#### **⚠** 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.

#### MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN http:///Global.MitsubishiElectric.com/





# **Environmental Sustainability Vision 2050**

#### **Environmental Declaration**

Protect the air, land, and water with our hearts and technologies to sustain a better future for all.



Environmental Sustainability Vision 2 0 5 0 To solve various factors that lead to environment issues, the Mitsubishi Electric Group shall unite the wishes of each and every person, and strive to create new value for a sustainable future.

#### **Three Environmental Action Guidelines**

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Apply diverse technologies in wide-ranging business areas to solve environmental issues

2

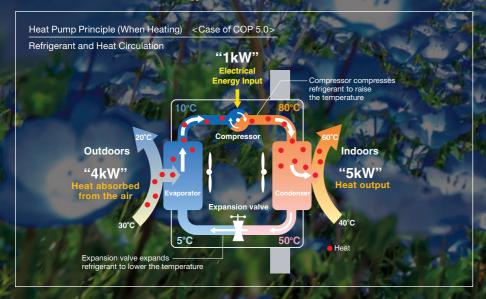
Challenge to develop business innovations for future generations 3

Publicize and share new values and lifestyles

## **Key Initiatives**

- Climate Change Measures
   Resource Circulation
- Live in Harmony with Nature
- Long-term Activities
- Innovation
- Nurturing Human
- Understanding Needs
- Co-create and
- Disseminate New Values
- Live in Harmony with the Region

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

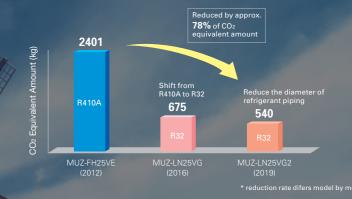


Mitsubishi Electric takes on the challenge of creating new value and contribute to a sustainable future in order to solve various environmental problems.

#### **Preventing Global Warming**

Mitsubishi Electric is actively introducing R32 refrigerant which has a global warming potential approximately 1/3 that of R410A refrigerant. Not only by shifting from R410A to R32 but by decreasing the diameter of refrigerant piping, we are also striving to reduce the amount of refrigerant usage. Throught these activities, we have achieved significant reduction in CO<sub>2</sub> equivalent amount compared to conventional models and realised minimizing the negative impact to the environment more than ever.

#### Reducing the amount of refrigerant usage



#### Effective use of materials (Reduce & Recycle)

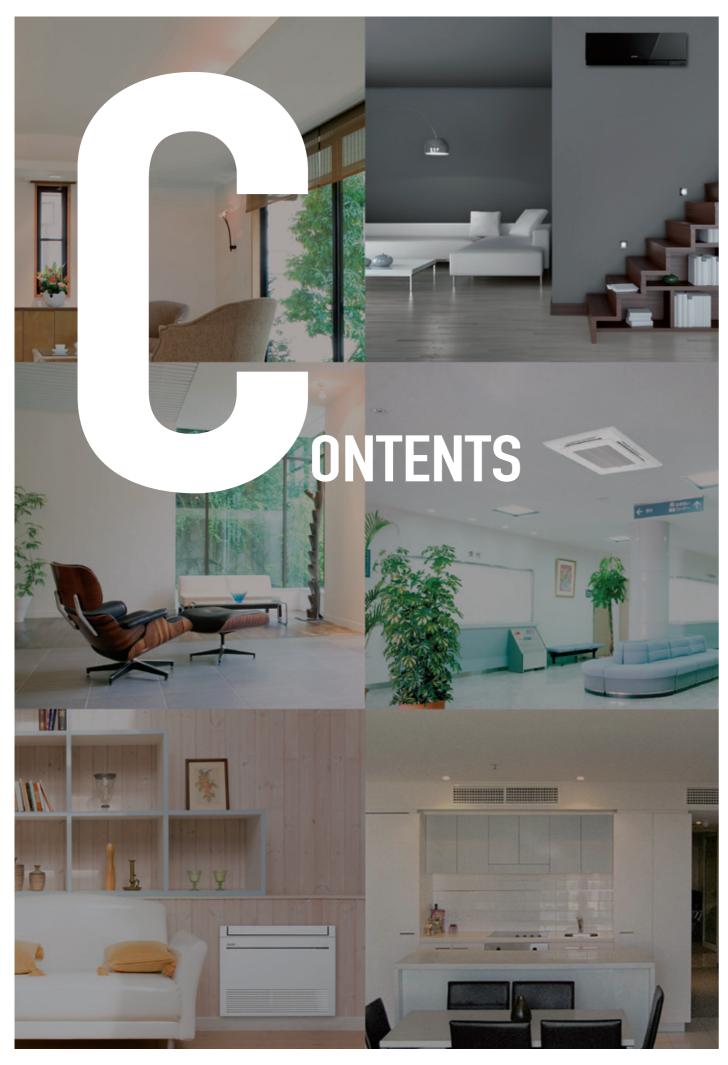
- Accelerating the downsizing technology to reduce material use while balancing energy saving performance.
- 2. Designing products that are easy to separate and recycle
- 3. All models are designed for WEEE and RoHS (II) compliance.\*

WEEE and RoHS directive: The Waste Electrical and Electronic Equipment (WEEE) Directive is a recycling directive for this type for equipment, while the Restrictions of Hazardous Substances (RoHS) Directive is an EU directiverestricting the use of ten specified substances in electronic and electrical devices. In the EU, it is no longer possible (from July 2019) to sell products containing any of the ten substances.

#### Balancing comfort and ecology

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

		THE PARTY OF THE P
	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 heat pump heating system to the cold regions to replace combustion heaters.
4. Dual Barrier Coating Dual Barrier Material	Prevents the indoor unit from getting dirty, delivering you clean air.	Keeping the inside of air conditioner clean leads to efficient operation and energy saving.



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Air Conditioners	
New releases in 2022	- 005-006
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S SERIES	- 053-066
P SERIES	- 067-114
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# RW Series

Hyper Heating Flagship Model

Available Now

# New releases in 2022





P.315





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

# M SERIES INVERTER Models

Model Nan		1.5kW	1.8kW	2.0kW	2.2kW	2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	Page
iviodei ivan	ne	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	Tage
	MSZ-L Series  R32  R410A *2		Multi connection only			WYRB SINGLE	W-V-R-B SINGLE		W-V-R-B SINGLE	W-V-R-B SINGLE		13
	MSZ-A Series MSZ-AP15/20VG	SINGLE		SINGLE								19
	MSZ-AP25/35/42/50VG MSZ-AP60/71VG					SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	19
	MSZ-E Series  R32  R410A  *1		Multi connection only		W-S-B Multi connection only	WSB SINGLE H	WSB SINGLE H	WSB SINGLE	W-S-B SINGLE			25
	MSZ-BT Series			SINGLE		SINGLE	SINGLE		SINGLE			27
	MSZ-HR Series MSZ-HR25/35/42/50VF(K)  R32  MSZ-HR60/71VF(K)					SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	29
Wall-	MSZ-DW Series					SINGLE	SINGLE		SINGLE			31
mounted	MSY-TP Series						SINGLE		SINGLE			33
	MSZ-S Series MSZ-SF15/20VA	Multi connection only		Multi connection only								35
	MSZ-SF25/35/42/50VE3					SINGLE	SINGLE	SINGLE	SINGLE			35
	MSZ-G Series (R410A)									SINGLE	SINGLE	35
	MSZ-D Series					SINGLE	SINGLE					39
	MSZ-H Series MSZ-HJ25/35/50  (R410A)  MSZ-HJ60/71					SINGLE	SINGLE		SINGLE	SINGLE	SINGLE	41
Compact floor	MFZ Series					SINGLE	SINGLE		SINGLE	SINGLE		43
1-way cassette	MLZ Series					SINGLE	SINGLE		SINGLE			45

<sup>\*1:</sup> R410A is for MXZ and PUMY connection. \*2: R410A is for PUMY connection.

# S SERIES

Model Nan	ne	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	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	55
Compact ceiling- concealed	SEZ Series R32 R410A		* SINGLE	* SINGLE	* SINGLE	* SINGLE	SINGLE	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE	61

#### \* Indoor units are available in two types; with or without the wireless remote controller.

## P SERIES

R32 Power Inverter Models / R32 Standard Inverter Models

Model Name		3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	Page
Model Name		1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	rage
4-way cassette	PLA Series	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	78
Ceiling-	PEAD Series	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	88
concealed	PEA Series								SINGLE	SINGLE	93
Wall- mounted	PKA Series	* SINGLE	* SINGLE	* SINGLE	SINGLE * TWIN *	SINGLE	TWIN	TWIN	TWIN TRIPLE QUADRUPLE	TRIPLE	96
Ceiling- suspended	PCA-KA Series	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	101
for Professional Kitchen	PCA-HA Series*				SINGLE *			* TWIN		* TRIPLE	106
Floor- standing	PSA Series				SINGLE	SINGLE	SINGLE	SINGLE	TWIN	TWIN TRIPLE	109

#### R410A POWER INVERTER Models / R410A STANDARD INVERTER Models

\* R32 Power Inverter Model only

Model Name		3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	D
woder warne		1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	Page
4-way cassette	PLA Series (R410A)	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	78
Ceiling-	PEAD Series (R410A)	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	88
concealed	PEA Series (R410A)								SINGLE	SINGLE	93
Wall- mounted	PKA Series R410A	* SINGLE	* SINGLE	* SINGLE	SINGLE * TWIN *	SINGLE	TWIN	TWIN	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	96
Ceiling- suspended	PCA-KA Series (R410A)	SINGLE	SINGLE	SINGLE	SINGLE TWIN *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	101
for Professional Kitchen	PCA-HA Series* (R410A)				SINGLE*			* TWIN		TRIPLE	106
Floor- standing	PSA Series  R410A				SINGLE*	SINGLE	SINGLE	SINGLE	TWIN	TWIN	109

\* Power Inverter Models only

H: Outdoor unit with freeze-prevention heater is available. WW-8-B: Indoor units are available in foreecooloomss)Wafuira, WhateaRelaSiMetrite, Ruby Red, and Onyx Black.

# MXZ SERIES INVERTER Models

Model Name		Capacity Class	Page
up to 2 indoor units MXZ-2F33VF3	2	3.3kW <1-phase>	117
up to 2 indoor units MXZ-2F42VF3	2	4.2kW <1-phase>	117
up to 2 indoor units MXZ-2F53VF(H)3	2	5.3kW <1-phase>	117
up to 3 indoor units MXZ-3F54VF3	2	5.4kW <1-phase>	117
up to 3 indoor units MXZ-3F68VF3	2	6.8kW <1-phase>	117
up to 4 indoor units MXZ-4F72VF3	2	7.2kW <1-phase>	117
up to 4 indoor units MXZ-4F80VF3	2	8.0kW <1-phase>	117
up to 4 indoor units MXZ-4F83VF	2	8.3kW <1-phase>	117
up to 5 indoor units MXZ-5F102VF	2	10.2kW <1-phase>	117
up to 6 indoor units MXZ-6F122VF	2	12.2kW <1-phase>	117
up to 2 indoor units MXZ-2HA40VF	2	4.0kW <1-phase>	121
up to 2 indoor units MXZ-2HA50VF	2	5.0kW <1-phase>	121
up to 3 indoor units MXZ-3HA50VF	2	5.0kW <1-phase>	121

Model Name		Capacity Class	Page
up to 2 indoor units MXZ-2D33VA		3.3kW <1-phase>	119
up to 2 indoor units MXZ-2D42VA2		4.2kW <1-phase>	119
up to 2 indoor units MXZ-2D53VA (H)2		5.3kW <1-phase>	119
up to 3 indoor units MXZ-3E54VA		5.4kW <1-phase>	119
up to 3 indoor units MXZ-3E68VA	0	6.8kW <1-phase>	119
up to 4 indoor units MXZ-4E72VA		7.2kW <1-phase>	119
up to 4 indoor units MXZ-4E83VA	•	8.3kW <1-phase>	119
up to 5 indoor units MXZ-5E102VA		10.2kW <1-phase>	119
up to 6 indoor units MXZ-6D122VA2	0	12.2kW <1-phase>	119
up to 2 indoor units MXZ-2DM40VA		4.0kW <1-phase>	123
up to 3 indoor units MXZ-3DM50VA	0	5.0kW <1-phase>	123

# 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	28.0kW 3-phase	33.5kW 3-phase	- Page
PUMY-SP (R410A)	1	1	1				125
PUMY-P	1	1	1	1	1	1	127

# POWERFUL HEATING SERIES INVERTER Models

Model Nam	ne		2.5kW	3.5kW	5.0kW	5.3kW	6.0kW	8.3kW	10.0kW	12.5kW	Page
Wiodel Hall			1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1 & 3-phase	3-phase	· -g-
		MSZ-RWVGHZ Series R32 R410A	SINGLE	SINGLE	SINGLE						137
Wall-m	nounted	MSZ-LNVGHZ Series R32 R410A	SINGLE	SINGLE	SINGLE						141
		MSZ-FT VGHZ Series	SINGLE	SINGLE	SINGLE						143
Compa	act floor	MFZ-KW Series	SINGLE	SINGLE	SINGLE		SINGLE				145
	4-way cassette	PLA Series R32 (R410A)							SINGLE	SINGLE	148
ZUBADAN	Ceiling- concealed	PEAD Series  R32 R410A							SINGLE		150
	Wall- mounted	PKA Series R32 (R410A)							SINGLE		151
Mult	i split	MXZ-F VFHZ Series MXZ-E VAHZ Series				2PORT H		4PORT H			154

\* R410A is for PUMY connection.

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

# **LOSSNAY** SERIES

		Centralized	Ventilation			Decentralized	I Ventilation
	C	Ceiling Concealed Typ	ре		Vertical Type	Wall Moun	ted Type
LGH-RVX Series	LGH-RVXT Series	LGH-RVS	GUF Series	GUG Series (Optional Unit)	VL-CZPVU Series	VL-100(E)Us-E	VL-50(E)S₂-E VL-50SR₂-E









## **SELECTION**

Choose the model that best matches room conditions.



#### **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-AP25/35/42/50VGH MUZ-EF25/35VGH MUZ-SF25/35/42/50VEH



MUZ-LN25/35VG

#### Hyper Heating

MUZ-LN25/35/50VGHZ MUZ-FH25/35/50VEHZ MUFZ-KW25/35/50/60VGHZ



#### 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)
- 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.





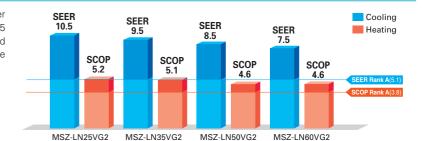




Developed to complement modern interior room décor, the LN Series is available in four colours specially chosen to blend in naturally wherever installed. Not only the sophisticated design, but also the optimum energy efficiency and operational comfort add even more value to this

## **High Energy Efficiency**

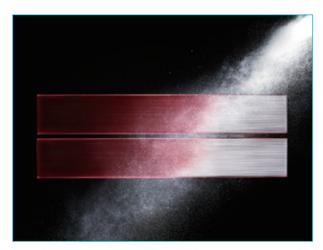
Optimum cooling/heating performance is another feature for the LN series. Models from capacities 25 to 50 have achieved the "Rank A+++" for SEER, and models for capacities 25 and 35 have achieved the "Rank A+++" for SCOP as well.



#### **Luminous and Luxurious Design**

MSZ-L

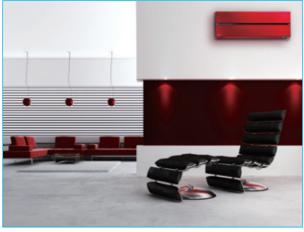
Natural White, Pearl White, Ruby Red, and Onyx Black. LN Series indoor units are available in four colours to match various lifestyles. The appearance of the indoor unit differs depending on the lighting in the room, attracting the attention of everyone that enters the room.



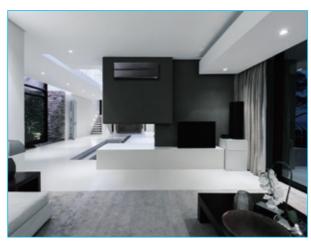
Master craftsmanship painting technology has resulted in a refined design, giving the finish deep colour and a premium quality feel.



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.

#### **LED Backlight Remote Controller**

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.

> The setting can be easily checked in the dark thanks to LED backlight.





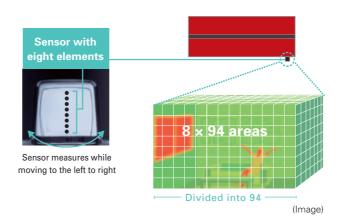






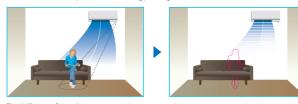
#### 3D i-see Sensor

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.



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.



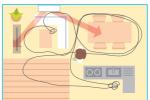
The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

#### **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.



#### 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.



**Direct Airflow** 

Even airflow mode

This setting can be used to directly target

airflow at people such as for immediate

comfort when coming indoors on a hot

The 3D i-see sensor memorizes human move

#### 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





#### (MSZ-LN18/25/35/50/60VG-SC Scandinavian model)

#### **Circulator Operation**

In case the indoor temperature reaches the setting temperature, the outdoor unit stops and the indoor unit starts FAN operation to circulate the indoor air.

The outdoor unit starts operation automatically when the indoor temperature drops below the setting temperature.



air is formed around ceiling.



This operating can help to circulate and rense warm air.

## 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

#### Bacteria



Test results have confirmed that Plasma Quad Plus neutralizes 99% of bacteria in 162 minutes in a 25m3 test space

<Test No.> KRCES-Bio. Test Report

#### Viruses



Test results have confirmed that Plasma Quad Plus neutralizes 99% of virus particles in 72 minutes in a 25m3 test space

<Test No.> vrc.center, SMC

#### Molds



Test results have confirmed that Plasma Quad Plus neutralizes 99% of mold in 135 minutes in a 25m3 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 28m3 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	А	А	В	В	С	
LN Series	Plasma Quad Plus	Two-Stage Plasma	А	А	А	А	А	А

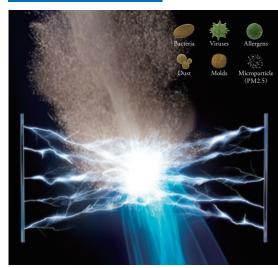
A: Highly effective

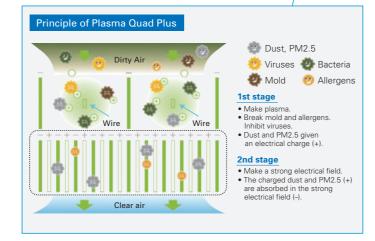
B: Effective

C: Partially effective

Particles smaller than 2.5µm

#### mage of Plasma Quad Plus





# **Dual Barrier Coating**

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



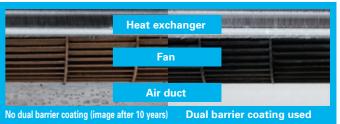


#### State-of-the-art coating technology

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)







- Consequences when the inside of the indoor unit is left dirty.
- Deterioration in energy
- · Musty smell from the unit.

<sup>\*1</sup> Verified by SIAA test method (JIS Z 2911) with No. JP0501014A0002O on SIAA antifungal agent positive list. Antifungal effect depends on the working environment. Fungicides comply with the SIAA safety criteria. What is SIAA? https://www.kohkin.net/en\_index/en\_siaa.html

#### 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.

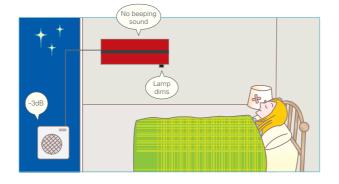




#### Night Mode

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

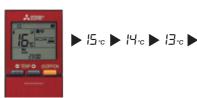
- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated operating noise specification.
- \*The cooling/heating capacity may drop.



#### 10°C Heating

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

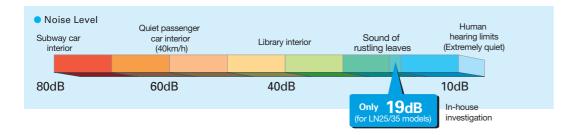
This function can also be used with the Weekly Timer setting.





#### **Quiet Operation**

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



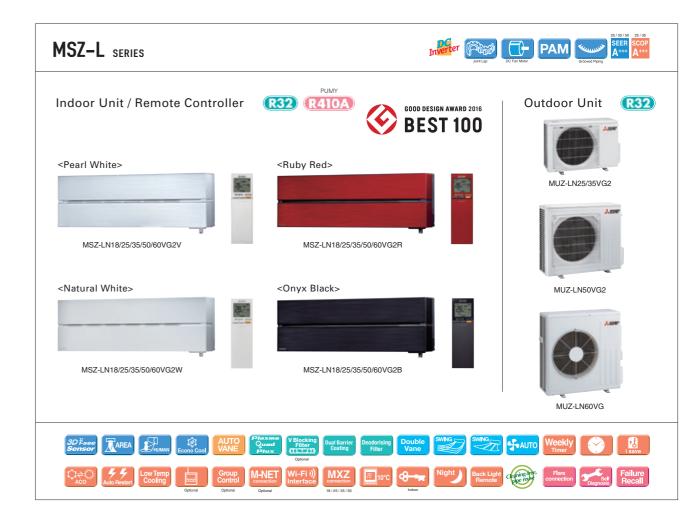
#### Built-in Wi-Fi Interface

17

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.





Туре						Inverter Heat Pump		
Indoor Ur	nit			MSZ-LN18VG2	MSZ-LN25VG2	MSZ-LN35VG2	MSZ-LN50VG2	MSZ-LN60VG2
Outdoor I	Jnit			for MXZ connection	MUZ-LN25VG2	MUZ-LN35VG2	MUZ-LN50VG2	MUZ-LN60VG
Refrigera	nt				Sir	ngle: R32 <sup>(*1)</sup> / Multi: R410A or R3:	2(*1)	
Power	Source					Outdoor Power Supply		
Supply	Outdoor (V/Ph	ase / Hz )				230 / Single / 50		
	Design load		kW	-	2.5	3.5	5.0	6.1
	Annual electricity	consumption (*2)	kWh/a	-	83	129	205	285
	SEER (*4)			-	10.5	9.5	8.5	7.5
Cooling		Energy efficiency class		-	A+++	A+++	A+++	A++
	0	Rated	kW	-	2.5	3.5	5.0	6.1
	Capacity	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
	Design load		kW	-	3.0 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	6.0 (-10°C)
		at reference design temperature	kW	-	3.0 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	6.0 (-10°C)
	Declared Capacity	at bivalent temperature	kW		3.0 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	6.0 (-10°C)
	Сарасіту	at operation limit temperature	kW	-	2.5 (-15°C)	3.2 (-15°C)	4.2 (-15°C)	6.0 (-15°C)
Heating	Back up heating	capacity	kW	_	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
(Average	Annual electricity	consumption (*2)	kWh/a	_	807	987	1369	1826
Season)("5)	SCOP (4)			-	5.2	5.1	4.6	4.6
		Energy efficiency class		-	A+++	A+++	A++	A++
		Rated	kW	-	3.2	4.0	6.0	6.8
	Capacity	Min-Max	kW	-	0.7 - 5.4	0.9 - 6.3	1.0 - 8.2	1.8 - 9.3
	Total Input	Rated	kW	-	0.600	0.820	1,480	1.810
Operatin	g Current (Max)		Α	_	7.1	9.9	13.9	15.2
•	Input	Rated	kW	0.027	0.027	0.027	0.034	0.040
	Operating Curre	nt(Max)	Α	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	14.5 (W) 15.5 (V, R, B)	14.5 (W) 15.5 (V, R, B)	14.5 (W) 15.5 (V, R, B)	15 (W) 16 (V, R, B)	15 (W) 16 (V, R, B)
Indoor	Air Volume (SLo-	Cooling	m³/min	4.7 - 5.9 - 7.1 - 9.2 - 12.4	4.7 - 5.9 - 7.1 - 9.2 - 12.4	4.7 - 5.9 - 7.1 - 9.2 - 13.0	5.7 - 7.6 - 8.8 - 10.6 - 13.9	7.1 - 8.8 - 10.6 - 12.7 - 15.7
Unit	Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/min	4.5 - 6.6 - 7.5 - 11.0 - 13.9	4.5 - 6.6 - 7.5 - 11.0 - 13.9	4.5 - 6.6 - 7.5 - 11.0 - 13.9	5.4 - 6.4 - 8.5 - 10.7 - 15.7	6.6 - 9.5 - 11.5 - 13.6 - 15.7
	Sound Level (SPL)	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 - 38 - 45	19 - 24 - 29 - 38 - 45	19 - 24 - 29 - 38 - 45	25 - 29 - 34 - 39 - 47	29 - 37 - 41 - 45 - 49
	Sound Level (PWL)	Cooling	dB(A)	58	58	59	60	65
	Dimensions	H*W*D	mm	_	550-800-285	550-800-285	714-800-285	880-840-330
	Weight		kg	=	33	34	40	55
	_	Cooling	m³/min	=	34.3	34.3	40.0	50.1
	Air Volume	Heating	m³/min		32.7	32.7	40.5	51.3
Outdoor		Cooling	dB(A)	=	46	49	51	55
Unit	Sound Level (SPL)	Heating	dB(A)	=	49	50	54	55
	Sound Level (PWL)	Cooling	dB(A)	=	60	61	64	65
	Operating Curre		A	-	6.8	9.6	13.5	14.8
	Breaker Size		Α	=	10	10	16	16
	Diameter	Liquid/Gas	mm	-	6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7
Ext.	Max.Length	Out-In	m	=	20	20	30	30
Piping	Max.Height	Out-In	m	_	12	12	12	15
Guarante	eed Operating	Cooling	°C		-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (C		Heating	°C	-	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24
		_			ould contribute less to global warming			

<sup>|</sup> 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<sub>2</sub>, 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.

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

<sup>(\*2)</sup> Integry consumption busined on statitude uses results. \*\*Proceedings you was a second of the 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 53-55 for heating (warmer season) specifications.

# MSZ-A SERIES

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<sup>+++</sup>" for SEER. \*MSZ-AP20/25/35VG



MSZ-AP25/35/42/50VG

MSZ-AP15/20VG

# GOOD DESIGN AWARD 2017

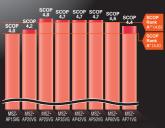


R32 Single / Multi

#### High energy saving

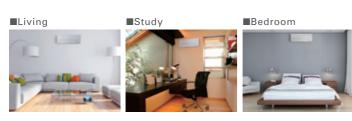
The classes from the low-capacity 25 to the high-capacity 60, have achieved either the "Rank A+++" or "Rank A++" for SEER and SCOP as energy-savings rating. Our air conditioners are contributing to reduce energy consumption in a wide range.





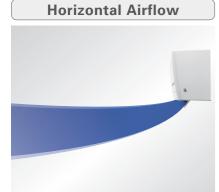
#### Compact and stylish

All the classes are introduced as single-split and multi-systems. From small rooms to living rooms, it is possible to coordinate residences with a unified design.





#### Evolved comfortable convenience function



The new airflow control which spreads across the ceiling eliminates the uncomfortable up and down using the remote controller. drafty feeling.



Auto vanes can be moved left and right, and

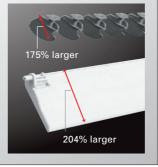
# The Function

#### High performance and compact size are realised by refining all parts



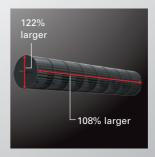
#### Vertical and **Horizontal Vane** New vertical and horizontal vanes are

double the size of the previous model, improving airflow control elaborately.



#### 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.



#### **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
			Automatically change	es to high-power opera	tion at wake-up time		
8:00							
10:00							
15:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
		Automatic	cally turned off during v	vork hours		Midday is warmer, so the temperature	
14:00						'	
15:00							
18:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
50:00		Automatically tur	ns on, synchronized wi	th arrival at home		Automatically raises ten	nperature setting to de-air temperature is low
55:00						Indicir time when outsit	ac-aii terriperature is low
(during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
		Automa	atically lowers tempera	ture at bedtime for en	ergy-saving operation a	at night	

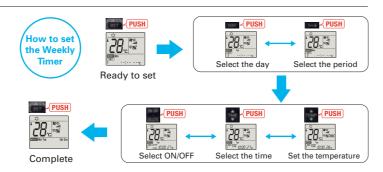
Settings

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 -





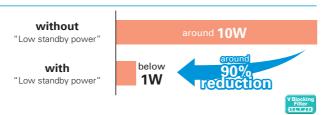
- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired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

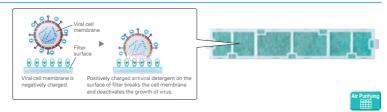
#### Low Standby Power

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.



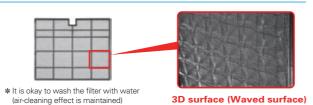
#### V Blocking Filter

V Blocking Filter with antiviral effect inhibits 99% of adhered virus, and other harmful substances, such as bacteria, mold and allergen. Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.



#### Air Purifying Filter

This filter generates stable antibacterial and deodorising 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.



#### "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**

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.



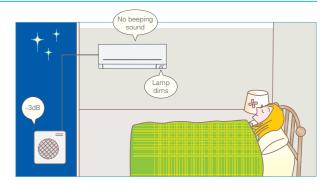
#### Night Mode

(MSZ-AP20/25/35/42/50/60/71)



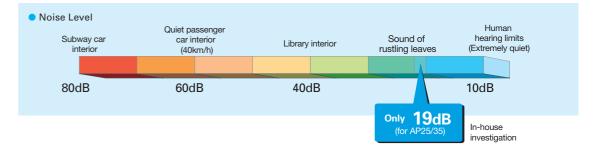
When Night Mode is activated using the wireless remote controller, air conditioner operation will switch to the following settings.

- 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-AP15/20/25/35/42/50/60/71VGK)



The indoor unit is equipped with a Wi-Fi Interface inside an exclusive pocket in the unit.

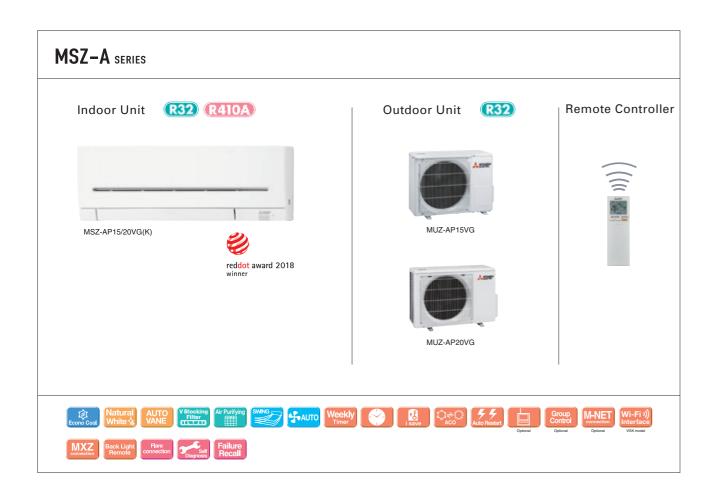
This eliminates the need to install a Wi-Fi interface, and also contributes to the beautiful appearance since the interface is hidden.

#### **LED Backlight Remote Controller**



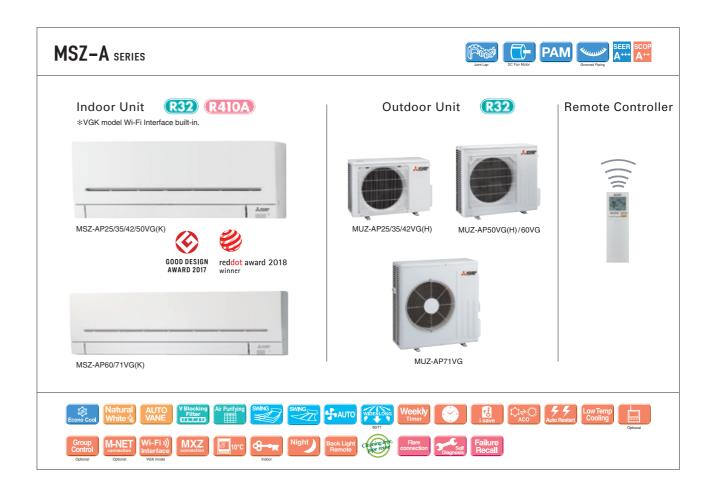
22

Blacklight 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.



