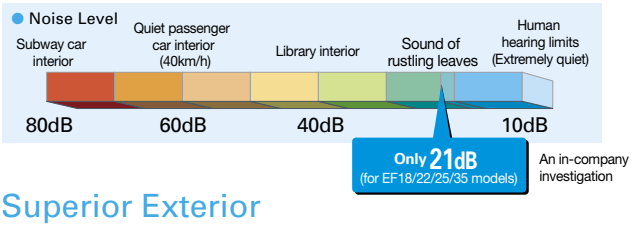
All models in the series have achieved high energy-savings rating, and are contributing to reduced energy consumption in homes, offices and a range of other settings. Offered in a variety of output capacities and installation patterns, the vast applicability promises an ideal match for any user.

Indoor \ Outdoor	Rank A for single connection	Compatibility								
	MUZ-EF25/35VE(H) MUZ-EF42/50VE	MXZ								
		2D33VA	2D42VA2	2D53VA2	3E54VA	3E68VA	4E72VA	4E83VA	5E102VA	6D122VA
MSZ-EF18VE3	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF22VE3	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF25VE3	A+++/A++(A++*)	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF35VE3	A+++/A++(A+*)		✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF42VE3	A++/A++			✓	✓	✓	✓	✓	✓	✓
MSZ-EF50VE3	A++/A+			✓	✓	✓	✓	✓	✓	✓

*VEH

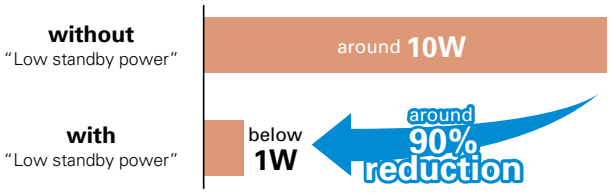
Quiet Comfort All Day Long

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.



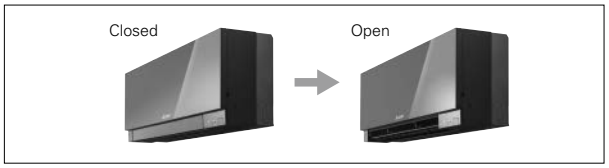
Low Standby Power

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.



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.



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

R32 R410A

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

R410A

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

MUZ-EF50VE

Remote Controller

Econo Cool | AUTO VANE | Silver-ion | Air Purifying | 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-EF18VE3	MSZ-EF22VE3	MSZ-EF25VE3	MSZ-EF25VE3	MSZ-EF35VE3	MSZ-EF35VE3	MSZ-EF42VE3	MSZ-EF50VE3
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	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

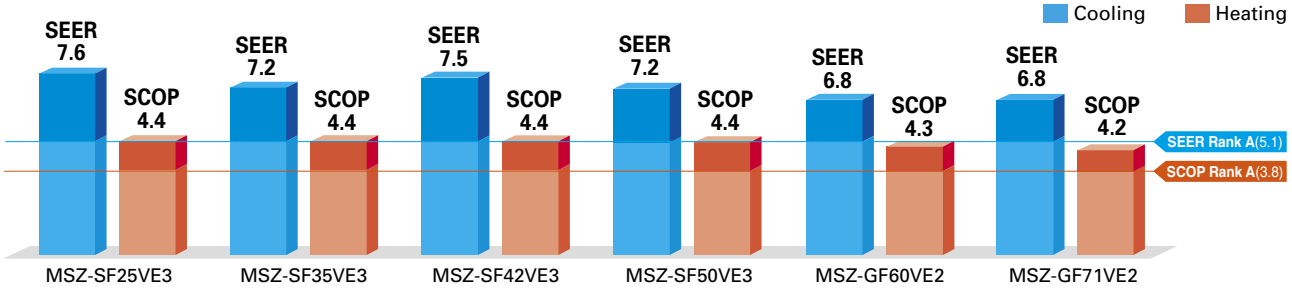
MSZ-S SERIES
MSZ-G SERIES

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.

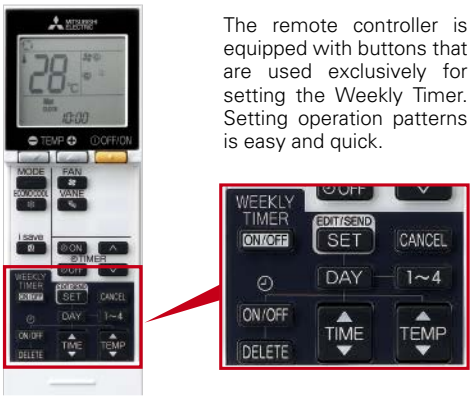
■ **Example Operation Pattern (Winter/Heating mode)**

	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						

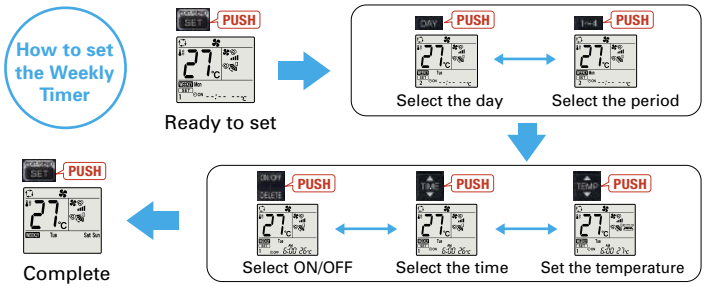
Settings

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



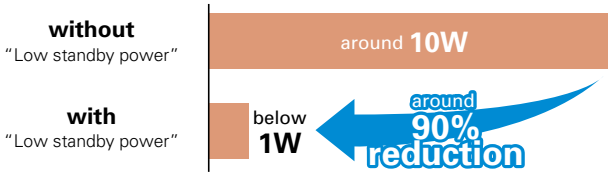
The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



- 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.

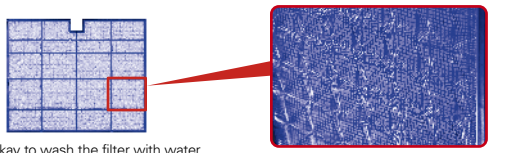
Low Standby Power

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 (MSZ-SF25/35/42/50,MSZ-GF60/71)

This filter generates 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 Air Purifying Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort yet another level.

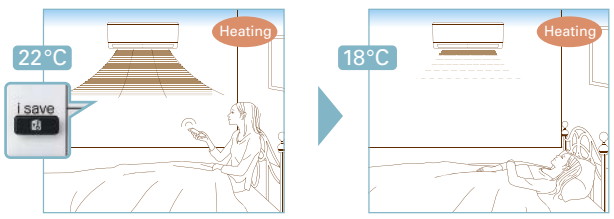


✻ It is okay to wash the filter with water (air-cleaning effect is maintained)

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.

MSZ-S SERIES

DC Inverter

Indoor Unit

R410A

GOOD DESIGN

MSZ-SF15/20VA

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-SF25VE3	MSZ-SF25VE3	MSZ-SF35VE3	MSZ-SF35VE3
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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 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

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

Indoor Unit R410A

MSZ-SF25/35/42/50VE3

MSZ-GF60/71VE2

Outdoor Unit R410A

MUZ-SF25/35/42VE(H)

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

Remote Controller

Econo Cool · Pure White · AUTO VANE · Silver-ion (Optional) · Air Purifying · 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-SF42VE3	MSZ-SF42VE3	MSZ-SF50VE3	MSZ-SF50VE3	MSZ-GF60VE2	MSZ-GF71VE2
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	5.0	5.0	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	5.0	5.0	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	1.580	1.700	1.700	1.810	2.230
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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 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).

R410A

MSZ-WN25/35VA

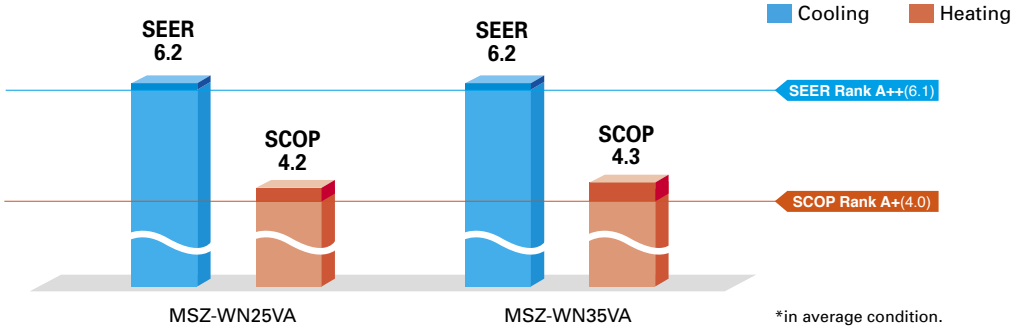
MSZ-W SERIES

Introducing a stylish indoor unit with high-performance air purifying filters. Wi-Fi and system controller connectivity, and a heating operation range down to –15°C contribute to greater room comfort.

Advanced Inverter Control – Efficient Operation All the Time

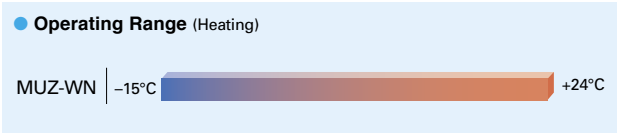
DC Inverter | 25/35 SEER A++ | 25/35 SCOP A+

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+".



Wider Heating Operating Range

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

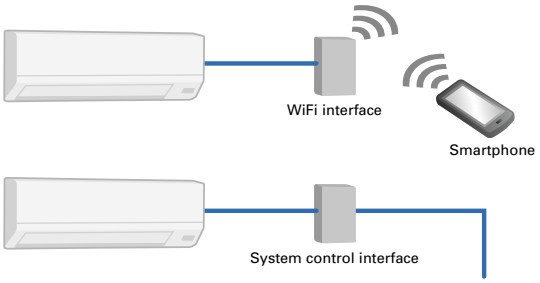


Wi-Fi and System Control

Wi-Fi Interface (Optional)
Optional interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.

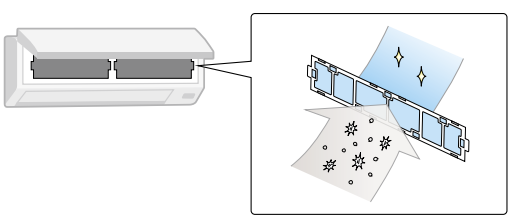
System Control Interface (Optional)
- Remote on/off operation is possible by input to the connector.
- Depending on the interface used, connecting a wired remote-control such as the PAR-32MAA is possible.
- Centralized control is possible when connected to M-NET.

*Wi-Fi Interface and System Control Interface cannot be used simultaneously.



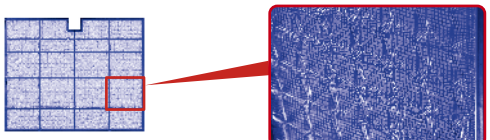
Silver-ionized Air Purifying Filter

The high performance filter is attached as standard. Captures the bacteria, pollen and other allergens in the air and neutralises them.



Air Purifying Filter

This filter generates 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 Air Purifying Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort yet another level.



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

3D surface (Waved surface)

MSZ-W SERIES

EUROVENT CERTIFIED PERFORMANCE

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

Indoor Unit R410A

MSZ-WN25/35VA

Outdoor Unit R410A

MUZ-WN25/35VA

Remote Controller

Econo Cool | Pure White | AUTO VANE | Silver-ion | SWING | AUTO | Auto Restart | Low Temp Cooling | Optional | Centralised On/Off Optional | Group Control Optional | Wi-Fi Interface Optional | Cleaning-free pipe route | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump	
Indoor Unit				MSZ-WN25VA	MSZ-WN35VA
Outdoor Unit				MUZ-WN25VA	MUZ-WN35VA
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	141	173
	SEER (*4)			6.2	6.2
		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	0.710	1.020
Heating (Average Season)(*5)	Design load		kW	1.9(-10ºC)	2.4(-10ºC)
	Declared Capacity	at reference design temperature	kW	1.9(-10ºC)	2.4(-10ºC)
		at bivalent temperature	kW	1.9(-10ºC)	2.4(-10ºC)
		at operation limit temperature	kW	1.6(-15ºC)	2.0(-15ºC)
	Back up heating capacity		kW	0.0(-10ºC)	0.0(-10ºC)
	Annual electricity consumption (*2)		kWh/a	628	793
	SCOP (*4)			4.2	4.3
		Energy efficiency class		A+	A+
	Capacity	Rated	kW	3.15	3.60
		Min-Max	kW	0.9 - 3.5	1.1 - 4.1
	Total Input	Rated	kW	0.850	0.975
Operating Current (Max)			A	5.8	6.5
Indoor Unit	Input	Rated	kW	0.020	0.026
	Operating Current(Max)		A	0.3	0.3
	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 - 11.4
		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 - 46
		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	52
		Heating	dB(A)	50	52
	Sound Level (PWL)	Cooling	dB(A)	63	64
	Operating Current (Max)		A	5.5	6.2
	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	℃	-10 ~ +46	-10 ~ +46
		Heating	℃	-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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

R410A

MSZ-DM25/35VA

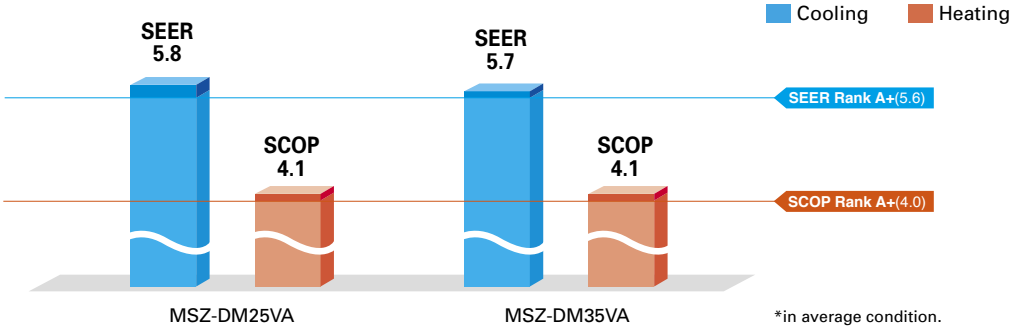
MSZ-D SERIES

Compact, high-performance indoor and outdoor units equipped with high-performance air purifying filters contribute to greater room comfort. Wi-Fi and system controller connectivity enable enhanced expandability.

Advanced Inverter Control – Efficient Operation All the Time

DC Inverter | 25/35 SEER A+ | 25/35 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+".



Wider Cooling Operating Range

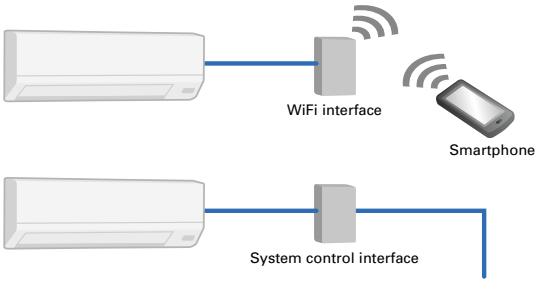
As a result of an extended operating range in cooling, these models accommodate a wider range of usage environments and applications than previous models.

Wi-Fi and System Control

Wi-Fi Interface (Optional)
Optional interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.

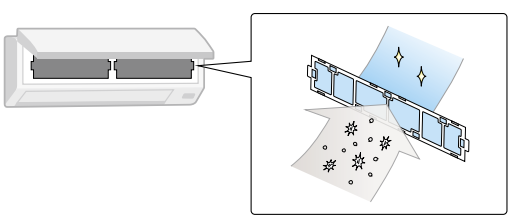
System Control Interface (Optional)
- Remote on/off operation is possible by input to the connector.
- Depending on the interface used, connecting a wired remote-control such as the PAR-32MAA is possible.
- Centralized control is possible when connected to M-NET.

*Wi-Fi Interface and System Control Interface cannot be used simultaneously.



Silver-ionized Air Purifying Filter

The high performance filter is attached as standard. Captures the bacteria, pollen and other allergens in the air and neutralises them.



Compact Units

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

Indoor Unit: MSZ-DM25VA

Only 799mm width

Outdoor Unit: MUZ-DM25/35VA

Only 699mm width

MSZ-D SERIES

EUROVENT CERTIFIED PERFORMANCE

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

Indoor Unit R410A

MSZ-DM25/35VA

Outdoor Unit R410A

MUZ-DM25/35VA

Remote Controller

Econo Cool | Pure White | AUTO VANE | Silver-ion | SWING | AUTO | Auto Restart | Low Temp Cooling | Optional | Centralised On/Off Optional | Group Control Optional | Wi-Fi Interface Optional | MXZ connection MXZ-DM only | Cleaning-free pipe route | Flare connection | Self Diagnosis | Failure Recall

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	149	190
	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	0.710	1.020
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	647	809
	SCOP (*4)			4.1	4.1
		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	0.850	0.975
Operating Current (Max)			A	5.8	6.5
Indoor Unit	Input	Rated	kW	0.020	0.024
	Operating Current(Max)		A	0.3	0.3
	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	5.5	6.2
	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 for heating (warmer season) specifications.

R410A

MSZ-HJ25/35/50VA

MSZ-HJ60/71VA

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.

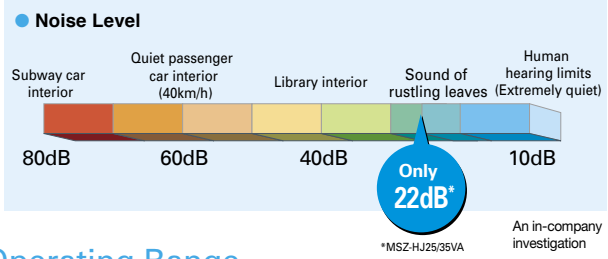
Advanced Inverter Control – Efficient Operation All the Time

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.



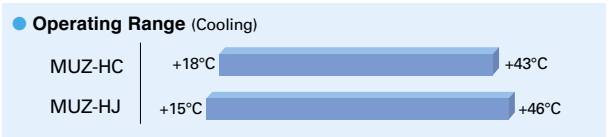
Long Piping Length

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.

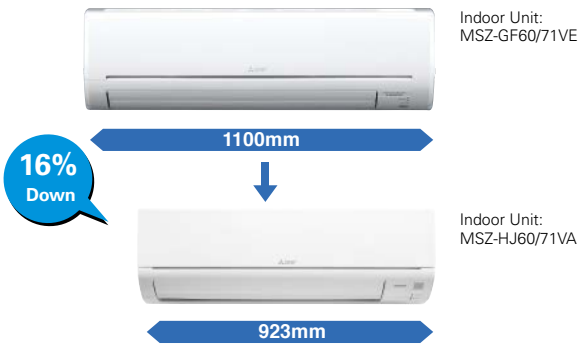
Indoor Unit: MSZ-HJ25/35/50VA

Only 799mm width

Outdoor Unit: MUZ-HJ25/35VA

Only 699mm width

Compared to other 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 R410A

MSZ-HJ25/35/50VA

MSZ-HJ60/71VA

Outdoor Unit R410A

MUZ-HJ25/35VA

MUZ-HJ50VA

MUZ-HJ60/71VA

Remote Controller

Econo Cool | Pure White | AUTO VANE | Silver-ion (Optional) | SWING | AUTO | Auto Restart | Cleaning-free pipe route | Flare connection | Self Diagnosis | Failure Recall | MXZ connection (25 / 35 / 50 MXZ-DM only)

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	0.024	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	12.0	12.0
	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 63 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.

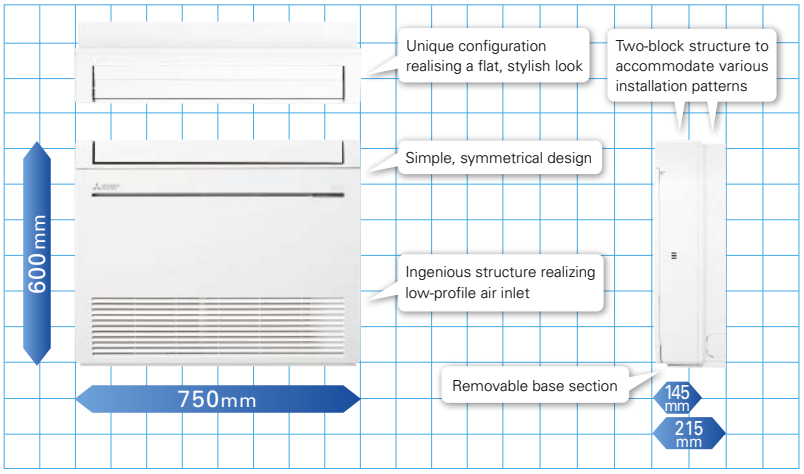
R410A

MFZ-KJ25/35/50VE2

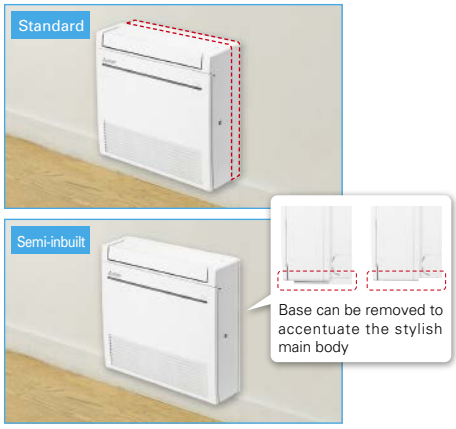
GOOD DESIGN

Simple , Flat Design

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



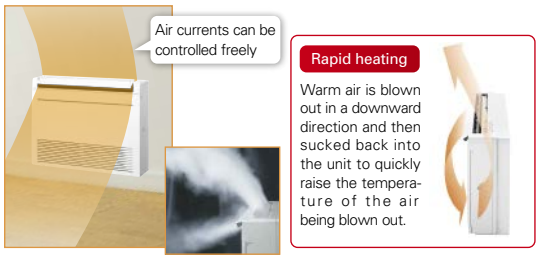
Images of installed unit



Multi-flow Vane

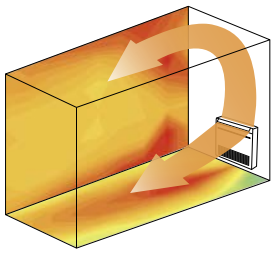
Three uniquely shaped vanes control the airflow and allow the freedom to customize comfort according to preferences.

When heating

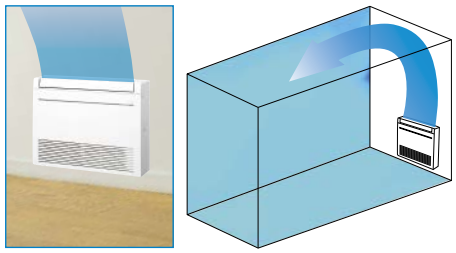


Rapid heating

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

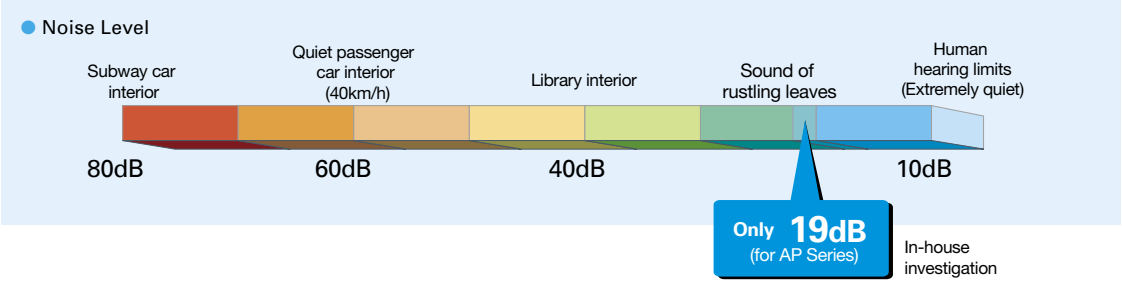
SEER A+++ (25) and SCOP A+ (25/35/50) ratings have been achieved through development focusing on compliance with European energy-related product (ErP) regulations.

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.

Quiet Operation

The indoor unit noise level is as low as 19dB for MFZ Series, offering a peaceful inside environment.



MFZ-KJ SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | DC Fan Motor | PAM | Grooved Piping | SEER 25 A+++ | SCOP A+

Indoor Unit R410A

GOOD DESIGN

MFZ-KJ25/35/50VE2

Outdoor Unit R410A

MUFZ-KJ25/35VE

MUFZ-KJ50VE

Remote Controller

Econo Cool | Pure White | AUTO VANE | Silver-ion | Air Purifying | 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-KJ25VE2	MFZ-KJ35VE2	MFZ-KJ50VE2
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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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

R32 Multi

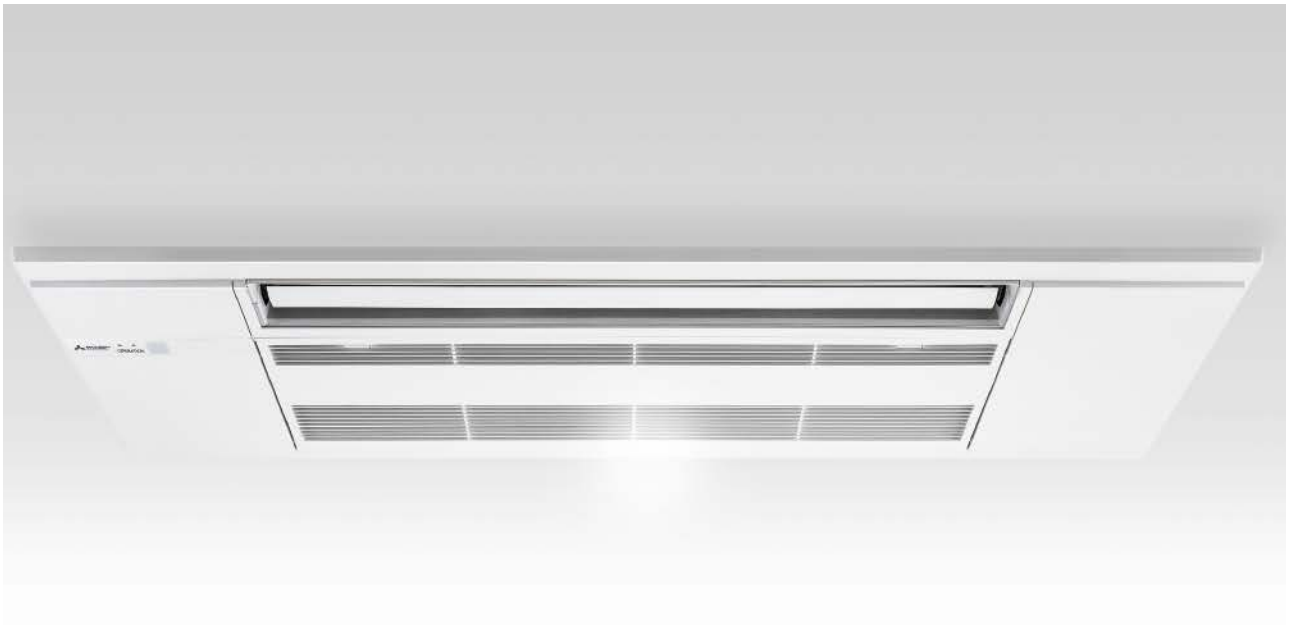
R410A Multi

MLZ-KP25/35/50VF

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

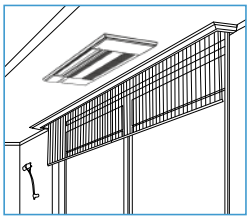
Slim Design

Industry leading slim body realized a simple design with linear beauty.



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 185mm 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.

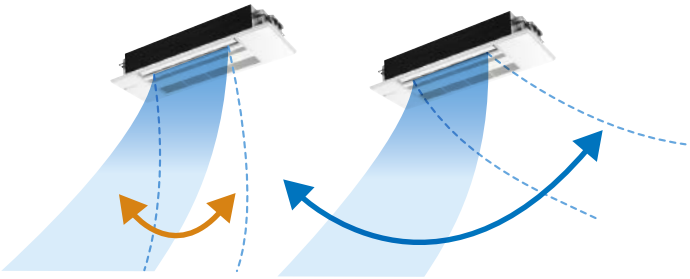
Set Airflow According to Ceiling Height

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.



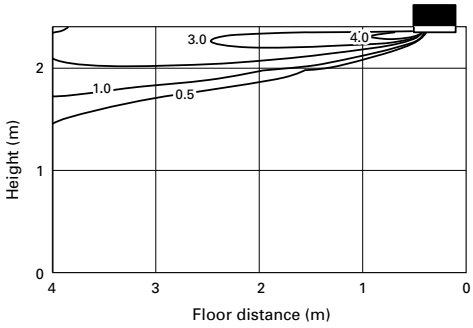
Up and Down **Left and Right**

✻Only available when Econo Cool is set.

Horizontal Airflow

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.

[Horizontal Airflow]
Model name: MLZ-KP35VF
Ceiling height: 2.4m
Model: Cooling



Weekly Timer Built-in Weekly Timer Function

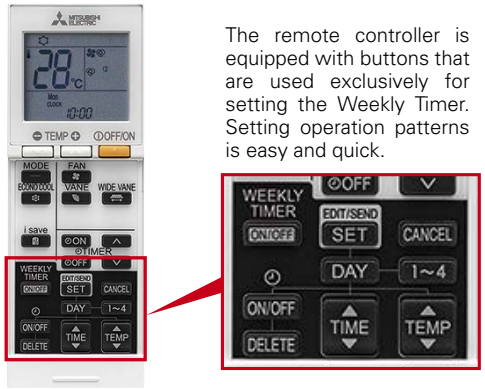
Easily set desired temperatures and operation ON/OFF times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ Example Operation Pattern (Winter/Heating mode)

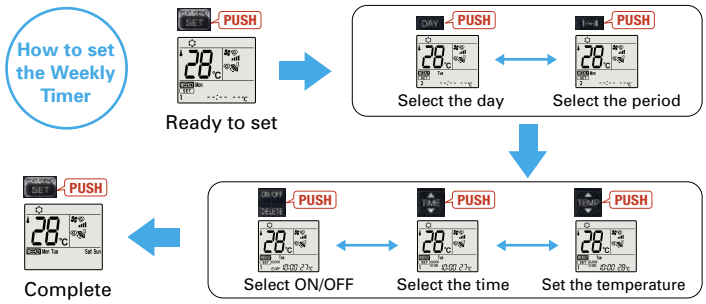
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00							
14:00	Automatically turned off during work hours					Midday is warmer, so the temperature is set lower	
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 10°C	ON 10°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.

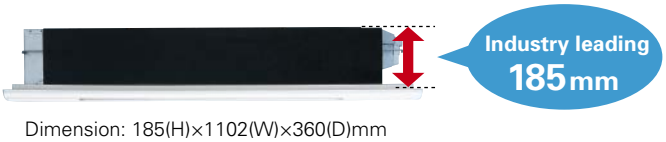


- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired 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.

Easy Installation

Industry leading Slim Body

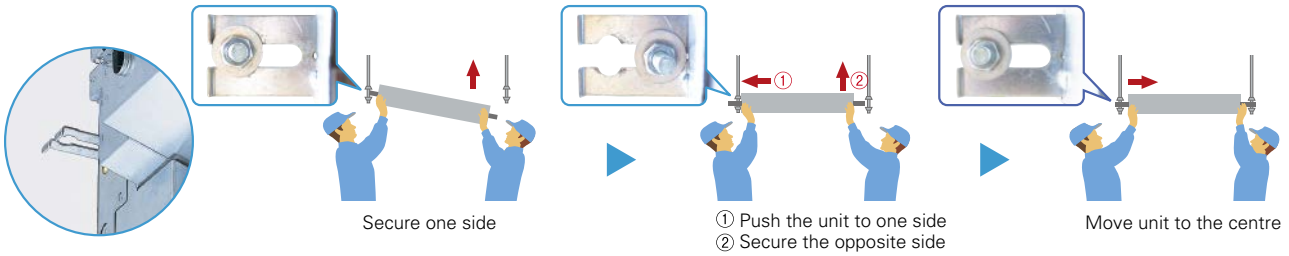
Inovative size which enables to fold the refrigerant piping above the unit.



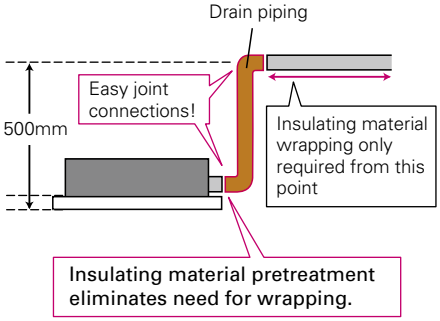
Dimension: 185(H)×1102(W)×360(D)mm

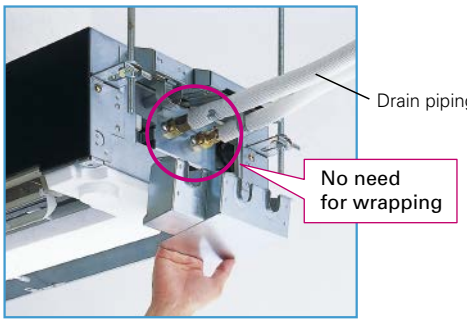
Temporary hanging hook

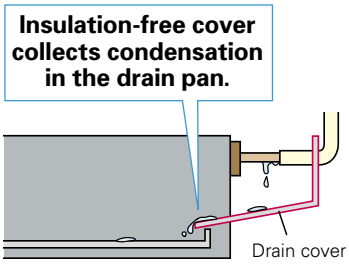
Work efficiency has improved during installation.



Drain Piping Supporters + Drain Cover

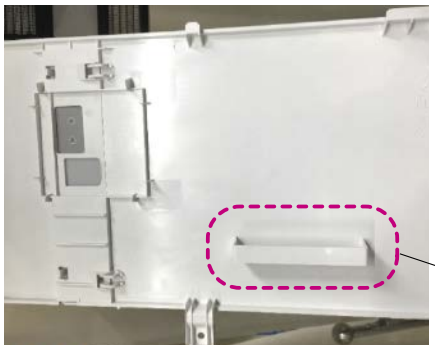






Wi-Fi Interface Installation (Optional)

The indoor unit panel is equipped with a Wi-Fi Interface pocket, contributing to the beautiful appearance, easy installation, and maintenance.



MLZ-KP SERIES

DC Inverter

Indoor Unit

R32 R410A

MLZ-KP25/35/50VF

Panel

MLP-444W

Outdoor Unit

For Multi Connection Only

Remote Controller

Econo Cool | AUTO VANE | Silver-ion | Air Purifying | SWING (Optional) | High Ceiling | AUTO | Weekly Timer | ACO | Auto Restart | Optional | Group Control (Optional) | M-NET connection (Optional) | Wi-Fi Interface (Optional) | MXZ connection

10°C | Night | Drain Lift Up | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MLZ-KP25VF	MLZ-KP35VF	MLZ-KP50VF
Outdoor Unit				for Multi connection		
Refrigerant				R410A / R32(*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	0.40	0.40	0.40
Indoor Unit	Input	Rated	kW	0.040	0.040	0.040
	Operating Current(Max)		A	-	-	-
	Dimensions	H*W*D	mm	185-1102-360	185-1102-360	185-1102-360
	Weight		kg	15.5	15.5	15.5
	Air Volume (SLo-Lo-Mid-Hi(*3))(Dry/Wet))	Cooling	m^3/min	6.0-7.2-8.0-8.8	6.0-7.3-8.4-9.4	6.0-8.3-9.8-11.4
		Heating	m^3/min	6.0-7.0-8.2-9.2	6.0-7.7-8.8-9.9	6.0-8.8-10.3-11.8
	Sound Level (SPL) (SLo-Lo-Mid-Hi(*3))	Cooling	dB(A)	27-31-34-38	27-32-36-40	29-36-41-47
		Heating	dB(A)	26-27-34-37	29-32-36-40	26-37-42-48
	Sound Level (PWL)	Cooling	dB(A)	52	53	59
Panel	Dimensions	H*W*D	mm	24-1200-424	24-1200-424	24-1200-424
	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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/Colder Condition

Type				Inverter Heat Pump						
Indoor Unit				MSZ-LN25VG		MSZ-LN35VG		MSZ-LN50VG		MSZ-LN60VG
Outdoor Unit				MUZ-LN25VG	MUZ-LN25VGHZ	MUZ-LN35VG	MUZ-LN35VGHZ	MUZ-LN50VG	MUZ-LN50VGHZ	MUZ-LN60VG
Refrigerant				R32 [*3]						
Cooling	**Design load**		kW	2.5	2.5	3.5	3.5	5	5.0	6.1
	Annual electricity consumption [*2]		kWh/a	83	83	128	130	205	230	285
	SEER			10.5	10.5	9.5	9.4	8.5	7.6	7.5
		Energy efficiency class		A^{+++}	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)	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)	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)	3.3 (2°C)
		at operation limit temperature	kW	2.5 (−15°C)	2.3 (-25°C)	3.2 (-15°C)	3.1 (-25°C)	4.2 (-15°C)	4.7 (-25°C)	6.0 (-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)	0.0 (2°C)
	Annual electricity consumption [*2]		kWh/a	358	374	412	466	602	779	779
	SCOP			6.6	6.7	6.7	6.6	5.8	5.9	5.9
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}
Heating (Colder Season)	**Design load**		kW	—	4.7 (-22°C)	—	5.9 (-22°C)	—	8.8 (-22°C)	—
	Declared Capacity	at reference design temperature	kW	—	2.6 (-22°C)	—	3.4 (-22°C)	—	5.1 (-22°C)	—
		at bivalent temperature	kW	—	3.2 (-10°C)	—	4.0 (-10°C)	—	6.0 (-10°C)	—
		at operation limit temperature	kW	—	2.3 (-25°C)	—	3.1 (-25°C)	—	4.7 (-25°C)	—
	Back up heating capacity		kW	—	2.1 (-22°C)	—	2.5 (-22°C)	—	3.7 (-22°C)	—
	Annual electricity consumption [*2]		kWh/a	—	2425	—	3075	—	5340	—
	SCOP			—	4.0	—	4.0	—	3.4	—
		Energy efficiency class		—	A^{+}	—	A^{+}	—	A	—

Type				Inverter Heat Pump							
Indoor Unit				MSZ-AP25VG		MSZ-AP35VG		MSZ-AP42VG		MSZ-AP50VG	
Outdoor Unit				MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH	MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH
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-FH25VE2		MSZ-FH35VE2		MSZ-FH50VE2	
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-EF25VE3		MSZ-EF35VE3		MSZ-EF42VE3	MSZ-EF50VE3
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-SF25VE3		MSZ-SF35VE3		MSZ-SF42VE3		MSZ-SF50VE3	
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-GF60VE2	MSZ-GF71VE2	MSZ-WN25VA	MSZ-WN35VA
Outdoor Unit				MUZ-GF60VE	MUZ-GF71VE	MUZ-WN25VA	MUZ-WN35VA
Refrigerant				R410A (*1)			
Cooling	Design load		kW	6.1	7.1	2.5	3.1
	Annual electricity consumption (*2)		kWh/a	311	364	141	173
	SEER			6.8	6.8	6.2	6.2
		Energy efficiency class		A++	A++	A++	A++
Heating (Warmer Season)	Design load		kW	2.5 (2°C)	3.7 (2°C)	1.1 (2°C)	1.3 (2°C)
	Declared Capacity	At reference design temperature	kW	2.5 (2°C)	3.7 (2°C)	1.1 (2°C)	1.3 (2°C)
		at bivalent temperature	kW	2.5 (2°C)	3.7 (2°C)	1.1 (2°C)	1.3 (2°C)
		at operation limit temperature	kW	3.7 (−15°C)	5.4 (−15°C)	1.6 (−15°C)	2.0 (−15°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	664	963	304	362
	SCOP (*4)			5.3	5.4	5.0	5.0
		Energy efficiency class		A+++	A+++	A++	A++

Type				Inverter Heat Pump						
Indoor Unit				MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA	MSZ-DM25VA	MSZ-DM35VA
Outdoor Unit				MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA	MUZ-DM25VA	MUZ-DM35VA
Refrigerant				R410A (*1)						
Cooling	Design load		kW	2.5	3.1	5.0	6.1	7.1	2.5	3.1
	Annual electricity consumption (*2)		kWh/a	171	212	292	354	441	149	190
	SEER			5.1	5.1	6.0	6.0	5.6	5.8	5.7
		Energy efficiency class		A	A	A+	A+	A+	A+	A+
Heating (Warmer Season)	Design load		kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)	2.5 (2°C)	2.9 (2°C)	1.1 (2°C)	1.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)	2.5 (2°C)	2.9 (2°C)	1.1 (2°C)	1.3 (2°C)
		at bivalent temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)	2.5 (2°C)	2.9 (2°C)	1.1 (2°C)	1.3 (2°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)	1.9 (−10°C)	2.4 (−10°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)
	Annual electricity consumption (*2)		kWh/a	356	426	539	674	813	325	386
	SCOP			4.3	4.3	5.5	5.1	4.9	4.7	4.7
		Energy efficiency class		A+	A+	A+++	A+++	A++	A++	A++

Type				Inverter Heat Pump					
Indoor Unit				MFZ-KJ25VE2		MFZ-KJ35VE2		MFZ-KJ50VE2	
Outdoor Unit				MUFZ-KJ25VE	MUFZ-KJ25VEHZ	MUFZ-KJ35VE	MUFZ-KJ35VEHZ	MUFZ-KJ50VE	MUFZ-KJ50VEHZ
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	102	102	150	150	266	266
	SEER			8.5	8.5	8.1	8.1	6.5	6.5
		Energy efficiency class		A+++	A+++	A++	A++	A++	A++
Heating (Warmer Season)	Design load		kW	1.9 (2°C)	1.9 (2°C)	1.9 (2°C)	2.0 (2°C)	2.4 (2°C)	2.5 (2°C)
	Declared Capacity	at reference design temperature	kW	1.9 (2°C)	1.9 (2°C)	1.9 (2°C)	2.0 (2°C)	2.4 (2°C)	2.5 (2°C)
		at bivalent temperature	kW	1.9 (2°C)	1.9 (2°C)	1.9 (2°C)	2.0 (2°C)	2.4 (2°C)	2.5 (2°C)
		at operation limit temperature	kW	2.4 (−15°C)	1.6 (−25°C)	2.9 (−15°C)	2.3 (−25°C)	6.0 (−15°C)	3.3 (−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	511	490	499	510	579	603
	SCOP			5.1	5.4	5.3	5.4	5.8	5.7
		Energy efficiency class		A+++	A+++	A+++	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.
(*3) 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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.

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.

R32
R410A

GOOD DESIGN

Units without Remote Controller

SLZ-M15FA (Multi split series connection only)
SLZ-M25FA
SLZ-M35FA
SLZ-M50FA
SLZ-M60FA

Panel

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller
SLP-2FA			
SLP-2FAL	✓		
SLP-2FAE		✓	
SLP-2FALE	✓	✓	
SLP-2FALM	✓		✓
SLP-2FALME	✓	✓	✓

R32
R410A

Units without Remote Controller

SEZ-M25DA
SEZ-M35DA
SEZ-M50DA
SEZ-M60DA
SEZ-M71DA

Units with Wireless Remote Controller

SEZ-M25DAL
SEZ-M35DAL
SEZ-M50DAL
SEZ-M60DAL
SEZ-M71DAL

STEP 2 SELECT OUTDOOR UNIT

There is one outdoor unit for respective indoor units.

R410A

SUZ-KA25/35VA6

R410A

SUZ-KA50/60/71VA6

✻ 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 provide maximum comfort by evenly distributing airflow throughout the entire room.

R32
R410A

SLZ-M15/25/35/50/60FA

GOOD DESIGN

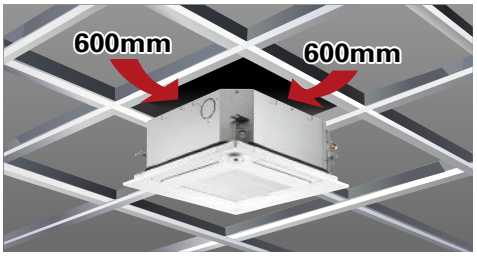
New lineup

1.5kW has been introduced for multi connection. The diverse selection enables the best solution for both customer and location.

Capacity	15	25	35	50	60
SLZ-KF		✓	✓	✓	✓
SLZ-M	✓	✓	✓	✓	✓

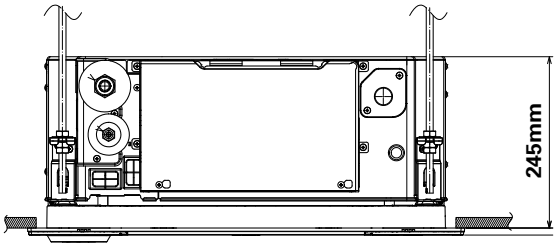
Beautiful design

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.



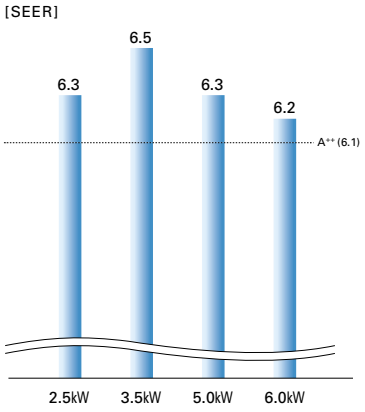
The height above ceiling of 245mm

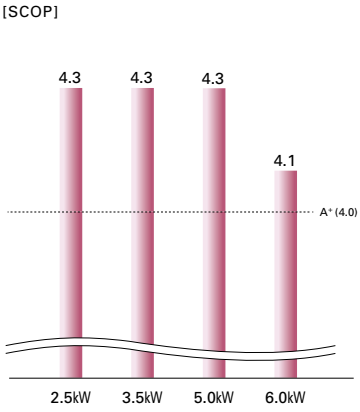
The height above ceiling of 245mm enables fitting into narrow ceiling space.
Installation is simple, even when the ceiling spaces are narrow to make the ceilings higher.
Of course, in addition to our products, replacing competitors' product is simplified too.



Energy-saving Performance*

The energy-saving performance achieved A^{++} in SEER and A^{+} in SCOP.
*In case of connecting with SUZ-KA-VA6





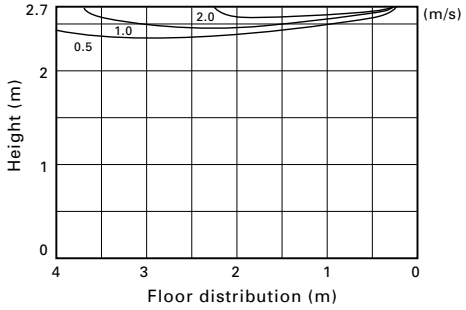
Quietness

Low sound level has been realized by introduction of 3D turbo fan. New SLZ can give users quieter and move comfortable room condition.

Horizontal Airflow

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.

[Airflow distribution]*
SLZ-M60FA
Flow angle,cooling at 20°C (ceiling height 2.7m)

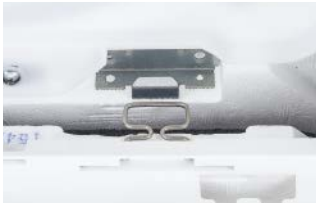


*Vane angle: Horizontal

Easy installation

Temporary hanging hook

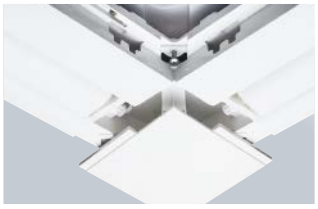
The structure of the panel has been revised and is now equipped with a temporary hanging hook. This has improved work efficiency during temporary panel installation.



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.

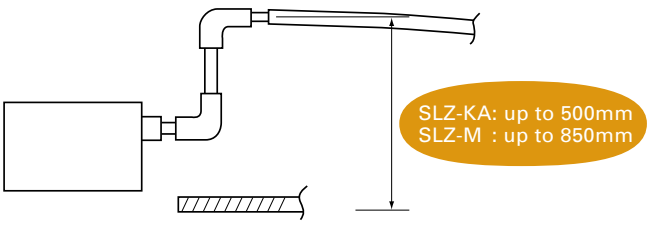
■ Corner panel



■ Control box cover

Drain lift

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



3D i-see Sensor for S & P SERIES

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.

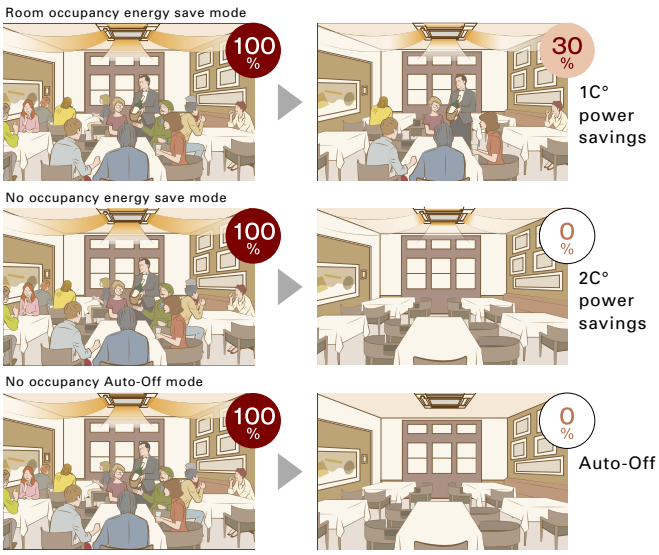
No occupancy energy-saving mode

When 3D i-see Sensor detects that no one is in 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.

* When MA Remote Controller is used to control multiple refrigerant systems, "No occupancy Auto-OFF mode" cannot be used.

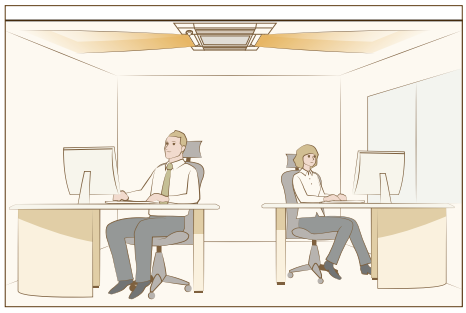


*PAR-33MAA is required for each setting

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 to the wind for each vane.

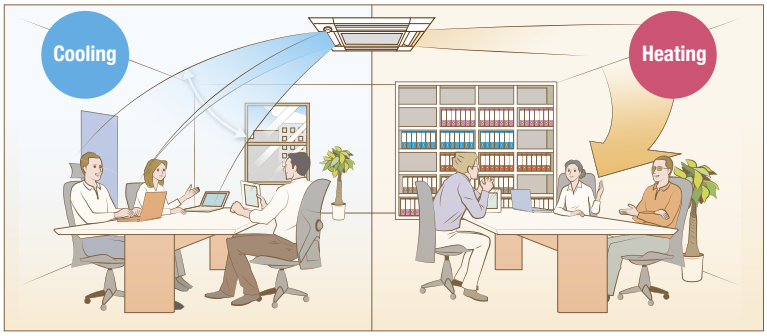


*PAR-33MAA or PAR-SL100A-E is required for each setting.

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-33MAA is required for each setting.

Simultaneous Multi-system*

Multiple indoor units can be installed to match the room layout, ensuring comfort and coverage of the entire room. Connection of multiple cassettes to P Series power inverter outdoor units shown below is possible.

* Only for RA410A connection

Power Inverter Combination		SLZ-M35FA	SLZ-M50FA	SLZ-M60FA
PUHZ-ZRP71VHA2		Twin	—	—
	Distribution pipe	MSDD-50TR-E		
PUHZ-ZRP100V(Y)KA3		Triple	Twin	—
	Distribution pipe	MSDT-111R-E	MSDD-50TR-E	
PUHZ-ZRP125V(Y)KA3		Quadruple	Triple	Twin
	Distribution pipe	MSDF-1111R-E	MSDT-111R-E	MSDD-50TR-E
PUHZ-ZRP140V(Y)KA3		Quadruple	Triple	—
	Distribution pipe	MSDF-1111R-E	MSDT-111R-E	—

SLZ-M SERIES

EUROVENT CERTIFIED PERFORMANCE

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

Indoor Unit

R32
R410A

GOOD DESIGN

SLZ-M15/25/35/50/60FA

Panel

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller
SLP-2FA			
SLP-2FAL	✓		
SLP-2FAE		✓	
SLP-2FALE	✓	✓	
SLP-2FALM	✓		✓
SLP-2FALME	✓	✓	✓

Outdoor Unit

R410A

SUZ-KA25/35VA6

R410A

SUZ-KA50/60VA6

Remote Controller

Enclosed in SLP-2FALM/SLP-2FALME

*optional

*optional

Pure White | AUTO VANE | Fresh-air Intake | Long Life | FA 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-M15FA	SLZ-M25FA	SLZ-M35FA	SLZ-M50FA	SLZ-M60FA
Outdoor Unit				for Multi connection	SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6
Refrigerant				R32 / 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	0.02	0.03	0.04
	Operating Current (max)		A	0.17	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>	245-570-570 <10-625-625>
	Weight <Panel>		kg	15 <3>	15 <3>	15 <3>	15 <3>	15 <3>
	Air Volume [Lo-Mid-Hi]		m^3/min	6.0 - 6.5 - 7.0	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)	24 - 26 - 28	25 - 28 - 31	25 - 30 - 34	27 - 34 - 39	32 - 40 - 43
	Sound Level (PWL)		dB(A)	45	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 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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.

*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

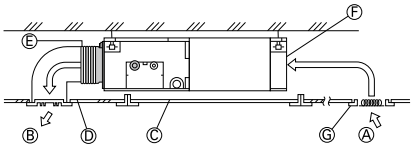
R32
R410A

SEZ-M25-71DA(L)

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.

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

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.

SEZ-M25-71DA(L)	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-M
External Static Pressure	15 Pa
35	23dB
50	30dB
60	30dB
71	30dB

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-M SERIES

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

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

Indoor Unit

R32
R410A

SEZ-M25/35/50/60/71DA (Requires Wired Remote Controller)
SEZ-M25/35/50/60/71DAL (Wireless Remote Controller is enclosed)

Outdoor Unit

R410A

SUZ-KA25/35VA6

R410A

SUZ-KA50/60/71VA6

Remote Controller

Enclosed in SEZ-M DAL

*optional (for SEZ-M DA)

*optional (for SEZ-M DA)

AUTO | ACO | Auto Restart | Low Temp Cooling | DA 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-M25DA(L)	SEZ-M35DA(L)	SEZ-M50DA(L)	SEZ-M60DA(L)	SEZ-M71DA(L)
Outdoor Unit				SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6
Refrigerant				R32 / 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	162	210	300	356	458
	SEER*3			5.3	5.7	5.8	5.3	5.3
		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	8.0	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 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. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

R32 R410A
4-way ceiling-cassette
PLA-ZM EA

R410A 4-way ceiling-cassette
PLA-RP EA

R32 R410A
Ceiling-concealed
PEAD-M

R410A
Floor-standing
PSA-KA

R32
R410A Ceiling-suspended
PCA-M

R410A Professional Kitchen
PCA-HAQ

R32 R410A
Wall-mounted
PKA-M HA(L)

R32 R410A
Wall-mounted
PKA-M KA(L)

R410A
Ceiling-concealed
PEA-WKA

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.

Eco-conscious Power Inverter

R32

PUZ-ZM35/50

PUZ-ZM60/71

PUZ-ZM100/125/140

Power Inverter

R410A

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140/200/250

Standard Inverter

R410A

SUZ-KA35*

SUZ-KA50/60/71*

PUHZ-P100/125/140

PUHZ-P200/250

* Some indoor units cannot be used with this unit.

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

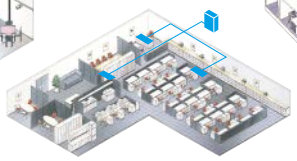
STEP 3 SELECT COMBINATION

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

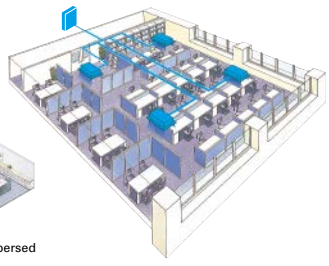
Simultaneous Multi-System

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 (PUZ-ZM / PUHZ-ZRP / 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 MSDD-50TR2-E2	MSDT-111R-E MSDT-111R2-E2	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.

Eco-conscious
Power Inverter SERIES

Our Eco-conscious Power Inverter Series is designed to achieve industry-leading seasonal chergy-efficiency throught use of New R32 refrigerant and advanced technologies.

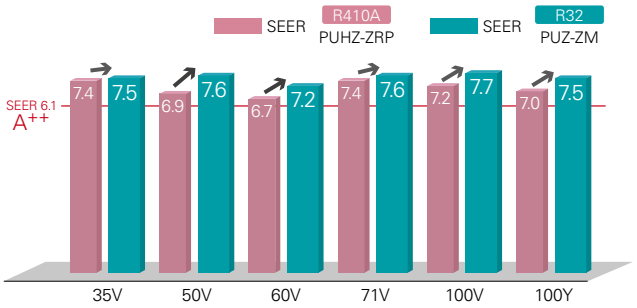
PUZ-ZM35/50VKA

PUZ-ZM60/71VHA

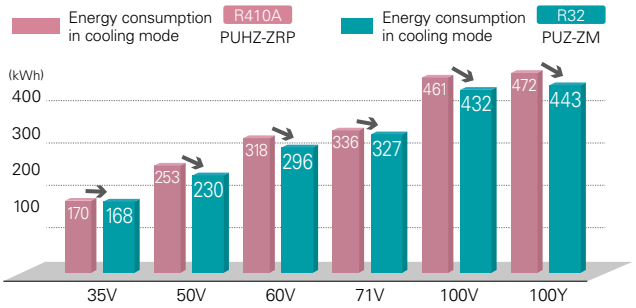
PUZ-ZM100/125/140V(Y)KA

Industry-leading energy efficiency

Introduction of new R32 refrigerant realises improved cooling efficiency. Rating of more than 7.0 achieved for all capacity range.



Introduction of new R32 refrigerant reduces energy consumption and realises energy savings.

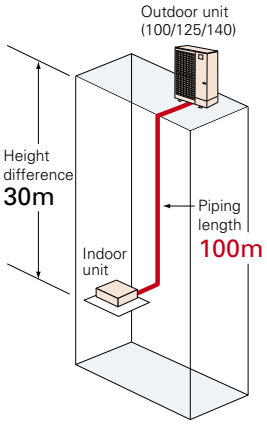


*Specifications reported are figures when PLA-ZM**EA is connected.

Longer piping (60/71/100/125/140)

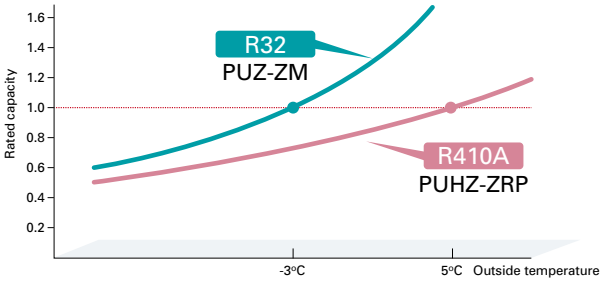
Longer piping length realised for 60, 71, 100, 125 and 140 classes, widely increasing installation flexibility.

	Piping Length	
	R410A PUHZ-ZRP	R32 PUZ-ZM
35/50	50m	50m
60/71	50m	55m
100/125/140	75m	100m



Rated heating capacity maintained down to –3°C

Rated heating capacity maintained even when the outside temperature is down to –3°C. Stay warm even at times of cold weather.

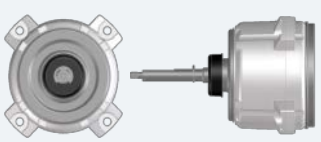


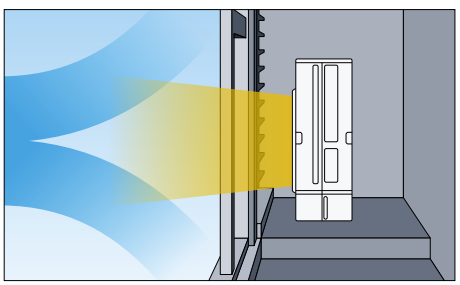
30Pa external static pressure

*Option (requires PAC-SJ71FM-E)

An external static pressure of 30Pa enables the outdoor unit to be installed on balconies in high-rise building or spaces near louvers.

30Pa external static pressure fan motor (option)
(PAC-SJ71FM-E)





*Rated noise level will be higher when equipped with this option.

Standard Inverter SERIES

Our Standard Series become light and compact with greater energy-saving performance.

R410A

PUHZ-P100/125/140VKA
PUHZ-P100/125/140YKA

Light weight and compact size

Compact design fits into narrow outdoor unit space of condominiums and offices.
Light weight design facilitates easy installation.

PUHZ-P140YHA2

Height 1,350mm
Weight 101kg

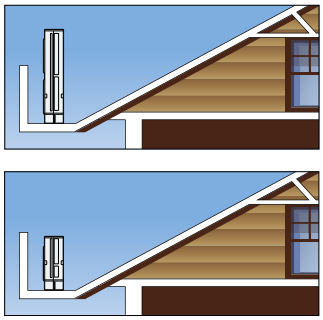
PUHZ-P140YKA

27% reduction
Height 981mm

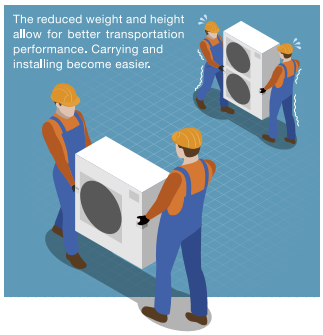
16% reduction
Weight 85kg

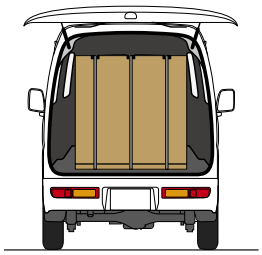
Unobstructive, compact, and easy to hide from view

Conventional 2-fan type outdoor units may spoil the view. Due to its compact size, the new model can be installed in locations that 2-fan type is not suitable.



Easy transportation and installation

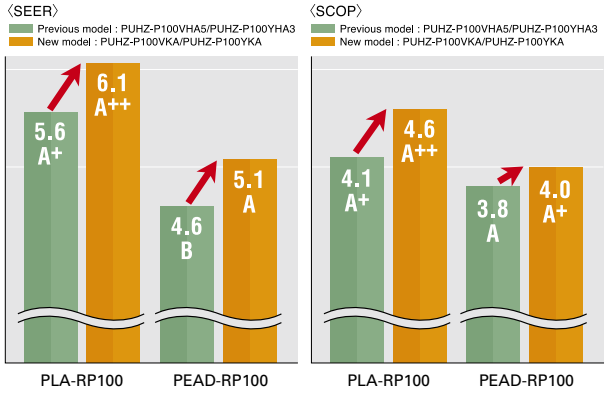




Transport efficiency improves thanks to its low height. The unit can even be transported by minivan.

Improvement of energy-saving performance

High seasonal energy efficiency ratio (SEER) and seasonal coefficient of performances (SCOP) are made possible even with its compact size.
The superior energy-saving performance helps reduce costs.

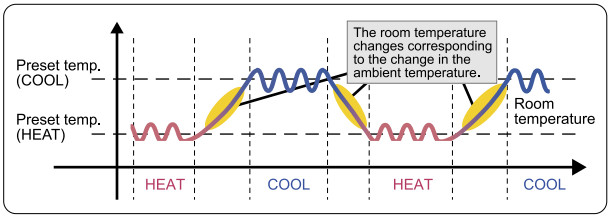


Dual Set Point

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 COOL or HEAT mode and keep the room temperature within the preset range.

Operation pattern during Auto (Dual Set Point) mode



R32
R410A

PLA-ZM35/50/60/71/100/125/140EA

R410A

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

PLA SERIES

A complete line-up including deluxe units that offer added energy savings. The incorporation of wide air-outlet and the "3D 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.

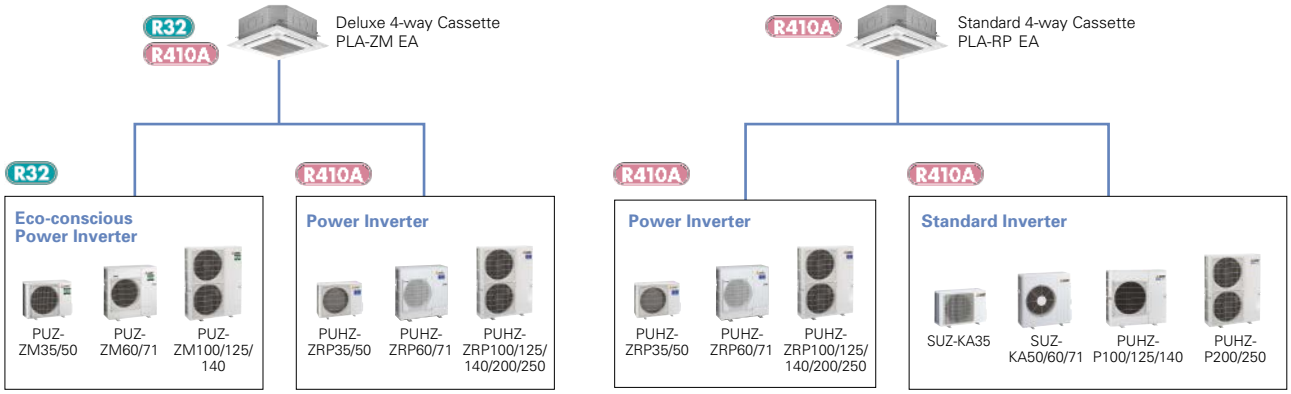
Deluxe 4-way Cassette Line-up

For users seeking even further energy savings, Mitsubishi Electric now offers deluxe units (PLA-ZM) to complete the 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**

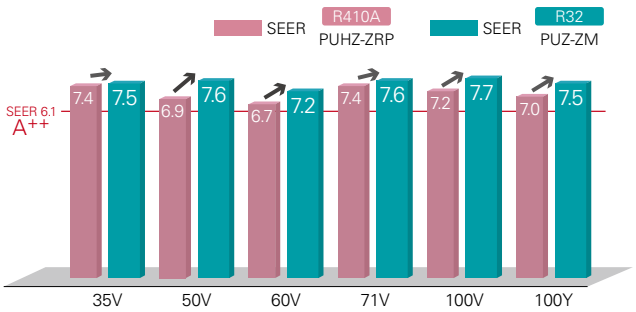
Series \ Model	35	50	60	71	100	125	140
R32 R410A **Deluxe 4-way Cassette (PLA-ZM)**	●	●	●	●	●	●	●
R410A **Standard 4-way Cassette (PLA-RP)**	●	●	●	●	●	●	●

■**Indoor/Outdoor Unit Combinations**

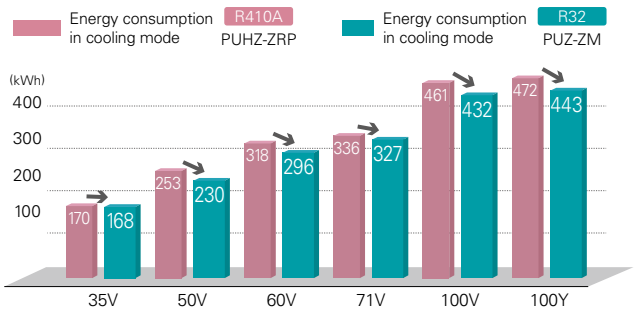


Industry-leading energy efficiency

Introduction of new R32 refrigerant realises improved cooling efficiency. Rating of more than 7.0 achieved for all capacity range.



Introduction of new R32 refrigerant reduces energy consumption and realises energy savings.

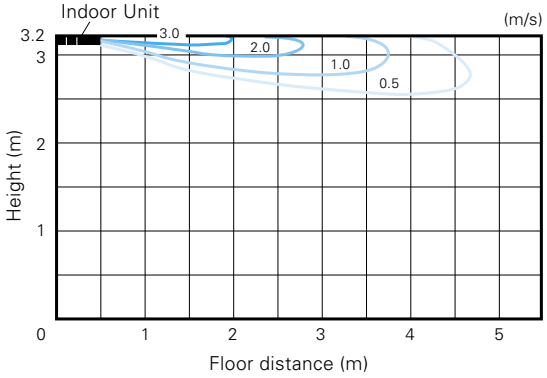


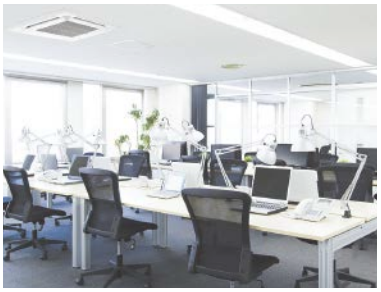
*Specifications reported are figures when PLA-ZM**EA is connected.

Horizontal Airflow

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

[Horizontal airflow]
Model name: PLA-ZM140EA
Ceiling height: 3.2m
Mode: Cooling





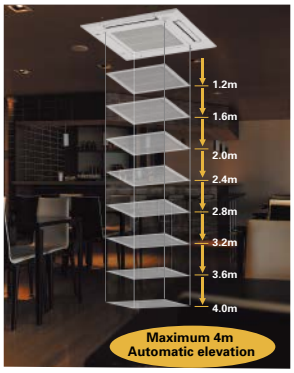
Automatic Grille Lowering Function (PLP-6EAJ)

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

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

Wired Remote Controller

Wireless Remote Controller



Easy Installation

Electrical box wiring

After reviewing the power supply terminal position in the electrical box, the structure was redesigned to improve connectivity. This has made previously complex wiring work easier.

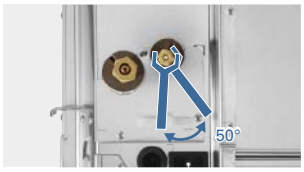
■ Previous model (B Series)

■ New model (E Series)

Increased space for plumbing work

The top and bottom positions of the liquid and gas pipes have been reversed to allow the gas pipe work, which requires more effort, to be completed first. Further, through structural innovations related to the space around the pipes, the area where the spanner can be moved has been increased, thus improving liquid pipe work and enabling it to be completed smoothly.

■ Previous model (B Series)



■ New model (E Series)

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 panel installation.

No need to remove screws

Installation is possible without removing the screws for the corner panel and the control box, simply loosen them. This lowers the risk of losing screws.

■ Corner panel

■ Control box cover

Lightweight decorative panel

After reviewing the structure and materials, weight has been reduced approximately 20% compared to the previous model, reducing the burden of installation.

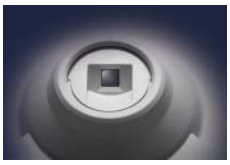
3D i-see Sensor for S & P SERIES

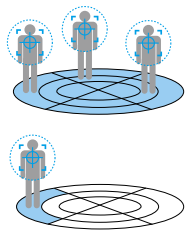
Detects number of people

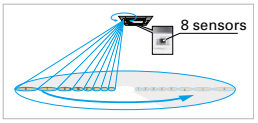
3D i-see Sensor detects the number of people in the room and sets the air-conditioning power accordingly. This makes automatic power-saving operation possible in places where the number of people entering and exiting is large. Additionally, when the area is continuously unoccupied, the system switches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

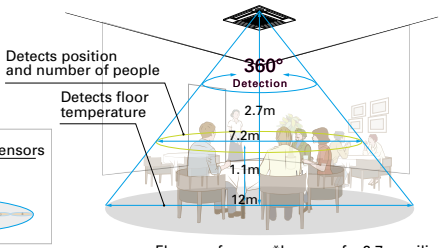
Detects people's position

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.









Floor surface *In case of a 2.7m ceiling

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.

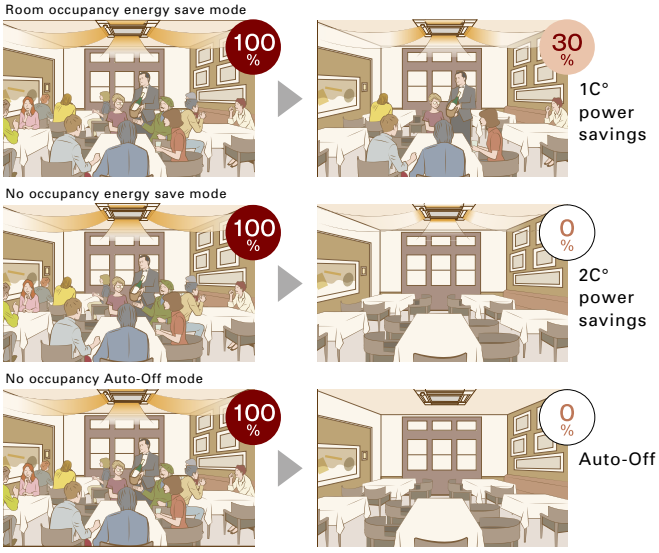
No occupancy energy-saving mode

When 3D i-see Sensor detects that no one is in 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.

* When MA Remote Controller is used to control multiple refrigerant systems, "No occupancy Auto-OFF mode" cannot be used.

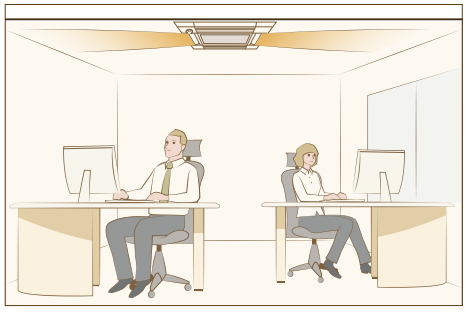


*PAR-33MAA is required for each setting

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 to the wind for each vane.

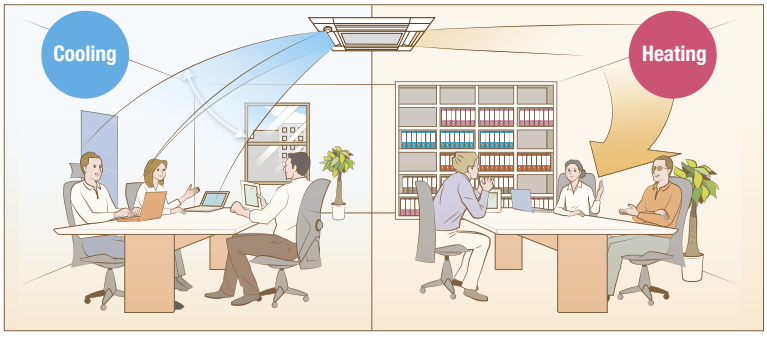


*PAR-33MAA or PAR-SL100A-E is required for each setting.

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-33MAA is required for each setting.