Туре						Inverter H	leat Pump		
ndoor Ur	nit			MSZ-AP15VG(K)	MSZ-AP20VG(K)	MSZ-AP25VG(K)	MSZ-AP25VG(K)	MSZ-AP35VG(K)	MSZ-AP35VG(K)
Outdoor	Jnit			MUZ-AP15VG	MUZ-AP20VG	MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH
Refrigera	nt					Single: R32(*1) / Mul	lti: R410A or R32 <sup>(*1)</sup>		
Power	Source					Outdoor Po	ower supply		
Supply	Outdoor ( V / Ph	nase / Hz )				230 / Sii	ngle / 50		
	Design load		kW	1.5	2.0	2.5	2.5	3.5	3.5
	Annual electricity	consumption (*2)	kWh/a	72	81	101	101	142	142
	SEER (*4)			7.2	8.6	8.6	8.6	8.6	8.6
Cooling		Energy efficiency class		A++	A+++	A+++	A+++	A+++	A+++
		Rated	kW	1.5	2.0	2.5	2.5	3.5	3.5
	Capacity	Min-Max	kW	0.5-2.2	0.6-2.7	0.9-3.4	0.9-3.4	1.1-3.8	1.1-3.8
	Total Input	Rated	kW	0.370	0.460	0.600	0.600	0.990	0.990
	Design load		kW	1.6 (-10°C)	2.3 (-10°C)	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)
		at reference design temperature	_	1.6 (-10°C)	2.3 (-10°C)	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)
	Declared	at bivalent temperature	kW	1.6 (-10°C)	2.3 (-10°C)	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)
	Capacity	at operation limit temperature	kW	1.6 (-15°C)	2.2 (-15°C)	2.4 (-15°C)	2.2 (-20°C)	2.6 (-15°C)	2.4 (-20°C)
Heating	Back up heating		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)
Average		Annual electricity consumption (*2) kW		559	766	698	703	862	873
Season)(*5)	SCOP (*4)			4.0	4.2	4.8	4.7	4.7	4.6
	Energy efficiency class			A+	A+	A++	A++	A++	A++
		Rated	kW	2.0	2.5	3.2	3.2	4.0	4.0
	Capacity	Min-Max	kW	0.5-3.1	0.5-3.5	1.0-4.1	1.0-4.1	1,3-4,6	1.3-4.6
	Total Input	Rated	kW	0,500	0,600	0.780	0.780	1,030	1.030
Operatin	g Current (Max)		A	5.5	7.0	7.1	7.1	8.5	8.5
-	Input	Rated	kW	0.017	0.019	0.026	0.026	0.026	0.026
	Operating Current (Max)		A	0.17	0.2	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
ndoor	Air Volume	Cooling	m³/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.
Jnit	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/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.
	Sound Level (SPL)	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
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	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
	Dimensions	H*W*D	mm	538-699-249	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285
	Weight		kg	23	31	31	31	31	31
		Coolina	m³/min	26	32.2	32.2	32.2	32.2	32.2
	Air Volume	Heating	m³/min	21	29.8	29.8	29.8	33.8	33.8
Outdoor		Cooling	dB(A)	50	47	47	47	49	49
Jnit	Sound Level (SPL)	Heating	dB(A)	50	48	48	48	50	50
	Sound Level (PWL)	Cooling	dB(A)	63	59	59	59	61	61
	Operating Curre		A A	5.3	6.8	6.8	6.8	8.2	8.2
	Breaker Size	JIL (ITIGA)	A	10	10	10	10	10	10
	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
Ext.	Max.Length	Out-In	m	20	20	20	20	20	20
Piping	Max.Height	Out-In	m	12	12	12	12	12	12
O		Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
	eed Operating		℃						
Range (O	rutuddi)	Heating	U	-15 ~ +24	-15 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24

Heating (Vuludor) | Heating | C | -15 - ±24 | -20 - ±24 | -15 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±24 | -20 - ±2



Туре						Inverter H	leat Pump		
Indoor Un	nit			MSZ-AP42VG(K)	MSZ-AP42VG(K)	MSZ-AP50VG(K)	MSZ-AP50VG(K)	MSZ-AP60VG(K)	MSZ-AP71VG(K)
Outdoor I				MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH	MUZ-AP60VG	MUZ-AP71VG
Refrigerar				1VIOZ-7/1 42 V C		Iti: R410A or R32 <sup>(*1)</sup>	IVIOZ-AI SOVGITI		/ Multi: R32 <sup>(*1)</sup>
Power	Source				Sirigie. 1102 / Iviu		ower supply	Jingle, 1102	/ IVIUILI. I IOZ
Supply	Outdoor (V / Ph	iase / Hz )					nale / 50		
	Design load	idsc / TIZ j	kW	4.2	4.2	5.0	5.0	6.1	7.1
	Annual electricity	consumption (*2)	kWh/a	188	188	236	236	288	345
	SEER (*4)	concumption	1111111111	7.8	7.8	7.4	7.4	7.4	7.2
Cooling		Energy efficiency class		A++	A++	A++	A++	A++	A++
0009		Rated	kW	4.2	4.2	5.0	5.0	6.1	7.1
	Capacity	Min-Max	kW	0.9-4.5	0.9-4.5	1.4-5.4	1.4-5.4	1.4-7.3	2.0-8.7
	Total Input	Rated	kW	1,300	1,300	1,550	1,550	1,590	2.010
	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)
	Ť	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)
	Declared	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)
	Capacity	at operation limit temperature	kW	4.2 (-15°C)	3.8 (-20°C)	4.7 (-15°C)	4.2 (-20°C)	3.7 (-15°C)	5.4 (-15°C)
Heating	Back up heating		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)
(Average	Annual electricity		kWh/a	1120	1134	1250	1275	1398	2132
Season)("5)	SCOP (*4)			4.7	4.6	4.7	4.6	4.6	4.4
		Energy efficiency class		A++	A++	A++	A++	A++	A+
		Rated	kW	5.4	5.4	5.8	5.8	6.8	8.1
	Capacity	Min-Max	kW	1.3-6.0	1.3-6.0	1.4-7.3	1.4-7.3	2.0-8.6	2.2-10.3
	Total Input	Rated	kW	1.490	1.490	1.600	1.600	1.670	2.120
Operating	g Current (Max)		Α	9.9	9.9	13.6	13.6	14.1	16.4
	Input	Rated	kW	0.032	0.032	0.032	0.032	0.049	0.045
	Operating Current (Max)		Α	0.3	0.3	0.3	0.3	0.5	0.4
	Dimensions	H*W*D	mm	299-798-219	299-798-219	299-798-219	299-798-219	325-1100-257	325-1100-257
Indoor	Weight		kg	10.5	10.5	10.5	10.5	16.0	17.0
Inaoor Unit	Air Volume	Cooling	m³/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	9.4 - 11.0 - 13.2 - 16.0 - 18.9	9.6 - 11.5 - 13.2 - 15.3 - 18.
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/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	10.8- 13.4 - 15.4 - 17.4 - 20.3	10.2- 11.5 - 13.2 - 15.3 - 19
	Sound Level (SPL)	Cooling	dB(A)	21 - 29 - 34 - 38 - 42	21 - 29 - 34 - 38 - 42	28 - 33 - 36 - 40 - 44	28 - 33 - 36 - 40 - 44	29 - 37 - 41 - 45 - 48	30 - 37 - 41 - 45 - 49
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	21 - 29 - 35 - 40 - 45	21 - 29 - 35 - 40 - 45	28 - 33 - 38 - 43 - 48	28 - 33 - 38 - 43 - 48	30 - 37 - 41 - 45 - 48	30 - 37 - 41 - 45 - 51
	Sound Level (PWL)	Cooling	dB(A)	57	57	58	58	65	65
	Dimensions	H*W*D	mm	550-800-285	550-800-285	714-800-285	714-800-285	714-800-285	880-840-330
	Weight		kg	35	35	40	40	40	55
	Air Volume	Cooling	m³/min	30.4	30.4	40.5	40.5	52.1	54.1
Outdoor		Heating	m³/min	32.7	32.7	40.5	40.5	52.1	47.9
Unit	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52	56	56
	` '	Heating	dB(A)	51	51	52	52	57	55
	Sound Level (PWL)	5	dB(A)	61	61	64	64	69	69
	Operating Curre	ent (Max)	Α	9.6	9.6	13.3	13.3	13.6	16.0
	Breaker Size		Α	10	10	16	16	16	20
Ext.	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7
Piping	Max.Length	Out-In	m	20	20	20	20	30	30
	Max.Height	Out-In	m	12	12	12	12	15	15
	ed Operating	Cooling	℃	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (O	utaoor)	Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming the artificient fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere. This applicance contains a professional.

The GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, this applicance contains 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) SH: 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".





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



#### Stylish Line-up Matches Any Room Décor

**Energy-efficient Operation** 

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 bestmatch scenario for diverse interior designs while simultaneously ensuring maximum room and energy savings.









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

Outdoor	Rank A for single connection			Compa	atibility					
	MUZ-EF25/35VG(H)		MXZ							
Indoor	MUZ-EF42/50VG	2F33VF	2F42VF	2F53VF	3F54VF	3F68VF	4F72VF			
MSZ-EF18VG	_	~	~	~	~	~	~			
MSZ-EF22VG	_	<b> </b>	~	~	~	~				
MSZ-EF25VG	A+++/A++(A++*)	~	~	~	~	~	~			
MSZ-EF35VG	A +++/ A++(A+*)		~	~	~	~	~			
MSZ-EF42VG	A++/A++			~	~	~	~			
MSZ-EF50VG	A++/A+			~	~	~	~			

#### Quiet Comfort All Day Long

Mitsubishi Electric's advanced "Silent Mode" fan speed setting provides super-guiet operation as low as 19dB for EF18/22/25 models for cooling. This unique feature makes the Kirigamine ZEN series ideal for use in any situation.

#### Noise Level Sound of Subway car 80dB 60dB 40dB 10dB An in-company

#### **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.

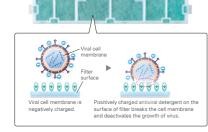


#### **V** Blocking Filter

V Blocking Filter with antiviral effect inhibits 99% of adhered virus, and other harmful substances, such as bacteria, mold and allergen.

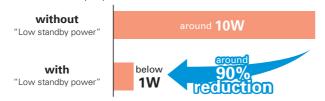
Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.

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#### Low Standby Power

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



#### **Outdoor Units for Cold Region**

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-E SERIES









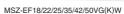
Outdoor Unit



**R32** 

Indoor Unit / Remote Controller R32 R410A







MSZ-EF18/22/25/35/42/50VG(K)S



\* Soft-dry Cloth is enclosed with Black models. \* VGK model Wi-Fi interface built-in



reddot award 2015



MUZ-EF25/35VG(H).42VG

























					Optional	
Self ignosis	Failure Recal					

Indoor Un	nit			MSZ-EF18VG(K)	MSZ-EF22VG(K)	MSZ-EF25VG(K)	MSZ-EF25VG(K)	MSZ-EF35VG(K)	MSZ-EF35VG(K)	MSZ-EF42VG(K)	MSZ-EF50VG(K)
Outdoor l	Unit			for MXZ c	onnection	MUZ-EF25VG	MUZ-EF25VGH	MUZ-EF35VG	MUZ-EF35VGH	MUZ-EF42VG	MUZ-EF50VG
Refrigerar	nt						R3	2(*1)	•	•	
Power	Source						Outdoor Po	ower supply			
Supply	Outdoor (V/Ph	ase / Hz )					230/Si	ngle/50			
	Design load		kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0
	Annual electricity	consumption (*2)	kWh/a	-	-	96	96	139	139	186	233
	SEER (*4)			-	-	9.1	9.1	8.8	8.8	7.9	7.5
Cooling		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	-	-	0.9-3.4	0.9-3.4	1.1-4.0	1.1-4.0	0.9-4.6	1.4-5.4
	Total Input	Rated	kW	-	-	0.540	0.540	0.910	0.910	1.200	1.540
	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	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)
	Capacity	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)
Heating	Back up heating		kW	-	-	0.0 (-10°C)					
(Average Season) <sup>("5)</sup>	Annual electricity	consumption (2)	kWh/a	-	-	713	727	882	900	1151	1304
Season	SCOP (14)			-	-	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	-	-	1.0-4.2	1.0-4.2	1.3-5.1	1.3-5.1	1.3-6.3	1.4-7.5
	Total Input	Rated	kW	-	-	0.700	0.700	0.950	0.950	1.455	1.560
Operating	g Current (Max)		A	-	-	7.1	7.1	7.1	7.1	10.0	14
	Input	Rated	kW	0.026	0.026	0.026	0.026	0.030	0.030	0.033	0.043
	Operating Curre		Α	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
		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
Indoor	Weight	0 "	kg	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Unit	Air Volume (SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Cooling	m³/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 - 11.2	
	· .	Heating	m³/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				6.4 - 7.2 - 9.0 - 11.1 - 14.6
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Cooling	dB(A)			19 - 23 - 29 - 36 - 42		21 - 24 - 30 - 36 - 42			30 - 33 - 36 - 40 - 43
	,	Heating	dB(A)								30 - 33 - 37 - 43 - 49
	Sound Level (PWL)	Cooling H*W*D	dB(A)	60	60	60	60	60 550-800-285	60 550-800-285	60	60
	Dimensions Weight	HWD	mm	-	-	550-800-285 31	550-800-285 31	34	34	550-800-285 35	714-800-285 40
	weignt	Cooling	kg m³/min	-	-	27.8	27.8	34.3	34.3	32.0	40.2
	Air Volume	Heating	m³/min	-	-	29.8	29.8	32.7	32.7	32.7	40.2
Outdoor		Cooling	dB(A)	_		47	47	49	49	50	52
Unit	Sound Level (SPL)	Heating	dB(A)		-	48	48	50	50	51	52
	Sound Level (PWL)		dB(A)	-	-	58	58	62	62	62	65
	Operating Curre		A A		-	6.8	6.8	6.8	6.8	9.6	13.6
	Breaker Size	iit (iviax)	A	_	-	10	10	10	10	12	16
	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
Ext.	Max.Length	Out-In	m	-	-	20	20	20	20	20	30
Piping	Max.Height	Out-In	m	_	-	12	12	12	12	12	15
Guaranto	eed Operating	Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (O		Heating	°C	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24
- 3490 (0		- room ry				10 - 12-4	20 124	10 12-7	20 124	10 124	10 12-4

<sup>(\*1)</sup> Refrigerant leakage contributes to climate charge. 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 the refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of COs, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or 638sassemble the product yourself or 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.

<sup>(2)</sup> Still: Supplied 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 53-55 for heating lyaermer season) specifications.



The BT series featured with its high performance, energy efficiency, and simplicity of use brings greater comfort to your room.

High Energy Efficiency for Entire Range of Series



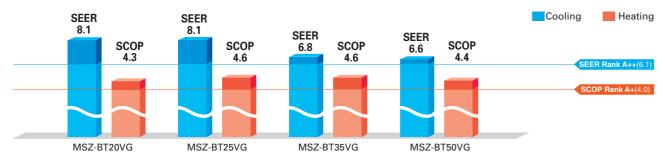






All models in the series, from the low-capacity 20 to the high-capacity 50, have achieved the "Rank A++" for SEER and size 25 and 35 have achieved the "Rank A++" for SCOP as energy-savings rating. For home use, such as in bedrooms and living rooms, to light commercial use, such as in offices, our air conditioners are contributing to reduced energy consumption in a wide range.

MSZ-BT20/25/35/50VG(K)



#### **Quiet Operation**

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



#### **New Remote Controller**

New stylish and compact remote controller features easy-read big display and simple button position with fundamental functions.

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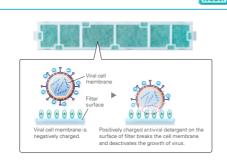
#### Built-in Wi-Fi Interface

(MSZ-BT20/25/35/50VGK)

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.

#### **V Blocking Filter**

V Blocking Filter with antiviral effect inhibits 99% of adhered virus, and other harmful substances, such as bacteria, mold and allergen. Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.



#### MSZ-BT SERIES



**Outdoor Unit** 









Remote

Controller







MSZ-BT20/25/35/50VG(K)































Туре					Inverter H	leat Pump	
Indoor Ur	nit			MSZ-BT20VG(K)	MSZ-BT25VG(K)	MSZ-BT35VG(K)	MSZ-BT50VG(K)
Outdoor I	Unit			MUZ-BT20VG	MUZ-BT25VG	MUZ-BT35VG	MUZ-BT50VG
Refrigera	nt				R3	2(*1)	
Power	Source				Outdoor Po	ower supply	
Supply	Outdoor (V/Ph	nase / Hz )			230V/Sin	igle/50Hz	
	Design load		kW	2.0	2.5	3.5	5.0
	Annual electricity	consumption (*2)	kWh/a	86	108	180	265
	SEER (*4)			8.1	8.1	6.8	6.6
Cooling		Energy efficiency class		A++	A++	A++	A++
		Rated	kW	2.0	2.5	3.5	5.0
	Capacity	Min-Max	kW	0.5-2.9	0.5-3.0	0.9-3.5	1.3-5.0
	Total Input	Rated	kW	0.450	0.700	1.240	2.050
	Design load		kW	1.5 (-10°C)	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	_	at reference design temperature	kW	1.5 (-10°C)	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	Declared Capacity	at bivalent temperature	kW	1.5 (-10°C)	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	Сараспу	at operation limit temperature	kW	1.3 (-15°C)	1.7 (-15°C)	2.1 (-15°C)	3.4 (-15°C)
Heating	Back up heating	g capacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
(Average	Annual electricity	Annual electricity consumption (*2) kW		487	577	727	1209
Season)("5)	SCOP (14)			4.3	4.6	4.6	4.4
		Energy efficiency class		A <sup>+</sup>	A++	A++	A <sup>+</sup>
		Rated	kW	2.5	3.15	3.6	5.4
	Capacity	Min-Max	kW	0.7-3.2	0.7-3.5	0.9-4.1	1.4-6.5
	Total Input	Rated	kW	0.550	0.750	0.930	1.550
Operatin	g Current (Max)		Α	5,6	7.0	7.0	10.0
	Input	Rated	kW	0.024	0.024	0.031	0.037
	Operating Curre	ent(Max)	Α	0.25	0.25	0.31	0.35
	Dimensions	H*W*D	mm	280-838-235	280-838-235	280-838-235	280-838-235
	Weight		kg	9	9	9	9
Indoor	Air Volume	Cooling	m³/min	4.2 - 5.2 - 6.8 - 8.7 - 10.9	4.2 - 5.2 - 6.8 - 8.7 - 10.9	4.2 - 5.2 - 6.8 - 8.7 - 13.2	6.3 - 7.6 - 9.0 - 11.0 - 13.2
Unit	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/min	4.2 - 5.0 - 6.8 - 9.0 - 11.9	4.2 - 5.0 - 6.8 - 9.0 - 11.9	4.2 - 5.0 - 6.8 - 9.0 - 11.9	6.0 - 7.8 - 9.9 - 11.9 - 14.1
	Sound Level (SPL)	Cooling	dB(A)	19 - 22 - 30 - 37 - 43	19 - 22 - 30 - 37 - 43	19 - 22 - 31 - 38 - 46	29 - 33 - 36 - 40 - 46
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	20 - 23 - 30 - 37 - 43	20 - 23 - 30 - 37 - 43	20 - 23 - 30 - 37 - 44	29 - 33 - 38 - 43 - 48
	Sound Level (PWL)	Cooling	dB(A)	57	57	60	60
	Dimensions	H*W*D	mm	538-699-249	538-699-249	538-699-249	550-800-285
	Weight		kg	23	24	24	35
		Cooling	m³/min	30.3	32.2	32.2	30.4
	Air Volume	Heating	m³/min	30.3	32.2	34.6	32.7
Outdoor		Cooling	dB(A)	50	50	52	50
Unit	Sound Level (SPL)	Heating	dB(A)	50	50	52	51
	Sound Level (PWL)	<u> </u>	dB(A)	63	63	64	64
	Operating Curre		A	5,3	6.7	6.7	9.6
	Breaker Size		A	10	10	10	12
	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6,35 / 9,52	6.35 / 12.7
Ext.	Max.Length	Out-In	m	20	20	20	20
Piping	Max.Height	Out-In	m	12	12	12	12

<sup>(\*\*)</sup> 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<sub>2</sub>, 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.

\*\*PEP feneror consumption based on schadard lest results. Actual energy consumption will depend on how the anolismos is used and where it is located.

ard test results. Actual energy consumption will depend on how the appliance is used and where it is located

<sup>(3)</sup> SHz. Super High

"(3) SHz. Super High

"(4) SEPR, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.628/2011. The temperature conditions for calculating SCOP are based on "Average Season" (5) Please see page 53-55 for heating (warmer season) specifications.



Compact, high-performance indoor and outdoor units with R32 that is low global warming potential compared with the current refrigerant R410A contribute to room comfort and to prevent global warming.



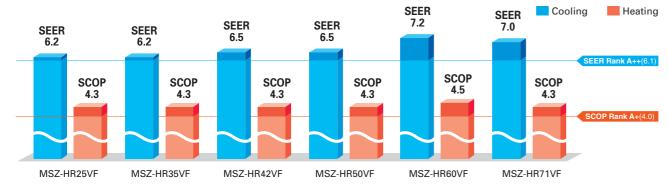
#### "Rank A++/A+" Energy Savings Achieved for Entire Range of Series







All models in the series, from capacity 25 to 71, have achieved the "Rank A+" for SEER and "Rank A+" for SCOP as energy-savings rating, thanks to Mitsubishi Electric's inverter technologies which are adopted to provide automatic adjustment of operation load according to need.



#### Simple and Friendly Design

The round front surface provides a simple and friendly impression. And the width of indoor unit is compact, making installation in smaller, tighter spaces possible.



#### Wi-Fi and System Control

#### Wi-Fi Interface (Built-in) \*Only VGK model

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

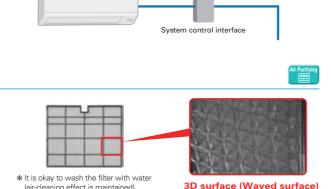
#### System Control Interface (Optional)

- •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-41MAA is possible.
- •Centralised control is possible when connected to M-NET.
- \*Wi-Fi Interface and System Control Interface cannot be used simultaneously.

#### Air Purifying Filter

29

This filter generates stable antibacterial and deodorising 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.



# Inverter PAM SEER AT AT AT MSZ-HR SERIES Indoor Unit R32 **Outdoor Unit** Remote Controller <u>((()</u> MUZ-HR35VF MSZ-HR25/35/42/50VF(K) MUZ-HR42/50VF MUZ-HR60/71VF MSZ-HR60/71VF(K) AUTO VBlocking Ar Purfying Wi-Fi I) MXZ Low Temp Cooling Control Contr

T						laure de la	le et Donne		
Туре				MOZ LIDOSI (E/I O	MOZ LIDOS /5/10	·	leat Pump	1407 LIDOOVENO	MOZ LIDZAVIENO
Indoor Ur				MSZ-HR25VF(K)	MSZ-HR35VF(K)	MSZ-HR42VF(K)	MSZ-HR50VF(K)	MSZ-HR60VF(K)	MSZ-HR71VF(K)
Outdoor I				MUZ-HR25VF	MUZ-HR35VF	MUZ-HR42VF	MUZ-HR50VF	MUZ-HR60VF	MUZ-HR71VF
Refrigera							2(*1)		
Power	Source						ower supply		
Supply	Outdoor (V / Ph	nase / Hz )					igle/50Hz		
	Design load	. 19	kW	2.5	3.4	4.2	5.0	6.1	7.1
	Annual electricity	consumption	kWh/a	141	191	226	269	296	355
	SEER (*4)			6.2	6.2	6.5	6.5	7.2	7.0
Cooling		Energy efficiency class		A++	A++	A++	A++	A++	A++
	Capacity	Rated	kW	2.5	3.4	4.2	5.0	6.1	7.1
		Min-Max	kW	0.5-2.9	0.9-3.4	1.1-4.6	1.3-5.0	1.7-7.1	1.8-7.3
	Total Input	Rated	kW	0.800	1.210	1.340	2.050	1.810	2.330
	Design load		kW	1.9 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	Declared	at reference design temperature		1.9 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	Capacity	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	2.9 (-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)	2.9 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
Heating	Back up heating	, , ,	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)
(Average Season) <sup>(*S)</sup>	Annual electricity	consumption (2)	kWh/a	614	781	928	1224	1430	1755
Season)	SCOP (4)			4.3	4.3	4.3	4.3	4.5	4.3
		Energy efficiency class		A <sup>+</sup>	A+	A <sup>+</sup>	A+	A+	A+
	Capacity	Rated	kW	3.15	3.6	4.7	5.4	6.8	8.1
		Min-Max	kW	0.7-3.5	0.9-3.7	0.9-5.4	1.4-6.5	1.5-8.5	1.5-9.0
	Total Input	Rated	kW	0.850	0.975	1.300	1.550	1.810	2.440
Operatin	g Current (Max)	I	Α	5.0	6.7	8.5	10.0	14.1	14.1
	Input	Rated	kW	0.020	0.028	0.032	0.039	0.055	0.055
	Operating Curre		Α	0.2	0.27	0.3	0.36	0.5	0.5
	Dimensions	H*W*D	mm	280-838-228	280-838-228	280-838-228	280-838-228	305-923-262	305-923-262
Indoor	Weight		kg	8.5	8.5	9	9	12.5	12.5
Unit	Air Volume	Cooling	m³/min	3.6 - 5.4 - 7.2 - 9.7	3.6 - 5.6 - 7.8 - 11.7	6.0 - 8.7 - 10.8 - 13.1	6.4 - 9.2 - 11.2 - 13.1	10.4 - 12.6 - 15.4 - 19.6	10.4 - 12.6 - 15.4 - 19.6
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/min	3.3 - 5.4 - 7.4 - 10.1	3.3 - 5.4 - 7.4 - 10.5	5.6 - 7.9 - 10.8 - 13.4	6.1 - 8.3 - 11.2 - 14.5	10.7 - 13.1 - 16.7 - 19.6	10.7 - 13.1 - 16.7 - 19.6
	Sound Level (SPL)	Cooling	dB(A)	21 - 30 - 37 - 43	22 - 31 - 38 - 46	24 - 34 - 39 - 45	28 - 36 - 40 - 45	33 - 38 - 44 - 50	33 - 38 - 44 - 50
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	21 - 30 - 37 - 43	21 - 30 - 37 - 44	24 - 32 - 40 - 46	27 - 34 - 41 - 47	33 - 38 - 44 - 50	33 - 38 - 44 - 50
	Sound Level (PWL)	Cooling	dB(A)	57	60	60	60	65	65
	Dimensions	H*W*D	mm	538-699-249	538-699-249	550-800-285	550-800-285	714-800-285	714-800-285
	Weight		kg	23	24	34	35	40	40
	Air Volume	Cooling	m³/min	30.3	32.2	30.4	30.4	42.8	42.8
Outdoor		Heating	m³/min	30.3	32.2	32.7	32.7	48.3	48.3
Unit	Sound Level (SPL)	Cooling	dB(A)	50	51	50	50	53	53
	,	Heating	dB(A)	50	51	51	51	57	57
	Sound Level (PWL)	1	dB(A)	63	64	64	64	65	66
	Operating Curre	ent (Max)	Α	4.8	6.4	8.2	9.6	13.6	13.6
	Breaker Size		Α	10	10	10	12	16	16
Ext.	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7
Piping	Max.Length	Out-In	m	20	20	20	20	30	30
	Max.Height	Out-In	m	12	12	12	12	15	15
	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (C	Outdoor)	Heating	℃	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24
(#4) D-6:		tlitb D-fi	and a college form	- -	MOD del esentido de lese de e	lobal warming than a refrigerant	ith bishes OMD if Isslesd to		

<sup>)</sup> 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 CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuity yourself or discassemble the productly curself and always ask a professional.

The GWP of R32 is 675 in the IPCC 4 Assessment Report.

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

<sup>(2)</sup> Ellegy consumption based on stantage testissus. Actual energy consumption will depend on now the applicable sused and where it is located.

(3) SHE Super Hand 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 53-55 for healing (wation assess) specifications.



# MSZ-DW.

Introducing an indoor unit that is compact yet packed with a variety of features.

High energy saving performance and Air Purifying Filter bring you a comfortable indoor environment.

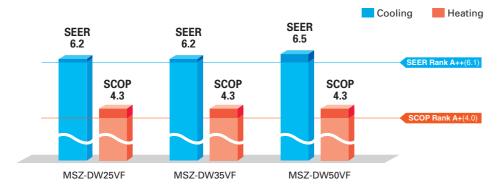


#### **Energy Saving**





Mitsubishi Electric's inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises Energy Rank "A++" for SEER (cooling) and "A+" for SCOP (heating).



#### Simple and Compact Design

The stylish design makes it a natural match for any room. The width of indoor units is compact, making installation in smaller, tighter spaces possible.

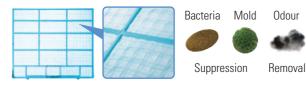


#### Air Purifying Filter

31



Air Purifying Filter generates stable antibacterial, antifungal, and deodorant effects. The three-dimensional surface expands the filter's capture area and contributes to the better dust collection performance than conventional filters.



#### Simple Control

The simple remote controller and functions provide the easy control solution and comforts of life.



#### Wi-Fi and System Control

#### Wi-Fi Interface (Optional)

Optional interface and a Cloud-based solution "MELCloud" enable users to control air conditioners and check operating status via devices such as laptops, 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-41MAA is possible.
- Centralised control is possible when connected to M-NET.



#### MSZ-DW SERIES



**Outdoor Unit** 





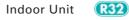


Remote

Controller

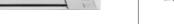






MSZ-DW25/35/50VF







































						· · · · · · · · · · · · · · · · · · ·
pe				1007 511107 5	Inverter Heat Pump	1107 51170175
loor Ur				MSZ-DW25VF	MSZ-DW35VF	MSZ-DW50VF
tdoor l				MUZ-DW25VF	MUZ-DW35VF	MUZ-DW50VF
frigera					R32 <sup>(1)</sup>	
wer	Source				Outdoor Power supply	
oply	Outdoor (V/Ph	ase / Hz )			230V/Single/50Hz	
	Design load		kW	2.5	3.4	5.0
	Annual electricity	consumption (2)	kWh/a	135	184	261
	SEER (14)			6.2	6.2	6.5
oling		Energy efficiency class		A++	A++	A++
	Capacity	Rated	kW	2.5	3.4	5.0
		Min-Max	kW	0.5-2.9	0.9-3.4	1.3-5.0
	Total Input	Rated	kW	0.800	1.210	2.050
	Design load		kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	Declared	at reference design temperature		1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	Capacity	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
		at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
ting		up heating capacity		0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
rage		l electricity consumption (*2) kWh/		618	781	1174
on) <sup>(rs)</sup>	SCOP (*4)			4.3	4.3	4.3
	Energy efficiency class			A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>
	Capacity	Rated	kW	3.15	3.6	5.4
	Сараспу	Min-Max	kW	0.7-3.5	0.9-3.7	1.4-6.5
	Total Input	Rated	kW	0.850	0.975	1.550
ratin	g Current (Max)		A	5.0	6.7	10.0
	Input	Rated	kW	0.023	0.028	0.029
	Operating Curre	ent(Max)	A	0.24	0.28	0.29
	Dimensions	H*W*D	mm	290-799-232	290-799-232	290-799-232
	Weight		kg	9	9	10
or	Air Volume	Cooling	m³/min	3.6 - 5.6 - 7.5 - 9.9	3.6 - 5.8 - 8.1 - 11.3	5.9 - 7.7 - 9.7 - 12.3
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/min	3.4 - 5.6 - 7.7 - 10.3	3.4 - 5.6 - 7.7 - 10.7	6.0 - 7.7 - 9.7 - 12.6
	Sound Level (SPL)	Cooling	dB(A)	21 - 30 - 37 - 43	22 - 31 - 38 - 46	28 - 36 - 40 - 45
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	21 - 30 - 37 - 43	21 - 30 - 37 - 44	27 - 34 - 41 - 47
	Sound Level (PWL)	Cooling	dB(A)	57	60	60
	Dimensions	H*W*D	mm	538-699-249	538-699-249	550-800-285
	Weight		kg	23	24	35
		Cooling	m³/min	30.3	32.2	33.5
	Air Volume	Heating	m³/min	30.3	32.2	32.7
loor		Cooling	dB(A)	50	51	50
	Sound Level (SPL)	Heating	dB(A)	50	51	51
	Sound Level (PWL)		dB(A)	63	64	64
	Operating Curre		A	5.3	7.0	9.2
	Breaker Size	,	A	10	10	12
_	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52
	Max.Length	Out-In	m	20	20	20
ng	Max.Height	Out-In	m	12	12	12
	ux.i icigiit				-10 ~ +46	-10 ~ +46
aranto	ed Operating	Cooling	l °c	-10 ~ +46		

<sup>)</sup> Herrigerant 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<sub>2</sub>, over a period of 100 years. Never by to interfere with the refrigerant circuit yourself and always ask a professional.

The GWP of RS2 is 675 in the PCC 4th Assessment Report.

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

SIH: Super High.

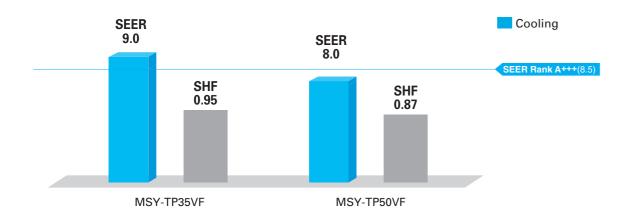
<sup>(2)</sup> Still: Supplied and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season". (5) Please see page 53-55 for heating lyaermer season) specifications.





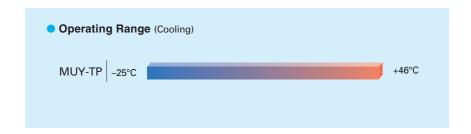
Cooling only model with high-perfomance provide high SHF in various environments thanks to wide operation range.

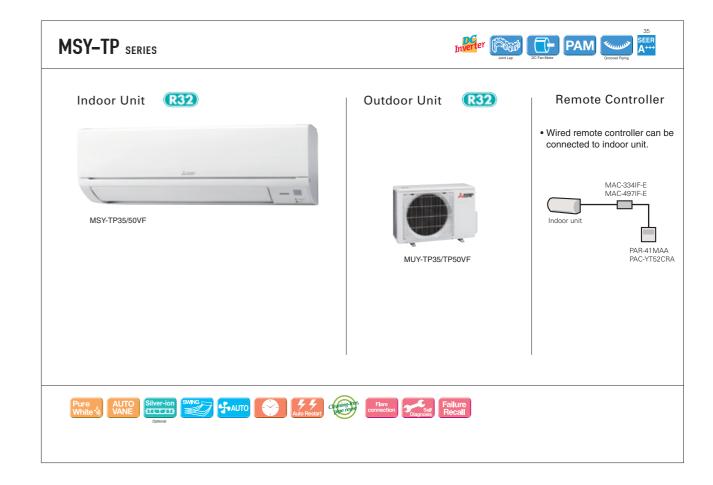
#### High Energy-Saving Performance with High SHF



#### Wide Cooling Operating Range

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





ype				In	verter Heat Pump
door Ur	nit			MSY-TP35VF	MSY-TP50VF
tdoor l	Unit			MUY-TP35VF	MUY-TP50VF
frigera	nt				R32 <sup>(1)</sup>
wer	Source			Ir	ndoor Power supply
pply	Outdoor (V/Ph	ase / Hz )			30V / Single / 50Hz
	Design load		kW	3.5	5.0
	Annual electricity	consumption (*2)	kWh/a	136	218
	SEER (*4)	· ·		9.0	8.0
ooling		Energy efficiency class		A+++	A <sup>++</sup>
		Rated	kW	3.5	5.0
	Capacity	Min-Max	kW	1.5 - 4.0	1.5 - 5.7
	Total Input	Rated	kW	0.760	1.450
	Design load		kW	-	-
	_	at reference design temperature		-	-
	Declared	at bivalent temperature	kW	-	-
	Capacity	at operation limit temperature	kW	-	-
ating	Back up heating		kW	-	-
erage	Annual electricity		kWh/a	-	-
ason)("5)	SCOP (14)			-	_
	Energy efficiency class				
		Rated	kW		-
L	Capacity	Min-Max	kW		_
	Total Input	Rated	kW		-
eratin	g Current (Max)	T Lates	A	9.6	9,6
, or a time	Input	Rated	kW	0.033	0.034
	Operating Curre		A	0.4	0.4
	Dimensions	H*W*D	mm	305-923-250	305-923-250
	Weight		kg	12.5	12.5
loor	Air Volume	Cooling	m³/min	10.1 - 11.6 - 13.7 - 16.4	10.1 - 11.6 - 13.7 - 16.4
it	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/min	10.1 11.0 10.1 10.4	10.1 11.0 10.1 10.4
	Sound Level (SPL)	Cooling	dB(A)	31 - 36 - 40 - 45	31 - 36 - 40 - 45
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	-	01 00 40 40
	Sound Level (PWL)	Cooling	dB(A)	60	60
	Breaker Size	Cooling	A A	10	10
	Dimensions	H*W*D	mm	550-800-285	550-800-285
	Weight	IIIWD	kg	34	34
	Weight	Cooling	m³/min	29.3	29.3
stelae -	Air Volume	Heating	m³/min	-	29.3
itdoor it		Cooling	dB(A)	- 45	47
	Sound Level (SPL)	Heating	dB(A)	- 45	-
	Sound Level (PWL)		dB(A)	- 58	- 61
			A A	9,2	
	Operating Curre				9.2
t.		Liquid/Gas	mm	6.35/9.52	6.35/9.52
ping	Max.Length	Out-In	m	20	20
	Max.Height	Out-In	m	12	12
	eed Operating	Cooling	°C	-25 ~ +46	-25 ~ +46

<sup>(</sup>i) realigetait learning controlles to ontate circle (re-integrant with ower global warning pole learning to controller as religeration with ower global warning pole learning to the amosphere. This application controller is a religerant flow of the setting and the setti

<sup>(\*2)</sup> Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is locate

<sup>(&</sup>quot;3) SHi: Super High ("4) SEER and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011.

# MSZ-S SERIES MSZ-G

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.



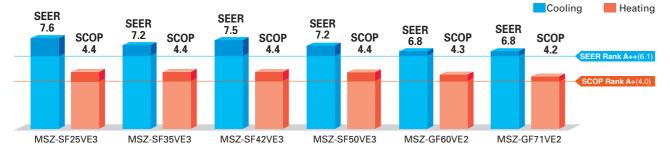
#### "Rank A++/A+" Energy Savings Achieved for Entire Range of Series







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.



#### Compact and Stylish

35

(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.

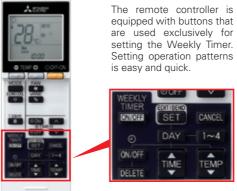
#### ■ Example Operation Pattern (Winter/Heating mode)

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
r.00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
6:00							
8:00							
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00 14:00		Automatio	Midday is warmer, so the temperature is set lower				
15:00							
18:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
55:00 50:00		Automatically tur	ns on, synchronized wi	ith arrival at home		Automatically raises ten match time when outsid	nperature setting to de-air temperature is low
(during sleeping hours)							
(during steeping nodis)	ON_18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
		Autom	atically lowers tempera	ture at bedtime for ene	ergy-saving operation a	it night	

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 -





- 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

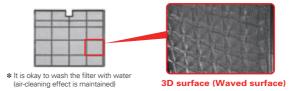
Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



#### Air Purifying Filter

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

This filter generates stable antibacterial and deodorising 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 vet another level



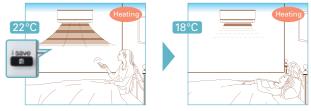
Outdoor Units for Cold Region (25/35/42/50)

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

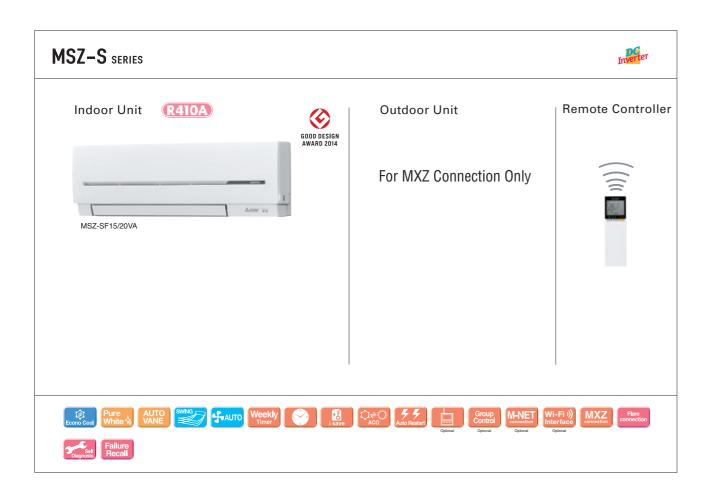
"i save" Mode

"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





Туре						Inverter F	leat Pump		
ndoor Ur	nit			MSZ-SF15VA	MSZ-SF20VA	MSZ-SF25VE3	MSZ-SF25VE3	MSZ-SF35VE3	MSZ-SF35VE3
Outdoor I	Jnit			for MXZ o	connection	MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH
efrigera	nt					R41	0A <sup>(*1)</sup>		
ower	Source					Outdoor Po	ower supply		
Supply	Outdoor (V/Ph	ase / Hz )				230/Si	ngle/50		
	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
Cooling		Energy efficiency class		_	_	A++	A++	A++	A++
		Rated	kW	-	-	2.5	2.5	3.5	3.5
	Capacity	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
	Design load	riatod	kW	_	_	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
	200igii iodu	at reference design temperature	_			2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
	Declared	at bivalent temperature	kW			2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
	Capacity	at operation limit temperature	kW	-	-	2.4(-10°C) 2.0(-15°C)	1.6(-20°C)	2.9(-10°C) 2.2(-15°C)	1.6(-20°C)
	Poek up besting		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
leating	Back up heating capacity		_	-	-	. ,	. ,		. ,
(Average Season) <sup>(*5)</sup>	Annual electricity consumption (*2)		kWh/a			764	790	923	948
	SCOP			-	-	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
peratin	g Current (Max)		A	-	-	8.4	8.4	8.5	8.5
	Input	Rated	kW	0.017	0.019	0.024	0.024	0.027	0.027
	Operating Curre		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
ndoor	Weight		kg	7.7	7.7	10	10	10	10
naoor Init	Air Volume	Cooling	m³/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.
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/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.
	Sound Level (SPL)	Cooling	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19(16) - 24 - 30 - 36 - 42	19(16) - 24 - 30 - 36 - 42	19 <sup>(16)</sup> - 24 - 30 - 36 - 42	19 <sup>(16)</sup> - 24 - 30 - 36 - 42
	(SLo-Lo-Mid-Hi-SHi(*3))	Heating	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19(16) - 24 - 34 - 39 - 45	19(16) - 24 - 34 - 39 - 45	19 <sup>(16)</sup> - 24 - 34 - 40 - 46	19 <sup>(16)</sup> - 24 - 34 - 40 - 46
	Sound Level (PWL)	Cooling	dB(A)	59	60	57	57	57	57
	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285
	Weight		kg	-	-	31	31	31	31
		Cooling	m³/min	-	-	31.1	31.1	35.9	35.9
	Air Volume	Heating	m³/min	-	-	30.7	30.7	35.9	35.9
utdoor		Cooling	dB(A)	-	-	47	47	49	49
nit	Sound Level (SPL)	Heating	dB(A)	_	_	48	48	50	50
	Sound Level (PWL)	Cooling	dB(A)	_	_	58	58	62	62
	Operating Curre		A	_	_	8.2	8.2	8.2	8.2
	Breaker Size	(	A	_	_	10	10	10	10
	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
xt.	Max.Length	Out-In	m	0.33/9.32	0.00/9.02	20	20	20	20
Piping	Max.Height	Out-In	_	-	-	12	12	12	12
			°C	-					
Guarante Range (C	ed Operating	Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46

Range (Outdoor)

Cooling
Range (Outdoor)

Refigerant 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 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassersmile the product yourself and always ask a professional.

The GWP of R410A is 2086 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 58-55 for heating (warmer season) specifications.

(6) For single use: only 19dB(A). For multi use (MXZ): 21dB(A).

MSZ-S SERIES MSZ-G SERIES	Inverter Cook DC For Motor	PAM  SEER  A++  Grooved Piprig
Indoor Unit R410A	Outdoor Unit R410A	Remote Controller
MSZ-SF25/35/42/50VE3	MUZ-SF25/35/42VE(H)	
MSZ-GF60/71VE2	MUZ-SF50VE(H) MUZ-GF60/71VE	
Pure Silver-ion Air Purifying SWING		Low Temp Cooling

T						I	Is at Down		
Туре				1107.0510150	1107.0510.50	Inverter H		1107.0500.50	
Indoor Ur				MSZ-SF42VE3	MSZ-SF42VE3	MSZ-SF50VE3	MSZ-SF50VE3	MSZ-GF60VE2	MSZ-GF71VE2
Outdoor				MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH	MUZ-GF60VE	MUZ-GF71VE
Refrigera						R41			
Power	Source					Outdoor Po			
Supply	Outdoor (V/Ph	ase / Hz )	kW			230/Si	,~		
	Design load			4.2	4.2	5.0	5.0	6.1	7.1
		Annual electricity consumption (*2)		196	196	246	246	311	364
	SEER (*4)			7.5	7.5	7.2	7.2	6.8	6.8
Cooling		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
	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	at reference design temperature	_	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)
	Capacity	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)
Heating	Back up heating		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)
(Average Season) <sup>(*5)</sup>			kWh/a	1215	1242	1351	1380	1489	2204
	SCOP <sup>(4)</sup>			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
	Capacity	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
Operatin	g Current (Max)		Α	9.5	9.5	12.3	12.3	14.5	16.6
	Input	Rated	kW	0.027	0.027	0.035	0.035	0.062	0.058
	Operating Current(Max)		Α	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
Indoor Unit	Air Volume	Cooling	m³/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
Ollit	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/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)	Cooling	dB(A)	26 <sup>(16)</sup> - 31 - 34 - 38 - 42	26 <sup>(16)</sup> - 31 - 34 - 38 - 42	28 <sup>(17)</sup> - 33 - 36 - 40 - 45	28 <sup>(7)</sup> - 33 - 36 - 40 - 45	29 - 37 -41 - 45 - 49	30 - 37 - 41 - 45 - 49
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	26 <sup>(16)</sup> - 31 - 36 - 42 - 47	26 <sup>(16)</sup> - 31 - 36 - 42 - 47	28 <sup>(17)</sup> - 33 - 38 - 43 - 49	28 <sup>(7)</sup> - 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
	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 Valores	Cooling	m³/min	35.2	35.2	44.6	44.6	49.2	50.1
	Air Volume	Heating	m³/min	33.6	33.6	44.6	44.6	49.2	48.2
Outdoor Unit		Cooling	dB(A)	50	50	52	52	55	55
Unit	Sound Level (SPL)	Heating	dB(A)	51	51	52	52	55	55
	Sound Level (PWL)	Cooling	dB(A)	63	63	65	65	65	65
	Operating Curre		A	9.2	9.2	12	12	14	16.1
	Breaker Size		A	10	10	16	16	20	20
	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
Ext.	Max.Length	Out-In	m	20	20	30	30	30	30
Piping	Max.Height	Out-In	m	12	12	15	15	15	15
Guarante	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
	Outdoor)	Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

Hasting (UUL0001) Hasting C. 1-15 - ±24 - ±24 - ±24

MSZ-D SERIES

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

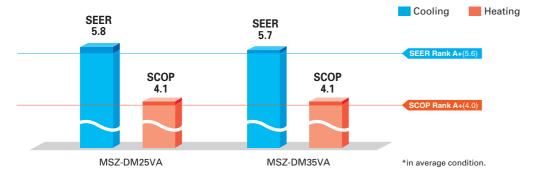
R410A

## Advanced Inverter Control -Efficient Operation All the Time



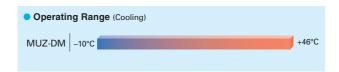
Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A+".

MSZ-DM25/35VA



#### 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)

39

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

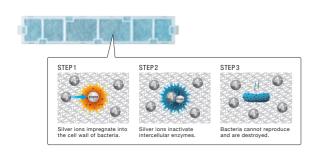
#### **System Control Interface (Optional)**

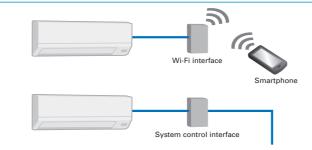
- •Remote on/off operation is possible by input to the connector.
- •Depending on the interface used, connecting a wired remote-control such as the PAR-41MAA is possible.
- •Centralised control is possible when connected to M-NET.

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

#### Silver-ionized Air Purifier Filter

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

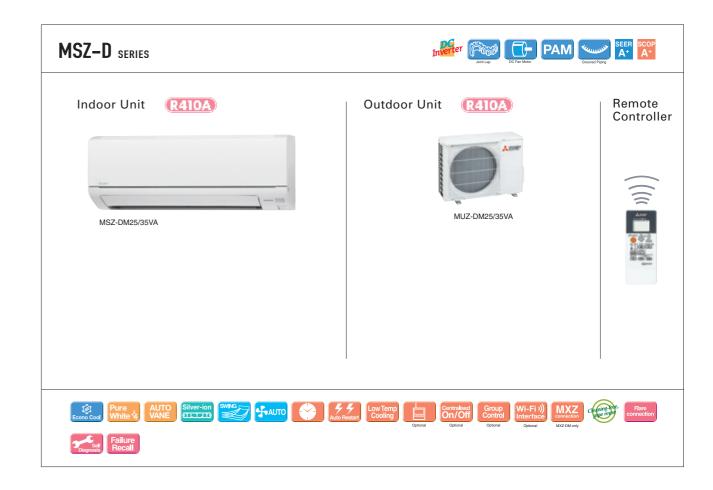




#### **Compact Units**

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





/ре				Invert	er Heat Pump
door Un	it			MSZ-DM25VA	MSZ-DM35VA
utdoor L				MUZ-DM25VA	MUZ-DM35VA
efrigeran					R410A <sup>(*1)</sup>
	Source				r Power supply
	Outdoor (V / Ph	ase / Hz )			//Single/50Hz
	Design load		kW	2.5	3.1
	Annual electricity	consumption (*2)	kWh/a	149	190
	SEER (*4)	oonoampuon		5.8	5.7
oling	0	Energy efficiency class		A <sup>+</sup>	A <sup>+</sup>
,g		Rated	kW	2.5	3.15
	Capacity	Min-Max	kW	1.3 - 3.0	1.4 - 3.5
ŀ	Total Input	Rated	kW	0.710	1.020
	Design load	1 Idiod	kW	1.9 (-10°C)	2.4 (-10°C)
Design load		at reference design temperature	kW	1.9 (-10°C)	2.4 (-10°C) 2.4 (-10°C)
	Declared	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10 C) 2.4 (-10°C)
	Capacity	at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10 G) 2.4 (-10°C)
}	Back up heating		kW	0.0 (-10°C)	0.0 (-10°C)
	Annual electricity		kWh/a	647	809
	SCOP (*4)	consumption	KVVII/d	4.1	4.1
···,	SCOP	F		4.1 A <sup>+</sup>	4.1 A <sup>+</sup>
		Energy efficiency class	134/		
	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
	Current (Max)	la	A	5.8	6.5
	Input	Rated	kW	0.020	0.024
	Operating Curre		A	0.3	0.3
		H*W*D	mm	290-799-232	290-799-232
or	Weight		kg	9	9
.	Air Volume	Cooling	m³/min	3.8 - 5.5 - 7.3 - 9.5	3.8 - 5.7 - 7.8 - 10.9
- 1		Heating	m³/min	3.5 - 5.5 - 7.5 - 10.0	3.5 - 5.5 - 7.5 - 10.3
	Sound Level (SPL)	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45
- 1	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	23 - 30 - 37 - 43	23 - 30 - 37 - 44
_	Sound Level (PWL)	Cooling	dB(A)	57	60
- 1	Dimensions	H*W*D	mm	538-699-249	538-699-249
[	Weight		kg	24	25
	Air Volume	Cooling	m³/min	31.5	31.5
	All Folulite	Heating	m³/min	31.5	31.5
door	Sound Level (SPL)	Cooling	dB(A)	50	51
Į.		Heating	dB(A)	50	51
[	Sound Level (PWL)	Cooling	dB(A)	63	64
	Operating Curre	nt (Max)	A	5.5	6.2
	Breaker Size		A	10	10
	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
_	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46
	utdoor)	Heating	°C	-10 ~ +24	-10 ~ +24

s GWP 45pers 17 or 1, the means a war an 1 of or a ways ask a professional.

The GWP of R410A is 2086 in the IPCC 4th Assessment Report.

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

<sup>(2)</sup> Still: Supplied 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 53-55 for heating lyaermer season) specifications.



#### 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





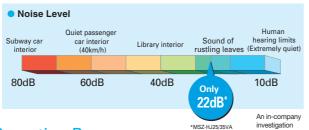




Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A" rating for 25/35 classes and "A\*" for 50/60/71 classes.

#### **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.



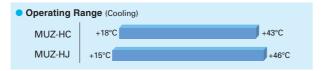
#### **Long Piping Length**

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

41

Outdoor Unit: MUZ-HJ25/35VA

Compared to other models, width is down by 16%



# 50/60/71 50/ MSZ-H SERIES Indoor Unit R410A Outdoor Unit R410A Remote Controller MUZ-HJ25/35VA MUZ-HJ50VA MSZ-HJ25/35/50VA MSZ-HJ60/71VA Pure White Want Silver-ion Swing Auto Silver-ion Swing Want State Connection Want Safe Recall Connection Want Safe Recall Connection

Туре					Inverter Heat Pump						
Indoor Ur	nit			MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA			
Outdoor	Unit			MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA			
Refrigera	nt					R410A <sup>(*1)</sup>					
Power	Source					Indoor Power supply					
Supply	Outdoor ( V / Ph	ase / Hz )		230V/Single/50Hz							
	Design load		kW	2.5	3.1	5.0	6.1	7.1			
		Annual electricity consumption (*2)		171	212	292	354	441			
	SEER (*4)			5.1	5.1	6.0	6.0	5.6			
Cooling	Energy efficiency class			А	A	A+	A+	A+			
	Capacity	Rated	kW	2.5	3.15	5.0	6.1	7.1			
	Capacity	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			
	Design load		kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)			
	Declared	at reference design temperature		1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)			
	Capacity	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)			
	оприону	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)			
Heating	Back up heating		kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)			
(Average			kWh/a	698	885	1267	1544	1854			
Season)("5)	SCOP (14)			3.8	3.8	4.2	4.1	4.0			
		Energy efficiency class		А	A	A+	A+	A+			
	Capacity	Rated	kW	3.15	3.6	5.4	6.8	8.1			
	Capacity	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			
Operatin	g Current (Max)		Α	5.8	6.5	9.8	12.5	12.5			
	Input	Rated	kW	0.020	0.024	0.037	0.055	0.055			
	Operating Curre	nt(Max)	Α	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			
Indoor	Weight		kg	9	9	9	13	13			
Unit	Air Volume	Cooling	m³/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			
0	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	m³/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)	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45	28 - 36 - 40 - 45	31 - 38 - 44 - 50	33 - 38 - 44 - 50			
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	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			
	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	m³/min	31.5	31.5	36.3	47.9	49.3			
Outdoor	All Volume	Heating	m³/min	31.5	31.5	34.8	47.9	47.9			
Unit	Sound Level (SPL)	Cooling	dB(A)	50	50	50	55	55			
0		Heating	dB(A)	50	50	51	55	55			
	Sound Level (PWL)	Cooling	dB(A)	63	64	64	65	66			
	Operating Curre	nt (Max)	Α	5.5	6.2	9.4	12.0	12.0			
	Breaker Size		Α	10	10	12	16	16			
Ext.	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7	6.35/15.88	9.52/15.88			
Piping	Max.Length	Out-In	m	20	20	20	30	30			
ba	Max.Height	Out-In	m	12	12	12	15	15			
Guarante	eed Operating	Cooling	℃	+15 ~ +46	+15 ~ +46	+15 ~ +46	+15 ~ +46	+15 ~ +46			
	Outdoor)	Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24			

<sup>(\*1)</sup> 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit SOME SIGNAL TO A LINE THE RESIDENCE TO A LINE THE RESIDENCE AND A LINE

<sup>(2)</sup> Still: Supplied 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 53-55 for heating lyaermer season) specifications.

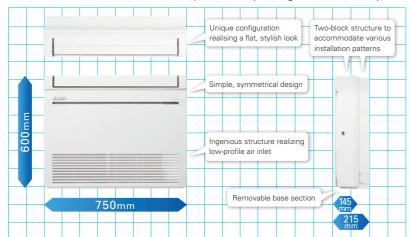
# MFZ SERIES

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



#### Simple, Flat Design

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





#### New Line-up

New models have been introduced to expand the line-up. The diverse selection enables the best solution for both customers and locations.

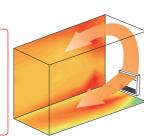
Capacity	2.5kW	3.5kW	5.0kW	6.0kW				
MFZ-KJ	✓	✓	✓					
1								
MFZ-KT	✓	✓	✓	✓				

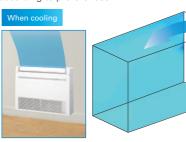
#### Multi-flow Vane

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









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

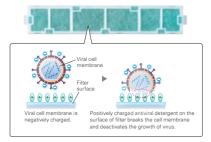
#### Weekly Timer (Introduced in response to market demand)

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.

#### **V Blocking Filter**

V Blocking Filter with antiviral effect inhibits 99% of adhered virus, and other harm-

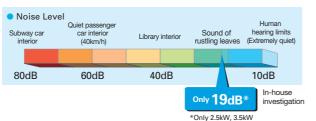
ful substances, such as bacteria, mold and allergen. Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.

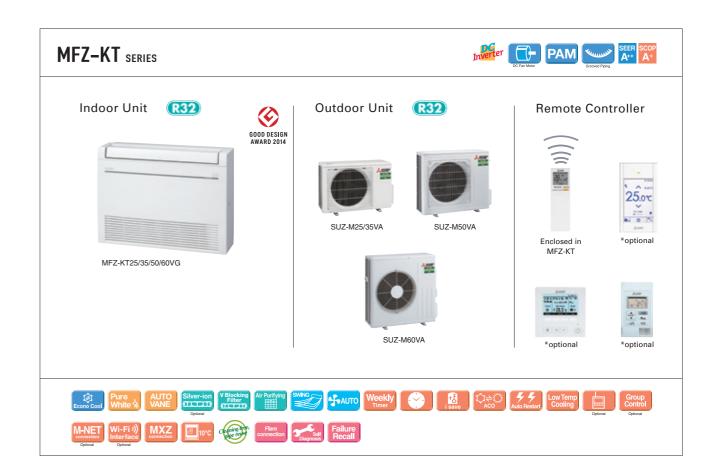


#### **Quiet Operation**

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

\* Single connection only.





уре					Inverter	Heat Pump			
door Ur	nit			MFZ-KT25VG	MFZ-KT35VG	MFZ-KT50VG	MFZ-KT60VG		
utdoor l	Jnit			SUZ-M25VA	SUZ-M35VA	SUZ-M50VA	SUZ-M60VA		
efrigera	nt			R32 <sup>(*1)</sup>	R32 <sup>(*1)</sup>	R32 <sup>(*1)</sup>	R32 <sup>(*1)</sup>		
wer	Source			Outdoor power supply					
ıpply	Outdoor(V/Phase/Hz)				230 / Si	ngle / 50			
	Design load		kW	2.5	3.5	5.0	6.1		
	Annual electricity consun	nption <sup>(°2)</sup>	kWh/a	134	185	257	343		
	SEER ('4), ('5)			6.5	6.6	6.8	6.2		
oling		Energy efficiency class		A++	A++	A++	A++		
	Capacity	Rated	kW	2.5	3.5	5.0	6.1		
		Min-Max	kW	1.6 - 3.2	0.9 - 3.9	1.2 - 5.6	1.7 - 6.3		
	Total Input	Rated	kW	0.62	1.06	1.55	1.84		
	Design load	•	kW	2.2	2.6	4.3	4.6		
	Declared Capacity	at reference design temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.5 (-10°C)	4.1 (-10°C)		
		at bivalent temperature	kW	2.0 (-7°C)	2.3 (-7°C)	3.9 (-7°C)	4.1 (-7°C)		
		at operation limit temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.5 (-10°C)	4.1 (-10°C)		
ating	Back up heating capacity		kW	0.2	0.3	0.8	0.5		
rerage	Annual electricity consun	nption (*2)	kWh/a	732	825	1423	1568		
eason) SCOP (*4), (*5)		-		4.2	4.4	4.2	4.1		
		Energy efficiency class		A+	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>		
	Capacity	Rated	kW	3.4	4.3	6.0	7.0		
		Min-Max	kW	1.3 - 4.2	1.1 - 5.0	1.5 - 7.2	1.6 - 8.0		
	Total Input	Rated	kW	0.91	1.26	1.86	2.18		
eratin	g Current (Max)	<u>'</u>	А	7.0	8.7	14.0	15.4		
	Input	Rated	kW	0.020 / 0.024	0.020 / 0.024	0.037 / 0.052	0.063 / 0.059		
	Operating Current(Max)		Α	0.20	0.20	0.45	0.55		
	Dimensions	H*W*D	mm	600-750-215	600-750-215	600-750-215	600-750-215		
	Weight	<u>'</u>	kg	14.5	14.5	14.5	15.0		
loor iit	Air Volume	Cooling	m³/min	3.9 - 4.8 - 6.5 - 7.8 - 8.9	3.9 - 4.8 - 6.5 - 7.8 - 8.9	5.6 - 6.7 - 8.6 - 10.4 - 12.3	5.6 - 8.0 - 9.6 - 12.3 - 15.		
III	(SLo-Lo-Mid-Hi-SHi (*3))	Heating	m³/min	3.5 - 4.0 - 5.6 - 7.3 - 9.7	3.5 - 4.0 - 5.6 - 7.3 - 9.7	6.0 - 7.7 - 9.4 - 11.6 - 14.0	6.0 - 7.7 - 9.7 - 12.5 - 14.		
	Sound Level (SPL)	Cooling	dB(A)	19 - 24 - 31 - 37 - 41	19 - 24 - 31 - 37 - 41	28 - 32 - 37 - 42 - 48	28 - 36 - 40 - 46 - 53		
	(SLo-Lo-Mid-Hi-SHi (*3))	Heating	dB(A)	19 - 23 - 30 - 37 - 44	19 - 23 - 30 - 37 - 44	29 - 35 - 40 - 44 - 49	29 - 35 - 41 - 47 - 51		
	Sound Level (PWL)	Cooling	dB(A)	54	54	60	65		
	Dimensions	H*W*D	mm	550-800-285	550-800-285	714-800-285	880-840-300		
	Weight	<u> </u>	kg	30	35	41	54		
	Air Volume	Cooling	m³/min	36.3	34.3	45.8	50.1		
tdoor		Heating	m³/min	34.6	32.7	43.7	50.1		
itaoor iit	Sound Level (SPL)	Cooling	dB(A)	45	48	48	49		
-		Heating	dB(A)	46	48	49	51		
	Sound Level (PWL)	Cooling	dB(A)	59	59	64	65		
	Operating Current(Max)	1 -	A	7	9	14	15		
	Breaker Size		A	10	10	16	16		
	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88		
rt.	Max.Length	Out-In	m	20	20	30	30		
ping	Max.Height	Out-In	m	12	12	30	30		
uarante	ed Operating Range	Cooling	℃	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46		
				.00					

<sup>(\*1)</sup> Refrigerant leskage 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or GSSassemble the product yourself or gard 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) SFIs. Super High

(\*4) SEER, SOOP 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) SEER and SCOP are based on 2009/125/EC.Energy-related Products Directive and Regulation(EU) No.206/2012.