SERIES SELECTION

Eco-conscious Power Inverter Series

Indoor Unit

R32

R410A

Panel PLA-ZM35/50/60/71/100/125/140EA

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

R32

For Single

PUZ-ZM35/50

PUZ-ZM60/71

PUZ-ZM100/125/140

R32

For Multi

PUZ-ZM71

PUZ-ZM100/125/140

Remote Controller

Optional

Optional

✻ Enclosed in PLP-6EALM/PLP-6EALME

PLA-ZM EA 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 (PUZ-ZM)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	35x2	50x2	60x2	71x2	–	–	50x3	–	–	–	–
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR2-E				–		MSDT-111R2-E			–	

PLZ-ZM SERIES

Eco-conscious Power Inverter

EUROVENT CERTIFIED PERFORMANCE

i see Sensor (Optional) · 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 · Ampere Limit (60-140V/200/250) · Rotation Back-up (Optional) · DIDO (Optional) · Group Control · M-NET connection (Optional) · COMPO · Wi-Fi Interface (Optional) · 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-ZM35EA	PLA-ZM50EA	PLA-ZM60EA	PLA-ZM71EA	PLA-ZM100EA		PLA-ZM125EA		PLA-ZM140EA	
Outdoor Unit				PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHA	PUZ-ZM100VKA	PUZ-ZM100YKA	PUZ-ZM125VKA	PUZ-ZM125YKA	PUZ-ZM140VKA	PUZ-ZM140YKA
Refrigerant				R32*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 - 6.5	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	0.705	1.106	1.452	1.651	2.065	2.065	3.378	3.378	3.722	3.722
	EER			5.10	4.52	4.20	4.30	4.60	4.60	3.70	3.70	3.60	3.60
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	168	230	296	327	432	443	–	–	–	–
	SEER			7.5	7.6	7.2	7.6	7.7	7.5	–	–	–	–
		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	0.820	1.363	1.707	1.818	2.604	2.604	3.674	3.674	4.312	4.312
	COP			5.00	4.40	4.10	4.40	4.30	4.30	3.81	3.81	3.71	3.71
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.5	3.8	4.4	4.7	7.8	7.8	–	–	–	–
	Declared Capacity	at reference design temperature	kW	2.5 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.5 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at operation limit temperature	kW	2.1 (–11°C)	3.7 (–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	745	1083	1339	1370	2277	2277	–	–	–	–
	SCOP			4.7	4.9	4.6	4.8	4.8	4.8	–	–	–	–
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	–	–	–	–
Operating Current (max)			A	13.2	13.2	19.2	19.3	27.0	8.5	27.0	10.0	28.7	13.7
Indoor Unit	Input	Rated	kW	0.03	0.03	0.03	0.05	0.07	0.07	0.08	0.08	0.10	0.10
	Operating Current (max)		A	0.21	0.22	0.22	0.34	0.47	0.47	0.52	0.52	0.66	0.66
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840			<40 - 950 - 950>			298 - 840 - 840		<40 - 950 - 950>	
	Weight <Panel>		kg	21 <5>			24 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/min	11-13-15-16	12-14-16-18	12-14-16-18	17-19-21-23	19-22-25-28	19-22-25-28	21-24-26-29	21-24-26-29	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	26-28-29-31	27-29-31-32	27-29-31-32	28-30-33-36	31-34-37-40	31-34-37-40	33-36-39-41	33-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	51	54	54	57	61	61	62	62	65	65
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+25)		1,338 - 1,050 - 330 (+40)					
	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m^3/min	45	45	55	55	110	110	120	120	120	120
		Heating	m^3/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	49	49	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		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	55	59	100	100	100	100	100	100
	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
*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.

SERIES SELECTION

Power Inverter Series

Indoor Unit

R32
R410A

Panel PLA-ZM35/50/60/71/100/125/140EA

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

R410A

For Single


PUHZ-ZRP35/50


PUHZ-ZRP60/71


PUHZ-ZRP100/125/140

R410A

For Multi


PUHZ-ZRP71


PUHZ-ZRP100/125/140/200/250

Remote Controller


Optional


Optional


✻ Enclosed in PLP-6EALM/PLP-6EALME

Standard Inverter Series

Indoor Unit

R410A

Panel PLA-RP35/50/60/71/100/125/140EA

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

R410A

For Single


SUZ-KA35


SUZ-KA50/60/71


PUHZ-P100/125/140

R410A

For Multi


PUHZ-P100/125/140


PUHZ-P200/250

Remote Controller


Optional


Optional


✻ Enclosed in PLP-6EALM/PLP-6EALME

PLA-ZM/RP EA 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 (SUZ & PUHZ-P)		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

Type				Inverter Heat Pump									
Indoor Unit				PLA-ZM35EA	PLA-ZM50EA	PLA-ZM60EA	PLA-ZM71EA	PLA-ZM100EA		PLA-ZM125EA		PLA-ZM140EA	
Outdoor Unit				PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
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 - 6.5	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	0.78	1.33	1.66	1.79	2.20	2.20	3.84	3.84	4.36	4.36
	EER			–	–	–	–	–	–	3.25	3.25	3.07	3.07
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	170	253	318	336	461	472	–	–	–	–
	SEER			7.4	6.9	6.7	7.4	7.2	7.0	–	–	–	–
		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	0.85	1.55	1.89	1.90	2.60	2.60	3.67	3.67	4.84	4.84
	COP			–	–	–	–	–	–	3.81	3.81	3.30	3.30
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.5	3.8	4.4	4.7	7.8	7.8	–	–	–	–
	Declared Capacity	at reference design temperature	kW	2.5 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.5 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at operation limit temperature	kW	2.1 (–11°C)	3.7 (–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	714	1109	1337	1342	2229	2229	–	–	–	–
	SCOP			4.9	4.8	4.6	4.9	4.9	4.9	–	–	–	–
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	–	–	–	–
Operating Current (max)			A	13.2	13.2	19.2	19.3	27.0	8.5	27.0	10.0	28.7	13.7
Indoor Unit	Input	Rated	kW	0.03	0.03	0.03	0.05	0.07	0.07	0.08	0.08	0.10	0.10
	Operating Current (max)		A	0.21	0.22	0.22	0.34	0.47	0.47	0.52	0.52	0.66	0.66
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840 <40 - 950 - 950>				298 - 840 - 840 <40 - 950 - 950>					
	Weight <Panel>		kg	21 <5>			24 <5>	26 <5>	26 <5>	27 <5>	27 <5>	27 <5>	27 <5>
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	11-13-15-16	12-14-16-18	12-14-16-18	17-19-21-23	19-22-25-28	19-22-25-28	21-24-26-29	21-24-26-29	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	26-28-29-31	27-29-31-32	27-29-31-32	28-30-33-36	31-34-37-40	31-34-37-40	33-36-39-41	33-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	51	54	54	57	61	61	62	62	65	65
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	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. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PLZ-P SERIES
STANDARD INVERTER

Type				Inverter Heat Pump									
Indoor Unit				PLA-RP35EA	PLA-RP50EA	PLA-RP60EA	PLA-RP71EA	PLA-RP100EA		PLA-RP125EA		PLA-RP140EA	
Outdoor Unit				SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VA・VKA:230 / Single / 50, YKA:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.5	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6
		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	1.02	1.61	1.76	2.10	3.18	3.18	4.10	4.10	5.41	5.41
	EER			–	–	–	–	2.95	2.95	2.95	2.95	2.51	2.51
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.5	5.7	7.1	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	181	295	307	400	538	538	–	–	–	–
	SEER			6.9	6.5	6.5	6.2	6.1	6.1	–	–	–	–
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	5.8	6.9	8.0	11.2	11.2	13.5	13.5	15.0	15.0
		Min - Max	kW	1.7 - 5.0	1.7 - 7.2	2.5 - 8.0	2.6 - 10.2	2.8 - 12.5	2.8 - 12.5	4.8 - 15.0	4.8 - 15.0	4.9 - 15.8	4.9 - 15.8
	Total Input	Rated	kW	1.00	1.69	1.97	2.24	3.26	3.26	3.84	3.84	4.67	4.67
	COP			–	–	–	–	3.43	3.43	3.51	3.51	3.21	3.21
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	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)	6.0 (–10°C)	6.0 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.3 (–7°C)	3.8 (–7°C)	4.1 (–7°C)	5.1 (–7°C)	7.0 (–7°C)	7.0 (–7°C)	–	–	–	–
		at operation limit temperature	kW	2.3 (–10°C)	3.8 (–10°C)	4.0 (–10°C)	4.7 (–10°C)	4.5 (–15°C)	4.5 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	0.3	0.5	0.6	1.1	2.0	2.0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	826	1505	1498	1888	2432	2432	–	–	–	–
	SCOP			4.4	4.0	4.3	4.3	4.6	4.6	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A+	A++	A++	–	–	–	–
Operating Current (max)			A	8.4	12.2	14.2	16.4	20.5	12.0	27.2	12.2	30.7	12.2
Indoor Unit	Input	Rated	kW	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.10	0.10	0.10
	Operating Current (max)		A	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840 <40 - 950 - 950>				298 - 840 - 840 <40 - 950 - 950>					
	Weight <Panel>		kg	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-Mi1-Hi]		m³/min	11-13-15-16	12-14-16-18	12-14-16-18	14-17-19-21	19-23-26-29	19-23-26-29	21-25-28-31	21-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	26-28-29-31	27-29-31-32	27-29-31-32	28-30-32-34	31-34-37-40	31-34-37-40	33-37-41-44	33-37-41-44	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	51	54	54	56	61	61	65	65	65	65
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 - 285		880 - 840 - 330		981 - 1050 - 330					
	Weight		kg	35	54	50	53	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	79	79	86	86	86	86
		Heating	m³/min	34.8	44.6	49.2	48.2	79	79	92	92	92	92
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	51	51	54	54	56	56
		Heating	dB(A)	50	52	55	55	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	72	72	75	75
	Operating Current (max)		A	8.2	12.0	14.0	16.1	20	11.5	26.5	11.5	30.0	11.5
	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 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. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PLZ-RP SERIES
POWER INVERTER

Type				Inverter Heat Pump									
Indoor Unit				PLA-RP35EA	PLA-RP50EA	PLA-RP60EA	PLA-RP71EA	PLA-RP100EA		PLA-RP125EA		PLA-RP140EA	
Outdoor Unit				PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
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 - 6.5	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	0.83	1.42	1.75	1.87	2.23	2.23	3.87	3.87	4.39	4.39
	EER			–	–	–	–	–	–	3.23	3.23	3.05	3.05
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	174	258	321	341	465	476	–	–	–	–
	SEER			7.2	6.7	6.6	7.2	7.1	6.9	–	–	–	–
		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 - 5.8	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	0.92	1.81	2.07	2.11	2.69	2.69	3.77	3.77	4.90	4.90
	COP			–	–	–	–	–	–	3.71	3.71	3.26	3.26
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.5	3.8	4.4	4.7	7.8	7.8	–	–	–	–
	Declared Capacity	at reference design temperature	kW	2.5 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.5 (–10°C)	3.8 (–10°C)	4.4 (–10°C)	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at operation limit temperature	kW	2.1 (–11°C)	3.7 (–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	764	1212	1418	1402	2468	2468	–	–	–	–
	SCOP			4.5	4.3	4.3	4.6	4.4	4.4	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A++	A+	A+	–	–	–	–
Operating Current (max)			A	13.2	13.2	19.2	19.3	27.0	8.5	27.2	10.2	28.7	13.7
Indoor Unit	Input	Rated	kW	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.10	0.10	0.10
	Operating Current (max)		A	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions <Panel>	H × W × D	mm	258 - 840 - 840 <40 - 950 - 950>				298 - 840 - 840 <40 - 950 - 950>					
	Weight <Panel>		kg	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/min	11-13-15-16	12-14-16-18	12-14-16-18	14-17-19-21	19-23-26-29	19-23-26-29	21-25-28-31	21-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	26-28-29-31	27-29-31-32	27-29-31-32	28-30-32-34	31-34-37-40	31-34-37-40	33-37-41-44	33-37-41-44	36-39-42-44	36-39-42-44
	Sound Level (PWL)		dB(A)	51	54	54	56	61	61	65	65	65	65
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m^3/min	45	45	55	55	110	110	120	120	120	120
		Heating	m^3/min	45	45	55	55	110	110	120	120	120	120
	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. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PEAD SERIES

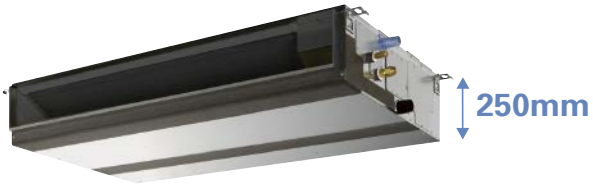
R32
R410A

PEAD-M35/50/60/71/100/125/140JA(L)

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, which makes installation in low ceilings with minimal clearance space possilbe.



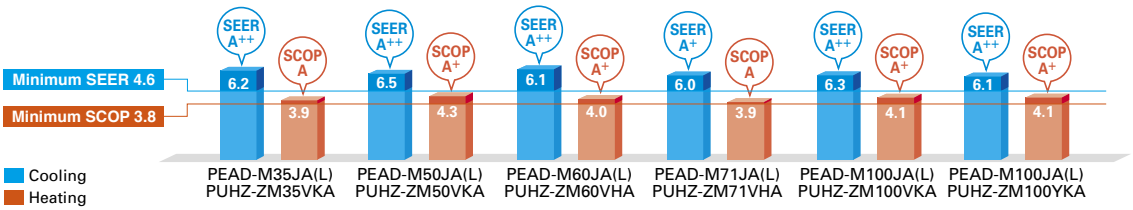
PEAD-M JA(L)

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.

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.



Drain Pump Option Available with All Models

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

PEAD-M JA → Drain pump built-in

PEAD-M JAL → No drain pump

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

SERIES SELECTION

Eco-conscious Power Inverter Series

Indoor Unit

R32
R410A

PEAD-M35/50/60/71/100/125/140

Outdoor Unit

R32

For Single

PUZ-ZM35/50

PUZ-ZM60/71

PUZ-ZM100/125/140

R32

For Multi

PUZ-ZM71

PUZ-ZM100/125/140

Remote Controller

Optional

Optional

Optional

PEAD-M 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 (PUZ-ZM)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	35x2	50x2	60x2	71x2	–	–	50x3	–	–	–	–
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR2-E				–		MSDT-111R2-E			–	

PEDZ-M JA SERIES

Eco-conscious Power Inverter

EUROVENT CERTIFIED PERFORMANCE *6

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 · 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-M35JA(L)	PEAD-M50JA(L)	PEAD-M60JA(L)	PEAD-M71JA(L)	PEAD-M100JA(L)		PEAD-M125JA(L)		PEAD-M140JA(L)	
Outdoor Unit				PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHA	PUZ-ZM100VKA	PUZ-ZM100YKA	PUZ-ZM125VKA	PUZ-ZM125YKA	PUZ-ZM140VKA	PUZ-ZM140YKA
Refrigerant				R32*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	0.837(0.820)	1.201(1.187)	1.509(1.495)	1.858(1.844)	2.272(2.256)	2.272(2.256)	3.333(3.315)	3.333(3.315)	3.631(3.611)	3.631(3.611)
	EER*5			4.30(4.39)	4.16(4.21)	4.04(4.08)	3.82(3.85)	4.18(4.21)	4.18(4.21)	3.75(3.77)	3.75(3.77)	3.69(3.71)	3.69(3.71)
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	217(201)	282(268)	350(337)	428(414)	534(521)	543(532)	–	–	–	–
	SEER*5			5.8(6.2)	6.2(6.5)	6.1(6.3)	5.8(6.0)	6.2(6.3)	6.1(6.2)	–	–	–	–
		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	0.917	1.312	1.616	1.932	2.598	2.598	3.349	3.349	3.970	3.970
	COP*5			4.47	4.57	4.33	4.14	4.31	4.31	4.18	4.18	4.03	4.03
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.4	3.8	4.4	4.9	7.8	7.8	–	–	–	–
	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)	–	–	–	–
		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)	–	–	–	–
		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)	–	–	–	–
	Back Up Heating Capacity		kW	0	0	0	0	0	0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	858	1237	1540	1751	2666	2666	–	–	–	–
	SCOP*5			3.9	4.3	4.0	3.9	4.1	4.1	–	–	–	–
		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	0.11/0.09	0.12/0.10	0.17/0.15	0.25/0.23	0.25/0.23	0.36/0.34	0.36/0.34	0.39/0.37	0.39/0.37
	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)	27 (26)	30 (29)	30 (29)	39 (38)	39 (38)	40 (39)	40 (39)	44 (43)	44 (43)
	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)	54	59	55	58	62	62	66	66	67	67
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+25)		1338 - 1050 - 330 (+40)					
	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	49	49	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	55	55	100	100	100	100	100	100
	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
*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.

SERIES SELECTION

Power Inverter Series

Indoor Unit

R32
R410A

PEAD-M35/50/60/71/100/125/140

Outdoor Unit

R410A

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140

R410A

For Multi

PUHZ-ZRP71

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional

Optional

Optional

Standard Inverter Series

Indoor Unit

R32
R410A

PEAD-M35/50/60/71/100/125/140

Outdoor Unit

R410A

For Single

SUZ-KA35

SUZ-KA50/60/71

PUHZ-P100/125/140

R410A

For Multi

PUHZ-P100/125/140

PUHZ-P200/250

Remote Controller

Optional

Optional

Optional

PEAD-M JA(L) 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

*6

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-M35JA(L)	PEAD-M50JA(L)	PEAD-M60JA(L)	PEAD-M71JA(L)	PEAD-M100JA(L)		PEAD-M125JA(L)		PEAD-M140JA(L)	
Outdoor Unit				PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
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	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	221 (205)	304 (288)	355 (340)	428 (411)	554 (543)	565 (554)	–	–	–	–
	SEER*5			5.7 (6.1)	5.7 (6.0)	6.0 (6.2)	5.8 (6.0)	6.0 (6.1)	5.8 (6.0)	–	–	–	–
		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	–	–	–	–
	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)	–	–	–	–
		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)	–	–	–	–
		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)	–	–	–	–
	Back Up Heating Capacity		kW	0	0	0	0	0	0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	839	1231	1513	1762	2627	2627	–	–	–	–
	SCOP*5			4.0	4.3	4.1	3.9	4.2	4.2	–	–	–	–
		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)	27 (26)	30 (29)	30 (29)	39 (38)	39 (38)	40 (39)	40 (39)	44 (43)	44 (43)
	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)	54	59	55	58	62	62	66	66	67	67
Outdoor Unit	Dimensions	H × W × D	mm	630 - 809 - 300		943 - 950 - 330 (+30)		1338 - 1050 - 330 (+40)					
	Weight		kg	43	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	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. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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-P JA SERIES

STANDARD INVERTER

*5

Demand Control (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-M35JA(L)	PEAD-M50JA(L)	PEAD-M60JA(L)	PEAD-M71JA(L)	PEAD-M100JA(L)		PEAD-M125JA(L)		PEAD-M140JA(L)	
Outdoor Unit				SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VA・VKA:230 / Single / 50, YKA:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	4.9	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6
		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	1.050 (1.030)	1.480 (1.460)	1.670 (1.650)	2.080 (2.060)	2.98 (2.96)	2.98 (2.96)	4.15 (4.14)	4.15 (4.14)	5.21 (5.19)	5.21 (5.19)
	EER*4			–	–	–	–	3.17	3.17	2.91 (2.92)	2.91 (2.92)	2.61 (2.62)	2.61 (2.62)
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	4.9	5.7	7.1	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	222 (210)	302 (290)	337 (325)	408 (396)	644 (627)	644 (627)	–	–	–	–
	SEER*4			5.6 (6.0)	5.6 (5.9)	5.6 (6.1)	6.1 (6.2)	5.1 (5.2)	5.1 (5.2)	–	–	–	–
		Energy Efficiency Class		A+ (A+)	A+ (A+)	A+ (A++)	A++ (A++)	A (A)	A (A)	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	4.1	5.9	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0
		Min - Max	kW	1.7 - 5.0	1.7 - 7.2	2.5 - 8.0	2.6 - 10.2	2.8 - 12.5	2.8 - 12.5	4.8 - 15.0	4.8 - 15.0	4.9 - 15.8	4.9 - 15.8
	Total Input	Rated	kW	1.110	1.620	1.930	2.040	2.94	2.94	3.73	3.73	4.27	4.27
	COP*4			–	–	–	–	3.80	3.80	3.61	3.61	3.51	3.51
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	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)	6.0 (–10°C)	6.0 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.5 (–7°C)	3.9 (–7°C)	4.1 (–7°C)	5.3 (–7°C)	7.0 (–7°C)	7.0 (–7°C)	–	–	–	–
		at operation limit temperature	kW	2.5 (–10°C)	3.9 (–10°C)	4.1 (–10°C)	5.3 (–10°C)	4.5 (–15°C)	4.5 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	0.3	0.5	0.5	0.7	2.0	2.0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	980	1466	1569	2153	2793	2793	–	–	–	–
	SCOP*4			4.0	4.2	4.0	3.9	4.0	4.0	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A	A+	A+	–	–	–	–
Operating Current (max)			A	9.3	13.4	15.6	18.1	22.7	14.2	29.3	14.3	32.8	14.3
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)	27 (26)	30 (29)	30 (29)	39 (38)	39 (38)	40 (39)	40 (39)	44 (43)	44 (43)
	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)	54	59	55	58	62	62	66	66	67	67
Outdoor Unit	Dimensions	H × W × D	mm	550-800-285		880-840-330		981-1050-330					
	Weight		kg	35	54	50	53	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	79	79	86	86	86	86
		Heating	m³/min	34.8	44.6	49.2	48.2	79	79	92	92	92	92
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	51	51	54	54	56	56
		Heating	dB(A)	50	52	55	55	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	72	72	75	75
	Operating Current (max)		A	8.2	12.0	14.0	16.1	20.0	11.5	26.5	11.5	30.0	11.5
	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 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. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PEA SERIES

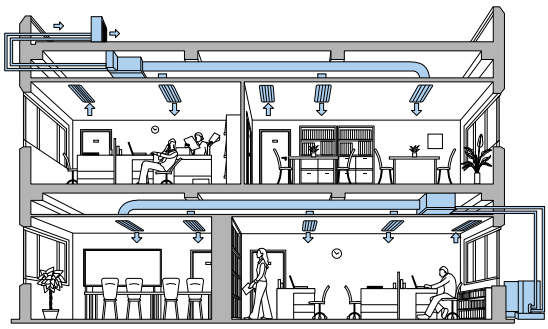
R410A

PEA-RP200/250WKA

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

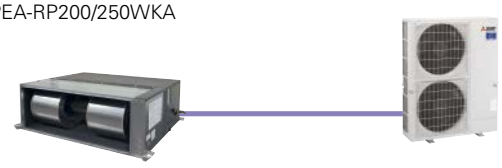
With the addition of more refrigerant, the maximum length for refrigerant piping has been increased to 100 metres. As a result, it is much easier to create the optimum layout for unit installation.

		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

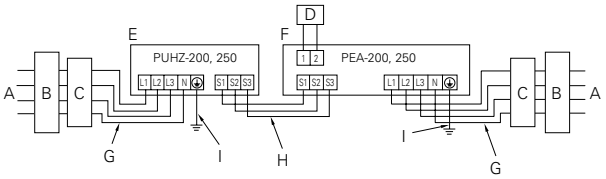
Wide-ranging Line-up from 20–25kW – Extensive Array of Choices to Match Building Size

[System Image]

PEA-RP200/250WKA



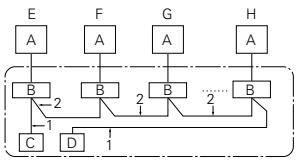
• For PEA-200, 250



PAR-33MAA Group Control

The PAR-33MAA remote controller can control up to 16 systems* as a group, and is ideal for supporting the integrated management of building air conditioners.

• 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

R410A

PEA-RP200/250WKA

Outdoor Unit

Power Inverter Series

R410A

PUHZ-ZRP200/250

Standard Inverter Series

R410A

PUHZ-P200/250

Remote Controller

Optional

Optional

PEZ-RP SERIES
POWER INVERTER

Type				Inverter Heat Pump	
Indoor Unit				PEA-RP200WKA	PEA-RP250WKA
Outdoor Unit				PUHZ-ZRP200YKA3	PUHZ-ZRP250YKA3
Refrigerant				R410A*1	
Power Supply	Source			Outdoor power supply	
	Outdoor (V/Phase/Hz)			400 / Three / 50	
Cooling	Capacity	Rated	kW	19.0	22.0
		Min - Max	kW	9.0 - 22.4	11.2 - 27.0
	Total Input	Rated	kW	6.03	8.05
	EER			3.15	2.73
		EEL Rank		-	-
Heating (Average Season)	Capacity	Rated	kW	22.4	27.0
		Min - Max	kW	9.5 - 25.0	12.5 - 31.0
	Total Input	Rated	kW	6.58	8.43
	COP			3.40	3.20
		EEL Rank		-	-
Operating Current (max)				23.3	26.5
Indoor Unit	Input [Cooling / Heating]	Rated	kW	0.66	0.80
	Operating Current (max)		A	4.3	5.5
	Dimensions	H x W x D	mm	470 - 1370 - 1120	
	Weight		kg	108	
	Air Volume [Lo-Hi]		m^3/min	50 - 61 - 72	58 - 71 - 84
	External Static Pressure		Pa	(60) / (75) / (100) / 150	
	Sound Level (SPL) [Lo-Hi]		dB(A)	38 - 41 - 44	40 - 43 - 46
	Sound Level (PWL)		dB(A)	65 - 66 - 67	70 - 71 - 72
Outdoor Unit	Dimensions	H x W x D	mm	1338 - 1050 - 330 (+40)	
	Weight		kg	135	135
	Air Volume	Cooling	m^3/min	140	140
		Heating	m^3/min	140	140
	Sound Level (SPL)	Cooling	dB(A)	59	59
		Heating	dB(A)	62	62
	Sound Level (PWL)	Cooling	dB(A)	77	77
	Operating Current (max)		A	19.0	21.0
	Breaker Size		A	32	32
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 25.4	12.7 / 25.4
	Max. Length	Out-In	m	100	100
	Max. Height	Out-In	m	30	30
Guaranteed Operating Range [Outdoo		Cooling*3	℃	-15 ~ +46	-15 ~ +46
		Heating	℃	-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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PEZ-P SERIES
STANDARD INVERTER

Type				Inverter Heat Pump	
Indoor Unit				PEA-RP200WKA	PEA-RP250WKA
Outdoor Unit				PUHZ-P200YKA3	PUHZ-P250YKA3
Refrigerant				R410A*1	
Power Supply	Source			Outdoor power supply	
	Outdoor (V/Phase/Hz)			400 / Three / 50	
Cooling	Capacity	Rated	kW	19.0	22.0
		Min - Max	kW	9.0 - 22.4	11.2 - 27.0
	Total Input	Rated	kW	6.29	8.14
	EER			3.02	2.70
		EEL Rank		-	-
Heating (Average Season)	Capacity	Rated	kW	22.4	27.0
		Min - Max	kW	9.5 - 25.0	12.5 - 31.0
	Total Input	Rated	kW	6.78	8.70
	COP			3.30	3.10
		EEL Rank		-	-
Operating Current (max)				23.3	26.5
Indoor Unit	Input [Cooling / Heating]	Rated	kW	0.66	0.80
	Operating Current (max)		A	4.3	5.5
	Dimensions	H x W x D	mm	470 - 1370 - 1120	
	Weight		kg	108	
	Air Volume [Lo-Hi]		m^3/min	50 - 61 - 72	58 - 71 - 84
	External Static Pressure		Pa	(60) / (75) / (100) / 150	
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	38 - 41 - 44	40 - 43 - 46
	Sound Level (PWL)		dB(A)	65 - 66 - 67	70 - 71 - 72
Outdoor Unit	Dimensions	H x W x D	mm	1338 - 1050 - 330 (+40)	
	Weight		kg	127	135
	Air Volume	Cooling	m^3/min	140	140
		Heating	m^3/min	140	140
	Sound Level (SPL)	Cooling	dB(A)	58	59
		Heating	dB(A)	60	62
	Sound Level (PWL)	Cooling	dB(A)	78	77
	Operating Current (max)		A	19.0	21.0
	Breaker Size		A	32	32
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 25.4	12.7/25.4
	Max. Length	Out-In	m	70	70
	Max. Height	Out-In	m	30	30
Guaranteed Operating Range [Outdoor]		Cooling*3	℃	-15 ~ +46	-15 ~ +46
		Heating	℃	-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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PKA SERIES

PKA-M35/50HA(L)

R32
R410A

PKA-M60/71/100KA(L)

R32
R410A

The compact, wall-mounted indoor units offer the convenience of simple installation, and a large product line-up (M35-M100 models) ensures a best-match solution. Designed for highly efficient energy savings, the PKA Series is the answer to your air conditioning needs.

Wired & Wireless Model

Wired models are newly added in P Series line-up. The diverse selection enables the base solution for both customer and location.

PKA-M KA
PKA-M HA

PKA-M KAL
PKA-M HAL

Flat Panel & Pure White Finish

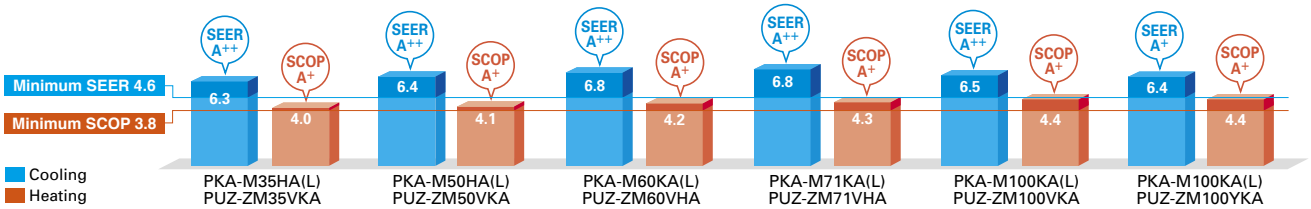
A flat panel layout has been adopted for all models. Pursuing a design that harmonizes with virtually any interior, the unit colour has been changed from white to pure white.

PKA-M HA(L)

PKA-M KA(L)

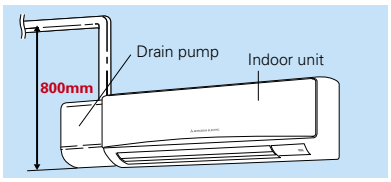
ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

Highly efficient indoor unit heat exchangers and and newly designed power inverters (PUHZ-ZM) 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-33MAA and PAC-YT52CRA wired remote controllers can be used as well.

✻ Connection to PAR-33MAA/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

Eco-conscious Power Inverter Series

Indoor Unit

R32
R410A

PKA-M35/50HA(L)

R32
R410A

PKA-M60/71/100KA(L)

Outdoor Unit

R32

For Single

PUZ-ZM35/50

PUZ-ZM60/71

PUZ-ZM100/125/140

R32

For Multi

PUZ-ZM71

PUZ-ZM100/125/140

Remote Controller

Optional (✻)

Optional (✻)

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

PKA-M HA(L)/KA(L) 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 (PUZ-ZM)		35x1	50x1	60x1	71x1	100x1	–	–	–	–	35x2	50x2	60x2	71x2	–	–	50x3	–	–	–	–
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR2-E				–	–	MSDT-111R2-E			–	

PKZ-M SERIES

Eco-conscious Power Inverter

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Pure White · AUTO VANE · Check! (Optional) · SWING · AUTO · ACO · Auto Restart · Low Temp Cooling · Silent · 60-140V/200/250 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-M35HA(L)	PKA-M50HA(L)	PKA-M60KA(L)	PKA-M71KA(L)	PKA-M100KA(L)	
Outdoor Unit				PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHA	PUZ-ZM100VKA	PUZ-ZM100YKA
Refrigerant				R32*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	0.869	1.239	1.560	1.863	2.405	2.405
	EER			4.14	3.71	3.91	3.81	3.95	3.95
		EEL Rank		–	–	–	–	–	–
	Design Load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual Electricity Consumption*2		kWh/a	200	251	313	364	508	519
	SEER			6.3	6.4	6.8	6.8	6.5	6.4
		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	1.040	1.347	1.732	2.116	3.102	3.102
	COP			3.94	3.71	4.04	3.78	3.61	3.61
		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	839	1115	1460	1523	2472	2472
	SCOP			4.0	4.1	4.2	4.3	4.4	4.4
		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 / 0.03	0.04 / 0.03	0.06 / 0.05	0.06 / 0.05	0.08 / 0.07	0.08 / 0.07
	Operating Current (max)		A	0.40	0.40	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 (+25)		1338 - 1050 - 330 (+40)	
	Weight		kg	46	46	70	70	116	123
	Air Volume	Cooling	m³/min	45	45	55	55	110	110
		Heating	m³/min	45	45	55	55	110	110
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49
		Heating	dB(A)	46	46	49	49	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	55	55	100	100
	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.

*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.

SERIES SELECTION

Power Inverter Series

Indoor Unit

R32
R410A

PKA-M35/50HA(L)

PKA-M60/71/100KA(L)

Outdoor Unit

R410A

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100

R410A

For Multi

PUHZ-ZRP71

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional (✻)

Optional (✻)

Standard Inverter Series

Indoor Unit

R32
R410A

PKA-M35/50HA(L)

PKA-M60/71/100KA(L)

Outdoor Unit

R410A

For Single

PUHZ-P100

R410A

For Multi

PUHZ-P100/125/140

PUHZ-P200/250

Remote Controller

Optional (✻)

Optional (✻)

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

PKA-M 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-M35HA(L)	PKA-M50HA(L)	PKA-M60KA(L)	PKA-M71KA(L)	PKA-M100KA(L)	
Outdoor Unit				PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3
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			3.83	3.26	3.81	3.94	3.96	3.96
		EEL Rank		–	–	–	–	–	–
	Design Load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual Electricity Consumption*2		kWh/a	214	296	324	368	522	533
	SEER			5.9	5.4	6.5	6.7	6.3	6.2
		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			3.83	3.33	3.57	3.65	3.68	3.68
		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	70	70	116	123
	Air Volume	Cooling	m³/min	45	45	55	55	110	110
		Heating	m³/min	45	45	55	55	110	110
	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 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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

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-M100KA(L)	
Outdoor Unit				PUHZ-P100VKA	PUHZ-P100YKA
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	3.7 - 10.6	3.7 - 10.6
	Total Input	Rated	kW	3.12	3.12
	EER			3.01	3.01
		EEL Rank		–	–
	Design Load		kW	9.4	9.4
	Annual Electricity Consumption*2		kWh/a	586	586
	SEER			5.6	5.6
		Energy Efficiency Class		A+	A+
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2
		Min - Max	kW	2.8 - 12.5	2.8 - 12.5
	Total Input	Rated	kW	3.48	3.48
	COP			3.21	3.21
		EEL Rank		–	–
	Design Load		kW	8.0	8.0
	Declared Capacity	at reference design temperature	kW	6.0 (–10°C)	6.0 (–10°C)
		at bivalent temperature	kW	7.0 (–7°C)	7.0 (–7°C)
		at operation limit temperature	kW	4.5 (–15°C)	4.5 (–15°C)
	Back Up Heating Capacity		kW	2.0	2.0
	Annual Electricity Consumption*2		kWh/a	2795	2795
	SCOP			4.0	4.0
		Energy Efficiency Class		A+	A+
Operating Current (max)			A	20.6	12.1
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	981 - 1050 - 330	
	Weight		kg	76	78
	Air Volume	Cooling	m³/min	79	79
		Heating	m³/min	79	79
	Sound Level (SPL)	Cooling	dB(A)	51	51
		Heating	dB(A)	54	54
	Sound Level (PWL)	Cooling	dB(A)	70	70
	Operating Current (max)		A	20.0	11.5
	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 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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PCA–KA SERIES

R32
R410A

PCA-M35/50/60/71/100/125/140KA

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.

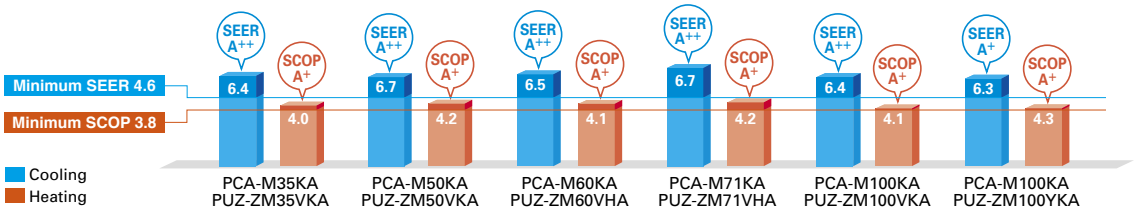
Stylish Indoor Unit Design

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-KA

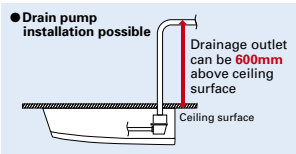
ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

A direct-current (DC) fan motor is isntalled in the indoor unit, increasing the seasonal energy efficiency of newly designed Power Inverter series (PUHZ-ZM) 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.



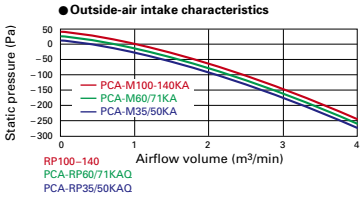
Optional Drain Pump for Full-capacity Models

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



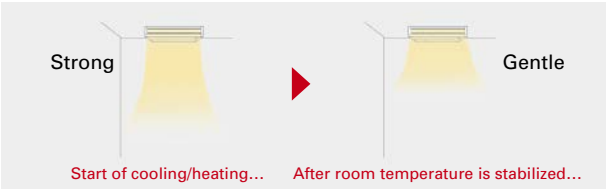
Outside-air Intake

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

R410A

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.

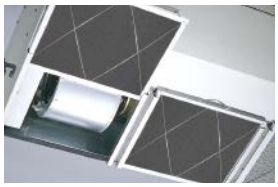
High-performance Oil Mist Filter

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



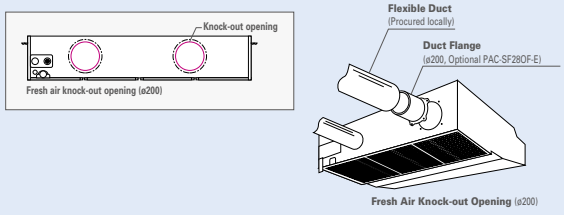
Pull the handle to easily slide the filter out

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)

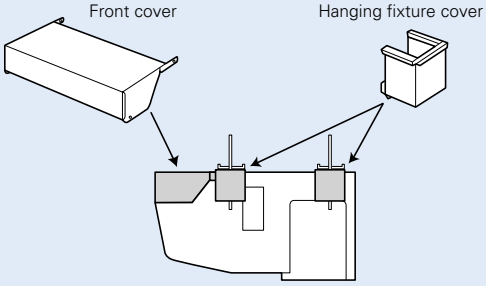
There is a knock-out opening on the rear panel of the unit that can be used to bring fresh air into the unit. This helps to improve ventilation and make the kitchen comfortable.



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

Eco-conscious Power Inverter Series

Indoor Unit

R32
R410A

PCA-M35/50/60/71/100/125/140KA

Outdoor Unit

R32

For Single

PUZ-ZM35/50

PUZ-ZM60/71

PUZ-ZM100/125/140

R32

For Multi

PUZ-ZM71

PUZ-ZM100/125/140

Remote Controller

Optional

Optional

Optional

PCZ-M 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 (PUZ-ZM)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	–	–	35x2	50x2	60x2	71x2	–	–	50x3	–	–	–	–
	Distribution Pipe	–	–	–	–	–	–	–	–	–	MSDD-50TR2-E				–		MSDT-111R2-E			–	

PCZ-M KA SERIES

Eco-conscious 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 (Optional) | 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-M35KA	PCA-M50KA	PCA-M60KA	PCA-M71KA	PCA-M100KA		PCA-M125KA		PCA-M140KA	
Outdoor Unit				PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHA	PUZ-ZM100VKA	PUZ-ZM100YKA	PUZ-ZM125VKA	PUZ-ZM125YKA	PUZ-ZM140VKA	PUZ-ZM140YKA
Refrigerant				R32*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	0.829	1.250	1.521	1.829	2.317	2.317	3.846	3.846	3.941	3.941
	EER			4.34	4.00	4.01	3.88	4.10	4.10	3.25	3.25	3.40	3.40
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	197	260	328	371	513	523	–	–	–	–
	SEER			6.4	6.7	6.5	6.7	6.4	6.3	–	–	–	–
		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	1.019	1.361	1.745	2.156	3.018	3.018	3.954	3.954	4.432	4.432
	COP			4.02	4.04	4.01	3.71	3.71	3.71	3.54	3.54	3.61	3.61
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	2.4	3.8	4.4	4.7	7.8	7.8	–	–	–	–
	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)	–	–	–	–
		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)	–	–	–	–
		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)	–	–	–	–
	Back Up Heating Capacity		kW	0	0	0	0	0	0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	839	1265	1499	1563	2539	2539	–	–	–	–
	SCOP			4.0	4.2	4.1	4.2	4.3	4.3	–	–	–	–
		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	25	26	32	32	37	37	38	38	40	40
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/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 (+25)		1338 - 1050 - 330 (+40)					
	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m^3/min	45	45	55	55	110	110	120	120	120	120
		Heating	m^3/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	49	49	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	55	55	100	100	100	100	100	100
	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
*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.

SERIES SELECTION

Power Inverter Series

Indoor Unit

R32
R410A

PCA-M35/50/60/71/100/125/140KA

Outdoor Unit

R410A

For Single

PUHZ-ZRP35/50

PUHZ-ZRP60/71

PUHZ-ZRP100/125/140

R410A

For Multi

PUHZ-ZRP100/125/140/200/250

Remote Controller

Optional

Optional

Optional

Standard Inverter Series

Indoor Unit

R32
R410A

PCA-M35/50/60/71/100/125/140KA

Outdoor Unit

R410A

For Single

SUZ-KA35

SUZ-KA50/60/71

PUHZ-P100/125/140

R410A

For Multi

PUHZ-P100/125/140

PUHZ-P200/250

Remote Controller

Optional

Optional

Optional

PCA-M 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

R410A

PCA-RP71HAQ

Outdoor Unit

R410A

For Single

PUHZ-ZRP71

R410A

For Multi

PUHZ-ZRP140/250

Remote Controller

Optional

Optional

PCA-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	–	–

PCZ-RP KA SERIES

POWER INVERTER

Type				Inverter Heat Pump									
Indoor Unit				PCA-M35KA	PCA-M50KA	PCA-M60KA	PCA-M71KA	PCA-M100KA		PCA-M125KA		PCA-M140KA	
Outdoor Unit				PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
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			4.19	3.73	3.67	3.90	3.93	3.93	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	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	202	283	340	367	542	553	–	–	–	–
	SEER			6.2	6.1	6.2	6.7	6.1	6.0	–	–	–	–
		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			4.02	3.79	3.63	3.64	3.68	3.68	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	–	–	–	–
	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)	–	–	–	–
		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)	–	–	–	–
		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)	–	–	–	–
	Back Up Heating Capacity		kW	0	0	0	0	0	0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	815	1257	1458	1519	2837	2837	–	–	–	–
	SCOP			4.1	4.2	4.3	4.3	3.9	3.9	–	–	–	–
		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	25	26	32	32	37	37	38	38	40	40
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/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	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m^3/min	45	45	55	55	110	110	120	120	120	120
		Heating	m^3/min	45	45	55	55	110	110	120	120	120	120
	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PCZ-P KA SERIES

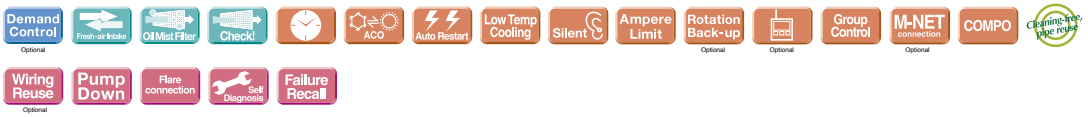
STANDARD INVERTER

Type				Inverter Heat Pump									
Indoor Unit				PCA-M35KA	PCA-M50KA	PCA-M60KA	PCA-M71KA	PCA-M100KA		PCA-M125KA		PCA-M140KA	
Outdoor Unit				SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerant				R410A*1									
Power Supply	Source			Outdoor power supply									
	Outdoor (V/Phase/Hz)			VA・VKA:230 / Single / 50, YKA:400 / Three / 50									
Cooling	Capacity	Rated	kW	3.6	5.0	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6
		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	1.050	1.550	1.720	2.060	3.05	3.05	4.24	4.24	5.62	5.62
	EER			3.43	3.23	3.31	3.45	3.08	3.08	2.85	2.85	2.41	2.41
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	Design Load		kW	3.6	5.0	5.7	7.1	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	209	296	325	409	586	586	–	–	–	–
	SEER			6.0	5.8	6.1	6.0	5.6	5.6	–	–	–	–
		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	13.5	13.5	15.0	15.0
		Min - Max	kW	1.7 - 5.0	1.7 - 6.6	2.5 - 8.0	2.6 - 10.2	2.8 - 12.5	2.8 - 12.5	4.8 - 15.0	4.8 - 15.0	4.9 - 15.8	4.9 - 15.8
	Total Input	Rated	kW	1.050	1.520	1.910	2.180	3.37	3.37	4.06	4.06	4.47	4.47
	COP			3.90	3.62	3.61	3.62	3.32	3.32	3.32	3.32	3.35	3.35
		EEL Rank		–	–	–	–	–	–	–	–	–	–
	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)	6.0 (–10°C)	6.0 (–10°C)	–	–	–	–
		at bivalent temperature	kW	2.3 (–7°C)	3.6 (–7°C)	4.3 (–7°C)	5.2 (–7°C)	7.0 (–7°C)	7.0 (–7°C)	–	–	–	–
		at operation limit temperature	kW	2.3 (–10°C)	3.6 (–10°C)	4.0 (–10°C)	5.2 (–10°C)	4.5 (–15°C)	4.5 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	0.3	0.4	0.8	0.6	2.0	2.0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	887	1398	1678	2028	2726	2726	–	–	–	–
	SCOP			4.1	4.0	4.0	4.3	4.1	4.1	–	–	–	–
		Energy Efficiency Class		A+	A+	A+	A+	A+	A+	–	–	–	–
Operating Current (max)			A	8.5	12.4	14.4	16.5	20.7	12.2	27.3	12.3	30.9	12.4
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	25	26	32	32	37	37	38	38	40	40
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/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		981 - 1050 - 330					
	Weight		kg	35	54	50	53	76	78	84	85	84	85
	Air Volume	Cooling	m^3/min	36.3	44.6	40.9	50.1	79	79	86	86	86	86
		Heating	m^3/min	34.8	44.6	49.2	48.2	79	79	92	92	92	92
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	51	51	54	54	56	56
		Heating	dB(A)	50	52	55	55	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	72	72	75	75
	Operating Current (max)		A	8.2	12.0	14.0	16.1	20.0	11.5	26.5	11.5	30.0	11.5
	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 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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PCZ-RP HA SERIES

POWER INVERTER



Type				Inverter Heat Pump
Indoor Unit				PCA-RP71HAQ
Outdoor Unit				PUHZ-ZRP71VHA2
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	70
	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

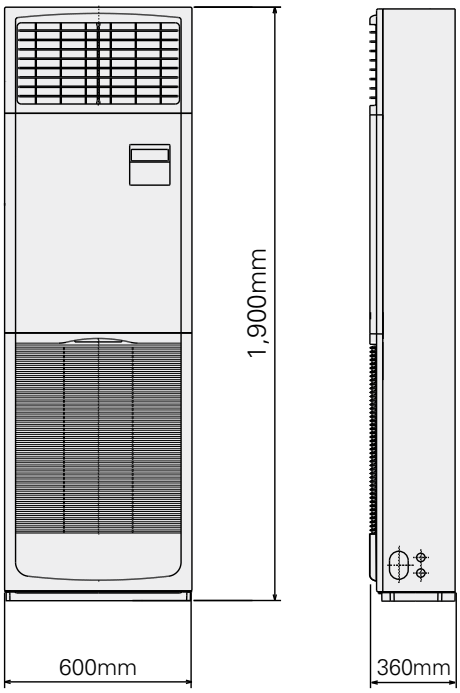
PSA SERIES R410A

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

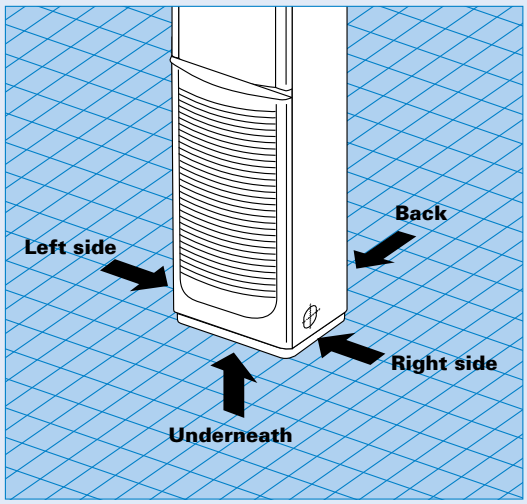
The floor-standing indoor unit is mounted on the floor, enabling quick installation. Its compact body requires only minimal space.

● 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

R410A

PSA-RP71/100/125/140KA

Outdoor Unit

R410A

For Single

PUHZ-ZRP71

PUHZ-ZRP100/125/140

R410A

For Multi

PUHZ-ZRP140/200/250

Remote Controller

Built-in

Standard Inverter Series

Indoor Unit

R410A

PSA-RP71/100/125/140KA

Outdoor Unit

R410A

For Single

PUHZ-P100/125/140

R410A

For Multi

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

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Pure White · Long Life · Check! · SWING · ACO · Auto Restart · Low Temp Cooling · Silent · Ampere Limit (71-140V) · Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional) · COMPO · Cleaning-free pipe routing · Wiring Reuse (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump						
Indoor Unit				PSA-RP71KA	PSA-RP100KA		PSA-RP125KA		PSA-RP140KA	
Outdoor Unit				PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
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	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	396	595	606	–	–	–	–
	SEER			6.3	5.6	5.5	–	–	–	–
		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	–	–	–	–
	Declared Capacity	at reference design temperature	kW	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at bivalent temperature	kW	4.7 (–10°C)	7.8 (–10°C)	7.8 (–10°C)	–	–	–	–
		at operation limit temperature	kW	3.5 (–20°C)	5.8 (–20°C)	5.8 (–20°C)	–	–	–	–
	Back Up Heating Capacity		kW	0	0	0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	1666	2761	2761	–	–	–	–
	SCOP			4.0	4.0	4.0	–	–	–	–
		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	70	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 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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

PSZ-P SERIES
STANDARD INVERTER

EUROVENT CERTIFIED PERFORMANCE

Demand Control (Optional) · Pure White · Long Life · Check! · SWING · ACO · Auto Restart · Low Temp Cooling · Silent · Group Control (Optional) · M-NET connection (Optional) · Wi-Fi Interface (Optional) · COMPO · Cleaning-free pipe routing · Wiring Reuse (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump					
Indoor Unit				PSA-RP100KA		PSA-RP125KA		PSA-RP140KA	
Outdoor Unit				PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerant				R410A*1					
Power Supply	Source			Outdoor power supply					
	Outdoor (V/Phase/Hz)			VKA:230 / Single / 50, YKA:400 / Three / 50					
Cooling	Capacity	Rated	kW	9.4	9.4	12.1	12.1	13.6	13.6
		Min - Max	kW	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 13.7	5.8 - 13.7
	Total Input	Rated	kW	3.12	3.12	5.02	5.02	6.38	6.38
	EER			3.01	3.01	2.41	2.41	2.13	2.13
		EEL Rank		–	–	–	–	–	–
	Design Load		kW	9.4	9.4	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	644	644	–	–	–	–
	SEER			5.1	5.1	–	–	–	–
		Energy Efficiency Class		A	A	–	–	–	–
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2	13.5	13.5	15.0	15.0
		Min - Max	kW	2.8 - 12.5	2.8 - 12.5	4.8 - 15.0	4.8 - 15.0	4.9 - 15.8	4.9 - 15.8
	Total Input	Rated	kW	3.28	3.28	4.80	4.80	4.82	4.82
	COP			3.41	3.41	2.81	2.81	3.11	3.11
		EEL Rank		–	–	–	–	–	–
	Design Load		kW	8.0	8.0	–	–	–	–
	Declared Capacity	at reference design temperature	kW	6.0 (–10°C)	6.0 (–10°C)	–	–	–	–
		at bivalent temperature	kW	7.0 (–7°C)	7.0 (–7°C)	–	–	–	–
		at operation limit temperature	kW	4.5 (–15°C)	4.5 (–15°C)	–	–	–	–
	Back Up Heating Capacity		kW	2.0	2.0	–	–	–	–
	Annual Electricity Consumption*2		kWh/a	2794	2794	–	–	–	–
	SCOP			4.0	4.0	–	–	–	–
		Energy Efficiency Class		A+	A+	–	–	–	–
Operating Current (max)			A	20.7	12.2	27.2	12.2	30.7	12.2
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	981 - 1050 - 330		981 - 1050 - 330		981 - 1050 - 330	
	Weight		kg	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	79	79	86	86	86	86
		Heating	m³/min	79	79	92	92	92	92
	Sound Level (SPL)	Cooling	dB(A)	51	51	54	54	56	56
		Heating	dB(A)	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	70	70	72	72	75	75
	Operating Current (max)		A	20.0	11.5	26.5	11.5	30.0	11.5
	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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
*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.

MULTI SPLIT SERIES

SELECTION

Choose from five 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

R32 R410A

MSZ-LN (25•35)

R410A

MSZ-FH

R32 R410A

MSZ-EF

R32 R410A

MSZ-AP25-50VG

MSZ-AP15-20VF

R410A

MSZ-SF25-50VE

MSZ-SF15-20VA

R410A

MSZ-GF

Floor-standing

R410A

MFZ-KJ

Cassette

R32 R410A

SLZ

R32 R410A

MLZ-KP

R32 R410A

PLA

Ceiling-suspended

R32 R410A

PCA

Ceiling-concealed

R32 R410A

SEZ

R32 R410A

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 up to 2 indoor units
R32

MXZ-2F33VF
MXZ-2F42VF
MXZ-2F53VF(H)

3-port up to 3 indoor units
R32

MXZ-3F54VF
MXZ-3F68VF

4-port up to 4 indoor units
R32

MXZ-4F72VF

2-port up to 2 indoor units
R410A

MXZ-2D33VA
MXZ-2D42VA2
MXZ-2D53VA(H)2

3-port up to 3 indoor units
R410A

MXZ-3E54VA
MXZ-3E68VA

4-port up to 4 indoor units
R410A

MXZ-4E72VA

MXZ-4E83VA

5-port up to 5 indoor units
R410A

MXZ-5E102VA

6-port up to 6 indoor units
R410A

MXZ-6D122VA2

HYPER HEATING*

2-port up to 2 indoor units
R410A

MXZ-2E53VAHZ

4-port up to 4 indoor units
R410A

MXZ-4E83VAHZ

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.

R32

2-port

MXZ-2F33VF
MXZ-2F42VF
MXZ-2F53VF(H)

R32

3-port 4-port

MXZ-3F54VF
MXZ-3F68VF
MXZ-4F72VF

EXAMPLE SYSTEM

MXZ-4F72VF system


MSZ-LN


MSZ-AP


MLZ-KP


MXZ-4F72VF


SLZ

Handle Up to 4 Rooms with a Single Outdoor Unit

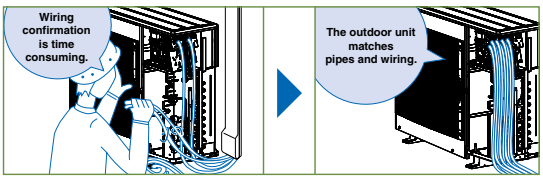
The MXZ Series for R32 offers a six-system line-up to choose from, ranging between 3.3 and 7.2kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

Support Functions

Wiring/Piping Correction Function* (3F54/3F68/4F72)

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.



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

Type (Inverter Multi - Split Heat Pump)				Up to 2 Indoor Units				Up to 3 Indoor Units		Up to 4 Indoor Units
Indoor Unit				Please refer to *4						
Outdoor Unit				MXZ-2F33VF	MXZ-2F42VF	MXZ-2F53VF	MXZ-2F53VFH	MXZ-3F54VF	MXZ-3F68VF	MXZ-4F72VF
Refrigerant				R32*1						
Power Supply	Source			Outdoor power supply						
	Outdoor (V/Phase/Hz)			220 - 230 - 240V / Single / 50Hz						
Cooling	Capacity	Rated	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2
	Input*4	Rated	kW	0.85	0.98	1.40	1.40	1.32	1.84	1.85
	EER*4			3.88	4.29	3.79	3.79	4.09	3.70	3.89
	EEL Rank*4			–	–	–	–	–	–	–
	Design Load		kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2
	Annual Electricity Consumption*2		kWh/a	188	169	215	215	222	299	310
	SEER*4			6.13	8.69	8.63	8.63	8.52	7.96	8.13
	Energy Efficiency Class*4			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
	Input	Rated	kW	0.91	0.88	1.56	1.56	1.40	1.91	1.87
	COP*4			4.40	5.11	4.10	4.10	5.00	4.50	4.60
	EEL Rank*4			–	–	–	–	–	–	–
	Design Load		kW	2.7	3.2	3.2	3.2	5.0	6.8	7.0
	Declared Capacity	at reference design temperature	kW	2.2	2.7	2.7	2.7	4.0	5.5	5.6
		at bivalent temperature	kW	2.4	2.9	2.9	2.9	4.5	6.1	6.2
		at operation limit temperature	kW	1.8	2.3	2.3	2.1	3.2	4.6	4.8
	Back Up Heating Capacity		kW	0.5	0.5	0.5	0.5	1.0	1.3	1.4
	Annual Electricity Consumption*2		kWh/a	908	974	973	998	1520	2312	2410
	SCOP*4			4.16	4.60	4.60	4.49	4.61	4.12	4.07
	Energy Efficiency Class*4			A+	A++	A++	A+	A++	A+	A+
Operating Current (max)			A	10.0	12.2	12.2	12.2	18.0	18.0	18.0
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 (+69) - 285 (+59.5)				710 - 840 (+30) - 330 (+66)		
	Weight		kg	33	37	37	38	58	58	59
	Air Volume	Cooling	m^3/min	32.9	27.7	32.9	32.9	42.1	42.1	42.1
		Heating	m^3/min	33.7	33.3	33.3	33.3	43.0	43.0	43.0
	Sound Level (SPL)	Cooling	dB(A)	49	44	46	46	46	48	48
		Heating	dB(A)	50	50	51	51	50	53	54
	Sound Level (PWL)	Cooling	dB(A)	60	59	61	61	60	63	63
	Operating Current	Cooling	A	Pending	Pending	Pending	Pending	Pending	Pending	Pending
		Heating	A	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	Breaker Size		A	15	15	15	15	25	25	25
Ext. Piping	Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3	6.35 × 3 / 9.52 × 3	6.35 x 4 / 12.7 x 1 + 9.52 x 3
	Total Piping Length (max)		m	20	30	30	30	50	60	60
	Each Indoor Unit Piping Length (max)		m	15	20	20	20	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
	Chargeless Length		m	20	30	30	30	Refer to "Method Of Charging refrigerant"		
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 675. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 675 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. The GWP of R32 is 675 in the IPCC 4th Assessment Report.

*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-2F33VF	MSZ-AP15VF + MSZ-LN18VG
MXZ-2F42VF	MSZ-LN18VG + MSZ-LN25VG
MXZ-2F53VF(H)	MSZ-LN18VG + MSZ-LN35VG
MXZ-3F54VF	MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG
MXZ-3F68VF	MSZ-LN18VG + MSZ-LN25VG + MSZ-LN25VG
MXZ-4F72VF	MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG

Method of Charging refrigerant

■MXZ-3/4F

Total refrigerant ✻3	=	Pre charge	+	Indoor unit number ✻1	+	Connection of specific I/U ✻2	+	Piping length
------ kg		1.4 kg		------ kg		------ kg		0.0 kg

■MXZ-2F42/53

Total refrigerant	=	Pre charge	+	Piping length
1.2 kg		1.2 kg		0.0 kg

■MXZ-2F33

Total refrigerant	=	Pre charge	+	Piping length
1.0 kg		1.0 kg		0.0 kg

✻1 If you connect indoor unit number 3 or 4 units, please add to charge refrigerant amount 0.5kg

✻2 If you connet specific indoor unit(s), please add to charge refrigerant amount 0.17kg per 1unit
Specific indoor unit is following: MSZ-LN18/25/35VG MLZ-KP25/35/50VA
SEZ-M50DA(L) PCA-M50/60KA
PEAD-M50JA(L)Q

✻3 In case total refrigerant amount exceeds 2.4kg depending on combination, please charge only 1.0kg for maximum.

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.

R410A

2-port

MXZ-2D33VA
MXZ-2D42VA2
MXZ-2D53VA(H)2

R410A

3-port 4-port

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

R410A

4-port 5-port

MXZ-4E83VA
MXZ-5E102VA

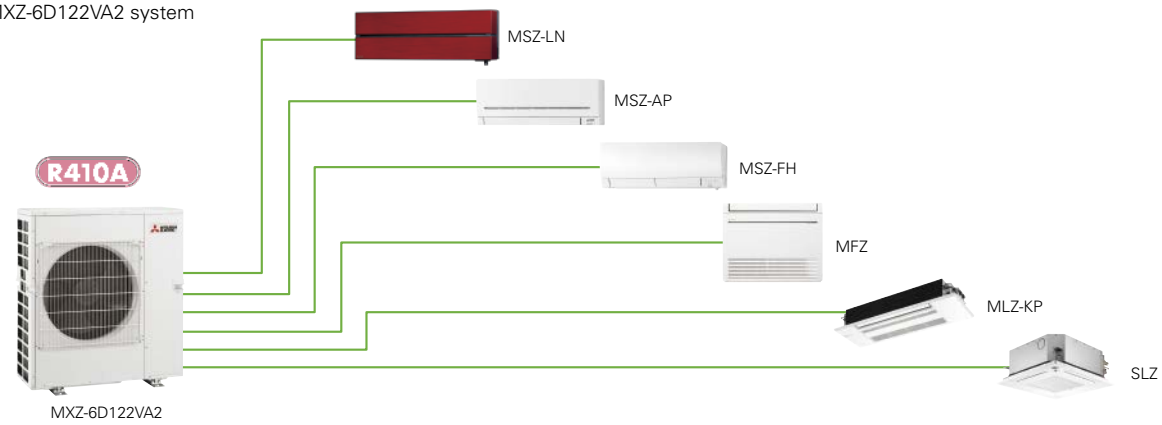
R410A

6-port

MXZ-6D122VA2

EXAMPLE SYSTEM

MXZ-6D122VA2 system



Handle Up to 6 Rooms with a Single Outdoor Unit

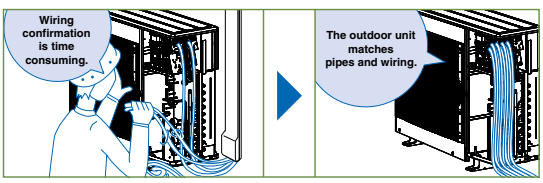
The MXZ Series offers a nine-system line-up to choose from, ranging between 3.3 and 12.2kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

Support Functions

Wiring/Piping Correction Function* (3E54/3E68/4E72/4E83/5E102/6D122)

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

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	N: MXZ-2D42VA2	N: MXZ-2D53VA2	N: MXZ-2D53VAH2	N: MXZ-3E54VA	N: MXZ-3E68VA	N: MXZ-4E72VA	MXZ-4E83VA	MXZ-5E102VA
Refrigerant				R410A*1								
Power Supply	Source			Outdoor power supply								
	Outdoor (V/Phase/Hz)			220 - 230 - 240V / 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	216	262	262	295	425	443	460	537
	SEER*4			5.5	6.8	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	4.0	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	1.0	1.4	1.4	1.6	1.6
	Annual Electricity Consumption*2		kWh/a	926	1065	1507	1546	1751	2466	2516	2889	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	63	64
	Air Volume	Cooling	m^3/min	32.9	27.7	32.9	32.9	42.1	42.1	42.1	55.6	65.1
		Heating	m^3/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-6D122VA2
Refrigerant				R410A*1
Power Supply	Source			Outdoor power supply
	Outdoor (V/Phase/Hz)			220 - 230 - 240V / 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	m^3/min	63.0
		Heating	m^3/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-2D42VA2 MXZ-2D53VA2 MXZ-2D53VAH2

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-3E54VA

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-3E68VA MXZ-4E72VA

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

*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-2D42VA2 → MSZ-EF18VE + MSZ-EF25VE
MXZ-2D53VA(H)2 → MSZ-EF18VE + MSZ-EF35VE
MXZ-3E54VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MXZ-3E68VA → MSZ-EF18VE + MSZ-EF25VE + MSZ-EF25VE
MXZ-4E72VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MXZ-4E83VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE
MXZ-5E102VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF22VE + MSZ-EF22VE
*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-6D122VA2 → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF25VE + MSZ-EF25VE

MXZ-DM SERIES

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

R410A

2-port

MXZ-2DM40VA

R410A

3-port

MXZ-3DM50VA

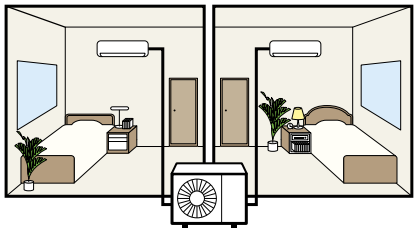
Stylish Design with Flat Panel Front

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

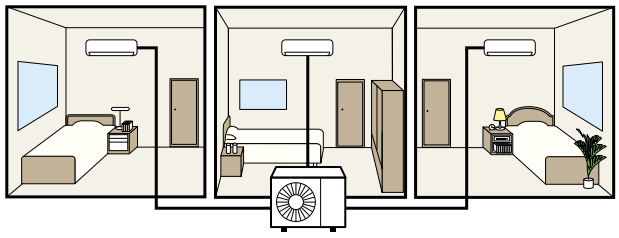
Easy to create various combinations

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

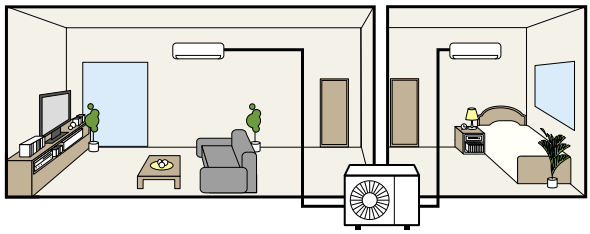
Two bedrooms



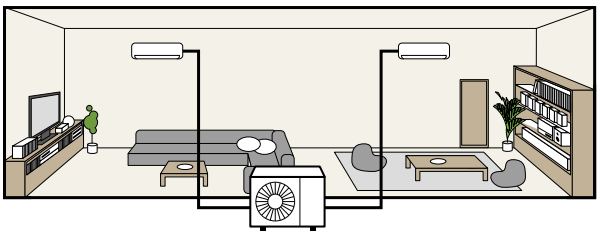
Three bedrooms



Living room and one bedroom

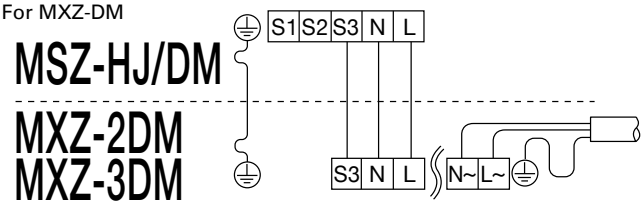


Wide living room

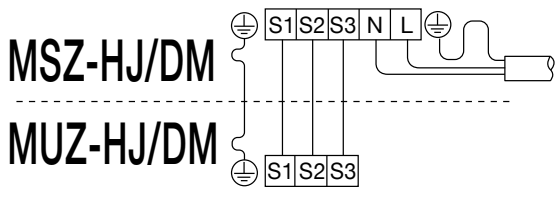


Attention MXZ-DM is exclusively for connection to MSZ-HJ and DM.
Please check to make sure that wiring is done correctly.

For MXZ-DM



For MSZ-HJ/DM / MUZ-HJ/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	31.9	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

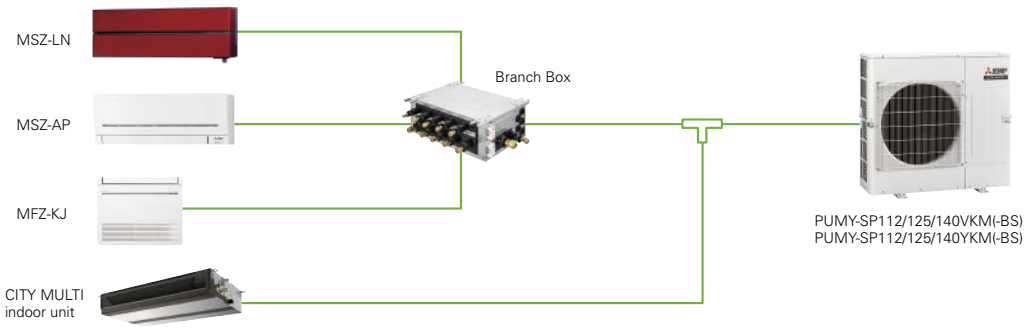
PUMY-SP SERIES

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

R410A

PUMY-SP112/125/140VKM(-BS)
PUMY-SP112/125/140YKM(-BS)

EXAMPLE SYSTEM



Light weight and compact size

Compact design fits into narrow outdoor unit space of condominiums and offices.
Light weight design facilitates easy installation and transportation.

PUMY-P112/125/140 YKM3(-BS)

Height 1,338mm
Weight 125kg

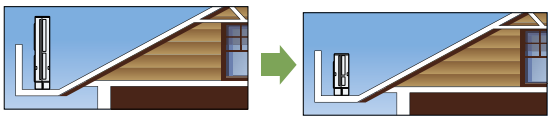
PUMY-SP112/125/140YKM(-BS)

27% reduction
Height 981mm

25% reduction
Weight 94kg

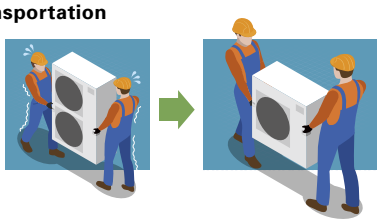
Unobstructive, compact, and easy to hide from view

Conventional 2-fan type outdoor units may spoil the view. Due to its compact size, the new outdoor fan unit can be installed in locations that would have been inappropriate.



Easy installation and transportation

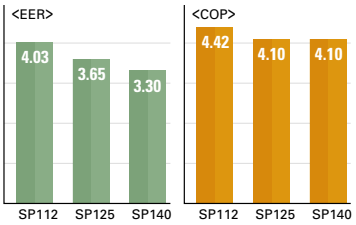
The reduced weight and height allow for better transportation performance. Carrying and installing become easier.



Industry's top energy efficiency*

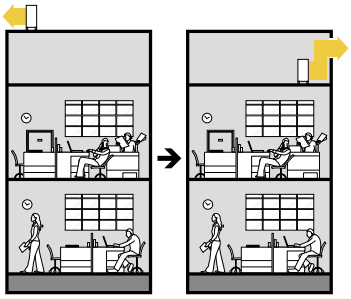
Even with its compact size and light weight, it has a high EER and COP. Costs are reduced with the industry's best energy saving abilities.

* As of sep.2017.Among VRF outdoor unit of 1fan. (An incompany investigation)

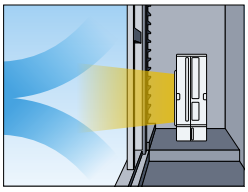


An external static pressure of 30Pa

The installation location is flexible, thanks to its 30Pa static pressure. You can install it in locations that you could not before.



An external static pressure of 30Pa allows outdoor unit to be installed on balconies in high-rise building or spaces near louvers.



✻Noise level will increase when using this function.

Super silent mode*

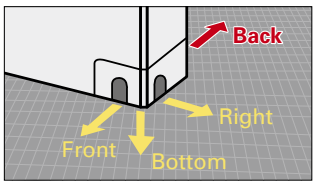
Noise level can be reduced up to 10dB(A). This allows you to operate the unit even in the night in a residential zone.

*Capacity reduction differs by mode setting.
*PAC-SC36NA-E is required to activate Super Silent mode.

Rear piping is available

Freedom with layout due to its piping pullout locations in four directions

The in-door unit allows piping from any four directions; front, back, bottom, or right. This enables easier horizontal connection for collective layout.
The out-door unit with an expanded piping layout flexibility greatly improves piping workability.



PUMY-SP SERIES
INVERTER MULTI

Model				PUMY-SP112VKM(-BS)	PUMY-SP125VKM(-BS)	PUMY-SP140VKM(-BS)	PUMY-SP112YKM(-BS)	PUMY-SP125YKM(-BS)	PUMY-SP140YKM(-BS)
Power Source				1-phase 220 - 230 - 240V 50Hz / 220V 60Hz			3-phase 380 - 400 - 415V 50Hz / 380V 60Hz		
Cooling Capacity (nominal)		*1	kW	12.5	14.0	15.5	12.5	14.0	15.5
	Power Input		kW	3.10	3.84	4.70	3.10	3.84	4.70
	Current Input		A	14.38 - 13.75 - 13.18 / 14.38	17.81 - 17.04 - 16.33 / 17.81	21.80 - 20.85 - 19.88 / 21.80	4.96 - 4.71 - 4.54 / 4.96	6.14 - 5.83 - 5.62 / 6.14	7.52 - 7.14 - 6.88 / 7.52
	EER		kW/kW	4.03	3.65	3.30	4.03	3.65	3.30
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.	*3	D.B.	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C
Heating Capacity (nominal)		*2	kW	14.0	16.0	16.5	14.0	16.0	16.5
	Power Input		kW	3.17	3.90	4.02	3.17	3.90	4.02
	Current Input		A	14.70 - 14.06 - 13.48 / 14.70	18.09 - 17.30 - 16.58 / 18.09	18.65 - 17.83 - 17.09 / 18.65	5.07 - 4.82 - 4.64 / 5.07	6.24 - 5.93 - 5.71 / 6.24	6.43 - 6.11 - 5.89 / 6.43
	COP		kW/kW	4.42	4.10	4.10	4.42	4.10	4.10
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*10	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
	Mixed System	Branch Box 1 unit	City Multi	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5
			Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5
		Branch Box 2 units	City Multi	15 - 140 / 3 or 2*8	15 - 140 / 3	15 - 140 / 3	15 - 140 / 3 or 2*8	15 - 140 / 3	15 - 140 / 3
			Branch Box	15 - 100 / 7 or 8*8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 7 or 8*8	15 - 100 / 8	15 - 100 / 8
Sound Pressure Level (Cooling / Heating)			dB <A>	52 / 54	53 / 56	54 / 56	52 / 54	53 / 56	54 / 56
Sound Power Level (Cooling)			dB <A>	72	73	74	72	73	74
Refrigerant Piping Diameter	Liquid Pipe		mm	9.52 Flare					
	Gas Pipe		mm	15.88 Flare					
Fan	Type × Quantity			Propeller Fan × 1					
	Air Flow Rate		m³/min	77	83	83	77	83	83
			L/s	1,283	1,383	1,383	1,283	1,383	1,383
			cfm	2,719	2,931	2,931	2,719	2,931	2,931
	Motor Output		kW	0.20					
	External Static Press.		Pa	0 Pa / 30 Pa*9					
Compressor	Type × Quantity			Twin rotary hermetic compressor × 1					
	Starting Method			Inverter					
	Motor Output		kW	3.1	3.5	3.7	3.1	3.5	3.7
External Dimensions (H × W × D)			mm	981×1,050×330 (+40)					
Net Weight			kg (lbs)	93 (205)*6			94 (207)*7		
Pre-Chareged Quantity	Weight		kg	3.5	3.5	3.5	3.5	3.5	3.5
	CO_2 Equivalent		t	7.31	7.31	7.31	7.31	7.31	7.31
Max Added Quantity	Weight		kg	9.0	9.0	9.0	9.0	9.0	9.0
	CO_2 Equivalent		t	18.79	18.79	18.79	18.79	18.79	18.79

*1,*2 Nominal conditions

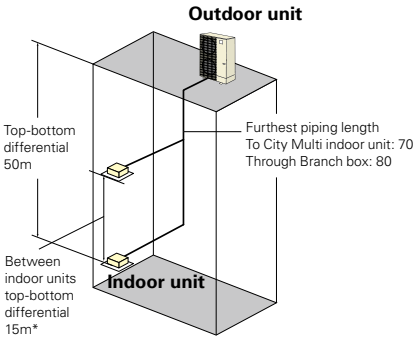
	Indoor	Outdoor	Piping Length	Level Difference	External Static Press. (Outdoor Unit)
Cooling	27°C DB / 19°C WB	35°C	7.5m (24 - 9 / 16ft.)	0m (0ft)	0 Pa
Heating	20°C DB	7°C DB / 6°C WB	7.5m (24 - 9 / 16ft.)	0m (0ft)	0 Pa

*3 10 to 52°C; incase of connecting PKFY-P15/P20/P25VBM, PFFY-P20/P25/P32VKM, PFFY-P20/P25/P32VLE(R)M indoor unit and M series indoor unit with connection kit and M series, S series, and P series type indoor unit with branch box.
*4 Up to P100 when connecting via branch box. *5 Up to 11 units when connecting via 2 branch boxes.
*6 94 (207), for PUMY-SP112/125/140VKM-BS *7 95 (209), for PUMY-SP112/125/140YKM-BS
*8 When connecting 7 indoor units via branch box, connectable City Multi indoor units are 3; connecting 8 indoor units via branch box, connectable City Multi indoor units are 2.
*9 0 Pa as initial setting
*10 At least 2 indoor units must be connected when using branch box.

Type				Branch Box			
Model Name				PAC-MK53BC	PAC-MK33BC	PAC-MK53BCB	PAC-MK33BCB
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)			1-phase, 220 - 230 - 240V, 50Hz			
Total Input			kW	0.003			
Operating Current			A	0.05			
Dimensions	H × W × D		mm	170 - 450 - 280			
Weight			kg	7.4	6.7	7.0	6.5
Piping [diameter]	Branch [Indoor Side]	Liquid	mm	6.35 × 5	6.35 × 3	6.35 × 5	6.35 × 3
		Gas	mm	9.52 × 4, 12.7 × 1	9.52 × 3	9.52 × 4, 12.7 × 1	9.52 × 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			

<Branch box compatible table>

Outdoor unit \ Branch box	PAC-MK31/51BC(B)	PAC-MK32/52BC(B)	PAC-MK33/53BC(B)
PUMY-SP112/125/140V/ YKM.TH(-BS)	✓	N/A	N/A
PUMY-SP112/125/140V/ YKMR1.TH(-BS)	N/A	N/A	✓



*In case of branch box connection: 12m

[SP112–140V/YKM(-BS)]

Refrigerant Piping Lengths	Maximum meters
Total length	120
Maximum allowable length	To City Multi indoor unit: 70 Through Branch box: 80

Vertical differentials between units	Maximum meters
Indoor/outdoor (outdoor higher)	50
Indoor/outdoor (outdoor lower)	30
Indoor/indoor	15*

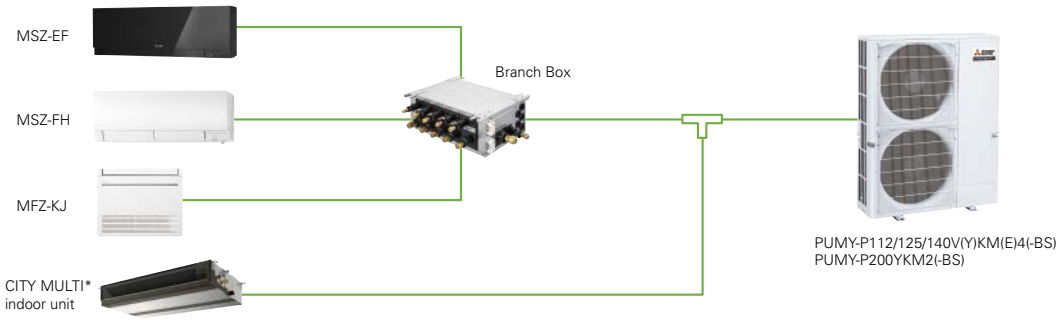
PUMY-P SERIES

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

R410A

PUMY-P112/125/140VKM4(-BS)
PUMY-P112/125/140YKM(E)4(-BS)
PUMY-P200YKM2(-BS)

EXAMPLE SYSTEM

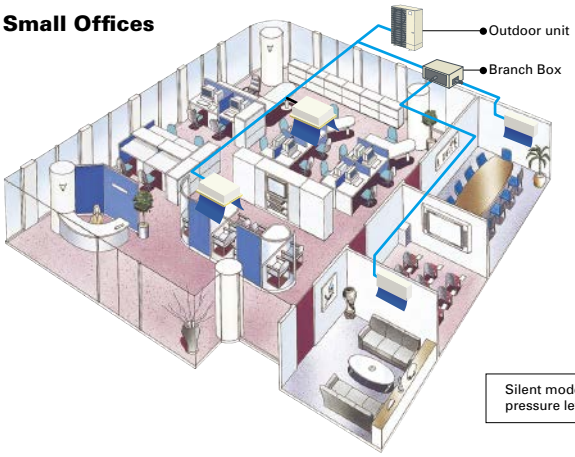


*In case of mix sytstem (CITY MULTI indoor unit with Branch box), PKFY and PFFY series are not connectable. (P112/125/140)

The two-pipe zoned system designed for Heat Pump Operation

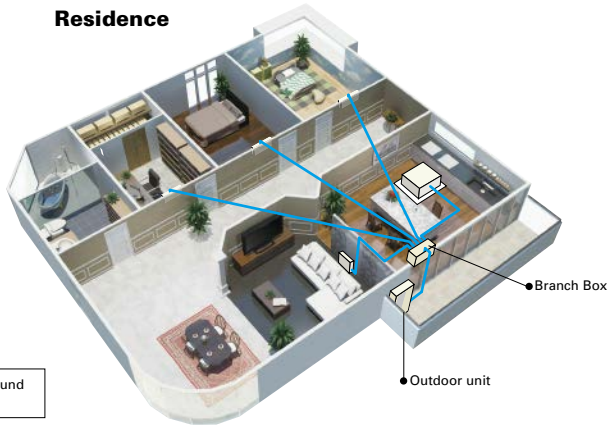
PUMY series make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively.
With 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



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

Residence



			Maximum Meters			
			Only City Multi*1 Indoor Unit	Only Branch Box Connection	Mixed System (City Multi*1 Indoor Unit + Branch Box)	
					City Multi*1 Indoor Unit	Via Branch Box
P112/125/140	Refrigerant Piping Length	Total Length	300	150	240 (2 Branch boxes) / 300 (1 Branch box)	
		Maximum Allowable Length	150 (175 equivalent)	80	85 (95 equivalent)	80
		Farthest Indoor From First Branch	30	55	30	55
	Vertical Differentials Between Units	Indoor/Outdoor (Outdoor higher)	50	50	50	
		Indoor/Outdoor(Outdoor Lower)	40*2	40	40	
		Indoor/Indoor	15*3	15*3	15*3	
P200	Refrigerant Piping Length	Total Length	150	150	150	
		Maximum Allowable Length	80 (90 equivalent)	80	80 (90 equivalent)	80
		Farthest Indoor From First Branch	30	55	30	55
	Vertical Differentials Between Units	Indoor/Outdoor (Outdoor higher)	50	50	50	
		Indoor/Outdoor (Outdoor Lower)	40	40	40	
		Indoor/Indoor	15*3	15*3	15*3	

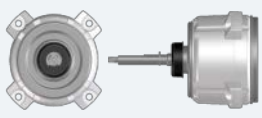
*1 Include system with connection kit
*2 In case of including PKFY or PFFY, height between units is 30m.
*3 In case of branch box connection: 12m

30Pa external static pressure* Option (requires PAC-SJ71FM-E)

An external static pressure of 30Pa enables the outdoor unit to be installed on balconies in high-rise building or spaces near louvers.

✻PUMY-P112/125/140VKM4(-BS), PUMY-P112/125/140YKM(E)4(-BS) only.
✻Noise level will increase when using this function.

30Pa external static pressure fan motor (option)
(PAC-SJ71FM-E)



PUMY SERIES
INVERTER MULTI

Model				PUMY-P112VKM4(-BS)	PUMY-P125VKM4(-BS)	PUMY-P140VKM4(-BS)	PUMY-P112YKM4(-BS)	PUMY-P125YKM4(-BS)	PUMY-P140YKM4(-BS)	PUMY-P200YKM2(-BS)
Power Source				1-phase 220 - 230 - 240V 50Hz			3-phase 380 - 400 - 415V 50Hz			
Cooling Capacity (nominal)		*1	kW	12.5	14.0	15.5	12.5	14.0	15.5	22.4
	Power Input		kW	2.79	3.46	4.52	2.79	3.46	4.52	6.05
	Current Input		A	12.87 - 12.32 - 11.80	15.97 - 15.27 - 14.64	20.86 - 19.95 - 19.12	4.99 - 4.74 - 4.57	5.84 - 5.55 - 5.35	7.23 - 6.87 - 6.62	9.88 - 9.39 - 9.05
	EER		kW/kW	4.48	4.05	3.43	4.48	4.05	3.43	3.70
Temp. Range of Cooling	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	15.0 - 24.0°C
	Outdoor Temp.*3		D.B.	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C	-5.0 - 52°C
Heating Capacity (nominal)		*2	kW	14.0	16.0	18.0	14.0	16.0	18.0	25.0
	Power Input		kW	3.04	3.74	4.47	3.04	3.74	4.47	5.84
	Current Input		A	14.03 - 13.42 - 12.86	17.26 - 16.51 - 15.82	20.63 - 19.73 - 18.91	5.43 - 5.16 - 4.98	6.31 - 6.00 - 5.78	7.15 - 6.79 - 6.55	9.54 - 9.06 - 8.74
	COP		kW/kW	4.61	4.28	4.03	4.61	4.28	4.03	4.28
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	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	-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	15 - 200 / 12
			Branch Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
	Mixed System	Branch Box 1 unit	City Multi	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5	15 - 200 / 5
			Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5
		Branch Box 2 units	City Multi	15 - 140 / 3 or 2*4	15 - 140 / 3	15 - 140 / 3	15 - 140 / 3 or 2*4	15 - 140 / 3	15 - 140 / 3	15 - 200 / 3
			Branch Box	15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8	15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
Sound Pressure Level (measured in anechoic room)			dB <A>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53	56 / 61
Refrigerant Piping Diameter	Liquid Pipe		mm	9.52 Flare						9.52*6 Flare
	Gas Pipe		mm	15.88 Flare						19.1 Flare
Fan	Type × Quantity			Propeller Fan × 2						
	Air Flow Rate		m^3/min	110						139
			L/s	1,883						2,316
			cfm	3,884						4,908
	Motor Output		kW	0.074 + 0.074						0.20 + 0.20
Compressor	Type × Quantity			Scroll hermetic compressor × 1						
	Starting Method			Inverter						
	Motor Output		kW	2.9	3.5	3.9	2.9	3.5	3.9	5.3
External Dimensions (H × W × D)			mm	1,338×1,050×330 (+40)						
Weight			kg	122			125			141

*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 10 to 52°C D.B.: When connecting PKFY-P15/20/25VBM, PFFY-P20/25/32VKM and PFFY-P20/25/32VLE(R)M, PEFY-P-VMA3, M, S and P series indoor unit.
*4 When connecting 7 indoor units via branch box, connectable City Multi indoor units are 3; connecting 8 indoor units via branch box, connectable indoor units are 2.
*5 At least 2 indoor units must be connected when using branch box.
*6 Liquid pipe diameter: 12.7mm when piping length is more than 60m.

Model				PUMY-P112YKME4(-BS)	PUMY-P125YKME4(-BS)	PUMY-P140YKME4(-BS)
Power Source				3-phase 380 - 400 - 415V 50Hz		
Cooling Capacity (nominal)		*1	kW	12.5	14.0	15.5
	Power Input		kW	2.79	3.46	4.52
	Current Input		A	4.99 / 4.74 / 4.57	5.84 / 5.55 / 5.35	7.23 / 6.87 / 6.62
	EER		kW/kW	4.48	4.05	3.43
Temp. Range of Cooling	Indoor Temp.		W.B.	15 to 24°C		
	Outdoor Temp.*3		D.B.	–5 to 52°C		
Heating Capacity (nominal)		*2	kW	14.0	16.0	18.0
	Power Input		kW	3.04	3.74	4.47
	Current Input		A	5.43 / 5.16 / 4.98	6.31 / 6.00 / 5.78	7.15 / 6.79 / 6.55
	COP		kW/kW	4.61	4.28	4.03
Temp. Range of Heating	Indoor Temp.		D.B.	15 to 27°C		
	Outdoor Temp.		W.B.	–20 to 15°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
			Branch Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
	Mixed System	Branch Box 1 unit	City Multi	15 - 140 / 5	15 - 140 / 5	15 - 140 / 5
			Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5
		Branch Box 2 units	City Multi	15 - 140 / 3 or 2*4	15 - 140 / 3	15 - 140 / 3
			Branch Box	15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8
Sound Pressure Level (measured in anechoic room)			dB <A>	49 / 51	50 / 52	51 / 53
Refrigerant Piping Diameter	Liquid Pipe		mm	9.52 Flare		
	Gas Pipe		mm	15.88 Flare		
Fan	Type × Quantity			Propeller Fan × 2		
	Air Flow Rate		m^3/min	110		
			L/s	1,833		
			cfm	3,884		
	Motor Output		kW	0.074 + 0.074		
Compressor	Type × Quantity			Scroll hermetic compressor × 1		
	Starting Method			Inverter		
	Motor Output		kW	2.9	3.5	3.9
External Dimensions (H × W × D)			mm	1,338×1,050×330 (+40)		
Weight			kg	136		

*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 10 to 52°C D.B.: When connecting PKFY-P15/20/25VBM, PFFY-P20/25/32VKM and PFFY-P20/25/32VLE(R)M, PEFY-P-VMA3, M, S and P series indoor unit.
*4 When connecting 7 indoor units via branch box, connectable City Multi indoor units are 3; connecting 8 indoor units via branch box, connectable indoor units are 2.
*5 At least 2 indoor units must be connected when using branch box.

Type				Branch Box			
Model Name				PAC-MK53BC	PAC-MK33BC	PAC-MK53BCB	PAC-MK33BCB
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)			1-phase, 220/230/240V, 50Hz, 1-phase, 220V, 60Hz			
Total Input			kW	0.003			
Operating Current			A	0.05			
Dimensions	H × W × D		mm	170 - 450 - 280			
Weight			kg	7.4	6.7	7.0	6.5
Piping [diameter]	Branch [Indoor Side]	Liquid	mm	6.35 × 5	6.35 × 3	6.35 × 5	6.35 × 3
		Gas	mm	9.52 × 4, 12.7 × 1	9.52 × 3	9.52 × 4, 12.7 × 1	9.52 × 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

■ MXZ Series R32

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

Indoor Unit		Outdoor Unit / Inverter Models Heat pump type	MXZ-2F33VF	MXZ-2F42VF	MXZ-2F53VF(H)	MXZ-3F54VF	MXZ-3F68VF	MXZ-4F72VF
M series	Wall-Mounted	MSZ-LN18VG(W)(V)(R)(B)	●	●	●	●	●	●
		MSZ-LN25VG(W)(V)(R)(B)	●	●	●	●	●	●
		MSZ-LN35VG(W)(V)(R)(B)		●	●	●	●	●
		MSZ-LN50VG(W)(V)(R)(B)						
		MSZ-AP15VF	●	●	●	●	●	●
		MSZ-AP20VF	●	●	●	●	●	●
		MSZ-AP25VG	●	●	●	●	●	●
		MSZ-AP35VG		●	●	●	●	●
		MSZ-AP42VG			●	●	●	●
		MSZ-AP50VG			●	●	●	●
		MSZ-FH25VE2						
		MSZ-FH35VE2						
		MSZ-FH50VE2						
		MSZ-EF18VE3(W)(B)(S)	●	●	●	●	●	●
		MSZ-EF22VE3(W)(B)(S)	●	●	●	●	●	●
		MSZ-EF25VE3(W)(B)(S)	●	●	●	●	●	●
		MSZ-EF35VE3(W)(B)(S)		●	●	●	●	●
		MSZ-EF42VE3(W)(B)(S)			●	●	●	●
		MSZ-EF50VE3(W)(B)(S)			●	●	●	●
		MSZ-SF15VA						
		MSZ-SF20VA						
		MSZ-SF25VE3						
		MSZ-SF35VE3						
		MSZ-SF42VE3						
		MSZ-SF50VE3						
		MSZ-GF60VE2						
		MSZ-GF71VE2						
		MSZ-DM25VA						
		MSZ-DM35VA						
		MSZ-HJ25VA						
		MSZ-HJ35VA						
		MSZ-HJ50VA						
	Floor-Standing	MFZ-KJ25VE2						
		MFZ-KJ35VE2						
		MFZ-KJ50VE2						
	1-way Cassette	MLZ-KP25VF	●	●	●	●	●	●
		MLZ-KP35VF		●	●	●	●	●
		MLZ-KP50VF				●	●	●
S series	2×2 Cassette	SLZ-M15FA	●	●	●	●	●	●
		SLZ-M25FA	●	●	●	●	●	●
		SLZ-M35FA		●	●	●	●	●
		SLZ-M50FA				●	●	●
	Ceiling-Concealed	SEZ-M25DA*2	●	●	●	●	●	●
		SEZ-M25DAL*2	●	●	●	●	●	●
		SEZ-M35DA		●	●	●	●	●
		SEZ-M35DAL		●	●	●	●	●
		SEZ-M50DA				●	●	●
		SEZ-M50DAL				●	●	●
		SEZ-M60DA					●	●
		SEZ-M60DAL					●	●
		SEZ-M71DA						
		SEZ-M71DAL						
P series	4-way Cassette	PLA-RP50EA						
		PLA-RP60EA						
		PLA-RP71EA						
	Ceiling-Suspended	PCA-M50KA				●	●	●
		PCA-M60KA					●	●
		PCA-M71KA						
	Ceiling-Concealed	PEAD-M50JA				●*1	●*1	●*1
		PEAD-M50JAL				●*1	●*1	●*1
		PEAD-M60JA						
		PEAD-M60JAL						
		PEAD-M71JA						
		PEAD-M71JAL						

*1 Maximum total current of indoor units: 3A or less.
*2 SEZ-M25 cannot be connected with MXZ-2F/3F/4F when total capacity of connected indoor units is equivalent to outdoor capacity (capacity ratio is 1).
*3 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.

■ MXZ Series R410A

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

Indoor Unit			Outdoor Unit / Inverter Models Heat pump type												
			MXZ-*3 2D33VA	MXZ-*3 2D42VA2	MXZ-*3 2D53VA(H)2	MXZ-*3 2E53VAHZ	MXZ-*3 2DM40VA	MXZ-*3 3E54VA	MXZ-*3 3E68VA	MXZ-*3 3DM50VA	MXZ-*3 4E72VA	MXZ-*3 4E83VA	MXZ-*3 4E83VAHZ	MXZ-*3 5E102VA	MXZ-*3 6D122VA2
M series	Wall-Mounted	MSZ-LN18VG(W)(V)(R)(B)													
		MSZ-LN25VG(W)(V)(R)(B)	●	●	●	●		●	●		●	●	●	●	●
		MSZ-LN35VG(W)(V)(R)(B)		●	●	●		●	●		●	●	●	●	●
		MSZ-LN50VG(W)(V)(R)(B)													
		MSZ-AP15VF	●	●	●	●		●	●		●	●	●	●	●
		MSZ-AP20VF	●	●	●	●		●	●		●	●	●	●	●
		MSZ-AP25VG*7	●	●	●	●		●	●		●	●	●	●	●
		MSZ-AP35VG*7		●	●	●		●	●		●	●	●	●	●
		MSZ-AP42VG*7			●	●		●	●		●	●	●	●	●
		MSZ-AP50VG*7			●	●		●	●		●	●	●	●	●
		MSZ-FH25VE2	●	●	●	●		●	●		●	●	●	●	●
		MSZ-FH35VE2		●	●	●		●	●		●	●	●	●	●
		MSZ-FH50VE2						●	●		●	●	●	●	●
		MSZ-EF18VE3(W)(B)(S)	●	●	●	●		●	●		●	●	●	●	●
		MSZ-EF22VE3(W)(B)(S)	●	●	●	●		●	●		●	●	●	●	●
		MSZ-EF25VE3(W)(B)(S)	●	●	●	●		●	●		●	●	●	●	●
		MSZ-EF35VE3(W)(B)(S)		●	●	●		●	●		●	●	●	●	●
		MSZ-EF42VE3(W)(B)(S)			●	●		●	●		●	●	●	●	●
		MSZ-EF50VE3(W)(B)(S)			●	●		●	●		●	●	●	●	●
		MSZ-SF15VA	●	●	●	●		●	●		●	●	●	●	●
		MSZ-SF20VA	●	●	●	●		●	●		●	●	●	●	●
		MSZ-SF25VE3	●	●	●	●		●	●		●	●	●	●	●
		MSZ-SF35VE3		●	●	●		●	●		●	●	●	●	●
		MSZ-SF42VE3			●	●		●	●		●	●	●	●	●
		MSZ-SF50VE3			●	●		●	●		●	●	●	●	●
		MSZ-GF60VE2							●		●	●	●	●	●
		MSZ-GF71VE2										●	●	●	●
		MSZ-DM25VA					●			●					
		MSZ-DM35VA					●			●					
		MSZ-HJ25VA					●			●					
		MSZ-HJ35VA					●			●					
		MSZ-HJ50VA								●					
	Floor-Standing	MFZ-KJ25VE2	●*4*5	●*4	●*4	●		●*4	●*4		●	●	●	●	●
		MFZ-KJ35VE2		●*4	●*4	●		●*4	●*4		●	●	●	●	●
		MFZ-KJ50VE2						●*4	●*4		●	●	●	●	●
	1-way Cassette	MLZ-KP25VF	●	●	●	●		●	●		●	●	●	●	●
		MLZ-KP35VF		●	●	●		●	●		●	●	●	●	●
		MLZ-KP50VF						●	●		●	●	●	●	●
S series	2×2 Cassette	SLZ-M15FA													
		SLZ-M25FA	●	●	●	●		●	●		●	●	●	●	●
		SLZ-M35FA		●	●	●		●	●		●	●	●	●	●
		SLZ-M50FA						●	●		●	●	●	●	●
	Ceiling-Concealed	SEZ-M25DA*2	●	●	●	●		●	●		●	●	●	●	●
		SEZ-M25DAL*2	●	●	●	●		●	●		●	●	●	●	●
		SEZ-M35DA		●	●	●		●	●		●	●	●	●	●
		SEZ-M35DAL		●	●	●		●	●		●	●	●	●	●
		SEZ-M50DA						●	●		●	●	●	●	●
		SEZ-M50DAL						●	●		●	●	●	●	●
		SEZ-M60DA							●		●	●	●	●	●
		SEZ-M60DAL							●		●	●	●	●	●
		SEZ-M71DA										●	●	●	●
		SEZ-M71DAL										●	●	●	●
P series	4-way Cassette	PLA-RP50EA						●	●		●	●	●	●	●
		PLA-RP60EA							●		●	●	●*6	●	●
		PLA-RP71EA										●	●*6	●	●
	Ceiling-Suspended	PCA-M50KA						●	●		●	●	●*6	●	●
		PCA-M60KA							●		●	●	●*6	●	●
		PCA-M71KA										●	●*6	●	●
	Ceiling-Concealed	PEAD-M50JA						●*1	●*1		●*1	●*1	●*1*6	●*1	●*1
		PEAD-M50JAL						●*1	●*1		●*1	●*1	●*1*6	●*1	●*1
		PEAD-M60JA										●*1	●*1*6	●*1	●*1
		PEAD-M60JAL										●*1	●*1*6	●*1	●*1
		PEAD-M71JA										●*1	●*1*6	●*1	●*1
		PEAD-M71JAL										●*1	●*1*6	●*1	●*1

*1 Maximum total current of indoor units: 3A or less.
*2 SEZ-KD25 cannot be connected with MXZ-2D(E)/3E/4E/5E when total capacity of connected indoor units is equivalent to outdoor capacity (capacity ratio is 1).
*3 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.
*4 When connecting the MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please refer to page 102.
*5 Regarding MXZ-2D33, the second unit should be a different type in the case of selecting one MFZ-KJ.
*6 P series cannot be connected with MXZ-4E83VAHZ when ampere limit adjustment function is operated.
*7 Connectable outdoor unit are MXZ-2D33VA-E4, MXZ-2D42VA2-E4, MXZ-2D53VA2-E4, MXZ-2E53VAHZ-E2, MXZ-3E54VA-E2, MXZ-3E68VA-E2, MXZ-4E72VA-E2, MXZ-4E83VA-E4, MXZ-4E83VAHZ-E3, MXZ-5E102VA-E4.

■ PUMY-SP Series

Branch Box Connection Compatibility Table

Series	Type	Model Name	Capacity										
			15	18	20	22	25	35	42	50	60	71	100
M series	Wall-Mounted	MSZ-LN•VG					●	●					
		MSZ-AP•VF/VG	●*1		●*1		●*1	●*1	●*1	●*1			
		MSZ-FH•VE2					●	●		●			
		MSZ-EF•VE3		●		●	●	●	●	●			
		MSZ-SF•VA	●		●								
		MSZ-SF•VE3					●	●	●	●			
		MSZ-GF•VE2									●	●	
	Floor-Standing	MFZ-KJ•VE2					●*1	●*1		●*1			
	1-way Cassette	MLZ-KP•VF					●*1	●*1		●*1			
S series	Ceiling-Concealed	SEZ-M•DA(L)					●*1	●*1		●*1	●*1	●*1	
	2x2 Cassette	SLZ-M•FA	●*1				●*1	●*1		●*1			
P series	Ceiling-Suspended	PCA-M•KA						●		●	●	●	●
	4-way Cassette	PLA-RP•EA						●		●	●	●	●
	Ceiling-Concealed	PEAD-M•JA(L)								●	●	●	●

*1 Connectable outdoor units are PUMY-SP112/125/140V(Y)KMR1.TH only.

LEV Kit Connection Compatibility Table

Series	I/U Type	Model Name	Capacity									
			15	18	20	22	25	35	42	50	60	71
M series	Wall-Mounted	MSZ-LN•VG					●	●				
		MSZ-AP•VF/VG	●*1		●*1		●*1	●*1	●*1	●*1		
		MSZ-FH•VE2					●	●		●		
		MSZ-EF•VE3		●		●	●	●	●	●		
		MSZ-SF•VA	●		●							
		MSZ-SF•VE3					●	●	●	●		
	Floor-Standing	MFZ-KJ•VE2										

*1 Connectable outdoor units are PUMY-SP112/125/140V(Y)KMR1.TH only.

CITY MULTI Indoor Unit Compatibility Table

Series	Type	Model Name	Capacity										
			P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140
CITY MULTI series	1-way Cassette	PMFY-P•VBM-E		●	●	●	●							
	2-way Cassette	PLFY-P•VLMD-E		●	●	●	●	●	●		●	●	●	
	4-way Cassette	PLFY-P•VEM-E		●	●	●	●	●	●		●	●	●	
		PLFY-EP•VEM-E *4						●	●		●			
	2x2 Cassette	PLFY-P•VFM-E1	●	●	●	●	●	●						
	Ceiling Concealed	PEFY-P•VMS1(L)-E	●	●	●	●	●	●	●					
		PEFY-P•VMA(L)-E		●	●	●	●	●	●	●	●	●	●	●
		PEFY-P•VMA3(L)-E *1			●	●	●							
		PEFY-•VMH-E					●	●	●	●	●	●	●	●
		PEFY-P•VMR5-E-L/R		●	●	●								
		PEFY-P•VMH-E-F									●			●
	Ceiling Suspended	PCFY-P•VKM-E					●		●			●	●	
	Wall Mounted	PKFY-P•VBM-E	●	●	●									
		PKFY-P•VHM-E				●	●	●						
		PKFY-P•VKM-E							●			●		
	Floor Standing	PFFY-P•VLEM-E		●	●	●	●	●	●					
	Floor Mounted	PFFY-P•VKM-E2		●	●	●	●							
	Concealed	PFFY-P•VLRM-E		●	●	●	●	●	●					
		PFFY-P•VLRMM-E		●	●	●	●	●	●					
	Lossnay	GUF-•RD(H)4 *3						●				●		

*1 Authorized connectable indoor units are as follows;
PUMY-SP112: PEFY-P25×2+P32×2,PUMY-SP125: PEFY-P25×1+P32×3, PUMY-SP140: PEFY-P32×2+P40×2
*2 Note that connection is not allowed inside EU countries.
PWFY can not connect to PUMY-SP seires.
*3 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)
*4 PLFY-EP can not connect more than 3units

■ PUMY-P Series

Branch Box Connection Compatibility Table

Series	Type	Model Name	Capacity										
			15	18	20	22	25	35	42	50	60	71	100
M series	Wall-Mounted	MSZ-LN•VG					●	●					
		MSZ-AP•VF/VG	●		●		●	●	●	●			
		MSZ-FH•VE2					●	●		●			
		MSZ-EF•VE3		●		●	●	●	●	●			
		MSZ-SF•VA	●		●								
		MSZ-SF•VE3					●	●	●	●			
		MSZ-GF•VE2									●	●	
	Floor-Standing	MFZ-KJ•VE2					●	●		●			
	1-way Cassette	MLZ-KP•VF					●	●		●			
S series	Ceiling-Concealed	SEZ-M•DA(L)					●	●		●	●	●	
	2×2 Cassette	SLZ-M•FA	●*1				●	●		●			
P series	Ceiling-Suspended	PCA-M•KA						●		●	●	●	●
	4-way Cassette	PLA-RP•EA						●		●	●	●	●
	Ceiling-Concealed	PEAD-M•JA(L)								●	●	●	●

*1 PUMY-P200YKM2 is not connectable.

LEV Kit Connection Compatibility Table

Series	I/U Type	Model Name	Capacity									
			15	18	20	22	25	35	42	50	60	71
M series	Wall-Mounted	MSZ-LN•VG					●	●				
		MSZ-AP•VG	●		●		●	●	●	●		
		MSZ-FH•VE2					●	●		●		
		MSZ-EF•VE3		●		●	●	●	●	●		
		MSZ-SF•VA	●		●							
		MSZ-SF•VE3					●	●	●	●		
	Floor-Standing	MFZ-KJ•VE2					●	●		●		

CITY MULTI Indoor Unit Compatibility Table

Series	Type	Model Name	Capacity										
			P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140
CITY MULTI series	1-way Cassette	PMFY-P•VBM-E		●	●	●	●							
	2-way Cassette	PLFY-P•VLMD-E		●	●	●	●	●	●		●	●	●	
	4-way Cassette	PLFY-P•VEM-E		●	●	●	●	●	●		●	●	●	
		PLFY-EP•VEM-E*4						●	●		●			
	2×2 Cassette	PLFY-P•VFM-E1	●	●	●	●	●	●						
	Ceiling Concealed	PEFY-P•VMS1(L)-E	●	●	●	●	●	●	●					
		PEFY-P•VMA(L)-E		●	●	●	●	●	●	●	●	●	●	●
		PEFY-P•VMA3-E*1			●	●	●		●					
		PEFY-P•VMH-E					●	●	●	●	●	●	●	●
		PEFY-P•VMR-E-L/R		●	●	●								
		PEFY-P•VMH-E-F									●			●
	Ceiling Suspended	PCFY-P•VKM-E					●		●			●	●	
	Wall Mounted	PKFY-P•VBM-E	●	●	●									
		PKFY-P•VHM-E				●	●	●						
		PKFY-P•VKM-E							●			●		
	Floor Standing Floor Mounted Concealed	PFFY-P•VLEM-E		●	●	●	●	●	●					
		PFFY-P•VKM-E2		●	●	●	●							
		PFFY-P•VLRM-E		●	●	●	●	●	●					
		PFFY-P•VLRMM-E		●	●	●	●	●	●					
	Air to Water unit	PWFY-P•VM-E1/E2-AU*2										●		
	Lossnay	GUF-•RD(H)4*3						●				●		

*1 Authorized connectable indoor units are as follows;
PUMY-P112:PEFY-P25×2+P32×2, PUMY-P125:PEFY-P32×4, PUMY-P140:PEFY-P32×3+P40×1, PUMY-P200YKM2:PEFY-P40×2+P63×2
*2 Note that connection is not allowed inside EU countries.
PWFY can not connect to PUMY-P200YKM2.
*3 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)
*4 PLFY-EP can not connect more than 3 units with PUMY-P Series. PLFY-EP can not connect with PUMY-P200YKM2.

POWERFUL HEATING

SERIES

SELECTION

Choose the series that best matches the building layout.

MSZ-LN VGHZ, MSZ-FH/MFZ-KJ VEHZ SERIES

The line-up includes outdoor models 25–50

Outdoor Unit

R32
R410A

MUZ-LN25/35VGHZ
MUZ-FH25/35VEHZ
MUFZ-KJ25/35VEHZ

R32
R410A

MUZ-LN50VGHZ
MUZ-FH50VEHZ
MUFZ-KJ50VEHZ

Indoor Unit

Wall-mounted

R32
R410A

MSZ-LN25/35/50VG
(W)(V)(R)(B)

R410A

MSZ-FH25/35/50VE2

Floor-standing

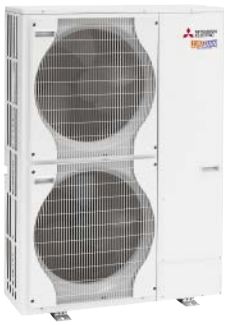
R410A

MFZ-KJ25/35/50VE2

ZUBADAN SERIES

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

Outdoor Unit



R410A

PUHZ-SHW112VHA
PUHZ-SHW112/140YHA

Indoor Unit

Ceiling-concealed

R32
R410A

PEAD Series

4-way cassette

R32
R410A

PLA Series

Wall-mounted

R32
R410A

PKA Series

MXZ-VAHZ SERIES

Outdoor Unit

R410A

MXZ-2E53VAHZ

R410A

MXZ-4E83VAHZ

LN VGHZ SERIES
R32 Single / Multi
R410A Multi

FH VEHZ SERIES
R410A Single / Multi

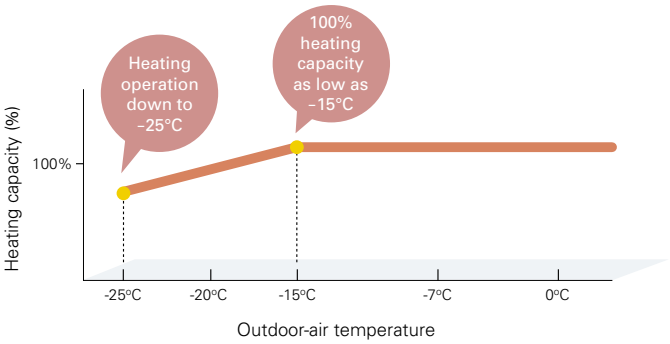
Unlike conventional air conditioning systems, the LN Series and FH Series don't lose heating capacity when it's cold outside. Original technologies ensure excellent heating performance under extremely low outdoor temperatures and an impressive guaranteed operating range.


MSZ-LN25/35/42VG(W)(V)(R)(B)

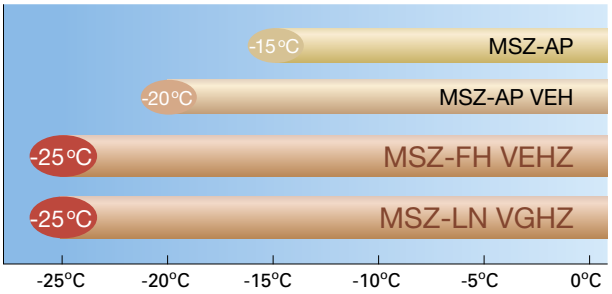

MSZ-FH25/35/50VE2

Unparalleled Heating Performance

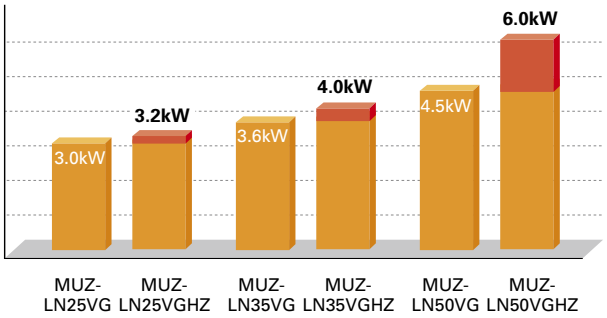
LN Series and FH Series outdoor units are equipped with a high-output compressor that provides enhanced heating performance under low outdoor temperatures. The heating operation range is extended down to -25°C.



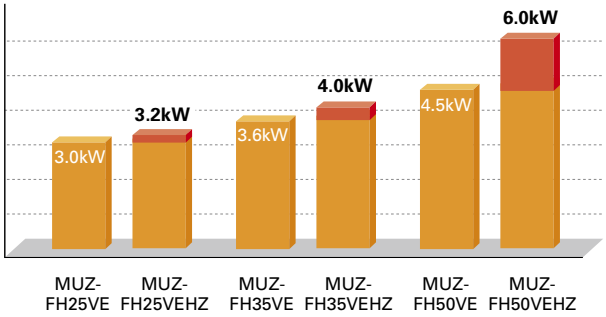
Operating Range



Declared Capacity (at reference design temperature)



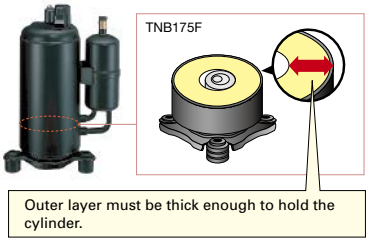
Declared Capacity (at reference design temperature)



Compact, Powerful Compressor

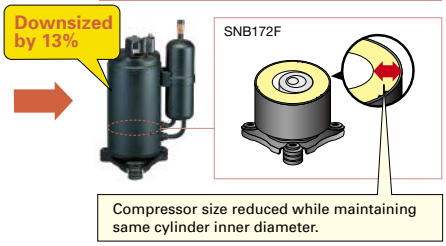
A special manufacturing technology, "Heat Caulking Fixing Method," has been introduced to reduce compressor size while maintaining a high compressor output. This technology enables the installation of a powerful compressor in compact MUZ outdoor units. As a result, excellent heating performance is achieved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

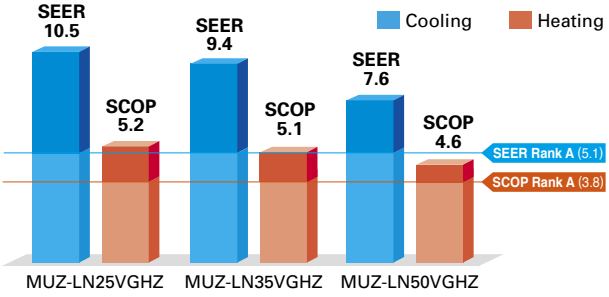
Compressor fixed using Heat Caulking Fixing Method

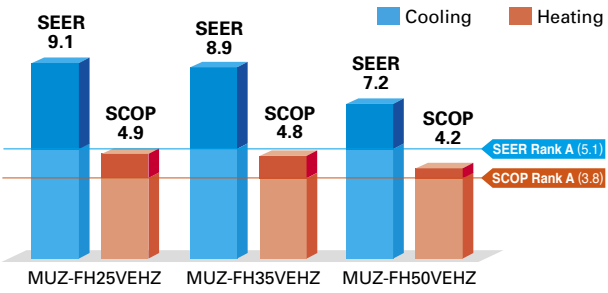


Compressor size reduced while maintaining same cylinder inner diameter.

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

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



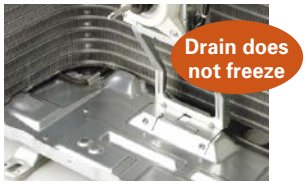


Freeze-prevention Heater Equipped as Standard

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

MSZ-LN VGHZ SERIES

EUROVENT CERTIFIED PERFORMANCE

R32 | DC Inverter | Joint Lap | DC Fan Motor | PAM | Grooved Piping | SEER 25 / 35 A+++ | SCOP 25 / 35 A+++

Indoor Unit / Remote Controller

GOOD DESIGN AWARD 2016 BEST 100

<Pearl White>

MSZ-LN25/35/50VGV

<Ruby Red>

MSZ-LN25/35/50VGR

<Natural White>

MSZ-LN25/35/50VGW

<Onyx Black>

MSZ-LN25/35/50VGB

Outdoor Unit

MUZ-LN25/35VGHZ

MUZ-LN50VGHZ

3D i-see Sensor | AREA | HUMAN | Econo Cool | AUTO VANE | Plasma Quad Plus | Dual Barrier Coating | Double Vane | SWING | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart

Low Temp Cooling | Optional | Group Control | Optional | M-NET connection | Optional | Wi-Fi Interface | MXZ connection | 25/35 | 10°C | Indoor | Night | Cleaning-free pipe route | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-LN25VG(W)(V)(R)(B)	MSZ-LN35VG(W)(V)(R)(B)	MSZ-LN50VG(W)(V)(R)(B)
Outdoor Unit				MUZ-LN25VGHZ	MUZ-LN35VGHZ	MUZ-LN50VGHZ
Refrigerant				R32 (*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	83	130	230
	SEER (*4)			10.5	9.4	7.6
		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	1.4 - 5.8
	Total Input	Rated	kW	0.485	0.820	1.380
Heating (Average Season)(*5)	Design Load		kW	3.2 (–10°C)	4.0 (–10°C)	6.0 (–10°C)
	Declared Capacity	at reference design temperature	kW	3.2 (–10°C)	4.0 (–10°C)	6.0 (–10°C)
		at bivalent temperature	kW	3.2 (–10°C)	4.0 (–10°C)	6.0 (–10°C)
		at operation limit temperature	kW	2.3 (–25°C)	3.1 (–25°C)	4.7 (–25°C)
	Back Up Heating Capacity		kW	0.0 (–10°C)	0.0 (–10°C)	0.0 (–10°C)
	Annual Electricity Consumption (*2)		kWh/a	849	1082	1826
	SCOP (*4)			5.2	5.1	4.6
		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	1.8 - 8.7
	Total Input	Rated	kW	0.580	0.800	1.480
Operating Current (max)			A	9.9	10.5	15.2
Indoor Unit	Input	Rated	kW	0.029	0.029	0.034
	Operating Current (max)		A	0.3	0.3	0.4
	Dimensions	H × W × D	mm	307 - 890 - 233	307 - 890 - 233	307 - 890 - 233
	Weight		kg	15.5	15.5	15.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)(Dry/Wet))	Cooling	m³/min	4.3 - 5.8 - 7.1 - 8.8 - 11.9	4.3 - 5.8 - 7.1 - 8.8 - 12.8	5.7 - 7.6 - 8.9 - 10.6 - 13.9
		Heating	m³/min	4.0 - 5.7 - 7.1 - 8.5 - 14.4	4.3 - 5.7 - 7.1 - 8.5 - 13.7	5.4 - 6.4 - 8.5 - 10.7 - 15.7
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	19 - 23 - 29 - 36 - 42	19 - 24 - 29 - 36 - 43	27 - 31 - 35 - 39 - 46
		Heating	dB(A)	19 - 24 - 29 - 36 - 45	19 - 24 - 29 - 36 - 45	25 - 29 - 34 - 39 - 47
	Sound Level (PWL)		dB(A)	58	58	60
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330
	Weight		kg	35	36	55
	Air Volume	Cooling	m³/min	31.4	33.8	48.8
		Heating	m³/min	27.4	27.4	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	10.2	14.8
	Breaker Size		A	10	12	16
Ext. Piping	Diameter	Liquid / Gas	mm	6.35/9.52	6.35/9.52	6.35/9.52
	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 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 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. The GWP of R32 is 675 in the IPCC 4th Assessment Report.
(*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 45 for heating (warmer season/colder season) specifications.

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) | Double Vane | 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 replace | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-FH25VE2	MSZ-FH35VE2	MSZ-FH50VE2
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 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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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 45 for heating (warmer season) specifications.

MFZ-KJ SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter · DC Fan Motor · PAM · Grooved Piping · SEER 25 A+++ · SCOP A+

Indoor Unit

GOOD DESIGN

R410A
Single / Multi

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-KJ25VE2	MFZ-KJ35VE2	MFZ-KJ50VE2
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.
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
(*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".

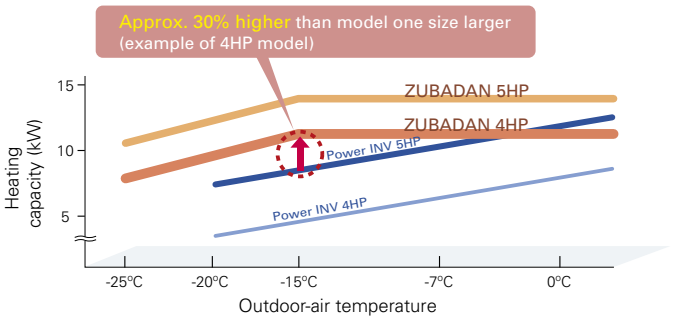
ZUBADAN SERIES

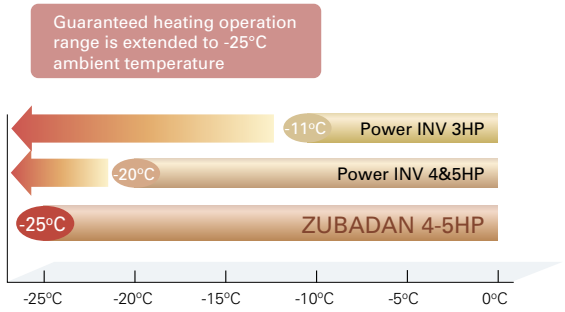
The ZUBADAN Series incorporates an original Flash Injection technology that improves the already high heating capacity of the system. This new member of the series line-up ensures comfortable heat pump-driven heating performance in cold regions.

✻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.



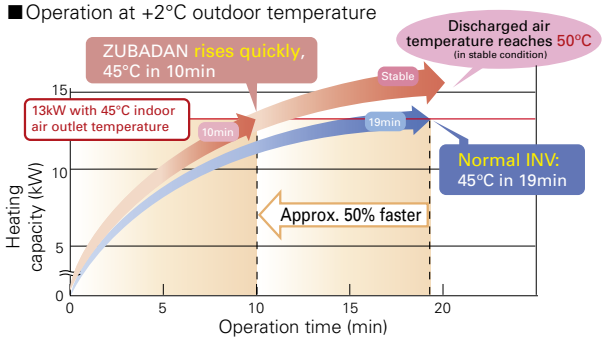


Enhanced Comfort

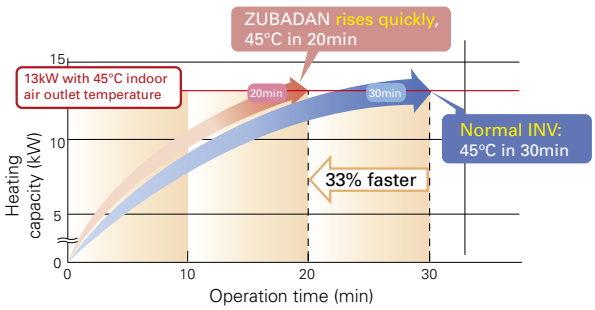
The Flash Injection circuit improves start-up and recover from the defrosting operation. A newly introduced defrost operation control also improves defrost frequency. These features enable the temperature to reach the set temperature more quickly, and contribute to maintaining it at the desired setting.

Quick Start-up

■Operation at +2°C outdoor temperature



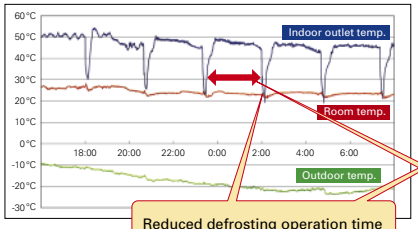
■Operation at -20°C outdoor temperature



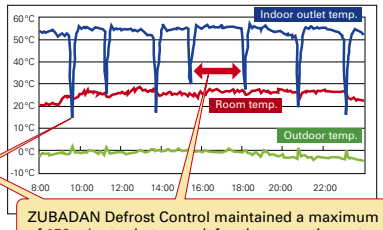
ZUBADAN Defrost Control and Faster Recovery from Defrost Operation

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

■Operation data for 25 Jan. 2005

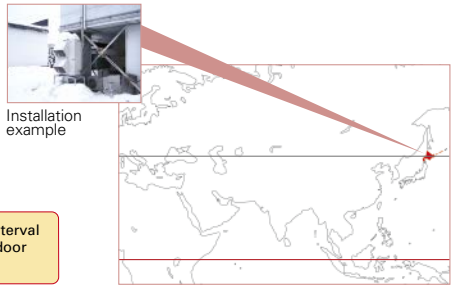


■Operation data for 2 Dec. 2004



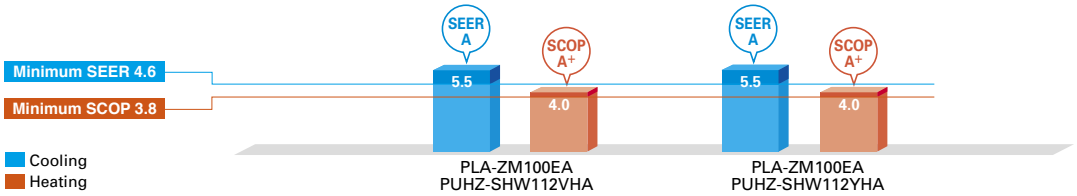
Reduced defrosting operation time from 4 to 3 minutes.

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



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

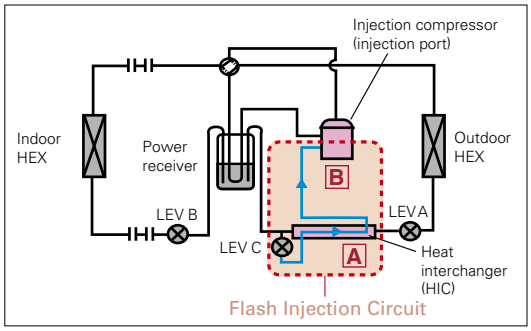
Powerful heating yet annually high energy efficiency in both cooling and heating, achieving rank A and A+.

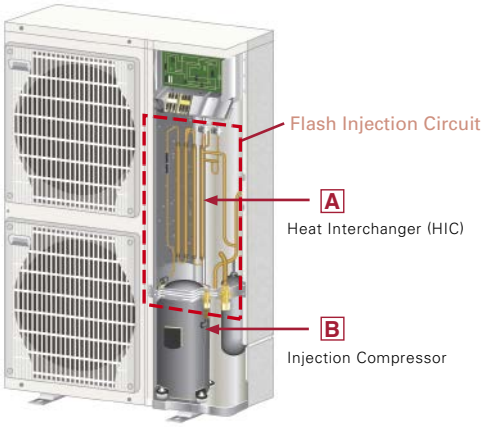


Mitsubishi Electric's Flash Injection Technology The Key to High Heating Performance at Low Outdoor Temperatures

Flash Injection Circuit

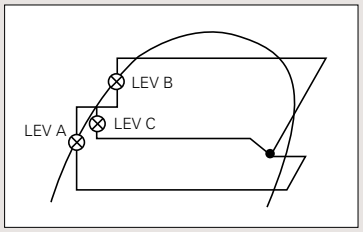
ZUBADAN





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)

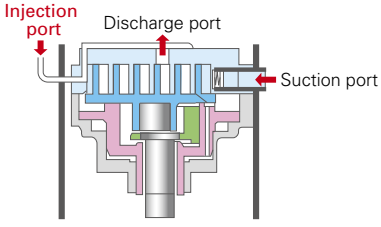
HIC cross-sectional view

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.

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

R32
R410A

PLA-ZM100/125EA

Panel

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

R410A

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

Remote Controller

Enclosed in
PLP-6EALM/PLP-6EALME

*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 reuse · Wiring Reuse (Optional) · Drain Lift Up · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				PLA-ZM100EA		PLA-ZM125EA
Outdoor Unit				PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
Refrigerant				R410A*1		
Power Supply	Source			Outdoor power supply		
	Outdoor (V/Phase/Hz)			230 / 1 / 50	400 / 3 / 50	400 / 3 / 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	2.857	2.857	5.000
	EER			–	–	2.50
		EEL Rank		–	–	–
	Design Load		kW	10.0	10.0	–
	Annual Electricity Consumption*2		kWh/a	633	633	–
	SEER			5.5	5.5	–
		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	4.000
	COP			–	–	3.50
		EEL Rank		–	–	–
	Design Load		kW	12.7	12.7	–
	Declared Capacity	at reference design temperature	kW	11.2 (-10°C)	11.2 (-10°C)	–
		at bivalent temperature	kW	11.2 (-7°C)	11.2 (-7°C)	–
		at operation limit temperature	kW	9.3 (-25°C)	9.3 (-25°C)	–
	Back Up Heating Capacity		kW	1.5	1.5	–
	Annual Electricity Consumption*2		kWh/a	4420	4420	–
	SCOP			4.0	4.0	–
		Energy Efficiency Class		A+	A+	–
Operating Current (max)			A	35.5	13.5	13.5
Indoor Unit	Input	Rated	kW	0.07	0.07	0.08
	Operating Current (max)		A	0.47	0.47	0.52
	Dimensions <Panel>	H × W × D	mm	298-840-840 <40-950-950>		
	Weight <Panel>		kg	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/min	19 - 22 - 25 - 28	19 - 22 - 25 - 28	21 - 24 - 26 - 29
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 36 - 39 - 41
	Sound Level (PWL)		dB(A)	61	61	62
Outdoor Unit	Dimensions	H × W × D	mm	1350 - 950 - 330 (+30)		
	Weight		kg	120	134	134
	Air Volume	Cooling	m^3/min	100	100	100
		Heating	m^3/min	100	100	100
	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	13	13
	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	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–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 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.

PLZ-SHW SERIES

Indoor Unit

R410A

PLA-RP100/125EA

Panel

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

R410A

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

Remote Controller

Enclosed in
PLP-6EALM/PLP-6EALME

*optional

*optional

Type				Inverter Heat Pump		
Indoor Unit				PLA-RP100EA		PLA-RP125EA
Outdoor Unit				PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
Refrigerant				R410A*1		
Power Supply	**Source**			Outdoor power supply		
	Outdoor (V/Phase/Hz)			230 / 1 / 50	400 / 3 / 50	400 / 3 / 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	2.940	2.940	5.000
	EER			–	–	2.50
		EEL Rank		–	–	–
	Design Load		kW	10.0	10.0	–
	Annual Electricity Consumption*2		kWh/a	661	661	–
	SEER			5.3	5.3	–
		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	2.793	2.793	4.000
	COP			–	–	3.50
		EEL Rank		–	–	–
	Design Load		kW	12.7	12.7	–
	Declared Capacity	at reference design temperature	kW	11.2 (-10°C)	11.2 (-10°C)	–
		at bivalent temperature	kW	11.2 (-7°C)	11.2 (-7°C)	–
		at operation limit temperature	kW	9.3 (-25°C)	9.3 (-25°C)	–
	Back Up Heating Capacity		kW	1.5	1.5	–
	Annual Electricity Consumption*2		kWh/a	4445	4445	–
	SCOP			4.0	4.0	–
		Energy Efficiency Class		A+	A+	–
Operating Current (max)			A	35.5	13.5	13.7
Indoor Unit	**Input**	Rated	kW	0.07	0.07	0.08
	Operating Current (max)		A	0.46	0.46	0.66
	Dimensions <Panel>	H × W × D	mm	298-840-840 <40-950-950>		
	Weight <Panel>		kg	24 <5>	24 <5>	26 <5>
	Air Volume [Lo-Mi2-Mi1-Hi]		m^3/min	19 - 23 - 26 - 29	19 - 23 - 26 - 29	21 - 25 - 28 - 31
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]		dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 37 - 41 - 44
	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	100	100
		Heating	m^3/min	100	100	100
	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	13	13
	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	°C	–15 ~ +46	–15 ~ +46	–15 ~ +46
		Heating	°C	–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 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.

PEDZ-SHW JA SERIES

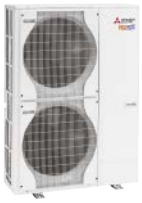
Indoor Unit

R32
R410A

PEAD-M100/125JA(L)

Outdoor Unit

R410A



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

Remote Controller

*optional

*optional

*optional

Type				Inverter Heat Pump		
Indoor Unit				PEAD-M100JA(L)		PEAD-M125JA(L)
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	–
	Annual Electricity Consumption*2		kWh/a	729 (714)	729 (714)	–
	SEER			4.8 (4.9)	4.8 (4.9)	–
		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	–
	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	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.

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

R32
R410A

PKA-M100KA(L)

Outdoor Unit

R410A

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 routing · Wiring Reuse (Optional) · Drain Lift Up (Optional) · Pump Down · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump	
Indoor Unit				PKA-M100KA(L)	
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

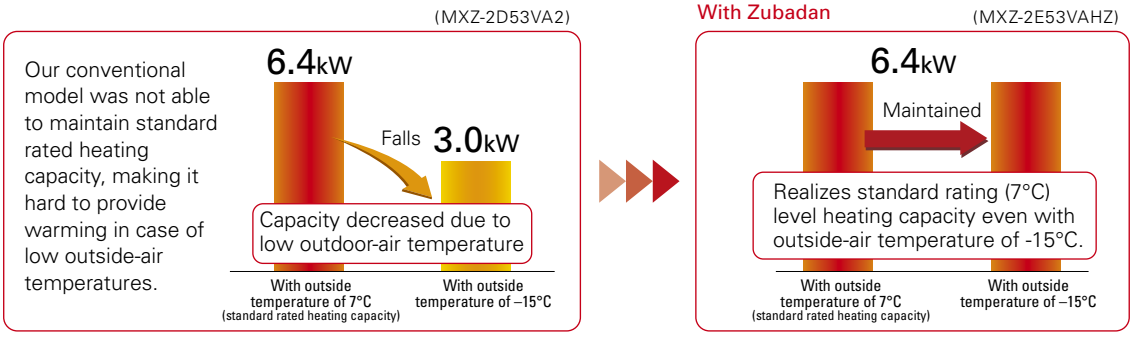
*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 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.

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.

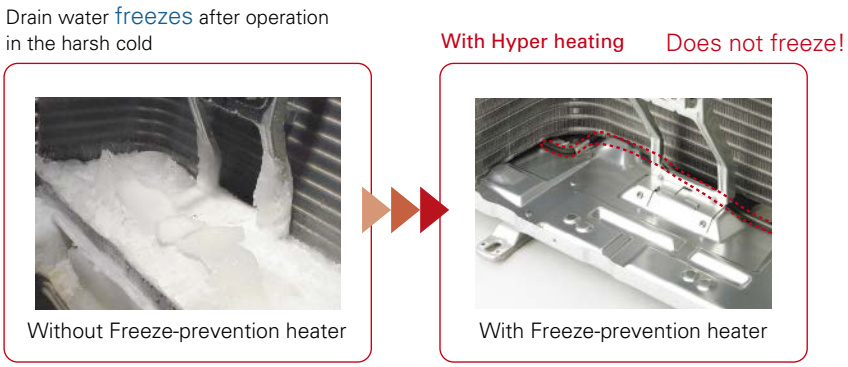


Can operate at outside-air temperature of –25°C

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.

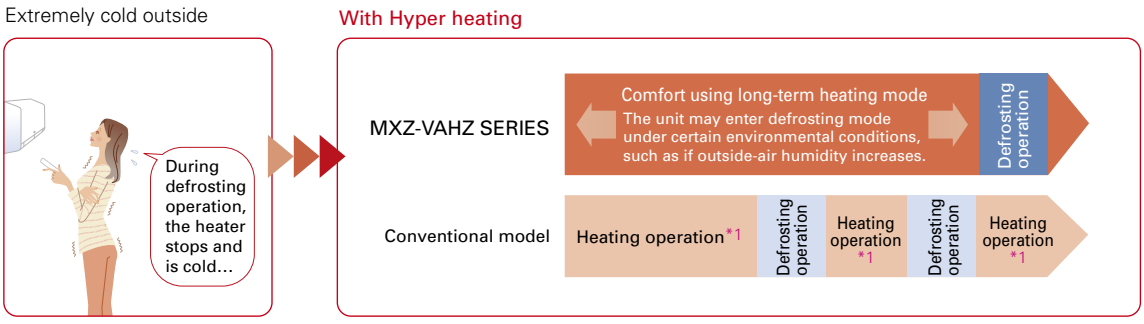
Freeze-prevention heater standard equipment

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.

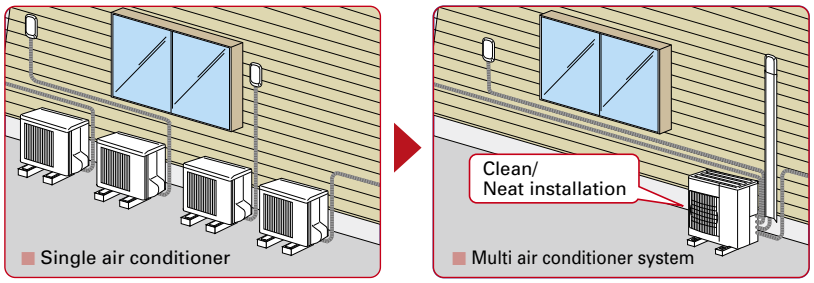


*1: Conventional model performs continuous heating approximately 30min up to a maximum of 90min.

One outdoor unit supports multiple indoor units.

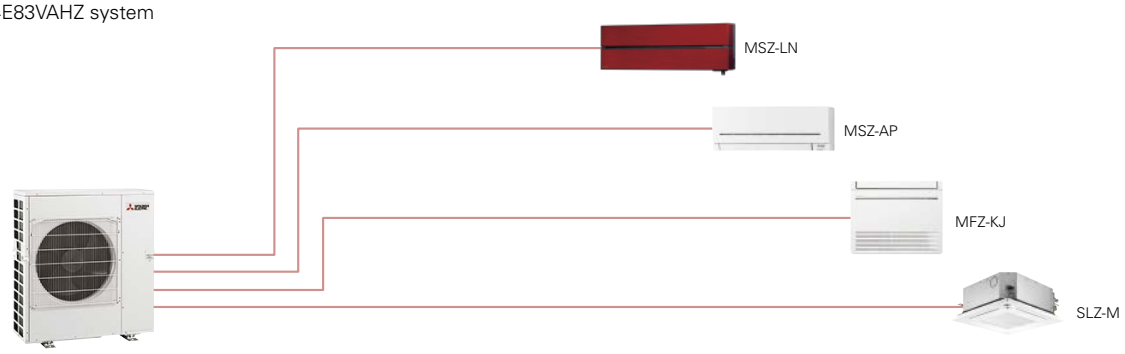
With MXZ-VAHZ, one outdoor unit can cool and heat up to six rooms. They can be installed neatly in sites with limited space such as condominium balconies.

*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

R410A

MXZ-2E53VAHZ

4-room use

R410A

MXZ-4E83VAHZ

INDOOR UNITS

Wall-mounted

R32 R410A

MSZ-LN

R32 R410A

MSZ-AP

R410A

MSZ-FH

R410A

MSZ-SF

R32 R410A

MSZ-EF

R410A

MSZ-GF

Floor-standing

R410A

MFZ-KJ

Cassette

R32 R410A

SLZ

R32 R410A

MLZ-KP

R32 R410A

*1

PLA

Ceiling-suspended

R32 R410A

*1

PCA

Ceiling-concealed

R32 R410A

SEZ

R32 R410A

*1

PEAD

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

MXZ-VAHZ SERIES

Outdoor Unit

R410A

MXZ-2E53VAHZ

R410A

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)			220 - 230 - 240V / 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 2088. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 2088 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 102.

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

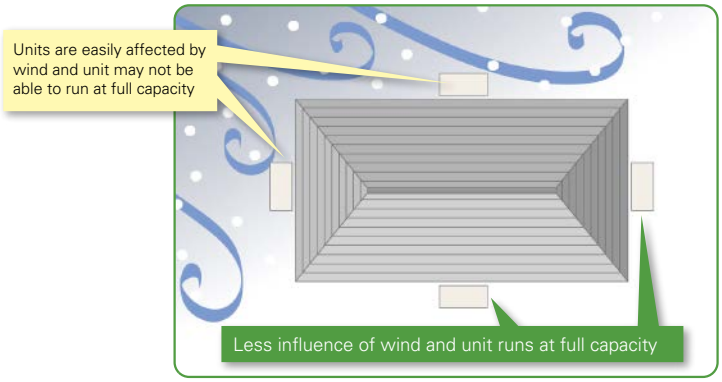
3 Important Points to Remember When Installing the Outdoor Unit

✻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

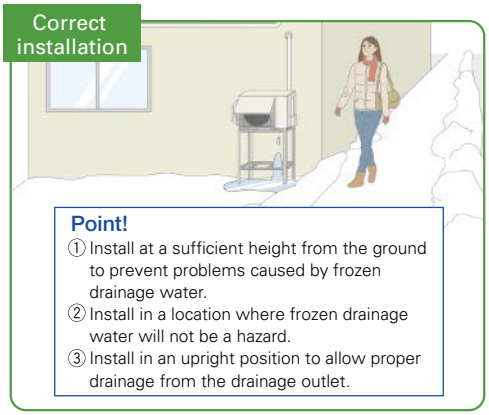
Be aware of the prevailing wind direction in winter and install the outdoor unit where it is as sheltered as possible.

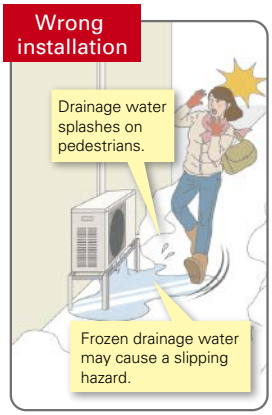


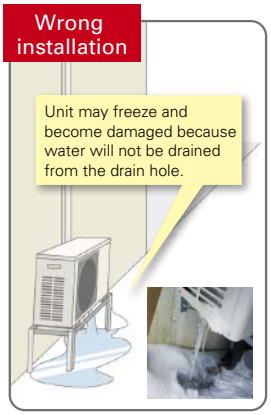
2 Measures for Drainage of Water

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.

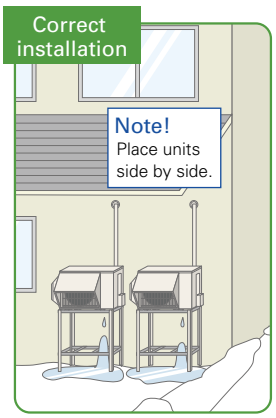


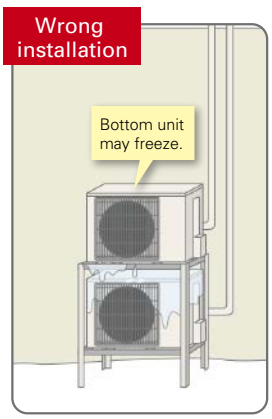




Case 2: Multiple units are installed

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]

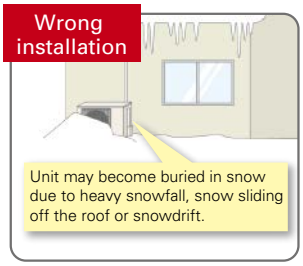
Correct installation

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.

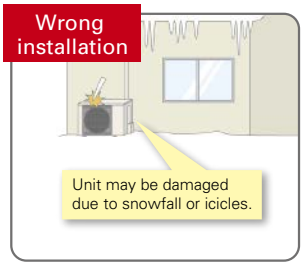
*1 Install at a height above the highest snowfall depth.
*2 Even for correct installations, dripping drainage water may form an icicle which needs to be cleared away regularly to prevent a blocked drainage outlet.

Wrong installation



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

Wrong installation

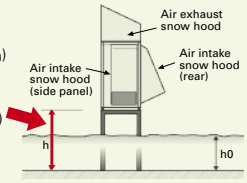


Unit may be damaged due to snowfall or icicles.

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

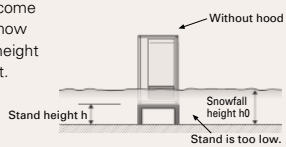
Correct installation

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



Wrong installation

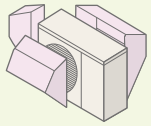
Unit may become covered in snow if the stand height is insufficient.



Install snow protection hood as necessary

[RAC / PAC / MXZ]

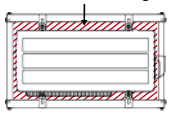
Correct installation



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.

AIR TO WATER

ecodan
Renewable Heating Technology

10th anniversary 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!

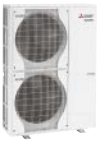
INDOOR UNIT

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	Coming soon  PUHZ-W85/112  PUHZ-W85  PUHZ-W112	

Split type	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity (≧16kW)*
ZUBADAN New Generation		NEW  PUHZ-SHW80/112AA  PUHZ-SHW80/112/140	 PUHZ-SHW230
POWER INVERTER	 PUHZ-SW50	NEW  PUHZ-SW75  PUHZ-SW75/100AA  PUHZ-SW100/120	 PUHZ-SW160/200
Eco Inverter	 SUHZ-SW45		

ATA/ATW Hybrid system	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity (≧16kW)*
Mr.SLIM+		 PUHZ-FRP71	
PUMY + ecodan		 PUMY-P112/125/140	

*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 came into effect from September 26, 2015.

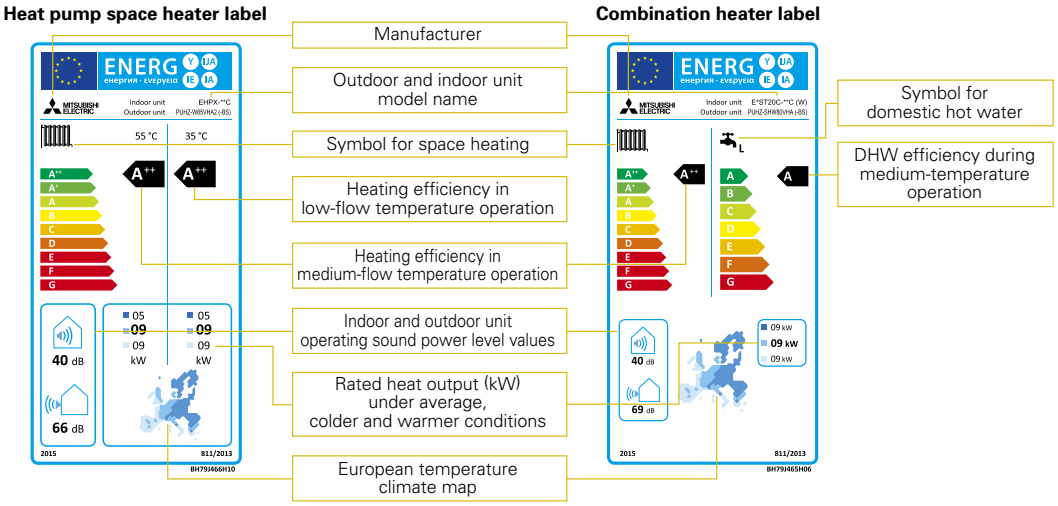
New energy label and measurements

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.



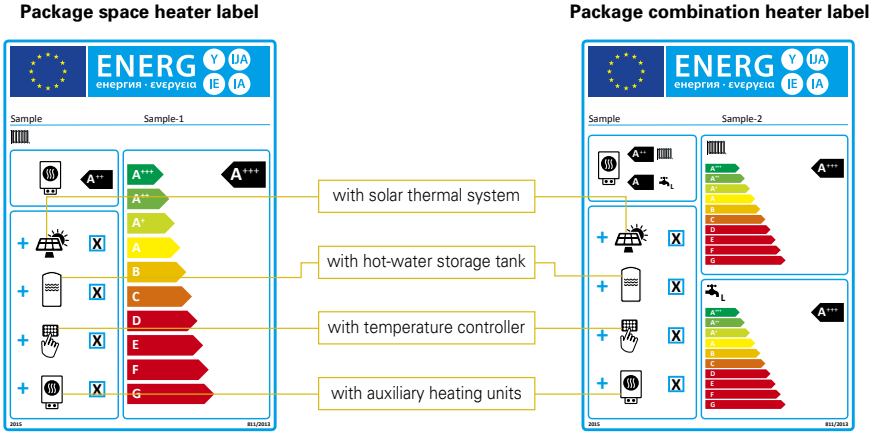
These labels are delivered with all ecodan outdoor units.

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 the FTC5 controller can be created on the Mitsubishi Electric website.

Designed for Optimal Heating

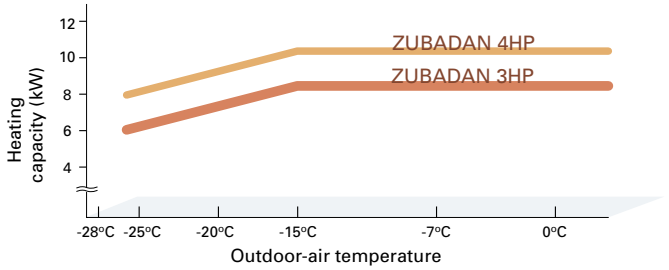
ZUBADAN New Generation (Split type)

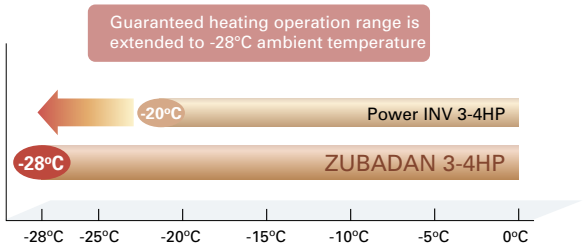
Even at the very low ambient temperatures, our ZUBADAN can provide powerful heating.

- Our unique flash injection circuit enables the nominal capacity to be maintained down to -15°C.
- The guaranteed operating range of the heating mode is extended down to -28°C.