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

R410A



#### 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.



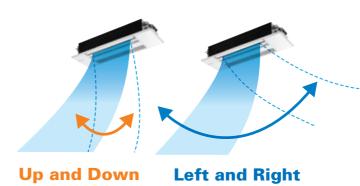
#### Set Airflow According to Ceiling Height

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**

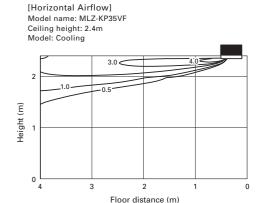
Outlet vanes can be moved left and right, and up and down using the remote controller. This improved airflow control feature solves the problem of drafts.



\*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.



#### Weekly 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
			Automatically change	es to high-power opera	tion at wake-up time		
8:00							
10:00							
(2:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
		Automatio	cally turned off during v	vork hours		Midday is warmer, so the temperature	
14:00							
1P: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	ON 22 C				ON 22 C	Automatically raises ten	
		Automatically tur	ns on, synchronized wi	th arrival at home			de-air temperature is low
55:00							
ıring sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 10°C	ON 10°C
		Automa	atically lowers tempera	ture at bedtime for en	ergy-saving operation a	t night	

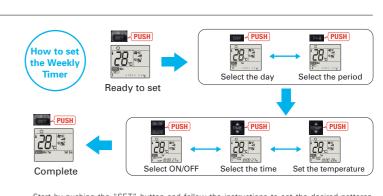
Settings

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





- 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.
- 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**

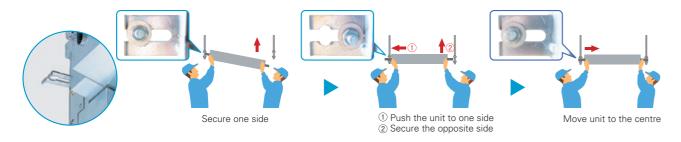
Inovative size which enables to fold the refrigerant piping above



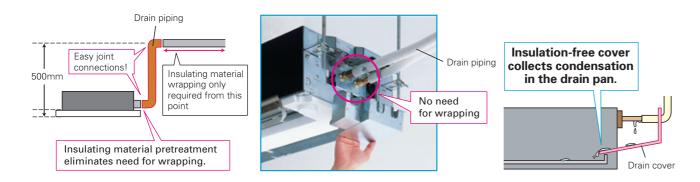
Dimension: 185(H)×1102(W)×360(D)mm

#### Temporary hanging hook

Work efficiency has improved during installation.

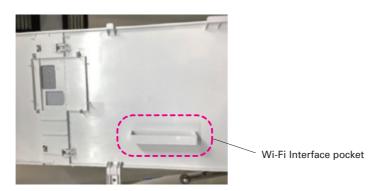


#### **Drain Piping Supporters + Drain Cover**



#### 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.





ype					Inverter Heat Pump					
ndoor Ur	nit			MLZ-KP25VF	MLZ-KP35VF	MLZ-KP50VF				
Outdoor	Jnit			SUZ-M25VA	SUZ-M35VA	SUZ-M50VA				
efrigera	nt				R32 <sup>(*1)</sup>					
ower	Source				Outdoor Power supply					
upply	Outdoor (V/Ph	ase / Hz )		230V / Single / 50Hz						
	Design load		kW	2.5	3.5	5.0				
	Annual electricity	consumption (*2)	kWh/a	141	175	260				
	SEER (14, (15)		`	6.2	7.0	6.7				
ooling		Energy efficiency clas	s	A++	A++	A++				
		Rated	kW	2.5	3.5	5.0				
	Capacity	Min-Max	kW	1.4 - 3.2	0.8 - 3.9	1.7 - 5.6				
	Total Input	Rated	kW	0.59	0.94	1.38				
	Design load		kW	2.2	2.6	4.3				
		at reference design temperatur	e kW	2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)				
	Declared	at bivalent temperature	kW	2.0 (-7°C)	2.3 (-7°C)	3.8 (-7°C)				
	Capacity	at operation limit temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)				
(Average Season)	Back up heating		kW	0.2	0.3	0.5				
	Annual electricity consumption (*2) kWh/a			697	791	1397				
	SCOP ('4), ('5)			4.4	4.6	4.3				
		Energy efficiency clas	s	A+	A++	A+				
		Rated	kW	3.2	4.1	6.0				
	Capacity	Min-Max	kW	1.4 - 4.2	1.1 - 4.9	1.7 - 7.2				
	Total Input	Rated	kW	0.80	1.10	1.86				
neratin	g Current (Max)	1 6100	A	7.2	8.9	13.9				
poratiii	Input	Rated	kW	0.04	0.04	0.04				
	Operating Curre		A	0.40	0.40	0.40				
	Dimensions	H*W*D	mm	185-1102-360	185-1102-360	185-1102-360				
	Weight	IIIV	kg	15.5	15.5	15.5				
ndoor	Air Volume Cooling		m³/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				
Jnit	(SLo-Lo-Mid-Hi <sup>(*3)</sup> )			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)	Cooling	m³/min dB(A)	27-31-34-38	27-32-36-40	29-36-41-47				
	(SLo-Lo-Mid-Hi <sup>(*3)</sup> )	Heating	dB(A)	26-27-34-37	29-32-36-40	26-37-42-48				
	Sound Level (PWL)	Cooling	dB(A)	52	53	59				
	Dimensions	H*W*D	mm	24-1200-424	24-1200-424	24-1200-424				
anel	Weight	111110	kg	3.5	3.5	3.5				
	Dimensions	H*W*D	mm	550-800-285	550-800-285	550-800-285				
	Weight		kg	30	35	41				
		Cooling	m³/min	36.3	34.3	45.8				
	Air Volume	Heating	m³/min	34.6	32.7	43.6				
utdoor		Cooling	dB(A)	45	48	43.7				
Init	Sound Level (SPL)	Heating	dB(A)	45	48	48				
	Sound Level (PWL)	Cooling	dB(A)	59	48 59	64				
	Operating Curre		A A	6.8	8.5	13.5				
	Breaker Size	iii (ividă)	A	10	10	20				
		1:::-1/0			-					
xt.	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7				
iping	Max.Length	Out-In	m	20	20	30				
	Max.Height	Out-In	m	12	12	30				
<b>Guaranteed Operating</b>		Cooling	℃	-10~+46	-10~+46	-15~+46				

Pleftigerant leakage contributes to climate change. Reftigerant with lower global warming potential (GWP) would contribute less to global warming than a reftigerant 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 reftigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO<sub>2</sub>, 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 RIO kg 2018 in the IPCC 4th Assessment Report.

## **Specification on Warmer/Colder Condition**

Туре					Inverter Heat Pump	
Indoor Ur	nit			MSZ-RW25VG	MSZ-RW35VG	MSZ-RW50VG
Outdoor	Jnit			MUZ-RW25VGHZ	MUZ-RW35VGHZ	MUZ-RW50VGHZ
Refrigera	nt				R32 (*3)	
	Design load		kW	2.5	3.5	5.0
Cooling	Annual electricity	consumption (*2)	kWh/a	78	130	230
0009	SEER			11.2	9.4	7.6
		Energy efficiency class		A+++	A+++	A++
	Design load		kW	1.8	2.2	3.3
		at reference design temperature	kW	1.8	2.2	3.3
	Declared Capacity	at bivalent temperature	kW	1.8	2.2	3.3
Heating (Warmer	Capacity	at operation limit temperature	kW	2.6	2.6	4.0
Season)	Back up heating	capacity	kW	0.0	0.0	0.0
0000011,	Annual electricity	consumption (*2)	kWh/a	372	469	715
	SCOP			6.7	6.5	6.4
		Energy efficiency class		A+++	A+++	A+++
	Design load		kW	4.7	5.9	8.8
		at reference design temperature	kW	3.7	4.0	5.6
	Declared Capacity	at bivalent temperature	kW	3.2	4.0	6.0
Heating (Colder	Capacity	at operation limit temperature	kW	2.6	2.6	4.0
(Colder Season)	Back up heating	g capacity	kW	1.0	1.9	3.2
	Annual electricity	consumption (*2)	kWh/a	2407	3083	5157
	SCOP			4.1	4.0	3.5
		Energy efficiency class		A <sup>+</sup>	A <sup>+</sup>	A

Туре							Inverter Heat Pump	)		
Indoor Ur	nit			MSZ-L1	N25VG2	MSZ-LI	N35VG2	MSZ-L	N50VG2	MSZ-LN60VG2
Outdoor I	Unit			MUZ-LN25VG2	MUZ-LN25VGHZ2	MUZ-LN35VG2	MUZ-LN35VGHZ2	MUZ-LN50VG2	MUZ-LN50VGHZ	MUZ-LN60VG
Refrigera	nt						R32 (*3)			
	Design load		kW	2.5	2.5	3.5	3.5	5	5.0	6.1
Cooling	Annual electricity	consumption (*2)	kWh/a	83	83	129	130	205	230	285
0009	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++
	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)
		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)
	Declared Capacity	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)
Heating (Warmer	Capacity	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)
Season)	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	369	382	431	467	602	779	779
	SCOP			6.4	6.6	6.5	6.5	5.8	5.9	5.9
		Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A+++	A+++
	Design load		kW	-	4.7 (-22°C)	-	5.9 (-22°C)	-	8.8 (-22°C)	-
	Declared	at reference design temperature	kW	-	2.6 (-22°C)	-	3.4 (-22°C)	-	5.1 (-22°C)	-
	Capacity	at bivalent temperature	kW	-	3.2 (-10°C)	-	4.0 (-10°C)	-	6.0 (-10°C)	-
Heating (Colder	Capacity	at operation limit temperature	kW	-	2.3 (-25°C)	-	3.1 (-25°C)	-	4.7 (-25°C)	-
Season)	Back up heating		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 <sup>+</sup>	_	A <sup>+</sup>	_	A	_

Туре					Inverter Heat Pump				
Indoor Ur	nit			MSZ-FT25VG	MSZ-FT35VG	MSZ-FT50VG			
Outdoor I	Unit			MUZ-FT25VGHZ	5VG         MSZ-FT35VG         MSZ-FT50VG           VGHZ         MUZ-FT50VGHZ         MUZ-FT50VGHZ           R32 P3         MUZ-FT50VGHZ           3.5         5.0           142         243           8.6         7.2           A+++         A++           C)         2.2 (2°C)         2.7 (2°C)           C)         2.2 (2°C)         2.7 (2°C)           C)         2.2 (2°C)         2.7 (2°C)           C)         3.4 (-25°C)         3.6 (-25°C)           C)         0.0 (2°C)         0.0 (2°C)           527         684         5.8           5.8         5.5           A+++         A+++           PC)         3.7 (-22°C)         4.0 (-22°C)           PC)         3.7 (-22°C)         4.0 (-22°C)				
Refrigera	nt				R32 (*3)				
	Design load		kW	2.5	3.5	5.0			
Cooling	Annual electricity	consumption (*2)	kWh/a	101	142	243			
0009	SEER			8.6	8.6	7.2			
		Energy efficiency class		A+++	A+++	A++			
	Design load		kW	1.8 (2°C)	2.2 (2°C)	2.7 (2°C)			
		at reference design temperature	kW	1.8 (2°C)	2.2 (2°C)	2.7 (2°C)			
	Declared Capacity	at bivalent temperature	kW	1.8 (2°C)	2.2 (2°C)	2.7 (2°C)			
Heating (Warmer	Capacity	at operation limit temperature	kW	3.0 (-25°C)	3.4 (-25°C)	3.6 (-25°C)			
(warmer Season)	Back up heating	g capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)			
0000011,	Annual electricity	consumption (*2)	kWh/a	432	527	684			
	SCOP			5.8	5.8	5.5			
		Energy efficiency class		A+++	A+++	A+++			
	Design load		kW	4.7 (-22°C)	5.9 (-22°C)	7.4 (-22°C)			
		at reference design temperature	kW	3.1 (-22°C)	3.7 (-22°C)	4.0 (-22°C)			
	Declared Capacity	at bivalent temperature	kW	3.2 (-10°C)	4.0 (-10°C)	5.0 (-10°C)			
Heating (Colder	Capacity	at operation limit temperature	kW	3.0 (-25°C)	3.4 (-25°C)	3.6 (-25°C)			
Season)	Back up heating	g capacity	kW	1.6 (-22°C)	2.2 (-22°C)	3.4 (-22°C)			
	Annual electricity	consumption (*2)	kWh/a	2766	3453	4707			
	SCOP			3.5	3.5	3.3			
		Energy efficiency class		A	A	В			

Туре									Inverter H	leat Pump					
Indoor Ur	nit			MSZ-AP15VG	MSZ-AP20VG	MSZ-A	P25VG	MSZ-A	P35VG	MSZ-A	P42VG	MSZ-A	P50VG	MSZ-AP60VG(K)	MSZ-AP71VG(F
Outdoor	Unit			MUZ-AP15VG	MUZ-AP20VG	MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH	MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH	MUZ-AP60VG	MUZ-AP71VG
Refrigera	nt					•			R3	2 <sup>('3)</sup>			•		
	Design load		kW	1.5	2.0	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0	6.1	7.1
Cooling	Annual electricity	consumption (*2)	kWh/a	72	81	116	116	171	171	196	196	246	246	288	345
	SEER	Sesign load   RW   1.5   2.0	8.6	7.6	7.6	7.2	7.2	7.5	7.5	7.2	7.2	7.4	7.2		
		Energy efficiency class		A++	A+++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++
	Design load		kW	0.9 (2°C)	1.3 (2°C)	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)	2.5 (2°C)	3.7 (2°C)
		at reference design temperature	kW	0.9 (2°C)	1.3 (2°C)	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)	2.5 (2°C)	3.7 (2°C)
		at bivalent temperature	kW	0.9 (2°C)	1.3 (2°C)	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)	2.5 (2°C)	3.7 (2°C)
Heating (Warmer	Capacity	at operation limit temperature	kW	1.6 (-15°C)	2.2 (-15°C)	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)	3.7 (-15°C)	5.4 (-15°C)
Season)	Back up heating	g capacity	kW	0.0 (2°C)	2) 1.6 (-20°C) 3.4 (-15°C) 2.2 (-20°C) 3.4 (-15°C) 2.3 (-20°C) 3.7 (-15°C) 5.4 (-15°C) 0.0 (2°C)	0.0 (2°C)									
,	Annual electricity	consumption (*2)	kWh/a	265	350	337	337	923 / 418	417	507	507	563	563	627	891
	SCOP			4.7	5.2	5.4	5.4	5.4	5.4	5.8	5.8	5.7	5.7	5.5	5.8
		Energy efficiency class	,	A++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

Туре						Inverter H	leat Pump		
Indoor Ur	nit			MSZ-E	F25VG	MSZ-E	F35VG	MSZ-EF42VG	MSZ-EF50VG
Outdoor I	Jnit			MUZ-EF25VG	MUZ-EF25VGH	MUZ-EF35VG	MUZ-EF35VGH	MUZ-EF42VG	MUZ-EF50VG
Refrigera	nt					R3	32(*3)		
	Design load		kW	2.5	2.5	3.5	3.5	4.2	5.0
Cooling	Annual electricity	consumption (*2)	kWh/a	96	96	139	139	186	233
	SEER			9.1	9.1	8.8	8.8	7.9	7.5
		Energy efficiency class		A+++	A+++	A+++	A+++	A++	A++
	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)
		at reference design temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	4.2 186 7.9 A++	2.3 (2°C)
Indoor Unit Outdoor Unit Refrigerant Cooling Annual SEER Desigr Declar Capac Warmer Back L Ba		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)
	Сарасну	at operation limit temperature	kW	2.0 (-15°C)	2.0 (-15°C)	2.4 (-15°C)	2.4 (-15°C)	3.4 (-15°C)	3.5 (-15°C)
	Back up heating	Back up heating capacity kW		0.0 (2°C)	0.0 (2°C)				
	Annual electricity consumption (*2) kWh/a		311	311	398	398	489	595	
	SCOP	COP			5.9	5.6	5.6	6.0	5.4
	Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A+++	

Туре					Inverter H	eat Pump	
Indoor Ur	nit			MSZ-BT20VG	MSZ-BT25VG	MSZ-BT35VG	MSZ-BT50VG
Outdoor I	Unit			MUZ-BT20VG	MUZ-BT25VG	MUZ-BT35VG	MUZ-BT50VG
Refrigera	nt				R3	2 <sup>(*3)</sup>	
	Design load		kW	2.0	2.5	3.5	5.0
Cooling	Annual electricity	consumption (*2)	kWh/a	86	108	180	265
0009	SEER			8.1	8.1	6.8	6.6
		Energy efficiency class		A++	A++	A++	A++
	Design load		kW	0.9 (2°C)	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
		At reference design temperature	kW	0.9 (2°C)	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
	Declared Capacity	at bivalent temperature	kW	0.9(2°C)	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
Heating (Warmer	Capacity	at operation limit temperature	kW	1.3 (-15°C)	1.7 (-15°C)	2.1 (-15°C)	3.4 (-15°C)
(warmer Season)	Back up heating	g capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
0000011,	Annual electricity	consumption (*2)	kWh/a	234	268	304	543
	SCOP (*4)			5.3	5.7	5.9	5.4
		Energy efficiency class		A+++	A+++	A+++	A+++

Туре						Inverter H	leat Pump		
Indoor Ur	nit			MSZ-HR25VF	MSZ-HR35VF	MSZ-HR42VF	MSZ-HR50VF	MSZ-HR60VF	MSZ-HR71VF
Outdoor I	Jnit			MUZ-HR25VF	MUZ-HR35VF	MUZ-HR42VF	MUZ-HR50VF	MUZ-HR60VF	MUZ-HR71VF
Refrigera	nt				•	R32	(*3)		
	Design load		kW	2.5	3.4	4.2	5.0	6.1	7.1
Cooling	Annual electricity	consumption (*2)	kWh/a	141	191	226	269	296	355
0009	SEER	ER			6.2	6.5	6.5	7.2	7.0
		Energy efficiency class		A <sup>++</sup>	A++	A++	A++	A++	A++
	Design load	Design load kW			1.3 (2°C)	1.6 (2°C)	2.1 (2°C)	2.5 (2°C)	3.0 (2°C)
		at reference design temperature	kW	1.1 (2°C)	1.3 (2°C)	1.6 (2°C)	2.1 (2°C)	2.5 (2°C)	3.0 (2°C)
	Declared Capacity	at bivalent temperature	kW	1.1 (2°C)	1.3 (2°C)	1.6 (2°C)	2.1 (2°C)	2.5 (2°C)	3.0 (2°C)
Heating	Capacity	at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
(Warmer Season)	Back up heating	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)
00000,	Annual electricity	nnual electricity consumption (*2) kWh/a			344	427	558	640	802
	SCOP			5.3	5.2	5.2	5.2	5.4	5.2
	Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A+++	

Туре					Inverter Heat Pump	י			
Indoor Ur	nit			MSZ-DW25VF	MSZ-DW35VF	MSZ-DW50VF			
Outdoor I	Jnit			MUZ-DW25VF	MUZ-DW35VF	MUZ-DW50VF			
Refrigera	nt			R32 <sup>(3)</sup>					
	Design load		kW	2.5	3.4	5.0			
Cooling	Annual electricity	consumption (*2)	kWh/a	135	184	261			
0009	SEER			6.2	6.2	6.5			
		Energy efficiency class		A++	A++	A++			
	Design load		kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)			
		at reference design temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)			
	Declared Capacity	at bivalent temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)			
Heating (Warmer	Capacity	at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)			
(warmer Season)	Back up heating	capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)			
2220011)	Annual electricity	consumption (*2)	kWh/a	287	351	508			
	Annual electricity consu			5.3	5.1	5.3			
		Energy efficiency class		A+++	A+++	A+++			

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Туре							leat Pump		
Indoor Ur	nit			MSZ-FI	H25VE2	MSZ-F	H35VE2	MSZ-F	H50VE2
Outdoor	Unit			MUZ-FH25VE	MUZ-FH25VEHZ	MUZ-FH35VE	MUZ-FH35VEHZ	MUZ-FH50VE	MUZ-FH50VEHZ
Refrigera	nt					R41	0A (*1)		•
	Design load		kW	2.5	2.5	3.5	3.5	5.0	5.0
Cooling	Annual electricity consumption (*2) kl		kWh/a	96	96	138	138	244	244
ccomig				9.1	9.1	8.9	8.9	7.2	7.2
		Energy efficiency class		A+++	A+++	A+++	A+++	A++	A++
	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)
		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)
	Declared Capacity	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)
Heating (Warmer	Capacity	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)
(warmer Season)	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)
2220011)	Annual electricity	Annual electricity consumption (*2) kWh/a			397	429	471	614	787
	SCOP	SCOP			6.3	6.5	4.8 / 6.5	5.7	5.9
	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, it 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<sub>2</sub>, 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<sub>2</sub>, 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.

## **Specification on Warmer/Colder Condition**

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Type							Inverter H	eat Pump			
Indoor U	nit			MSZ-SI	F25VE3	MSZ-S	F35VE3	MSZ-S	F42VE3	MSZ-S	F50VE3
Outdoor	Unit			MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH	MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH
Refrigera	ınt			R410A (1)							
	Design load		kW	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0
Cooling	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++							
	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)
		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)
	Declared Capacity	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)
Heating (Warmer	1	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)
Season)	Back up heating	capacity	kW	0.0 (2°C)							
2220011	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+++							

Туре					Inverter H	eat Pump	
Indoor Ur	nit			MSZ-GF60VE2	MSZ-GF71VE2	MSZ-WN25VA	MSZ-WN35VA
Outdoor I	Unit			MUZ-GF60VE	MUZ-GF71VE	MUZ-WN25VA	MUZ-WN35VA
Refrigera	nt				R410	)A (*1)	
	Design load		kW	6.1	7.1	2.5	3.1
Cooling	Annual electricity	consumption (*2)	kWh/a	311	364	141	173
0009	SEER			6.8	6.8	6.2	6.2
		Energy efficiency class		A++	A++	A++	A++
	Design load		kW	2.5 (2°C)	3.7 (2°C)	1.1 (2°C)	1.3 (2°C)
		At reference design temperature	kW	2.5 (2°C)	3.7 (2°C)	1.1 (2°C)	1.3 (2°C)
	Declared Capacity	at bivalent temperature	kW	2.5 (2°C)	3.7 (2°C)	1.1 (2°C)	1.3 (2°C)
Heating (Warmer	Сарасну	at operation limit temperature	kW	3.7 (-15°C)	5.4 (-15°C)	1.6 (-15°C)	2.0 (-15°C)
Season)	Back up heating	capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
0000011,		Annual electricity consumption (*2) kWh/			963	304	362
	SCOP (*4)			5.3	5.4	5.0	5.0
		Energy efficiency class		A+++	A+++	A++	A++

Туре						ı	nverter Heat Pump	)					
Indoor Ur	nit			MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA	MSZ-DM25VA	MSZ-DM35VA			
Outdoor I	Unit			MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA	MUZ-DM25VA	MUZ-DM35VA			
Refrigera	nt			R410A (*1)									
	Design load		kW	2.5	3.1	5.0	6.1	7.1	2.5	3.1			
Cooling	Annual electricity	consumption (*2)	kWh/a	171	212	292	354	441	149	190			
0009	SEER			5.1	5.1	6.0	6.0	5.6	5.8	5.7			
		Energy efficiency class		А	A	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>			
	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)			
		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)			
	Declared Capacity	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)			
Heating (Warmer	Сарасну	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)			
(warmer Season)	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)			
2230011	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 <sup>+</sup>	A <sup>+</sup>	A+++	A+++	A++	A++	A++			

<sup>(1)</sup> 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<sub>2</sub>, 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 enfigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO<sub>2</sub>, 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.









## **SELECTION**

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

#### **SELECT INDOOR UNIT**

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



#### **Units without Remote Controller**

SLZ-M15FA2

(Multi split series connection only)

SLZ-M25FA2

SLZ-M35FA2

SLZ-M50FA2

SLZ-M60FA2

#### **Panel**

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controlle
SLP-2FA			
SLP-2FAL	✓		
SLP-2FAE		✓	
SLP-2FALE	✓	✓	
SLP-2FALM2	✓		✓
SLP-2FALME2	✓	✓	✓





#### **Units without Remote Controller**

SEZ-M25DA2

SEZ-M35DA2

SEZ-M50DA2

SEZ-M60DA2

SEZ-M71DA2

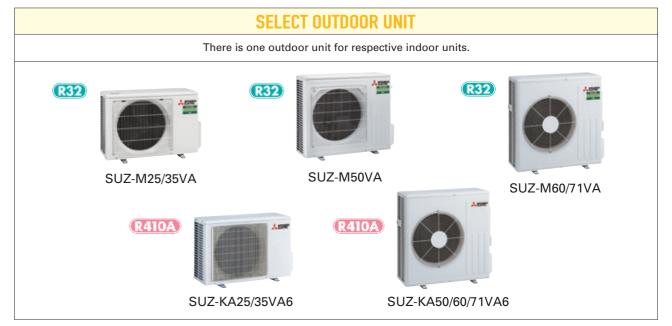
#### Units with Wireless Remote Controller

SEZ-M25DAL2

SEZ-M35DAL2

SEZ-M50DAL2

SEZ-M60DAL2 SEZ-M71DAL2



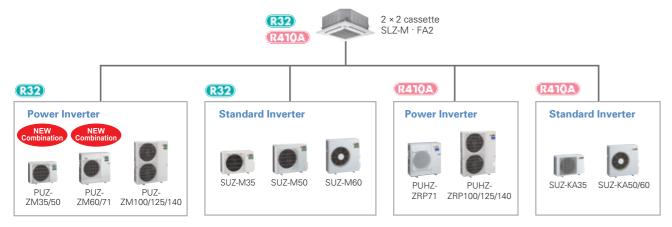
 $<sup>\</sup>bigstar \text{To confirm compatibility with the MXZ Series multi-type system, refer to the MXZ Series page}.$ 



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

#### 2x2 Cassette Line-up

The SLZ series was previously only able to be connected to standard inverters and some power inverters. However, it can now also be connected to low-capacity power inverters. The ability to connect to a high-performance power inverter allows us to offer a wider range of options to our



#### New lineup

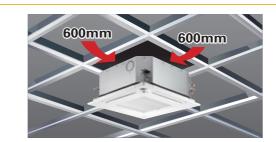
1.5kW has been introduced for multi connection. The diverse selection enables the best solution for both customer and location.

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.

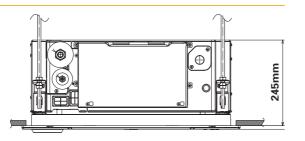
Of course, design matched 2x2 (600mm\*600mm) ceiling construction specifications.



#### 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.

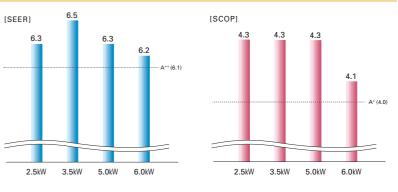
Of course, in addition to our products, replacing competitors' product is simplified too.



#### **Energy-saving Performance\***

The energy-saving performance achieved A++ in SEER and A+ in SCOP.

\*In case of connecting with SUZ-KA-VA6



#### Quietness

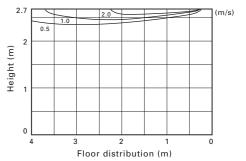
Low sound level has been realized by introduction of 3D turbo fan. New SLZ can give users quieter and move comfortable room condi-



#### **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.

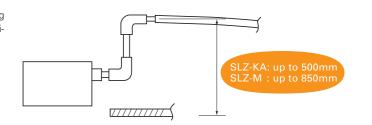






#### **Drain lift**

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 airconditioning 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.

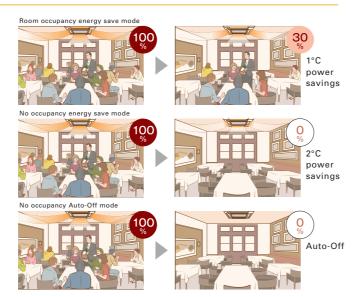
#### No occupancy energy-saving mode

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-41MAA 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-41MAA or PAR-SL101A-E is required for each setting.

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#### Seasonal airflow\*

#### <When cooling>

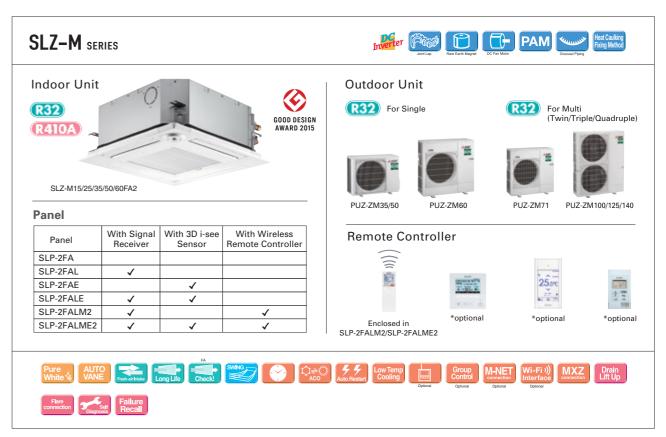
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping 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-41MAA is required for each setting.



									oor Unit Cap							
Indoor Unit Co				For Single				For Twin For Triple				For Quadruple				
		35	50	60	71	100	125	140	71	100	125	100	125	140	125	140
Power Inverter (PUZ-ZM)		35×1	50×1	60×1	-	-	-	-	35×2	50×2	60×2	35×3	50×3	50×3	35×4	35×4
Distribution Pipe		-	-	-	-	-	-	-	MSDD-50TR2-E MSDT-111R3-E		3-E	MSDF-1111R2-E				

Type					Inverter Heat Pump	
ndoor Unit	t			SLZ-M35FA2	SLZ-M50FA2	SLZ-M60FA2
utdoor U	nit			PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2
frigerant	[(*1)				R32	
wer	Source				Outdoor power supply	
pply	Outdoor(V/Phase/Hz)				230/Single/50	
oling	Capacity	Rated	kW	3.6	5.0	6.1
		Min-Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5
	Total Input	Rated	kW	0.800	1.315	1.648
	EER			4.50	3.80	3.70
	Design load		kW	3.6	5.0	6.1
	Annual electricity consu	mption(*2)	kWh/a	194	280	346
	SEER(*4)	-		6.5	6.2	6.1
		Energy efficiency class		A++	A++	A++
ating	Capacity	Rated	kW	4.1	5.0	6.4
		Min-Max	kW	1.6 - 5.0	2.5 - 5.5	2.8 - 7.3
	Total Input	Rated	kW	1.205	1.470	2.064
	COP	•		3.40	3.40	3.10
	Design load		kW	2.4	3.8	4.4
	Declared Capacity	at reference design temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)
		at bivalent temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)
		at operation limit temperature	kW	2.2 (-11°C)	3.7 (-11°C)	2.8 (-20°C)
	Back up heating capacity		kW	0.0	0.0	0.0
	Annual electricity consu	mption(*2)	kWh/a	820	1273	1560
	SCOP(*4)			4.0	4.1	3.9
		Energy efficiency class		A+	A+	A
	Current(Max)		А	13.2	13.3	19.4
	Input [cooling / Heating ]	Rated	kW	0.02 / 0.02	0.03 / 0.03	0.04 / 0.04
	Operating Current(Max)		А	0.24	0.32	0.43
	Dimensions	H*W*D	mm	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>
	Weight		kg	15 <3>	15 <3>	15 <3>
	Air Volume (Lo-Mi2-Mi1-Hi		m³/min	6.5-8.0-9.5	7.0-9.0-11.5	7.5-11.5-13.0
	Sound Level (Lo-Mi2-Mi1-F	li) (SPL)	dB(A)	25-30-34	27-34-39	32-40-43
	Sound Level (PWL)	Lucius	dB(A)	51	56	60
	Dimensions	H*W*D	mm	630-809-300	630-809-300	943-950-330(+25)
it	Weight	0 1	kg .	46	46	67
	Air Volume	Cooling	m³/min	45	45	55
		Heating	m³/min	45	45	55
	Sound Level (SPL)	Cooling	dB(A)	44	44	47
		Heating	dB(A)	46	46	49
	Sound Level (PWL)	Cooling	dB(A)	65	65	67
	Operating Current(Max)		A	13	13	19
<u> </u>	Breaker Size	Li i i	А	16	16	25
.Piping	Diameter(*5)	Liquid/Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88
	Max.Length	Out-In	m	50	50	55
	Max.Height	Out-In	m	30	30	30
Jarantee	ed Operating Range (Outdoo		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46
		Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21

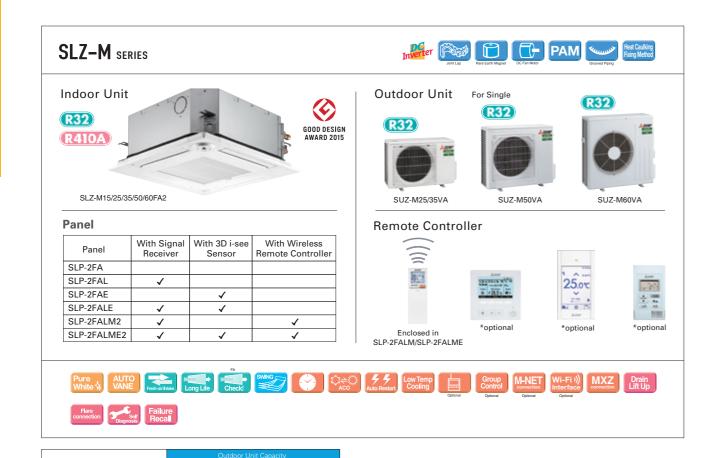
<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means 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<sub>2</sub>, 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 based on standard test results are the standard test results and the standard test results are the standard test results and the standard test results are the standard test results are the standard test results.