Improved Heating Performance

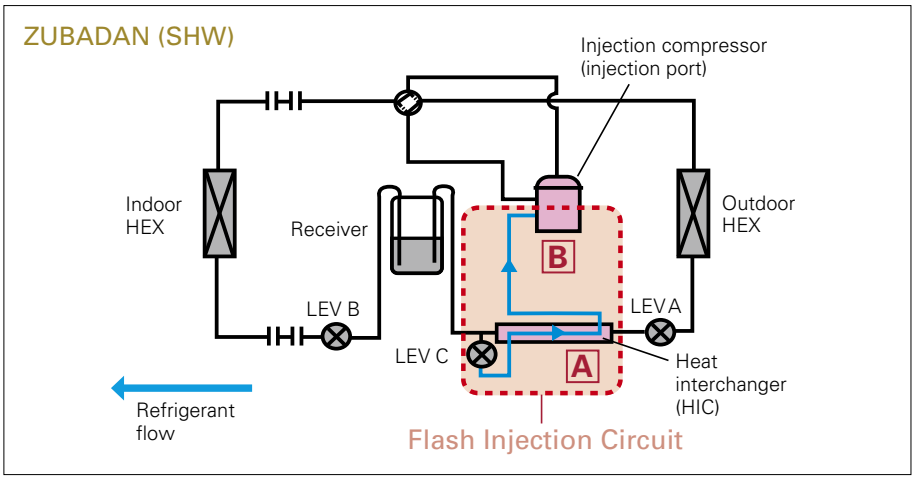
Mitsubishi Electric's unique "Flash Injection" circuit achieves remarkably high heating performance. This technology has resulted in an excellent heating capacity rating in outdoor temperatures as low as -15°C, and the guaranteed heating operation range of the heating mode has been extended to -28°C. Accordingly, the heat-pump units of the ZUBADAN Series are perfect for warming homes in the coldest regions.





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

■ Flash Injection Circuit



A Heat Interchanger (HIC)

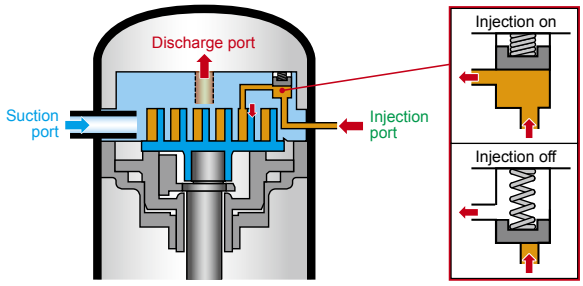
HIC cross-sectional view

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 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.

Dedicated Heat Pump for Residence

NEW

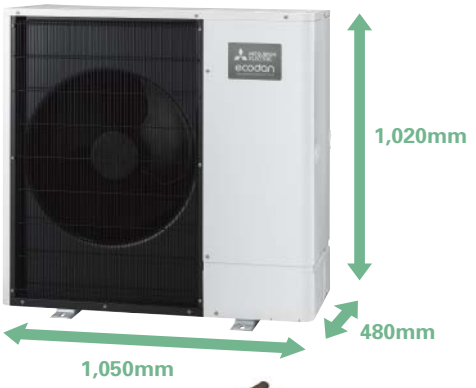
reddot award 2018 winner

PUHZ-SW75V/YAA SW100V/YAA SHW80V/YAA SHW112V/YAA

Stylish and compact

The stylish design and compact size harmonises residential application

- Simple and elegant design by rounding left and right corners of the unit.
- Concealing the fan by matching the panel and the grille in dark colour.
- Unified shape and safety by setting the fan whole backwards and matching the grille on the same level of the front panel.

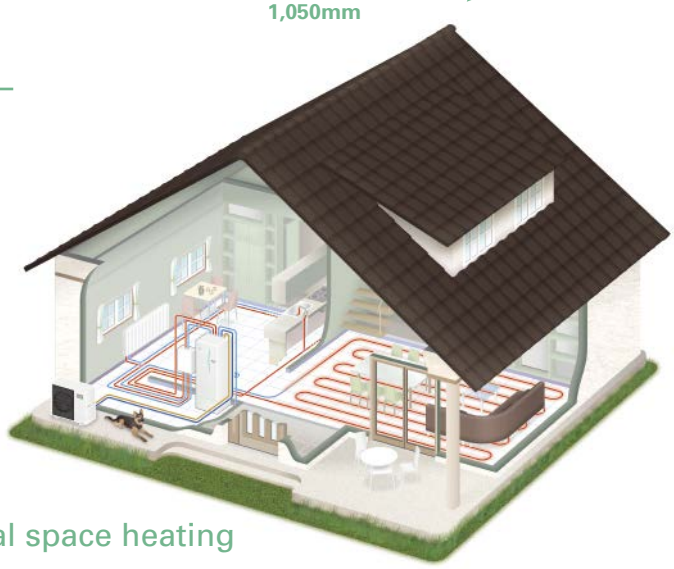


High performance

New compressor

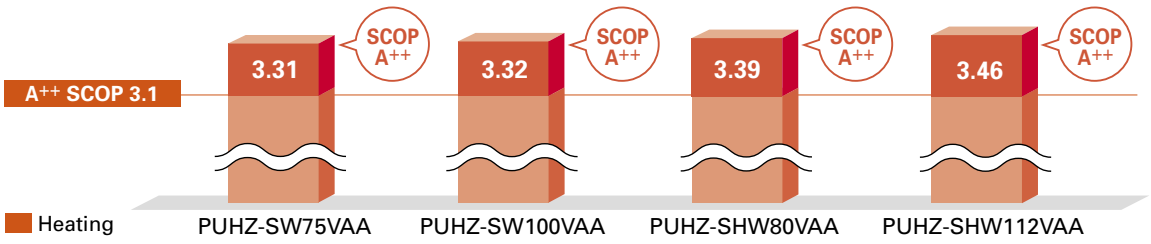
- Compact
- High performance

* for PUHZ-SW100V/YAA
PUHZ-SHW80V/YAA
PUHZ-SHW112V/YAA



ErP Lot 1 Compliant with highest seosonal space heating energy efficiency class A++

Powerful heating yet annaully high energy efficiency, achieving rank A++.



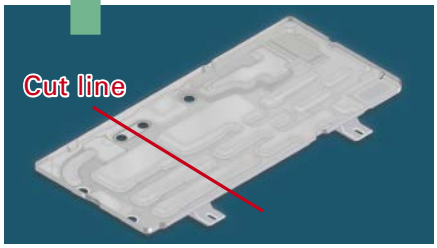
Higher reliability

New base design

Improving drainage

- Optimising the base structure to improve drainage.
- A slope of the base achieves smooth and faster drainage.

sectional view

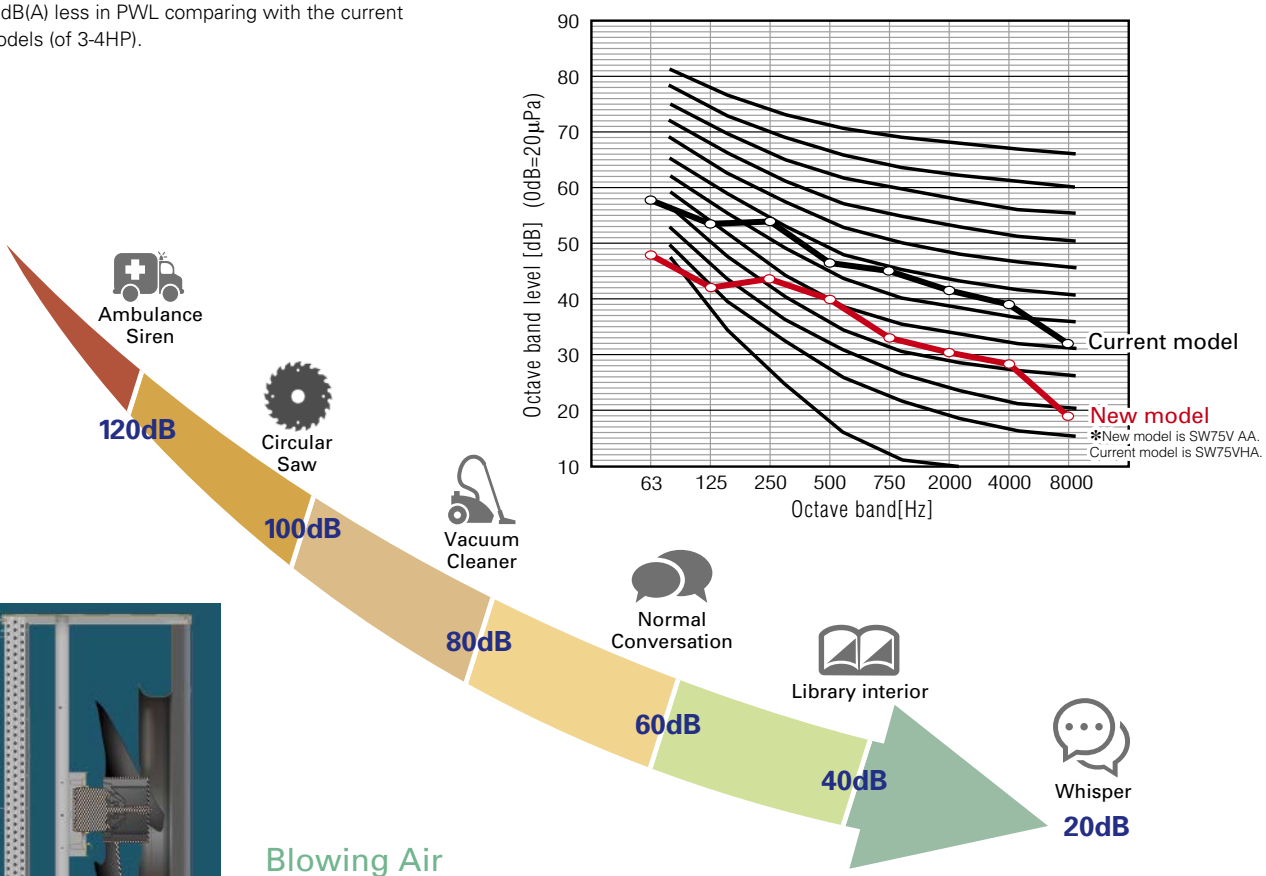


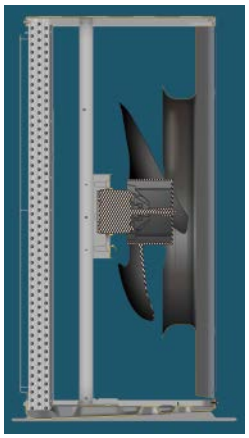
Optimizing defrost control and operation.
Optimizing outdoor unit heat exchanger to avoid ice-forming.

Compact but low noise

Noise reduction-10dB(A)

10dB(A) less in PWL comparing with the current models (of 3-4HP).





Blowing Air

To reduce fan noise

- Optimising fan position
- Optimising bell mouth shape
- Bigger fan diameter

Enclosing noise

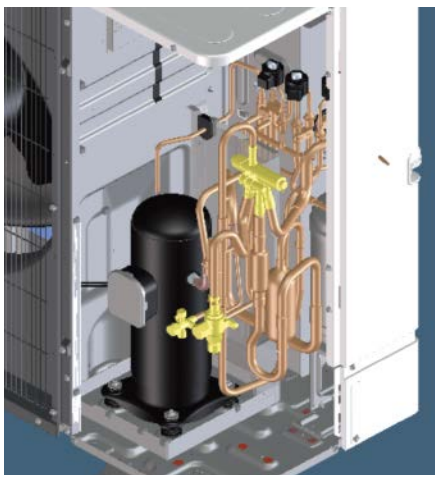
Shutting out noise from compressor

- The structure of double enclosing

Primary: enclosing a compressor (the structure is patented.)
Secondary: enclosing machine room.

Avoiding vibration and resonance

- Dedicated soft rubber mount for the compressor to avoid vibration.
- Optimising piping structure to avoid vibration and resonance.



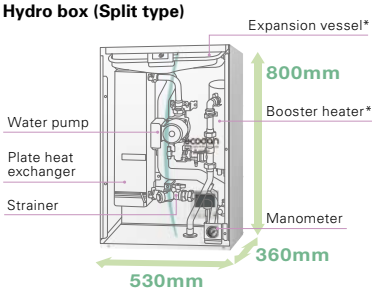
Indoor units

New all-in-one compact indoor unit

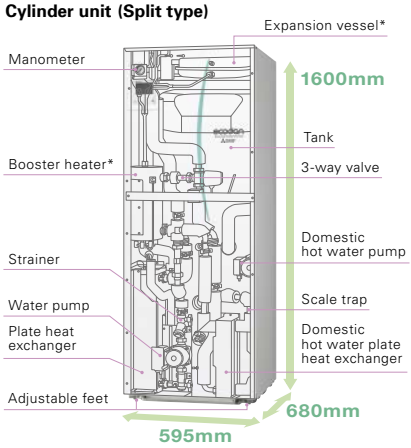
Easy to install and low maintenance

- All-in-one: Key functional components are incorporated
- Compact cylinder unit: Just 1600mm in height
- Compact hydro box: Only 530×360mm 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

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 reach 60°C maximum flow temperature. The new 8–10HP hydro box is available in both heating only and reversible models and can be connected to a customised capacity domestic hot water tank.

Line-up

ecodan's line-up has many types of indoor units to satisfy diverse customers' needs, requests and local regulations.
It includes smaller capacity units, with/without booster heater, with/without an expansion vessel, etc.
In addition, a reversible hydro box and a reversible cylinder unit are available.

Hydro box

Cylinder unit

Available options

– Packaged or Split type
– With/without booster heater
– With/without expansion vessel
– Cylinder unit has an integrated 200L stainless steel tank
– Hydro box is control ready for domestic hot water with a stand-alone tank (locally supplied)

Reversible models (for heating/cooling)

Perfect comfort in winter and summer time, thanks to our reversible models.

Reversible models are now available for both hydro box and cylinder units (Split type only).
The new reversible cylinder is now able to produce cold water for cooling use and can alternatively produce domestic hot water in summer time.

Reversible hydro box

Reversible cylinder unit

*Reversible cylinder requires the installation of the drain pan stand PAC-DP01-E.

High-performance for domestic hot water re-charge

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.

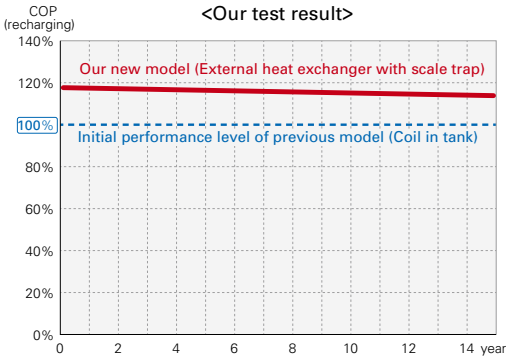
Avoid performance loss due to scale

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.

<Our test result>



<*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

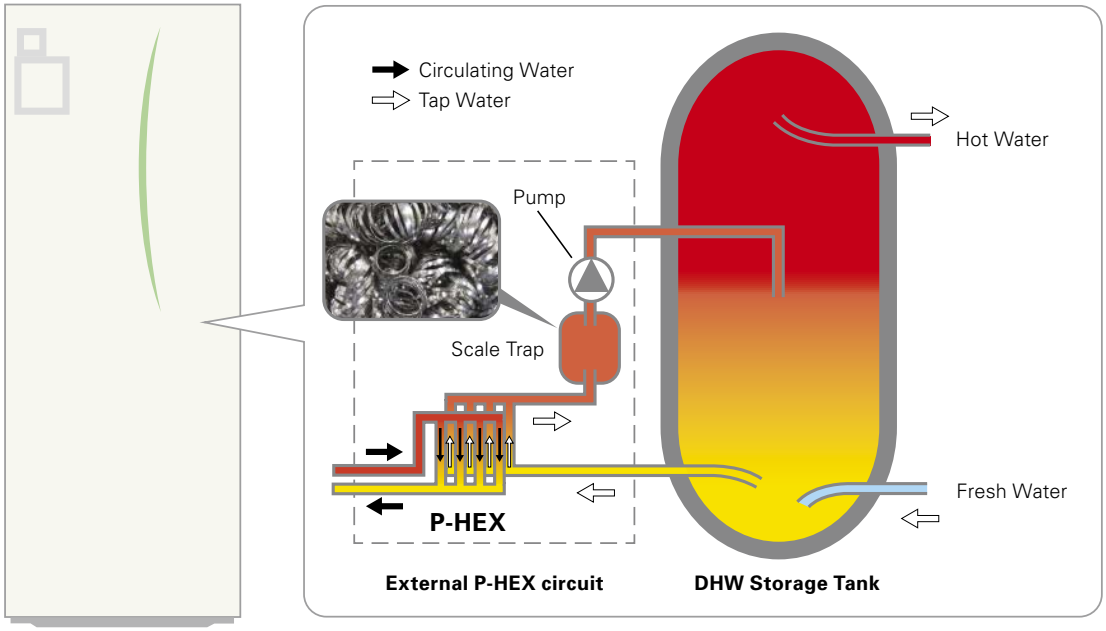
Optimised stratification for better comfort

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 special localished conditions such as very hard tap water, please consult a specialist before installation.



Unique technology of ecodan

Auto Adaptation

Maximize energy savings while retaining comfort at all times

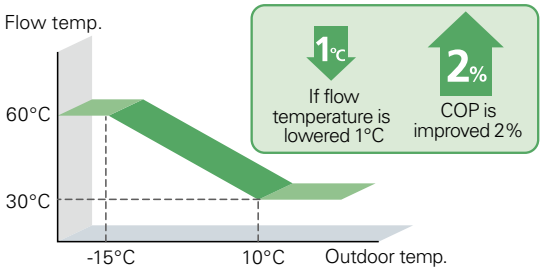
Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

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.

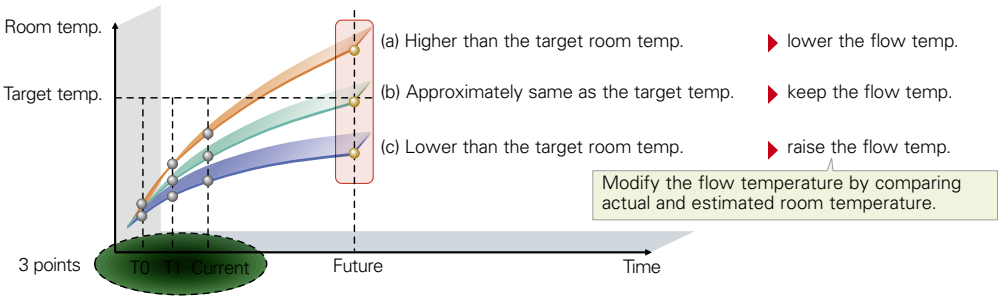
■ Heat curve setting (Example)



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

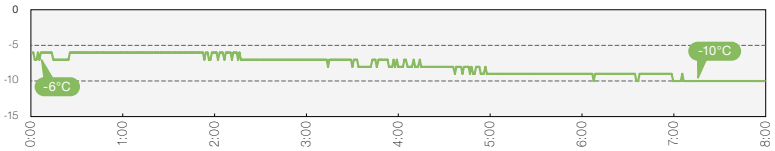


Auto Adaptation – room temperature control

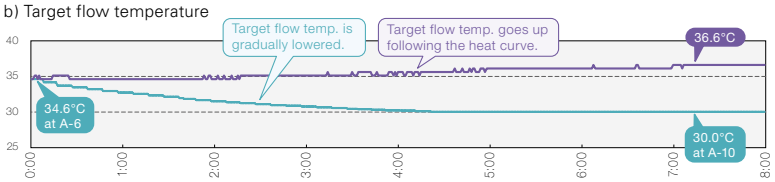
1. Installation site: Southern Sweden
2. Detached house with underfloor heating
3. Data in February 2011

[Example]

a) Outdoor temperature is gradually decreasing…

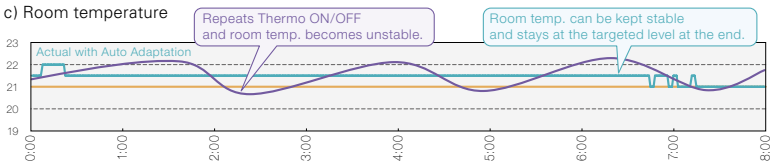


b) Target flow temperature



By Auto Adaptation, flow temperature can be lowered even when outdoor temp. is decreasing.

c) Room temperature



By Auto Adaptation, flow temperature can be lowered without sacrificing comfort.

2 zone control (for heating/cooling)

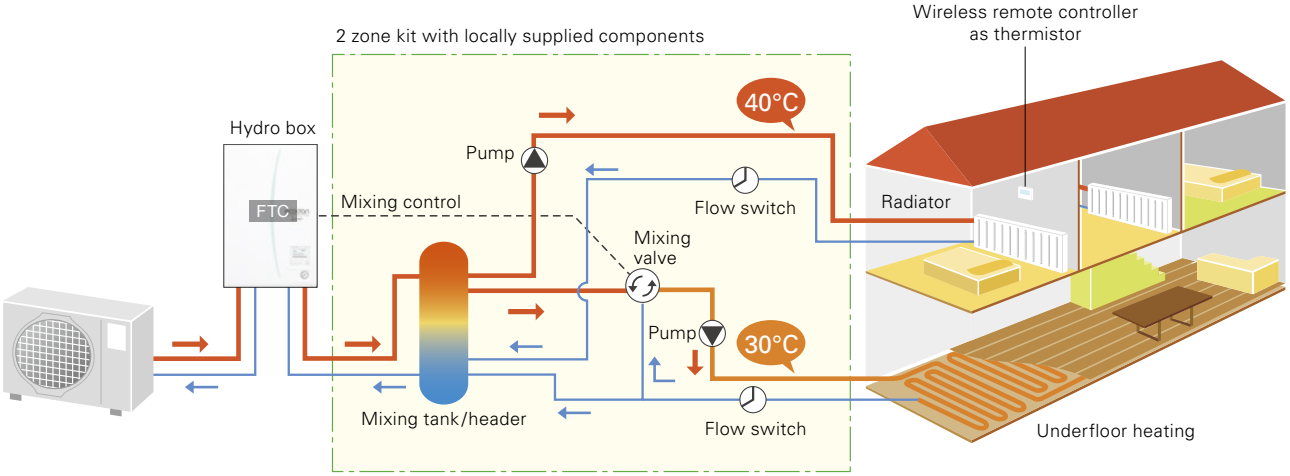
Simultaneously control two different zones

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

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 2 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 a mixing tank, mixing valve flow switch and pumps are not included and need to be purchased locally.

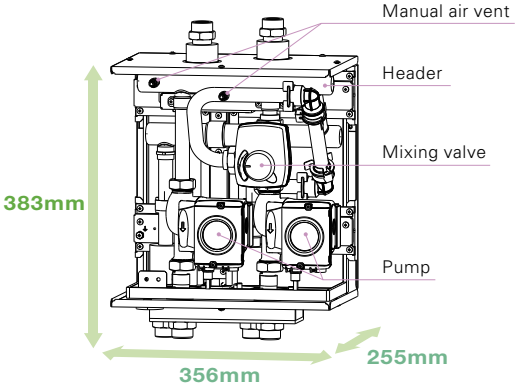
2 zone kit

With optional parts

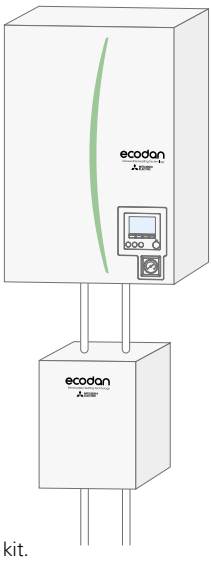
Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

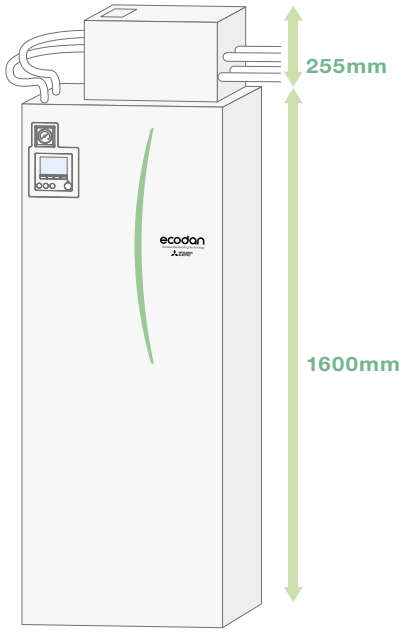
2 zone kit



Hydro box connection



Cylinder unit connection



Easy to install and low maintenance

- All-in-one kit: Key functional components are incorporated in 2 zone kit.
- Easy installation: G1 screw type flexi piping to avoid brazing.
- Compact size: Just to fit on the top of cylinder unit, also wall mountable.

Intelligent hybrid control (boiler interlock)

Settings can be performed using an SD card.

*SD logo is a trademark of SD-3C, LLC

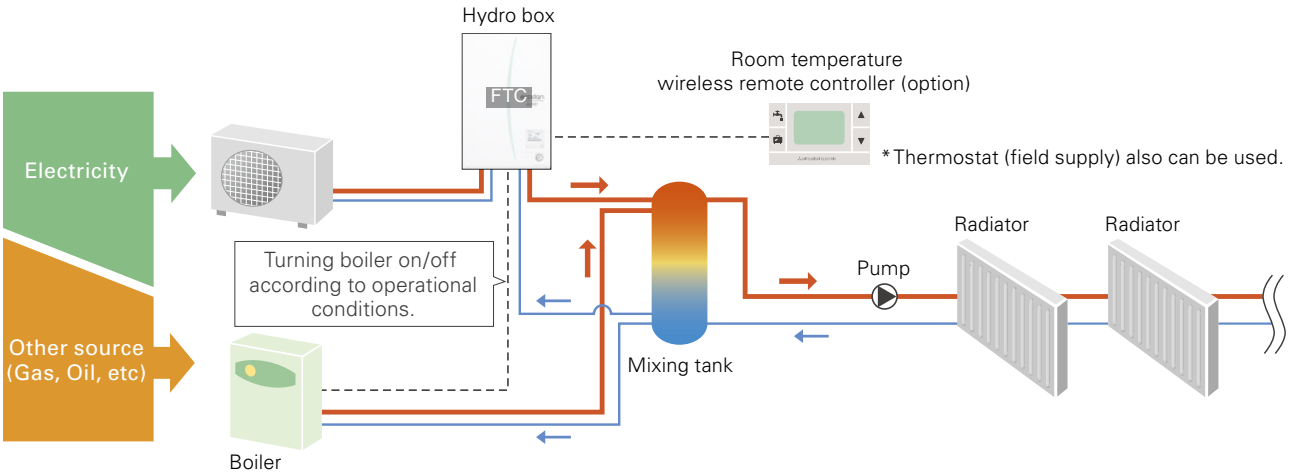
An existing boiler can be used for extra heating capacity in an efficient way

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 see below "Heat source switchover".

Intelligent system combining a boiler with ecodan

■ Intelligent boiler interlock system



* Items such as a mixing tank, and pump are not included and need to be purchased locally.

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.

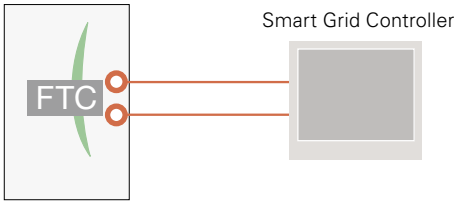
② Switchover based on running cost
- Heat source switchover occurs by judging optimal operation based on running cost.
  *Pre-registration of the energy price of electricity, and gas or oil per 1kWh is necessary.

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.

Smart Grid Ready function

In recent years renewable energy generation has become popular. However, this rapid growing causes the problem of supply and demand gap of electricity. The aim of "SG Ready" is to make the electricity demand response more flexible by creating a uniform interface for the smart grid integration of heat pumps. Air-to-Water units need to be able to change the operation pattern when the signal is received from the Smart Grid Controller.
New ecodan Cylinder, Hydro box and FTC have been modified to communicate with Smart Grid Controller. The communication protocol is based on "SG Ready" label regulation. (Version 1.1; gültig ab 01.01.2013)



Pattern	Input 1	Input 2	Operation
1	OFF	OFF	Normal operation
2	ON	OFF	Switch ON recommendation
3	OFF	ON	Switch OFF command
4	ON	ON	Switch ON command

SG

Pattern 1: Normal operation
When there is no signal from the Smart Grid Controller, DHW and Heating operate according to user settings.

Pattern 2: Switch ON recommendation
When set to the "Switch ON" recommendation, the target temperature of DHW is increased a specified amount and the heating "Thermo ON" condition range is extended.

Pattern 3: Switch OFF command
When the "Switch OFF" command is received, both DHW and Heating are turned off.

Pattern 4: Switch ON command
When the "Switch ON" command is received, the target temperature of DHW is increased to the maximum target temperature and Heating continues.

Multiple unit control

Connect up to 6 units – Automatic control of multiple units for bigger capacity and better efficiency

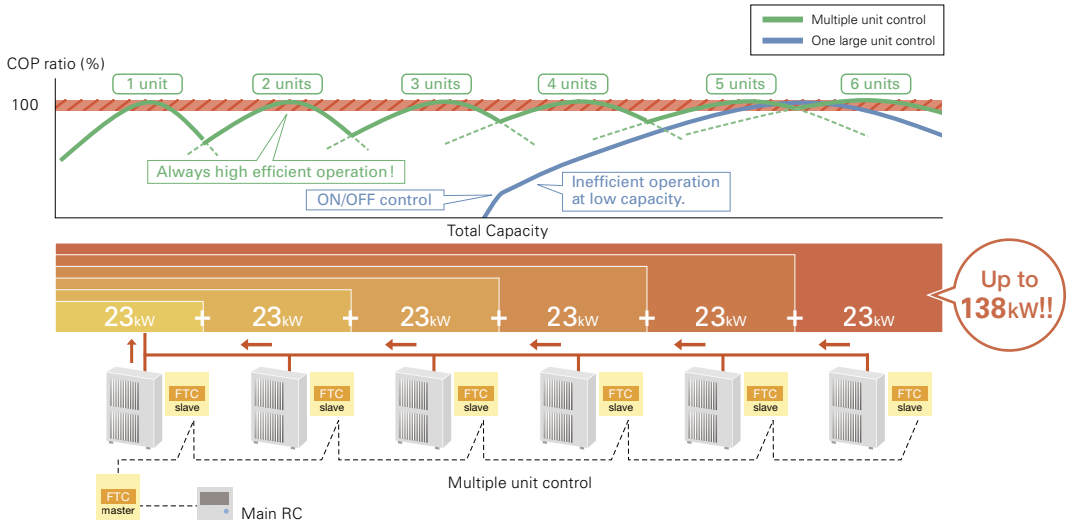
Settings can be performed using an SD card.

*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



Remote controllers

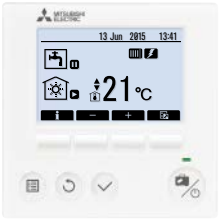
Smart user-friendly controller with stylish design

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

– Energy monitoring
– Two-zone control (cooling and heating)
– Two separate schedules
– 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

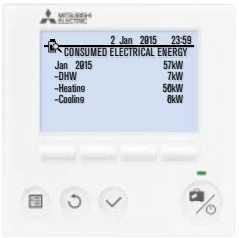
Energy monitoring

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.

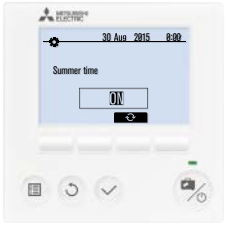
Summer time setting

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.



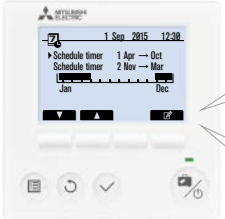
Two separate schedules

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**

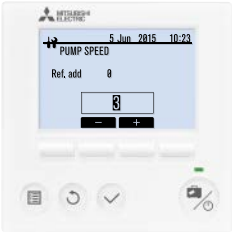
Schedule 2 Summer time
Domestic hot water **any time**

Easy commissioning

Pump for primary water circuit* speed setting possible using ecodan's main remote controller

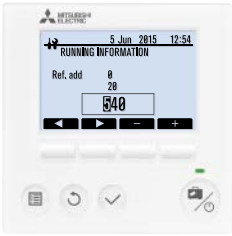
Even when the system is running, pump output can be set to one of five different settings using the main remote controller.
The person commissioning the system can adjust this speed much more easily.

*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

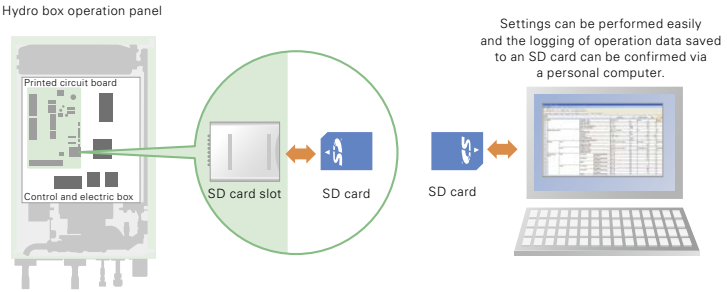
For easier settings and data logging

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

- 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>

					Small capacity					Medium capacity								UK model	
Model name					EHST20D-VM2C	EHST20D-YM9C	EHST20D-VM2EC	EHST20D-MHC	EHST20D-MEC	EHST20C-VM2C	EHST20C-VM6C	EHST20C-YM9C	EHST20C-TM9C	EHST20C-VM2EC	EHST20C-VM6EC	EHST20C-YM9EC	EHST20C-MEC	EHST20C-MHCW	EHST20D-MHCW
	Type				Heating only														
	Immersion heater				–	–	–	×	–	–	–	–	–	–	–	–	–	×	×
	Expansion vessel				×	×	–	×	–	×	×	×	×	–	–	–	–	×	×
	Booster heater				×	×	×	–	–	×	×	×	×	×	×	×	–	–	–
Dimensions	H×W×D		mm		1600×595×680														
Weight (empty)			kg		103	105	97	103	96	110	111	112	112	104	105	106	103	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/Single/50	–		230/Single/50		400/Three/50	230/Three/50	230/Single/50		400/Three/50	–		
		Capacity		kW	2	9 (3/6/9)	2	–		2	6 (2/4/6)	9 (3/6/9)	9 (3/6/9)	2	6 (2/4/6)	9 (3/6/9)	–		
		Current		A	9	13	9	–		9	26	13	23	9	26	13	–		
		Breaker size		A	16	16	16	–		16	32	16	32	16	32	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 indoor environment must be frost-free

<Hydro box>

					Small capacity				Medium capacity								Large capacity	
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 indoor environment must be frost-free

<Reversible cylinder unit>

					Small capacity		Medium capacity	
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 indoor 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>

					Small capacity	Medium capacity		Large capacity	
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				Eco Inverter	Power Inverter							
				SUHZ-SW45VA (H)*1	PUHZ-SW50VKA (-BS)	PUHZ-SW75V/YAA (-BS)	PUHZ-SW100V/YAA (-BS)	PUHZ-SW75VHA (-BS)	PUHZ-SW100V/YHA (-BS)	PUHZ-SW120V/YHA (-BS)	PUHZ-SW160YKA (-BS)	PUHZ-SW200YKA (-BS)
Dimensions	H×W×D		mm	880×840×330	630×809×300	1020×1050×480	1020×1050×480	943×950×330	1350×950×330	1350×950×330	1338×1050×330	1338×1050×330
Product weight (empty)			kg	54	43	92/104	114/126	75	118/130	118/130	136	136
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	8.00	11.20	16.00	22.00	25.00
	COP			5.06	4.42	4.40	4.46	4.40	4.45	4.10	4.20	4.00
	Power input		kW	0.889	1.244			1.818	2.517	3.902	5.238	6.250
Heating (A2/W35)	Capacity		kW	3.50	5.00	7.50	10.00	7.50	10.00	12.00	16.00	20.00
	COP			3.40/3.04	2.97	3.40	3.32	3.40	3.32	3.24	3.11	2.80
	Power input		kW	1.029/1.151	1.684			2.206	3.009	3.704	5.145	7.143
Cooling (A35/W7)	Capacity		kW	4.00	4.50	7.10	10.00	6.60	9.10	12.50	16.00	20.00
	EER			2.73	2.76	2.70	2.83	2.82	2.75	2.32	2.76	2.25
	Power input		kW	1.465	1.630			2.340	3.309	5.388	5.797	8.889
Cooling (A35/W18)	Capacity		kW	3.80	5.00	7.10	10.00	7.10	10.00	14.00	18.00	22.00
	EER			4.28	4.60	4.43	4.47	4.43	4.35	4.08	4.56	4.10
	Power input		kW	0.888	1.087			1.603	2.299	3.431	3.947	5.366
Sound pressure level (SPL)	Heating		dB (A)	52	46	43	47	51	54	54	62	62
Sound power level (PWL)	Heating		dB (A)	61	63	58	60	68	70	72	78	78
Operating current (max)			A	12.0	13.0	22.0/11.5	28.0/12.0	17.0	29.5/13.0	29.5/13.0	19.0	21.0
Breaker size			A	20	16	25.0/16.0	32.0/16.0	25	32/16	32/16	25	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	9.52/15.88	9.52/15.88	9.52/25.4	12.7/25.4
	Max. length	Out-In	m	30	40	40	75	40	75	75	80	80
	Max. height	Out-In	m	30	30	10	10	30	30	30	30	30
Guaranteed operating range	Heating		°C	−15 to +24	−15 to +21	−20 to +24	−20 to +24	−20 to +21	−20 to +21	−20 to +21	−20 to +21	−20 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	−20 to +35	−20 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

Model name				ZUBADAN					
				PUHZ-SHW80V/YAA (-BS)	PUHZ-SHW112V/YAA (-BS)	PUHZ-SHW80VHA	PUHZ-SHW112V/YHA	PUHZ-SHW140YHA	PUHZ-SHW230YKA2
Dimensions	H×W×D		mm	1020×1050×480	1020×1050×480	1350×950×330	1350×950×330	1350×950×330	1338×1050×330
Product weight (empty)			kg	116/128	116/128	120	120/134	134	149
Power supply (V / Phase / Hz)				VHA : 230/Single/50 YHA, YKA : 400/Three/50					
Heating (A7/W35)	Capacity		kW	8.00	11.20	8.00	11.20	14.00	23.00
	COP			4.65	4.40	4.65	4.46	4.22	3.65
	Power input		kW			1.720	2.511	3.318	6.301
Heating (A2/W35)	Capacity		kW	8.00	11.20	8.00	11.20	14.00	23.00
	COP			3.55	3.22	3.55	3.34	2.96	2.37
	Power input		kW			2.254	3.353	4.730	9.705
Cooling (A35/W7)	Capacity		kW	7.10	10.00	7.10	10.00	12.50	20.00
	EER			3.31	2.83	3.31	2.83	2.17	2.22
	Power input		kW			2.145	3.534	5.760	9.009
Cooling (A35/W18)	Capacity		kW	7.10	10.00	7.10	10.00	12.50	20.00
	EER			4.52	4.74	4.52	4.74	4.26	3.55
	Power input		kW			1.571	2.110	2.934	5.634
Sound pressure level (SPL)	Heating		dB (A)	45	47	51	52	52	59
Sound power level (PWL)	Heating		dB (A)	59	60	69	70	70	75
Operating current (max)			A	22.0/13.0	28.0/13.0	29.5	35.0/13.0	13.0	26.0
Breaker size			A	25.0/16.0	32.0/16.0	32	40/16	16	32
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	12.7/25.4
	Max. length	Out-In	m	75	75	75	75	75	80
	Max. height	Out-In	m	30	30	30	30	30	30
Guaranteed operating range	Heating		°C	−28 to +24	−28 to +24	−28 to +21	−28 to +21	−28 to +21	−25 to +21
	DHW		°C	−28 to +35	−28 to +35	−28 to +35	−28 to +35	−28 to +35	−25 to +35
	Cooling*2		°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 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.

Split type	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	Large capacity (≧16kW)*
ZUBADAN New Generation		NEW PUHZ-SHW80/112AA; PUHZ-SHW80/112/140	PUHZ-SHW230
POWER INVERTER	PUHZ-SW50	PUHZ-SW75; NEW PUHZ-SW75/100AA; PUHZ-SW100/120	PUHZ-SW160/200
Eco Inverter	SUHZ-SW45		

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 indoor 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 indoor environment must be frost-free

Outdoor unit

				Power Inverter			ZUBADAN		
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.

Packaged type	Medium capacity (7.5kW–14kW)*
ZUBADAN	 PUHZ-HW112/140

Packaged type	Small capacity (Under 5kW)*	Medium capacity (7.5kW–14kW)*	
POWER INVERTER	 PUHZ-W50	 PUHZ-W85	 PUHZ-W112

Optional Parts

Split type

<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-IH03V2-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	MAC-567IF-E		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Drain pan stand	PAC-DP01-E	D665mm H270mm W595mm N/W: 14.5kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	×*1	–	–
2 zone kit	PAC-TZ01-E		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	–

*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-SW75VYAA(-BS)	PUHZ-SW100VYAA(-BS)	PUHZ-SW75VHA(-BS)	PUHZ-SW100VYHA(-BS)	PUHZ-SW120VYHA(-BS)	PUHZ-SW160YKA(-BS)	PUHZ-SW200YKA(-BS)	PUHZ-SHW80VYAA(-BS)	PUHZ-SHW112VYAA(-BS)	PUHZ-SHW80VHA	PUHZ-SHW112VYHA	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	–	–	×*1	×*1	–	–	–	×	×	×*1	×*1	–	–	–	×
Air protection guide	PAC-SJ06AG-E	–	×	–	–	–	–	–	–	–	–	–	–	–	–	–
	PAC-SH63AG-E	–	–	–	–	×	×	×	–	–	–	–	×	×	×	–
	PAC-SH95AG-E	–	–	×*1	×*1	–	–	–	×	×	×*1	×*1	–	–	–	×
Attachment	PAC-SJ82AT-E	–	–	×*1	×*1	–	–	–	–	–	×*1	×*1				
Drain socket	PAC-SG61DS-E	–	–	×	×	×	×	×	×	×	×	×	–	–	–	–
	PAC-SJ08DS-E	–	×	–	–	–	–	–	–	–	–	–	–	–	–	–
Centralised drain pan	PAC-SG63DP-E	–	×	–	–	–	–	–	–	–	–	–	–	–	–	–
	PAC-SG64DP-E	–	–	–	–	×	×	×	–	–	–	–	–	–	–	–
	PAC-SH97DP-E	–	–	–	–	–	–	–	×	×	–	–	–	–	–	–
	PAC-SJ83DP-E	–	–	×	×	–	–	–	–	–	×	×				
Control/Service tool	PAC-SK52ST	–	×	×	×	×	×	×	×	×	×	×	×	×	×	×

*1 Attachment (PAC-SJ82AT-E) is necessary for the Air Guide.

Package type

<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-IH03V2-E	1Ph 3kW	×	×	×	×	–	–	–	–
EHPT accessories for UK	PAC-WK01UK-E		–	–	–	–	×	–	–	–
Wi-Fi interface	MAC-567IF-E		×	×	×	×	×	×	×	×
2 zone kit	PAC-TZ01-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-IF063B-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/YHA2	SUHZ-SW45VA(H)	PUHZ-SW50VKA	PUHZ-SW75VAA	PUHZ-SW75YAA	PUHZ-SW100VAA	PUHZ-SW100YAA	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												ATA/ATW Hybrid system			
Power Inverter				ZUBADAN								Mr.SLIM+	PUMY+ecodan		
PUHZ-SW100VHA/YHA	PUHZ-SW120VHA/YHA	PUHZ-SW160YKA	PUHZ-SW200YKA	PUHZ-SHW80VAA	PUHZ-SHW80YAA	PUHZ-SHW112VAA	PUHZ-SHW112YAA	PUHZ-SHW80VHA	PUHZ-SHW112VHA/YHA	PUHZ-SHW140YHA	PUHZ-SHW230YKA2	PUHZ-FRP71VHA2	PUMY-P112VKM4/YKM(E)4	PUMY-P125VKM4/YKM(E)4	PUMY-P140VKM4/YKM(E)4
●	●			●	●	●	●	●	●	●		●	●	●	●
●	●			●	●	●	●	●	●	●		●	●	●	●
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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, the 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)

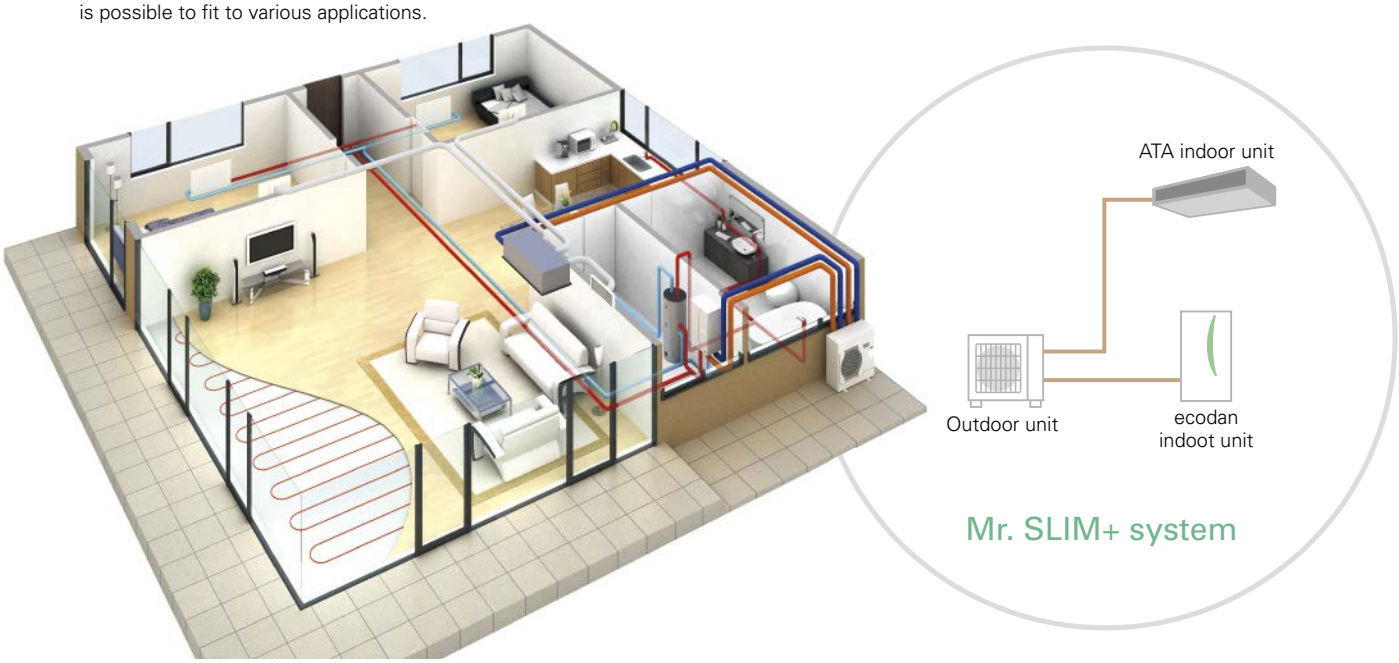
1 unit, 2 roles – Total comfort year-round

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)

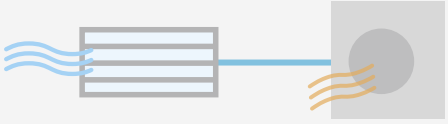
Mr. SLIM for Air-to-Air
Mr. SLIM+ utilises a duct system that enables the air conditioning or heating of multiple rooms, and other indoor unit type systems that it is possible to fit to various applications.

ecodan for Air-to-Water
✓Domestic hot water (DHW) supply
✓Heating for multiple rooms



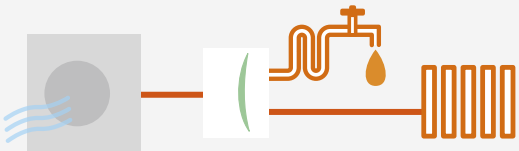
Various operations

Mr. SLIM / ATA (Air Cooling)
Cooling using ATA indoor unit

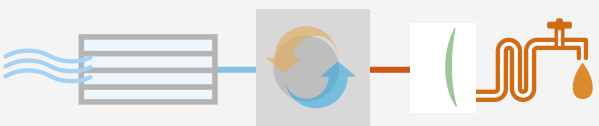


Mr. SLIM / ATA (Air Heating)
Heating using ATA indoor unit

ecodan / ATW (Hot water heating + DHW)
Heating and DHW using ATW indoor unit



Mr. SLIM + ecodan / ATA (Air Cooling) + DHW
Heat recovery using both ATA and ATW indoor units



Specifications

Indoor unit						PLA-ZM71EA	PKA-M71KAL	PCA-M71KA	PSA-RP71KA	PEAD-M71JAQ	PEAD-M71JALQ
Outdoor unit						PUHZ-FRP71VHA2	PUHZ-FRP71VHA2	PUHZ-FRP71VHA2	PUHZ-FRP71VHA2	PUHZ-FRP71VHA2	PUHZ-FRP71VHA2
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
			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
		Total input	Rated		kW	1.88	1.93	1.93	2.15	2.10	2.04
		EER				3.77	3.67	3.67	3.30	3.38	3.48
		Design load			kW	7.1	7.1	7.1	7.1	7.1	7.1
		Annual electricity consumption *1			kWh/a	376	386	384	409	444	427
		SEER *3				6.6	6.4	6.4	6.0	5.5	5.8
			Energy-efficiency class			A^{++}	A^{++}	A^{++}	A^{+}	A	A^{+}
	Heating (average season)	Capacity	Rated		kW	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
		Total input	Rated		kW	2.11	2.29	2.29	2.42	2.11	2.11
		COP				3.80	3.50	3.50	3.30	3.79	3.79
		Design load			kW	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)	4.9 (–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)	4.9 (–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)	3.7 (–20°C)	3.7 (–20°C)
		Back-up heating capacity			kW	0	0	0	0	0	0
		Annual electricity consumption *1			kWh/a	1,509	1,564	1,556	1,699	1,791	1,791
		SCOP *3				4.3	4.2	4.2	3.8	3.8	3.8
			Energy-efficiency class			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	8.00	8.00	8.00	8.00	8.00
			Input		kW	1.98	1.98	1.98	1.98	1.98	1.98
			COP			4.05	4.05	4.05	4.05	4.05	4.05
		A2W35	Capacity		kW	7.50	7.50	7.50	7.50	7.50	7.50
			Input		kW	2.67	2.67	2.67	2.67	2.67	2.67
			COP			2.81	2.81	2.81	2.81	2.81	2.81
	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
			Input		kW	1.90	1.93	1.95	2.02	2.15	2.13
			COP			7.95	7.82	7.74	7.48	7.02	7.09
		W55	Capacity (ATA cooling + ATW)		kW	7.1+9.0	7.1+9.0	7.1+9.0	7.1+9.0	7.1+9.0	7.1+9.0
			Input		kW	2.97	3.00	3.02	3.09	3.22	3.20
			COP			5.42	5.37	5.33	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
		Air volume	Cooling		m^3/min	50	50	50	50	50	50
			Heating		m^3/min	50	50	50	50	50	50
		Sound pressure level (SPL)	Cooling		dB(A)	47	47	47	47	47	47
			Heat recovery		dB(A)	47	47	47	47	47	47
			ATA Heating		dB(A)	49	49	49	49	49	49
			ATW Heating		dB(A)	49	49	49	49	49	49
		Sound power level (PWL)	Cooling		dB(A)	67	67	67	67	67	67
			Heat recovery		dB(A)	67	67	67	67	67	67
			ATA Heating		dB(A)	68	68	68	68	68	68
			ATW Heating		dB(A)	68	68	68	68	68	68
		Operating current (max)			A	19.0	19.0	19.0	19.0	19.0	19.0
		Breaker size			A	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
		Max. length	Out-In		m	30 (for ATA) + 30 (for ATW)					
		Max. height	Out-In		m	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
			Heating		°C	–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
			Heat recovery		°C	+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).

PUMY+ecodan

Air-to-Air and Air-to-Water hybrid multi split system

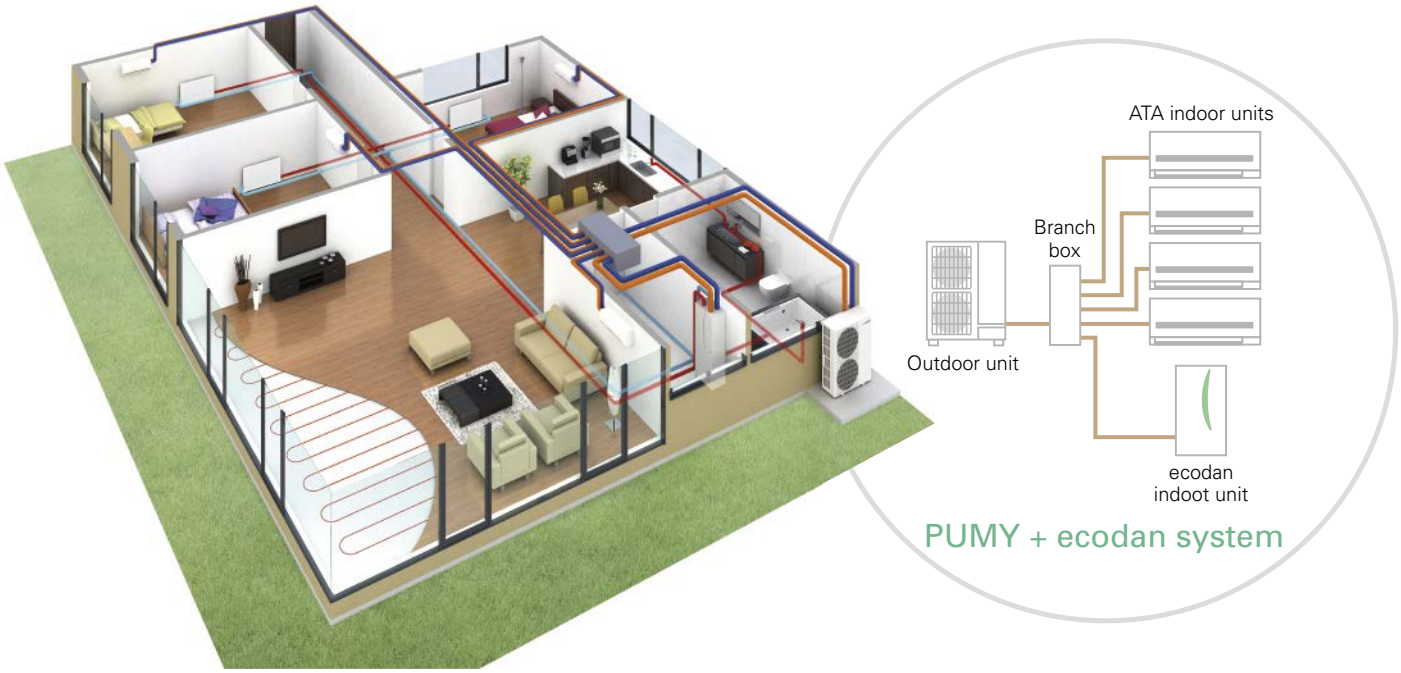
1 unit, 2 roles – Total comfort year-round

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)

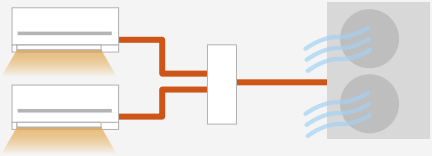
PUMY for Air-to-Air
PUMY utilises various indoor units, enabling the air conditioning or heating of multiple rooms, and controls each unit individually.

ecodan for Air-to-Water
✓Domestic hot water (DHW) supply
✓Heating for multiple rooms

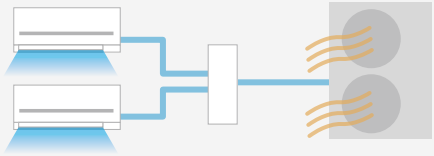


Main operation patterns

ATA (Air Heating)
Heating using ATA indoor unit

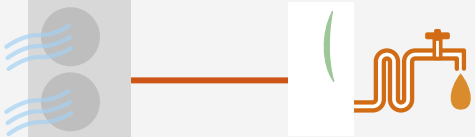


ATA (Air Cooling)
Cooling using ATA indoor unit



ATW (Hot water heating)
Heating using ATW indoor unit

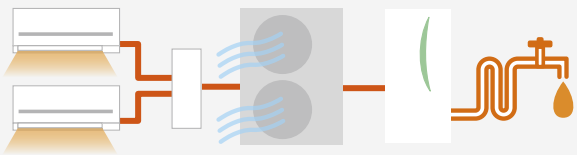
ATW (DHW)
DHW using ATW indoor unit



Optional operation patterns* (simultaneous)

ATA (Air Heating) & ATW (Hot water heating)

ATA (Air Heating) & ATW (DHW)

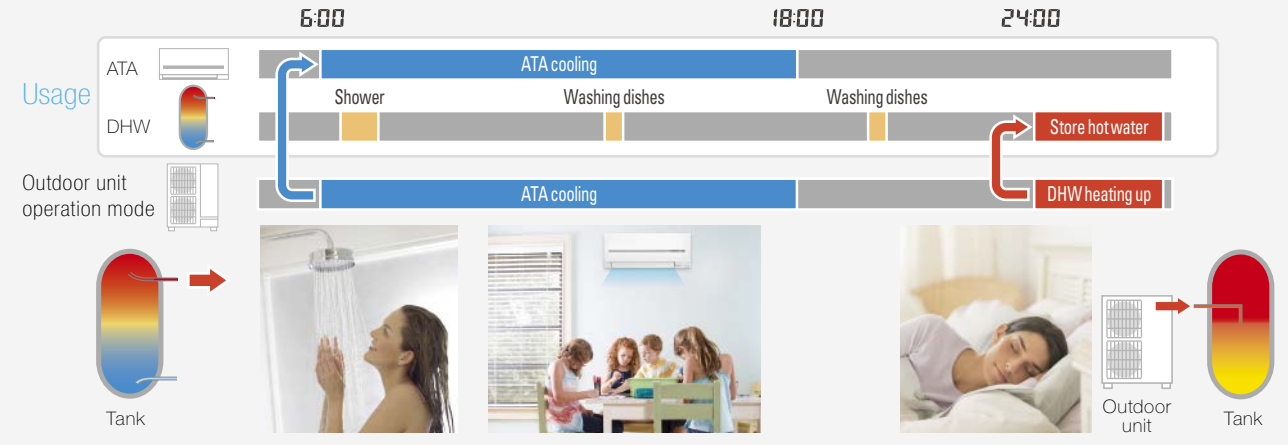


*When using optional simultaneous operation, there are some restrictions, such as connectable indoor units, operation range and DHW flow temp.

Usage pattern All-in-one system solution

Summer 2-in-1 operation

In summer ATA cooling and DHW are utilized. Keep your room comfortable with ATA cooling during high temperature daytime. Heat pump operates to heat up water stored in the DHW tank when ATA is not operated. The hot water can be utilized for shower and washing dishes during daytime.

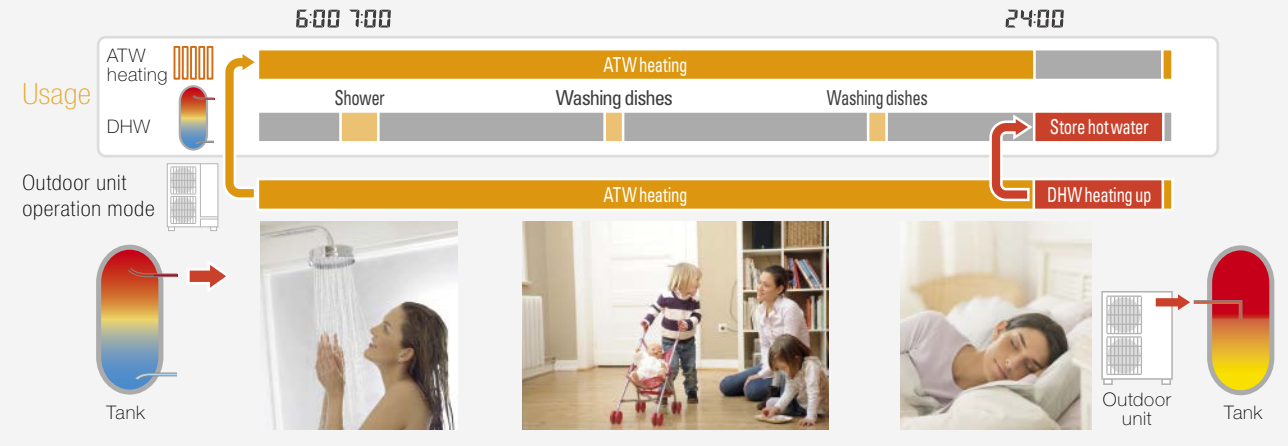


Spring & Autumn 2-in-1 operation

In spring and autumn, ATA heating and DHW are utilized. ATA heating can warm up each room quickly during the low temperature morning and evening. Heat pump operates to heat up water stored in the DHW tank when ATA is not operated. The hot water can be utilized for shower and washing dishes during daytime.

Winter ecodan

In winter ATW heating and DHW are utilized. ATW heating warms home all the day in severe cold weather. ATW heating stops temporarily only when the heat pump operates to heat up water stored in the DHW tank.



PUMY+ecodan

Model name						PUMY-P112VKM4(-BS)	PUMY-P125VKM4(-BS)	PUMY-P140VKM4(-BS)	PUMY-P112YKM(E)4(-BS)	PUMY-P125YKM(E)4(-BS)	PUMY-P140YKM(E)4(-BS)
Power supply						1-phase 220 - 230 - 240V, 50Hz			3-phase 380 - 400 - 415V, 50Hz		
Air-to-Air (ATA)	Cooling (nominal)*1	Capacity			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
		EER				4.48	4.05	3.43	4.48	4.05	3.43
	Temp. range of cooling	Indoor temp.			W.B.	15 - 24°C					
		Outdoor temp.*2			D.B.	–5 - 52°C					
	Heating (nominal)*1	Capacity			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
		COP				4.61	4.28	4.03	4.61	4.28	4.03
	Temp. range of heating	Indoor temp.			W.B.	15 - 27°C					
		Outdoor temp.			D.B.	–20 - 15°C					
Air-to-Water (ATW)	Nominal flow rate (for heating)				L/min	35.8					
	Heating*3	A7W35	Capacity		kW	12.5					
			Power input		kW	3.06					
			COP			4.08					
		A2W35	Capacity		kW	10.0					
			Power input		kW	3.50					
			COP			2.86					
	Guaranteed operating range	ATW	Heating		D.B.	–20 - +21°C					
			DHW		D.B.	–20 - +35°C					
		ATA + ATW	ATA heating + DHW		D.B.	7 - +21°C					
			ATA heating + ATW heating *4		D.B.	–10 - +21°C					
	Maximum Outlet water temp.				°C	55					
Outdoor unit	Indoor unit connectable	ATA only	Total capacity			50 to 130% of outdoor unit capacity					
			Model/ Quantity	Branch box system		15-100/8	15-100/8	15-100/8	15-100/8	15-100/8	15-100/8
				Mixed system*12		15-140*5/10	15-140*5/10*6	15-140*5/10*6	15-140*5/10	15-140*5/10*6	15-140*5/10*6
		ATA + ATW individual operation	Total capacity			ATA : Max 130% of outdoor unit capacity + ATW (EHST20C or EHSC) *7					
			Model/Quantity (including ATW)	Branch box system		15-100/8	15-100/8	15-100/8	15-100/8	15-100/8	15-100/8
				Mixed system*12		15-140*5/10	15-140*5/10*6	15-140*5/10*6	15-140*5/10	15-140*5/10*6	15-140*5/10*6
		ATA + ATW simultaneous operation	Total capacity			Max 100% of outdoor unit capacity : ATA + ATW (EHST20C or EHSC) *7					
			Model/Quantity	ATA*12		15/1*8	15-25/2*9	15-42*11/3*10	15/1*8	15-25/2*9	15-42*11/3*10
				ATW		ATW (EHST20C or EHSC) / 1					
	Sound pressure level (measured in anechoic room)				dB<A>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53
	Sound power level (measured in anechoic room)				dB<A>	69 / 71	70 / 72	71 / 73	69 / 71	70 / 72	71 / 73
	Refrigerant piping diameter			Liquid pipe	mm	9.52 flare					
				Gas pipe	mm	15.88 flare					
	Fan	Type × Quantity				Propeller fan × 2					
		Airflow rate			m³/min	110					
					L/s	1,883					
					cfm	3,884					
		Motor output			kW	0.074 + 0.074					
	Compressor	Type × Quantity				Scroll hermetic compressor × 1					
		Starting method				Inverter					
		Motor output			kW	2.9	3.5	3.9	2.9	3.5	3.9
	External dimensions (H × W × D)				mm	1,338 × 1,050 × 330 (+40)					
	Weight				kg	122			YKM: 125 / YKME: 136		

*1

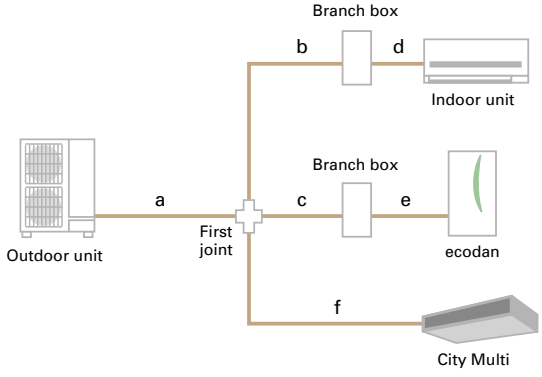
	Indoor	Outdoor	Piping length	Level difference
Cooling	27°C DB / 19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB / 6°C WB	7.5m	0m

*2 10 to 52°C D.B.: When connecting PKFY-P15/20/25VBM, PFFY-P20/25/32VKM, PFFY-P20/25/32VLE(R)M, PEFY-P∗VMA3 or M, S and P series indoor unit.
*3 In the case of ATW single connection. Input to circulation pump is not included.
*4 In the case of simultaneous operation of ATA heating and ATW heating, target flow temperature range is restricted to 45-55°C and when the ambient temp is under 7°C, the flow temp is lowered.
*5 Up to P100 when connecting via branch box.
*6 Up to 11 units when connecting via 2 branch boxes.
*7 Only one ecodan unit can be connected.
*8 Exceptionally, one MSZ-SF15VA or MSZ-AP15VF can be connected.
*9 Exceptionally, two MSZ-SF15VA or MSZ-AP15VF can be connected.
*10 Exceptionally, three MSZ-SF15VA or MSZ-AP15VF can be connected.
*11 In the case of City Multi connection, maxmum is P32.
*12 PKFY and PFFY series are not connectable.

Piping specifications

Total piping length	m	150*	a+b+c+d+e+f
Farthest piping length	m	80	a+b+d or a+c+e
		85	a+f
Total piping length betwen outdoor unit and branch box	m	55	a+b+c
Total piping length between branch boxes and indoor units	m	95	d+e
Farthest piping length from the first joint	m	30	b or c or f
Farthest piping length after branch box	m	25	d or e
Height difference (Outdoor upside / Outdoor downside)	m	50 / 40	

*When an ecodan is connected, the maximum piping length is 150m.



PUMY+ecodan compatibility table

ATW branch box connection compatibility table

Series	Type	Model name	Compatibility
ATW	Cylinder unit	EHST20C-VM2/6C	●
		EHST20C-YM9C	●
		EHST20C-TM9C	●
		EHST20C-VM2/6EC	●
		EHST20C-YM9EC	●
		EHST20C-MHCW	●

Type	Model name	Compatibility
Hydro box	EHSC-VM2(E)C	●
	EHSC-VM6(E)C	●
	EHSC-YM9(E)C	●
	EHSC-TM9C	●

Type	Model name	Compatibility
Branch box	PAC-MK53BC	●
	PAC-MK33BC	●
	PAC-MK53BCB	●
	PAC-MK33BCB	●

Branch box connection compatibility table

Series	Type	Model name	Compatibility									
			15	18	20	22	25	35	42	50	60	71	100
M series	Wall-mounted	MSZ-LN•VG					●	●					
		MSZ-AP•VF/VG	●		●		●	●	●	●			
		MSZ-FH•VE2					●	●		●			
		MSZ-EF•VE3		●		●	●	●	●	●			
		MSZ-SF•VA	●		●								
		MSZ-SF•VE3					●	●	●	●			
		MSZ-GF•VE2									●	●	
	Floor-standing	MFZ-KJ•VE2					●	●		●			
	1-way cassette	MLZ-KP•VF					●	●		●			
S series	Ceiling-concealed	SEZ-M•DA(L)					●	●		●	●	●	
	2×2 cassette	SLZ-M•FA					●	●		●			
P series	Ceiling-suspended	PCA-M•KA						●		●	●	●	●
	4-way cassette	PLA-RP•EA						●		●	●	●	●
	Ceiling-concealed	PEAD-M•JA(L)								●	●	●	●

LEV kit connection compatibility table

Series	I/U type	Model name	Compatibility									
			15	18	20	22	25	35	42	50	60	71
M series	Wall-mounted	MSZ-LN•VG										
		MSZ-AP•VF/VG										
		MSZ-FH•VE2					●	●		●		
		MSZ-EF•VE3		●		●	●	●	●	●		
		MSZ-SF•VA	●		●							
		MSZ-SF•VE3					●	●	●	●		
	Floor-standing	MFZ-KJ•VE2					●	●		●		

Connectable indoor unit capacity

For individual operation ATA+ATW (no simultaneous operation) ATA: Max 130% of outdoor unit capacity + ATW (EHST20C or EHSC)

Outdoor capacity 12.5kW	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	Connectable ATA indoor unit total capacity: Max.16.2kW (130%)

Outdoor capacity 14.0kW	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	Connectable ATA indoor unit total capacity: Max.18.2kW (130%)

Outdoor capacity 15.5kW	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	Connectable ATA indoor unit total capacity: Max.20.2kW (130%)

For simultaneous operation of ATA+ATW Max 100% of outdoor unit capacity: ATA + ATW (EHST20C or EHSC)

Outdoor capacity 12.5kW	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 1.3kW

*Exceptionally, one MSZ-SF15VA or MSZ-AP15VF can be connected.

Outdoor capacity 14.0kW	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 2.8kW

*Exceptionally, two units of MSZ-SF15VA or MSZ-AP15VF can be connected.

Outdoor capacity 15.5kW	
ATW indoor unit (Cylinder or Hydro box) 11.2kW	ATA capacity Max. 4.3kW

*Exceptionally, three units of MSZ-SF15VA or MSZ-AP15VF can be connected.

MELCloud (Wi-Fi interface) for ecodan

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 MAC-567IF-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 metering hardware is required.

All A++ line-up!!

*except for ATA & ATW hybrid system, Mr. SLIM+

		For medium-temperature application							For low-temperature application						
Outdoor unit	Indoor unit	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 LWA indoor	Sound power level LWA 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 LWA indoor	Sound power level LWA outdoor
				kW	%	%	dB	dB			kW	%	%	dB	dB
SUHZ-SW45VA (-H)	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-SW75VAA/YAA (-BS)	EHST20D-****	A++	A	7.1	129	104	40	58	A++	A	7.2	162	104	40	58
	ERST20D-****	A++	A	7.1	132	104	40	58	A++	A	7.2	166	104	40	58
	EHSD-****	A++	–	7.1	129	–	40	58	A++	–	7.2	162	–	40	58
	ERSD-****	A++	–	7.1	132	–	40	58	A++	–	7.2	166	–	40	58
PUHZ-SW100VAA/YAA (-BS)	EHST20C-****	A++	A	10.0	130	103	40	60	A++	A	10.6	167	103	40	60
	ERST20C-****	A++	A	10.0	132	103	40	60	A++	A	10.6	170	103	40	60
	EHSC-****	A++	–	10.0	130	–	40	60	A++	–	10.6	167	–	40	60
	ERSC-****	A++	–	10.0	132	–	40	60	A++	–	10.6	170	–	40	60
PUHZ-SW75VHA (-BS)	EHST20D-****	A++	A	7.1	127	100	40	68	A++	A	7.2	164	100	40	68
	ERST20D-****	A++	A	7.1	129	100	40	68	A++	A	7.2	166	100	40	68
	EHSD-****	A++	–	7.1	127	–	40	68	A++	–	7.2	164	–	40	68
	ERSD-****	A++	–	7.1	129	–	40	68	A++	–	7.2	166	–	40	68
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-SHW80VAA/YAA (-BS)	EHST20C-****	A++	A	9.0	123	103	40	59	A++	A	9.6	169	103	40	59
	ERST20C-****	A++	A	9.0	135	103	40	59	A++	A	9.6	172	103	40	59
	EHSC-****	A++	–	9.0	133	–	40	59	A++	–	9.6	169	–	40	59
	ERSC-****	A++	–	9.0	135	–	40	59	A++	–	9.6	172	–	40	59
PUHZ-SHW112VAA/YAA (-BS)	EHST20C-****	A++	A	12.7	125	103	40	60	A++	A	13.9	171	103	40	60
	ERST20C-****	A++	A	12.7	137	103	40	60	A++	A	13.9	173	103	40	60
	EHSC-****	A++	–	12.7	135	–	40	60	A++	–	13.9	171	–	40	60
	ERSC-****	A++	–	12.7	137	–	40	60	A++	–	13.9	173	–	40	60
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	69	A++	A	10.0	164	100	40	69
	EHPX-****	A++	–	10.0	125	–	40	69	A++	–	10.0	164	–	40	69
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-FRP71VHA2	EHST20C-****	A+	A	7.5	123	98	40	68	A++	A	7.5	163	98	40	68
ATA & ATW hybrid system, Mr. SLIM+	EHSC-****	A+	–	7.5	123	–	40	68	A++	–	7.5	163	–	40	68
PUMY-P112VKM3/YKM(E)4 (-BS)	EHST20C-****	A+	A	11.2	121	75	40	69	A++	A	11.2	168	75	40	69
	EHSC-****	A+	–	11.2	121	–	40	69	A++	–	11.2	168	–	40	69
PUMY-P125VKM3/YKM(E)4 (-BS)	EHST20C-****	A+	A	11.2	121	75	40	69	A++	A	11.2	168	75	40	69
	EHSC-****	A+	–	11.2	121	-	40	69	A++	–	11.2	168	–	40	69
PUMY-P140VKM3/YKM(E)4 (-BS)	EHST20C-****	A+	A	11.2	121	75	40	69	A++	A	11.2	168	75	40	69
	EHSC-****	A+	–	11.2	121	–	40	69	A++	–	11.2	168	–	40	69

✻ Based on COMMISSION DELEGATED REGULATION (EU) No 811/2013, average climate conditions

NEW ECODESIGN DIRECTIVE

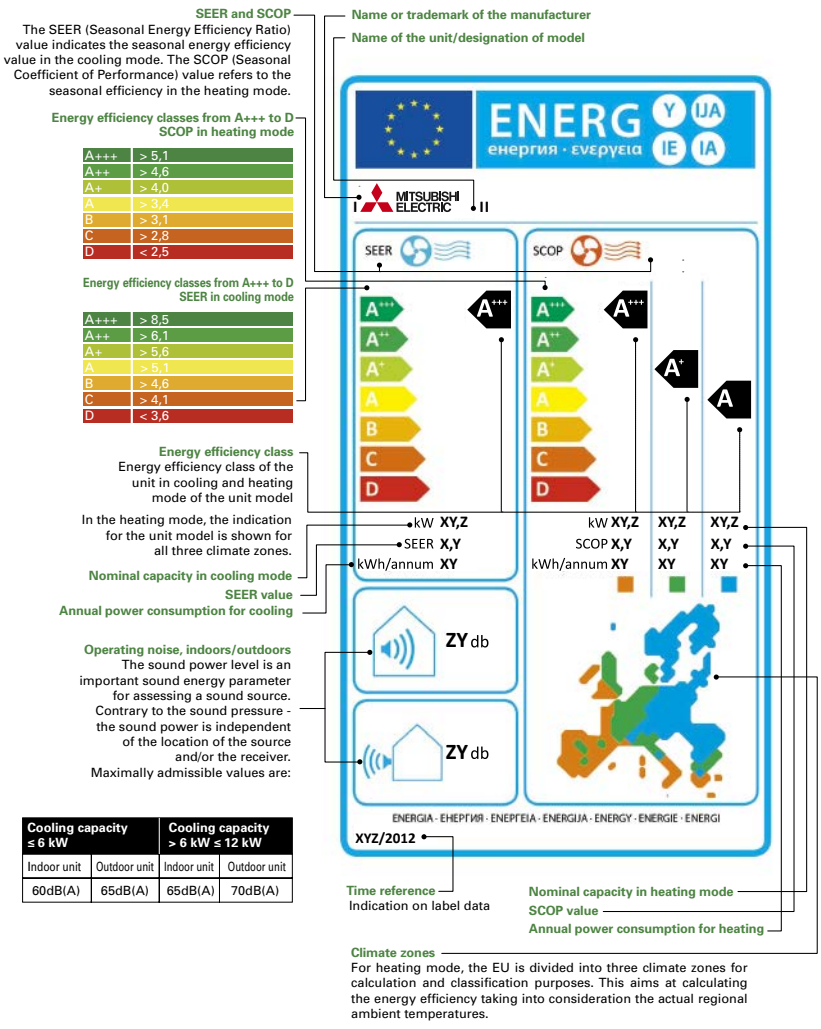
WHAT IS THE ErP DIRECTIVE?

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

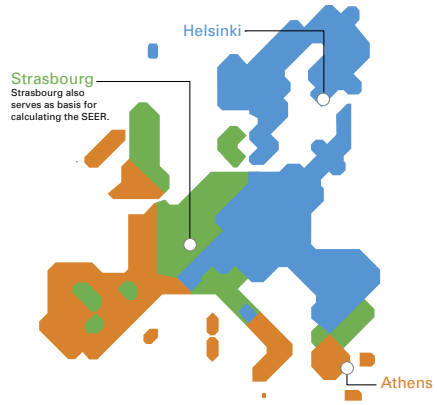
Under regulation 2011/626/EU, supplementing directive 2010/30/EU, air conditioning systems are newly classified into energy-efficiency classes on the basis of a new energy labelling system, which includes three new classes: A^{+}, A^{++} and A^{+++}.
Revisions to the measurement points and calculations 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



■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

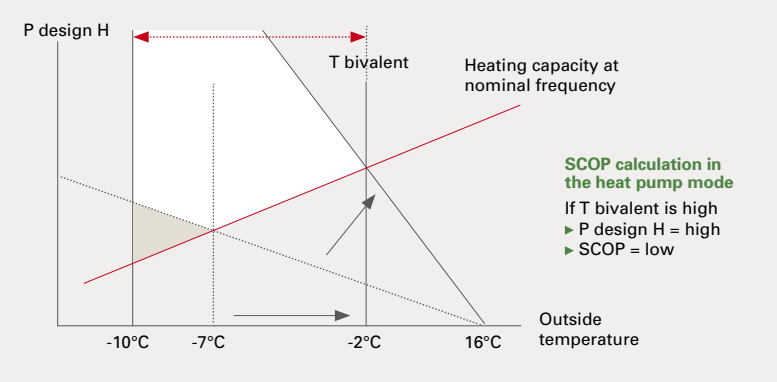
Cold (Helsinki)

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.

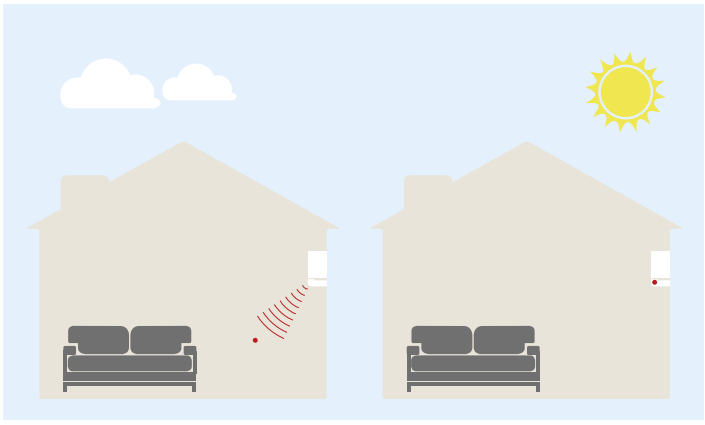
T design: Outside temperature which determines the P design H point. The latter is determined from the area conditions.

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.

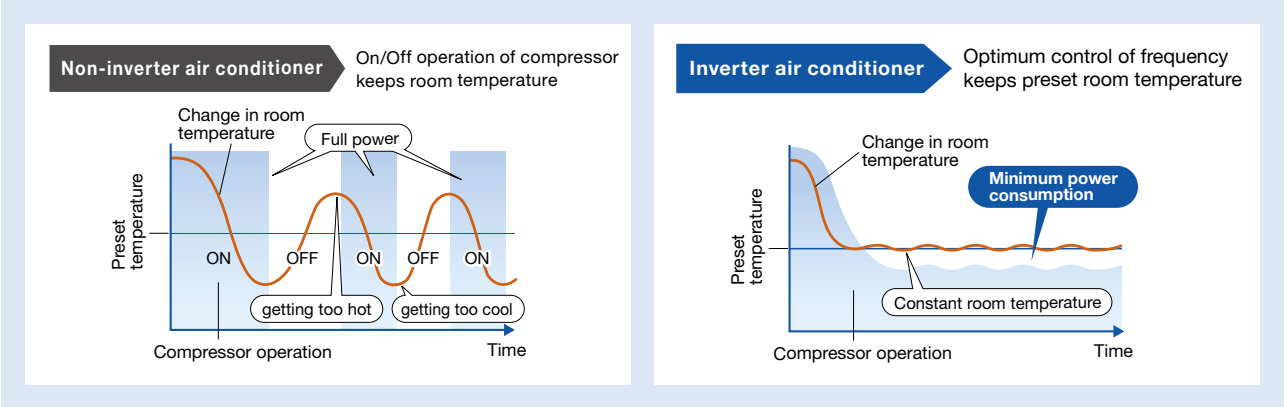
ECONOMIC OPERATION

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

Below is a simple comparison of air conditioner operation control with and without an inverter.

■ Inverter operation comparison



The compressors of air conditioners without an inverter start and stop repeatedly in order to maintain the preset room temperature. This repetitive on/off operation uses excessive electricity and compromises room comfort. The compressors of air conditioners equipped with an inverter run continuously; the inverter quickly optimizing the operating frequency according to changes in room temperature. This ensures energy-efficient operation and a more comfortable room.

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

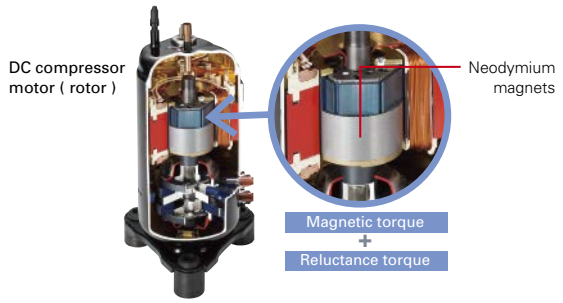
Mitsubishi Electric has developed a unique motor, called the "Poki-Poki Motor" in Japan, which is manufactured using a joint lapping technique. This innovative motor operates based on a high-density, high-magnetic force, leading to extremely high efficiency and reliability.

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.

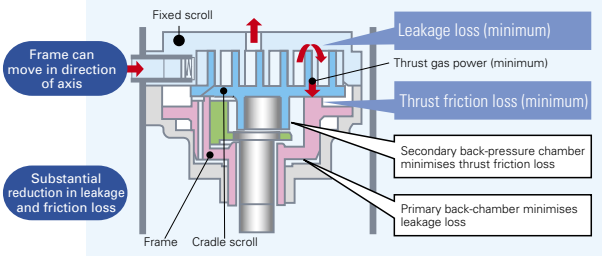
Reluctance DC Rotary Compressor

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

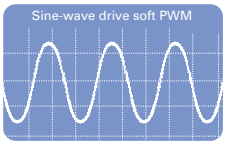
A highly efficient DC motor drives the fan of the outdoor unit. Efficiency is much higher than an equivalent AC motor.

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.

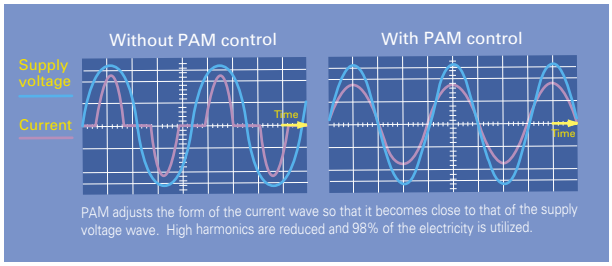
Smooth wave pattern

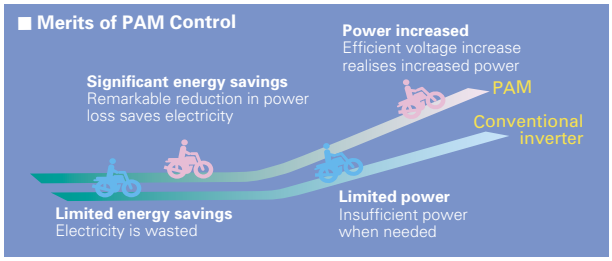
Inverter size has been reduced using insert-molding, where the circuit pattern is molded into the synthetic resin. To ensure quiet operation, soft PWM control is used to prevent the metallic whine associated with conventional inverters.



PAM (Pulse Amplitude Modulation)

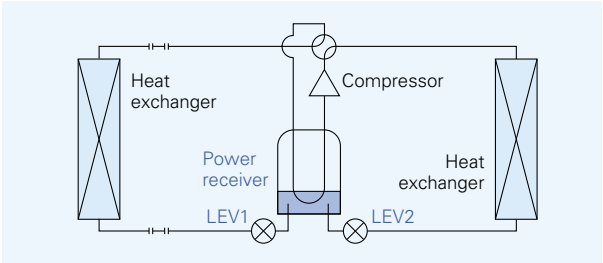
PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.





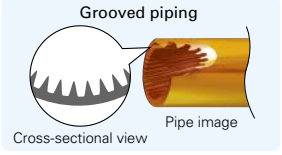
Power Receiver and Twin LEV Control

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.

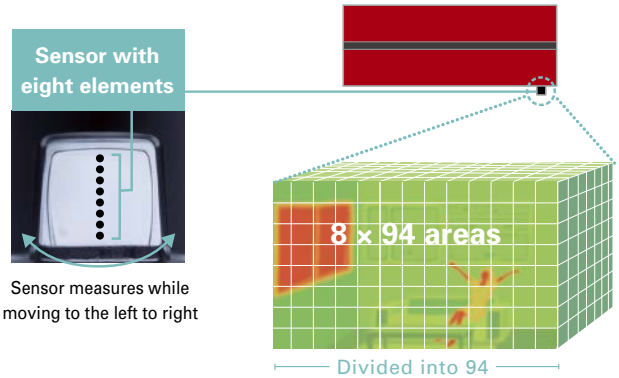


COMFORT

3D i-see Sensor

3D i-see Sensor for M SERIES

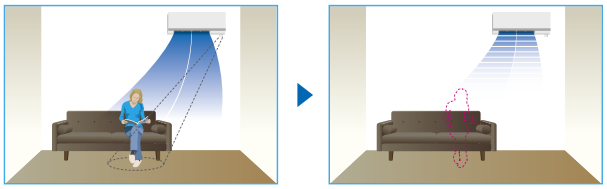
The LN Series and FH Series are equipped with the 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it 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)

No occupancy energy-saving mode

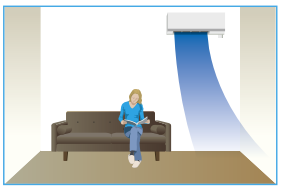
The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.



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.

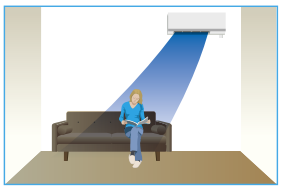
Indirect Airflow

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.



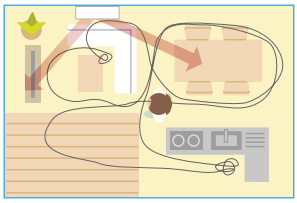
Direct Airflow

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



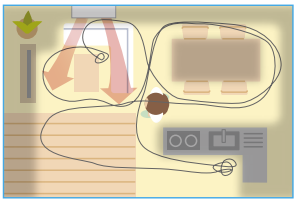
Even Airflow *LN Series only

Normal swing mode



The airflow is distributed equally throughout the room, even to spaces where there is no human movement.

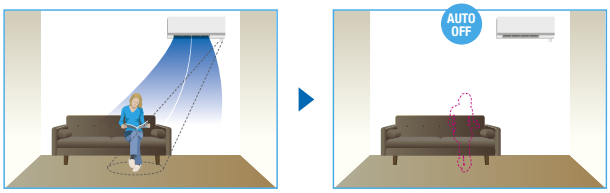
Even airflow mode



The 3D i-see sensor memorizes human movement and furniture positions, and efficiently distributes airflow.

No occupany Auto-OFF mode *LN Series only

The sensors detect whether or not there are people in the room. When there is no one in the room, the unit turns off automatically.



3D i-see Sensor for S & P SERIES

Detects number of people

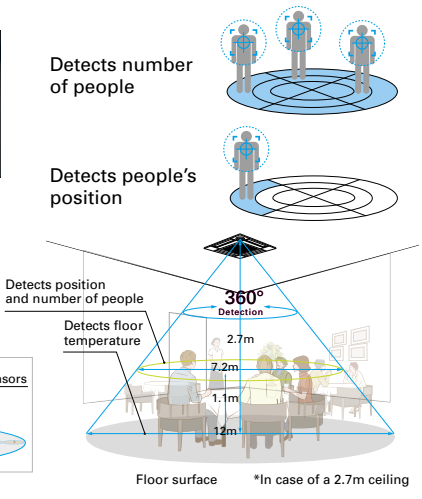
The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced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

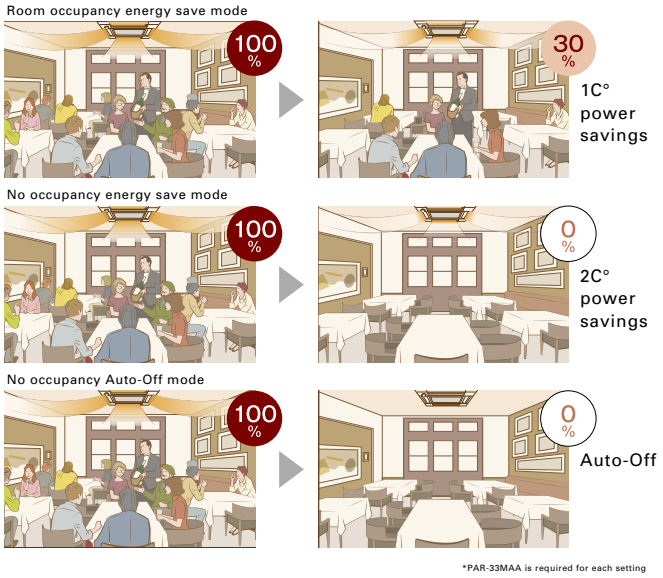
No occupancy energy-saving mode

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.

* When MA Remote Controller is used to control multiple refrigerant systems, "No occupancy Auto-OFF mode" cannot be used.

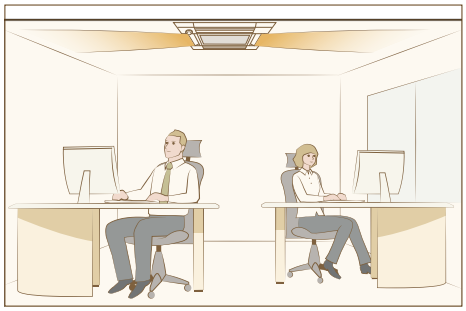


*PAR-33MAA is required for each setting

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!

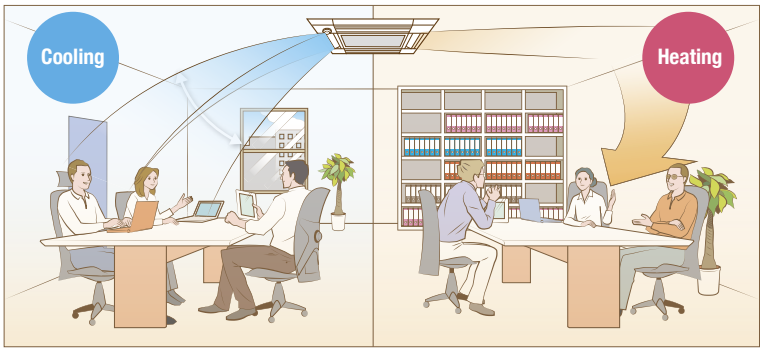


*PAR-33MAA or PAR-SL100A-E is required for each setting.

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.

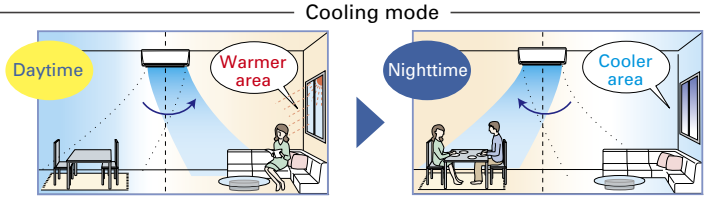
When heating
The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction.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



*PAR-33MAA is required for each setting.

AREA Area Temperature Monitor

The "3D 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.



COMFORT

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

AIR QUALITY

Plasma Quad Plus

Plasma Quad Plus is a plasma-based filter system similar to Plasma Quad, but in addition to bacteria, viruses, allergens, and dust, it can also filter out microparticles such as PM2.5.

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.

Dual Barrier Coating

A two-barrier coating which prevents hydrophobic and hydrophillic dirt from sticking to the inner surface and inner parts of the indoor unit.

Fresh-air Intake

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

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.

Air Purifying Filter

The filter has a large capture area and deodourise the circulating air.

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.

Silver-ionized Air Purifier Filter

Captures the bacteria, pollen and other allergens in the air and neutralises them.

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

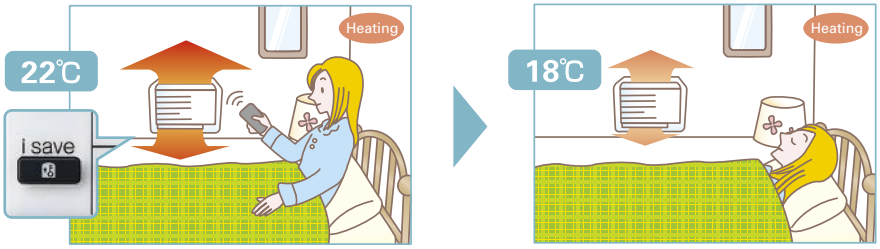
The airflow speed mode adjusts the fan speed of the indoor unit automatically according to the present room conditions.

CONVENIENCE

CONVENIENCE

"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.

Low-temperature Cooling

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

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.

Operation Lock (Indoor unit)

To accommodate specific-use applications, cooling or heating operation can be specified using the wireless remote controller. A convenient option when a system needs to be configured for exclusive cooling or heating service.

Operation Lock (Outdoor unit)

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.

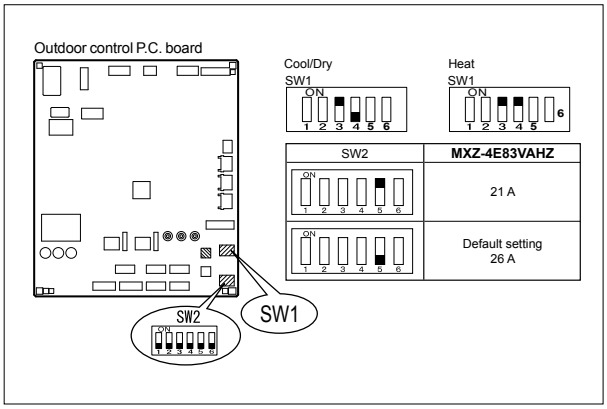
Auto Restart

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

10°C Heating

During heating operation, the temperature can be set in 1°C increments down to 10°C.

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



Night Mode

When Night Mode is activated using the wireless remote controller, it will switch to the settings described below.

- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated specification operating noise.

*The cooling/heating capacity may drop.

Low-noise Operation (Outdoor Unit)

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

On/Off Operation Timer

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

Built-in Weekly Timer Function

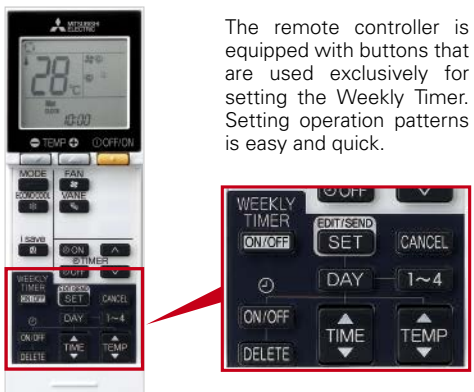
Easily set desired temperatures and operation ON/OFF times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ Example Operation Pattern (Winter/Heating mode)

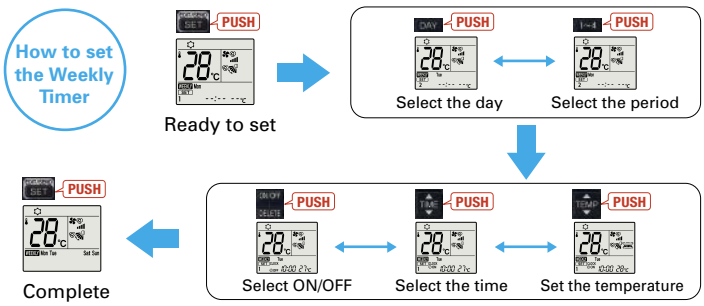
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00	Automatically turned off during work hours					Midday is warmer, so the temperature 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 "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.

INSTALLATION & MAINTENANCE

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.

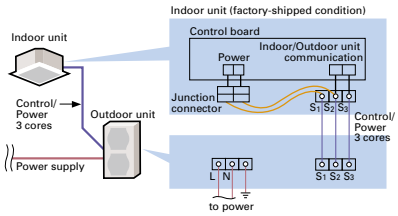
Reuse of Existing Wiring

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

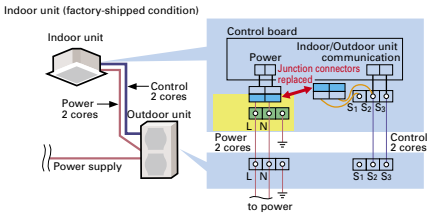
The wiring method has been improved, making it possible to use methods different from that utilized for control and power supply. Units are compatible with the dual harness control line/power line method and the separate power supply method. Using a power supply terminal kit, wire can be efficiently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

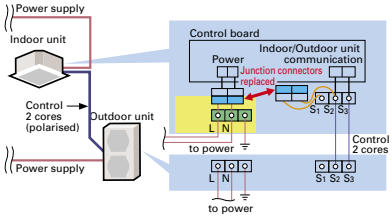
Single Harness Control/Power Line Method (Current method)



Dual Harness Control Line/Power Line Method



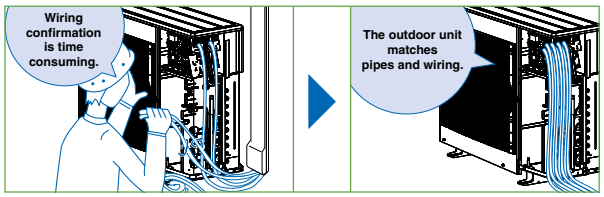
Separate Power Supply Method



Wiring/Piping Correction Function*

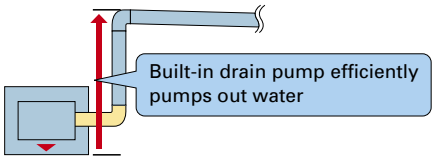
The push of a single button is all that is required to confirm that piping and wiring are properly connected. Corrections are made automatically if a wiring error is detected, eliminating the need for complicated wiring confirmation work when expanding the number of rooms served.

* 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.



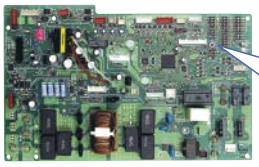
Flare Connection

Flare connection to cooling pipe work is possible.

Pump Down Switch

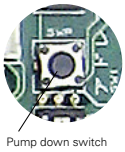
Enables smooth and easy recovery of refrigerant. Simply press the "Pump Down" switch before moving or changing the unit.

Outdoor unit control circuit board



* Photo of Model PUHZ-P100

Pump Down Switch



Push this switch to start/stop refrigerant recovery operation automatically. (Valve in refrigerant circuit is opened/closed.)

Pump down switch

MAINTENANCE

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.

SYSTEM CONTROL

SYSTEM CONTROL

PAR-33MAA/PAC-YT52CRA

Units are compatible for use with the PAR-33MAA or PAC-YT52CRA remote controller, which has a variety of management functions.

System Group Control

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

M-NET Connection

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

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

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

MELCloud (Wi-Fi interface)

MELCloud for fast, easy remote control and monitoring

MELCloud is a Cloud-based solution for controlling air-conditioner either locally or remotely by computer, tablet or smartphone via the Internet. Setting up and remotely operating via MELCloud is simple and straight forward. All you need is wireless computer connectivity in your home or the building where the air-conditioner is installed and an Internet connection on your mobile or fixed terminal. To set up the system, the router and the Wi-Fi 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 air-conditioner via MELCloud from virtually anywhere an Internet connection is available.
That means, thanks to MELCloud, you can use much more easily and conveniently.

Key control and monitoring features

1. **Turn system on/off**
2. **See status of operating & adjust set point**
3. **Live weather feed from your location**

   Schedule timer - Set 7 day weekly schedule
   Error status
4. **Energy Consumption Monitoring**

   *MSZ-LN, AP Series are available

MELCloud™

NEW

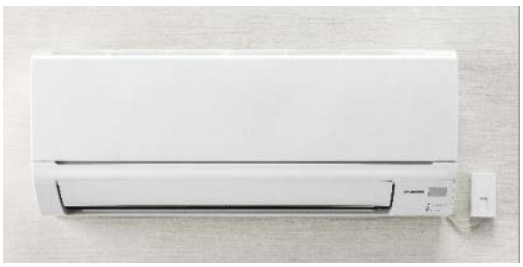
MELCloud uses the MAC-567IF-E interface

Connecting the Wi-Fi interface

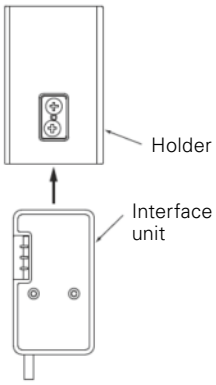
The new Wi-Fi interface MAC-567IF-E can be mounted on the wall or on the outer side of the indoor unit.
For LN Series, there is a built-in Wi-Fi interface inside the indoor unit.

When mounting on the wall

The interface can be mounted simply by affixing the holder to the wall on either side of the unit and inserting the interface unit into the holder.

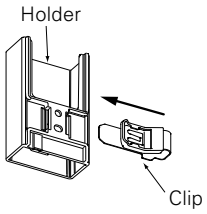


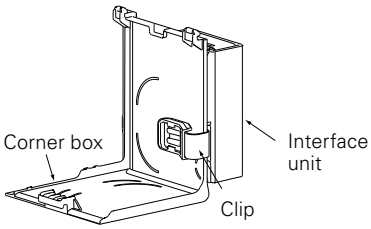
*When mounting on the right side of the unit



When mounting on the outer side of the unit

The interface can be mounted on the right side, left side, bottom right, or bottom left of the indoor unit. After inserting the clip into the holder, slip the clip over the edge of the corner box.





Right side

Bottom right

Left side

Bottom left

CONTROL TECHNOLOGIES

PAR-33MAA

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.

PAR-33MAA

English	Spanish	Italian	Turkish
French	Greek	Portuguese	Swedish

PAR-33MAAG

English	German	French	Russian
Polish	Czech	Hangarian	Dutch

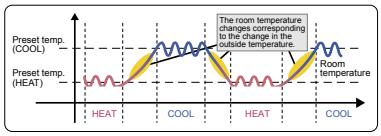
Temperature Control

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 176-178 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.

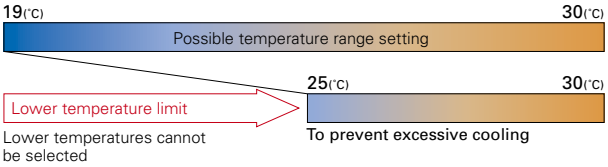
Temperature Range Restriction

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

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

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

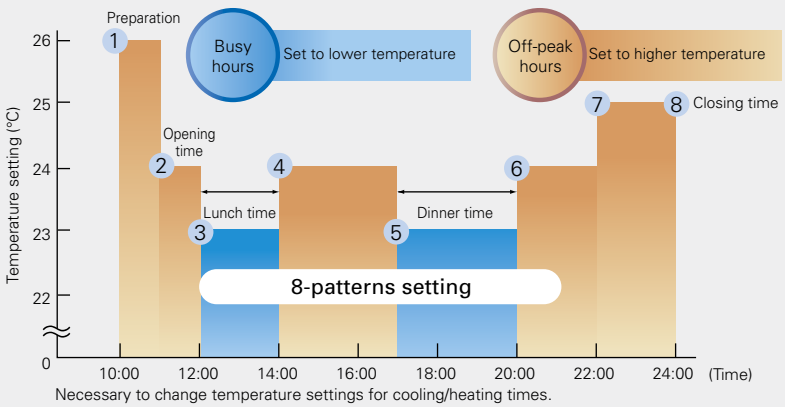
Weekly Timer

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

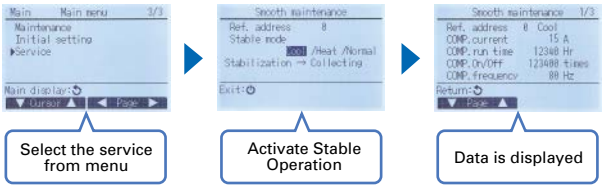
Installation/Maintenance Support Functions

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)

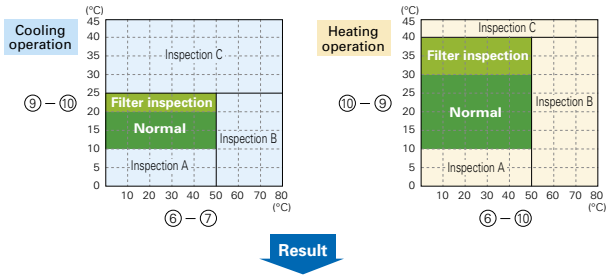
Compressor		⑥	OU TH4 temp. (°C)
①	COMP. current (A)	⑦	OU TH6 temp. (°C)
②	COMP. run time (Hr)	⑧	OU TH7 temp. (°C)
③	COMP. ON/OFF (times)	Indoor Unit	
④	COMP. frequency (Hz)	⑨	IU air temp. (°C)
Outdoor Unit		⑩	IU HEX temp. (°C)
⑤	Sub cool (°C)	⑪	IU filter operating time* (Hr)

*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.)



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.

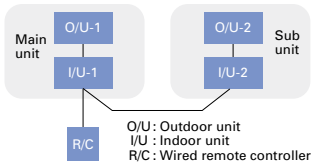
Rotation Back-up Rotation, Back-up and 2nd Stage Cut-in Functions (PAR-33MAA)

(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

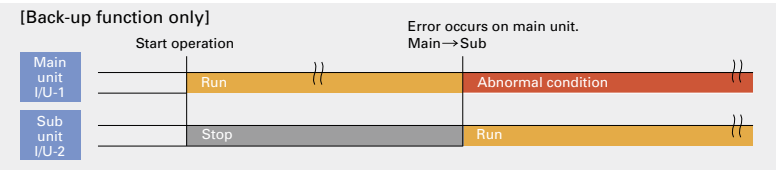
Function Outline

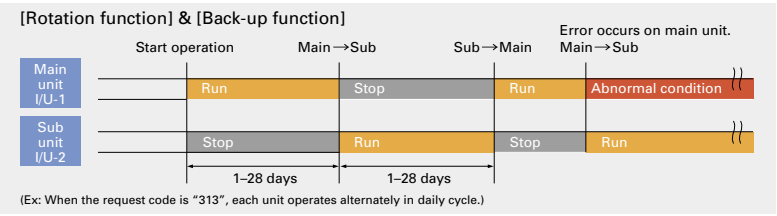
- Number of units operating is based on room temperature and predetermined settings.
- When room temperature rises above the desired setting, the standby unit starts (2-unit operation).
- When the room temperature falls 4°C below the predetermined setting, the standby unit stops (1-unit operation).

System Constraint

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

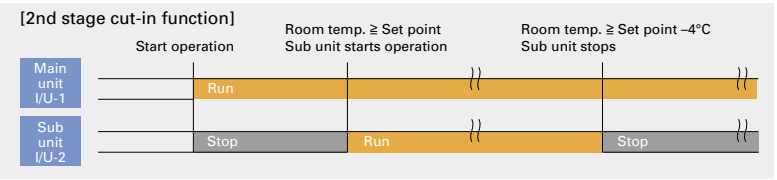
Operation Pattern



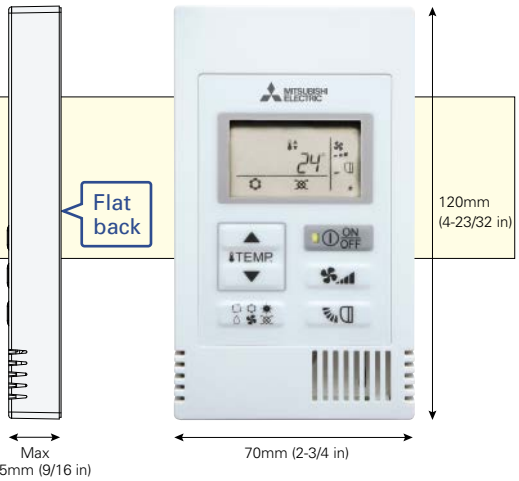


(Ex: When the request code is "313", each unit operates alternately in daily cycle.)

Operation Pattern



Simple MA Remote Controller
PAC-YT52CRA



Backlit LCD

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

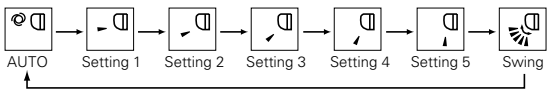
Flat Back

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.

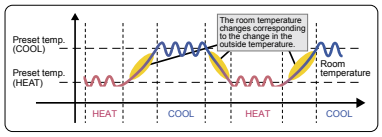


Dual Set Point

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

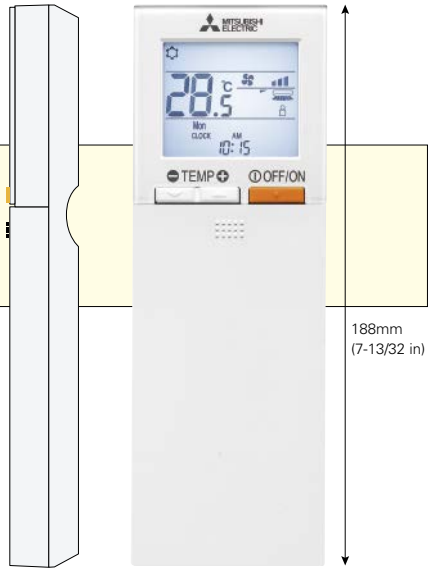


*Please refer to the function list on pages 176-178 for the combination of the available units.

* 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.

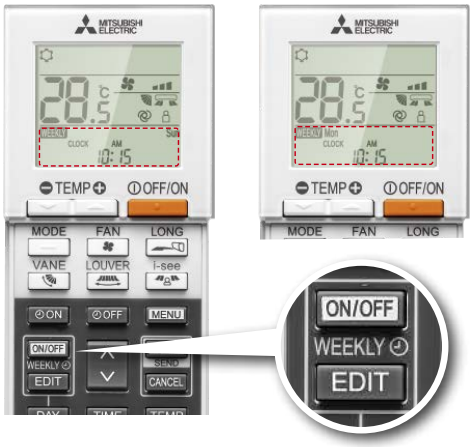
CONTROL TECHNOLOGIES

Wireless Remote Controller
PAR-SL100A-E



Weekly Timer

The Weekly Timer enables the setting of operation start and finish times and adjusting the temperature as standard features. Up to 4 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.



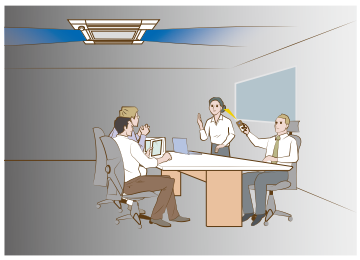
■ Example Operation Pattern (Winter/Heating mode)

	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						

*Weekly Timer cannot be used when On/Off Timer is in use.
*Only for SLZ-KF25/35/50/60VA2, PLA-ZP/RP35/50/60/71/100/125/140EA

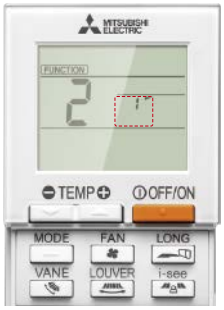
Backlight

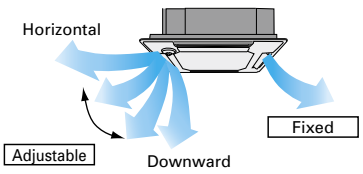
Backlight function incorporated, making screen easy to read in the dark. Even in dimly lit rooms, the screen can be seen clearly for trouble-free remote controller operation.



Individual Vane Settings

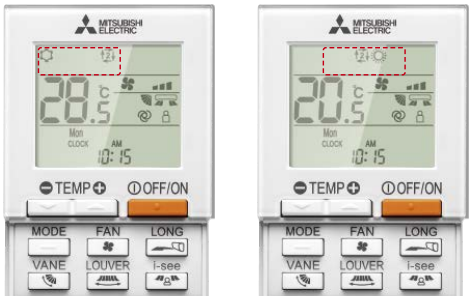
The airflow directions of the four vanes can each be adjusted independently. Easily set the optimum airflow according to the room setting.



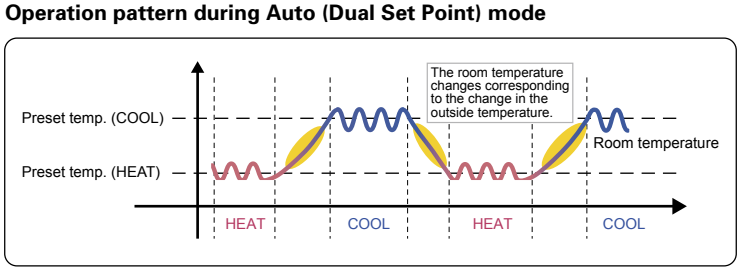


Dual Set Point

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, the indoor unit will automatically operate in either the COOL or HEAT mode and keep the room temperature within the preset range.

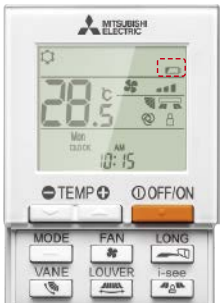


Operation pattern during Auto (Dual Set Point) mode



* Only available for compatible models.

Battery Replacement Sign

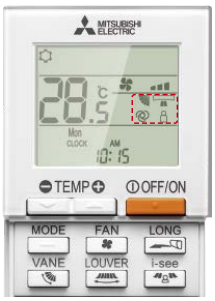


Previous wireless remote controllers were not easy to read, understand or use sometimes because the battery was low. Beginning with the PAR-SL100A-E, a battery charge indicator that shows the charge status is included in the LCD so it can be seen when the battery is low and needs to be changed.

3D i-see Sensor (Direct/Indirect Airflow)

Pressing the i-see button enables direct or indirect setting of all vanes.

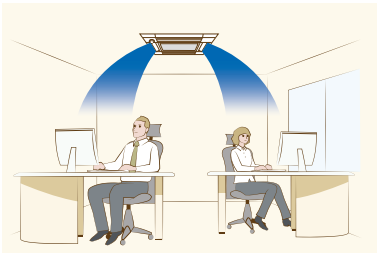
Direct



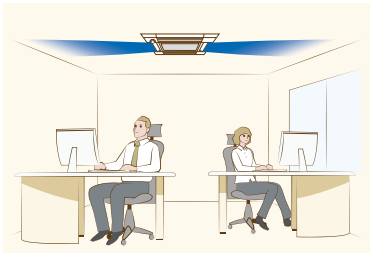
Indirect

	Vane setting	
	Direct	Indirect
Cooling	horizontal → swing	keep horizontal
Heating	keep downward	downward → horizontal

Direct Airflow



Indirect Airflow



*Only available for models equipped with 3D i-see Sensor.

Basic Functions

Functions	Button	Liquid crystal
OFF / ON	OFF/ON	
Preset temperature	TEMP	
Mode	MODE	Cool, Dry, Heat, Fan, Auto, Dual set point (*Dual Set Point function not operational first use.)
Fan speed	FAN	4-Speed, Auto
Vane angle	VANE	5-step, Swing, Auto
3D i-see Sensor	i-see	Direct, Indirect
Send sign		
Battery replacement sign		
Function setting		FUNCTION
Test run		TEST
Self check		CHECK
Not available		N/A

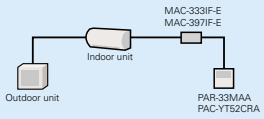
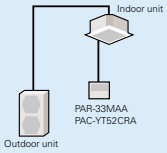
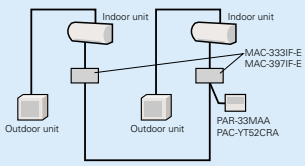
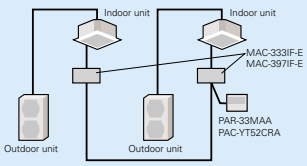
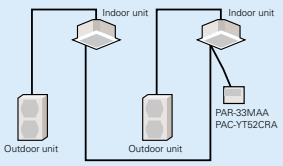
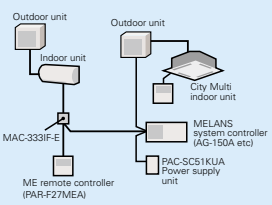
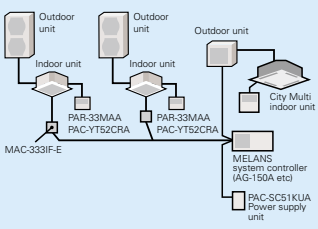
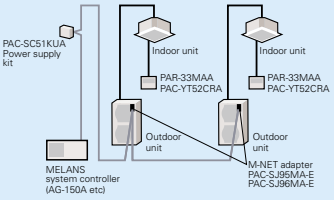
*This remote controller is only compatible with the following models: SLZ-M15/25/35/50/60FA, PLFY-P15/20/25/32/40/50VFM-E1, PLA-ZM/RP35/50/60/71/100/125/140EA, PLFY-P20/25/32/40/50/63/80/100/125VEM-E

*Functions available vary according to the model.

SYSTEM CONTROL

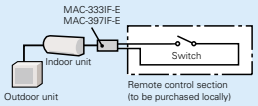
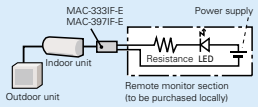
Versatile system controls can be realised using optional parts, relay circuits, control panels, etc.

MAJOR SYSTEM CONTROL

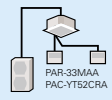
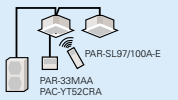
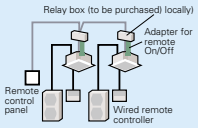
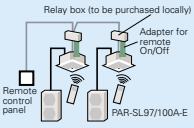
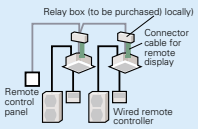
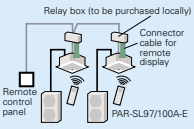
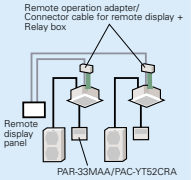
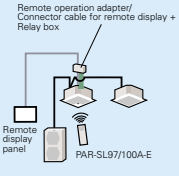
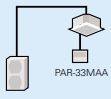
	System Examples		
Indoor Unit	M Series Indoor Unit	S Series & P Series Indoor Unit	P Series Indoor Unit
Outdoor Unit	M Series and MXZ Series Outdoor	S Series and MXZ Series Outdoor	P Series Outdoor
PAR-33MAA Control **PAC-YT52CRA Control**			
Details	• Wired remote controller can be connected to indoor unit	Standard equipment (for indoor units compatible with wired remote controllers)	
Major Optional Parts Required	• MAC-333IF-E or MAC-397IF-E (Interface) • PAR-33MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)	• PAR-33MAA (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. • PAR-SL100A cannot be used when connected through the MAC-333IF-E or MAC-397IF-E, or when group control is used.		
Major Optional Parts Required	• MAC-333IF-E or MAC-397IF-E (Interface) • PAR-33MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)		• PAR-33MAA (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-SJ95MA-E or PAC-SJ96MA-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-33MAA** **PAC-YT52CRA** (for PKA, **PAC-SH29TC-E** is required) • Wireless Remote Controller **PAR-SL97A-E / PAR-SL100A-E** (only for SLZ) • Wireless Remote Controller Kit for PCA **PAR-SL94B-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-33MAA**

FUNCTION LIST (1)

Category		Icon	Combination	M SERIES																							
			Indoor unit	MSZ-LN18/25/35/50/60VG(W)(V)(R)(B)						MSZ-AP15/20VF					MSZ-AP25/35/42/50VG						MSZ-FH25/35/50VE2					
			Outdoor unit	MUZ -LN	MXZ -2D/F	MXZ -3E/F	MXZ -4E/F	MXZ -5E	MXZ -6D	MXZ -2D/F	MXZ -3E/F	MXZ -4E/F	MXZ -5E	MXZ -6D	MUZ -AP	MXZ -2D/F	MXZ -3E/F	MXZ -4E/F	MXZ -5E	MXZ -6D	MUZ -FH	MXZ -2D	MXZ -3E	MXZ -4E	MXZ -5E	MXZ -6D
Technology		DC Inverter		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Joint Lap DC Motor		●	●	●	72/83VA	●	●	●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	●	72/83VA	●	
		Reluctance DC Rotary Compressor					83	●	●			83	●	●				83	●	●				83	●	●
		Heating Caulking (Compressor)		●	●	●	72/83VA	●		●	●	72/83VA	●			●	●	72/83VA	●		●	●	●	72/83VA	●	
		DC Fan Motor		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		PAM (Pulse Amplitude Modulation)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Power Receiver and Twin LEV Control				●	72				●	72					●	72					●	72			
		Grooved Piping		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Functions	i-see Sensor	Felt Temperature Control (3D i-see Sensor)		●	●	●	●	●	●													●	●	●	●	●	●
		AREA Temperature Monitor		●	●	●	●	●	●													●	●	●	●	●	●
	Energy Saving	Econo Cool Energy-saving Feature		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Standby Power Consumption Cut		●											●							●					
	Air Quality	Plasma Quad Plus		●	●	●	●	●	●																		
		Plasma Quad																				●	●	●	●	●	●
		Dual Barrier Coating		●	●	●	●	●	●																		
		Silver-ionized Air Purifier Filter		Opt	Opt	Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt	Opt	Opt	●	●	●	●	●	●	
		Air Purifying Filter													●	●	●	●	●	●							
	Air Distribution	Double Vane		●	●	●	●	●	●													●	●	●	●	●	●
		Horizontal Vane		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Vertical Vane		●	●	●	●	●	●													●	●	●	●	●	●
		High Ceiling 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
		Auto Restart		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-temperature Cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		10°C Heating		●	●	●	●	●	●																		
		Low-noise Operation (Outdoor Unit)			●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●
		Night Mode		●	●*4	●*4	●*4	●*4	●*4																		
		Ampere Limit Adjustment			2E		83	●	●	2E		83	●	●		2E		83	●	●		2E		83	●	●
		Operation Lock (Indoor)		●	●	●	●	●	●																		
		Operation Lock (Outdoor)			●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●
		Built-in Weekly Timer Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	System Control	PAR-33MAA 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
		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
		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
		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
		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
		Wi-Fi Interface		●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		MXZ Connection			●*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		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Wiring/Piping Correction Function			●	●	●	●	●		●	●	●	●		●	●	●	●	●		●	●	●	●	●
		Drain Pump																									
		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 101-102 for details.
*3 Please refer to “System Control” on pages 171-172 for details.
*4 When connected to MXZ outdoor units, the outdoor operating sound will not change.

M SERIES																													
MSZ-EF18/22/25/35/42/50VE3(W)(B)(S)						MSZ-SF15/20VA					MSZ-SF25/35/42/50VE3						MSZ-GF60/71VE2					MSZ-WN25/35VA	MSZ-DM25/35VA			MSZ-HJ25/35/50VA			MSZ-HJ60/71VA
MUZ-EF	MXZ-2D/F	MXZ-3E/F	MXZ-4E/F	MXZ-5E	MXZ-6D	MXZ-2D	MXZ-3E	MXZ-4E	MXZ-5E	MXZ-6D	MUZ-SF	MXZ-2D	MXZ-3E	MXZ-4E	MXZ-5E	MXZ-6D	MUZ-GF	MXZ-3E	MXZ-4E	MXZ-5E	MXZ-6D	MUZ-WN	MUZ-DM	MXZ-2DM	MXZ-3DM	MUZ-HJ	MXZ-2DM	MXZ-3DM	MUZ-HJ
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	72/83VA	●		●	●	72/83VA	●		●	●	●	72/83VA	●		●	●	72/83VA	●		●	●	●	●	●	●	●	●
			83	●	●			83	●	●				83	●	●			83	●	●								
●	●	●	72/83VA	●		●	●	72/83VA	●			●	●	72/83VA	●			●	72/83VA	●				●	●	50	●	●	●
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●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		●	72				●	72					●	72				●	72						●			●	
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	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●			●	●		●	●	
	2E		83	●	●	2E		83	●	●		2E		83	●	●			83	●	●								
	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●			●	●		●	●	
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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				
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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	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●		●	●	●	●		●	●	●	●	●		●	●	●	●			●	●		●	●	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

• 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 (1)

Category		Icon			M SERIES										
			Combination	Indoor unit	MFZ-KJ25/35/50VE2						MLZ-KP25/35/50VF				
				Outdoor unit	MUFZ -KJ	MXZ -2D	MXZ -3E	MXZ -4E	MXZ -5E	MXZ -6D	MXZ -2D/F	MXZ -3E/F	MXZ -4E/F	MXZ -5E	MXZ -6D
Technology		DC Inverter			●	●	●	●	●	●	●	●	●	●	●
		Joint Lap DC Motor			●	●	●	72/83VA	●		●	●	72/83VA	●	
		Reluctance DC Rotary Compressor						83	●	●			83	●	●
		Heating Caulking (Compressor)			●	●	●	72/83VA	●		●	●	72/83VA	●	
		DC Fan Motor			●	●	●	●	●	●	●	●	●	●	●
		PAM (Pulse Amplitude Modulation)			●	●	●	●	●	●	●	●	●	●	●
		Power Receiver and Twin LEV Control					●	72				●	72		
		Grooved Piping			●	●	●	●	●	●	●	●	●	●	●
Functions	i-see Sensor	Felt Temperature Control (3D i-see Sensor)													
		AREA Temperature Monitor													
	Energy Saving	Econo Cool Energy-saving Feature			●	●	●	●	●	●	●	●	●	●	●
		Standby Power Consumption Cut			●										
	Air Quality	Plasma Quad Plus													
		Plasma Quad													
		Dual Barrier Coating													
		Silver-ionized Air Purifier Filter			●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt
		Air Purifying Filter													
	Air Distribution	Double Vane													
		Horizontal Vane			●	●	●	●	●	●	●	●	●	●	●
		Vertical Vane									●	●	●	●	●
		High Ceiling 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
		Auto Restart			●	●	●	●	●	●	●	●	●	●	●
		Low-temperature Cooling			●	●	●	●	●	●	●	●	●	●	●
		10°C Heating													
		Low-noise Operation (Outdoor Unit)				●	●	●	●	●	●	●	●	●	●
		Night Mode													
		Ampere Limit Adjustment				2E		83	●	●	2E		83	●	●
		Operation Lock (Indoor)													
		Operation Lock (Outdoor)				●	●	●	●	●	●	●	●	●	●
		Built-in Weekly Timer Function			●										
	System Control	PAR-33MAA Control *3			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
		Centralised On/Off Control *3			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
		M-NET Connection *3			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Wi-Fi Interface			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		MXZ Connection				●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2
	Installation	Cleaning-free Pipe Reuse			●	●	●	●	●	●	●	●	●	●	●
		Wiring/Piping Correction Function				●	●	●	●	●	●	●	●	●	●
		Drain Pump									●	●	●	●	●
		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 101-102 for details.
*3 Please refer to “System Control” on pages 171-172 for details.

・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	S SERIES													P SERIES														
		Combination: Indoor unit	SLZ-M15/25/35/50/60FA *7							SEZ-M25/35/50/60/71DA(L)							PLA-ZM35/50/60/71/100/125/140EA							PLA-RP35/50/60/71/100/125/140EA								
		Combination: Outdoor unit	SUZ-KA	PUHZ-ZRP	MXZ-2D/F	MXZ-3E/F	MXZ-4E/F	MXZ-5E	MXZ-6D	SUZ-KA	MXZ-2D/F	MXZ-3E/F	MXZ-4E/F	MXZ-5E	MXZ-6D	PUHZ-SHW	PUZ-ZM	PUHZ-ZRP	MXZ-3E/F	MXZ-4E/F	MXZ-5E/F	MXZ-6D	PUHZ-SHW	PUZ-ZM	PUHZ-ZRP	SUZ-KA	PUHZ-P	MXZ-3E/F	MXZ-4E/F	MXZ-5E/F	MXZ-6D
Technology	DC Inverter		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Joint Lap DC Motor		●		●	●	72/83VA	●		●	●	●	72/83VA	●			35-71	35-71	●	72/83VA	●			35-71	35-71	●	100	●	72/83VA	●	
	Magnetic Flux Vector Sine Wave Drive			●												●	●	●					●	●	●		●				
	Reluctance DC Rotary Compressor		●				83	●	●	●			83	●	●		35-71	35-71		83	●	●		35-71	35-71	●	●		83	●	●
	Highly Efficient DC Scroll Compressor			●												●	100-140	100-250					●	100-140	100-250		200-250				
	Heating Caulking (Compressor)		●		●	●	72/83VA	●		●	●	●	72/83VA	●			35-71	35-71	●	72/83VA	●			35-71	35-71	●	100	●	72/83VA	●	
	DC Fan Motor		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Vector-Wave Eco Inverter			●												●	●	●					●	●	●		●				
	PAM (Pulse Amplitude Modulation)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	35-140	35-140	●	●	●	●	●	●	35-140	●	100-40V	●	●	●	●
	Power Receiver and Twin LEV Control			●		●	72					●	72			●	35-140	35-140	●	72			●	●	35-140		100-40	●	72		
	Grooved Piping		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Functions	i-see Sensor	Felt Temperature Control (3D i-see Sensor)	Opt	Opt	Opt	Opt	Opt	Opt	Opt							Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		AREA Temperature Monitor	Opt	Opt	Opt	Opt	Opt	Opt	Opt							Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Energy Saving	Demand Function														Opt	Opt	Opt					Opt	Opt	Opt		Opt				
	Attractive	Pure White	●	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Auto Vane	●	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Air Quality	Fresh-air Intake	●	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		High-efficiency Filter														Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Auto Changeover	●	●	●*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		60-140V	2E		83	●	●		2E		83	●	●	112/140	60-140V	60-140V 200/250		83	●	●	112/140	60-140V	60-140V 200/250				83	●	●
		Operation Lock			●	●	●	●	●		●	●	●	●	●				●	●	●	●						●	●	●	●
		Rotation, Back-up and 2nd Stage Cut-in Functions		●												●	●	●					●	●	●		●				
		Dual Set Point *6		●													●	●						●	●		●				
	System Control	PAR-33MAA 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
		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
		Centraliesd 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
		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
		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
		COMPO *4		71-140												●	71-140	71-250					●	71-140	71-250		●				
		MXZ Connection			●*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														Opt	Opt	Opt					Opt	Opt	Opt		Opt				
		Wiring/Piping Correction Function			●	●	●	●	●		●	●	●	●	●				●	●	●	●						●	●	●	●
		Drain Pump	●	●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		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 101-102 for details.
*3 Please refer to "System Control" on pages 171-172 for details.
*4 Please refer to page 163 for details.
*5 PEAD-RP JALQ are not equipped with a drain pump.
*6 This function is only available with PAR-33MAA, PAC-YT52CRA.
*7 SLZ-M15 can be connected with R32 MXZ only.

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

FUNCTION LIST (2)

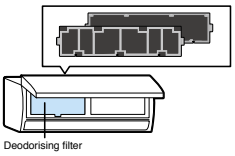
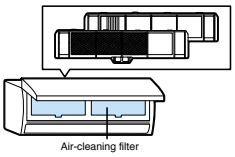
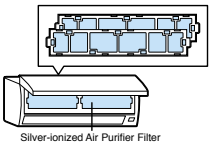
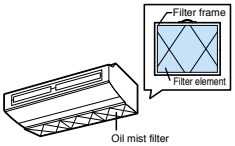
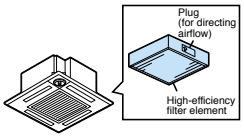
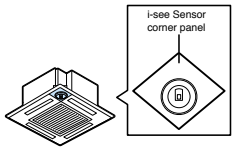
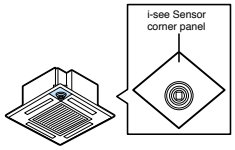
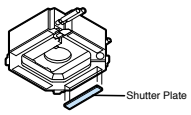
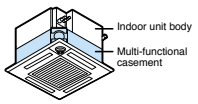
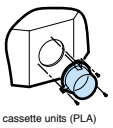
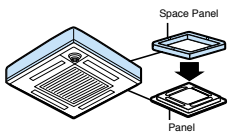
Category		Icon		P SERIES																		
		Combination	Indoor unit	PEAD-M35/50/60/71/100/125/140JA(L)									PEA-RP200/250 WKA		PKA-M35/50HA(L)			PKA-M60/71/100KA(L)			
			Outdoor unit	PUHZ -SHW	PUZ -ZM	PUHZ -ZRP	PUHZ -P	SUZ -KA	MXZ -3E/F	MXZ -4E/F	MXZ -5E/F	MXZ -6D	PUHZ -ZRP	PUHZ -P	PUZ -ZM	PUHZ -ZRP	PUHZ -P	PUHZ -SHW	PUZ -ZM	PUHZ -ZRP	PUHZ -P
Technology	DC Inverter			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Joint Lap DC Motor				35-71	35-71	100	●	●	72/83VA	●				35-71	35-71	100		60/71	60/71	100
	Magnetic Flux Vector Sine Wave Drive			●	●	●	●						●	●	●	●	●	●	●	●	●	●
	Reluctance DC Rotary Compressor				35-71	35-71	100-140	●		83	●	●			35-71	35-71			60/71	60/71	100-140
	Highly Efficient DC Scroll Compressor			●	100-140	100-250	200/250						●	●	100-200	100-200	200	●	100-250	100-250	200/250
	Heating Caulking (Compressor)				35-71	35-71	100	●	●	72/83VA	●				35-71	35-71			60/71	60/71	100
	DC Fan Motor			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Vector-Wave Eco Inverter			●	●	●	●						●	●	●	●	●	●	●	●	●	●
	PAM (Pulse Amplitude Modulation)			●	●	35-140	100-140V	●	●	●	●	●			35-140	35-140	100V-140V	●	●	60-140	100-140V
	Power Receiver and Twin LEV Control			●	●	35-140			●	72					35-140	35-140	100-140	●	●	60-140	100-140
	Grooved Piping			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Functions	i-see Sensor	Felt Temperature Control (3D i-see Sensor)																				
		AREA Temperature Monitor																				
	Energy Saving	Demand Function		Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Attractive	Pure White													●	●	●	●	●	●	●	●
		Auto Vane													●	●	●	●	●	●	●	●
	Air Quality	Fresh-air Intake																				
		High-efficiency Filter																				
		Oil Mist Filter																				
		Long-life Filter		●	●	●	●	●	●	●	●	●										
		Filter Check Signal		●	●	●	●	●	●	●	●	●			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Air Distribution	Horizontal Vane													●	●	●	●	●	●	●	●
		Vertical Vane																				
		High Ceiling Mode																				
		Low Ceiling Mode																				
		Auto Fan Speed Mode		●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
	Convenience	On/off Operation Timer		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Auto Changeover		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Auto Restart		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-temperature Cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-noise Operation (Outdoor Unit)		●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Ampere Limit Adjustment		112/140	60-140V	60-140V 200/250				83	●	●	●		60-140V	60-140V 200/250		112/140	60-140V	60-140V 200/250		
		Operation Lock																				
		Rotation, Back-up and 2nd Stage Cut-in Functions		●	●	●	●								●	●	●	●	●	●	●	●
		Dual Set Point *6			●	●	●						●	●	●	●	●		●	●	●	●
	System Control	PAR-33MAA Control *3		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
		Centraliesd On/Off Control *3		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
		M-NET Connection *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		COMPO *4		●	71-140	71-250	●								71-140	71-250	●	●	71-140	71-250	●	
		MXZ Connection							●*2	●*2	●*2	●*2										
	Installation	Cleaning-free Pipe Reuse		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Reuse of Existing Wiring		Opt	Opt	Opt	Opt								Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Wiring/Piping Correction Function							●	●	●	●										
		Drain Pump		●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Pump Down Switch		●	●	●	●						●	●	●	●	●	●	●	●	●	●
		Flare Connection		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Maintenance	Self-Diagnosis Function (Check Code Display)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Failure Recall Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

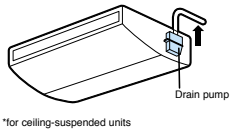
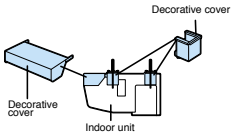
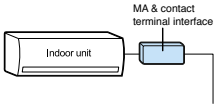
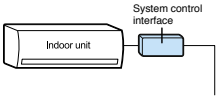
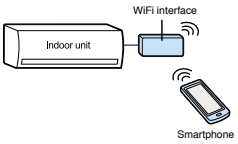
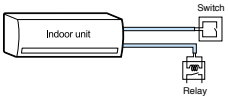
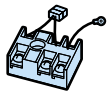
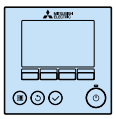
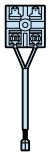
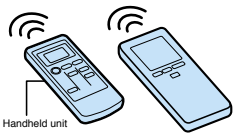
*1 When multiple indoor units connected to an MXZ outdoor unit are running at the same time, simultaneous cooling and heating is not possible.
*2 For the possible connectivity of MXZ outdoor units and indoor units, please refer to the list on page 101-102 for details.
*3 Please refer to “System Control” on pages 171-172 for details.
*4 Please refer to page 163 for details.
*5 PEAD-M JAL are not equipped with a drain pump.
*6 This function is only available with PAR-33MAA, PAC-YT52CRA.

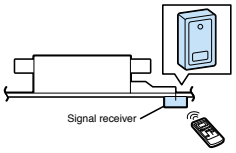
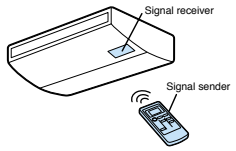
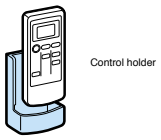
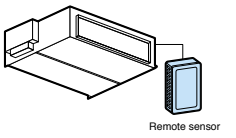
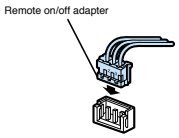
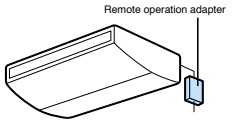
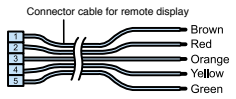
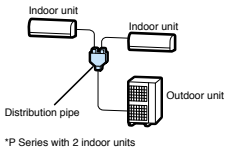
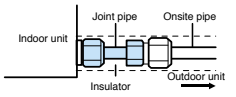
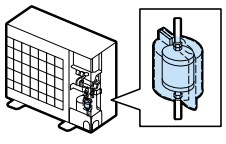
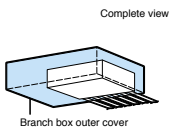
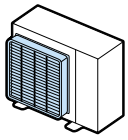
	P series										
	PCA-M35/50/60/71/100/125/140KA								PCA-RP71 HAQ	PSA-RP71/100/125/140KA	
	PUZ -ZM	PUHZ -ZRP	PUHZ -P	SUZ -KA	MXZ -3E/F	MXZ -4E/F	MXZ -5E/F	MXZ -6D	PUHZ -ZRP	PUHZ -ZRP	PUHZ -P
	●	●	●	●	●	●	●	●	●	●	●
	35-71	35-71	100	●	●	●	●	●	71	71	100
	●	●	●						●	●	●
	35-71	35-71	100-140	●		83	●	●	71	71	100-140
	100-140	100-250	200/250						100-250	100-250	200/250
	35-71	35-71	100	●	●	72			71	71	100
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●						●	●	●
	●	35-140	100-140V	●	●	●	●	●	71-140	71-140	100-140V
	●	35-140	100-140		●	72	●	●	71-140	71-140	100-140
	●	●	●	●	●	●	●	●	●	●	●
	Opt	Opt	Opt						Opt	Opt	Opt
	●	●	●	●	●	●	●	●		●	●
	●	●	●	●	●	●	●	●			
	●	●	●	●	●	●	●	●	●		
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			
									●		
	●	●	●	●	●	●	●	●		●	●
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●			
										●	●
	●	●	●	●	●	●	●	●			
	●	●	●	●	●	●	●	●			
	●	●	●	●	●	●	●	●		●	●
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●*1	●*1	●*1	●*1	●	●	●
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●		●	●	●	●	●	●	●
	60-140V	60-140V 200/250				83	●	●	71-140V 200/250	71-140V 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
	71-140	71-250	●						71-250	71-250	●
					●*2	●*2	●*2	●*2			
	●	●	●	●	●	●	●	●	●	●	●
	Opt	Opt	Opt						Opt	Opt	Opt
					●	●	●	●			
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			
	●	●	●						●	●	●
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●

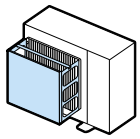
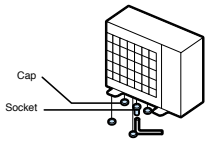
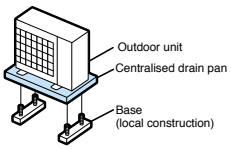
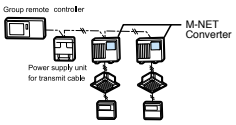
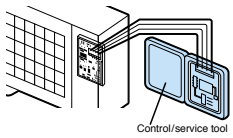
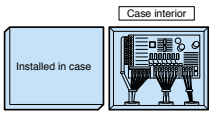
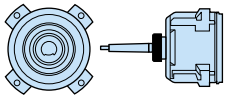
• If a numerical figure is listed, the feature is only available with the outdoor unit of that capacity.
• Opt: Optional parts must be purchased.

Major Optional Parts

Part Name	Description
Deodorising Filter Captures small foul-smelling substances in the air.	
Air-cleaning Filter Removes fine dust particles from the air by means of static electricity.	
Silver-ionized Air Purifier Filter Captures the bacteria, pollen and other allergens in the air and neutralises them.	
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.	 *For 4-way cassette units (PLA)
3D i-see Sensor Corner Panel for SLZ Corner panel holding the 3D i-see Sensor.	
3D i-see Sensor Corner Panel for PLA Corner panel holding the 3D i-see Sensor.	
Shutter 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
Drain Pump Pumps drain water to a point higher than that where the unit is installed.	 *for ceiling-suspended units
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-33MAA 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 PUMY.	
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.	
High-static Fan Motor Static pressure enhanced up to +30pa.	

Optional Parts List <Indoor>

Indoor Unit / Option			Filter								Softdry cloth	System Control Interface	MA & Contact Terminal Interface	Wi-Fi Interface	Connector Cable		Wired Remote Controller		
			Silver-ionized Air Purifier Filter					Deodorising Filter		Air Purifying Filter							Controller		Controller Holder
			MAC-2360 FT	MAC-2370 FT	MAC-2380 FT	MAC-2390 FT	MAC-172 FT-E	MAC-3000 FT-E	MAC-3010 FT-E	MAC-3005 CF-E	MAC-1001 CL-E	MAC-333IF-E	MAC-397IF-E	MAC-567IF-E	MAC-1702RA-E	MAC-1710RA-E	PAR-33MAA	PAC-YT52CRA	MAC-1200RC
M SERIES	Wall - mounted	MSZ-LN18VG(W)(V)(R)(B)				●			●		●	●	●		●	●	●*1	●*1	
		MSZ-LN25VG(W)(V)(R)(B)				●			●		●	●	●		●	●	●*1	●*1	
		MSZ-LN35VG(W)(V)(R)(B)				●			●		●	●	●		●	●	●*1	●*1	
		MSZ-LN50VG(W)(V)(R)(B)				●			●		●	●	●		●	●	●*1	●*1	
		MSZ-LN60VG(W)(V)(R)(B)				●			●		●	●	●		●	●	●*1	●*1	
		MSZ-AP15VF										●	●	●			●*1	●*1	
		MSZ-AP20VF										●	●	●			●*1	●*1	
		MSZ-AP25VG		●								●	●	●			●*1	●*1	
		MSZ-AP35VG		●								●	●	●			●*1	●*1	
		MSZ-AP42VG		●								●	●	●			●*1	●*1	
		MSZ-AP50VG		●								●	●	●			●*1	●*1	
		MSZ-FH25VE2			●			●				●	●	●	●	●	●*1	●*1	
		MSZ-FH35VE2			●			●				●	●	●	●	●	●*1	●*1	
		MSZ-FH50VE2			●			●				●	●	●	●	●	●*1	●*1	
		MSZ-EF18VE3(W)(B)(S)		●							●	●	●	●			●*1	●*1	
		MSZ-EF22VE3(W)(B)(S)		●							●	●	●	●			●*1	●*1	
		MSZ-EF25VE3(W)(B)(S)		●							●	●	●	●			●*1	●*1	
		MSZ-EF35VE3(W)(B)(S)		●							●	●	●	●			●*1	●*1	
		MSZ-EF42VE3(W)(B)(S)		●							●	●	●	●			●*1	●*1	
		MSZ-EF50VE3(W)(B)(S)		●							●	●	●	●			●*1	●*1	
		MSZ-SF15VA										●	●	●			●*1	●*1	
		MSZ-SF20VA										●	●	●			●*1	●*1	
		MSZ-SF25VE3		●								●	●	●			●*1	●*1	
		MSZ-SF35VE3		●								●	●	●			●*1	●*1	
		MSZ-SF42VE3		●								●	●	●			●*1	●*1	
		MSZ-SF50VE3		●								●	●	●			●*1	●*1	
		MSZ-GF60VE2	●									●	●	●			●*1	●*1	
		MSZ-GF71VE2	●									●	●	●			●*1	●*1	
		MSZ-WN25VA		●								●	●	●	●	●	●	●	
		MSZ-WN35VA		●								●	●	●	●	●	●	●	
		MSZ-DM25VA		●								●	●	●	●	●	●*1	●*1	
		MSZ-DM35VA		●								●	●	●	●	●	●*1	●*1	
		MSZ-HJ25VA		●											●	●			●
		MSZ-HJ35VA		●											●	●			●
		MSZ-HJ50VA		●											●	●			●
		MSZ-HJ60VA		●											●	●			●
		MSZ-HJ71VA		●											●	●			●
	Floor - standing	MFZ-KJ25VE2		●								●	●	●	●	●	●*1	●*1	
		MFZ-KJ35VE2		●								●	●	●	●	●	●*1	●*1	
		MFZ-KJ50VE2		●								●	●	●	●	●	●*1	●*1	
	1-way cassette	MLZ-KP25VF		●								●	●	●	●	●	●*1	●*1	
		MLZ-KP35VF		●								●	●	●	●	●	●*1	●*1	
		MLZ-KP50VF		●								●	●	●	●	●	●*1	●*1	

*1 MAC-333IF-E or MAC-397IF-E is required.

Optional Parts List <Indoor>

		Indoor Unit \ Option	Filter									3D i-see Sensor Corner Panel		Shutter Plate	Multi-functional Casement	Fresh-air Intake Duct Flange		Space Panel	Drain Pump						Decorative Cover		System Control Interface
			Oil Mist Filter Element	High-efficiency Filter Element				Filter Box																			
			PAC-SG38KF-E	PAC-SH59KF-E	PAC-SH88KF-E	PAC-SH89KF-E	PAC-SH90KF-E	PAC-KE92TB-E	PAC-KE93TB-E	PAC-KE94TB-E	PAC-KE95TB-E	PAC-SF1ME-E	PAC-SE1ME-E	PAC-SJ37SP-E	PAC-SJ41TM-E	PAC-SH65OF-E	PAC-SF28OF-E	PAC-SJ65AS-E	PAC-SH94DM-E	PAC-SH75DM-E	PAC-SJ92DM-E	PAC-SJ93DM-E	PAC-SJ94DM-E	PAC-KE07DM-E	PAC-SF81KC-E	PAC-SF82KC-E	MAC-333IF-E
S SERIES	4-way cassette	SLZ-M15FA										●															●
		SLZ-M25FA										●															●
		SLZ-M35FA										●															●
		SLZ-M50FA										●															●
		SLZ-M60FA										●															●
	Ceiling - conceald	SEZ-M25DA(L)																						●			●
		SEZ-M35DA(L)																						●			●
		SEZ-M50DA(L)																						●			●
		SEZ-M60DA(L)																						●			●
		SEZ-M71DA(L)																						●			●
P SERIES	4-way Cassette	PLA-ZM35EA		●									●	●	●	●		●									●*1
		PLA-ZM50EA		●									●	●	●	●		●									●*1
		PLA-ZM60EA		●									●	●	●	●		●									●*1
		PLA-ZM71EA		●									●	●	●	●		●									●*1
		PLA-ZM100EA		●									●	●	●	●		●									●*1
		PLA-ZM125EA		●									●	●	●	●		●									●*1
		PLA-ZM140EA		●									●	●	●	●		●									●*1
		PLA-RP35EA		●									●	●	●	●		●									●*1
		PLA-RP50EA		●									●	●	●	●		●									●*1
		PLA-RP60EA		●									●	●	●	●		●									●*1
		PLA-RP71EA		●									●	●	●	●		●									●*1
		PLA-RP100EA		●									●	●	●	●		●									●*1
		PLA-RP125EA		●									●	●	●	●		●									●
		PLA-RP140EA		●									●	●	●	●		●									●
	Ceiling - concealed	PEAD-M35JA(L)						●																			●*1
		PEAD-M50JA(L)						●																			●*1
		PEAD-M60JA(L)							●																		●*1
		PEAD-M71JA(L)							●																		●*1
		PEAD-M100JA(L)								●																	●*1
		PEAD-M125JA(L)								●																	●*1
		PEAD-M140JA(L)									●																●*1
		PEA-RP200WKA																									●*1
		PEA-RP250WKA																									●*1
	Wall - mounted	PKA-M35HA(L)																		●							●*1
		PKA-M50HA(L)																		●							●*1
		PKA-M60KA(L)																	●								●*1
		PKA-M71KA(L)																	●								●*1
		PKA-M100KA(L)																	●								●*1
	Ceiling - suspended	PCA-M35KA			●																	●					●*1
		PCA-M50KA			●																	●					●*1
		PCA-M60KA				●																	●				●*1
		PCA-M71KA				●																		●			●*1
		PCA-M100KA					●																	●			
		PCA-M125KA					●																	●			
		PCA-M140KA					●																	●			
		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 Unable to use with wireless remote controller. *3 Two interface components required for each indoor unit.
*4 Refrigerant address must be set to 00. *5 PAC-SH29TC-E is required. *6 Group control cannot be used.