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

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Protoucts Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



ı	IIIuuuu UIIIt C	OTTIBITIALIOTT			roi Sirigle			
			25	35	50	60	71	
Г	S Seires		25×1	35×1	50×1	60×1	-	
		Distribution Pipe	-	-	-	-	-	
_								_
								Inverter Heat Pu
U	nit					S	LZ-M25FA2	SLZ-M35FA2
or	Unit					S	UZ-M25VA	SUZ-M35VA
ra	ant <sup>(*1)</sup>							R32
	Source							Outdoor power sup
/	Outdoor(V							230/Single/50
g	Capacity	Ra	ted		kW		2.5	3.5
			n-Max		kW		1.4 - 3.2	0.7 - 3.9
	Total Inp	ut Ra	ted		kW		0.657	1.093
	EER						3.80	3.20
	Design Io				kW		2.5	3.5
		lectricity consumption	n <sup>(*2)</sup>		kWh/a		139	183
	SEER(*4)	_					6.3	6.7
			ergy efficience	y class			A++	A++
g	Capacity	Ra	ted		kW		3.2	4.0

Outdoor U				SUZ-M25VA	SUZ-M35VA	SUZ-M50VA	SUZ-M60VA
Refrigeran	t <sup>(*1)</sup>				R	32	
Power	Source				Outdoor po	wer supply	
Supply	Outdoor(V/Phase/Hz)				230/Sii	ngle/50	
Cooling	Capacity		kW	2.5	3.5	4.6	5.7
		Min-Max	kW	1.4 - 3.2	0.7 - 3.9	1.0 - 5.2	1.5 - 6.3
	Total Input	Rated	kW	0.657	1.093	1.352	1.676
	EER	•		3.80	3.20	3.40	3.40
	Design load		kW	2.5	3.5	4.6	5.7
	Annual electricity consump	ption(*2)	kWh/a	139	183	253	321
	SEER(*4)			6.3	6.7	6.3	6.2
		Energy efficiency class		A++	A++	A++	A++
Heating	Capacity	Rated	kW	3.2	4.0	5.0	6.4
•	11	Min-Max	kW	1.3 - 4.2	1.0 - 5.0	1.3 - 5.5	1.6 - 7.3
	Total Input	Rated	kW	0.886	1.078	1.562	2.133
	COP			3.61	3.71	3.20	3.00
	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)	4.1 (-10°C)
			kW	2.0 (-7°C)	2.3 (-7°C)	3.2 (-7°C)	4.1 (-7°C)
		at operation limit temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.1 (-10°C)
	Back up heating capacity		kW	0.2	0.3	0.4	0.5
	Annual electricity consum		kWh/a	716	845	1192	1560
	SCOP(*4)			4.3	4.3	4.2	4.1
		Energy efficiency class		A+	A+	A+	A+
Operating	Current(Max)		A	7.0	8.7	13.8	15.2
Indoor	Input [cooling / Heating ]	Rated	kW	0.02 / 0.02	0.02 / 0.02	0.03 / 0.03	0.04 / 0.04
Unit	Operating Current(Max)		А	0.20	0.24	0.32	0.43
	Dimensions	H*W*D	mm	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>
	Weight	•	kg	15 <3>	15 <3>	15 <3>	15 <3>
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	6.5-7.5-8.5	6.5-8.0-9.5	7.0-9.0-11.5	7.5-11.5-13.0
	Sound Level (Lo-Mi2-Mi1-Hi)		dB(A)	25-28-31	25-30-34	27-34-39	32-40-43
	Sound Level (PWL)		dB(A)	48	51	56	60
Outdoor	Dimensions		mm	550-800-285	550-800-285	714-800-285	880-840-330
Unit	Weight		kg	30	35	41	54
	Air Volume		m³/min	36.3	34.3	45.8	50.1
			m³/min	34.6	32.7	43.7	50.1
	Sound Level (SPL)		dB(A)	45	48	48	49
			dB(A)	46	48	49	51
	Sound Level (PWL)	Cooling	dB(A)	59	59	64	65
	Operating Current(Max)	· · · · · · · · · · · · · · · · · · ·	А	6.8	8.5	13.5	14.8
	Breaker Size		А	10	10	20	20
Ext.Piping	Diameter(*5)		mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88
	Max.Length		m	20	20	30	30
	Max.Height	Out-In	m	12	12	30	30
Guarante	ed Operating Range (Outdoor)	Cooling(*3)	°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46
			1				

<sup>\*1</sup> 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<sub>2</sub>, 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.

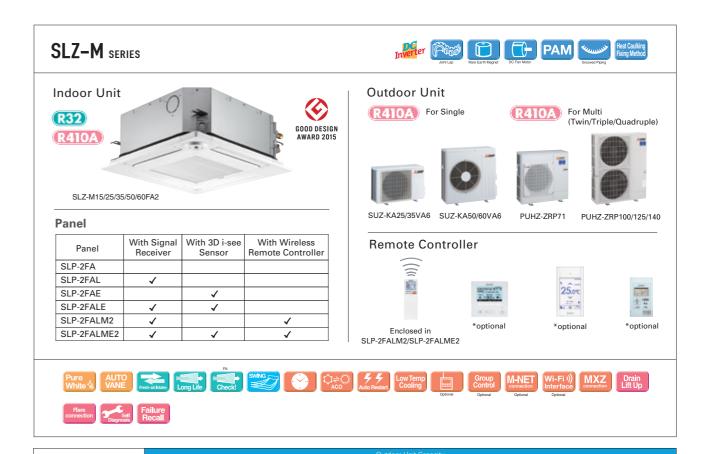
\*2 Energy consumption based on standard test results. Actual energy consumption who whe appliance is used and where it is located.

\*3 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*4 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

59

Indoor Unit Combination



For Twin 100 125

100 125

35×2 50×2 60×2 35×3 50×3 50×3 35×4 35×4

140 125 140

60

_										
Туре						leat Pump				
ndoor Unit				SLZ-M25FA2	SLZ-M35FA2	SLZ-M50FA2	SLZ-M60FA2			
utdoor Unit				SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6			
efrigerant <sup>(*1)</sup>						10A				
	ource					ower supply				
	utdoor(V/Phase/Hz)				230/Si					
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			
	EER			3.80	3.60	3.30	3.17			
	Design load		kW	2.6	3.5	4.6	5.6			
	Annual electricity consump	otion(*2)	kWh/a	144	188	256	316			
	SEER(*4)			6.3	6.5	6.3	6.2			
		Energy efficiency class		A++	A++	A++	A++			
eating	Capacity		kW	3.2	4.0	5.0	6.4			
	Min-Max		kW kW	1.3 - 4.2	1.7 - 5.0	1.7 - 6.0	2.5 - 7.4			
	Total Input	Input Rated		0.886	1.108	1.558	2.278			
	COP			3.61	3.61	3.21	2.81			
	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	0.6 1573			
	Annual electricity consump	otion(*2)	kWh/a	716	846	1166	1573			
	SCOP(*4)			4.3	4.3	4.3	4.0			
		Energy efficiency class		A+	A+	A+	A+			
perating Cu	urrent(Max)		Α	7.2	8.4	12.3	14.4			
	put [cooling / Heating ]	Rated	kW	0.02 / 0.02	0.02 / 0.02	0.03 / 0.03	0.04 / 0.04			
	perating Current(Max)		A	0.20	0.24	0.32	0.43			
	imensions	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			
	/eight		kg	15 <3>	15 <3>	15 <3>	15 <3>			
	ir Volume (Lo-Mi2-Mi1-Hi)		m³/min	6.5-7.5-8.5	6.5-8.0-9.5	7.0-9.0-11.5	7.5-11.5-13.0			
	ound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	25-28-31	25-30-34	27-34-39	32-40-43			
	ound Level (PWL)	Limites	dB(A)	48	51	56	60			
	mensions	H*W*D	mm	550-800-285	550-800-285	880-840-330	880-840-330			
	eight	I	kg	30	35	54	50			
Ai	ir Volume	Cooling	m³/min	32.6	36.3	44.6	40.9			
_		Heating	m³/min	34.7	34.8	44.6	49.2			
So	ound Level (SPL)	Cooling	dB(A)	47	49	52	55			
L		Heating	dB(A)	48	50	52	55			
	ound Level (PWL)	Cooling	dB(A)	58	62	65	65			
	perating Current(Max)		A	7	8.2	12	14			
	reaker Size	l.:	A	10	10	20	20			
kt.Piping Di		Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88			
	ax.Length	Out-In	m	20	20	30	30			
	ax.Height	Out-In	m	12	12	30	30			
uaranteed	Operating Range (Outdoor)	Cooling <sup>(*3)</sup>	°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46			
		Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24			

100

125

140

25 35 50 60

50×1 60×1

25×1 35×1

Indoor Unit Combination

Power Inverter (PUZ-ZM)

Distribution Pipe

<sup>\*1</sup> 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, the impact on global warming would be 1975 times higher than 1 kg of CO2, 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 and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*4 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

# SEZ SERIES



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

#### **High Energy Efficiency**

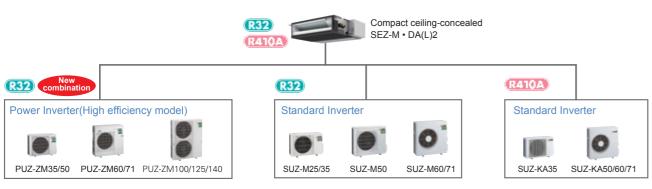


Highly efficient indoor units with DC inverter contribute to a reduction in electricity consumption throughout a year. The SEZ series has achieved energy-saving performance of "A+" or higher when connected to PUZ series and "A" or higher when connected to SUZ-M series.



#### Lineup of compatible outdoor unit has been expanded by power inverter series

Although models in the SEZ series were previously only compatible with the standard inverter, they can now also be connected to small capacity power inverters. The ability to connect to a power inverter with high-performance specifications makes it possible to offer an even wider range of solutions to our customers.



#### Compact Design with a Height of 200 mm

The height of the units is 200 mm for all capacity ranges. Its thin body is suitable for installation in low ceilings with a small cavity space.



SEZ-M D	A(L)2	M25	M35	M50	M60	M71	
Height	mm	200					
Width	mm	790	99	90	1190		

#### **Low Noise Operation**

Low noise operation contributes to a peaceful indoor environment. The SPL of M25/35 model, which is the quietest model among the new series, is as low as 22 dB (ESP 5 Pa, low fan speed setting).

	Capa	acity	M25	M35	M50	M60	M71
Sound	_	High	29	30	36	37	39
pressure	Fan speed	Mid	25	26	33	33	34
	·	Low	22	22	29	29	29

\*When fan speed setting is low, the cooling/heating capacity is subject to reduce.

#### Selectable Static Pressure Levels

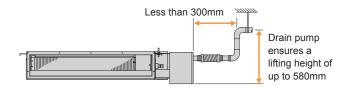
External static pressure can be selected from 5, 25, 35, and 50 Pa (set to 25 Pa at the time of factory shipment).

Four levels Available for All Models

#### **Drain Pump (Optional)**

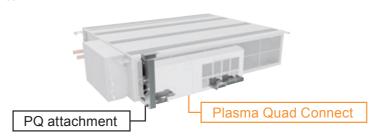
The PAC-KE07DM-E drain pump is available as an option. The drain connection can be raised as high as 580 mm, allowing more freedom in piping layout design.

\*The use of drain pump may increase the operation noise.

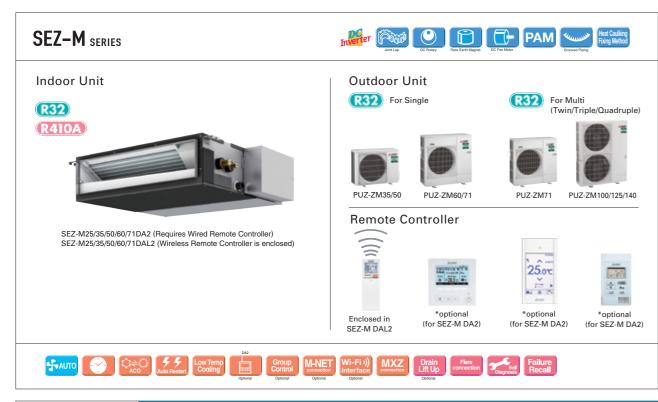


#### Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side. For installation, PQ attachment PAC-HA11PAR is required.



<sup>\*</sup>Operation noise may increase due to the installation environment or the operation status



								oor Unit Cap							
Indoor Unit Combination				For Single				For Twin For Triple					For Quadruple		
	35	50	60	71	100	125	140	71	100	125	100	125	140	125	140
Power Inverter (PUZ-ZM)	35×1	50×1	60×1	71×1	-	-	-	35×2	50×2	60×2	35×3	50×3	50×3	35×4	35×4
Distribution Pipe	-	-	-	-	-	-	-	М	SDD-50TR2	2-E	N	ISDT-111R3	3-E	MSDF-1	111R2-E

Type					Inverter h	leat Pump	
Indoor Uni	t			SEZ-M35DA(L)2	SEZ-M50DA(L)2	SEZ-M60DA(L)2	SEZ-M71DA(L)2
Outdoor U	Init			PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2
Refrigeran	t <sup>(*1)</sup>					32	
Power	Source				Outdoor po	ower supply	
Supply	Outdoor(V/Phase/Hz)					ngle/50	
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1
	1 1	Min-Max	kW	1.6 - 3.9	2.3 - 5.6	2.7 - 6.3	3.3 - 8.1
	Total Input	Rated	kW	0.857	1.315	1.525	1.918
	EER(*4)	'		4.20	3.80	4.00	3.70
	Design load		kW	3.6	5.0	6.1	7.1
	Annual electricity consump	otion(*2)	kWh/a	205	287	352	440
	SEER(*4)(*5)			6.1	6.1	6.0	5.6
		Energy efficiency class		A++	A++	A+	A+
eating	Capacity		kW	4.1	6.0	7.0	8.0
	,		kW	1.6 - 5.0	2.5 - 7.2	2.8-8.0	3.5 - 10.2
	Total Input		kW	1.025	1.578	1.707	2.051
	COP(*4)			4.00	3.80	4.10	3.90
	Design load	- I	kW	2.4	3.8	4.4	4.7
	Declared Capacity		kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)
	Deciared Supacity		kW	2.4 (10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (10°C)
			kW	2.2 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.5 (-20°C)
	Back up heating capacity		kW	0.0	0.0	0.0	0.0
	Annual electricity consump		kWh/a	791	1279	1464	1633
	SCOP(*4)(*5)	, in the second	KVVII/a	4.2	4.1	4.2	4.0
	3001	Energy efficiency class		4.2 A+	A+	A+	4:0 A+
noratino	Current(Max)		A	13.7	13.8	19.9	20.0
door	Input [cooling / Heating ]		kW	0.047	0.077	0.084	0.102
nit	Operating Current(Max)		A	0.65	0.077	0.084	1.00
IIIC	Dimensions		mm	200 - 990 - 700	200 - 990 - 700	200 - 1190 - 700	200 - 1190 - 700
	Weight		kg	200 - 990 - 700	200 - 990 - 700	25.5	25.5
	Air Volume (Lo-Mid-Hi)		m³/min	7 - 9 - 11	10 - 12.5 - 15	12 - 15 - 18	12 - 16 - 20
	External Static Pressure(*7)		Pa	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>
	Sound Level (Lo-Mid-Hi) (SPL)		dB(A)	23 - 27 - 31	30 - 34 - 37	30 - 34 - 38	30 - 35 - 40
	, , , , , , , , , , , , , , , , , , , ,		dB(A)	22 - 26 - 30	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39
	Sound Level (PWL)		dB(A)	51	57	58	60
utdoor	Dimensions		mm	630-809-300	630-809-300	943-950-330(+25)	943-950-330(+25)
nit	Weight		kg	46	46	67	67
-	Air Volume		m³/min	45	45	55	55
			m³/min	45	45	55	55
	Sound Level (SPL)		dB(A)	44	44	47	47
			dB(A)	46	46	49	49
	Sound Level (PWL)		dB(A)	65	65	67	67
	Operating Current(Max)		Α	13	13	19	19
	Breaker Size		A	16	16	25	25
xt Pining	Diameter(*6)		mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88
vr ibiiii	Max.Length		m	50	50	55	55
	Max.Height		m	30	30	30	30
luaranto	ed Operating Range (Outdoor)		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Juai aiile	ca operating name (Outdoor)		°C	-15 ~ +46 -11 ~ +21	-15 ~ +40 -11 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +40 -20 ~ +21
		neating	U	-11 ~ +Z1	-II ~ +ZI	-2U ~ +2 I	-ZU ~ +Z I

<sup>\*1</sup> 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 CO2, 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.

\*4 EER/COP and SEER/SCOP for M35-71 are measured at ESP 25Pa

\*5 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*6 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

\*7 The factory setting of ESP is shown without < >.

\*8 SPL measured at ESP 5Pa.

SEZ-M SERIES	Inverter Joint Lap DC Ro	Rare Earth Magnet DC Fan M	ے سے ا	Heat Caulking Fixing Method
Indoor Unit	Outdoor Unit	For Single	R	32
R32 R410A	R32  SUZ-M25/35VA	SUZ-M50	DVA S	SUZ-M60/71VA
	Remote Contr	oller		
SEZ-M25/35/50/60/71DA2 (Requires Wired Remote Controller) SEZ-M25/35/50/60/71DAL2 (Wireless Remote Controller is enclosed)			-	
		SECOND WAS DO TO THE PARTY OF T	25.oc	
	Enclosed in SEZ-M DAL2 (fo	*optional or SEZ-M DA2)	*optional (for SEZ-M DA2)	*optional (for SEZ-M DA2)
LowTemp Cooling Group Control	Wi-Fi i) MXZ Interface Optional		Self Self Recall	

Туре						Inverter Heat Pump			
ndoor Uni	:			SEZ-M25DA(L)2	SEZ-M35DA(L)2	SEZ-M50DA(L)2	SEZ-M60DA(L)2	SEZ-M71DA(L)2	
utdoor U				SUZ-M25VA	SUZ-M35VA	SUZ-M50VA	SUZ-M60VA	SUZ-M71VA	
efrigeran			-	302-IVI23VA	302-W33VA	R32	302-W00VA	302-W/ TVA	
ower	Source		-			Outdoor power supply			
upply	Outdoor(V/Phase/Hz)		-	Outdoor power suppry 230/Single/50					
oolina	Capacity	Rated IkV	Λ/	2.5	3.5	5.0	6.1	7.1	
Journa	Capacity	Min-Max kV		1.4 - 3.2	0.7 - 3.9	1.1 - 5.6	1.6 - 6.3	2.2 - 8.1	
	Total Input	Rated kV		0.714	1.000	1.547	1.848	2.151	
	EER(*4)	Indica   Kv	-	3.50	3.50	3.23	3.30	3.30	
	Design load kW		Λ/	2.5	3.5	5.23	6.1	7.1	
	Annual electricity consumption(*2) kWh/a			146	202	290	385	451	
	SFFR(*4)(*5)	ILIOII.	VVII/d	6.0	6.0	6.0	5.5	5.5	
	SEEN	Energy efficiency class	-	A+	A+	A+	3.5 A	5.5 A	
ating	Capacity	Rated KV	Λ/	2.9	A+ 4.2	6.0	7.4	8.0	
ading	Capacity	Min-Max kV		1.3 - 4.2	4.2 1.1 - 5.0	1.5 - 7.2	1.6 - 8.0	2.0 - 10.2	
	Total Input	Rated kV		0.803			2.049	2.0 - 10.2	
	COP(*4)	Inaren  Ki	VV	0.803 3.61	1.076 3.90	1.617 3.71	2.049 3.61	2.285 3.50	
		lkV	A/	2.0	3.90	4.3	3.61	3.50 5.8	
	Design load								
	Declared Capacity	at reference design temperature kV		2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C)	
		at bivalent temperature kV		2.0 (-7°C)	2.3 (-7°C)	3.8 (-7°C)	4.1 (-7°C)	5.2 (-7°C)	
	l <del> </del>	at operation limit temperature kV		2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C)	
	Back up heating capacity kW			0.2	0.3	0.5	0.5	0.6	
	Annual electricity consump	rtion(*2) KV	Wh/a	769	878	1501	1516	2030	
	SCOP			4.0	4.1	4.0	4.2	3.9	
	0 (00	Energy efficiency class	_	A+	A+	A+	A+	A	
	Current(Max)	A		7.4	9.2	14.3	15.7	15.8	
door	Input [cooling / Heating ]	Rated kV		0.043	0.047	0.077	0.084	0.102	
nit	Operating Current(Max) Dimensions		_	0.62	0.65	0.82	0.88	1.00	
	Weight	lu-ss-n	nm	200 - 790 - 700 18	200 - 990 - 700 22	200 - 990 - 700 22	200 - 1190 - 700 25.5	200 - 1190 - 70 25.5	
	Air Volume (Lo-Mid-Hi)		3/min	5.5 - 7 - 9	7 - 9 - 11	10 - 12.5 - 15	25.5 12 - 15 - 18	12 - 16 - 20	
	External Static Pressure(*6)	Pa		<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <	
	Sound Level (Lo-Mid-Hi) (SPL)		B(A)	23 - 26 - 30	23 - 27 - 31	30 - 34 - 37	30 - 34 - 38	30 - 35 - 40	
			B(A)	22 - 25 - 29	22 - 26 - 30	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39	
	Sound Level (PWL)		B(A)	50	51	57	58	60	
tdoor	Dimensions		nm	550-800-285	550-800-285	714-800-285	880-840-330	880-840-330	
it	Weight	kg	_	30	35	41	54	55	
-	Air Volume		n <sup>3</sup> /min	36.3	34.3	45.8	50.1	50.1	
			<sup>3</sup> /min	34.6	32.7	43.7	50.1	50.1	
	Sound Level (SPL)		B(A)	45	48	48	49	49	
			B(A)	46	48	49	51	51	
	Sound Level (PWL)		B(A)	59	59	64	65	66	
	Operating Current(Max)			6.8	8.5	13.5	14.8	14.8	
	Breaker Size A			10	10	20	20	20	
t Pining	Diameter(*6)		nm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	
ipinig	Max.Length	Out-In m	-	20	20	30	30	30	
	Max.Height	Out-In Im		12	12	30	30	30	
uarante	ed Operating Range (Outdoor)	Cooling <sup>(*3)</sup>		-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	
			-	-10 ~ T40	-10 ~ T40	-10 ~ T40	-10 ~ T40	-10 ~ ±40	

<sup>\*1</sup> 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<sub>2</sub>, 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 R41OA 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 25Pa.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

\*7 SPL measured at ESP 5Ps is shown without < >.

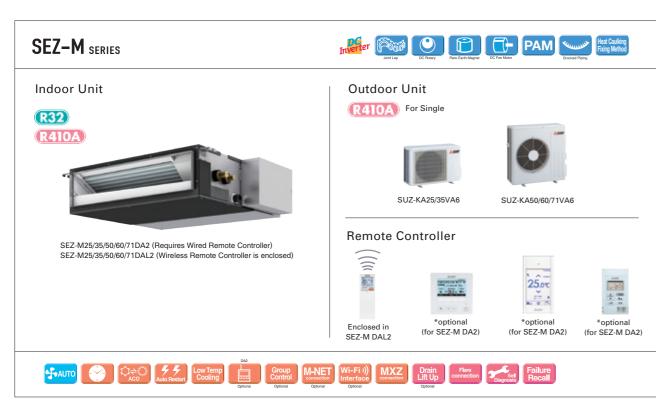
\*7 SPL measured at ESP 5Pa.

 25
 35
 50
 60
 71

 25x1
 35x1
 50x1
 60x1
 71x1

S Seires

Distribution Pipe



Indoor Unit Combination		Outdoor Unit Capacity						
		For Single						
		25	35	50	60	71		
S series		25×1	35×1	50×1	60×1	71×1		
	Dietribution Pino	_	_	_	_	_		

Type				Inverter Heat Pump					
Indoor Uni	it			SEZ-M25DA(L)2	SEZ-M35DA(L)2	SEZ-M50DA(L)2	SEZ-M60DA(L)2	SEZ-M71DA(L)2	
Outdoor U				SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	
Refrigeran	t <sup>(*1)</sup>					R410A			
Power	Source					Outdoor power supply			
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	0.731	1.012	1.580	1.740	2.210	
	EER(*4)			3.42	3.46	3.23	3.22	3.21	
	Design load		kW	2.5	3.5	5.1	5.6	7.1	
	Annual electricity consump	otion(*2)	kWh/a	159	203	297	353	449	
	SEER(*4)(*5)			5.5	6.0	6.0	5.5	5.5	
		Energy efficiency class		A	A+	A+	A	A	
Heating	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	1.132	1.800	2.200	2.268	
	COP(*4)	•		3.61	3.71	3.56	3.36	3.50	
	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)	
			kW	1.9 (-10°C)	2.5 (-10°C)	4.1 (-10°C)	4.5 (-10°C)	5.3 (-10°C)	
			kW	0.3	0.3	0.5	1.0	0.7	
			kWh/a	789	977	1614	1857	2147	
	SCOP(*4)(*5)		, , ,	3.9	4.0	3.9	4.1	3.9	
		Energy efficiency class		A	A+	A	A+	A	
Operating	Current(Max)		А	7.6	8.9	12.8	14.9	17.1	
ndoor	Input [cooling / Heating ]	Rated	kW	0.043	0.047	0.077	0.084	0.102	
Unit	Operating Current(Max)		А	0.62	0.65	0.82	0.88	1.00	
	Dimensions	H*W*D	mm	200 - 790 - 700	200 - 990 - 700	200 - 990 - 700	200 - 1190 - 700	200 - 1190 - 700	
	Weight		kg	18	22	22	25.5	25.5	
	Air Volume (Lo-Mid-Hi)		m³/min	5.5 - 7 - 9	7 - 9 - 11	10 - 12.5 - 15	12 - 15 - 18	12 - 16 - 20	
	External Static Pressure(*6)		Pa	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	<5> - 25 - <35> - <50>	
	Sound Level (Lo-Mid-Hi) (SPL)		dB(A)	23 - 26 - 30	23 - 27 - 31	30 - 34 - 37	30 - 34 - 38	30 - 35 - 40	
	Council I amal (DWII)	5Pa(*7)	dB(A)	22 - 25 - 29	22 - 26 - 30	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39	
Outdoor	Sound Level (PWL) Dimensions	IH*W*D	dB(A)	50 550-800-285	51 550-800-285	57 880-840-330	58 880-840-330	60 880-840-330	
Uutaoor Unit		lu_∧∧_∩	mm						
Unit	Weight	0 1	kg	30 32.6	35	54	50	53 50.1	
	Air Volume	Cooling	m³/min	32.6 34.7	36.3	44.6	40.9		
	0 11 1/081)	Heating	m³/min		34.8	44.6	49.2	48.2	
	Sound Level (SPL)	Cooling	dB(A)	47	49	52	55	55	
	0 11 1/8/4/13	Heating	dB(A)	48	50	52	55	55	
	Sound Level (PWL)	Cooling	dB(A)	58	62	65	65	69	
			A	7	8.0	12	14	16.1	
	Breaker Size	Turning .	А	10	10	20	20	20	
Ext.Piping	Diameter <sup>(*6)</sup>	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	
Guarante	ed Operating Range (Outdoor)	Cooling(*3)	°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	
		Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	

<sup>\*1</sup> 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<sub>2</sub>, 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 R410 is 2.088 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.

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# **CONTROL TECHNOLOGIES**





#### 2+1 Back-up rotation\*

The use of a three-refrigerant air conditioning system enables you to utilize the back-up, rotation, and cut-in functions. This allows you to implement effective risk management for added peace of mind.

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller

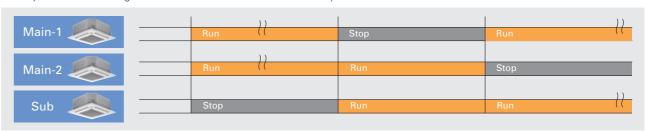
#### Back-up Function

In the unlikely event that one of the units stops operation due to an abnormality, the standby unit immediately starts back-up operation. Being fully prepared for a failure guarantees that and operation is always available and gives you the confidence that your system will be reliable in any situation.



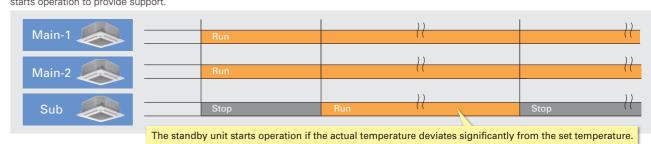
#### **Rotation Function**

A single remote controller is used to operate three-refrigerant air conditioning system in a rotation pattern. Reducing the burden on the equipment allows you to maintain a longer time between maintenance and increases product life.



#### Cut-in Function

If the actual room temperature greatly differs from the set temperature and two-refrigerant air conditioning system is insufficient, the standby unit starts operation to provide support.



<sup>\*2</sup> Energy consumption based on standard test results. Actual energy consumption will depend on how the applian \*3 SEER/SCOP are measured at ESP 25Pa.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.
\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.
\*6 The factory setting of ESP is shown without < >.
\*7 SPL measured at ESP 5Pa.









## **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.

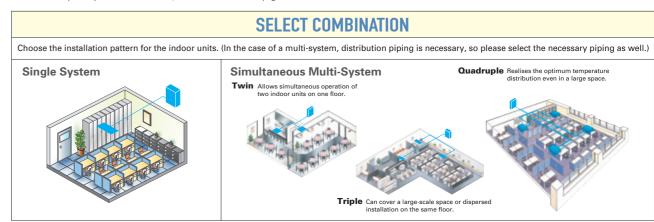


\* Some indoor units cannot be used with this ur



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

Some indoor units cannot be used with this unit.



#### Connectable Combinations for Inverter Units

	Indoor Unit Capacity					
Outdoor 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 MSDD-50WR2-E	MSDT-111R-E MSDT-111R3-E	MSDF-1111R-E MSDF-1111R2-E			

Note: The distribution pipe listed is required for simultaneous multi-systems.

# 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









PUZ-ZM35/50VKA2

PUZ-ZM60/71VHA2

Industry-leading energy efficiency

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

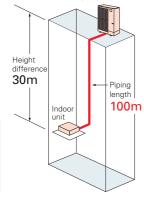
Introduction of new R32 refrigerant reduces energy consumption and realises energy savings.



#### Longer piping (60/71/100/125/140/200/250)

Longer piping length realised for 60, 71, 100, 125, 140, 200 and 250 classes, widely increasing installation flexibility.