MA & Contact Terminal Interface	Wi-Fi Interface	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)				
MAC-397IF-E	MAC-567IF-E	PAC-SG94HR-E	PAC-SG96HR-E	PAC-SG97HR-E	PAC-SJ39HR-E	PAR-33MAA	PAC-YT52CRA	PAC-SH29TC-E	PAR-SL97A-E	PAR-SL100A-E	PAR-SA9CA-E	PAR-SF9FA	PAR-SE9FA-E	PAR-SL94B-E	PAC-SE41TS-E	PAC-SE55RA-E	PAC-SF40RM-E	PAC-SA88HA-E
●	●					●	●		●	●*6		●			●	●	●*2	●
●	●					●	●		●	●*6		●			●	●	●*2	●
●	●					●	●		●	●*6		●			●	●	●*2	●
●	●					●	●		●	●*6		●			●	●	●*2	●
●	●					●	●		●	●*6		●			●	●	●*2	●
●	●					VAQ	VAQ		●		●				●	●	●*2	●
●	●					VAQ	VAQ		●		●				●	●	●*2	●
●	●					VAQ	VAQ		●		●				●	●	●*2	●
●	●					VAQ	VAQ		●		●				●	●	●*2	●
●	●					VAQ	VAQ		●		●				●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●				●	●	●		●	●*6			●		●	●	●*2	●
●	●				●	●	●		●	●*6			●		●	●	●*2	●
●	●				●	●	●		●	●*6			●		●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●			●		●	●		●		●				●	●	●*2	●
●*1	●					●	●								●	●	●*2	●
●*1	●					●	●								●	●	●*2	●
●*1	●	●				●*5	●*5	●	●						●	●		●
●*1	●	●				●*5	●*5	●	●						●	●		●
●*1	●	●				●*5	●*5	●	●						●	●		●
●*1	●	●				●*5	●*5	●	●						●	●		●
●*1	●	●				●*5	●*5	●	●						●	●		●
●*1	●		●			●	●		●					●	●	●	●*2	●
●*1	●		●			●	●		●					●	●	●	●*2	●
●*1	●		●			●	●		●					●	●	●	●*2	●
●*1	●		●			●	●		●					●	●	●	●*2	●
	●		●			●	●		●					●	●	●	●*2	●
	●		●			●	●		●					●	●	●	●*2	●
	●		●			●	●		●					●	●	●	●*2	●
				●		●	●		●						●	●	●*2	●
	●		●												●	●	●*2	●
	●		●												●	●	●*2	●
	●		●												●	●	●*2	●
	●		●												●	●	●*2	●

Optional Parts List <Outdoor>

Outdoor Unit		Option	Distribution Pipe				Joint Pipe									Liquid Refrigerant Dryer			Air Outlet Guide								
			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									
										Flare																	
			MSDD-50TR-E	MSDD-50WR-E	MSDT-111R-E	MSDF-1111R-E	PAC-SG72RJ-E	PAC-SG73RJ-E	PAC-SG75RJ-E	PAC-SG76RJ-E	PAC-493PI	MAC-A454JP-E	MAC-A455JP-E	MAC-A456JP-E		PAC-SG81DR-E	PAC-SG82DR-E	PAC-SG85DR-E	MAC-889SG	MAC-881SG	MAC-882SG	MAC-856SG	MAC-886SG-E	MAC-883SG	PAC-SJ07SG-E	PAC-SG59SG-E	PAC-SH96SG-E
M SERIES	L Series	MUZ-LN25VG																	●	●							
		MUZ-LN25VGHZ																	●	●							
		MUZ-LN35VG																	●	●							
		MUZ-LN35VGHZ																	●	●							
		MUZ-LN50VG																			●						
		MUZ-LN50VGHZ																					●				
		MUZ-LN60VG																					●				
	A Series	MUZ-AP25VG																									
		MUZ-AP25VGH																									
		MUZ-AP35VG																									
		MUZ-AP35VGH																									
		MUZ-AP42VG																									
		MUZ-AP42VGH																									
		MUZ-AP50VG																									
		MUZ-AP50VGH																									
	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																					●				
	W Series	MUZ-WN25VA																						●			
		MUZ-WN35VA																						●			
	D Series	MUZ-DM25VA																						●			
		MUZ-DM35VA																						●			
	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-KA25VA6						●											●	●							
		SUZ-KA35VA6						●											●	●							
		SUZ-KA50VA6																					●				
		SUZ-KA60VA6																					●				
		SUZ-KA71VA6																					●				

	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 1 PC board w/attachment kit	Insulation for Accumlator		High Static Fan Motor
	PAC-SJ06AG-E	PAC-SH63AG-E	PAC-SH95AG-E	PAC-SJ08DS-E	PAC-SG60DS-E	PAC-SG61DS-E	MAC-643BH-E	MAC-644BH-E	PAC-645BH-E	PAC-SG63DP-E	PAC-SG64DP-E	PAC-SH97DP-E	PAC-IF01MNT-E	PAC-SJ96MA-E	PAC-SJ95MA-E	PAC-SK52ST	PAC-IF012B-E	MAC-892INS-E	MAC-893INS-E	PAC-SJ71FM-E
								●												
								●												

Optional Parts List <Outdoor>

Outdoor Unit		Option	Distribution Pipe						Branch Pipe/Header (Joint)					Joint Pipe										Liquid Refrigerant Dryer			Air Outlet Guide		
			For Twin (50:50)			For Triple (33:33:33)		For Quad-ruple (25:25: 25:25)	In case of using 2-branch boxes		Branch Pipe	Header		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			
									Flare	Brazing							Flare											
			MSDD-50TR-E	MSDD-50TR2-E	MSDD-50WR-E	MSDT-111R-E	MSDT-111R2-E	MSDF-1111R-E	MSDD-50AR-E	MSDD-50BR-E	CMY-Y62-G-E	CMY-Y64-G-E	CMY-Y68-G-E	PAC-SG72RJ-E	PAC-SG87RJ-E	PAC-SG73RJ-E	PAC-SG88RJ-E	PAC-SG75RJ-E	PAC-SG76RJ-E	PAC-493PI	MAC-A454JP-E	MAC-A455JP-E	MAC-A456JP-E	PAC-SG81DR-E	PAC-SG82DR-E	PAC-SG85DR-E	MAC-889SG	MAC-881SG	MAC-882SG
P SERIES	Power Inverter (R32)	PUZ-ZM35VKA												●	●									●					
		PUZ-ZM50VKA												●	●									●					
		PUZ-ZM60VHA															●								●				
		PUZ-ZM71VHA		●													●								●				
		PUZ-ZM100VKA		●													●								●				
		PUZ-ZM100YKA		●													●								●				
		PUZ-ZM125VKA		●				●									●								●				
		PUZ-ZM125YKA		●				●									●								●				
		PUZ-ZM140VKA		●			●	●									●								●				
		PUZ-ZM140YKA		●			●	●									●								●				
	Power Inverter (R410A)	PUHZ-ZRP35VKA2												●										●					
		PUHZ-ZRP50VKA2												●										●					
		PUHZ-ZRP60VHA2														●		●							●				
		PUHZ-ZRP71VHA2	●													●		●							●				
		PUHZ-ZRP100VKA3	●			●										●		●							●				
		PUHZ-ZRP100YKA3	●			●										●		●							●				
		PUHZ-ZRP125VKA3	●			●		●								●		●							●				
		PUHZ-ZRP125YKA3	●			●		●								●		●							●				
		PUHZ-ZRP140VKA3	●			●		●								●		●							●				
		PUHZ-ZRP140YKA3	●			●		●								●		●							●				
		PUHZ-ZRP200YKA3			●	●		●								●									●				
		PUHZ-ZRP250YKA3			●	●		●																		●			
	Standard Inverter (R410A)	PUHZ-P100VKA	●																						●				
		PUHZ-P125VKA	●																						●				
		PUHZ-P140VKA	●			●																			●				
		PUHZ-P100YKA	●																						●				
		PUHZ-P125YKA	●																						●				
		PUHZ-P140YKA	●			●																			●				
		PUHZ-P200YKA3			●	●		●																	●				
		PUHZ-P250YKA3			●	●		●																		●			
MXZ SERIES (R32)		MXZ-2F33VF																									●	●	
		MXZ-2F42VF																									●	●	
		MXZ-2F53VF(H)																			●						●	●	
		MXZ-3F54VF																			●								
		MXZ-3F68VF																	●	●	●								
		MXZ-4F72VF																	●	●	●	●	●						
MXZ SERIES (R410A)		MXZ-2D33VA																									●	●	
		MXZ-2D42VA2																									●	●	
		MXZ-2D53VA(H)2																			●						●	●	
		MXZ-2E53VAHZ																			●								
		MXZ-3E54VA																			●								
		MXZ-3E68VA																	●	●	●								
		MXZ-4E72VA																	●	●	●	●	●						
		MXZ-4E83VA																	●	●	●	●	●						
		MXZ-4E83VAHZ																	●	●	●	●	●						
		MXZ-5E102VA																	●	●	●	●	●						
		MXZ-6D122VA2																	●	●	●	●	●						
		MXZ-2DM40VA																									●	●	
		MXZ-3DM50VA																			●								
PUMY Series (R410A)		PUMY-SP112VKM(-BS)									●	●	●																
		PUMY-SP112YKM(-BS)									●	●	●																
		PUMY-SP125VKM(-BS)									●	●	●																
		PUMY-SP125YKM(-BS)									●	●	●																
		PUMY-SP140VKM(-BS)									●	●	●																
		PUMY-SP140YKM(-BS)									●	●	●																
		PUMY-P112VKM4(-BS)							●	●	●	●	●			●		●											
		PUMY-P112YKM(E)4(-BS)							●	●	●	●	●			●		●											
		PUMY-P125VKM4(-BS)							●	●	●	●	●			●		●											
		PUMY-P125YKM(E)4(-BS)							●	●	●	●	●			●		●											
		PUMY-P140VKM4(-BS)							●	●	●	●	●			●		●											
		PUMY-P140YKM(E)4(-BS)							●	●	●	●	●			●		●											
		PUMY-P200YKM2(-BS)							●	●	●	●	●			●		●											
POWERFUL HEATING		PUHZ-SHW112VHA	●																						●				
		PUHZ-SHW112YHA	●																						●				
		PUHZ-SHW140YHA	●																						●				

	Branch Box Outer Cover	Reactor Box	Different Diameter Joint					Different Diameter Joint For Brazing Model				
			ø9.52-->ø12.7	ø12.7-->ø9.52	ø12.7-->ø15.88	ø6.35-->ø9.52	ø9.52-->ø15.88	ø9.52-->ø12.7	ø12.7-->ø9.52	ø12.7-->ø15.88	ø6.35-->ø9.52	ø9.52-->ø15.88
	PAC-AK350CVR-E	PAC-RB01BC	MAC-A454JP	MAC-A455JP	MAC-A456JP	PAC-493PI	PAC-SG76RJ-E	PAC-SG78RJB-E	PAC-SG79RJB-E	PAC-SG80RJB-E	PAC-SG77RJB-E	PAC-SG76RJB-E
PAC-MK33BC (Flare)	●	●	●	●	●	●	●					
PAC-MK53BC (Flare)	●	●	●	●	●	●	●					
PAC-MK33BCB (Brazing)	●	●						●	●	●	●	●
PAC-MK53BCB (Brazing)	●	●						●	●	●	●	●

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 1 PC board w/attach-ment kit		Insulation for Accumlator		Con-nection Kit	High Static Fan Motor
MAC-856SG	MAC-886SG-E	MAC-883SG	PAC-SJ07SG-E	PAC-SG59SG-E	PAC-SH96SG	PAC-SJ06AG-E	PAC-SH63AG-E	PAC-SH95AG-E	PAC-SJ08DS-E	PAC-SG60DS-E	PAC-SG61DS-E	MAC-643BH-E	MAC-644BH-E	PAC-645BH-E	PAC-646BH-E	PAC-SJ10BH-E	PAC-SJ20BH-E	PAC-SG63DP-E	PAC-SG64DP-E	PAC-SH97DP-E	PAC-IF01MNT-E	PAC-SJ96MA-E	PAC-SJ95MA-E	PAC-SK52ST	PAC-IF012B-E	PAC-(S)IF013B-E	MAC-892INS-E	MAC-893INS-E	PAC-LV11M-J	PAC-SJ71FM-E
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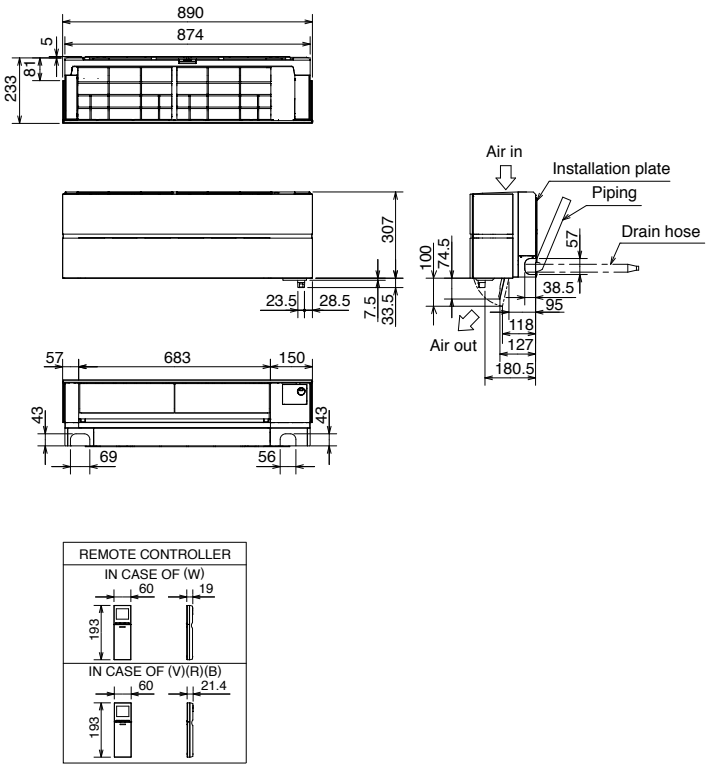
External Dimensions

M SERIES

Unit : mm

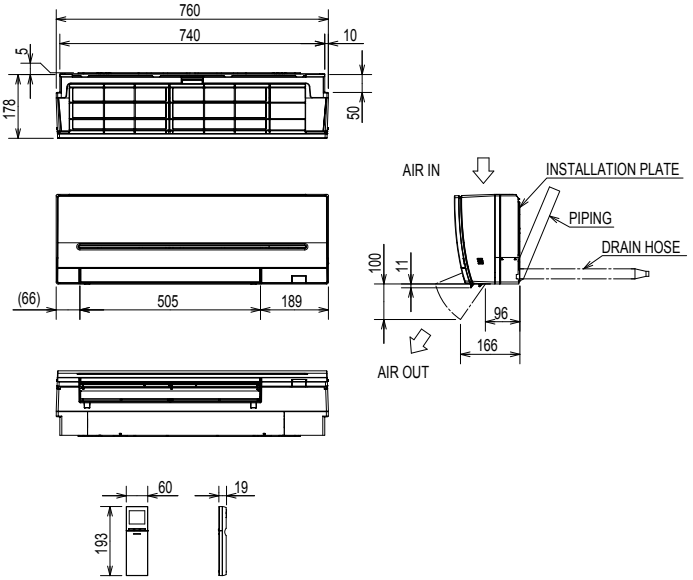
MSZ-LN25VG(W)(V)(R)(B) MSZ-LN35VG(W)(V)(R)(B)
MSZ-LN50VG(W)(V)(R)(B) MSZ-LN60VG(W)(V)(R)(B)

INDOOR UNIT



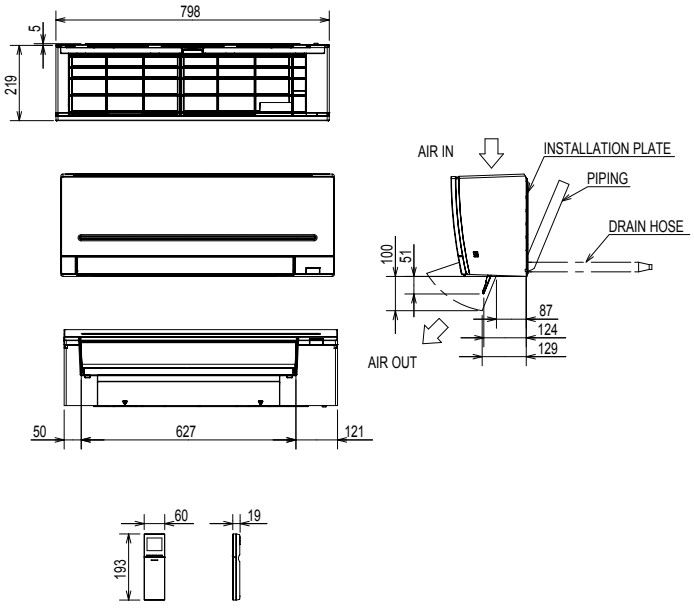
MSZ-AP15VF MSZ-AP20VF

INDOOR UNIT



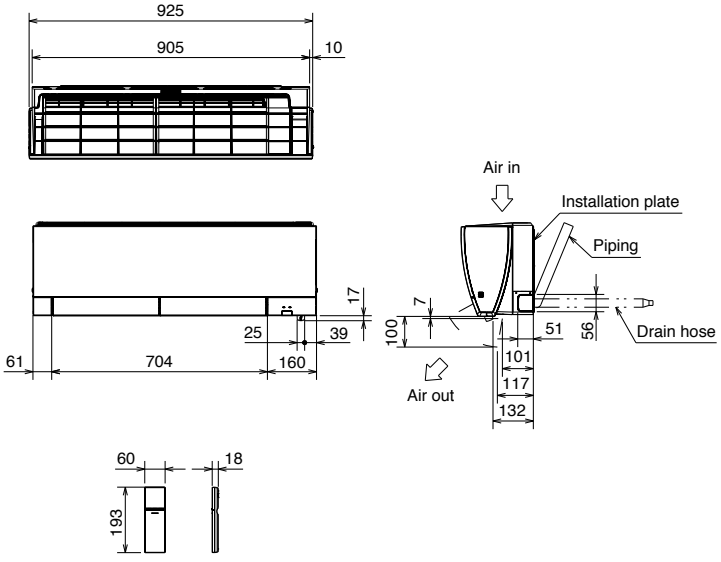
MSZ-AP25VG MSZ-AP35VG MSZ-AP42VG MSZ-AP50VG
MSZ-AP25VGK MSZ-AP35VGK MSZ-AP42VGK MSZ-AP50VGK

INDOOR UNIT



MSZ-FH25VE2 MSZ-FH35VE2 MSZ-FH50VE2

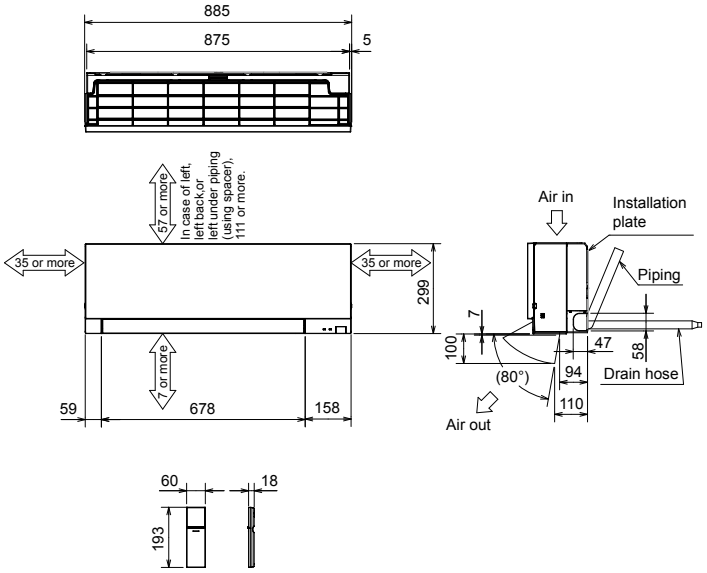
INDOOR UNIT



Unit : mm

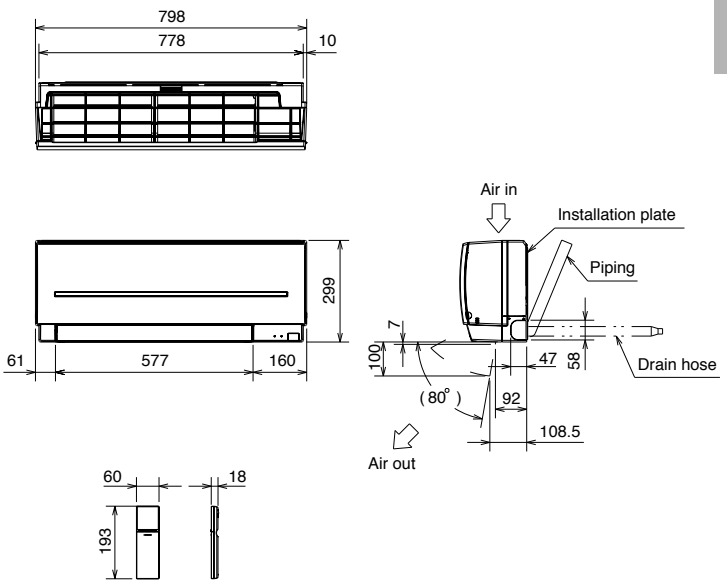
MSZ-EF18VE3(W)(B)(S) MSZ-EF22VE3(W)(B)(S)
MSZ-EF25VE3(W)(B)(S) MSZ-EF35VE3(W)(B)(S)
MSZ-EF42VE3(W)(B)(S) MSZ-EF50VE3(W)(B)(S)

INDOOR UNIT



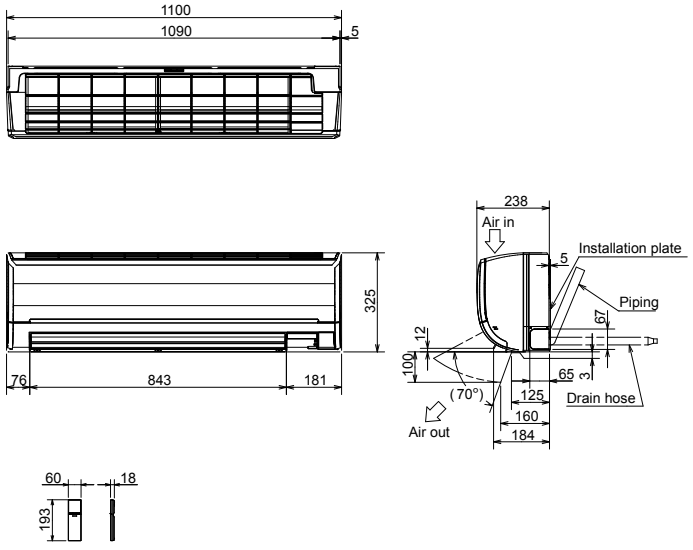
MSZ-SF25VE3 MSZ-SF35VE3 MSZ-SF42VE3
MSZ-SF50VE3

INDOOR UNIT



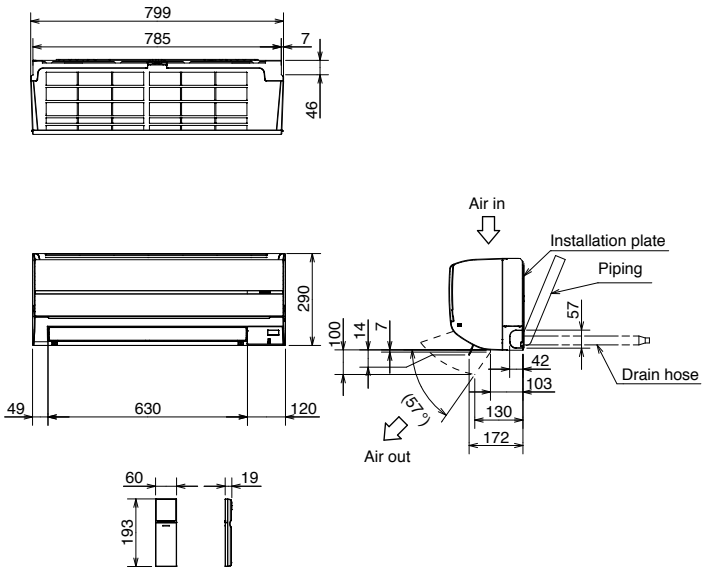
MSZ-GF60VE2 MSZ-GF71VE2

INDOOR UNIT



MSZ-WN25VA MSZ-WN35VA

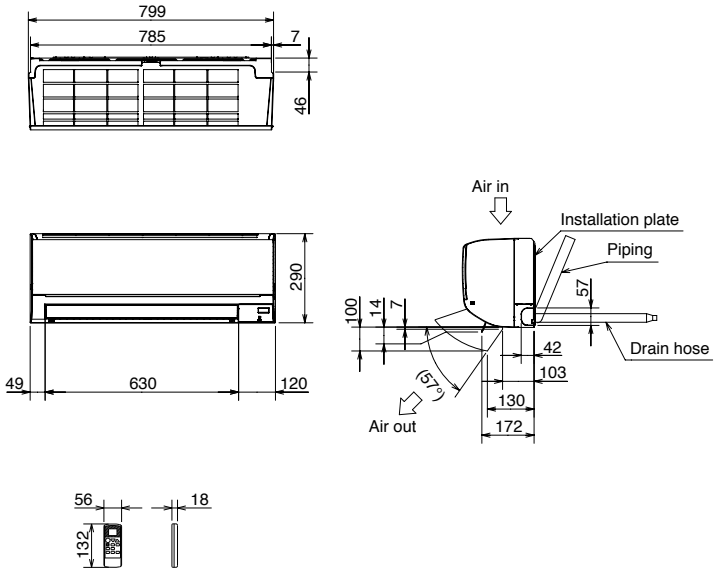
INDOOR UNIT



Unit : mm

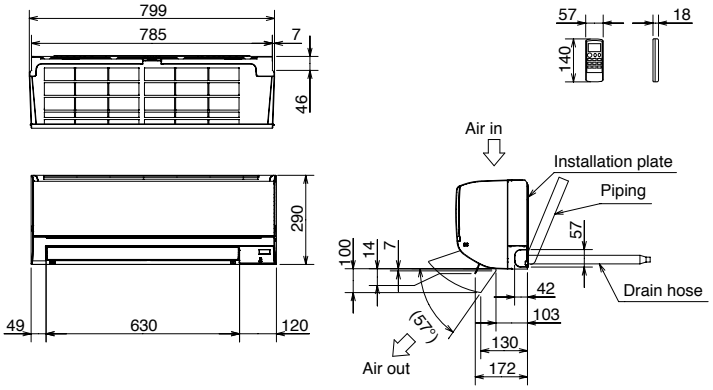
MSZ-DM25VA MSZ-DM35VA

INDOOR UNIT



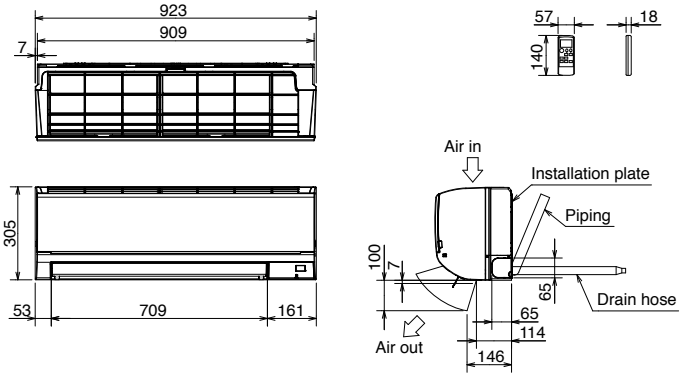
MSZ-HJ25VA MSZ-HJ35VA MSZ-HJ50VA

INDOOR UNIT



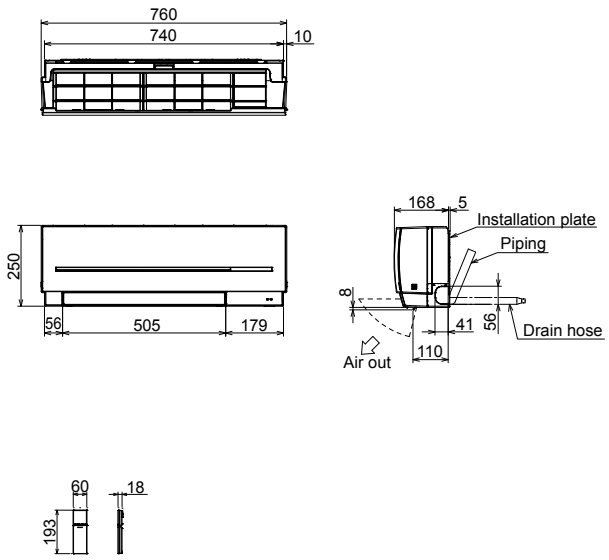
MSZ-HJ60VA MSZ-HJ71VA

INDOOR UNIT



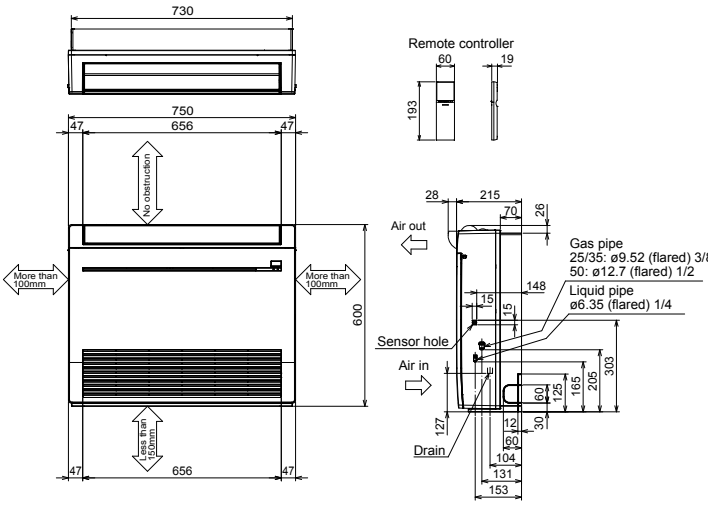
MSZ-SF15VA MSZ-SF20VA

INDOOR UNIT



MFZ-KJ25VE2 MFZ-KJ35VE2 MFZ-KJ50VE2

INDOOR UNIT

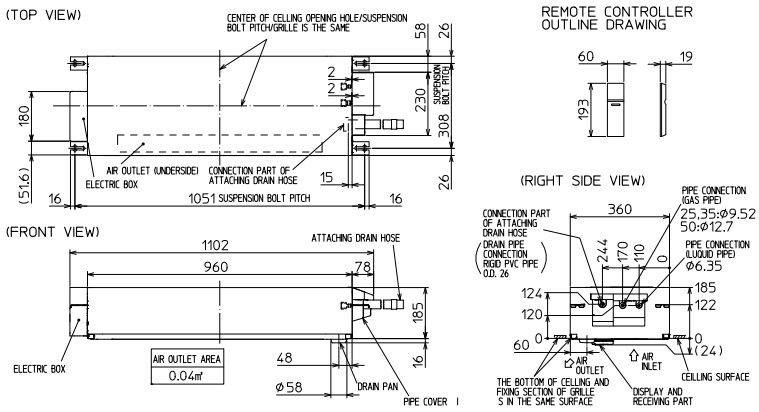


Unit : mm

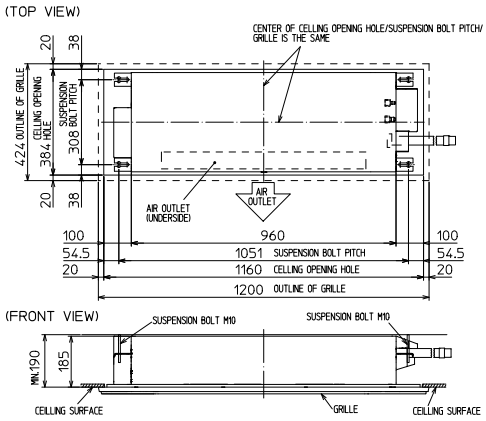
MLZ-KP25VF MLZ-KP35VF MLZ-KP50VF

INDOOR UNIT

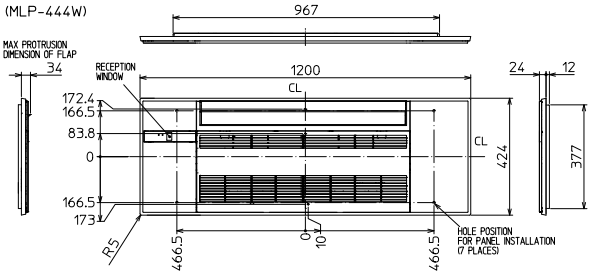
INDOOR UNIT OUTLINE DRAWING



INDOOR UNIT DETAIL VIEW



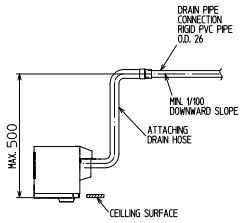
GRILLE OUTLINE DRAWING



		KP25/35VF	KP50VF
EXTENSION PIPE	LIQUID PIPE O.D.	ø6.35	
	GAS PIPE O.D.	ø9.52	ø12.7
CONNECTING OF PIPE	LIQUID PIPE	FLARED CONNECTION ø6.35	
	GAS PIPE	FLARED CONNECTION ø9.52	FLARED CONNECTION ø12.7
DRAIN HOSE		HEAT INSULATER O.D. ø32 / CONNECTION I.D. ø25 / EFFECTIVE LENGTH 480	
DRAIN PIPE CONNECTION		RIGID PVC PIPE O.D. 26	

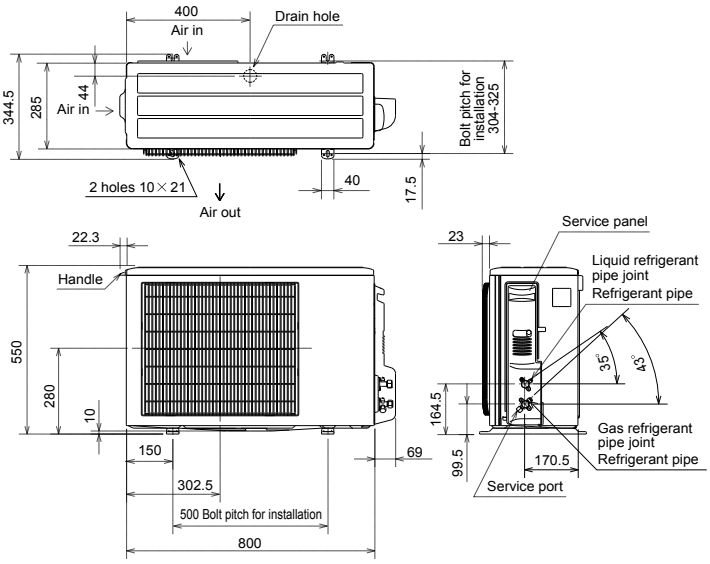
NOTE1. CUTTING ATTACHING DRAIN HOSE CAN BE USED.

THE METHOD FOR STANDING DRAIN FROM INDOOR UNIT
※ CUTTING ATTACHING DRAIN HOSE CAN BE USED



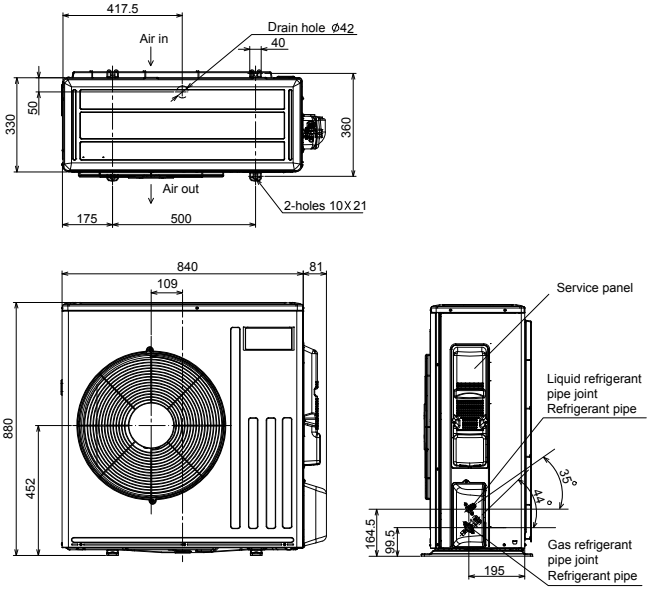
MUZ-LN25VG MUZ-LN25VGHZ
MUZ-LN35VG MUZ-LN35VGHZ
MUZ-FH25VE MUZ-FH35VE
MUZ-FH25VEHZ MUZ-FH35VEHZ
MUZ-EF25VE MUZ-EF25VEH
MUZ-EF35VE MUZ-EF35VEH
MUZ-EF42VE
MUZ-SF25VE MUZ-SF25VEH MUZ-SF35VE
MUZ-SF35VEH MUZ-SF42VE MUZ-SF42VEH
MUZ-HJ50VA
MUFZ-KJ25VE MUFZ-KJ35VE
MUFZ-KJ25VEHZ MUFZ-KJ35VEHZ

OUTDOOR UNIT



MUZ-LN50VGHZ MUZ-LN60VG
MUZ-FH50VE MUZ-FH50VEHZ
MUZ-EF50VE
MUZ-SF50VE MUZ-SF50VEH
MUZ-GF60VE MUZ-GF71VE
MUZ-HJ60VA MUZ-HJ71VA
MUFZ-KJ50VE MUFZ-KJ50VEHZ

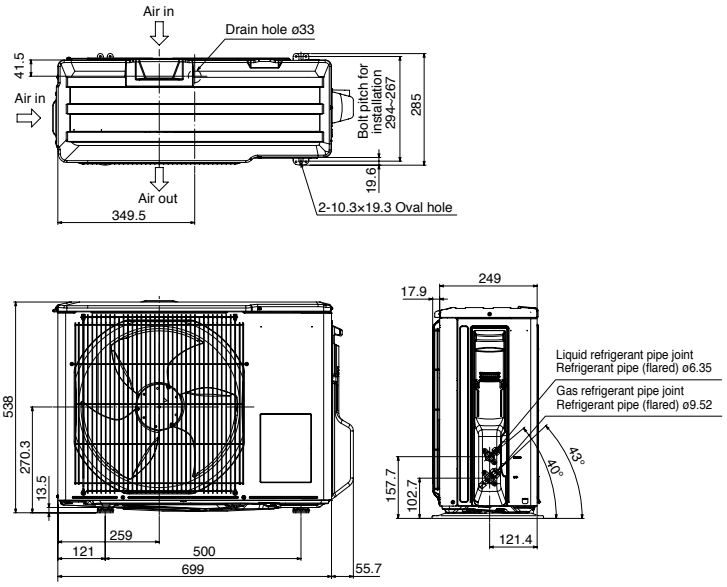
OUTDOOR UNIT



Unit : mm

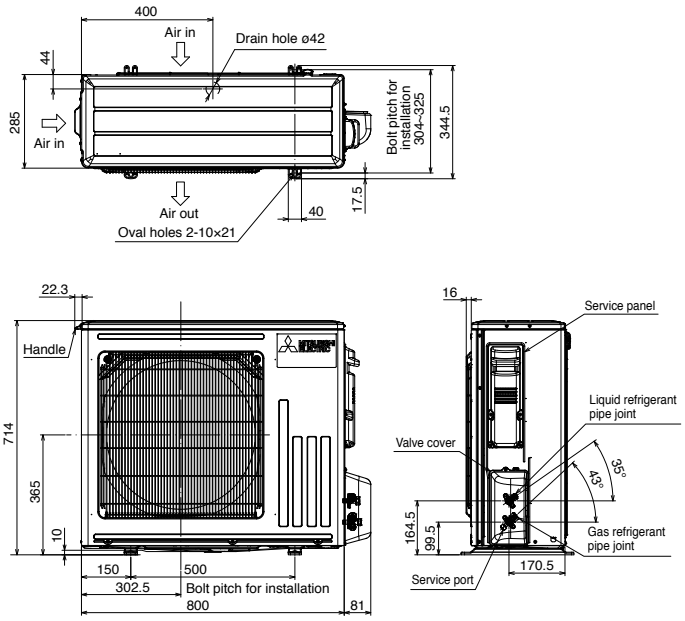
MUZ-WN25VA MUZ-WN35VA
MUZ-DM25VA MUZ-DM35VA
MUZ-HJ25VA MUZ-HJ35VA

OUTDOOR UNIT



MUZ-LN50VG

OUTDOOR UNIT

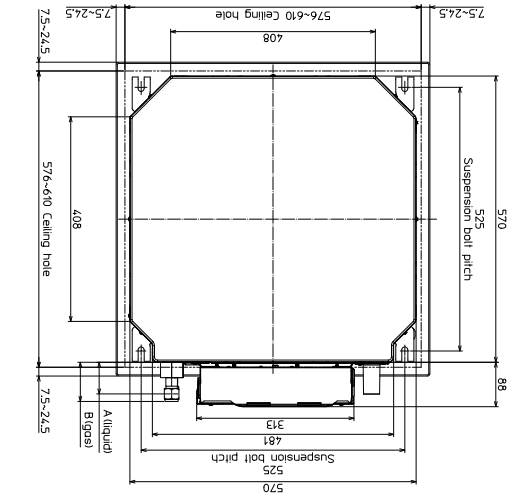


S SERIES

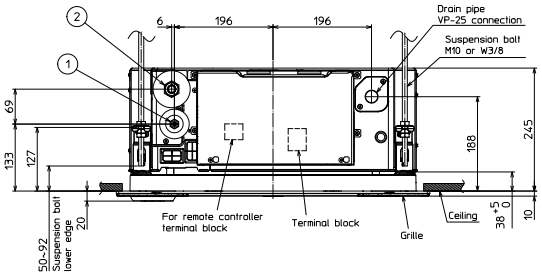
Unit : mm

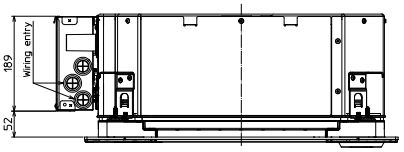
SLZ-M15FA
SLZ-M25FA SLZ-M35FA
SLZ-M50FA SLZ-M60FA

INDOOR UNIT



Models	① Refrigerent pipe (liquid)	② Refrigerent pipe (gas)	A	B
SLZ-M15FA SLZ-M25FA SLZ-M35FA	ϕ6.35mm flared connection 1/4F	ϕ9.52mm flared connection 3/8F	63mm	72mm
SLZ-M50FA	ϕ6.35mm flared connection 1/4F	ϕ12.7mm flared connection 1/2F	63mm	78mm
SLZ-M60FA	ϕ6.35mm flared connection 1/4F	ϕ15.88mm flared connection 5/8F	63mm	78mm

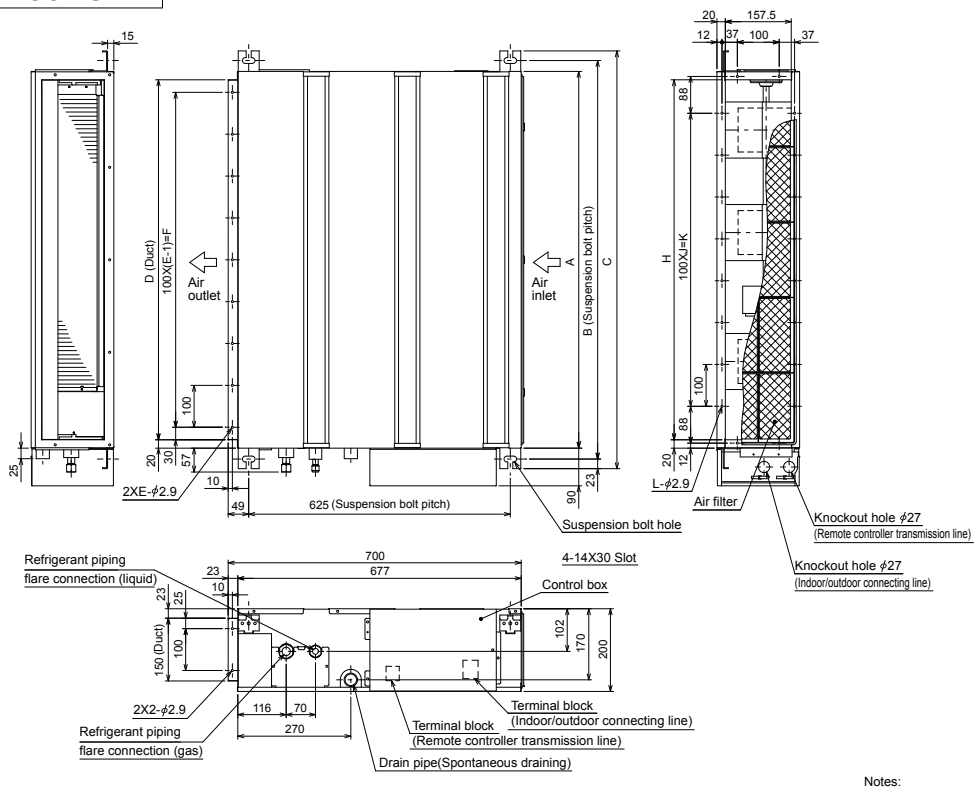




Unit : mm

SEZ-M25DA(L) SEZ-M35DA(L) SEZ-M50DA(L) SEZ-M60DA(L) SEZ-M71DA(L)

INDOOR UNIT

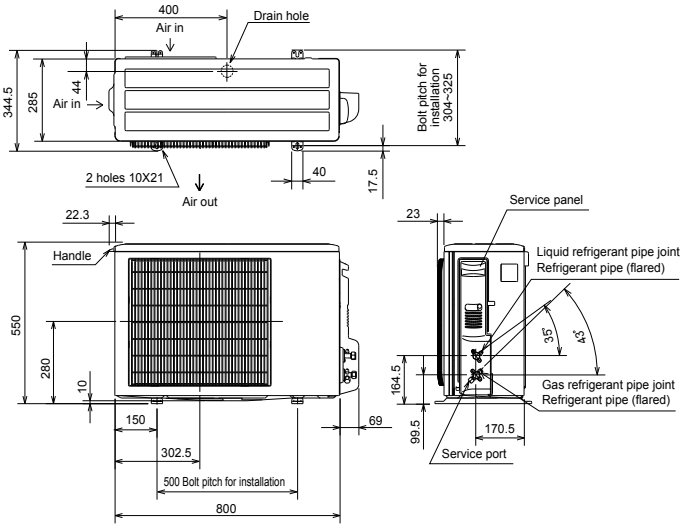


Model	A	B	C	D	E	F	G	H	J	K	L
SEZ-M25DAL/DA	700	752	798	660	7	600	800	660	5	500	16
SEZ-M35DAL/DA	900	952	998	860	9	800	1000	860	7	700	20
SEZ-M50DAL/DA											
SEZ-M60DAL/DA	1100	1152	1198	1060	11	1000	1200	1060	9	900	24
SEZ-M71DAL/DA											

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-M50DAL/DA, which has three fans. SEZ-M25, 35DAL/DA has two fans, and SEZ-M60, 71DAL/DA 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.

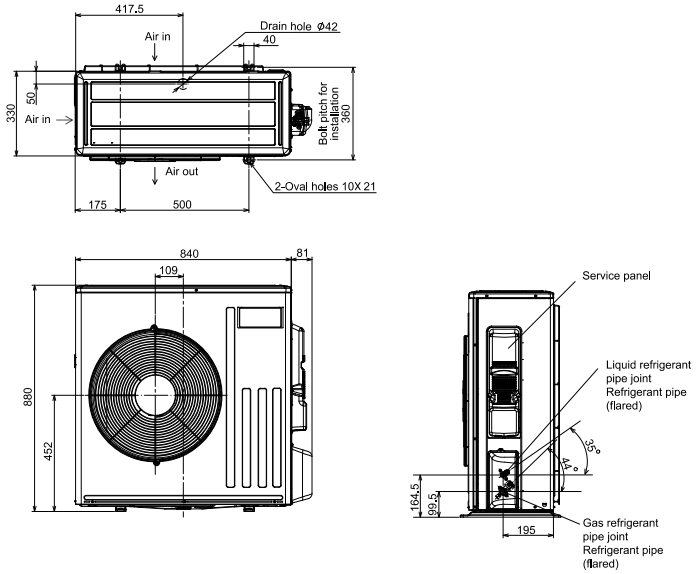
SUZ-KA25VA6 SUZ-KA35VA6

OUTDOOR UNIT



SUZ-KA50VA6 SUZ-KA60VA6 SUZ-KA71VA6

OUTDOOR UNIT



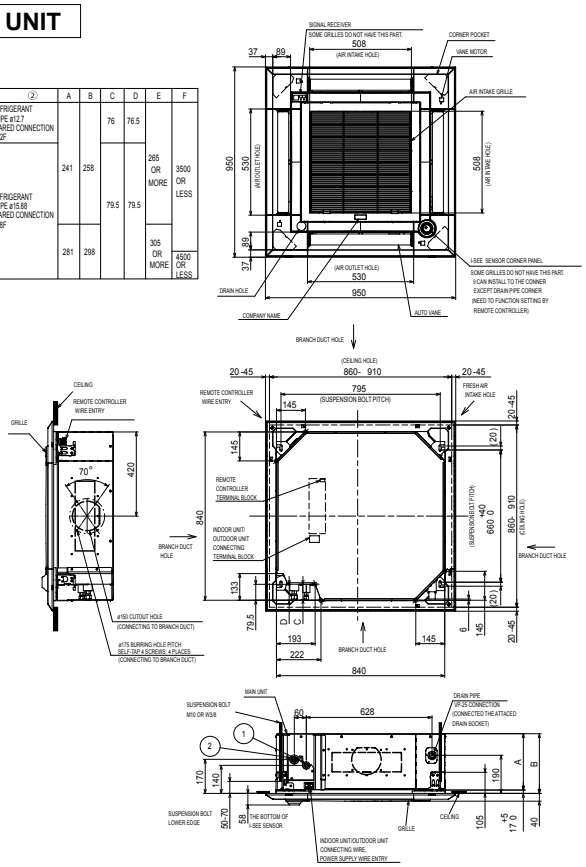
Unit : mm

PLA-ZM35EA PLA-ZM50EA PLA-ZM60EA PLA-ZM71EA PLA-ZM100EA PLA-ZM125EA PLA-ZM140EA PLA-RP35EA PLA-RP50EA PLA-RP60EA PLA-RP71EA PLA-RP100EA PLA-RP125EA PLA-RP140EA

INDOOR UNIT

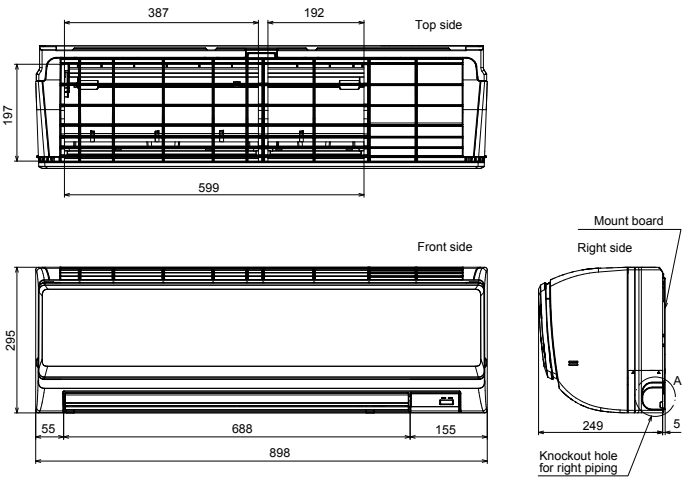
PLA-ZM35/50/60/71/100/125/140EA
PLA-RP35/50/60/71/100/125/140EA

ZM	①	②	A	B	C	D	E	F
35/50	REFRIGERANT PIPE ø6.35 FLARED CONNECTION 1/4F	REFRIGERANT PIPE ø12.7 FLARED CONNECTION 1/2F	241	258	76	76.5	265 OR MORE	3500 OR LESS
60	REFRIGERANT PIPE ø9.52 FLARED CONNECTION 3/8F	REFRIGERANT PIPE ø15.88 FLARED CONNECTION 5/8F			79.5	79.5		
71			281	298			305 OR MORE	4500 OR LESS
100-140								



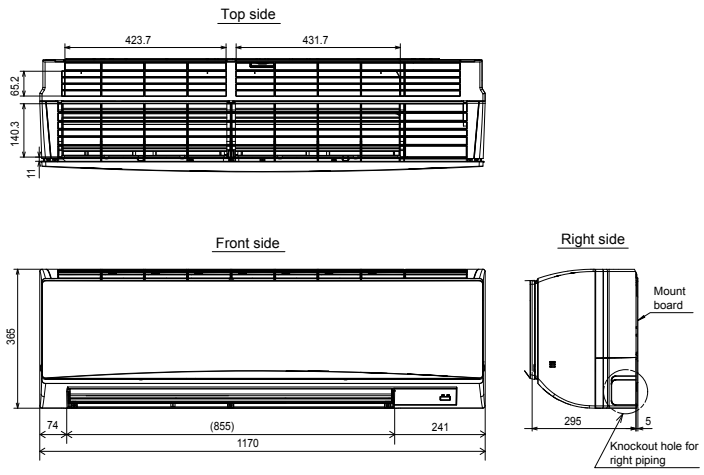
PKA-M35HA(L) PKA-M50HA(L)

INDOOR UNIT



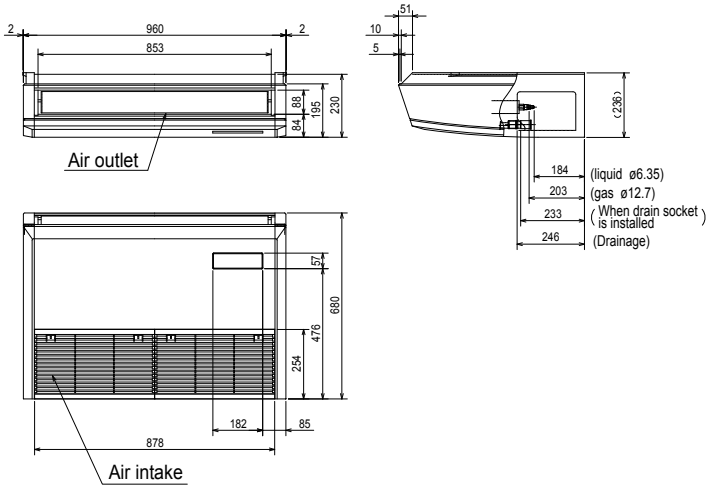
PKA-M60KA(L) PKA-M71KA(L) PKA-M100KA(L)

INDOOR UNIT



PCA-M35KA PCA-M50KA

INDOOR UNIT

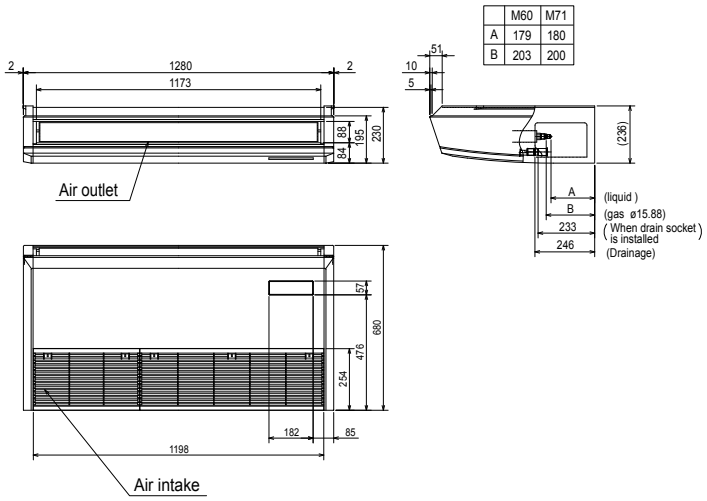


NOTES.
1.Use M10 or W3/8 screw for anchor bolt.
2.Please be sure when installing the drain pump (option parts), refrigerant pipe will be only upward.

Unit : mm

PCA-M60KA PCA-M71KA

INDOOR UNIT



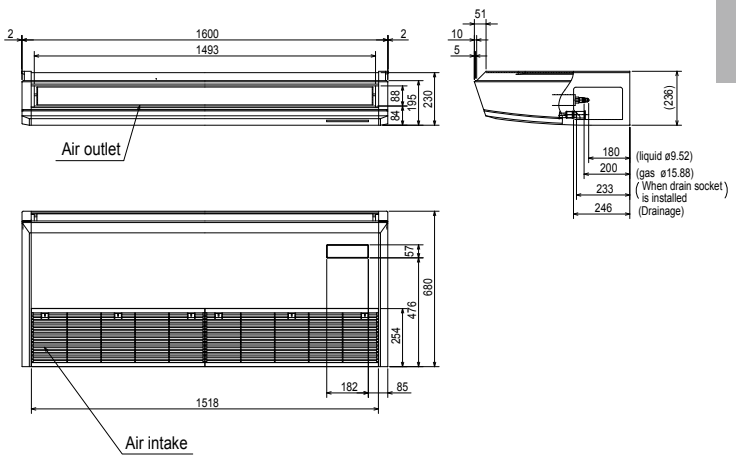
	M60	M71
A	179	180
B	203	200

NOTES.
1.Use M10 or W3/8 screw for anchor bolt.
2.Please be sure when installing the
drain pump (option parts),
refrigerant pipe will be only upward.

Use the current nuts meeting the pipe size of the outdoor unit.
Available pipe size

PCA-M100KA PCA-M125KA PCA-M140KA

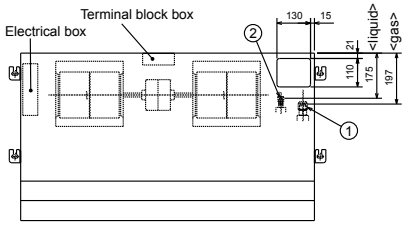
INDOOR UNIT

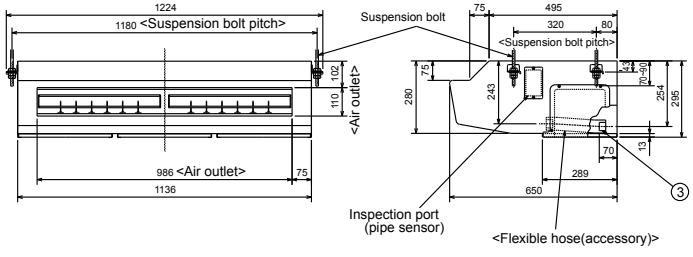


NOTES.
1.Use M10 or W3/8 screw for anchor bolt.
2.Please be sure when installing the
drain pump (option parts),
refrigerant pipe will be only upward.

PCA-RP71HAQ

INDOOR UNIT

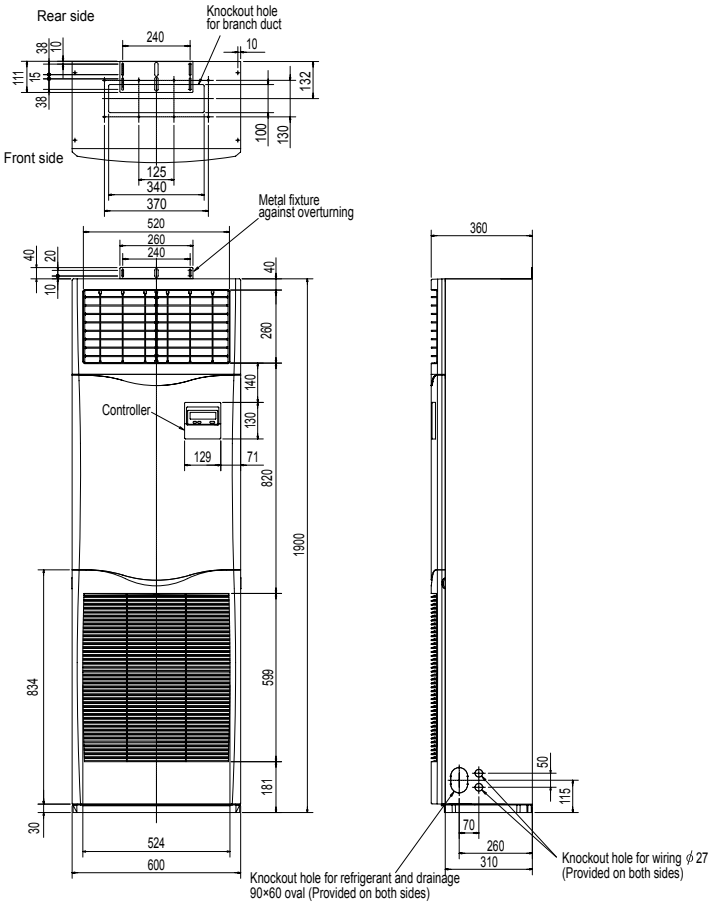




①Refrigerant pipe connection(gas pipe side/flared connection)
②Refrigerant pipe connection(liquid pipe side/flared connection)
③Flexible hose(accessory) →Drainage pipe connection

PSA-RP71KA PSA-RP100KA PSA-RP125KA PSA-RP140KA

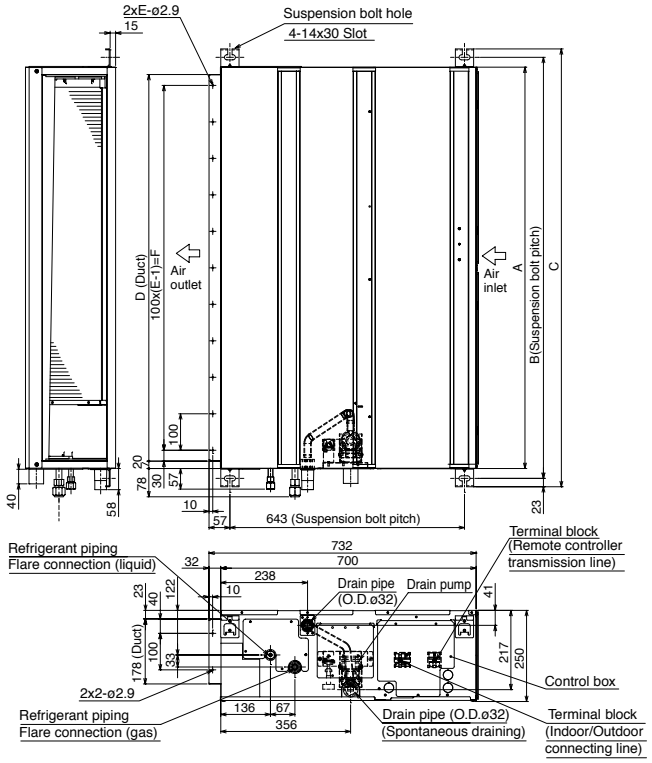
INDOOR UNIT



Unit : mm

PEAD-M35JA PEAD-M50JA PEAD-M60JA PEAD-M71JA PEAD-M100JA PEAD-M125JA PEAD-M140JA

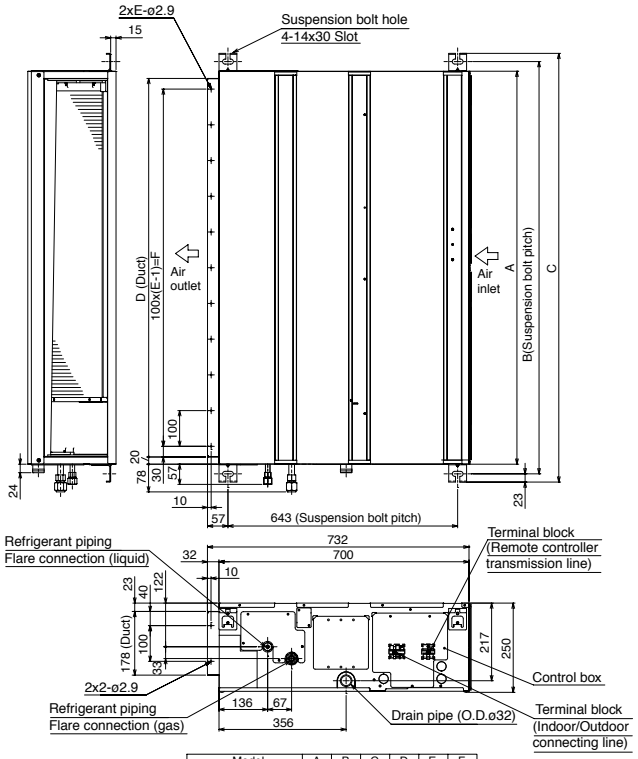
INDOOR UNIT



Model	A	B	C	D	E	F	G
PEAD-M35, 50JA	900	954	1000	860	9	800	858
PEAD-M60JA	1100	1154	1200	1060	11	1000	1058
PEAD-M71JA							
PEAD-M100, 125JA	1400	1454	1500	1360	14	1300	1358
PEAD-M140JA	1600	1654	1700	1560	16	1500	1558

PEAD-M35JAL PEAD-M50JAL PEAD-M60JAL PEAD-M71JAL PEAD-M100JAL PEAD-M125JAL PEAD-M140JAL

INDOOR UNIT

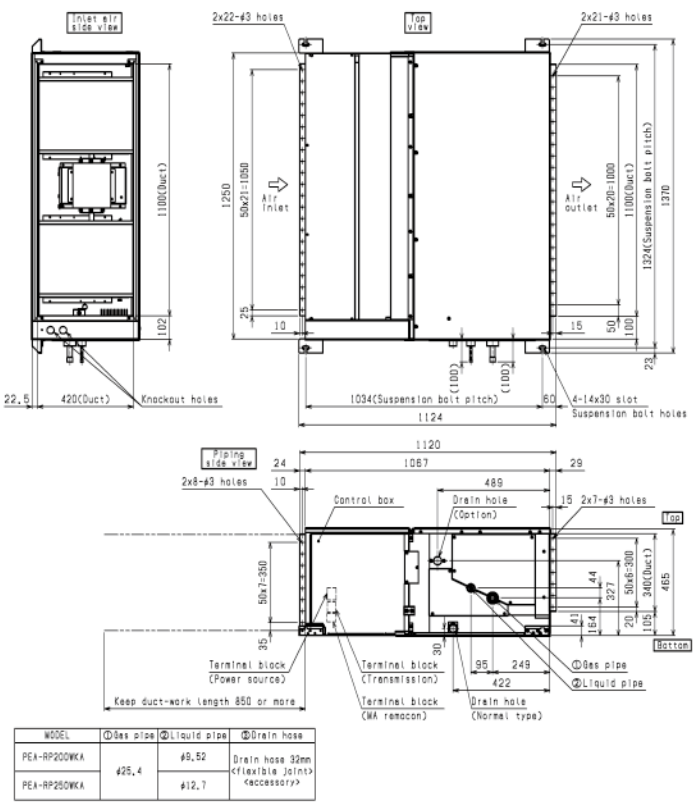


Model	A	B	C	D	E	F
PEAD-M35, 50JAL	900	954	1000	860	9	800
PEAD-M60JAL	1100	1154	1200	1060	11	1000
PEAD-M71JAL						
PEAD-M100, 125JAL	1400	1454	1500	1360	14	1300
PEAD-M140JAL	1600	1654	1700	1560	16	1500

Unit : mm

PEA-RP200WKA PEA-RP250WKA

INDOOR UNIT

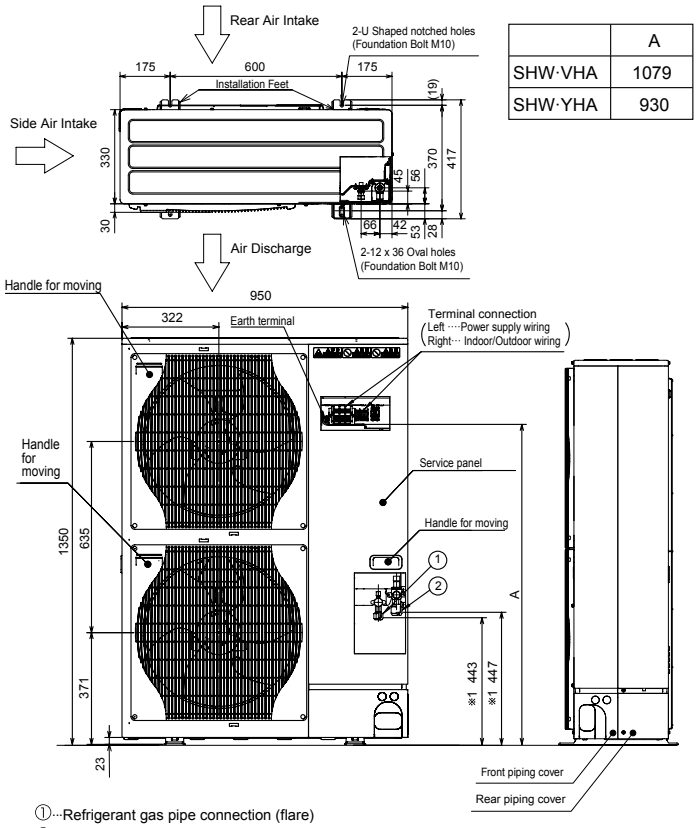


MODEL	①Gas pipe	②Liquid pipe	③Drain hose
PEA-RP200WKA	ø25.4	ø9.52	Drain hose 32mm <flexible joint> <accessory>
PEA-RP250WKA		ø12.7	

Unit : mm

PUHZ-SHW112VHA PUHZ-SHW112YHA PUHZ-SHW140YHA

OUTDOOR UNIT

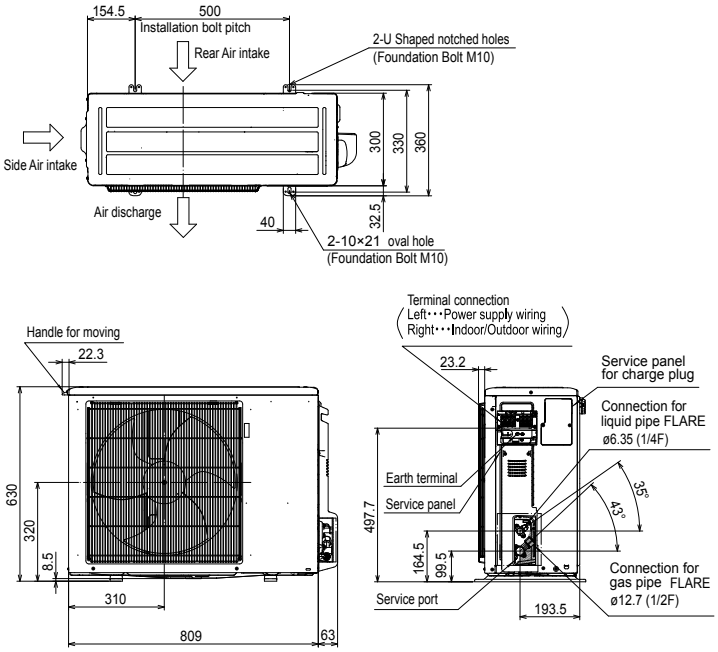


	A
SHW·VHA	1079
SHW·YHA	930

①···Refrigerant gas pipe connection (flare)
②···Refrigerant liquid pipe connection (flare)
※···Indicates stop valve connection location.

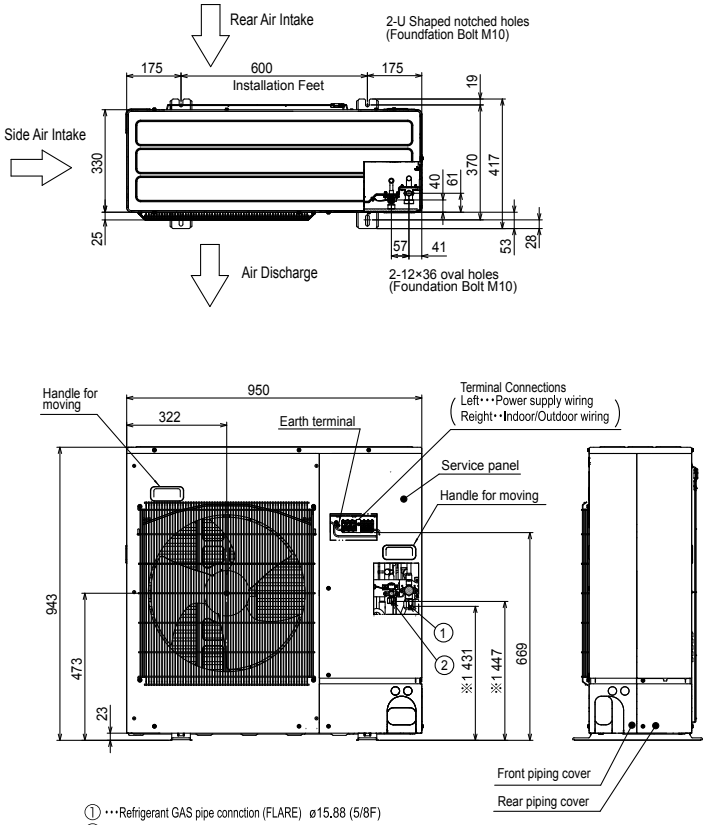
PUZ-ZM35VKA PUZ-ZM50VKA

OUTDOOR UNIT



PUZ-ZM60VHA PUZ-ZM71VHA

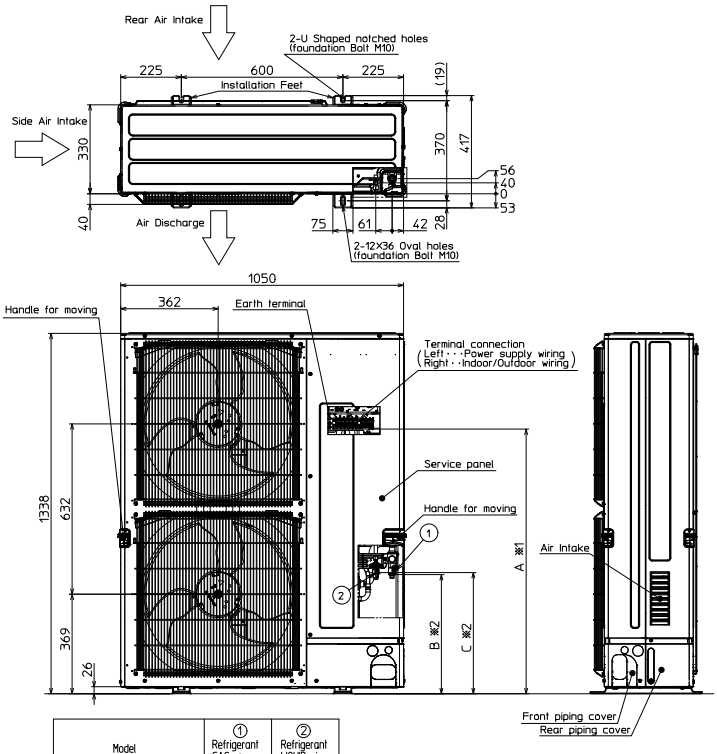
OUTDOOR UNIT



① ···Refrigerant GAS pipe connction (FLARE) ø15.88 (5/8F)
② ···Refrigerant LIQUID pipe connection (FLARE) ø9.52 (3/8F)
※1 ···Indication of STOP VALVE connection location.