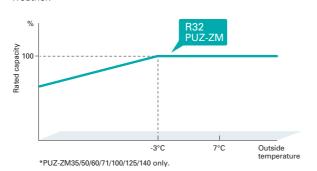




Outdoor unit

#### 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.



#### 2+1 Back-up rotation\*

The use of a three-refrigerant air conditioning system enables you to utilize the back-up, rotation, and cut-in functions. This allows you to implement effective risk management for added peace of mind.

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.

#### Back-up Function

In the unlikely event that one of the units stops operation due to an abnormality, the standby unit immediately starts back-up operation. Being fully prepared for a failure guarantees that and operation is always available and gives you the confidence that your system will be reliable in any situation.



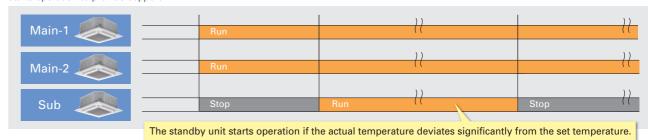
#### **Rotation Function**

A single remote controller is used to operate three-refrigerant air conditioning system in a rotation pattern. Reducing the burden on the equipment allows you to maintain a longer time between maintenance and increases product life.



#### Cut-in Function

If the actual room temperature greatly differs from the set temperature and two-refrigerant air conditioning system is insufficient, the standby unit starts operation to provide support.



#### Extended cooling set temperature range\*

In environments such as gyms where people do strenuous exercise, even if the room is cooled to an appropriate temperature, people may feel that it is hot, and they need a cooler air. To satisfy such demands, we have extended the lower limit of the cooling set temperature range from 19-30°C. to 14-30°C.

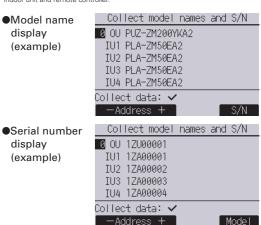
\*Insulation kit (PAC-SK36HK-E) is required when indoor unit is PLA series.
\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



#### Display of model names and serial numbers\*

The model names and serial numbers of the indoor/outdoor units that are connected to the MA smart remote controller can be automatically acquired and displayed through one simple operation. This eliminates the need to directly check each unit and helps with inquiries in the case of an abnormality.

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



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# Preliminary error history\*

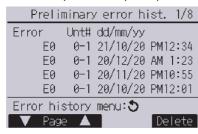
In addition to error history, the history of preliminary abnormalities can be displayed. The feature enables the unit status check during inspection

Availability of this function is depending on outdoor unit, indoor unit and remote controller.

## Error history (Sample)



# Preliminary error history (Sample)



# Display of power consumption\*

It is possible to measure, acquire, and display the amount of energy used by each air conditioning system.

\*Availability of this function is depending on outdoor unit, indoor unit and remote controlled

1234.5kWh 1/6

2:30 123.4kWh

3:00 123.4kWh

3:30 123.4kWh

< Data Collection Period >

2019-1-1

Return: 🐧

0:30 123.4kWh

1:00 123.4kWh

1:30 123.4kWh

Every 30 minutes (example)

Time data: Every 30 minutes over the past month Monthly/daily data: Monthly over the past 14 months

Energy data

2:00 123.4kWh | 4:00 123.4kWh

— Date + | ▼ Page ▲

Energy consumption values are calculated from estimated power consumption values according to the operating conditions. They may vary from the actual power consumption values. Please note that the power consumption of optional parts is not included except in the case of optional parts that have their power supplied directly by the outdoor unit. Daily (example)

		Energ:	y data		
2019-	- 1	1	23456.	7kWh	1/4
31	1234.	5kWh	27	1234.	5kWh
30	1234.	5kWh	26	1234.	5kWh
29	1234.	5kWh	25	1234.	5kWh
28	1234.	5kWh	24	1234.	5kWh
Retui	m: <b>o</b>				
V	Page	$\blacksquare$			

# Monthly (example)

Energy data								
▶2019- 1	123456.7kWh	1/3						
2018-12	123456.7kWh							
2018-11	123456.7kWh							
2018-10	123456.7kWh							
2018- 9	123456.7kWh							
View daily da	ata: <b>~</b>							
🛛 🔻 Cursor 🛦								

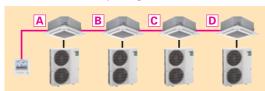
# Improved defrosting performance\*

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.

# Avoiding Simultaneous Defrosting

When each of multiple units is in operation for heating in the same space, these may start defrosting at the same time, resulting in a drop in the room temperature. Therefore, we have developed a new function that controls up to four-refrigerant air conditioning system to avoid simultaneous defrosting. By ensuring that defrosting is only performed by one unit at a time, it is possible to minimize any decrease in room temperature.

# **Example System Configuration** Four sets controlled by a single remote controller



# ■When All Sets Are Controlled Together

Α	Heating	Defrosting	Heating				Ensuring defrosting
В	Heating		Defrosting	Heating			is only performed by one unit at a time
C	Heating			Defrosting	Heating		allows you to minimize decreases
D	Heating				Defrosting	Heating	in room temperature!

# Defrosting When People Are Absent

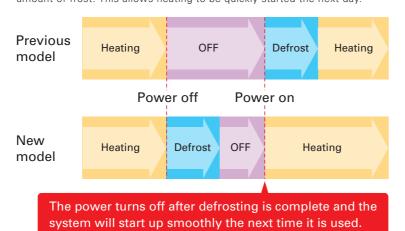
The use of the 3D i-see sensor allows a more comfortable defrosting schedule. After a large amount of frost has built up, the system will switch to defrosting when the 3D i-see sensor detects that no people are present. By minimizing defrosting while people are in the room, there is a much lower chance of a temperature drop while the room is occupied.



\* Only compatible with 4-way cassette and 2x2 cassette models with an attached 3D i-see sensor panel. Even though people are present in the room, the defrosting process may start if all defrosting conditions are met.

# Defrosting When Operation is Stopped

It takes a long time to start operation if there is an excess build-up of frost. Therefore, each unit is equipped with a control system where defrosting is performed immediately after operation is stopped when there is a large amount of frost. This allows heating to be quickly started the next day.

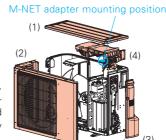


# Easier M-NET Adapter Installation

The optional M-NET adapter, which allows centralized control (M-NET control), is now easier to install. The redesigned mounting position significantly reduces the time and effort for installation.

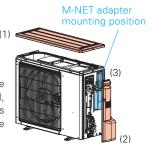
# Conventional Model PAC-SJ96MA-E Removed parts

The (1) top panel, (2) front panel, (3) service panel, and (4) electronics box need to be removed, and the connector must be temporarily unplugged.



	New Model
PAC	-SK15MA-E
	Removed parts

There is no need to remove the (1) top panel, (2) service panel, (3) service plate, electronics box, nor temporarily unplug the



# Improved chargeless piping length ZM100/125/140

PUZ-ZM100/125/140V(Y)KA used to have a chargeless pipe length of 30 m. However, starting with the V(Y)KA2 model, this has been extended to 40 m. This allows it to be used for a wider range of applications without the need for additional charging of refrigerant.

	Maximum piping length	Chargeless piping length			Maximum piping length	Chargeless piping length
PUZ-ZM 100V (Y)KA	100m	30m	<b>→</b>	PUZ-ZM 100V (Y)KA2	100m	40m
PUZ-ZM 125V (Y)KA	100m	30m	<b>→</b>	PUZ-ZM 125V (Y)KA2	100m	40m
PUZ-ZM 140V (Y)KA	100m	30m	<b>→</b>	PUZ-ZM 140V (Y)KA2	100m	40m

# Utilizing IoT for Improved Convenience\*

\*Availability of IoT functions are depending on MELCloud version

By connecting to a MAC-587IF-E Wi-Fi interface, it is possible to collect data and perform air conditioning control via MELCloud. In addition to basic functions such as turning the power on/off and setting the temperature, it is also possible to acquire data used for maintenance and inspection such as model names, serial numbers, and operation data.

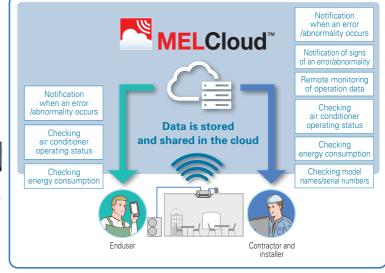


- Operation on/off
- Temperature setting
- Operation mode Airflow speed
- Airflow direction etc...

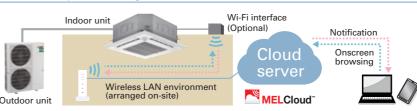
# [Data Collection and Display]

- •Model name display
- Serial number display
- Collection of operation data
- ●Energy consumption display

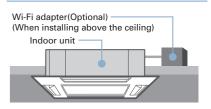




# **MELCloud System Configuration**



# Wi-Fi Adapter (Optional) Installation



# On-Site Installation and Configuration

Wireless LAN adapter installation Connect the wireless LAN adapter to the indoor unit PCB and install it above the ceiling.

Wireless LAN adapter and router connection settings Wireless LAN adapter and server connection settings

# Collection of operation data

All the operation data required for maintenance and inspection can be collected in a simple step. This data can then be easily checked via MELcloud. This makes it easy to check the operating status data even in cases when it is difficult to do a visual inspection. This allows you to quickly identify any system malfunctions. This function also helps to improve the quality of installation work and shortening the time required for maintenance and inspection. This operation

# Operation data that can be collected (example)

- ●Compressor frequency ●Compressor operating current ●Outdoor discharge temperature
- ●Outdoor heat exchanger temperature ●Outdoor air temperature ●Compressor shell temperature
- ●Sub cool ●Discharge superheat ●Indoor inlet temperature ●Indoor heat exchanger temperature ●Total compressor operating time●Compressor operation count ●Indoor filter operating time

# \*1 The total compressor operating time is displayed in units of 10 hours. The compressor operation count is displayed in units of 100. \*2 Indicates the elapsed time since a filter sign reset was performed.

# Demand control

It is possible to control air-conditioners to appropriately operate according to the energy supply-demand adjustment by electric power companies and each electricity rate plan of end users.

e.g. <Peak cut control> It is possible to utilize an external demand signal to reduce power consumption during peak hours. By satisfying the need for reducing peak power consumption or shifting consumption to a non-peak period, we have increased the range of options for our customers.

# Notification of potential abnormality

The comprehensive analysis of operating data allows the early detection of abnormalities in small functional parts by alerting the operator of any signs of abnormal behaviour. The recognition in advance of abnormalities in each unit further improves the ease of servicing and maintenance. Since this allows a countermeasure to be implemented before the abnormality requires the unit to be completely shut down, it is an effective method for maintaining the unit in its optimum condition.

# [Abnormalities That Have Their Signs Monitored]

●Filter blockage ●Drain blockage ●Refrigerant leakage •Heat exchanger blockage etc...



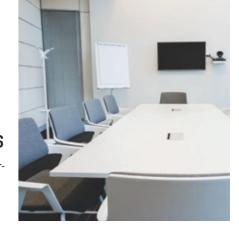




data is strange.

# Standard Inverter SERIES

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





SUZ-M35VA





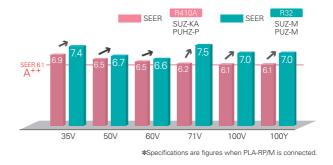




SUZ-M50VA

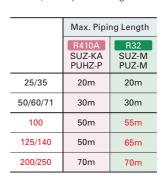
Improved energy efficiency

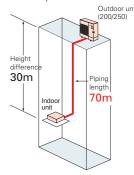
Introduction of new R32 refrigerant realises improved cooling efficiency. Rating of more than 6.6 achieved for all capacity range.



Longer piping (100/125/140/200/250)

Longer piping length realised for 100, 125, 140, 200 and 250 classes, widely increasing installation flexibility.





# Light weight and compact size

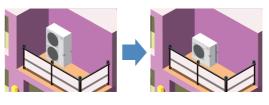
Compact design fits into narrow outdoor unit space of condominiums and offices. Light weight design facilitates easy installation.



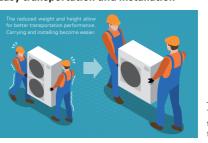
101kg

# Unobstructive, compact, and easy to hide from view

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



# Easy transportation and installation





to its low height. The unit can even be transported by minivan.

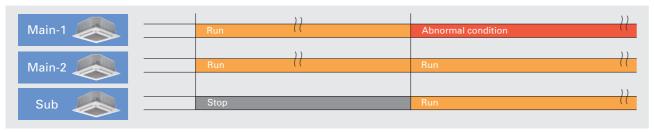
# 2+1 Back-up rotation\*

The use of a three-refrigerant air conditioning system enables you to utilize the back-up, rotation, and cut-in functions. This allows you to implement effective risk management for added peace of mind.

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller

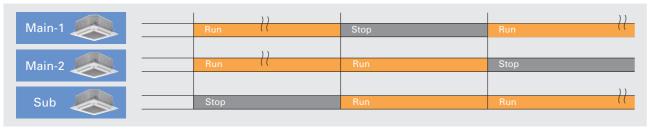
# Back-up Function

In the unlikely event that one of the units stops operation due to an abnormality, the standby unit immediately starts back-up operation. Being fully prepared for a failure guarantees that and operation is always available and gives you the confidence that your system will be reliable in any situation.



# **Rotation Function**

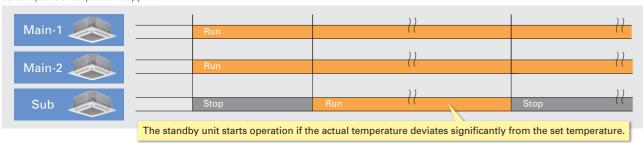
A single remote controller is used to operate three-refrigerant air conditioning system in a rotation pattern. Reducing the burden on the equipment allows you to maintain a longer time between maintenance and increases product life.



# Cut-in Function

75

If the actual room temperature greatly differs from the set temperature and two-refrigerant air conditioning system is insufficient, the standby unit starts operation to provide support.

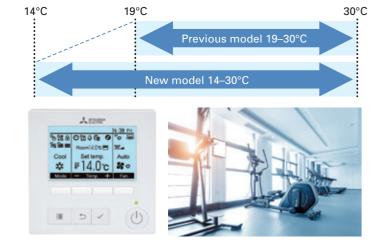


# Extended cooling set temperature range\*

In environments such as gyms where people do strenuous exercise, even if the room is cooled to an appropriate temperature, people may feel that it is hot, and they need a cooler air. To satisfy such demands, we have extended the lower limit of the cooling set temperature range from 19-30°C. to 14-30°C.

\*Insulation kit (PAC-SK36HK-E) is required when indoor unit is PLA series.

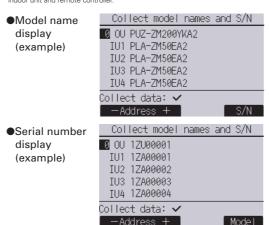
\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



# Display of model names and serial numbers\*

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\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



# Preliminary error history\*

In addition to error history, the history of preliminary abnormalities can be displayed. The feature enables the unit status check during inspection

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.

## Error history (Sample)

	Error	history	1/4
Error	Unt#	dd/mm/yy	
E0		21/10/20	
E0	0-1	20/12/20	AM 1:23
E0		20/11/20	
E0	0-1	20/10/20	PM12:01
Error hi	story	menu:🔊	
<b>▼</b> Pag	e 🔺		Delete

# Preliminary error history (Sample)

Preli	minary error hist. 1/	8_
Error	Unt# dd/mm/yy	
E0	0-1 21/10/20 PM12:3	4
E0	0-1 20/12/20 AM 1:2	
E0	- 0-1 20/11/20 PM10:5	5
E0	0-1 20/10/20 PM12:0	1
Error hi	story menu:5	
<b>▼</b> Pag	e 🛕 Delet	е

# Display of power consumption\*

It is possible to measure, acquire, and display the amount of energy used by each air conditioning system.

- \*Availability of this function is depending on outdoor unit, indoor unit and remote controlled
- < Data Collection Period >

Time data: Every 30 minutes over the past month

Monthly/daily data: Monthly over the past 14 months

## ●Every 30 minutes (example) Enorgy data

Liferay	uata
2019- 1-1	1234.5kWh 1/6
0:30 123.4kWh	2:30 123.4kWh
1:00 123.4kWh	3:00 123.4kWh
1:30 123.4kWh	3:30 123.4kWh
2:00 123.4kWh	4:00 123.4kWh
Return: 🐧	
— Date +	▼ Page ▲

# ●Daily (example)

Energy data							
2019	- 1	1	23456.	7kWh	1/4		
31	1234.	5kWh	27	1234.	5kWh		
30	1234.	5kWh	26	1234.	5kWh		
29	1234.	5kWh	25	1234.	5kWh		
28	1234.	5kWh	24	1234.	5kWh		
Retui	m: <b>৩</b>						
▼	Page						

# Monthly (example)

Energy consumption values are calculated from estimated power consumption values according to the operating conditions. They may vary from the actual power consumption values. Please note that the power consumption of optional parts is not included except in the

case of optional parts that have their power supplied directly by the outdoor unit.

Energy data							
▶2019- 1	123456.7kWh	1/3					
2018-12	123456.7kWh						
2018-11	123456.7kWh						
2018-10	123456.7kWh						
2018- 9	123456.7kWh						
View daily d	data: 🗸						
▼ Cursor ⊿	A I						

# Improved defrosting performance\*

\*Availability of this function is depending on outdoor unit, indoor unit and remote controlle

# Avoiding Simultaneous Defrosting

When each of multiple units is in operation for heating in the same space, these may start defrosting at the same time, resulting in a drop in the room temperature. Therefore, we have developed a new function that controls up to four-refrigerant air conditioning system to avoid simultaneous defrosting. By ensuring that defrosting is only performed by one unit at a time, it is possible to minimize any decrease in room temperature.

# Example System Configuration Four sets controlled by a single remote controller



# ■When All Sets Are Controlled Together

A Heating Defrosting	Heating	Ensuring defrosting
<b>B</b> Heating	Defrosting Heating	is only performed by one unit at a time
<b>C</b> Heating	Defrosting Heating	allows you to minimize decreases
<b>D</b> Heating	Defro	in room temperature!

# Utilizing IoT for Improved Convenience\*

\*Availability of IoT functions are depending on MELCloud version

By connecting to a MAC-587IF-E Wi-Fi interface, it is possible to collect data and perform air conditioning control via MELCloud. In addition to basic functions such as turning the power on/off and setting the temperature, it is also possible to acquire data used for maintenance and inspection such as model names, serial numbers, and operation data.



- ●Operation on/off ●Temperature setting
- ●Operation mode ●Airflow speed
- •Airflow direction etc...

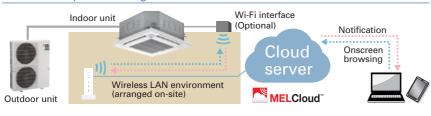
# [Data Collection and Display]

- ■Model name display
  ■Serial number display
- Collection of operation data
- •Energy consumption display etc...

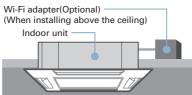


# MELCloud" Data is stored

# **MELCloud System Configuration**



# Wi-Fi Adapter (Optional) Installation



# On-Site Installation and Configuration

•Wireless LAN adapter installation Connect the wireless LAN adapter to the indoor unit PCB and install it above the ceiling.

Wireless LAN adapter and router connection settings Wireless LAN adapter and server connection settings

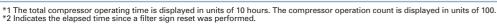
> This operation data is strange..

# Collection of operation data

All the operation data required for maintenance and inspection can be collected in a simple step. This data can then be easily checked via MELcloud. This makes it easy to check the operating status data even in cases when it is difficult to do a visual inspection. This allows you to quickly identify any system malfunctions. This function also helps to improve the quality of installation work and shortening the time required for maintenance and inspection.

# Operation data that can be collected (example)

- ●Compressor frequency ●Compressor operating current ●Outdoor discharge temperature
- ●Outdoor heat exchanger temperature ●Outdoor air temperature ●Compressor shell temperature
- ●Sub cool ●Discharge superheat ●Indoor inlet temperature ●Indoor heat exchanger temperature
- ●Total compressor operating time●Compressor operation count ●Indoor filter operating time



# Demand control

It is possible to control air-conditioners to appropriately operate according to the energy supply-demand adjustment by electric power companies and each electricity rate plan of end users.

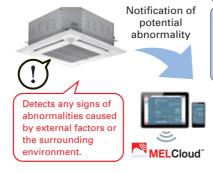
e.g. <Peak cut control> It is possible to utilize an external demand signal to reduce power consumption during peak hours. By satisfying the need for reducing peak power consumption or shifting consumption to a non-peak period, we have increased the range of options for our customers.

# Notification of potential abnormality

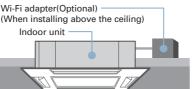
The comprehensive analysis of operating data allows the early detection of abnormalities in small functional parts by alerting the operator of any signs of abnormal behaviour. The recognition in advance of abnormalities in each unit further improves the ease of servicing and maintenance. Since this allows a countermeasure to be implemented before the abnormality requires the unit to be completely shut down, it is an effective method for maintaining the unit in its optimum condition.

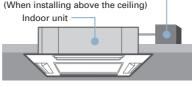
[Abnormalities That Have Their Signs Monitored]

●Filter blockage ●Drain blockage ●Refrigerant leakage •Heat exchanger blockage etc...









Deluxe 4-way Cassette (PLA-ZM)	•	•			
Standard 4-way Cassette (PLA-M)					

50

60

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-M), deluxe models provide addi-

tional energy savings, contributing to a significant reduction in electricity costs.

Deluxe 4-way Cassette Line-up

■Line-up

**R32** 



71 100 125 140

PLA-M35/50/60/71/100/125/140FA2



PLA-ZM35/50/60/71/100/125/140EA2

A complete line-up including deluxe units that offer added energy savings. The incorpora-

tion of "3D total flow" 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 sat-



**R32** 



Deluxe 4-way Cassette

PUHZ- PUHZ- PUHZ-ZRP35/50 ZRP60/71 ZRP100/125/

(R410A)

# 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.



# **Horizontal Airflow**

The new airflow control removes that uncomfortable drafty feeling with the introduction of a horizontal airflow that spreads across the

■Indoor/Outdoor Unit Combinations

(R410A)

ceiling. The ideal airflow for offices and restaurants.



Floor distance (m)

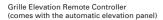
78

# Automatic Grille Lowering Function (PLP-6EAJ, PLP-6EAJE)\*

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.

\*Auto elevation panel(PLP-6EAJ,PLP-6EAJE) cannot be used with Plasma Quad Connect(PAC-SK51FT-E) and Insulation kit (PAC-SK36HK-E).







Wired Remote Controlle



Wireless Remote Controlle



# 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)





# 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.

burden of installation.

■ Previous model (B Series)



■ New model (F 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.







Lightweight decorative panel

After reviewing the structure and materials,

weight has been reduced approximately 20%

compared to the previous model, reducing the

# 3D F-see Sensor for S & P SERIES

# Detects number of people

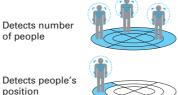
3D i-see Sensor detects the number of people in the room and sets the air-conditioning power accordingly. This makes automatic power-saving operation possible in places where the number of people entering and exiting is large. Additionally, when the area is continuously unoccupied, the system switches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

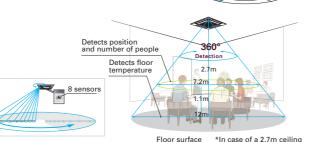
# Detects people's position

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









# Detects number of people (3D i-see Sensor)

# 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 airconditioning 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.

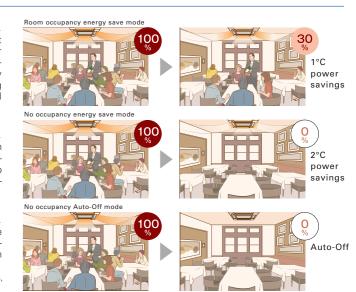
# No occupancy energy-saving mode

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-41MAA is required for each setting

# Detects people's position (3D i-see Sensor)

# 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



\*PAR-41MAA or PAR-SL101A-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.

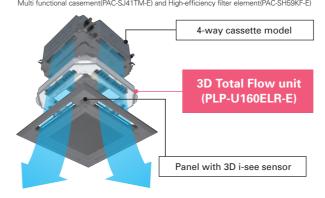


\*PAR-41MAA is required for each setting

# 3D Total Flow\*

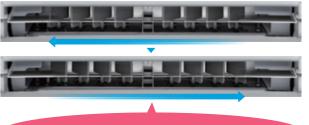
3D Total Flow is an innovative function. Our original 3D i-see sensor detects the temperature of the floor, and then the newly installed 3D Total Flow unit automatically controls the airflow in the left/right directions in a smart manner.

\*3D Total Flow unit(PLP-U160ELR-E) cannot be used with Plasma Quad Connect(PAC-SK51FT-E), Insulation kit(PAC-SK36HK-E), Shutter Plate(PAC-SJ37SP-E), Multi functional casement(PAC-SJ41TM-E) and High-efficiency filter element(PAC-SH59KF-E)



# Horizontal louver (3D Total Flow)

In addition to the ability of conventional models to control airflow in the vertical direction, the adoption of a horizontal louver unit allows each outlet to blow air over a horizontal angle of 90 degrees. The combination of four outlets delivers 360° airflow control around the entire circumference. This now makes it possible to blow air in diagonal directions which eliminates temperature irregularities.



louvers can provide horizontal airflow control.

# Fine-tuned sensing & airflow direction control (3D Total Flow)

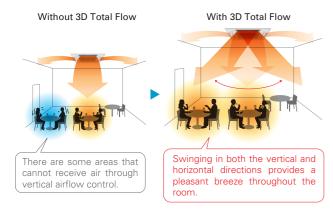


# Swinging

Since airflow can be controlled in the horizontal and vertical directions, you can efficiently make the entire room comfortable.

# Horizontal, vertical, and diagonal airflow delivered to every corner

The combination of the vertical vanes with the horizontal louver unit makes it possible to direct airflow in any direction. This quickly makes the entire room comfortable, even when diagonal airflow is necessary.

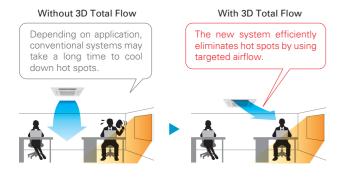


# Targeting

The system can detect spaces with uneven temperatures and target them by sending air even if they are in a diagonal direction.

# Detects and targets areas with uneven temperatures

3D i-see sensor detects areas with uneven temperatures, even if they are caused by the installation orientation of the air conditioner or the influence of strong sunlight. Efficient air conditioning is possible thanks to the ability to send focused airflow to such areas, even those in a diagonal position.



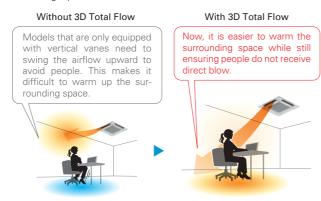


# Indirect mode

When set to "Indirect" mode, the system detects the position of a person and maintains comfort while diverting airflow away from them.

# Prevents direct airflow and keeps you comfortable

This function prevents people from being directly exposed to airflow while still ensuring comfort. The "Indirect" mode of 3D Total Flow keeps the downward airflow while avoiding direct blow to people, delivering a pleasant warmth.



\*If people are present throughout the entire airflow range of an outlet, the airflow is shifted horizontally to avoid direct airflow

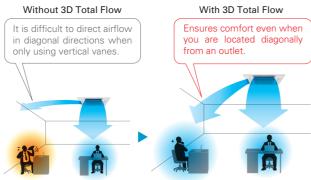
# •

# Direct mode

When set to "Direct" mode, the system detects the position and diverts airflow towards wherever they are located.

# Delivers airflow even in diagonal directions

You can freely turn on "Direct" mode depending on personal prefereuce. This allows for air conditioning in diagonal directions which was difficult for models that could only swing the airflow up and down. This feature is perfect for when you come back home on a hot day.



# Connectable to Plasma Quad Connect\*

The optional Plasma Quad Connect PAC-SK51FT-E can be installed on the indoor units.

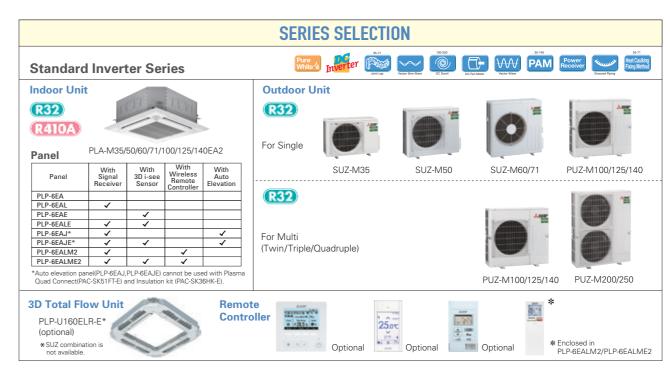
\*Plasma Quad Connect(PAC-SK51FT-E) cannot be used with PLP-U160ELR-E(3D Total Flow unit), Insulation kit (PAC-SK36HK-E), Auto elevation panel(PLP-6EAJ, PLP-6EAJE), Multi functional casement(PAC-SJ41TM-E) and High-efficiency filter element(PAC-SH59KF-E).