PUZ-ZM100VKA PUZ-ZM125VKA PUZ-ZM140VKA PUZ-ZM100YKA PUZ-ZM125YKA PUZ-ZM140YKA

OUTDOOR UNIT



Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUZ-ZM100~140VKA.UK PUZ-ZM100~140YKA.UK	ø15.88 (5/8F)	ø9.52 (3/8F)

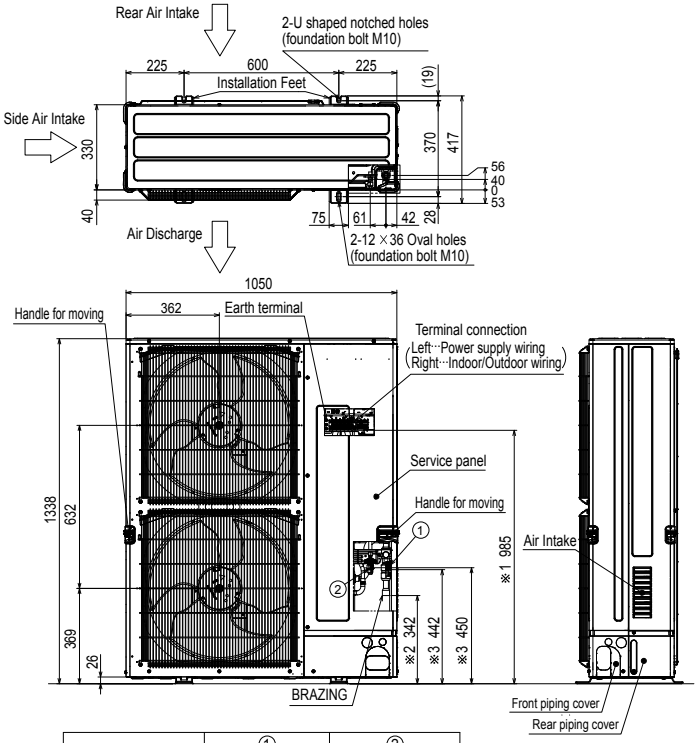
Model	A	B	C
PUZ-ZM100~140VKA.UK	1067	442	450
PUZ-ZM100~140YKA.UK	919	442	450

※1···Indication of Terminal connection location.
※2···Indication of STOP VALVE connection location.

Unit : mm

PUHZ-ZRP200YKA3 PUHZ-ZRP250YKA3

OUTDOOR UNIT

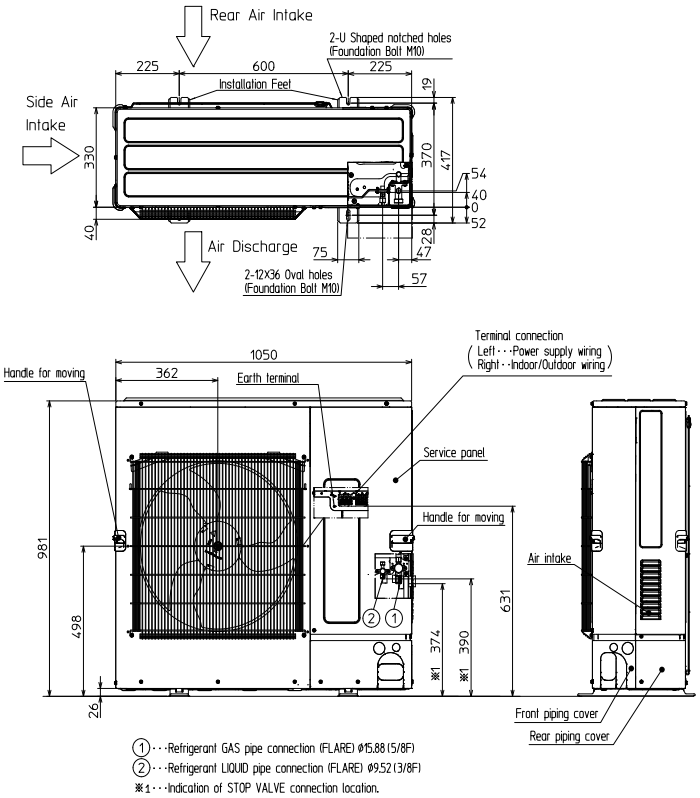


Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUHZ-ZRP200YKA3	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-ZRP250YKA3	ø19.05 (3/4F)	ø12.7 (1/2F)

※1···Indication of Terminal connection location.
※2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
※3···Indication of STOP VALVE connection location.

PUHZ-P100VKA PUHZ-P100YKA
PUHZ-P125VKA PUHZ-P125YKA
PUHZ-P140VKA PUHZ-P140YKA

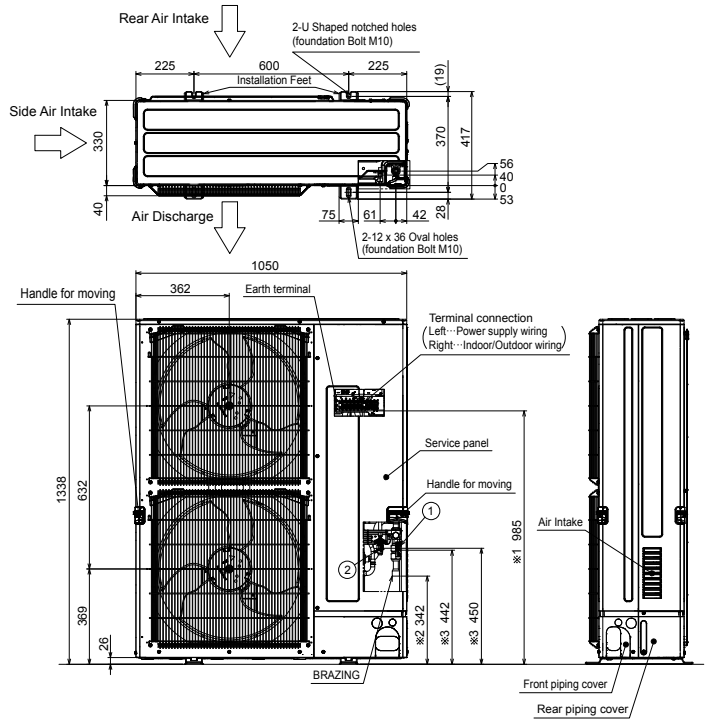
OUTDOOR UNIT



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.

PUHZ-P200YKA3 PUHZ-P250YKA3

OUTDOOR UNIT



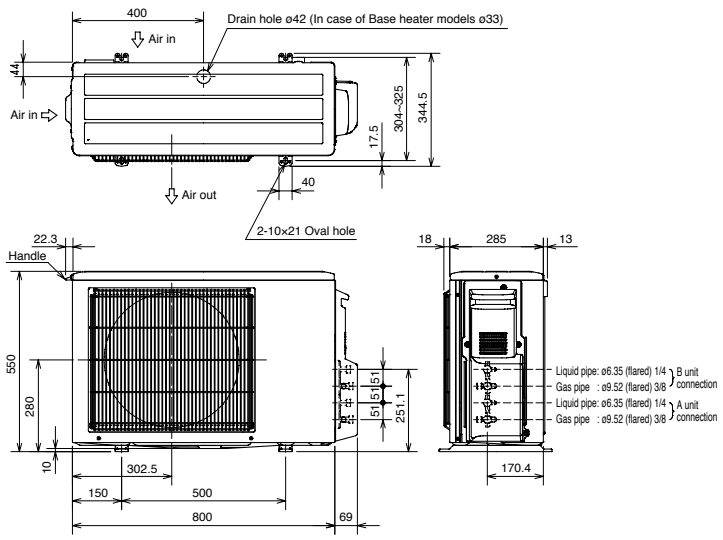
Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUHZ-P200YKA3	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-P250YKA3	ø19.05 (3/4F)	ø12.7 (1/2F)

※1···Indication of Terminal connection location.
※2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
※3···Indication of STOP VALVE connection location.

Unit : mm

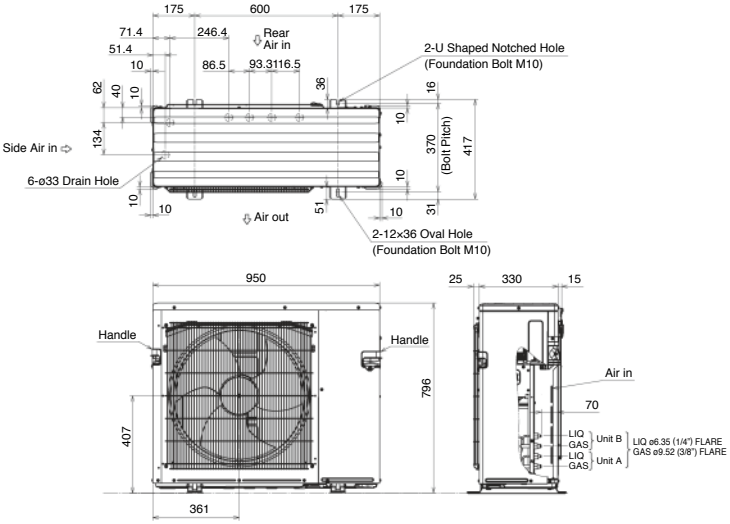
MXZ-2D33VA MXZ-2D42VA2 MXZ-2D53VA2 MXZ-2D53VAH2 MXZ-2DM40VA MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH

OUTDOOR UNIT



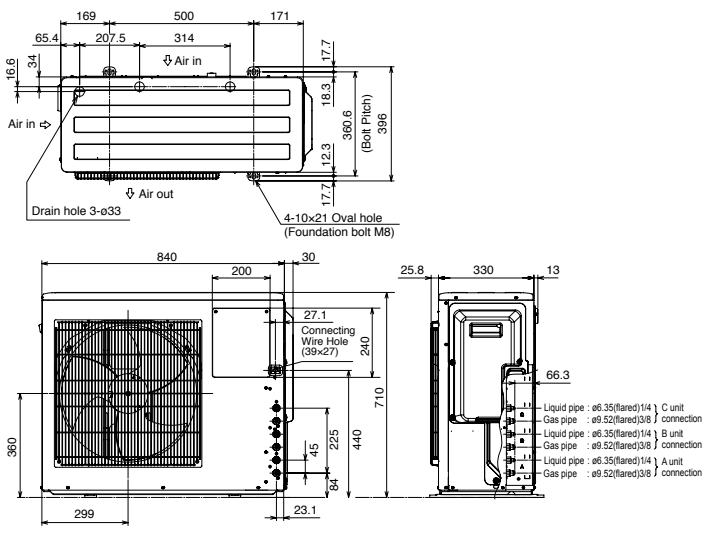
MXZ-2E53VAHZ

OUTDOOR UNIT



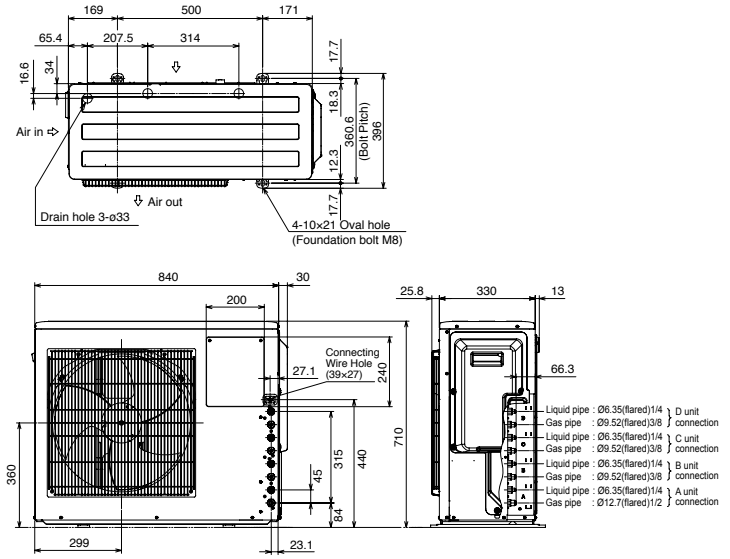
MXZ-3E54VA MXZ-3E68VA MXZ-3DM50VA MXZ-3F54VF MXZ-3F68VF

OUTDOOR UNIT



MXZ-4E72VA MXZ-4F72VF

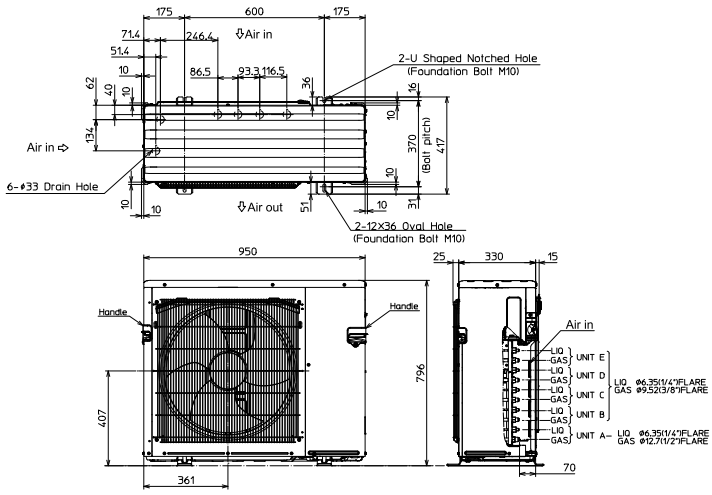
OUTDOOR UNIT



Unit : mm

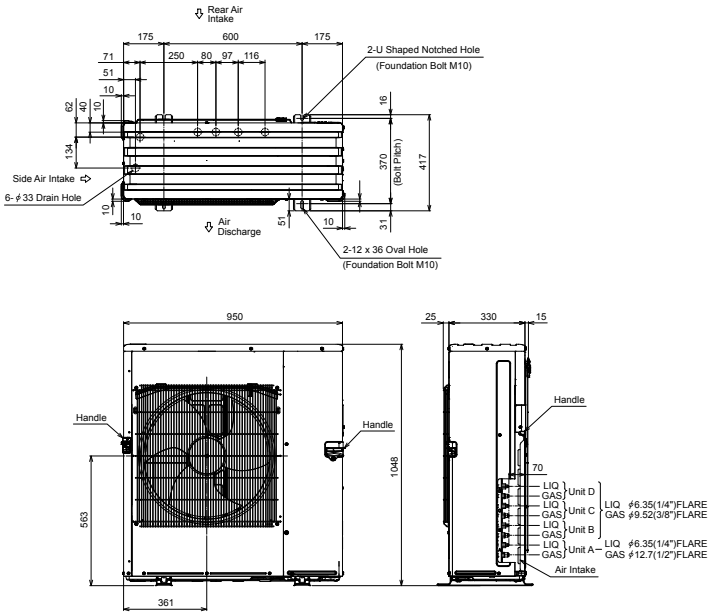
MXZ-4E83VA MXZ-5E102VA

OUTDOOR UNIT



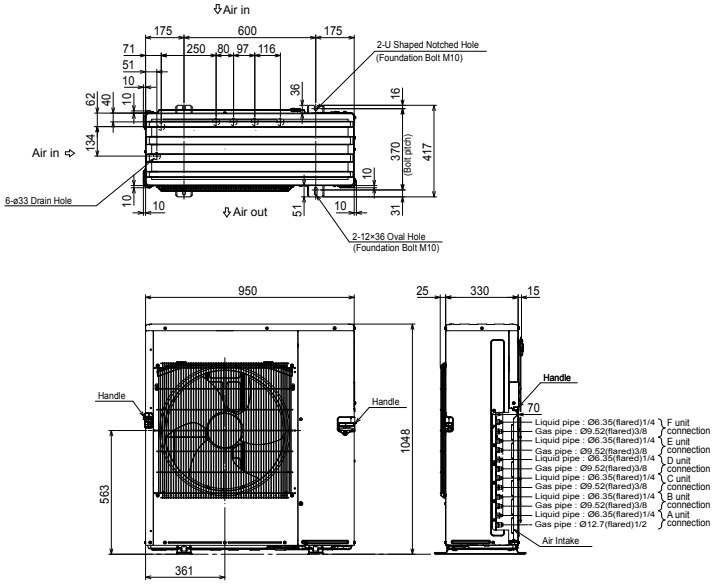
MXZ-4E83VAHZ

OUTDOOR UNIT



MXZ-6D122VA2

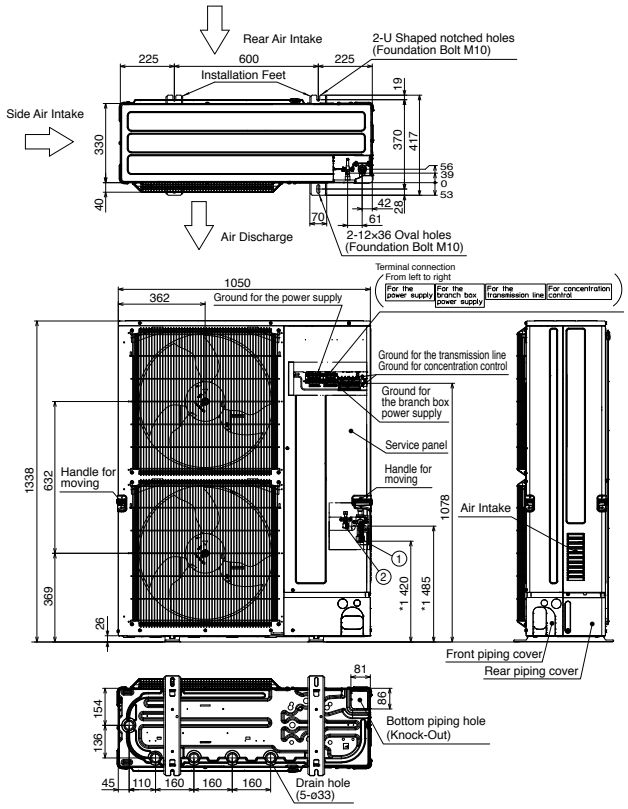
OUTDOOR UNIT



Unit : mm

PUMY-P112/125/140VKM4(-BS)

OUTDOOR UNIT

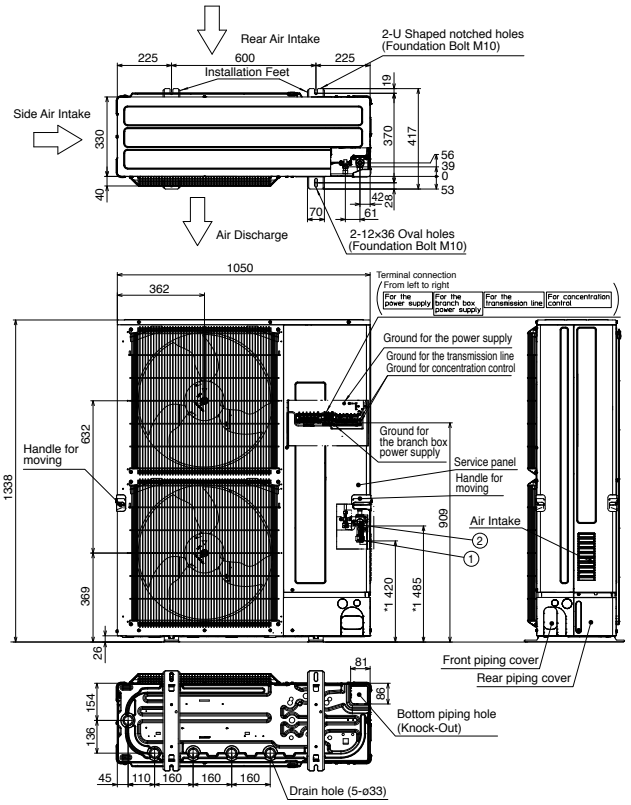


Example of Notes

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.

PUMY-P112/125/140YKM(E)4(-BS)

OUTDOOR UNIT

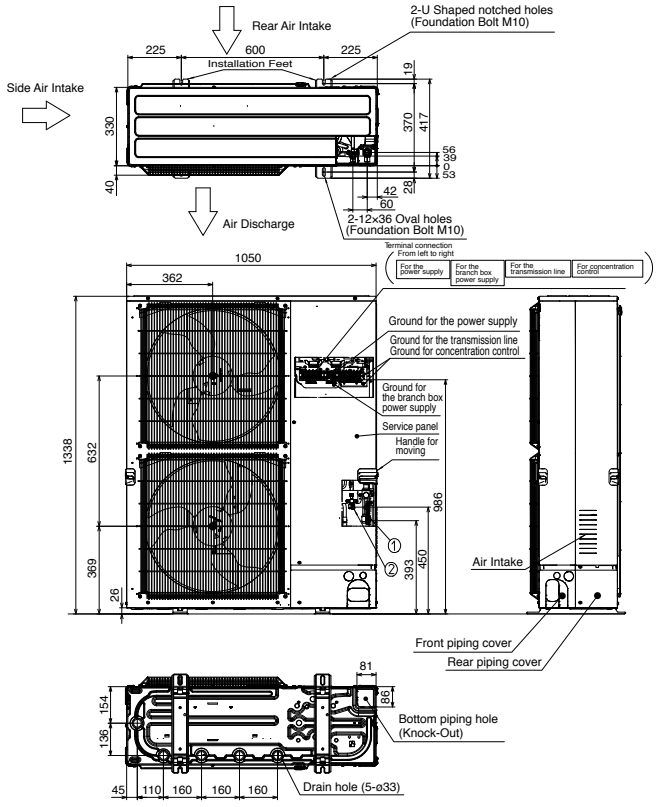


Example of Notes

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.

PUMY-P200YKM2(-BS)

OUTDOOR UNIT

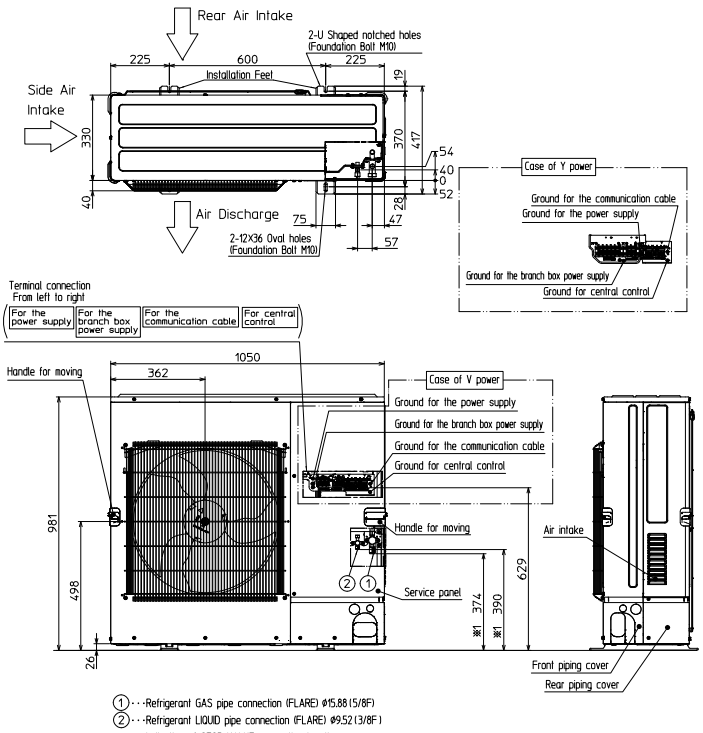


Example of Notes

①…Refrigerant GAS pipe connection (FLARE) ø19.05 (3/4F)
②…Refrigerant LIQUID pipe connection (FLARE) ø9.52 (3/8F)
*1 …Indication of STOP VALVE connection location.

PUMY-SP112/125/140VKM(-BS)
PUMY-SP112/125/140YKM(-BS)

OUTDOOR UNIT



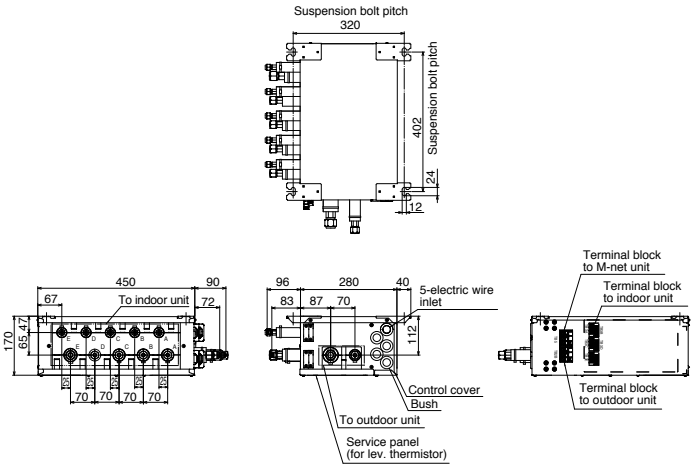
①…Refrigerant GAS pipe connection (FLARE) ø15.88 (5/8F)
②…Refrigerant LIQUID pipe connection (FLARE) ø9.52 (3/8F)
※1…Indication of STOP VALVE connection location.

Unit : mm

PAC-MK53BC

Suspension bolt: W3/W8 (M10)

Branch box



Suspension bolt : W3/8(M10)

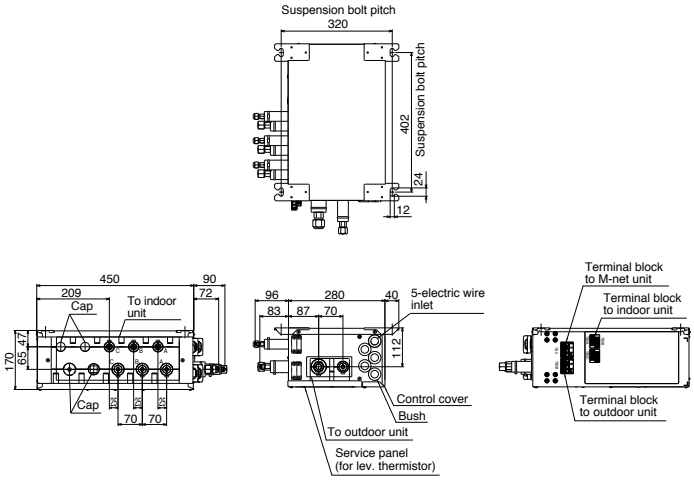
Refrigerant pipe flared connection

	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-MK33BC

Suspension bolt: W3/W8 (M10)

Branch box



Suspension bolt : W3/8(M10)

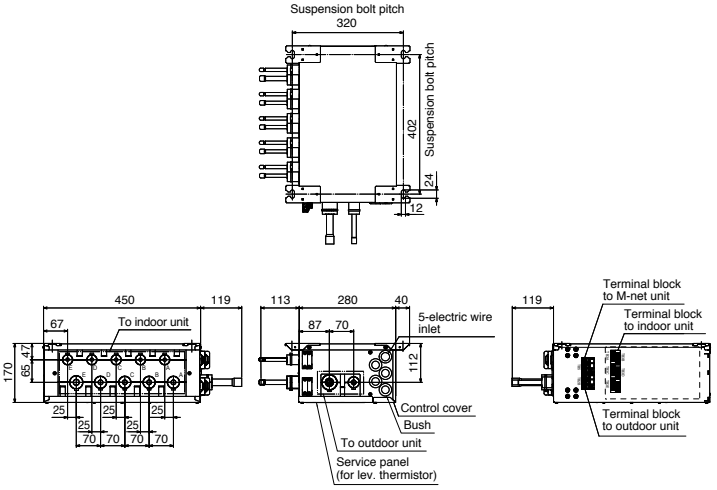
Refrigerant pipe flared connection

	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-MK53BCB

Suspension bolt: W3/W8 (M10)

Branch box



Suspension bolt : W3/8(M10)

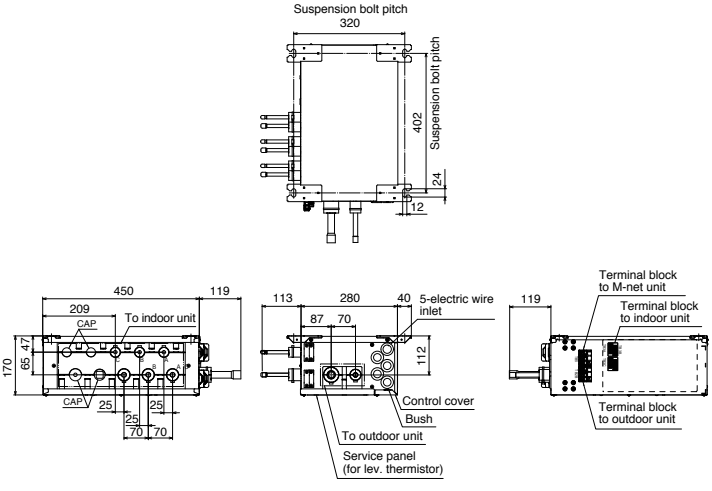
Refrigerant pipe brazed connection

	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

PAC-MK33BCB

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-L	25 / 35	20	12	10
	50	20	12	10
	60	30	15	10
MSZ-A	25 / 35 /42	20	12	10
	50	20		
MSZ-F MFZ	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-W 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
Eco-conscious Power Inverter (PUZ-ZM)	35 / 50	50	30	15
	60 / 71	55	30	15
	100 / 125 / 140	100	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
Eco-conscious Power Inverter (PUZ-ZM)	71	55	8	20	30	1	15
	100 / 125 / 140	100	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

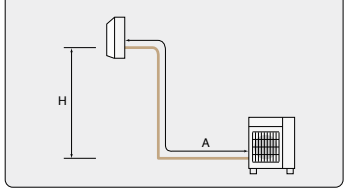
Triple type

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
Eco-conscious Power Inverter (PUZ-ZM)	140	100	8	20	30	1	15
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

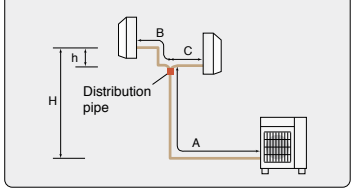
Quadruple type

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

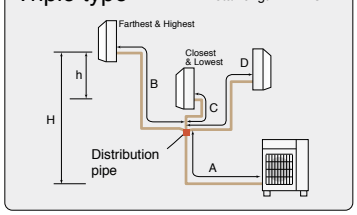
Single type



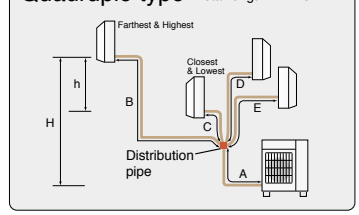
Twin type Total length A+B+C



Triple type Total length A+B+C+D



Quadruple type Total length A+B+C+D+E



MXZ SERIES

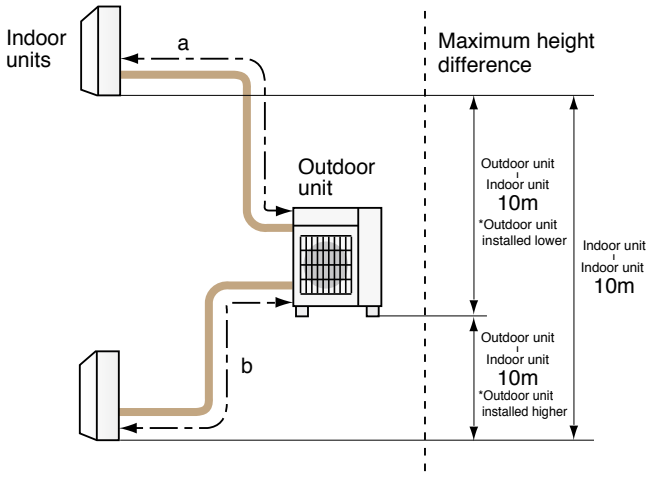
MXZ-2D33VA, MXZ-2F33VF

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-2D42VA2, MXZ-2F42VF

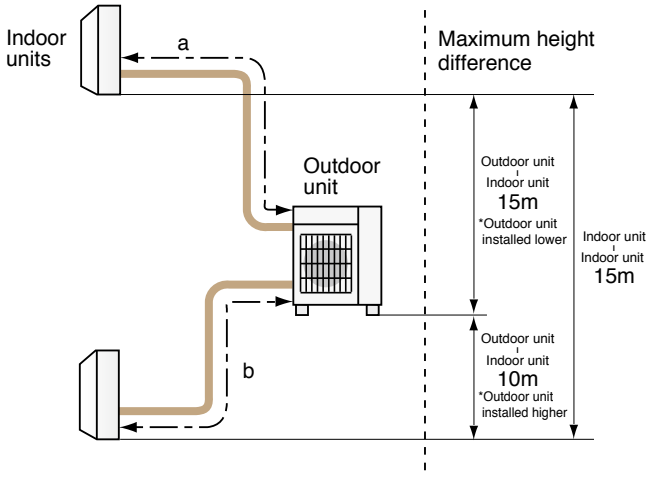
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	20
Total number (a+b)	30

MXZ-2D53VA(H)2, MXZ-2E53VAHZ, MXZ-2F53VF(H)

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-2D42VA2 or MXZ-2D53VA(H)2, additional refrigerant is required. For details, please contact Mitsubishi Electric.

MXZ-3E54VA, MXZ-3F54VF

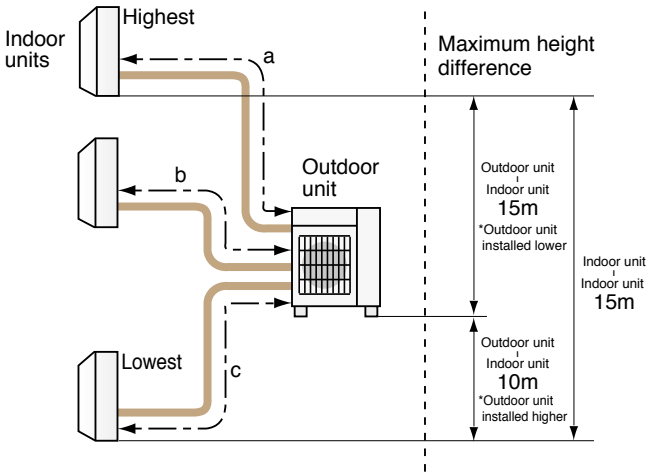
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c)	25m
Total length (a+b+c)	50m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c)	25
Total number (a+b+c)	50

MXZ-3E68VA, MXZ-3F68VF

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.

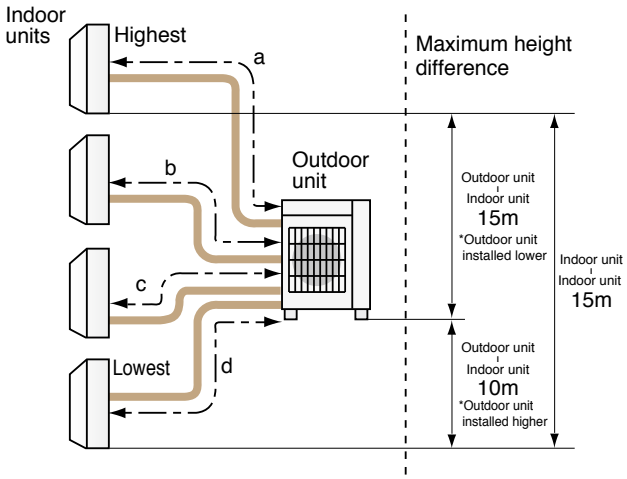
MXZ SERIES

MXZ-4E72VA, MXZ-4F72VF

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

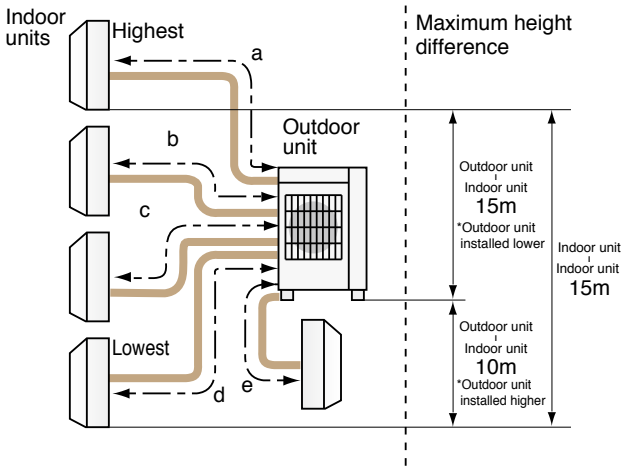
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d)	25m
Total length (a+b+c+d)	70m

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

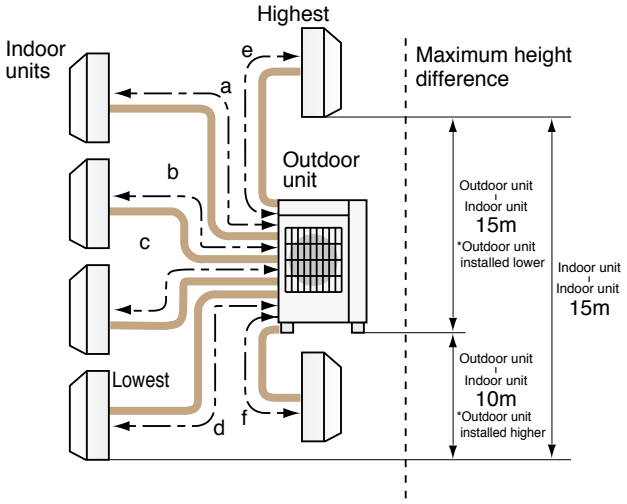
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e)	25
Total number (a+b+c+d+e)	80



MXZ-6D122VA2

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d,e,f)	25m
Total length (a+b+c+d+e+f)	80m

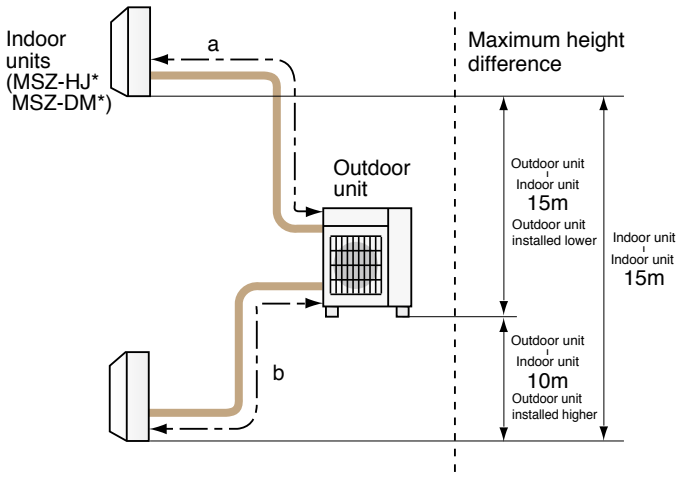
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e,f)	25
Total number (a+b+c+d+e+f)	80



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

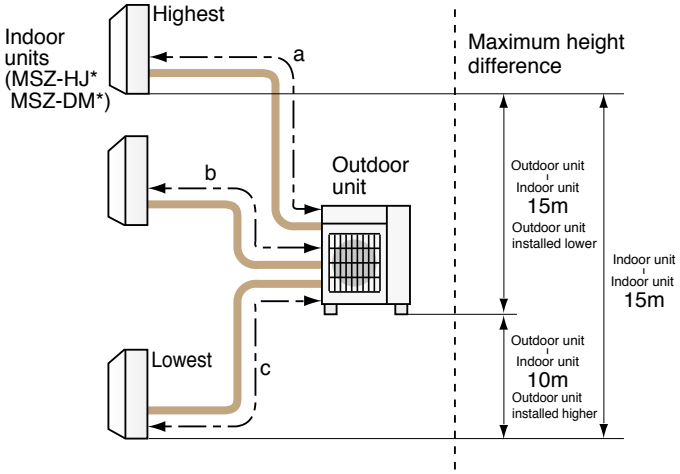


* Only MSZ-HJ and DM model is connectable.

MXZ-3DM50VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c)	25m
Total length (a+b+c)	50m

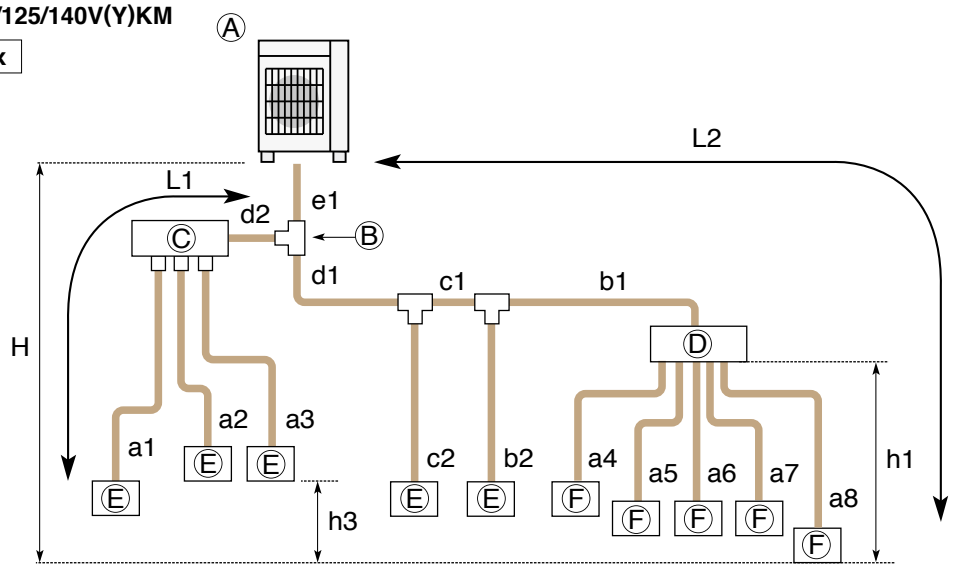
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c)	25
Total number (a+b+c)	50



* Only MSZ-HJ and DM model is connectable.

PUMY-SP112/125/140V(Y)KM

1-Branch box

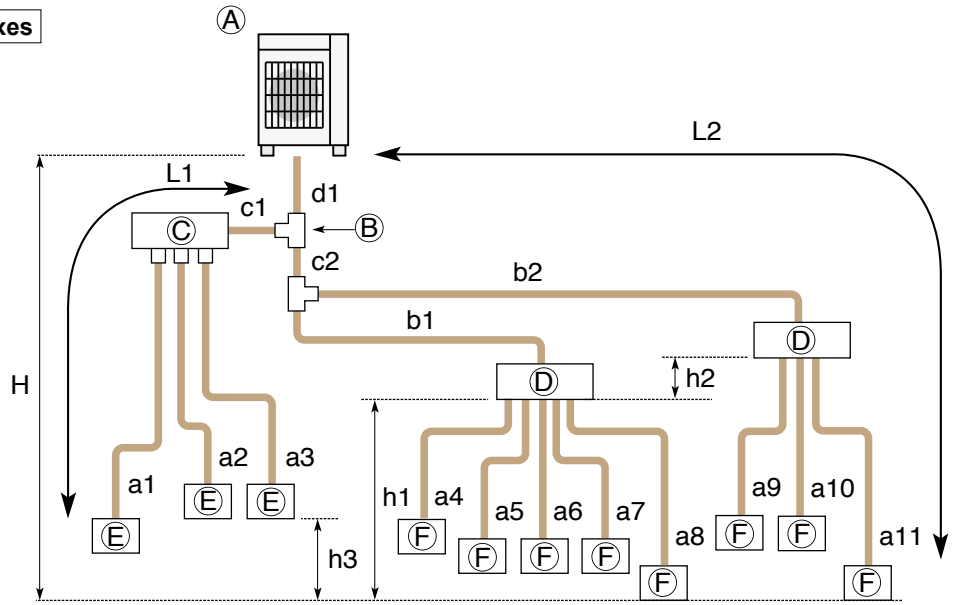


Ⓐ Outdoor Unit
Ⓑ First joint (CMY, MSDD)
Ⓒ Branch header (CMY)
Ⓓ Branch box (PAC-MK•BC(B))
Ⓔ CITY MULTI Indoor unit
Ⓕ M/S/P series Indoor unit

Permissible length (One-way)	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 120 m
	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 70 m
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 50 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 ≦ 50 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 ≦ 30 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



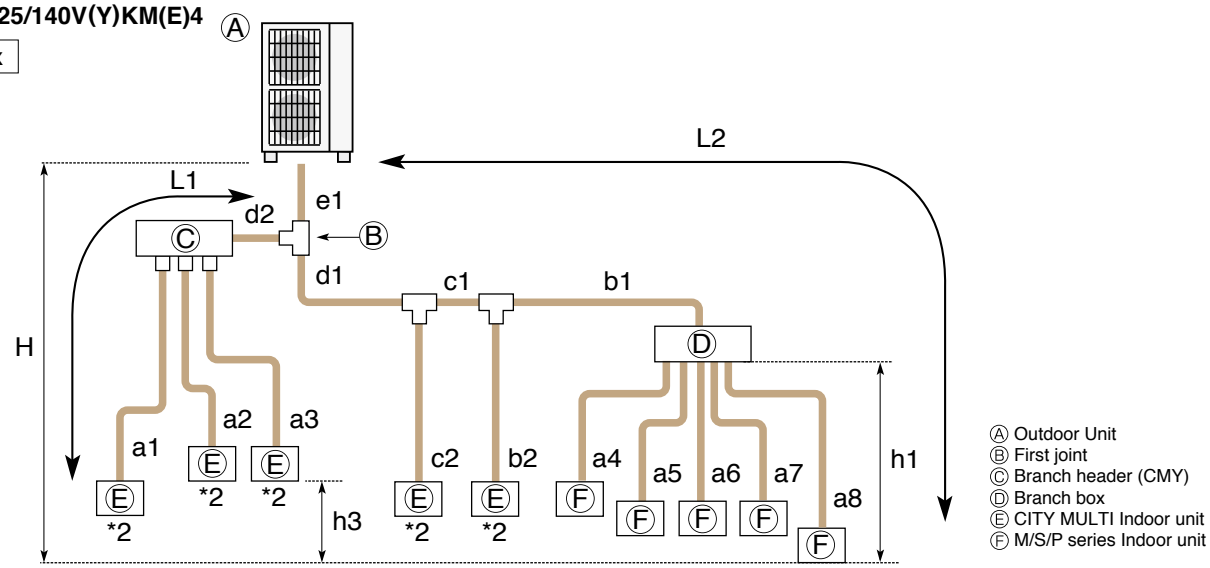
Ⓐ Outdoor Unit
Ⓑ First joint (CMY, MSDD)
Ⓒ Branch header (CMY)
Ⓓ Branch box (PAC-MK•BC(B))
Ⓔ CITY MULTI Indoor unit
Ⓕ M/S/P series Indoor unit

Permissible length (One-way)	Total piping length	d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 120 m
	Farthest piping length (L1)	d1 + c1 + a1 ≦ 70 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 ≦ 50 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 ≦ 30 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.

PUMY-P112/125/140V(Y)KM(E)4

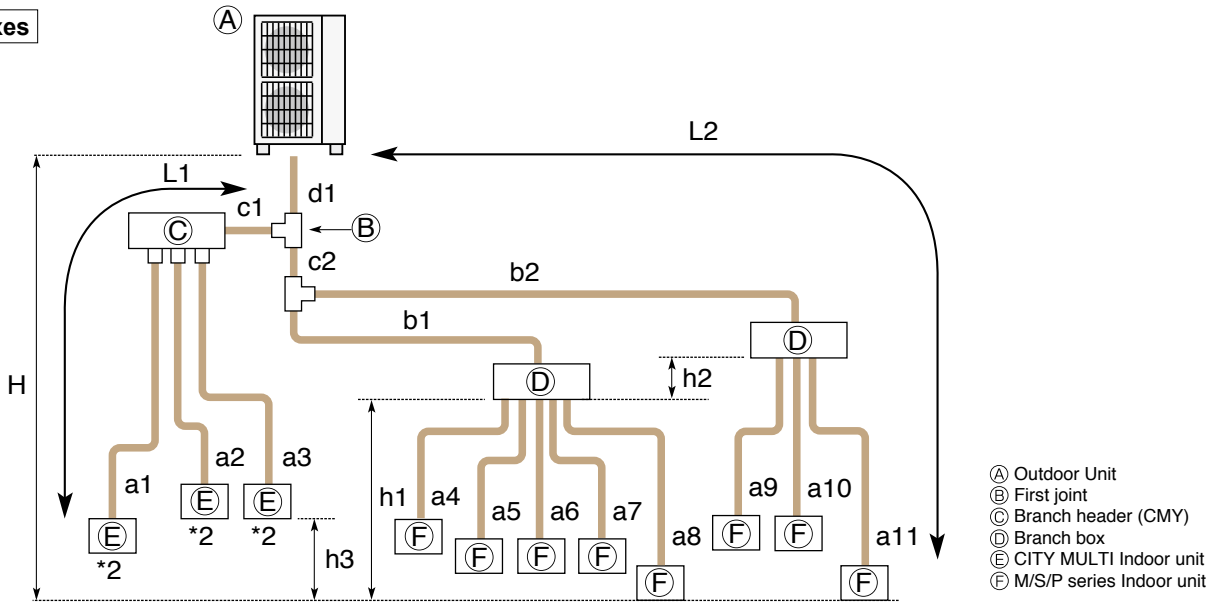
1-Branch box



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: PKFY and PFFY Series cannot be connected.

2-Branch boxes

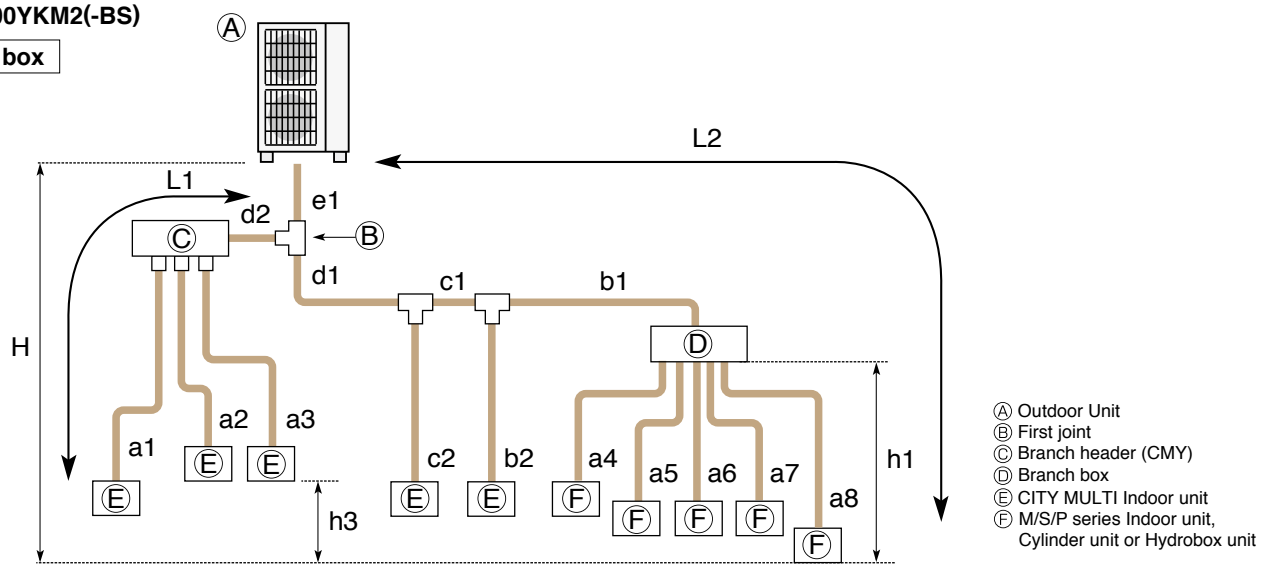


Permissible length (One-way)	Total piping length	d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 240 m
	Farthest piping length (L1)	d1 + c1 + a1 ≦ 85 m
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≦ 80 m
	Piping length between outdoor unit and branch 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.
*2: PKFY and PFFY Series cannot be connected.

PUMY-P200YKM2(-BS)

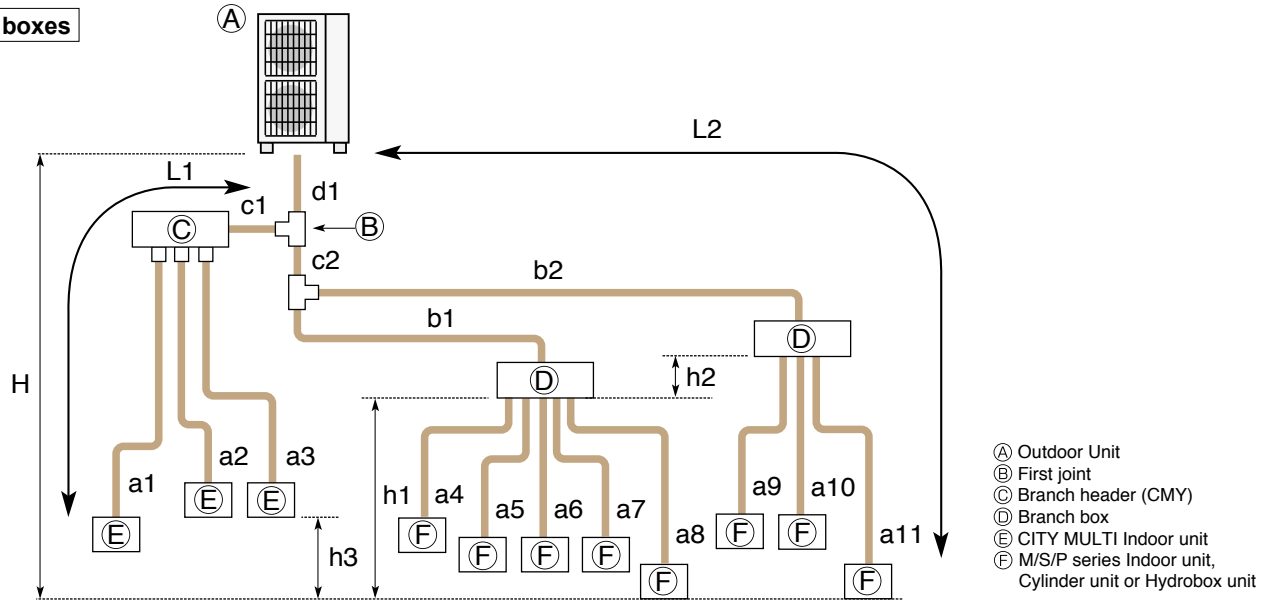
1-Branch box



Permissible length (One-way)	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 150 m
	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 80 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



Permissible length (One-way)	Total piping length	d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 150 m
	Farthest piping length (L1)	d1 + c1 + a1 ≦ 80 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.

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	–	VG,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, "G"=R32 with new A control
HZ	"HZ"= Hyper Heating model , "H"= Anti-freeze heater equipped model , "S"= Silver indoor unit , "W"= White/Natural White indoor unit , "B"= Black/Onyx Black indoor unit , "V"= Pearl White indoor unit , "R"= Ruby Red 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
Z	"Z"= Inverter
–	
ZM/M/ZRP/RP/P	"ZM"= R32 Eco-conscious Power Inverter , "M"= R32 &R410A "ZRP"/"RP"= R410A & cleaning-free pipe reuse , "P"=R410A
SHW	"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/F/HJ/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

Refrigerant Amount

M/S/P/Multi/Zubadan/ATW

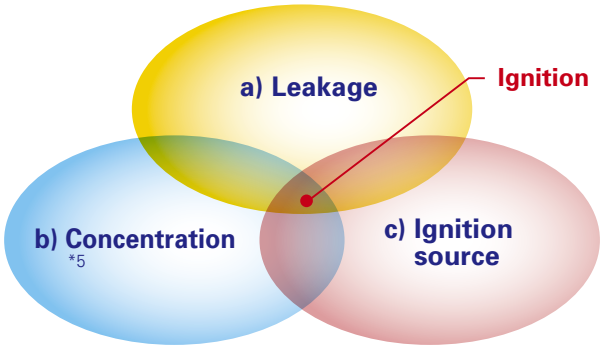
	Model Name	Refrigerant		Pre-charged quantity		Max. added quantity	
			GWP	Weight [kg]	CO_2 equivalent [t]	Weight [kg]	CO_2 equivalent [t]
M-Series	MUZ-LN25VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN35VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN50VG	R32	675	1.25	0.85	0.26	0.18
	MUZ-LN60VG	R32	675	1.45	0.98	0.46	0.32
	MUZ-LN25VGHZ	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN35VGHZ	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN50VGHZ	R32	675	1.45	0.98	0.46	0.32
	MUZ-AP25VG	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP35VG	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP42VG	R32	675	0.70	0.47	0.26	0.18
	MUZ-AP50VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-AP25VGH	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP35VGH	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP42VGH	R32	675	0.70	0.47	0.26	0.18
	MUZ-AP50VGH	R32	675	1.00	0.68	0.26	0.18
	MUZ-FH25VE	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH35VE	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH50VE	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-FH25VEHZ	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH35VEHZ	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH50VEHZ	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-EF25VE(H)	R410A	2088	0.8	1.68	0.39	0.82
	MUZ-EF35VE(H)	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-EF42VE	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-EF50VE	R410A	2088	1.45	3.03	0.46	0.97
	MUZ-SF25VE(H)	R410A	2088	0.7	1.47	0.39	0.82
	MUZ-SF35VE(H)	R410A	2088	0.8	1.68	0.39	0.82
	MUZ-SF42VE(H)	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-SF50VE(H)	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-GF60VE	R410A	2088	1.55	3.24	0.4	0.84
	MUZ-GF71VE	R410A	2088	1.9	3.97	1.1	2.30
	MUZ-WN25VA	R410A	2088	0.7	1.47	0.26	0.55
	MUZ-WN35VA	R410A	2088	0.7	1.47	0.26	0.55
	MUZ-DM25VA	R410A	2088	0.7	1.47	0.26	0.55
	MUZ-DM35VA	R410A	2088	0.72	1.51	0.26	0.55
	MUZ-HJ25VA	R410A	2088	0.7	1.47	0.26	0.55
	MUZ-HJ35VA	R410A	2088	0.72	1.51	0.26	0.55
	MUZ-HJ50VA	R410A	2088	1.15	2.41	0.26	0.55
	MUZ-HJ60VA	R410A	2088	1.8	3.76	0.46	0.97
	MUZ-HJ71VA	R410A	2088	1.8	3.76	0.46	0.97
	MUFZ-KJ25VE	R410A	2088	1.1	2.30	0.39	0.82
	MUFZ-KJ35VE	R410A	2088	1.1	2.30	0.39	0.82
	MUFZ-KJ50VE	R410A	2088	1.5	3.14	0.46	0.97
	MUFZ-KJ25VEHZ	R410A	2088	1.1	2.30	0.39	0.82
	MUFZ-KJ35VEHZ	R410A	2088	1.1	2.30	0.39	0.82
	MUFZ-KJ50VEHZ	R410A	2088	1.5	3.14	0.46	0.97
	MXZ-2D33VA	R410A	2088	1.15	2.72	0.0	0.00
	MXZ-2D42VA2	R410A	2088	1.3	2.72	0.2	0.42
	MXZ-2D53VA(H)2	R410A	2088	1.3	2.72	0.2	0.42
	MXZ-3E54VA	R410A	2088	2.7	5.64	0.2	0.42
	MXZ-3E68VA	R410A	2088	2.7	5.64	0.4	0.84
	MXZ-4E72VA	R410A	2088	2.7	5.64	0.4	0.84
	MXZ-4E83VA	R410A	2088	2.99	6.25	0.9	1.88
	MXZ-5E102VA	R410A	2088	2.99	6.25	1.6	3.35
	MXZ-6D122VA	R410A	2088	4.0	8.36	1.0	2.09
	MXZ-2F33VF	R32	675	1.0	0.68	0.00	0.00
	MXZ-2F42VF	R32	675	1.2	0.81	0.00	0.00
	MXZ-2F53VF(H)	R32	675	1.2	0.81	0.00	0.00
	MXZ-3F54VF	R32	675	1.4	0.95	1.0	0.68
	MXZ-3F68VF	R32	675	1.4	0.95	1.0	0.68
	MXZ-4F72VF	R32	675	1.4	0.95	1.0	0.68
	MXZ-2E53VAHZ	R410A	2088	2.0	4.18	0.2	0.42
	MXZ-4E83VAHZ	R410A	2088	3.9	8.15	0.9	1.88
	MXZ-2DM40VA	R410A	2088	0.95	1.99	0.2	0.42
	MXZ-3DM50VA	R410A	2088	2.7	5.64	0.2	0.42
S-Series	SUZ-KA25VA6	R410A	2088	0.8	1.68	0.39	0.82
	SUZ-KA35VA6	R410A	2088	1.15	2.41	0.39	0.82
	SUZ-KA50VA6	R410A	2088	1.6	3.35	0.46	0.97
	SUZ-KA60VA6	R410A	2088	1.6	3.35	0.46	0.97
	SUZ-KA71VA6	R410A	2088	1.8	3.76	1.265	2.65

	Model Name	Refrigerant		Pre-charged quantity		Max. added quantity	
			GWP	Weight [kg]	CO_2 equivalent [t]	Weight [kg]	CO_2 equivalent [t]
P-Series	PUZ-ZM35VKA	R32	675	2.0	1.35	0.3	0.20
	PUZ-ZM50VKA	R32	675	2.0	1.35	0.3	0.20
	PUZ-ZM60VHA	R32	675	2.8	1.89	0.8	0.54
	PUZ-ZM71VHA	R32	675	2.8	1.89	0.8	0.54
	PUZ-ZM100VKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM100YKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM125VKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM125YKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM140VKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM140YKA	R32	675	4.0	2.70	2.8	1.89
	PUHZ-ZRP35VKA2	R410A	2088	2.2	4.60	0.4	0.84
	PUHZ-ZRP50VKA2	R410A	2088	2.4	5.02	0.4	0.84
	PUHZ-ZRP60VHA2	R410A	2088	3.5	7.31	1.2	2.51
	PUHZ-ZRP71VHA2	R410A	2088	3.5	7.31	1.2	2.51
	PUHZ-ZRP100VKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP100YKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP125VKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP125YKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP140VKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP140YKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP200YKA3	R410A	2088	7.1	14.83	3.6	7.52
	PUHZ-ZRP250YKA3	R410A	2088	7.7	16.08	4.8	10.03
	PUHZ-P100VKA	R410A	2088	3.3	6.89	1.2	2.51
	PUHZ-P100YKA	R410A	2088	3.3	6.89	1.2	2.51
	PUHZ-P125VKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P125YKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P140VKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P140YKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P200YKA3	R410A	2088	6.5	13.58	3.6	7.52
	PUHZ-P250YKA3	R410A	2088	7.7	16.08	4.8	10.03
	PUHZ-SHW112VHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW112YHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW140VHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW140YHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-FRP71VHA	R410A	2088	3.8	7.94	1.8	3.76
PUMY	PUMY-SP112VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP112YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP125VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP125YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP140VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP140YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-P112VKM4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P125VKM4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P140VKM4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P112YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P125YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P140YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P200YKM2 (-BS)	R410A	2088	7.3	15.24	13.1	27.35
ATW Packaged	PUHZ-W50VHA2(-BS)	R410A	2088	1.7	3.55	–	
	PUHZ-W85VHA2(-BS)	R410A	2088	2.4	5.02	–	
	PUHZ-W112VHA(-BS)	R410A	2088	4.0	8.36	–	
	PUHZ-HW112YHA2(-BS)	R410A	2088	4.0	8.36	–	
	PUHZ-HW140VHA2(-BS)	R410A	2088	4.3	8.98	–	
	PUHZ-HW140YHA2(-BS)	R410A	2088	4.3	8.98	–	
ATW Split	SUHZ-SW45VA(H)	R410A	2088	1.3	2.72	0.35	0.72
	PUHZ-SW50VKA(-BS)	R410A	2088	1.4	2.93	0.6	1.26
	PUHZ-SW75VAA(-BS)	R410A	2088	3.0	6.27	1.8	3.76
	PUHZ-SW75YAA(-BS)	R410A	2088	3.0	6.27	1.8	3.76
	PUHZ-SW100VAA(-BS)	R410A	2088	4.2	8.77	1.8	3.76
	PUHZ-SW100YAA(-BS)	R410A	2088	4.2	8.77	1.8	3.76
	PUHZ-SW75VHA(-BS)	R410A	2088	3.2	6.69	1.4	2.93
	PUHZ-SW100VHA(-BS)	R410A	2088	4.6	9.61	2.9	6.06
	PUHZ-SW100YHA(-BS)	R410A	2088	4.6	9.61	2.9	6.06
	PUHZ-SW120VHA(-BS)	R410A	2088	4.6	9.61	2.9	6.06
	PUHZ-SW120YHA(-BS)	R410A	2088	4.6	9.61	2.9	6.06
	PUHZ-SW160YKA(-BS)	R410A	2088	7.1	14.83	4.0	8.36
	PUHZ-SW200YKA(-BS)	R410A	2088	7.7	16.08	5.2	10.86
	PUHZ-SHW80VAA	R410A	2088	4.6	9.61	1.4	2.93
	PUHZ-SHW80YAA	R410A	2088	4.6	9.61	1.4	2.93
	PUHZ-SHW112VAA	R410A	2088	4.6	9.61	1.4	2.93
	PUHZ-SHW112YAA	R410A	2088	4.6	9.61	1.4	2.93
	PUHZ-SHW80VHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW112VHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW112YHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW140YHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW230YKA2	R410A	2088	7.7	16.08	5.2	10.86
Mr. Slim+	PUHZ-FRP71VHA2	R410A	2088	3.8	7.94	1.8	3.76

R32 REFRIGERANT

R32 REFRIGERANT PROPERTIES

Under the conditions shown below, there is a possibility that R32 could ignite.



	R32	R410A	R22
Chemical formula	CH_2F_2	CH_2F_2/CHF_2CF_3	$CHClF_2$
Composition (blend ratio wt. %)	Single composition	R32/R125 (50/50 wt %)	Single composition
Ozone depletion potential (ODP)	0	0	0.055
Global warming potential (GWP) *1	675	2088	1810
LFL(vol.%) *2	13.3	–	–
UFL(vol.%) *3	29.3	–	–
Flammability *4	Lower flammability (2L)	No flame propagation (1)	No flame propagation (1)

*1 IPCC 4th assessment report.
*2 LFL : Lower flammable limit
*3 UFL : Upper flammable limit
*4 ISO 817:2014
*5 R32 consistency is higher than LFL*1 and lower than UFL*2.

Although R32 is classified as low flammability, the possibility of igniting can be eliminated by ensuring the following three points.

a) Do not leak refrigerant.

<Installation> ·Vacuum drying should be done. Air purging is prohibited.
·Follow "4. Installation Points of Refrigerant Piping Work".
<Repair/Relocation/Removal> ·Pump down or recovering refrigerant should be done.

b) Prevent concentration.

·Ventilate during installation and servicing, such as open the door or window and use a fan.
·Follow "2. Installation Restrictions".

c) Keep ignition source away from the unit.

·Do not braze pipe and unit which contain refrigerant. Before brazing, refrigerant should be recovered.
·Do not install unit while the electricity is turned on. Turn off electricity at the fuse box and check the wiring using a tester.
·Do not smoke when working or during transportation of the product.

Note **Both R32 / R410A emit a toxic gas when coming into contact with an open flame.**

INSTALLATION RESTRICTIONS

In order to prevent the refrigerant from igniting, use the following instructions during installation.

1) Indoor Units

Install in a room with a floor area of Amin* or more, corresponding to refrigerant quantity M.
(M = factory-charged refrigerant + locally added refrigerant)

Install the indoor unit so that the height from the floor to the bottom of the indoor unit is hO*.

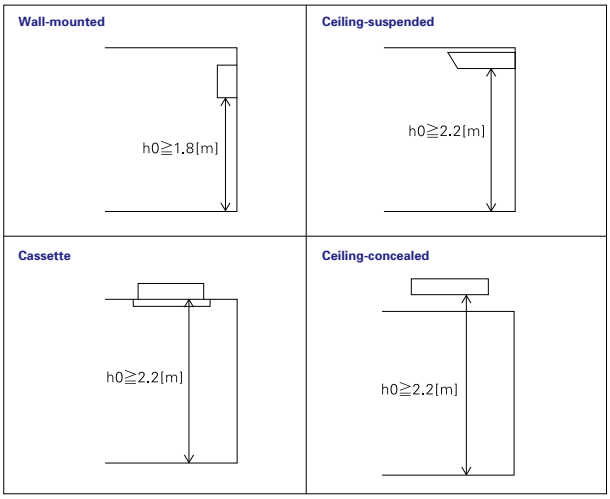
* Refer to table and drawings below.

<M & P Series>

M[kg]	Amin[m²]
1.0	4
1.5	6
2.0	8
2.5	10
3.0	12
3.5	14
4.0	16
4.5	20
5.0	24
5.5	29
6.0	35
6.5	41
7.0	47
7.5	54

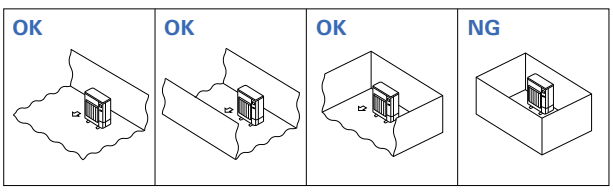
<MXZ Series>

M[kg]	Amin[m²]
1.0	3
1.5	4.5
2.0	6
2.5	7.5
3.0	9
3.5	12
4.0	15.5
4.5	20
5.0	24
5.5	29
6.0	35
6.5	41
7.0	47
7.5	54



2) Outdoor Units

Install outdoor units in a place where at least one of the four sides is open or in a sufficiently large space without depressions.



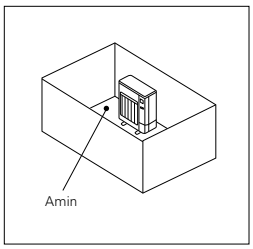
If you unavoidably install a unit in a space where all four sides are blocked or there are depressions, confirm that one of these situations (A, B or C) is satisfied.

A Secure sufficient installation space (minimum installation area Amin).

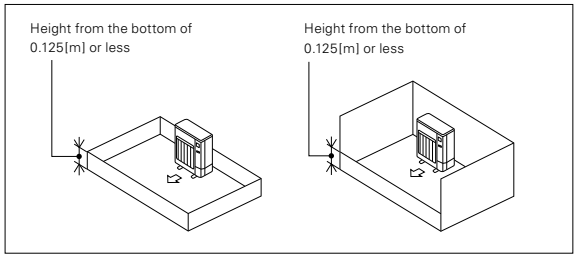
Install in a space with an installation area of Amin* or more, corresponding to refrigerant quantity M. (M = factory-charged refrigerant + locally added refrigerant)

* Refer to table and drawings below.

M[kg]	Amin[m²]
1.0	12
1.5	17
2.0	23
2.5	28
3.0	34
3.5	39
4.0	45
4.5	50
5.0	56
5.5	62
6.0	67
6.5	73
7.0	78
7.5	84

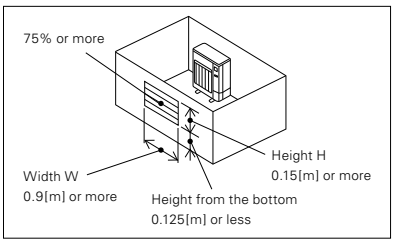


B Install in a space with a depression height of ≦0.125[m].



C Create an appropriate open ventilation area.

Make sure that the width of the open area is 0.9[m] or more and the height of the open area is 0.15[m] or more.
However, the height from the bottom of the installation space to the bottom edge of the open area should be 0.125[m] or less.
More than 75% of the ventilation area should be open to allow air circulation.



Note **These countermeasures (A, B or C) are for keeping safety not for specification guarantee.**

● Models with R32 Refrigerant: MSZ-L Series (single connection)

LOSSNAY SYSTEM

LOSSNAY LINE-UP

Application	Model \ Air volume	50 CMH	100 CMH	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
Commerical Use	LGH-RVX Series 			●	●	●	●	●	●	●	●	●	
	LGH-RVXT Series 										●	●	●
	GUF Series 						●			●			
Optional Unit	Dx-Coil unit for Lossnay LGH-RVX/RVXT Series GUG Series 						●	●	●	●	●	●	●
Residential Use	VL-220CZGV-E 				●								
	VL-100(E)U5-E		●										
	VL-50(E)S2-E VL-50SR2-E 	●											

LGH-RVX Series
This commercially oriented system can be utilized virtually anywhere with high performance and functions.

LGH-RVXT Series
Thin large air volume models in LGH series with high performance and functions.

Dx-Coil Unit (GUG Series)
Temperature control equipment working with Lossnay unit and Mr. Slim outdoor unit.

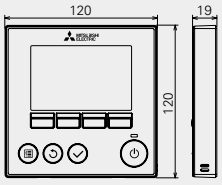
GUF Series
Heat recovery with heating and cooling system using the heat resource of City Multi outdoor unit.

VL-220CZGV-E
Centralized ventilation for residential use with sensible heat exchange.

VL-100(E)U5-E, VL-50(E)S2-E
Wall mount models. Particularly suitable for houses and small offices.