# PLA-ZM EA2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor Uı	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
			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	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	_	-	_	-	-	-	-	-	-	N	ISDD-!	50TR2	-E	MS 50W	DD- 'R2-E	MSE	OT-111	R3-E		DF- R2-E



# PLA-M EA2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

									Outd	oor U	nit Cap	acity								
Indoor Unit Combination				Fo	r Sing	jle						For 7	Twin			Fo	or Trip	le	For Qua	adruple
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standard Inverter (SUZ & PUZ-M)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe	-	-	-	-	-	-	-	-	-	-	MSD	D-50T	R2-E		DD- /R2-E	MSE	)T-111	R3-E		DF- 1R2-E





















Sensor Optional	Control White	VANE	Fresh-air Intake High-effic	ency Long Life	Check!		Ceiling	Ceiling	JVAUIU		ACO	Auto Restart	Cooling
Silent	Ampere Limit Rotation		Group Control M-NI	СОМРО	Wi-Fi )) Interface	Cleaning-line,	Wiring Reuse	Drain Lift Up	Pump Down	Flare connection	Self Diagnosis	Failure Recall	

		- Copie	21188	Ориона	Орилла		Optional	Opau	-				
Туре							Inve	erter Heat Pu	mp				
ndoor Un	it	·		PLA-ZM35EA2	PLA-ZM50EA2	PLA-ZM60EA2	PLA-ZM71EA2	PLA-ZM100EA2	PLA-ZM100EA2	PLA-ZM125EA2	PLA-ZM125EA2	PLA-ZM140EA2	PLA-ZM140EA
Outdoor U	Jnit			PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM100YKA2	PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140Y
Refrigerar	nt (*1)							R	32				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor(V/Phase/Hz)						VKΔ-V/	HA:230/Single/		hree/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.
	Total Input	Rated	kW	0.705	1.106	1.452	1.651	2.159	2.159	3.378	3.378	3.722	3.722
	EER	riatod		5.10	4.52	4.20	4.30	4.40	4.40	3.70	3.70	3.60	3.60
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	- 3.70	-	-	- 0.00
	Annual electricity consump	-+i (*?)	kWh/a	168	230	296	327	431	442	<del></del>			
	SEER (*4)	DUON -	KVVII/a	7.5	7.6	7.2	7.6	7.7	7.5				
	SEEN. "	Energy efficiency class		7.5 A++	7.6 A++	7.2 A++	7.0 A++	A++	7.5 A++	-	-	-	
11 41	0		kW		6.0	7.0	8.0	11.2		14.0	14.0	16.0	16.0
Heating	Capacity	Rated		4.1					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	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.
	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
	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)	3.4 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	_	_	_	_
	Back up heating capacity		kW	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	_
	Annual electricity consump	otion (*2)	kWh/a	744	1086	1339	1371	2271	2272	-	-	-	-
	SCOP (*4)			4.7	4.9	4.6	4.8	4.8	4.8	-	-	-	-
		Energy efficiency class		A++	A++	A++	A++	A++	A++	-	-	-	_
Operating	g Current(Max)		А	13.2	13.2	19.2	19.3	20.5	8.5	27.0	9.5	30.7	12.5
ndoor	Input [cooling / Heating ]	Rated	kW	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.05 / 0.05	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08	0.08 / 0.08	0.10 / 0.10	0.10 / 0.1
Unit	Operating Current(Max)		А	0.21	0.22	0.22	0.34	0.47	0.47	0.52	0.52	0.66	0.66
	Dimensions	H*W*D	mm		40-840 <40-950					40-840 <40-950			
	Weight		kg	21 <5>	21 <5>	21 <5>	24 <5>	26 <5>	26 <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	17-19-21-23	19-22-25-28	19-22-25-28	21-24-26-29	21-24-26-29	24-26-29-32	24-26-29-3
	Sound Level (Lo-Mi2-Mi1-Hi) (S	SPL)	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	36-39-42-4
	Sound Level (PWL)		dB(A)	51	54	54	57	61	61	62	62	65	65
Outdoor	Dimensions	H*W*D	mm	630-809-300			943-950-330(+25)		1338-1050-330(+40)				1338-1050-330(-
Jnit	Weight		kg	46	46	67	67	105	111	105	114	105	118
	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)		А	13	13	19	19	20	8	26.5	9	30	11.8
	Breaker Size		Α	16	16	25	25	32	16	32	16	40	16
			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 / 15.8
Ext.Pipin	g Diameter(*5)	Liquid/Gas											
Ext.Pipin	Diameter <sup>(*5)</sup> Max.Length				50	55	55	100	100	100	100	100	1 100
Ext.Pipin	Max.Length	Out-In	m	50	50 30	55 30	55 30	100	100	100	100	100	100
					50 30 -15 ~ +46	55 30 -15 ~ +46	55 30 -15 ~ +46	100 30 -15 ~ +46	30 -15 ~ +4				

<sup>\*1</sup> 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<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.







































OIANDAN	JINVERIER	Silent C Limit Back-up Optional	Optional	Control	Optional	Option	ace piperou	Optional	LITTUP	Down	Diag	nosis	
Туре							Inverter	Heat Pump					
Indoor Unit				PI Α-M35FΔ2	PI A-M50F42	PI Α-Μ60ΕΔ2			PI A-M100FΔ2	PI A-M125FΔ2	PLA-M125EA2	ΡΙ Α-Μ140ΕΔ2	PI A-M140FΔ2
Outdoor Un	it										PUZ-M125YKA2		
Refrigerant <sup>6</sup>	<u> </u>			- 52 II.05VA	1222 1110047	1222 11.0047	1222	R:					1
Power	Source								ower supply				
Supply	Outdoor(V/Phase/Hz)						\/A.\/\/	A:230/Single/5		broo/EO			
Cooling	Capacity	Rated	kW	3.6	5.5	6.1	7.1	9.5	9.5	12.1	12.1	13.4	13.4
Cooling	Capacity	Min-Max	kW	0.8 - 3.9	1.2 - 5.6	1.6 - 6.3	2.2 - 8.1	4.0 - 10.6	4.0 - 10.6	5.8 - 13.0	5.8 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	0.900	1.617	1.848	1.918	2.714	2.714	4.019	4.019	4.962	4.962
	EER	Hateu	KVV	4.00	3.40	3.30	3.70	3.50	3.50	3.01	3.01	2.70	2.70
	Design load		kW	3.6	5.5	6.1	7.1	9.5	9.5	3.01	3.01	2.70	2.70
	Annual electricity consumption	(*2)	kWh/a	170	285	320	331	475	475	-	<del></del>		<del></del>
	SEER (*4)	on · ·	kvvn/a	7.4	6.7	6.6	7.5	7.0	7.0	-	<del>-</del>		
	SEEN	F					7.5 A++		A++			_	
Heating	Canasitu	Energy efficiency class Rated	kW	A++ 4.1	A++ 6.0	A++ 7.0	8.0	A++ 11.2	11.2	12.5	13.5	15.0	15.0
Heating	Capacity					_				13.5			
		Min-Max	kW	1.0 - 5.0	1.5 - 7.2	1.6 - 8.0	2.0 - 10.2	2.8 - 12.5	2.8 - 12.5	4.1 - 15.0	4.1 - 15.0	4.2 - 15.8	4.2 - 15.8
	Total Input	Rated	kW	0.976	1.734	1.842	2.216	3.018	3.018	3.638	3.638	4.398	4.398
	COP		liver	4.20	3.46	3.80	3.61	3.71	3.71	3.71	3.71	3.41	3.41
	Design load	T	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)	4.1 (-10°C)	5.2 (-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)	5.2 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	-	-	-	-
		at operation limit temperature	kW	2.3 (-10°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	-	-	-	-
	Back up heating capacity		kW	0.3	0.5	0.5	0.6	2.0	2.0	-	-	-	-
	Annual electricity consumption	on (*2)	kWh/a	774	1458	1459	1798	2406	2406	-	-	-	-
	SCOP (*4)			4.7	4.1	4.4	4.5	4.6	4.6	-	-	-	-
		Energy efficiency class		A++	A+	A+	A+	A++	A++	-	-	-	-
	Current(Max)		А	8.7	13.7	15.0	15.1	20.5	12	27.2	12.2	30.7	12.2
Indoor	Input [cooling / Heating ]	Rated	kW	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.04 / 0.04	0.07 / 0.07	0.07 / 0.07	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10
Unit	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	H*W*D	mm		258-840-840						<40-950-950>		
	Weight		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)	DI 1	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 (Lo-Mi2-Mi1-Hi) (S	rL)	dB(A)	26-28-29-31 51	27-29-31-32 54	27-29-31-32 54	28-30-32-34 56	31-34-37-40 61	31-34-37-40 61	33-37-41-44 65	33-37-41-44 65	36-39-42-44 65	36-39-42-44 65
Outdoor	Sound Level (PWL)	H*W*D					880-840-330		981-1050-330(+40)		981-1050-330(+40)	981-1050-330(+40)	
Unit	Dimensions Weight	IL-M-D	mm	35	41	54	55	76	78	84	85	84	85
Oill	Air Volume	Cooling	kg m³/min	34.3	45.8	50.1	50.1	76	78	86	86	86	86
	Air voidme			34.3	45.8	50.1	50.1	79	79	92	92	92	92
	Count I coul (CDI)	Heating	m³/min		_				_			_	_
	Sound Level (SPL)	Cooling	dB(A)	48	48	49	49	51	51	54	54	55	55
	a de deserva	Heating	dB(A)	48	49	51	51	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	59	64	65	66	70	70	72	72	73	73
	Operating Current(Max)		A	8.5	13.5	14.8	14.8	20	11.5	26.5	11.5	30	11.5
	Breaker Size		А	10	20	20	20	32	16	32	16	40	16
Ext.Piping	Diameter(*5)	Liquid/Gas	mm	6.35 / 9.52	6.35 / 12.7		9.52 / 15.88			9.52 / 15.88			9.52 / 15.88
	Max.Length	Out-In	m	20	30	30	30	55	55	65	65	65	65
	Max.Height	Out-In	m	12	30	30	30	30	30	30	30	30	30
Guarantee	d 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

Guaranteed Operating Range (Outdoor)

Cooling\*\*\*28

PC -10 ~ +46 -15 ~ +46 -

























		Optional		-	Optional								
Туре				DI 4 1 10 E E 4 0	D. 4 1 1 1 2 2 1 2	DI 4 1 100 T 10		erter Heat Pu		D	D	DI 4 144 405 40	D
Indoor Uni								PLA-M100EA2					
Outdoor U				PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM/1VHA2	PUZ-ZM100VKA2		PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140YK
Refrigeran									32				
Power	Source							Outdoor po					
Supply	Outdoor(V/Phase/Hz)							HA:230/Single					
	Capacity		W	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
			W	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 k	W	0.751	1.175	1.523	1.716	2.209	2.209	3.396	3.396	3.746	3.746
Cooling	EER			4.79	4.25	4.00	4.14	4.30	4.30	3.68	3.68	3.58	3.58
0009	Design load		W	3.6	5.0	6.1	7.1	9.5	9.5	-	-	_	_
	Annual electricity consump	otion(*2) k	Wh/a	172	234	301	336	437	448	-	-	-	-
	SEER(*4)			7.3	7.4	7.1	7.4	7.6	7.4	-	-	-	-
		Energy efficiency class		A++	A++	A++	A++	A++	A++	_	-	-	_
	Capacity		W	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
			W	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 k	W	0.890	1.581	1.863	2.014	2.685	2.685	3.773	3.773	4.365	4.365
	COP			4.61	3.79	3.76	3.97	4.17	4.17	3.71	3.71	3.67	3.67
Heating	Design load		W	2.5	3.8	4.4	4.7	7.8	7.8	-	-	-	-
(Average	Declared Capacity	at reference design temperature  k	W	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
Season)			W	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  k	W	2.1 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.4 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	_	-	-
	Back up heating capacity	k)	W	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-
	Annual electricity consump	otion(*2) k	Wh/a	798	1187	1422	1429	2496	2497	-	-	-	-
	SCOP(*4)			4.3	4.4	4.3	4.6	4.3	4.3	-	-	-	-
		Energy efficiency class		A+	A+	A+	A++	A+	A+	-	-	-	-
Operating	Current(Max)	A	4	13.2	13.2	19.2	19.3	20.5	8.5	27.2	9.7	30.7	12.5
	Input [cooling / Heating ]	Rated k	W	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.04 / 0.04	0.07 / 0.07	0.07 / 0.07	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10
	Operating Current(Max)	A	4	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions	H*W*D m	nm			<40-950-950>					<40-950-950>		
Indoor	Weight	k	g	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
Unit	Air Volume (Lo-Mid-Hi)		n³/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 (Lo-Mid-Hi) (SPL		IB(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)		B(A)	51	54	54	56	61	61	65	65	65	65
	Dimensions		nm	630-809-300		943-950-330(+25)		1338-1050-330(+40)			1338-1050-330(+40)		
	Weight	kı		46	46	67	67	105	111	105	114	105	118
	Air Volume		n³/min	45	45	55	55	110	110	120	120	120	120
			n³/min	45	45	55	55	110	110	120	120	120	120
Outdoor	Sound Level (SPL)		IB(A)	44	44	47	47	49	49	50	50	50	50
Unit			IB(A)	46	46	49	49	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	IB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current(Max)	A	4	13	13	19	19	20	8	26.5	9	30	11.8
	Breaker Size	A	1	16	16	25	25	32	16	32	16	40	16
	Diameter(*5)	Liquid/Gas m	nm	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
Ext.Piping	Max.Length	Out-In m	n	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
Guarante	ed Operating Range (Outdoor)	Cooling(*3)		-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
			C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21

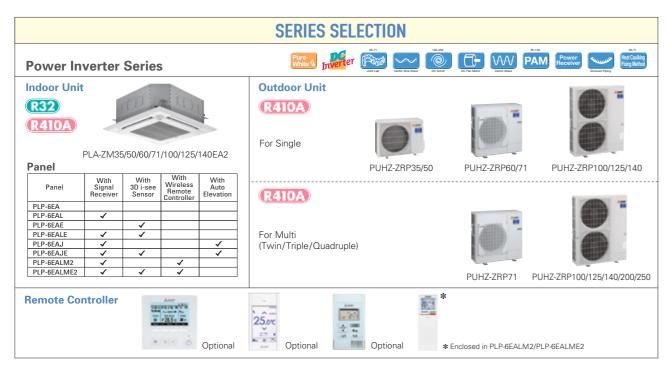
<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means 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<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC-Energy-related Products Directive and Regulation(IEU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



# PLA-ZM EA2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	oacity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
			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	_	_	_	_	_	_	-	_	_	N	иSDD-	-50TR-	E		DD- VR-E	MS	DT-11	1R-E		DF- 1R-E



# PLA-M EA2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	jle						For <sup>-</sup>	Twin			Fo	or Trip	le	For Qu	adruple
			50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	ard Inverter (SUZ & PUHZ-P)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	_	-	-	-	-	-	_	-	-	-	MSE	D-50	ΓR-E	MSDD-	50WR-E	MS	DT-111	IR-E	MSDF-1	1111R-E



























		Silent C Limit Dack	anal .	Optional	Optional		Optional	Optio	nal Lilt Up	DOWII		iagnosis	
Туре								erter Heat Pu					
Indoor Un	it			PLA-ZM35EA2	PLA-ZM50EA2	PLA-ZM60EA2	PLA-ZM71EA2	PLA-ZM100EA2	PLA-ZM100EA2	PLA-ZM125EA2	PLA-ZM125EA2	PLA-ZM140EA2	PLA-ZM140EA2
Outdoor L	Jnit			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA
Refrigerar	1t <sup>(*1)</sup>					•		R41	10A				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor(V/Phase/Hz)						VKA-VI	HA:230/Single/	50, YKA:400/T	hree/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
	11	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	0.782	1.330	1.660	1.790	2.200	2.200	3.846	3.846	4.364	4.364
	EER			4.60	3.75	3.66	3.95	4.32	4.32	3.25	3.25	3.07	3.07
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual electricity consump	ption (*2)	kWh/a	170	253	318	335	461	472	_	_	_	_
	SEER(*4)			7.4	6.9	6.7	7.4	7.2	7.0	_	_	_	_
	022	Energy efficiency class		A++	A++	A++	A++	A++	A++	_	_	_	_
Heating	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	0.850	1.550	1.890	1.900	2.600	2.600	3.674	3.674	4.848	4.848
	COP	1		4.82	3.85	3.70	4.20	4.31	4.31	3.81	3.81	3.30	3.30
	Design load		kW	2.5	3.8	4.4	4.7	7.8	7.8	-		-	-
	Declared Capacity	at reference design temperature		2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	_	_	_	_
	Decial ed Capacity	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)	_	_	_	_
			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	at operation in it temperature	kW	0.0	0.0	0.0	0.0	0.0	0.0	_	_	_	_
	Annual electricity consump	ntion (*2)	kWh/a	713	1108	1335	1337	2223	2224	_		_	
	SCOP(*4)	ption	KVVII/d	4.9	4.8	4.6	4.9	4.9	4.9				
	SCOP	Energy efficiency class		A++	A++	A++	A++	A++	A++			_	
Onevetine	Current(Max)	Lifergy efficiency class	IA	13.2	13.2	19.2	19.3	27.0	8.5	27.0	10.0	28.7	13.7
Indoor	Input (cooling / Heating )	Rated	kW	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.05 / 0.05	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08	0.08 / 0.08	0.10 / 0.10	0.10 / 0.10
Unit	Operating Current(Max)	Indieu	A	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.05 / 0.05	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08	0.08 / 0.08	0.10/0.10	0.1070.10
UIIIL	Dimensions	H*W*D	mm		10-840 <40-950		0.34	0.47		0.52		0.00	0.00
	Weight	11 ** 5	kg	21 <5>	21 <5>	21 <5>	24 <5>	26 <5>	26 <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	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 (Lo-Mi2-Mi1-Hi) (	(SPL)	dB(A)	26-28-29-31	27-29-31-32		28-30-33-36			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	Dimensions	H*W*D	mm	630-809-300	630-809-300	943-950-330(+30)	943-950-330(+30)		1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40
Unit	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)	1 3	A	13	13	19	19	26.5	8	26.5	9.5	28	13
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
Fxt Pining	Diameter (*5)	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
-aci ibilii	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
Guaranto	ed 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
Guarante	or operating name (Outdoor)	Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21
		ate change. Refrigerant with lowe											

<sup>\*1</sup> 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 CO2, 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.

\*4 SEER and SCOP are based on 2009/125/EC.Energy-related Products Directive and Regulation(EU) No206/2012.

<sup>\*5</sup> Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

























STANDARI	INVERTER	Silent Rotation Back-up	Group Control	Group Control	N-NET CO	MPO Wi-F	i i)) MXZ	Cleaning-free,	Wiring Reuse		own conne	ection Signer	Failure Recall
		Optional Optional		Optional	Optional	Option			Optional				
Туре								Heat Pump					
Indoor Unit							PLA-M71EA2						
Outdoor Un				SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6			PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerant(									10A				
Power	Source								ower supply				
Supply	Outdoor(V/Phase/Hz)						VA-VK/	4:230/Single/5	50, YKA:400/T	hree/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	1.020	1.610	1.760	2.100	3.186	3.186	4.101	4.101	5.418	5.418
	EER			3.53	3.42	3.24	3.38	2.95	2.95	2.95	2.95	2.51	2.51
	Design load		kW	3.6	5.5	5.7	7.1	9.4	9.4	-	-	-	_
	Annual electricity consumpti	on (*2)	kWh/a	181	296	306	400	537	537	-	-	-	-
	SEER(*4)			6.9	6.5	6.5	6.2	6.1	6.1	-	-	-	-
		Energy efficiency class		A++	A++	A++	A++	A++	A++	-	_	-	_
Heating	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	1.000	1.690	1.970	2.247	3.265	3.265	3.846	3.846	4.672	4.672
	COP			4.10	3.43	3.50	3.56	3.43	3.43	3.51	3.51	3.21	3.21
	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 consumpti	on (*2)	kWh/a	826	1499	1493	1888	2433	2433	-	_	-	-
	SCOP(*4)			4.4	4.0	4.3	4.3	4.6	4.6	_	_	-	-
		Energy efficiency class		A+	A+	A+	A+	A++	A++	-	-	-	-
Operating (	Current(Max)	•	Α	8.4	12.2	14.2	16.4	20.5	12.0	27.2	12.2	30.7	12.2
Indoor	Input [cooling / Heating ]	Rated	kW	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.04 / 0.04	0.07 / 0.07	0.07 / 0.07	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10
Unit	Operating Current(Max)		А	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions	H*W*D	mm		258-840-840						<40-950-950>		
	Weight		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			19-23-26-29	21-25-28-31	21-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (Lo-Mi2-Mi1-Hi) (S	PL)	dB(A)	26-28-29-31	27-29-31-32	27-29-31-32		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)	T	dB(A)	51	54	54	56	61	61	65	65	65	65
Outdoor	Dimensions	H*W*D	mm		880-840-330				981-1050-330	981-1050-330			
Unit	Weight	1	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	14	16.1	20	11.5	26.5	11.5	30	11.5
	Breaker Size		Α	10	20	20	20	32	16	32	16	40	16
Ext.Piping	Diameter(*5)	Liquid/Gas	mm	6.35 / 9.52	6.35 / 12.7		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 <sup>(*3)</sup>	°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
	and the second second second	hango Rofrigorant with lower global											

<sup>\*1</sup> 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<sub>2</sub>, 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 twhe appliance is used and where it is located.
\*3 Optional air protection guide is required where ambient temperature is lower than –5°C. \*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.
\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.























		Opt	onal	Optional	Optional		Optional		Optional				
Туре								erter Heat Pui					
Indoor Unit	t							PLA-M100EA2					
Outdoor U	nit			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
Refrigerant	(*1)							R4	10A				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor(V/Phase/Hz)						VKA-VI	HA:230/Single/	50, YKA:400/T	hree/50			
	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	0.833	1.416	1.747	1.868	2.230	2.230	3.869	3.869	4.393	4.393
Cooling	EER	•		4.32	3.53	3.49	3.80	4.26	4.26	3.23	3.23	3.05	3.05
Cooling	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	_	-	-	-
	Annual electricity consump	otion(*2)	kWh/a	174	258	321	341	465	475	-	-	-	-
	SEER			7.2	6.7	6.6	7.2	7.1	6.9	_	-	-	-
		Energy efficiency class		A++	A++	A++	A++	A++	A++	_	-	-	-
	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
	11	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	0.920	1.810	2.070	2.110	2.690	2.690	3.773	3.773	4.907	4.907
	COP	•		4.46	3.31	3.38	3.79	4.16	4.16	3.71	3.71	3.26	3.26
Heating	Design load		kW	2.5	3.8	4.4	4.7	7.8	7.8	-	-	-	-
(Average	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)	-	-	-	-
Season)	' '	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	0.0	0.0	0.0	-	-	-	-
	Annual electricity consump	otion(*2)	kWh/a	766	1215	1421	1405	2471	2472	-	-	-	-
	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)	, ,	А	13.2	13.2	19.2	19.3	27.0	8.5	27.2	10.2	28.7	13.7
	Input [cooling / Heating ]	Rated	kW	0.03 / 0.03	0.03 / 0.03	0.03 / 0.03	0.04 / 0.04	0.07 / 0.07	0.07 / 0.07	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10	0.10 / 0.10
	Operating Current(Max)		А	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions	H*W*D	mm		258-840-840	<40-950-950>				298-840-840	<40-950-950>		
Indoor	Weight		kg	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
Unit	Air Volume (Lo-Mid-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
	External Static Pressure		Pa	0	0	0	0	0	0	0	0	0	0
	Sound Level (Lo-Mid-Hi) (SPL	.)	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)	Lunions	dB(A)	51	54	54	56	61	61	65	65	65	65
	Dimensions	H*W*D	mm	630-809-300	630-809-300	943-950-330(+30)	943-950-330(+30)		1338-1050-330(+40)	1338-1050-330(+40)		1338-1050-330(+40)	1338-1050-330(+40)
	Weight	lo "	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
Outdoor	Sound Level (SPL)		dB(A)	44	44	47	47	49	49	50	50	50	50
Unit			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	13	19	19	26.5	8	26.5	9.5	28	13
	Breaker Size		А	16	16	25	25	32	16	32	16	40	16
	Diameter <sup>(*5)</sup>	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
Ext.Piping	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
Guarantee	ed 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

<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a 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<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



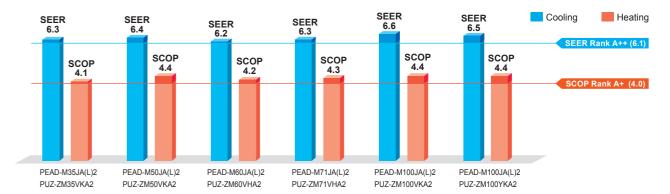
Energy efficiency has been improved. A reduced electricity consumption contributes to a further reduction in operating cost. The thin body with a wide-ranged external static pressure of this series is the perfect answer for the air conditioning needs of buildings with minimum ceiling installation space.

# ErP Lot-10 compliant, Achieving High Energy Efficiency





The shape of fan wing and casing is improved to provide more smooth air flow, increasing the operation efficiency. All models under 12kW(M35~M100) are complied with ErP Lot 10 and energy rankings of A++ for cooling and A+ for heating. This contributes to a reduction in the cost of annual electricity.



# **Compact Indoor Units**

The height of the models from 35-140 has been unified to 250 mm, which makes installation in low ceiling with minimal clearance space possible.

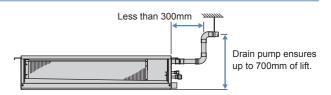
# Selectable Static Pressure Levels

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

# Drain Pump is Optionally Selectable

The line-up consists of two types: models with or without a built-in drain pump, thus allowing more freedom in piping design.

PEAD-M JA2 Built-in drain pump PEAD-M JAL2 ▶ No drain pump



# Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side. For installation, PQ attachment or PQ box is required.



# PEAD-M JA(L)2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor Ur	nit Cap	pacity								
Indoor	Unit Combination				Fo	or Sing	jle						For	Twin			Fo	or Trip	le	For Qu	adruple
		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	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	N	ISDD-	50TR2	-E	MS 50W	DD- /R2-E	MSE	)T-111	R3-E		DF- IR2-E

	SERIES SELECTION
Standard Inverter Series	100-202
Indoor Unit	Outdoor Unit
R32 R410A	For Single
	SUZ-M35 SUZ-M50 SUZ-M60/71 PUZ-M100/125/140
PEAD-M35/50/60/71/100/125/140JA(L)2	For Multi (Twin/Triple/Quadruple)
D ( 0 ( )	PUZ-M100/125/140 PUZ-M200/250
Remote Controller  Optional	Optional Optional* Optional*

# PEAD-M JA(L)2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor Ui	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	jle						For	Twin			Fo	or Trip	le	For Qu	adruple
		35 50 60				100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	ard Inverter (PUZ-M&SUZ)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	MSD	D-50T	R2-E	MS 50W	DD- 'R2-E	MSI	OT-111	R3-E	MS 1111	SDF- 1R2-E





















Type Inverter Heat Pump			
Indoor Unit   PEAD-M35JA[L]2   PEAD-M50JA[L]2   PEAD-M60JA[L]2   PEAD-M71JA[L]2   PEAD-M100JA[L]2   PE	(I )2 PFAD-M125JA(I	2 PEAD-M140.IA(I ):	PFAD-M140.IA(I)2
Outdoor Unit PUZ-ZM50VKA2 PUZ-ZM50VKA2 PUZ-ZM50VKA2 PUZ-ZM60VHA2 PUZ-ZM10VKA2 PUZ-ZM100VKA2 PUZ-ZM10			
Refrigerant <sup>(*)</sup>			
Power Source Outdoor power supply			
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.		6.2 - 15.3	6.2 - 15.3
Total Input Rated kW 0.837 1.190 1.487 1.775 2.261 2.261 3.333	3.333	3.701	3.701
EER <sup>(*4)</sup> 4.30 4.20 4.10 4.00 4.20 4.20 3.75	3.75	3.62	3.62
	_	_	-
Annual electricity consumption (*2)	_	_	_
SEER(*4)*5) 6.3 6.4 6.2 6.3 6.6 6.5 -	_	_	
Energy efficiency class	_	_	_
Heating 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.	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
Total Input Rated kW 0.911 1.363 1.590 1.904 2.545 2.545 3.763	3.763	4.102	4.102
COP <sup>(*4)</sup> 4.50 4.40 4.40 4.20 4.40 4.40 3.72	3.72	3.90	3.90
Design load	_	-	-
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) 3.4 (-20°C) 5.8 (-20°C) -	_	-	-
Back up heating capacity kW 0.0 0.0 0.0 0.0 0.0 0.0 -	-	-	-
Annual electricity consumption <sup>(*2)</sup>   kWh/a   816   1202   1459   1585   2469   2470   -	-	-	-
SCOP(*4)(*5) 4.1 4.4 4.2 4.3 4.4 4.4 -	-	-	-
Energy efficiency class A+ A+ A+ A+ A+ A+ A+ A+ -	_	-	_
Operating Current(Max)   A 14.2 14.4 20.9 20.9 22.3 10.3 28.8	11.3	32.6	14.4
Indoor         Input [cooling / Heating ]         Rated         kW         0.05         0.07         0.08         0.09         0.14         0.14         0.20	0.20	0.21	0.21
Unit Operating Current(Max) A 1.16 1.35 1.85 1.9 2.25 2.25 2.34	2.34	2.63	2.63
Dimensions         H*W*D         mm         250×900×732         250×900×732         250×1100×732         250×1100×732         250×1400×732         250×			
Weight         kg         25(24.5)         26.5(25.5)         29.5(29)         29.5(29)         37(36)         37(36)         38(37)	38(37)	42(41)	42(41)
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   14.5-18.0-23.0   23.0-28.0-32.0   23.0-28.0-32.0   28.0-34.0-3			
External Static Pressure <sup>(7)</sup> Pa 35-<50>-<70>-<100>-<150> 40-<50>-<70>-<100>-<150>		>-<100>-<150	
Sound Level (Lo-Mid-Hi) (SPL)         dB(A)         24-29-32         27-33-35         26-32-35         26-32-37         31-36-39         31-36-39         35-39-4           Sound Level (PWL)         dB(A)         54         58         56         58         62         62         66	35-39-41 66	34-38-41 66	34-38-41 66
Sound Level (PWL) (dBIA) 54 58 56 58 62 0. 600 Columbia (Dimensions H*W*D mm 630-809-300 630-809-300 943-865-3304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 943-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-304-261 945-965-30			
Unit Weight   kg   46   46   67   67   105   111   105	114	105	118
Air Volume   Coolina   m³/min   45   45   55   55   110   110   120	120	120	120
Heating mymin 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
South Level (3FL) Cooling GB(A) 44 44 47 47 49 49 50 Heating GB(A) 46 46 49 49 51 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)	9	30	11.8
Operating Current(wax) A 15 15 19 20 0 20.5  Breaker Size A 16 16 25 25 32 16 32	16	40	16
Streamer Size			
Max.Length	100	100	100
Max.Height   Out-In   m   30   30   30   30   30   30   30	30	30	30























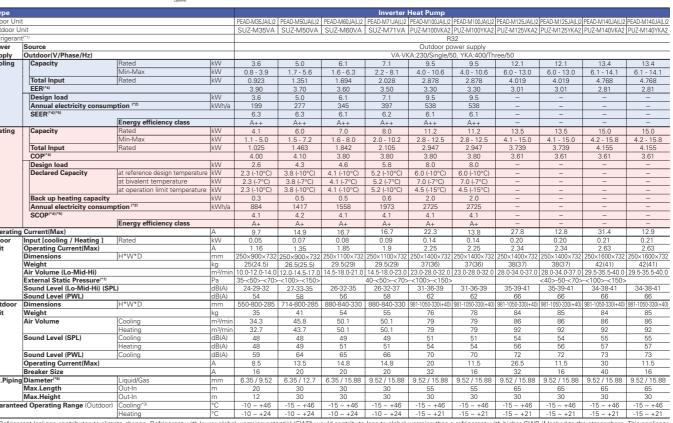












<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere, contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg 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<sub>2</sub>, 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. \*4 EER/COP and SEER/SCOP for M35-71 are measured at ESP 35Pa, for M100 at ESP 37Pa, for M125/140 at ESP 50Pa.

\*5 SEER and SCOP are based on 2009/125/EC-Energy-related Products Directive and Regulation(EU) No206/2012.

\*6 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units and indoor units.

\* PAR-SC9CA-E is also required.



# PEAD-M JA(L) Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor Ur	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
		35	50	60	71	100	125	140	200	250	71 100 125 140 200 250 140 200 250 2				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	-	-	-	-	-	-	-	-	-	١	ИSDD-	50TR-	E		DD- VR-E	MSI	DT-111	IR-E		DF- 1R-E

	SERIES SELE	CTION		
Standard Inverter Series	Inverter	35-71 100-250 77.140  Joint Lap Vector Sine Wave DC Rotary	200,250    C Scroll   C Fan Motor   Vector-Wave	PAM  S5-71  Growth Piping  S5-71  Heat Caulking Fixing Method
Indoor Unit	Outdoor Unit			
R32 R410A	R410A For Single		0	
		SUZ-KA35	SUZ-KA50/60/71	PUHZ-P100/125/140
PEAD-M35/50/60/71/100/125/140JA(L)2	For Multi (Twin/Triple/Quadruple)			0
			PUHZ-P100/125/140	PUHZ-P200/250
Remote Controller  Optional	25oc Optional	Optional Opt	ional* Optional*	

PEAD-M JA(L) Indoor Unit Combinations Indoor unit combinations sh

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-E is also required.