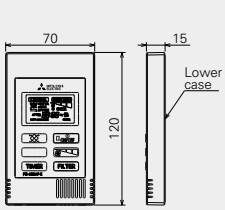
REMOTE CONTROLLER

PZ-61DR-E



Unit (mm)

PZ-43SMF-E



Unit (mm)

Function (Communicating Mode)	PZ-61DR-E		PZ-43SMF-E	
	LGH-RVX/RVXT	VL-220CZGV-E	LGH-RVX/RVXT	VL-220CZGV-E
Fan speed selection	4 fan speeds	4 fan speeds	2 of 4 fan speeds	2 of 4 fan speeds
Ventilation mode selection	Energy recovery / Bypass / Auto	Heat recovery / Bypass / Auto (available with optional parts P-133DUE-E)	Energy recovery / Bypass / Auto	Heat recovery / Bypass / Auto (available with optional parts P-133DUE-E)
Night-purge (time)	Anytime schedule	No	No	No
Night-purge (fan speed)	Selectable from 4 fan speeds	No	No	No
Function setting from RC	Yes	Yes	No	No
Bypass temp. free setting	Yes	Yes (available with optional parts P-133DUE-E)	No	No
Heater-On temp. free setting	Yes	No	No	No
Fan power change after installation	Yes	Yes	No	No
On/Off timer	Yes	Yes	Yes	Yes
Auto-Off timer	Yes	Yes	No	No
Weekly timer	Yes	Yes	No	No
Operation restrictions (On/Off, ventilation mode, fan speed)	Yes	Yes (ventilation mode is available with optional parts P-133DUE-E)	No	No
Operation restrictions (fan speed skip setting)	Yes	Yes	No	No
Screen contrast adjustment	Yes	Yes	No	No
Language selection	Yes (8 languages)	Yes (8 languages)	No (English Only)	No (English Only)
Initializing remote controller	Yes	Yes	No	No
Filter cleaning sign	Yes	Yes	Yes	Yes
Lossnay core cleaning sign	Yes	No	No	No
Error indication	Yes	Yes	Yes	Yes
Error history	Yes	Yes	No	No

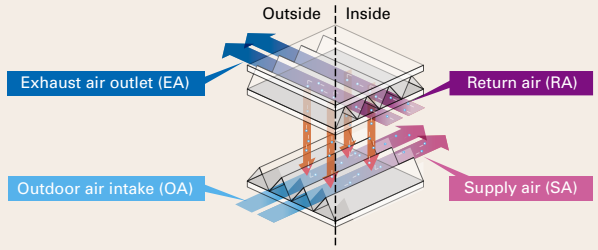
LOSSNAY SYSTEM

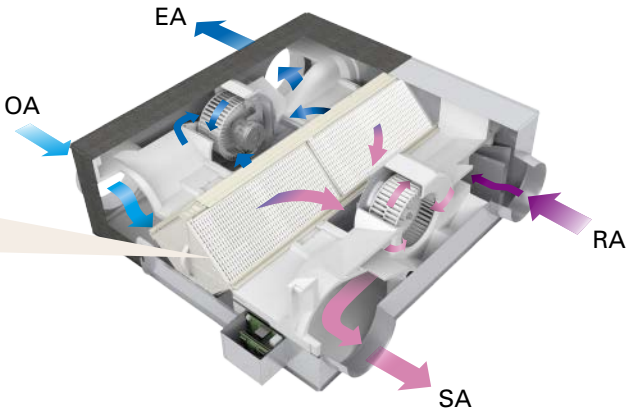
Lossnay ventilation systems are renowned industry-wide for their efficiency. They offer environment-friendly energy recovery and humidity control, and enable air conditioning systems to simultaneously provide optimum room comfort and energy savings.

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



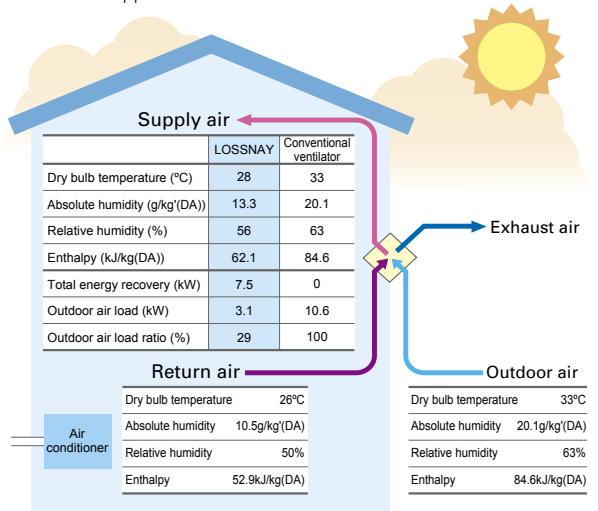


What can be Improved by Introducing Lossnay?

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

Return 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

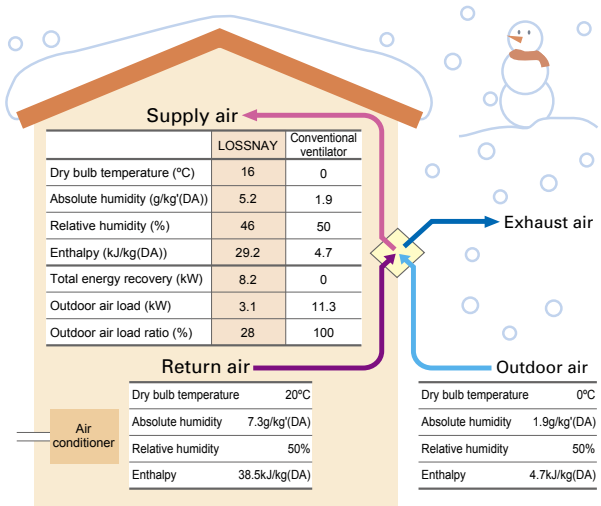
Indoor supply-air temperature (°C) = Outdoor temperature (°C) − (Outdoor temperature (°C) − Indoor temperature (°C)) × Temp recovery efficiency (%)

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

Return 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

Indoor supply-air temperature (°C) = Indoor temperature (°C) − (Outdoor temperature (°C)) × Temp recovery efficiency (%) + Outdoor temperature (°C)

Calculation example: 16°C = (20°C − 0°C) × 80% + 0°C

*The above applies to the case of LGH-100RVX (fan speed 4).

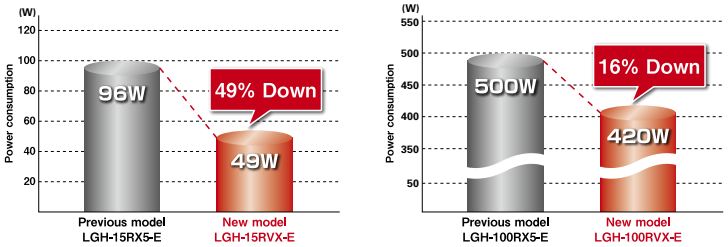
Commercial Use Lossnay

LGH-RVX (Standard model)

Power consumption reduced further with introduction of a DC motor

Realized low power consumption with introduction of a high efficiency brushless DC motor. Compared to models with an AC motor, power consumption is reduced.

Comparison between new and previous power consumption
(New model: Fan speed 4 at 230V 50Hz, Previous model: Extra-High at 220V 50Hz)



Improved Air Volume Range

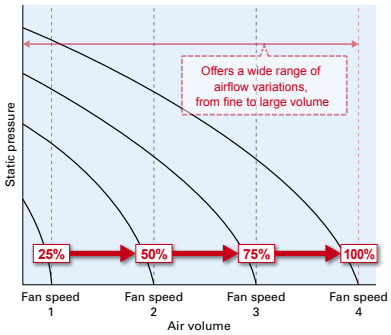
Wide range air volume

Each fan speed has a range setting of 25, 50, 75 and 100%, allowing much finer air volume control. When used in combination with the CO_2 sensor or timer function, the air volume can be controlled according to conditions that realize better performance and reduce power consumption.

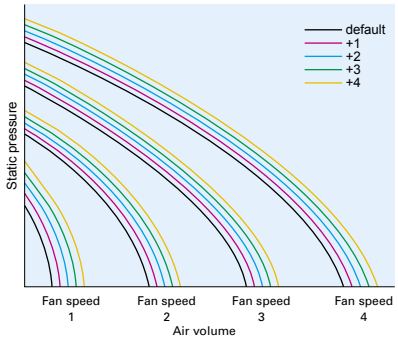
Fan speed adjustment function

The default fan speed value can be adjusted slightly. Use the PZ-61DR-E remote controller to reset the speed.
1) Considering the total hours of Lossnay operation (filter clogging), the fan power can be adjusted automatically after a given period of time.
2) After the unit is installed, when if the air volume is slightly lower than the desired airflow, it is possible to make fine adjustments.

■ **LGH-RVX/RVXT series model characteristic curves**



■ **P-Q curve image**



LGH-RVXT (Thinner body type)

The LGH-RVXT series have a large air volume of 1500 - 2500 CMH, but has a thin body @500mm. Installing the unit behind the ceiling is easy.

■ **LGH-150/200RVX-E**

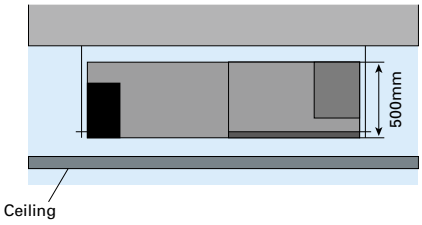
Height: 808mm

■ **LGH-150/200/250RVXT-E**

Height: 500mm

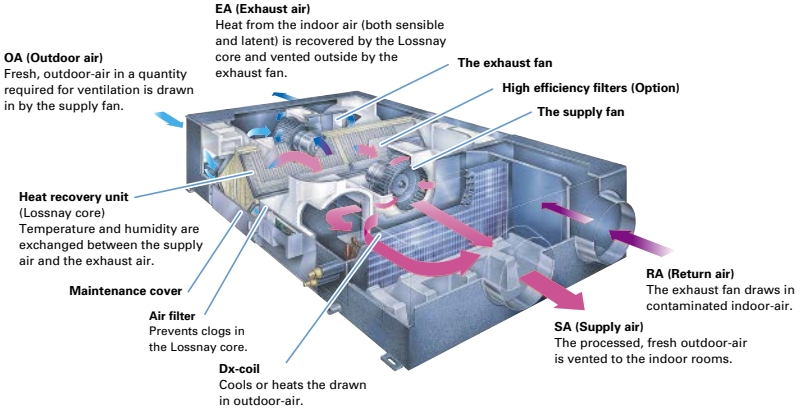
38% Thinner body

■ **LGH-RVXT Installation image**



GUF Series (Lossnay with Dx-coil unit)

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy.



Commercial Use Lossnay Specifications

LGH-RVX Series

Model		LGH-15RVX-E								LGH-25RVX-E								LGH-35RVX-E							
Electrical power supply		220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		0.40	0.24	0.15	0.10	0.41	0.25	0.15	0.10	0.48	0.28	0.16	0.10	0.48	0.29	0.16	0.11	0.98	0.54	0.26	0.12	0.98	0.56	0.28	0.13
Input power (W)		49	28	14	7	52	28	14	8	62	33	16	7.5	63	35	17	9	140	70	31	11	145	72	35	13
Air volume	(m^3/h)	150	113	75	38	150	113	75	38	250	188	125	63	250	188	125	63	350	263	175	88	350	263	175	88
	(L/s)	42	31	21	10	42	31	21	10	69	52	35	17	69	52	35	17	97	73	49	24	97	73	49	24
External static pressure (Pa)		95	54	24	6	95	54	24	6	85	48	21	5	85	48	21	5	160	90	40	10	160	90	40	10
Temperature exchange efficiency (%)		80	81	83	84	–	–	–	–	79	80	82	86	–	–	–	–	80	82.5	86	88.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	73	75.5	78	79	–	–	–	–	69.5	72	76	83	–	–	–	–	71.5	74	78.5	83.5	–	–	–	–
	Cooling	71	74.5	78	79	–	–	–	–	68	70	74.5	83	–	–	–	–	71	73	78	82	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of unit in an anechoeic chamber)		28	24	19	17	29	24	19	18	27	22	20	17	27.5	23	20	17	32	28	20	17	32.5	28	20	18
Weight (kg)		20								23								30							
Specific energy consumption class		A								A								–							

Model		LGH-50RVX-E								LGH-65RVX-E								LGH-80RVX-E							
Electrical power supply		220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		1.15	0.59	0.26	0.13	1.15	0.59	0.27	0.13	1.65	0.90	0.39	0.15	1.72	0.86	0.38	0.16	1.82	0.83	0.36	0.15	1.97	0.86	0.40	0.15
Input power (W)		165	78	32	12	173	81	35	14	252	131	49	15	262	131	47	17	335	151	60	18	340	151	64	20
Air volume	(m^3/h)	500	375	250	125	500	375	250	125	650	488	325	163	650	488	325	163	800	600	400	200	800	600	400	200
	(L/s)	139	104	69	35	139	104	69	35	181	135	90	45	181	135	90	45	222	167	111	56	222	167	111	56
External static pressure (Pa)		120	68	30	8	120	68	30	8	120	68	30	8	120	68	30	8	150	85	38	10	150	85	38	10
Temperature exchange efficiency (%)		78	81	83.5	87	–	–	–	–	77	81	84	86	–	–	–	–	79	82.5	84	85	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	69	71	75	82.5	–	–	–	–	68.5	71	76	82	–	–	–	–	71	73.5	78	81	–	–	–	–
	Cooling	66.5	68	72.5	82	–	–	–	–	66	69.5	74	81	–	–	–	–	70	72.5	78	81	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of unit in an anechoeic chamber)		34	28	19	18	35	29	20	18	34.5	29	22	18	35.5	29	22	18	34.5	30	23	18	36	30	23	18
Weight (kg)		33								38								48							

Model		LGH-100RVX-E								LGH-150RVX-E								LGH-200RVX-E							
Electrical power supply		220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		2.50	1.20	0.50	0.17	2.50	1.20	0.51	0.19	3.71	1.75	0.70	0.29	3.85	1.78	0.78	0.30	4.88	2.20	0.88	0.33	4.54	2.06	0.87	0.35
Input power (W)		420	200	75	21	420	200	75	23	670	311	123	38	698	311	124	44	850	400	153	42	853	372	150	49
Air volume	(m^3/h)	1000	750	500	250	1000	750	500	250	1500	1125	750	375	1500	1125	750	375	2000	1500	1000	500	2000	1500	1000	500
	(L/s)	278	208	139	69	278	208	139	69	417	313	208	104	417	313	208	104	556	417	278	139	556	417	278	139
External static pressure (Pa)		170	96	43	11	170	96	43	11	175	98	44	11	175	98	44	11	150	84	38	10	150	84	38	10
Temperature exchange efficiency (%)		80	83	86.5	89.5	–	–	–	–	80	82.5	84	85	–	–	–	–	80	83	86.5	89.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	72.5	74	78	87	–	–	–	–	72	73.5	78	81	–	–	–	–	72.5	74	78	87	–	–	–	–
	Cooling	71	73	77	85.5	–	–	–	–	70.5	72.5	78	81	–	–	–	–	71	73	77	85.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of unit in an anechoeic chamber)		37	31	23	18	38	32	24	18	39	32	24	18	40.5	33	26	18	40	36	28	18	41	36	27	19
Weight (kg)		54								98								110							

LGH-RVXT Series

Model		LGH-150RVXT-E								LGH-200RVXT-E								LGH-250RVXT-E							
Electrical power supply		220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz								220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode				Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		4.30	2.40	1.10	0.36	3.40	1.80	0.77	0.31	5.40	2.70	1.10	0.39	5.00	2.20	0.85	0.34	7.60	3.60	1.40	0.57	6.90	3.10	1.30	0.49
Input power (W)		792	421	176	48	625	334	134	37	1000	494	197	56	916	407	150	45	1446	687	244	82	1298	587	212	69
Air volume	(m^3/h)	1500	1125	750	375	1500	1125	750	375	2000	1500	1000	500	2000	1500	1000	500	2500	1875	1250	625	2500	1875	1250	625
	(L/s)	417	313	208	104	417	313	208	104	556	417	278	139	556	417	278	139	694	521	347	174	694	521	347	174
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11	175	98	44	11	175	98	44	11	175	98	44	11	175	98	44	11
	Return	100	56	25	6	100	56	25	6	100	56	25	6	100	56	25	6	100	56	25	6	100	56	25	6
Temperature exchange efficiency (%)		80	80.5	81	81.5	–	–	–	–	80	81	82.5	84	–	–	–	–	77	79	80.5	82.5	–	–	–	–
Enthalpy exchange efficiency (%)	Heating	70	71	73	75	–	–	–	–	72.5	73.5	77	83	–	–	–	–	68	71.5	74	79	–	–	–	–
	Cooling	69	70	72	74	–	–	–	–	70	71	74.5	80.5	–	–	–	–	65.5	69	71.5	76.5	–	–	–	–
Noise (dB) (Measured at 1.5m under the center of unit in an anechoeic chamber)		39.5	35.5	29.5	22	39	33	26.5	20.5	39.5	35.5	28	22	40.5	34.5	27	20.5	43	39	32	24	44	38.5	31	22.5
Weight (kg)		156								159								198							

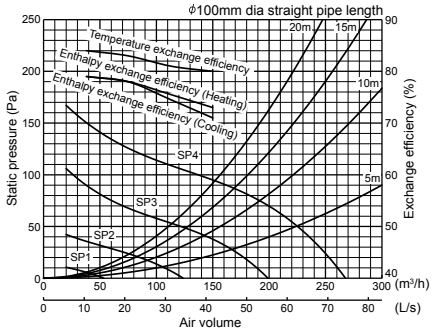
GUF Series

Model		GUF-50RD4				GUF-100RD4				GUF-50RDH4				GUF-100RDH4			
Electrical power supply		220-240V/50Hz				220-240V/50Hz				220-240V/50Hz				220-240V/50Hz			
Ventilation mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode		Heat recovery mode		Bypass mode	
Fan speed		High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Running current (A)		1.15	0.70	1.15	0.70	2.20	1.73	2.25	1.77	1.15	0.70	1.15	0.70	2.20	1.76	2.25	1.77
Input power (W)		235-265	150-165	235-265	150-165	480-505	370-395	490-515	385-410	235-265	150-165	235-265	150-165	480-505	385-400	490-515	385-410
Air volume	(m^3/h)	500	400	500	400	1000	800	1000	800	500	400	500	400	1000	800	1000	800
	(L/s)	139	111	139	111	278	222	278	222	139	111	139	111	278	222	278	222
External static pressure (Pa)		140	90	140	90	140	90	140	90	125	80	125	80	135	86	135	86
Temperature exchange efficiency (%)		77.5	80	–	–	79.5	81.5	–	–	77.5	80	–	–	79.5	81.5	–	–
Enthalpy exchange efficiency (%)	Heating	68	71	–	–	71	74	–	–	68	71	–	–	71	74	–	–
	Cooling	65	67	–	–	69	71	–	–	65	67	–	–	69	71	–	–
Cooling capacity (kW)		5.57 (1.94)				11.44 (4.12)				5.57 (1.94)				11.44 (4.12)			
Heating capacity (kW)		6.21 (2.04)				12.56 (4.26)				6.21 (2.04)				12.56 (4.26)			
Capacity equivalent to the indoor unit		P32				P63				P32				P63			
Humidifier	Humidifying	–				–				Permeable film humidifier							
	Humidifying capacity(kg/h)	–				–				2.7 (heating)				5.4 (heating)			
	Water supply pressure	–				–				Minimum pressure : 2.0 × 10^4Pa				Maximum pressure : 49.0 × 10^4Pa			
Noise (dB) (Measured at 1.5m under the center of the unit)		33.5-34.5	29.5-30.5	35-36	29.5-30.5	38-39	34-35	38-39	35-36	33.5-34.5	29.5-30.5	35-36	29.5-30.5	38-39	34-35	38-39	35-36
Weight (kg)		48				82				51 (filled with water 55)				88 (filled with water 96)			

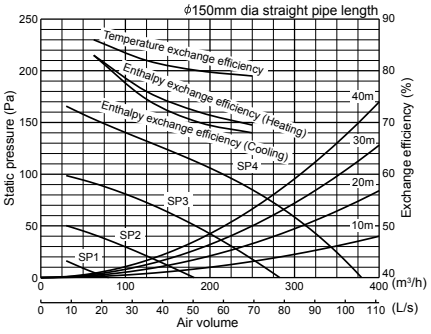
■For LGH-RVX and LGH-RVXT series
*The running current, the input power, the efficiency and the noise are based on the rating air volume, and 230V/50Hz.
*For the specification at the other frequency contact your dealer.
*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.
■For GUF series
*Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling: Indoor: 27°C DB/19°C WB Outdoor: 35°C DB/24°C WB
Heating: Indoor: 20°C DB/13.8°C WB Outdoor: 7°C DB/6°C WB
*The figures in ( ) indicates heat recoverying capacity of heat exchange core.
*Figures in the chart are measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

Characteristic Curves

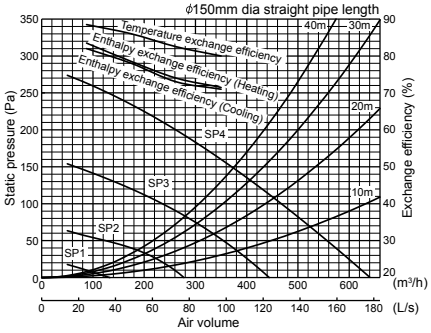
LGH-15RVX-E



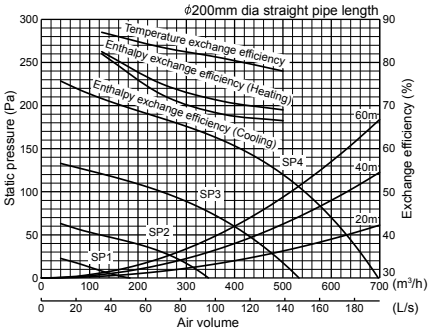
LGH-25RVX-E



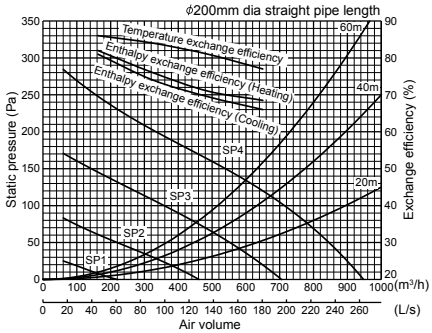
LGH-35RVX-E



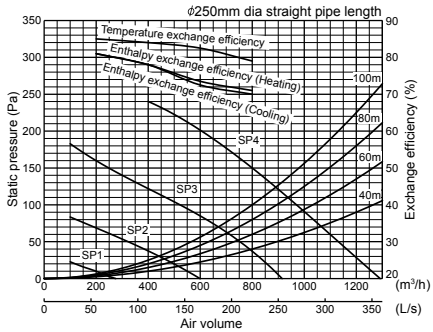
LGH-50RVX-E



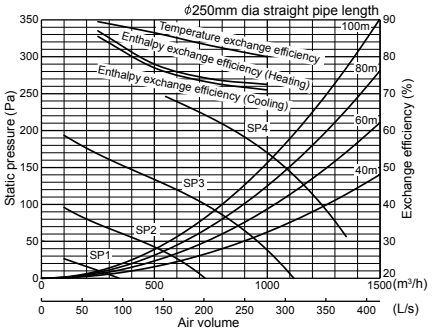
LGH-65RVX-E



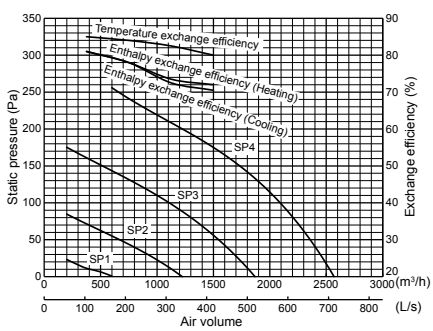
LGH-80RVX-E



LGH-100RVX-E



LGH-150RVX-E



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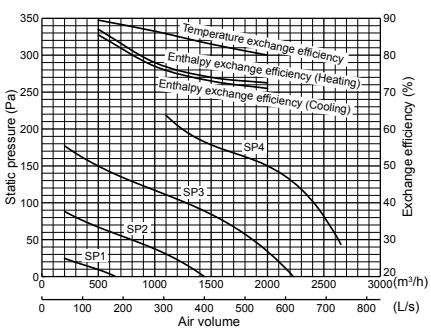
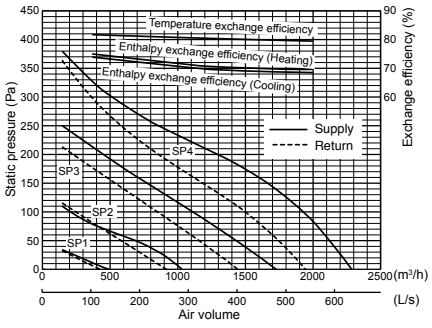


LGH-150RVXT-E



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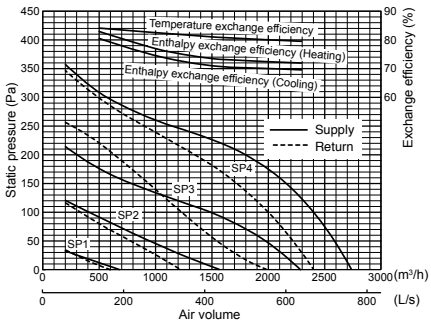

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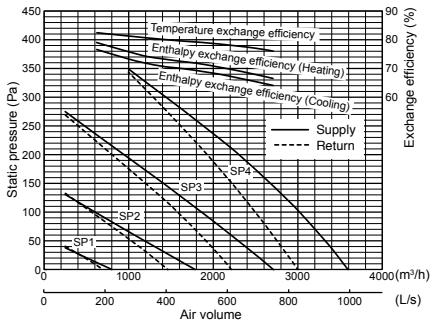
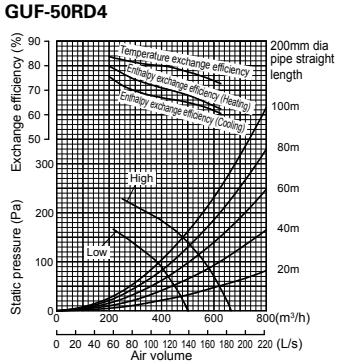


GUF-50RD4



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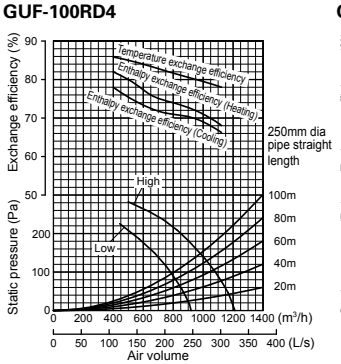
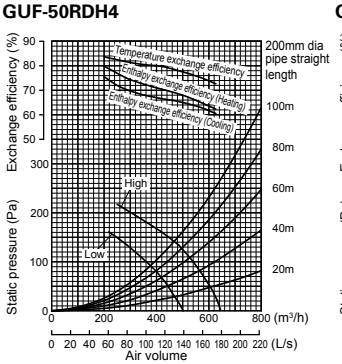


GUF-50RDH4



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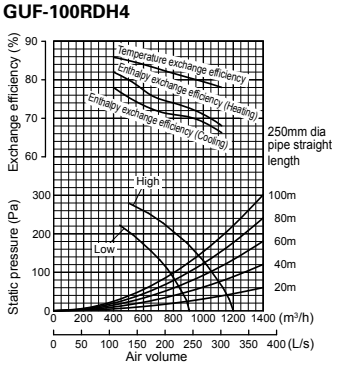
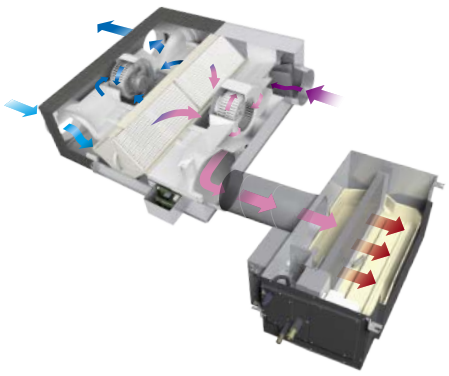


Optional Dx-coil Unit for Lossnay

Supply Comfortable Control

Product Features

- Lossnay return air and supply air temperature control are possible with Dx-coil unit which is connectable with Mr. Slim (Power inveter series)
- Expand the product line-up of Lossnay with temperature control (500-2,500CMH) by the connection of Dx-coil unit.
  Suitable for various applications such as offices, shops and schools etc.

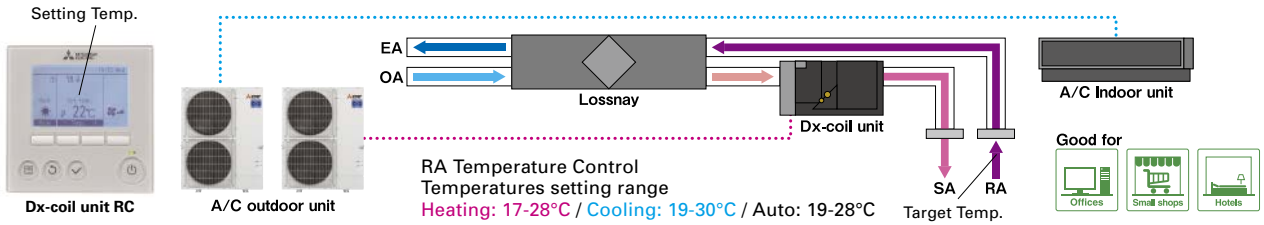


■ Target Application

Application Examples

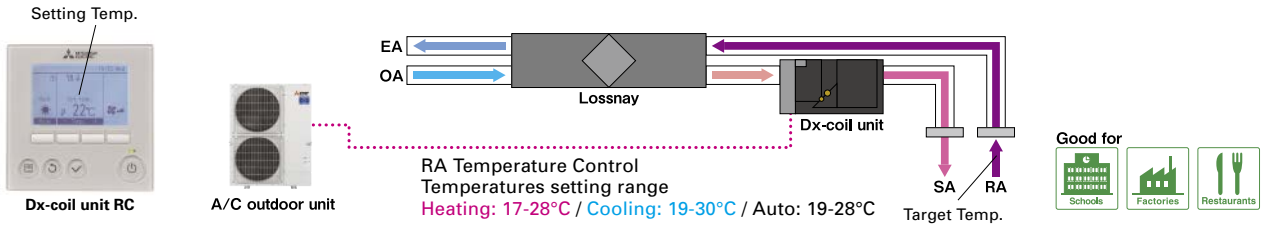
Supplemental Air-conditioning System (Return Air Temperature Control)

There may be the possibility of reducing 1 air-conditioning system by using return air temperature control as air-conditioning system.



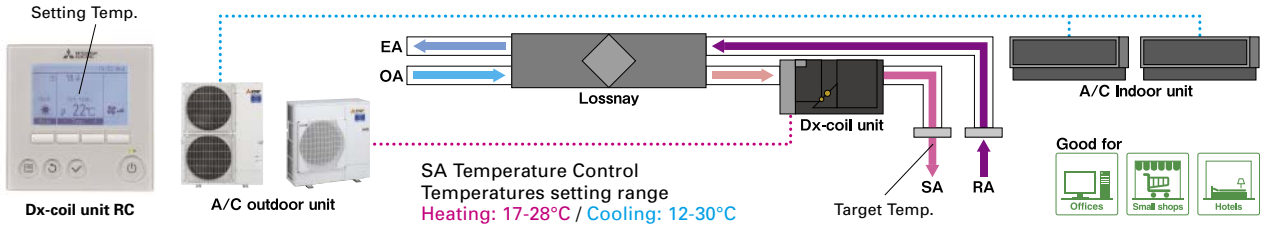
Main Air-conditioning System (Return Air Temperature Control)

Possible to use Lossnay + Dx-coil unit as main air-conditioning and ventilation system for lower air-conditioning load application.



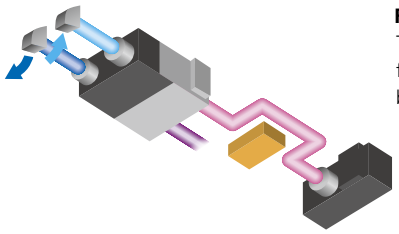
Outdoor Air Treatment System (Supply Air Temperature Control)

Controlling the temperature of outdoor air simplifies air-conditioning design and control.



*Example images of using LGH-RVXT series for reference only.

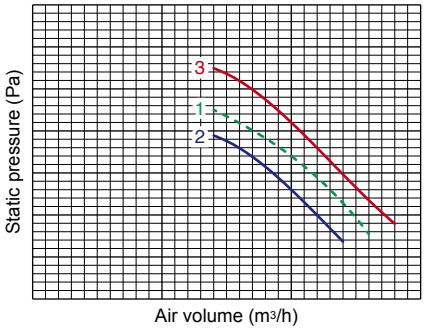
Flexible Installation



Flexible Connection to Lossnay

The length of the connection cable (accessory) between the Lossnay and Dx-coil unit is about 6m, so flexible installation is possible (two units can be installed close together or far apart with straight or bent ducting).

To Keep High Static Pressure

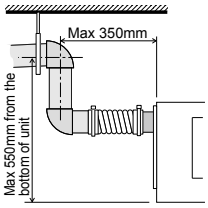


P-Q curve image
1. Lossnay unit
2. Lossnay unit + Dx-coil unit
3. Lossnay unit (fan power up +4) + Dx-coil unit

Dx-coil unit static pressure loss is kept to minimum, making it possible to maintain high static pressure using the fan power up function of the Lossnay. The fan power up function is only available when used with the PZ-61DR-E Lossnay remote controller.

Drain Pump Equipment

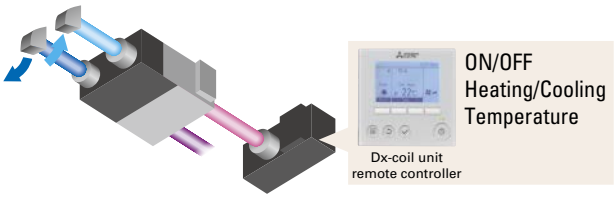
A built-in drain pump makes, attaching the drain hose in the ceiling cavity easy, resulting in simple and fast installation.



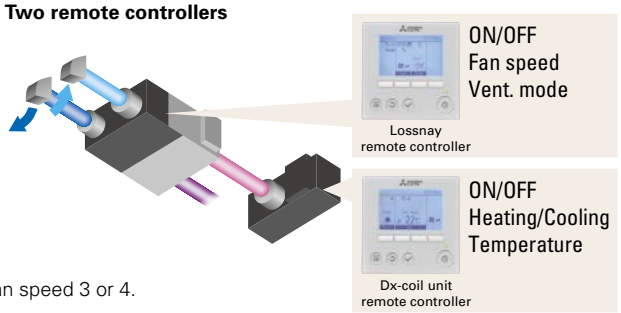
User-friendly System Control

Flexible Remote Controller Selection

(A) One remote controller



(B) Two remote controllers



When using only one remote controller, the Lossnay fan speed is fixed at fan speed 3 or 4.
When using two remote controllers, all of Lossnay function is available.
*1: Both of Lossnay unit and Dx-coil unit will synchronously switch to ON and OFF.
*2: When one of the two remote controllers is turned ON, the other remote controller turns ON synchronously.

Priority Mode Selection

Temperature priority mode (factory setting) or Fan speed priority mode are selectable when Lossnay unit fan speed is controlled by a CO_2-sensor or a BMS (analogue input (0-10VDC) or a volt-free input).

*During fan speed 1 or 2, the Dx-coil unit is always thermo-OFF

Operation mode	Fan speed order from external input	Actual fan speed	
		Temp. priority	Fan speed priority
Heating or Cooling	FS4	FS4	FS4
	FS3	FS3	FS3
	FS2	FS3	FS2
	FS1	FS3	FS1
Fan	FS4	FS4	FS4
	FS3	FS3	FS3
	FS2	FS2	FS2
	FS1	FS1	FS1

Specifications

GUG Series

GUG-01SL-E

GUG-02SL-E

GUG-03SL-E

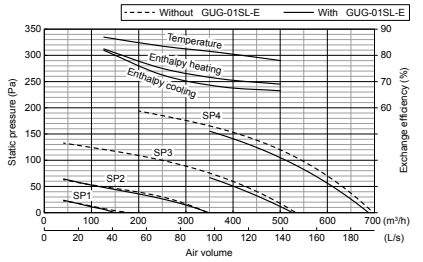
Model		GUG-01SL-E (Connection to LGH-50RVX-E or LGH-65RVX-E)				GUG-02SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)			
Refrigerant		R410A				R410A			
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)				220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)			
Input power		Heating / Fan: 2.5W, Cooling: 12.4W				Heating / Fan: 2.5W, Cooling: 12.4W			
Running current		Less than 0.1A				Less than 0.1A			
Weight		21kg *Accessories: Approx. 1kg				26kg *Accessories: Approx. 1kg			
Function		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control				Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control			
		RA (Return Air) temperature control				RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]			
RA (Return Air) temperature control									
Connectable Lossnay unit		LGH-50RVX-E				LGH-65RVX-E			
Capacity [kW]	Heating	6.5 (2.4 + 4.1)				7.7 (3.2 + 4.5)			
	Cooling	5.6 (2.0 + 3.6)				6.6 (2.6 + 4.0)			
SHF		0.66				0.69			
Performance index	Heating	4.09				4.72			
	Cooling	4.69				5.03			
Air flow range at SP3 and SP4		350 - 695 m^3/h				350 - 900 m^3/h			
Connectable outdoor unit		PUHZ-ZRP35				PUHZ-ZRP35			
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7				Diameter Liquid / Gas: 6.35 / 12.7			
		Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m			
Required optional parts		–				–			
SA (Supply Air) temperature control									
Connectable Lossnay unit		–				–			
Capacity [kW]	Heating	–				–			
	Cooling	–				–			
SHF		–				–			
Performance index	Heating	–				–			
	Cooling	–				–			
Air flow range at SP3 and SP4		–				–			
Connectable outdoor unit		–				–			
Ext. piping		–				–			
		–				–			
Required optional parts		–				–			
Ventilation specifications									
Connectable Lossnay unit		LGH-50RVX-E				LGH-65RVX-E			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Air Volume	[m^3/h]	500	375	250	125	650	488	325	163
	[L/s]	139	104	69	35	181	135	90	45
External static pressure [Pa]		105	59	26	7	95	53	24	6

Model		GUG-01SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)				GUG-02SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)			
Refrigerant		R410A				R410A			
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)				220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)			
Input power		Heating / Fan: 2.5W, Cooling: 12.4W				Heating / Fan: 2.5W, Cooling: 12.4W			
Running current		Less than 0.1A				Less than 0.1A			
Weight		26kg *Accessories: Approx. 1kg				26kg *Accessories: Approx. 1kg			
Function		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control				Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control			
		RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]				RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]			
RA (Return Air) temperature control									
Connectable Lossnay unit		LGH-80RVX-E				LGH-100RVX-E			
Capacity [kW]	Heating	10.0 (4.0 + 6.0)				13.2 (5.1 + 8.1)			
	Cooling	8.3 (3.3 + 5.0)				11.3 (4.2 + 7.1)			
SHF		0.69				0.66			
Performance index	Heating	4.62				4.42			
	Cooling	4.76				4.98			
Air flow range at SP3 and SP4		560 - 1200 m^3/h				700 - 1200 m^3/h			
Connectable outdoor unit		PUHZ-ZRP50				PUHZ-ZRP71			
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7				Diameter Liquid / Gas: 9.52 / 15.88			
		Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m			
Required optional parts		PAC-SH30RJ-E and PAC-SH50RJ-E				–			
SA (Supply Air) temperature control									
Connectable Lossnay unit		LGH-80RVX-E				LGH-100RVX-E			
Capacity [kW]	Heating	10.0 (4.0 + 6.0)				11.4 (5.1 + 6.3)			
	Cooling	8.3 (3.3 + 5.0)				9.5 (4.2 + 5.3)			
SHF		0.69				0.73			
Performance index	Heating	4.62				5.09			
	Cooling	4.76				5.43			
Air flow range at SP3 and SP4		560 - 1200 m^3/h				700 - 1200 m^3/h			
Connectable outdoor unit		PUHZ-ZRP50				PUHZ-ZRP50			
Ext. piping		Diameter Liquid / Gas: 6.35 / 12.7				Diameter Liquid / Gas: 6.35 / 12.7			
		Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m			
Required optional parts		PAC-SH30RJ-E and PAC-SH50RJ-E				PAC-SH30RJ-E and PAC-SH50RJ-E			
Ventilation specifications									
Connectable Lossnay unit		LGH-80RVX-E				LGH-100RVX-E			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Air Volume	[m^3/h]	800	600	400	200	1,000	750	500	250
	[L/s]	222	167	111	56	278	208	139	69
External static pressure [Pa]		130	73	33	8	130	73	33	8

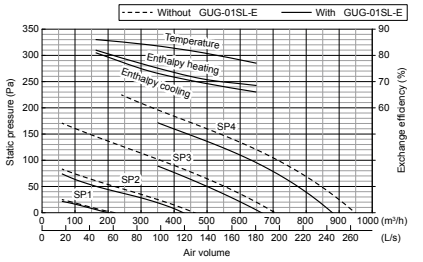
Model		GUG-03SL-E (Connection to LGH-150RVX-E or LGH-200RVX-E)								GUG-03SL-E (Connection to LGH-150RVXT-E, LGH-200RVXT-E or LGH-250RVXT-E)											
Refrigerant		R410A																			
Electrical power supply		220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)																			
Input power		Heating / Fan: 2.5W, Cooling: 12.4W																			
Running current		Less than 0.1A																			
Weight		28kg *Accessories: Approx. 1kg																			
Function		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control																			
		RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]																			
RA (Return Air) temperature control																					
Connectable Lossnay unit		LGH-150RVX-E				LGH-200RVX-E				LGH-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E			
Capacity [kW]	Heating	20.7 (7.7 + 13.0)				23.8 (10.3 + 13.5)				20.4 (7.4 + 13.0)				23.8 (10.3 + 13.5)				26.1 (12.1 + 14.0)			
	Cooling	15.8 (6.3 + 9.5)				18.4 (8.4 + 10.0)				15.7 (6.2 + 9.5)				18.4 (8.4 + 10.0)				22.3 (9.8 + 12.5)			
SHF		0.68				0.76				0.68				0.76				0.87			
Performance index	Heating	4.24				5.02				4.07				4.86				4.75			
	Cooling	5.27				5.86				5.03				5.59				4.59			
Air flow range at SP3 and SP4		1050 - 2250 m^3/h				1050 - 2600 m^3/h				1050 - 2250 m^3/h				1050 - 2600 m^3/h				1750 - 2880 m^3/h			
Connectable outdoor unit		PUHZ-ZRP100				PUHZ-ZRP100				PUHZ-ZRP100				PUHZ-ZRP100				PUHZ-ZRP125			
Ext. piping		Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88			
		Maximum length: 75m, Maximum height: 30m				Maximum length: 75m, Maximum height: 30m				Maximum length: 75m, Maximum height: 30m				Maximum length: 75m, Maximum height: 30m				Maximum length: 75m, Maximum height: 30m			
SA (Supply Air) temperature control																					
Connectable Lossnay unit		LGH-150RVX-E				LGH-200RVX-E				LGH-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E			
Capacity [kW]	Heating	16.6 (7.7 + 8.9)				19.5 (10.3 + 9.2)				16.3 (7.4 + 8.9)				19.5 (10.3 + 9.2)				21.6 (12.1 + 9.5)			
	Cooling	13.4 (6.3 + 7.1)				15.9 (8.5 + 7.4)				13.3 (6.2 + 7.1)				15.9 (8.5 + 7.4)				17.6 (9.8 + 7.8)			
SHF		0.85				0.90				0.86				0.90				0.95			
Performance index	Heating	5.46				6.30				5.16				6.01				5.97			
	Cooling	5.32				5.85				5.03				5.54				5.31			
Air flow range at SP3 and SP4		1050 - 2250 m^3/h				1050 - 2600 m^3/h				1050 - 2250 m^3/h				1050 - 2600 m^3/h				1000 - 2600 m^3/h			
Connectable outdoor unit		PUHZ-ZRP71				PUHZ-ZRP71				PUHZ-ZRP71				PUHZ-ZRP71				PUHZ-ZRP71			
Ext. piping		Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid / Gas: 9.52 / 15.88			
		Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m				Maximum length: 50m, Maximum height: 30m			
Ventilation specifications																					
Connectable Lossnay unit		LGH-150RVX-E				LGH-200RVX-E				LGH-150RVXT-E				LGH-200RVXT-E				LGH-250RVXT-E			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Air Volume	[m^3/h]	1,500	1,125	750	375	2,000	1,500	1,000	500	1,500	1,125	750	375	2,000	1,500	1,000	500	2,500	1,875	1,250	625
	[L/s]	417	313	208	104	556	417	278	139	417	313	208	104	556	417	278	139	694	521	347	174
External static pressure [Pa]		150	84	38	9	105	59	26	7	150	84	38	9	145	82	36	9	140	79	35	9

Characteristic Curves

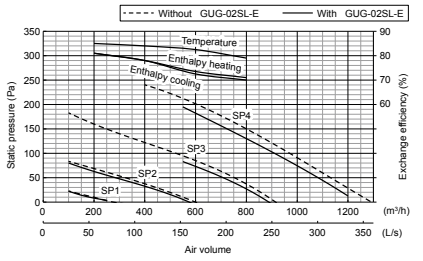
LGH-50RVX-E



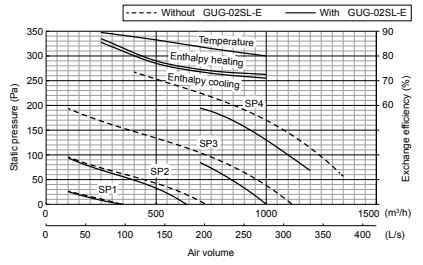
LGH-65RVX-E



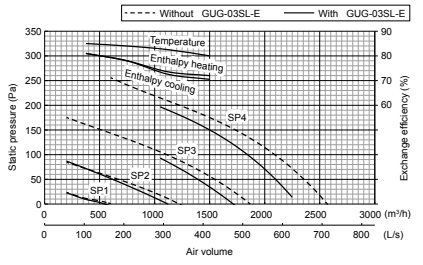
LGH-80RVX-E



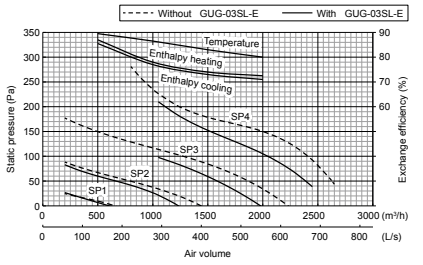
LGH-100RVX-E



LGH-150RVX-E

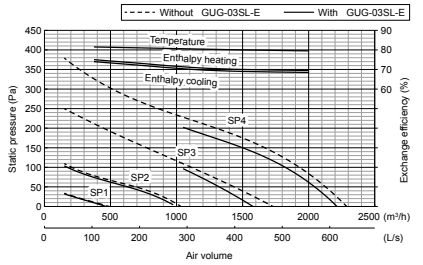


LGH-200RVX-E

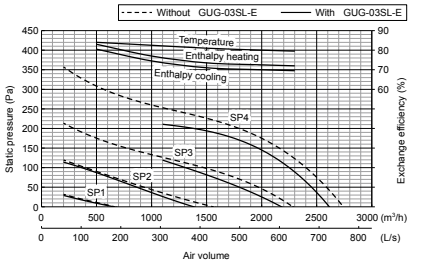


***Note The graphs below show the supply air only.**

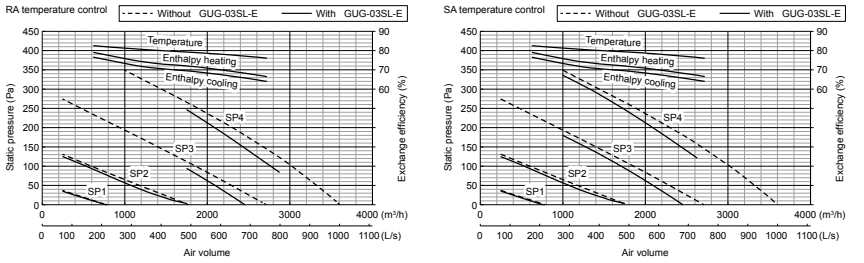
LGH-150RVXT-E



LGH-200RVXT-E



LGH-250RVXT-E



Attention

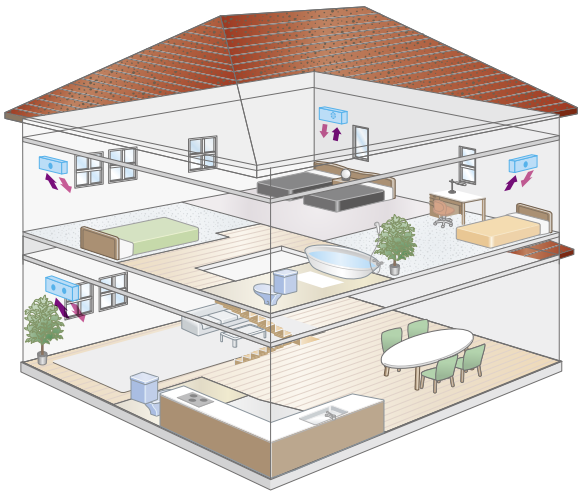
1. The running current and input power are based on 230V/50Hz.
2. The cooling and heating capacities are based on the air conditions listed below and the rated airflow of fan speed 4.
   Cooling Indoor: 27°CDB/19°CWB Outdoor: 35°CDB/24°CWB
   Heating Indoor: 20°CDB/15°CWB Outdoor: 7°CDB/6°CWB
3. The first figure in ( ) of the capacity specification is the heat recovery energy of the Lossnay unit. The second figure is the capacity specification for the Dx-coil connected to the outdoor unit.
4. "Performance index" is the calculated value at the temperature conditions above and is reference purpose only.
   Performance index = Total capacity ÷ total power consumption of outdoor unit and Lossnay unit
5. The external static pressure listed in the tables includes the static pressure loss of the Dx-coil unit when using a 50cm straight duct between the Lossnay and Dx-coil units. When the duct work between the Lossnay and Dx-coil units is longer and/or bent, the pressure loss of the duct work should be included in the pressure loss calculation.
6. The designed airflow of the system (Lossnay, Dx-coil and duct work) at fan speed 3 and 4 should be kept within "Airflow range at SP3 and SP4" listed in the tables. This range is shown as the solid line in graphs of the characteristics curve. If the Lossnay airflow is out of this range, the compressor of the outdoor unit may stop for self-protection purposes.
7. By installing the Dx-coil unit with a Lossnay unit, the air blow noise level is quieter at fan speed 4.
   Please refer to the "Direct Expansion coil unit for Lossnay" catalogue.
8. 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.

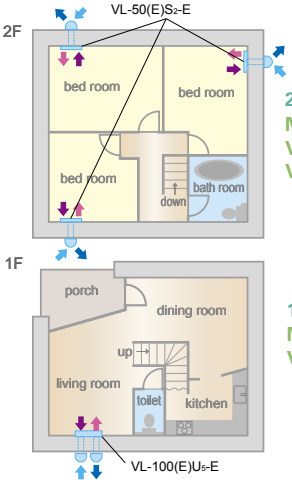
Residential Use Lossnay

Mitsubishi Electric offers you decentralized ventilation and centralized ventilation solutions for optimising your indoor air quality by Lossnay.

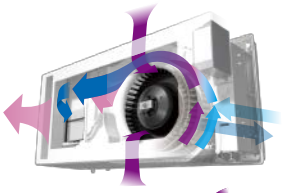
Decentralized Ventilation Solution

Install the wall mounted Lossnay in each room.
The heat recovery system provides fresh air at a comfortable air temperature.
Total heat exchangers effectively reduce heat loss.

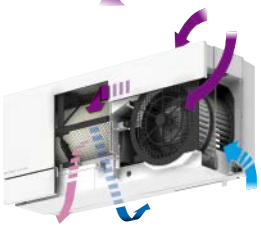




2F
Model:
VL-50(E)S_2-E
VL-50SR_2-E

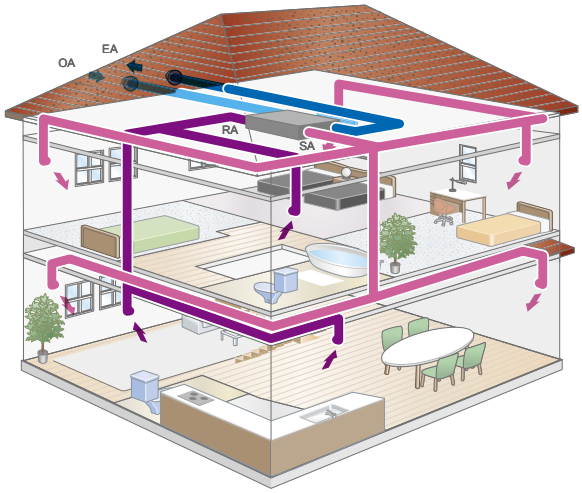


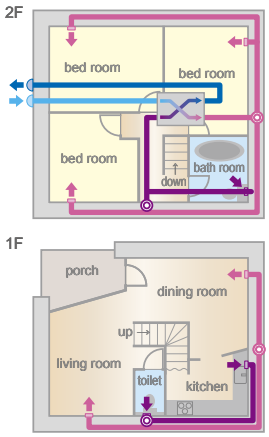
1F
Model:
VL-100(E)U_5-E

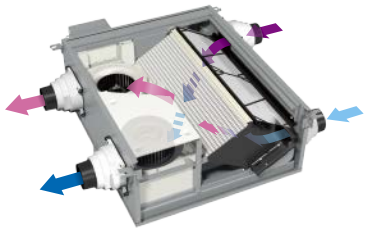


Centralized Ventilation Solution

One Lossnay unit provides 24-hour ventilation for the entire house, from living room and bedrooms to the bathroom. The heat recovery system provides fresh air at a comfortable air temperature. Sensible heat exchanger effectively reduces excess humidity in the winter.







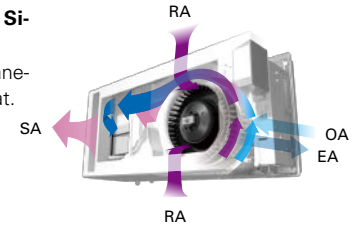
Model:
VL-220CZGV-E

Decentralized ventilation: VL-50(E)S2-E, VL-50SR2-E and VL-100(E)U5-E

Product Merit

Air supplied and Exhausted Simultaneously

Supply and exhaust air simutaneously while transferring the heat.

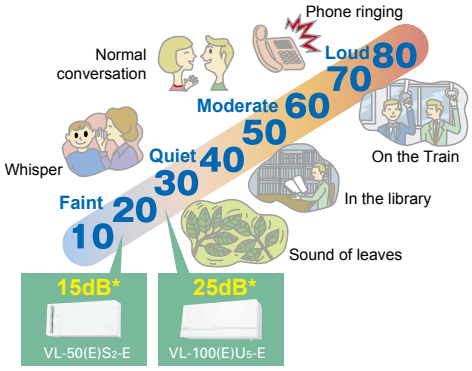


Energy Efficient

- Total heat exchanger minimizes heat loss.
- Achieve over 80%* temperature efficiency.

*VL-10D(E)U5-E at low fan speed in230V 50Hz
*VL-50(E)S2-E at low fan speed in 230V 50Hz

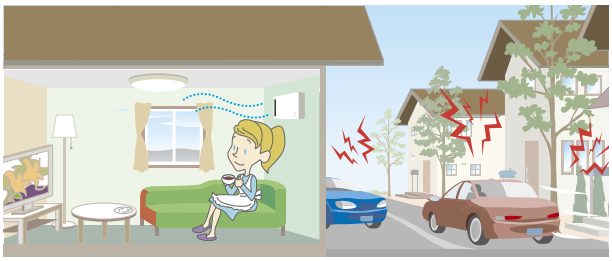
The low noise level is good for bedrooms and children's rooms.



*Condition: 50Hz, 230V, low fan speed

Sound Insulation

A sound insulation effect reduces noise generated outside.



Sound Insulation Effect	Sound Source Side Average sound pressure dB	Sound Receiving Side Average sound pressure dB	Difference
	103.4	63.2	40.2

*Tested based on VL-08S2-AE
*Measured by average sound pressure level of more than 30dB in 500Hz according to JIS A1416.
VL-08S2-AE is Japanese dedicated model with equivalent of VL-50(E)S2-E

Product Features

Stylish Design

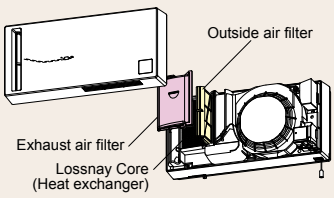
Match any interior décor to create a comfortable room.

VL-50(E)S2-E
VL-50SR2-E

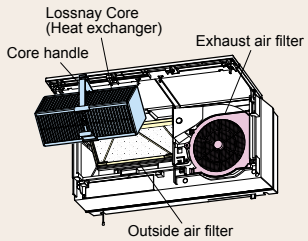
VL-100(E)U5-E

Easy Maintenance

The only maintenance required is cleaning the outside-air filter and exhaust-air filter. Filters are easily accessible, making quick and thorough cleaning possible.



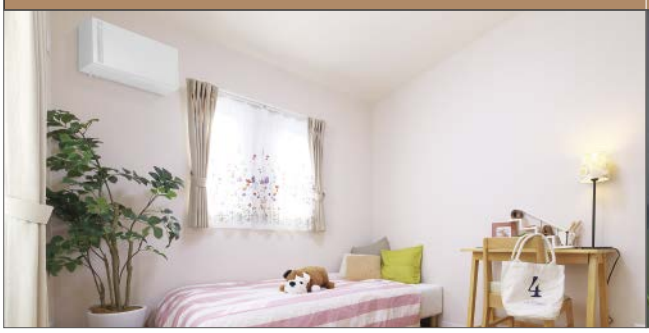
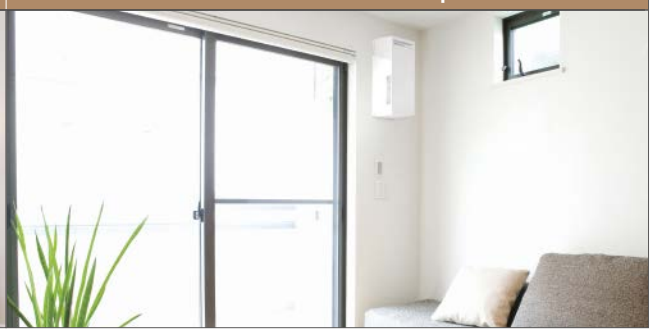
VL-50(E)S2-E



VL-100(E)U5-E

Flexible Installation for Only VL-50(E)S2-E and VL-50SR2-E

Not only horizontal installation but also vertical installation are available. It can fit various types of rooms with flexible installation.

Horizontal Installation	Vertical Installation Example
	

Centralized ventilation: VL-220CZGV-E

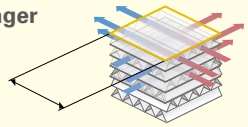
Product Merit

Newly Developed Heat Exchanger

- During ventilation, Lossnay recovers warmth in the winter and keeps air cool in the summer.
- Reducing heating and cooling loads with a maximum exchange efficiency of 86%*.

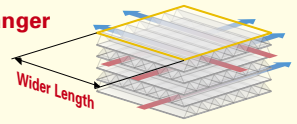
Normal Square Heat Exchanger

Simple structure contributes to minimize pressure loss and reduce power consumption.



New Diamond Heat Exchanger

Due to the diamond design, air passages are longer and help realize higher exchange efficiency.



Energy Efficient

- The highest energy-saving performance in its class. (8.5W* minimum input power)
- Saves heating and cooling costs by minimizing energy loss that occurs during ventilation.

Quiet

- At an ultra quiet 14dB*, it is the quietest product in its class.
- Blocks outside noise for a more comfortable environment.

*Fan speed 1

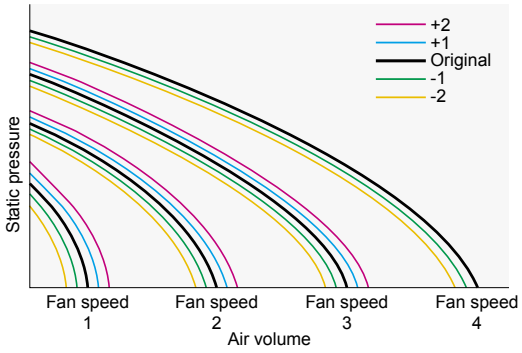
Product Features

Fan Speed Precise Adjustment Function

Each main fan speed value can be further adjusted slightly.
Use the PZ-61DR-E remote controller to adjust the speed.

1) Considering the total hours of Lossnay opertaion (filter clogging), the fan power can be adjusted automatically after a given period of time.
2) After the unit is installed, when if the air volume is slightly lower or higher than the desired air flow, it is possible to make a fine adjustments. (Fan speed 4 is available only 1 down and 2 down)

■P-Q curve image



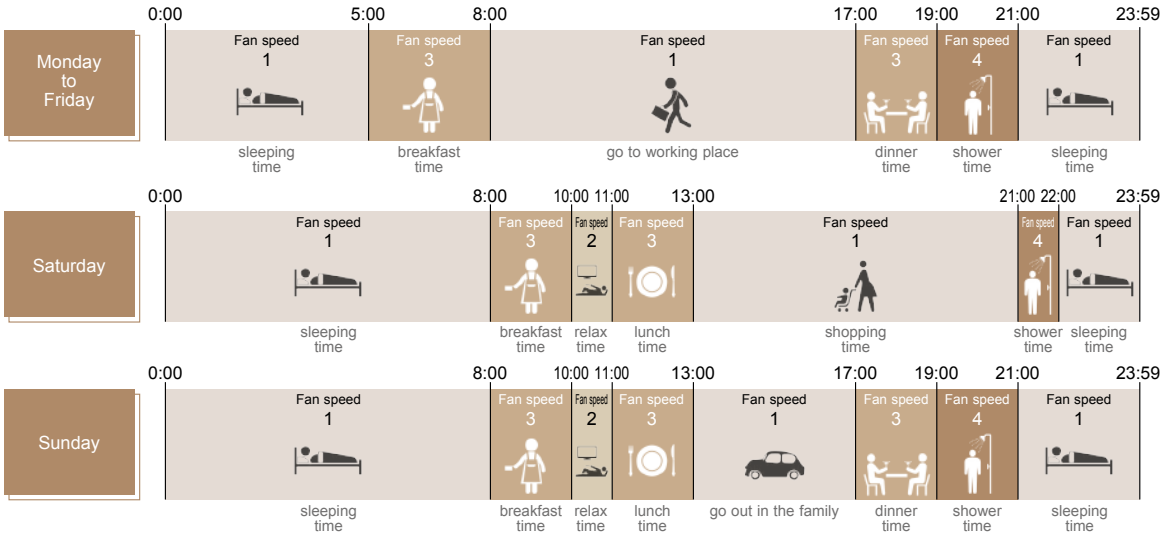
Multi Ventilation (Power Supply and Exhausted) Mode

This mode allows the air supply/ exhaust balance to be varied dynamically. The supply/ exhaust balance can be selected to suit the usage environment.

Normal Mode	Power Supply Mode		Power Exhaust Mode	
Relax time	Adjust the indoor pressure balance in case a separate exhaust is installed	Increase indoor pressure to prevent unfiltered drafts from coming in	Keep steam inside of the shower room	Prevent odors from spreading

Weekly Timer

Operation patterns for each day of the week. ON/OFF and airflow can be set using the weekly timer function (up to eight zones per day). This function contributes to enhanced energy-saving operation.



*Example for reference only.

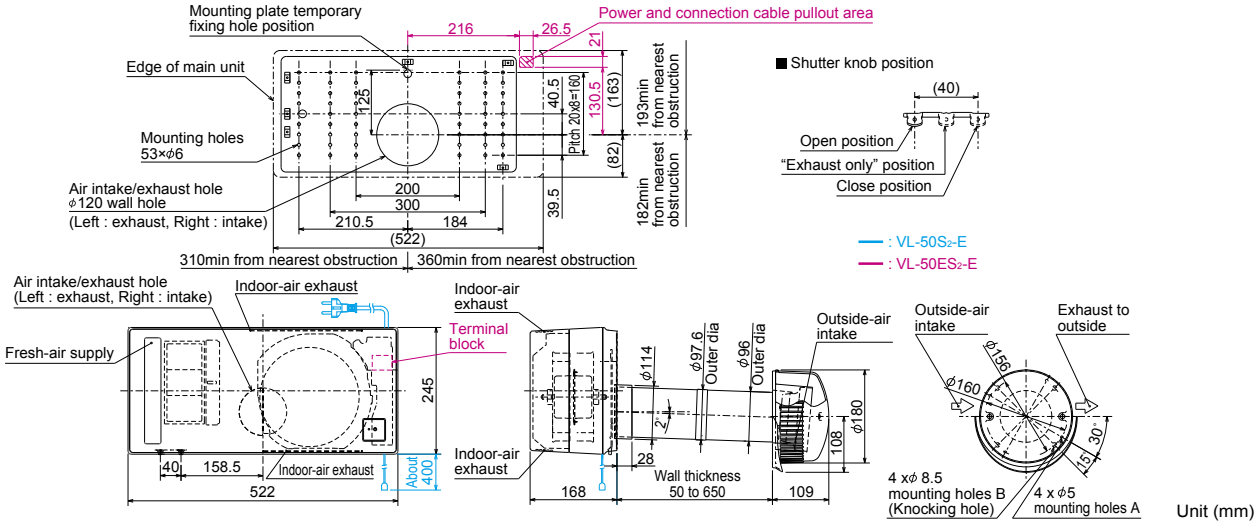
Residential Lossnay Specifications

Model: VL-50S$_2$-E (Pull-Switch Model), VL-50ES$_2$-E (Wall-Switch Model)

Model	VL-50(E)S$_2$-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Air volume (m^3/h)	51	15	52.5	16	54	17	54	17
Power consumption (W)	19	4	20	4.5	21	5	21	5.5
Temperature exchange efficiency (%)	70	86	69	85	68	84	68	84
Noise level (dB)	36.5	14	37	15	37.5	15.5	37.5	15.5
Weight (kg)	6.2							
Specific energy consumption class	C							

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628) on shutter knob open position.

Dimensions



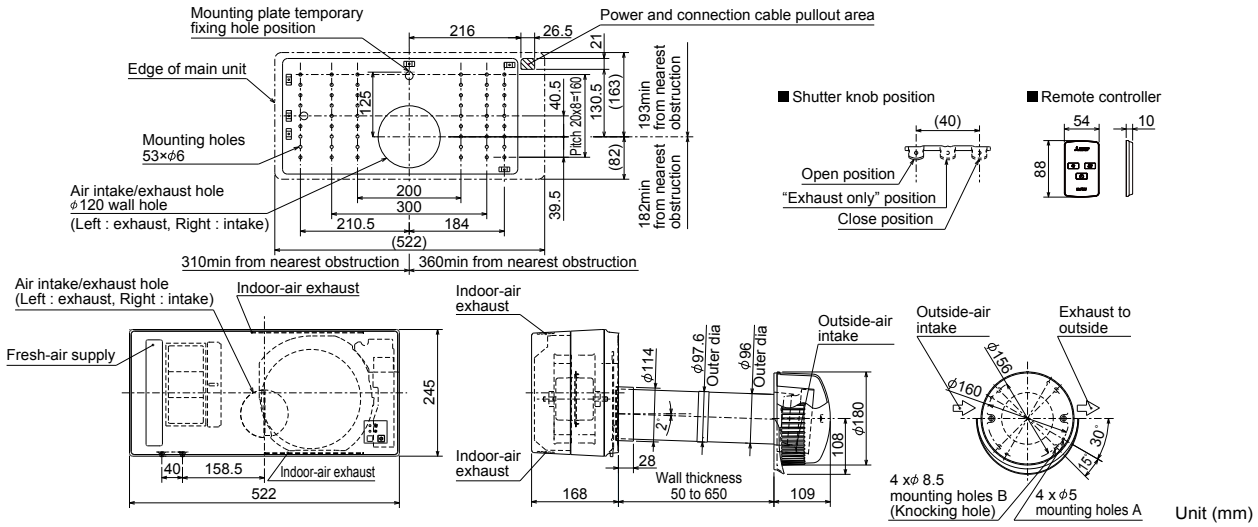
Unit (mm)

Model: VL-50SR$_2$-E (Remote Controller Model)

Model	VL-50SR$_2$-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Air volume (m^3/h)	51	15	52.5	16	54	17	54	17
Power consumption (W)	19	4.5	20	5	21	5.5	21	6
Temperature exchange efficiency (%)	70	86	69	85	68	84	68	84
Noise level (dB)	36.5	14	37	15	37.5	15.5	37.5	15.5
Weight (kg)	6.2							
Specific energy consumption class	C							

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628) on shutter knob open position.

Dimensions



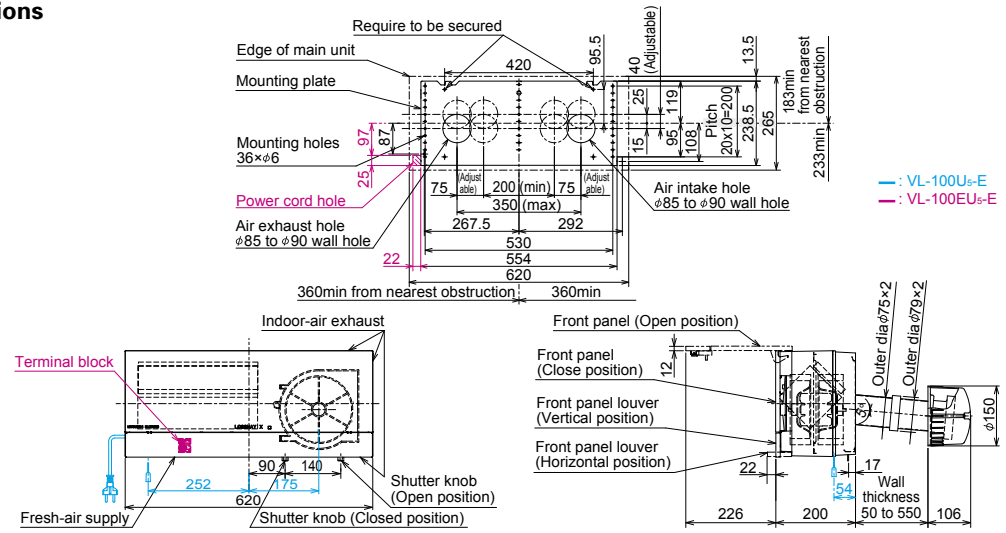
Unit (mm)

Model: VL-100U5-E (Pull-Switch Model), VL-100EU5-E (Wall-Switch Model)

Model	VL-100(E)U5-E							
Electrical power supply	220V/50Hz		230V/50Hz		240V/50Hz		220V/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low
Air volume (m³/h)	100	55	105	60	106	61	103	57
Power consumption (W)	30	13	31	15	34	17	34	17
Temperature exchange efficiency (%)	73	80	73	80	72	79	73	80
Noise level (dB)	36.5	24	37	25	38	27	38	25
Weight (kg)	7.5							
Specific energy consumption class	B							

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628) on shutter knob open position.

Dimensions



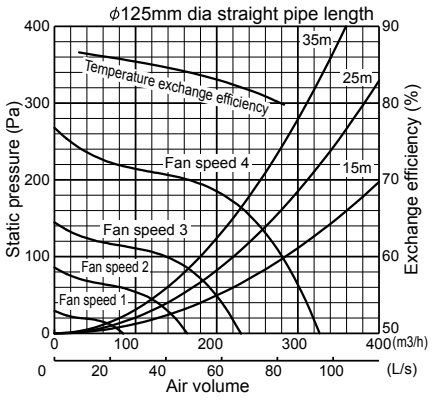
Unit (mm)

Model: VL-220CZGV-E

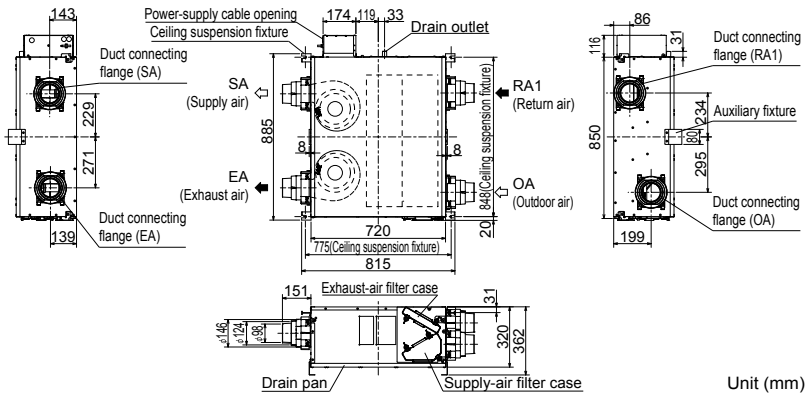
Model		VL-220CZGV-E			
Electrical power supply		220-240V/50Hz 220V/60Hz			
Ventilation mode		Heat recovery mode			
Fan speed		Fan speed 4	Fan speed 3	Fan speed 2	Fan speed 1
Running current		0.60	0.29	0.18	0.11
Input power (W)		80	35	18.5	8.5
Air volume	(m³/h)	230	165	120	65
	(L/s)	64	46	33	18
External static pressure (Pa)		164	84	44	13
Temperature exchange efficiency (%)		82	84	85	86
Noise level (dB)		31	25	19	14
Weight (kg)		31			
Specific energy consumption class		A			

*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

Characteristic Curve



Dimensions



Unit (mm)

Accessories

Optional Parts for VL-50(E)S$_2$-E and VL-50SR$_2$-E

Filter, Extension Pipe and Stainless Hood

Type	High Efficiency Filter	Replacement Filter	Extension Pipe	Joint	Stainless Hood
Design					
Model	P-50HF$_2$-E	P-50F$_2$-E	P-50P-E	P-50PJ-E	P-50VSQ$_5$-E
Feature	Upgrated high-performance filter.	Standard grade replacement filter.	Total length when connected to the joint is 350mm.	Joint for extension pipe	Stylish stainless hood

Optional Parts for VL-100(E)U$_5$-E

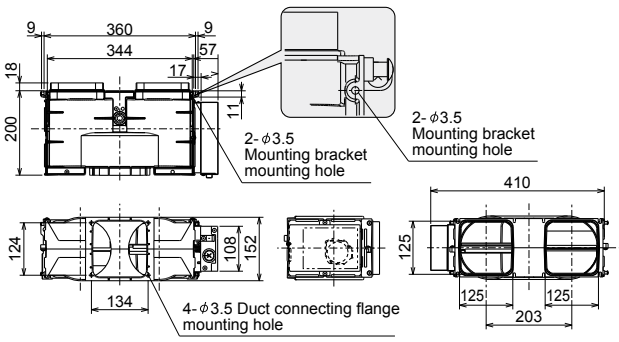
Filter and Extension Pipe

Type	High Efficiency Filter	Replacement Filter	Extension Pipe	Joint
Design				
Model	P-100HF$_5$-E	P-100F$_5$-E	P-100P-E	P-100PJ-E
Feature	Upgrated high-performance filter.	Standard grade replacement filter.	Total length when connected to the joint is 300mm.	• Joint for extension pipe • Screw-in method

Optional Parts for VL-220CZGV-E

Bypass damper

Model: P-133DUE-E



Unit (mm)

Filter

Type	High Efficiency Supply Air Filter	Medium Efficiency Exhaust Air Filter	Standard Replacement Filter
Design			
Model	P-220SHF-E	P-220EMF-E	P-220F-E
Classification (EN779:2012)	M6	G4	G3