										Outd	oor U	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			F	or Trip	ole	For Qu	adruple
				60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	Standard Inverter (PUHZ-P&SUZ)			60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	MSI	D-50	ΓR-E	MSDD-	50WR-E	MS	DT-11	1R-E	MSDF-	1111R-E

























Туре							Inverter	Heat Pump				_	_
Indoor Uni	it			PEAD-M35JA(L)2	PEAD-M50JA(L)2	PEAD-M60JA(L)2	PEAD-M71JA(L)2	PEAD-M100JA(L)2	PEAD-M100JA(L)2	PEAD-M125JA(L)2	PEAD-M125JA(L)2	PEAD-M140JA(L)2	PEAD-M140JA(L)2
Outdoor U										PUHZ-ZRP125VKA3			
Refrigeran	t <sup>(*1)</sup>								10A				
Power	Source							Outdoor pr	ower supply				
Supply	Outdoor(V/Phase/Hz)						VKA•V	/HA:230/Single/		hree/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	0.870	1.420	1.630	1.990	2.410	2.430	3.834	3.834	4.322	4.322
	EER(*4)			4.14	3.52	3.74	3.53 (3.57)	3.94	3.94	3.26	3.26	3.10	3.10
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	_	_	-	-
	Annual electricity consum	ption (*2)	kWh/a	205	287	340	411	542	553	_	_	-	-
	SEER(*4)(*5)			6.1	6.1	6.2	6.0	6.1	6.0	_	_	_	_
		Energy efficiency class		A++	A++	A++	A+	A++	A+	_	_	-	-
Heating	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	0.950	1.500	1.790	2.030	2.600	2.600	3.508	3.508	4.071	4.071
	COP(*4)		•	4.32	4.00	3.91	3.94	4.31	4.31	3.70 (3.99)	3.70 (3.99)	3.60	3.60
	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	0.0	0.0	0.0	_	-	-	-
	Annual electricity consum	ption (*2)	kWh/a	831	1232	1487	1718	2593	2594	-	-	-	-
	SCOP(*4)(*5)			4.0	4.3	4.1	3.9	4.2	4.2	-	-	-	-
		Energy efficiency class		A+	A+	A+	Α	A+	A+	-	-	-	-
Operating	Current(Max)		Α	14.2	14.4	20.9	20.9	28.8	10.3	28.8	11.8	30.6	15.6
Indoor	Input [cooling / Heating ]	Rated	kW	0.05	0.07	0.08	0.09	0.14	0.14	0.20	0.20	0.21	0.21
Unit	Operating Current(Max)		Α	1.16	1.35	1.85	1.9	2.25	2.25	2.34	2.34	2.63	2.63
	Dimensions	H*W*D	mm							250×1400×732			
	Weight		kg	25(24.5)	26.5(25.5)	29.5(29)	29.5(29)	37(36)	37(36)	38(37)	38(37)	42(41)	42(41)
	Air Volume (Lo-Mid-Hi)		m³/min		12.0-14.5-17.0	14.5-18.0-21.0		23.0-28.0-32.0			28.0-34.0-37.0		
	External Static Pressure(*7)		Pa		-<100>-<150>			-<100>-<150>				-<100>-<150>	
	Sound Level (Lo-Mid-Hi) (SPI Sound Level (PWL)	L)	dB(A)	24-29-32	27-33-35	26-32-35	26-32-37	31-36-39	31-36-39	35-39-41	35-39-41	34-38-41	34-38-41
Outdoor	Dimensions	H*W*D	mm	54 630-809-300	58	56	58	62 1338-1050-330(+40)	62 1338-1050-330(+40)	66	66 ) 1338-1050-330(+40)	66	66 1338-1050-330(+40
Unit	Weight	H W D	kg	43	46	70	70	116	123	116	125	118	131
OIIIL	Air Volume	Cooling	m³/min		45	55	55	110	110	120	120	120	120
	All Volume	Heating	m³/min		45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	45	45	47	47	49	49	50	50	50	50
	Sound Level (SFL)	Heating	dB(A)	44	44	47	47	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)	Cooling	A	13	13	19	19	26.5	8	26.5	9.5	28	13
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
Evt Dining	Diameter(*6)	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
∟xt.riþin(	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
Guaranta	ad Operating Pange (Outdoor)												
Guarante	ed Operating Range (Outdoor)	Cooling(*3) Heating	°C	-15 ~ +46 -11 ~ +21	-15 ~ +46 -11 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21

<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant thin higher GWP, if leaked to the atmosphere, the impact on global warming potent 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 toward be 1975 times higher than 1 kg of CO<sub>2</sub>, 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. \*4 EER/COP and SEER/SCOP for M35-71 are measured at ESP 35Pa, for M100 at ESP 37Pa, for M125/140 at ESP 50Pa.

\*5 SEER and SCOP are based on 2009/125/EC-Energy-related Products Directive and Regulation(EU) No206/2012.

\*6 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

\*7 The factory setting of ESP is shown without < >...









































Туре							Inverter	Heat Pump					
ndoor Un	it			PEAD-M35JA(L)2	PEAD-M50JA(L)2	PEAD-M60JA(L)2	PEAD-M71JA(L)2	PEAD-M100JA(L)2	PEAD-M100JA(L)2	PEAD-M125JA(L)2	PEAD-M125JA(L)2	PEAD-M140JA(L)2	PEAD-M140J
utdoor l	Jnit			SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140
efrigerar	nt <sup>(*1)</sup>							R4	10A				
ower	Source							Outdoor po	wer supply				
upply	Outdoor(V/Phase/Hz)						VA•V	KA:230/Single/5		ree/50			
ooling	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
	Total Input	Rated	kW	1.029	1.458	1.652	2.060	2.965	2.965	4.143	4.143	5.551	5.551
	EER(*4)			3.50	3.36	3.45	3.45	3.17	3.17	2.92	2.92	2.45	2.45
	Design load		kW	3.6	4.9	5.7	7.1	9.4	9.4	-	_	-	-
	Annual electricity consum	ption (*2)	kWh/a	210	284	326	395	596	596	_	_	_	_
	SFFR(*4)(*5)			6.0	6.0	6.1	6.2	5.5	5.5	_	_	_	_
	022	Energy efficiency class		A+	A+	A++	A++	A	A.	_	_	_	_
eating	Capacity	Rated	kW	4.1	5.9	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0
cuting	Cupacity	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
	Total Input	Rated	kW	1.111	1.620	1.928	2.040	2.947	2.947	3.739	3.739	4.347	4.347
	COP(*4)	Hated	IV. A.	3.69	3.64	3.63	3.80	3.80	3.80	3.61	3.61	3.45	3.45
	Design load		kW	2.8	4.4	4.5	6.0	8.0	8.0	-	-	-	- 3.45
	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)				_
	Decialed Capacity	at bivalent temperature	kW	2.5 (-10°C)	3.9 (-7°C)	4.1 (-10°C)	5.3 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	_	_	_	_
			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	at operation in it temperature	kW	0.3	0.5	0.4	0.7	2.0	2.0	_	_	_	_
	Annual electricity consum	ntion (*2)	kWh/a	975	1455		2132	2797	2797	_		_	_
	SCOP(*4)(*5)	puon	KVVII/d	4.0	4.2	1559 4.0	3.9	4.0	4.0		-		_
	SCOP W	Energy efficiency class		4.0 A+	4.2 A+	4.0 A+	3.9 A	4.0 A+	4.0 A+	_	_		_
	Current(Max)	Ellergy efficiency class	Α	9.4	13.4	15.9	18.0	22.3	13.8	27.8	12.8	31.4	12.9
		Rated	kW	0.05	0.07	0.08	0.09	0.14	0.14	0.20	0.20	0.21	0.21
door nit	Input [cooling / Heating ] Operating Current(Max)	nated	A	1.16	1.35	1.85	1.9	2.25	2.25	2.34	2.34	2.63	2.63
nit	Dimensions	lH*W*D	mm					250×1400×732					
	Weight	IH W D	kg	25(24.5)	26.5(25.5)	29.5(29)	29.5(29)	37(36)	37(36)	38(37)	38(37)	42(41)	42(41
	Air Volume (Lo-Mid-Hi)		m³/min		12.0-14.5-17.0			23.0-28.0-32.0					
	External Static Pressure(*7)		Pa		-<100>-<150>			-<100>-<150>	23.0-20.0-32.0	20.0-34.0-37.0		-<100>-<150>	
	Sound Level (Lo-Mid-Hi) (SPI	D	dB(A)	24-29-32	27-33-35	26-32-35	26-32-37	31-36-39	31-36-39	35-39-41	35-39-41	34-38-41	34-38-4
	Sound Level (PWL)		dB(A)	54	58	56	58	62	62	66	66	66	66
utdoor	Dimensions	H*W*D	mm	550-800-285	880-840-330	880-840-330		981-1050-330					
nit	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
	All Volume	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
	Journa Level (GFL)	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)	Cooming	Δ	8.2	12	14	16.1	20	11.5	26.5	11.5	30	11.5
	Breaker Size		A	10	20	20	20	32	16	32	16	40	16
rt Pinin	Diameter(*6)	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
c.r ipili	Max.Length	Out-In	m	20	30	30	30	50	50	50	50	50	50
	Max.Height	Out-In		12	30	30	30	30	30	30	30	30	30
		Uut-III	m	12			30					3U	
	ed 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 ~ +

<sup>\*\*1</sup> Herrigerant 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 or notatins 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<sub>2</sub>, 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 676 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. \*4 EER/COP and SEER/SCOP for M35-71 are measured at ESP 35Pa, for M100 at ESP 37Pa, for M125/140 at ESP 50Pa.

\*5 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*6 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

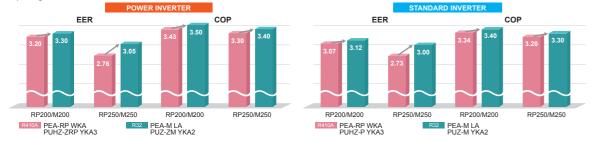
\*7 The factory setting of ESP is shown without < >.



The PEA Series is a large capacity ceiling-concealed type indoor units which are visually discreet blending into various environments. The new R32 refrigerant lineup realizes improved energy efficiency with a patented fan called a Turbo In Sirocco fan. A wider option of external static pressure up to 200Pa allows authentic ducted air-conditioning with an elegant interior layout.

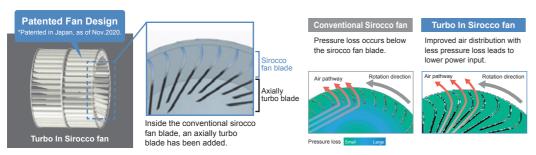
# Improved Energy Efficiency

Introduction of new R32 refrigerant with newly designed fan reduces energy consumption and have resulted in higher energy savings for all capacity ranges.



# Low input with New Fan Design

The new PEA series applies a newly designed fan; a Turbo In Sirocco fan which realizes high efficiency with a lower power input. The new design is Mitsubishi Electric's patented technology with a combination of turbo fan inside the sirocco fan.



# Wide range of external static pressure allows flexible duct design

200Pa setting is newly added enabling total of five static pressure level. The ability to select additional static pressure enables long duct and more freedom in design.



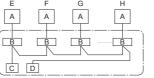
PEA-M200/250LA <60>/75/<100>/<150>/<200> Pa

PUZ-7M200/250

The factory setting of external static pressure is shown without brackets (< >). Refer to "Fan characteristics curves" according to the external static pressure, in the DATA BOOK for the usable range of airflow rate

# PAR-41MAA Group Control

The PAR-41MAA remote controller can control up to 16 systems as a group, and is ideal for supporting the integrated management of building air conditioners.



- A Outdoor unit B Indoor unit
- C Main remote controlle D Subordinate remote controller
- Standard (Refrigerant address = 00) Refrigerant address = 01
- Refrigerant address = 02
- LINE-UP **Indoor Unit Outdoor Unit Remote Controller R32** Power Standard Inverter Inverter Series PUHZ-ZRP200/250 PUH7-P200/250 25oc Power Standard Inverter Inverter PEA-M200/250LA Series Series **R32 R32**



















ERTER	bod (	Control	connection Interface Down connection Set Diagnosis Rec	call
	Optional		Optional Optional	<del></del>
			Inverter H	leat Pump
			PEA-M200LA	PEA-M250LA
			PUZ-ZM200YKA2	PUZ-ZM250YKA2
			R	32
ource				ower supply
utdoor(V/Phase/Hz)			400/Tr	nree/50
Capacity	Rated	kW	19.0	22.0
	Min-Max	kW	9.2 - 22.4	9.9 - 27.0
Total Input	Rated	kW	5.757	7.213
EER			3.30	3.05
Capacity	Rated	kW	22.4	27.0
	Min-Max	kW	7.1 - 25	7.3 - 31
Total Input	Rated	kW	6.400	7.941
COP			3.50	3.40
ırrent(Max)		А	25.7	25.9
put [cooling / Heating ]	Rated	kW	0.35/0.35	0.53/0.53
perating Current(Max)		A	3.1	3.4
mensions	H*W*D	mm		70 - 1120
eight		kg		37
r Volume (Lo-Mi2-Mi1-Hi)		m³/min	42-51-60(60Pa-150Pa) 42-51-55(200Pa)	50-61-72(60Pa-100Pa) 45-55-65(150Pa) 45-50-55(200Pa)
ternal Static Pressure		Pa		0)/(150)/(200)
ound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	35-40-43 63-64-64	38-43-47 67-67-68
ound Level (PWL)	H*W*D	dB(A)		1338-1050-330(+40)
mensions eight	H-W-D	mm	1338-1050-330(+40) 137	1338-1050-330(+40)
r Volume	Castian	kg m³/min		
Volume	Cooling Heating	m³/min	140 140	140 140
		dB(A)		
ound Level (SPL)	Cooling		59	59
und Lovel (DWIL)	Heating	dB(A)	62	62

<sup>\*3</sup> Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units





















Silent		Group Control	
	Optional		

Туре					Heat Pump
ndoor Un	t			PEA-M200LA	PEA-M250LA
utdoor L	nit			PUZ-M200YKA2	PUZ-M250YKA2
efrigeran	t <sup>(*1)</sup>			F	R32
ower	Source			Separate p	power supply
Supply	Outdoor(V/Phase/Hz)			400/1	hree/50
Cooling	Capacity		kW	19.0	22.0
			kW	9.2 - 22.4	9.9 - 27.0
	Total Input	Rated	kW	6.089	7.333
	EER			3.12	3.00
leating	Capacity		kW	22.4	27.0
			kW	6.8 - 25	7.3 - 31
	Total Input	Rated	kW	6.588	8.181
	COP			3.40	3.30
Operating	Current(Max)		Α	25.7	25.9
ndoor	Input [cooling / Heating ]	Rated	kW	0.35/0.35	0.53/0.53
Jnit	Operating Current(Max)		A	3.1	3.4
	Dimensions	H*W*D	mm		370 - 1120
	Weight		kg		87
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	42-51-60(60Pa-150Pa) 42-51-55(200Pa)	50-61-72(60Pa-100Pa) 45-55-65(150Pa) 45-50-55(200Pa)
	External Static Pressure		Pa		0)/(150)/(200)
	Sound Level (Lo-Mi2-Mi1-Hi)		dB(A)	35-40-43	38-43-47
	Sound Level (PWL)		dB(A)	63-64-64	67-67-68
Outdoor	Dimensions	H*W*D	mm	1338-1050-330(+40)	1338-1050-330(+40)
Jnit	Weight		kg	129	138
	Air Volume		m³/min	140	140
		Heating	m³/min	140	140
	Sound Level (SPL)		dB(A)	58	59
			dB(A)	60	62
	Sound Level (PWL)	Cooling	dB(A)	78	77
	Operating Current(Max)		A	22.5	22.5
	Breaker Size		Α	32	32
xt.Piping	Diameter <sup>(*3)</sup>		mm	9.52 / 25.4	12.7 / 25.4
	Max.Length	Out-In	m	70	70
	Max.Height	Out-In	m	30	30
Guarante	ed Operating Range (Outdoor)		°C	-15~+46	-15~+46
		Heating	°C	-20~+21	-20~+21

<sup>\*1</sup> 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<sub>2</sub>, 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 Optional air protection guide is required where ambient temperature is lower than 5°C.
\*3 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

<sup>\*1</sup> 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 CO2, 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 Optional air protection guide is required where ambient temperature is lower than -5°C.























	Ç <del></del> ⊖Ö ACO	Auto Restart	Low Temp Cooling	Silent	Ampere Limit
ump					

		Option	al Opti	onal Optional						
Туре				Inver	rter Heat Pump					
Indoor Ur	nit									
Outdoor l	Jnit			PEA-M200LA	PEA-M250LA					
Refrigera	nt <sup>(*1)</sup>			PUHZ-ZRP200YKA3	R410A(*1) PUHZ-ZRP250YKA3					
Power	Source			Separa	ate power supply					
Supply	Outdoor (V/Phase	e/Hz)		40	0 / 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	5.937	7.971					
	EER			3.20	2.76					
	Capacity	Rated	kW	-	-					
Average		Min - Max	kW	22.4	27.0					
Season)	Total Input	Rated	kW	9.5 -25	12.5 - 31					
	COP			6.530	8.181					
Operatin	g Current (max)			3.43	3.30					
ndoor	Input [Cooling / He	eating] Rated	kW	22.2	24.4					
Unit	Operating Curren	nt (max)	A	0.35 / 0.35	0.53 / 0.53					
	Dimensions	H x W x D	mm	3.1 47	70-1370-1120 3.4					
	Weight	<u>'</u>	kg		87					
	Air Volume [Lo-M	lid-Hi]	m³/min	42-51-60(60Pa-150Pa) 42-51-55(200Pa)	50-61-72(60Pa-100Pa) 45-55-65(150Pa) 45- 50- 55(200F					
	External Static Pr	ressure	Pa	(60)/75	5/(100)/(150)/(200)					
	Sound Level (SPL	) [Lo-Mid-Hi]	dB(A)	35-40-43	38-43-47					
	Sound Level (PWI	L)	dB(A)	63-64-64	67-67-68					
	Dimensions	HxWxD	mm	1338-1050-330(+40)	1338-1050-330(+40)					
Jnit	Weight	'	kg	135	135					
	Air Volume	Cooling	m³/min	140	140					
		Heating	m³/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 Curren	it (max)	A	19	21					
	Breaker Size		A	32	32					
Ext.	Diameter (*3)	Liquid / Gas	mm	9.52/25.4	12.7/25.4					
Piping	Max. Length	Out-In	m	100	100					
	Max. Height	Out-In	m	30	30					
	ed Operating Range	Cooling(*2)	°C	-15 ~ +46	-15 ~ +46					
(Outdoor)		Heating	℃	-20 ~ +21	-20 ~ +21					

<sup>\*1</sup> 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 CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a profess

# PEA-M SERIES































Demand Control Optional	Q≑Q ACO	Auto Restart	Low Temp Cooling	Silent	Optional

STANDAR	RD INVERTER		connection	Interface	Down connection Set Diagnosis Recall						
Туре			- Special Control of the Control of		Inverter	Heat Pump					
ndoor Un	nit				PEA-M200LA	PEA-M250LA					
utdoor l					PUHZ-P200YKA3	PUHZ-P250YKA3					
efrigerar	nt(*1)				R41	0A(*1)					
ower	Source				Separate p	ower supply					
upply	Outdoor (V/Phase	e/Hz)			400 / Ti	nree / 50					
ooling	Capacity	Rated		kW	19.0	22.0					
		Min - N	lax	kW	9.0-22.4	11.2-27.0					
	Total Input	Rated		kW	6.188	8.058					
	EER				3.07	2.73					
eating	Capacity	Rated		kW	22.4	27.0					
verage		Min - N	lax	kW	9.5-25	12.5-31					
eason)	Total Input	Rated		kW	6.706	8.437					
	COP				3.34	3.20					
peratin	g Current (max)				22.2	24.4					
door	Input [Cooling / He	eating]	Rated	kW	0.35/0.35	0.53/0.53					
nit	Operating Current	t (max)		A	3.1 3.4						
	Dimensions		H x W x D	mm	470-13	70-1120					
	Weight			kg	3	37					
	Air Volume [Lo-Mi	id-Hi]		m³/min	42-51-60(60Pa-150Pa) 42-51-55 (200Pa)	50-61-72(60Pa-100Pa) 45-55-65(150Pa) 45-50-55(200Pa)					
	External Static Pro	essure		Pa	(60)/75/(100	0)/(150)/(200)					
	Sound Level (SPL)	[Lo-Mid-	Hi]	dB(A)	35-40-43	38-43-47					
	Sound Level (PWL			dB(A)	63-64-64	67-67-68					
	Dimensions		H x W x D	mm	1338-105	0-330(+40)					
nit	Weight			kg	127	135					
	Air Volume		Cooling	m³/min	140	140					
			Heating	m³/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	t (max)		А	19	21					
	Breaker Size			А	32	32					
xt.	Diameter (*3)		Liquid / Gas	mm	9.52/25.4	12.7/25.4					
iping	Max. Length		Out-In	m	70	70					
	Max. Height	T	Out-In	m	30	30					
	ed Operating Range	T	Cooling <sup>(*2)</sup>	°C	-15~+46	-15~+46					
Outdoor)		П	Heating	°C	-20~+21	-20~+21					

<sup>\*1</sup> 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<sub>2</sub>, 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 Optional air protection guide is required where ambient temperature is lower than -5°C.

\*3 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

**R32 R410A** 

**R32** 

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.

PKA-M35/50LA(L)2

# PKA-M60/71/100KA(L)2 Designed for highly efficient energy savings, the PKA Series is the answer to your

# New Design (M35-50)

air conditioning needs.

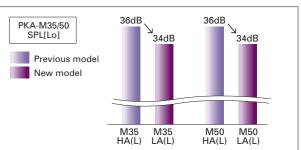
A sharp and simple form that combines beauty and function. The simple square design harmonizes beautifully with the straight lines created by the intersection of the walls, floor and ceiling of the space, leading to a better quality of space. Also adopted a new white body color. It will make your life and space beautiful and comfortable without disturbing the atmosphere of the room. In addition, we realized miniaturization of conventional model. It contributes to space saving of installation area and giving room to room space.



# Quietness (M35-50)

The noise level has been significantly reduced compared to the conventional model by reviewing the unit structure and improving the line flow fan.





# New Wireless Remote Controller Included

The PKA-KAL2 series wireless remote controller has been updated. It now comes with a new stylish remote controller that fits comfortably in your hand and has a wide range of useful functions.



Main Functions of new Wireless Remote Controller ·Weekly Timer

- Backlight
- Dual set point ·Battery replacement sign

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

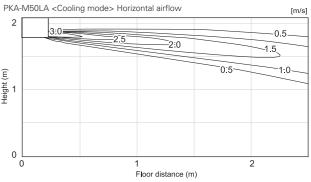
Highly efficient indoor unit heat exchangers and and newly designed power inverters (PUHZ-ZM) contribute to an amazing reduction in electricity consumption throughout a year, and have resulted in models in the full-capacity range attaining the rank A, A+ and A++ energy savings rating.



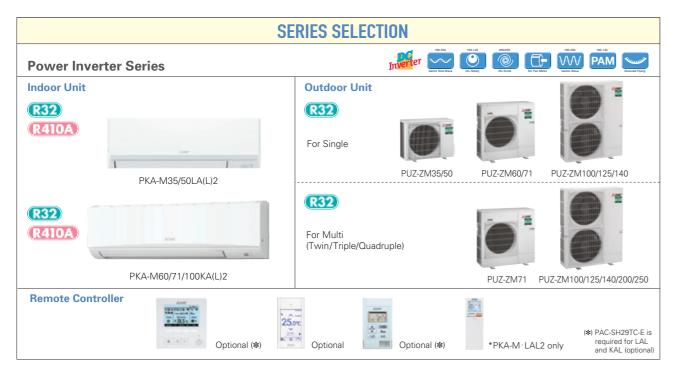
# Airflow Control - Horizontal Airflow - (M35-50)

Significantly improved airflow control to achieve horizontal airflow. This reduces the feeling of draft even on a wall-mounted model, and air conditioning the indoor space firmly.

# Airflow distributions



<sup>\*2</sup> Optional air protection guide is required where ambient temperature is lower than -5°C. \*3 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



# PKA-M LA(L)2/KA(L)2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	acity								
Indo	oor Unit Combination				Fo	or Sing	gle	e 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
Pow	ver Inverter (PUZ-ZM)	35x1	50x1	60x1	71x1	100x1	-	-	-	-	35x2 50x2 60x2 71x2 100x2 -				-	50x3	60x3	71x3	50x4	60x4	
	Distribution Pipe	-	-	-	-	-	-	-	-	-	N	ISDD-	50TR2	-E	MSDD- 50WR2-E	-	MSE	OT-111	R3-E	MS 1111	DF- R2-E

	SERIES SELECTION
Standard Inverter Series	100-200
Indoor Unit	Outdoor Unit
R32 R410A	For Single
PKA-M35/50LA(L)2	PUZ-M100
PKA-M60/71/100KA(L)2	For Multi (Twin/Triple/Quadruple)  PUZ-M100/125/140  PUZ-M200/250
Remote Controller  Optional (*)	Optional Optional (*) *PKA-M·LAL2 only (*) PAC-SH29TC-E is required for LAL and KAL (optional

# PKA-M LA(L)2/KA(L)2 Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Ca <sub>l</sub>	pacity										
Indo	oor Unit Combination	For Single									For Twin						F	or Trip	For Quadruple				
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250		
Star	ndard Inverter (PUZ-M)	-	-	-	-	100x1	-	-	-	-	-	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4		
	Distribution Pipe	-	1	-	-	-	-	-	-	-	-	MSE	D-50T	R2-E	MSDD- 50WR2-E	-	MSE	OT-111	R3-E	MS 1111	DF- R2-E		



PKA-M SERIES





















Туре						Inverter F	leat Pump		
Indoor Unit				PKA-M35LA(L)2	PKA-M50LA(L)2	PKA-M60KA(L)2	PKA-M71KA(L)2	PKA-M100KA(L)2	PKA-M100KA(L)2
Outdoor Unit				PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM100YKA2
Refrigerant(*1)	)					R	32		
Power So	ource					Outdoor po	ower supply		
Supply O	utdoor(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	0.857	1.239	1.560	1.863	2.435	2.435
	EER			4.20	3.71	3.91	3.81	3.90	3.90
П	Design load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual electricity consump	tion (*2)	kWh/a	194	244	314	365	508	519
	SEER(*4)			6.5	6.6	6.8	6.8	6.5	6.4
		Energy efficiency class		A++	A++	A++	A++	A++	A++
Heating	Capacity	Rated	kW	4.1	5.0	7.0	8.0	11.2	11.2
		Min-Max	kW	1.6 - 5.2	2.5 - 7.0	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0
	Total Input	Rated	kW	1.040	1.344	1.732	2.116	3.102	3.102
	COP			3.94	3.72	4.04	3.78	3.61	3.61
	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)	3.4 (-20°C)	5.8 (-20°C)	5.8 (-20°C)
	Back up heating capacity		kW	0.0	0.0	0.0	0.0	0.0	0.0
	Annual electricity consump	otion (*2)	kWh/a	829	1074	1464	1530	2477	2478
	SCOP(*4)			4.0	4.3	4.2	4.3	4.4	4.4
		Energy efficiency class		A+	A+	A+	A+	A+	A+
Operating Cu			Α	13.4	13.4	19.4	19.4	20.6	8.6
		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
	perating Current(Max)		A	0.35	0.35	0.43	0.43	0.57	0.57
		H*W*D	mm	299-898-237	299-898-237	365-1170-295	365-1170-295	365-1170-295	365-1170-295
	/eight		kg	12.6	12.6	21	21	21	21
	ir Volume (Lo-Mi2-Mi1-Hi)	(0.51)	m³/min	7.5-8.2-9.2-10.9	7.5-8.2-9.2-10.9	18-20-22	18-20-22	20-23-26	20-23-26
	ound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	34-37-40-43	34-37-40-43	39-42-45 64	39-42-45 64	41-45-49 65	41-45-49
	ound Level (PWL) imensions	H*W*D	dB(A)	60 630-809-300	60			1338-1050-330(+40)	65
	leight	H-W-D	mm		630-809-300	943-950-330(+25)	943-950-330(+25)		1338-1050-330(+40
	reignt ir Volume	Cooling	kg m³/min	46	46	67	67	105	111
Ai	ir volume	Heating	m³/min	45 45	45 45	55 55	55 55	110 110	110 110
c.	ound Level (SPL)	Cooling	dB(A)	45	45	47	47	49	49
30	ourid Level (SFL)	Heating	dB(A)	44	46	49	49	51	51
	ound Level (PWL)		dB(A)	65	65	67	67	69	
		Cooling	A A		13		19		69
	perating Current(Max) reaker Size		A	13 16	13	19 25	25	20	8 16
xt.Piping Di		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
	lax.Length	Out-In	m	50	50	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	lax.Lengtn lax.Height	Out-In	m	30	30	30	30	30	30
		Cooling(*3)	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Juaranteed	Operating nange (Outdoor)		°C			-15 ~ +46 -20 ~ +21			
		Heating	_	-11 ~ +21	-11 ~ +21		-20 ~ +21	-20 ~ +21	-20 ~ +21

<sup>\*1</sup> 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<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.































)	СОМРО	Cleaning-free, page reuse	Wiring Reuse Optional	Drain Lift Up	Pump Down	Flare connection	Diagn

Type				Inverter H	leat Pump
Indoor Uni	it				00KA(L)2
Outdoor U	Init			PUZ-M100VKA2	PUZ-M100YKA2
Refrigeran	t(*1)				32
Power	Source				ower supply
Supply	Outdoor(V/Phase/Hz)				50, YKA:400/Three/50
Cooling	Capacity	Rated	kW	9.5	9.5
		Min-Max	kW	4.0 - 10.6	4.0 - 10.6
	Total Input	Rated	kW	2.941	2.941
	EER		-	3.23	3.23
	Design load		kW	9.5	9.5
	Annual electricity consump	otion (*2)	kWh/a	573	573
	SEER(*4)			5.8	5.8
		Energy efficiency class		A+	A+
Heating	Capacity	Rated	kW	11.2	11.2
		Min-Max	kW	2.8 - 12.5	2.8 - 12.5
	Total Input	Rated	kW	3.284	3.284
	COP			3.41	3.41
	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 consump	otion (*2)	kWh/a	2780	2780
	SCOP(*4)			4.0	4.0
		Energy efficiency class		A+	A+
	Current(Max)		А	20.6	12.1
Indoor	Input [cooling / Heating ]	Rated	kW	0.08 / 0.07	0.08 / 0.07
Unit	Operating Current(Max)		A	0.57	0.57
	Dimensions	H*W*D	mm	365-1170-295	365-1170-295
	Weight		kg	21	21
	Air Volume (Lo-Mi2-Mi1-Hi)	(0.51.)	m³/min	20-23-26	20-23-26
	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A) dB(A)	41-45-49 65	41-45-49 65
Outdoor	Sound Level (PWL) Dimensions	H*W*D	mm	981-1050-330 (+40)	981-1050-330(+40)
Unit	Weight	H-MA-D		981-1050-330 (+40)	981-1050-330(+40) 78
OIIIL	Air Volume	Cooling	kg m³/min	79	79
	Air volume	Heating	m³/min	79	79
	Sound Level (SPL)	Cooling	dB(A)	79 51	51
	Soulid Level (SFL)	Heating	dB(A)	54	54
	Sound Level (PWL)	Cooling	dB(A)	70	70
	Operating Current(Max)	Cooling	A A	20.0	11.5
	Breaker Size		Α	32	16
Evt Dining	Diameter(*5)	Liquid/Gas	mm	9.52 / 15.88	9.52 / 15.88
-xr.rıþin(	Max.Length	Out-In	m	9.52 / 15.88	9.52 / 15.88 55
	Max.Height	Out-In	m	30	30
Cuerert	ed Operating Range (Outdoor)	Cooling <sup>(*3)</sup>	°C	-15 ~ +46	-15 ~ +46
Guarante	ed Operating Range (Outdoor)		°C	-15 ~ +46 -15 ~ +21	-15 ~ +46 -15 ~ +21
** 0 **		Heating	L	-15 ~ 121	-15 ~ +Z1

<sup>\*1</sup> 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<sub>2</sub>, 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.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.
\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



# PKA-M LA(L)/KA(L) Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	pacity								
Indoor	Unit Combination	on For Single For Twin						For Single For Twin For T						or Trip	riple For Quadru		adruple				
		35	50	60	71	100	125	140	200	250	71	71 100 125 140 200 250						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	-	-	-	-	-	-	-	-	-	N	MSDD-	50TR-	E	MSDD- 50WR-E	-	MS	DT-11	IR-E		DF- 1R-E

	SERIES SELECTION		
Standard Inverter Series	Inverter	100-150 200-25	Vector-Vilave PAM Cronved Piping
Indoor Unit	Outdoor Unit		
R32 R410A	R410A		
icioa -	For Single		
1 ===		PUHZ-P100	
PKA-M35/50LA(L)2			
how	R410A  For Multi (Twin/Triple/Quadruple)		0
PKA-M60/71/100KA(L)2		PUHZ-P100/125/140	PUHZ-P200/250
Remote Controller  Optional (*)	Optional Optional (*)	*PKA-M·LAL2 only	(*) PAC-SH29TC-E is required for LAL and KAL (optiona

# PKA-M LA/KA Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For 7	Twin			Fo	or Trip	le	For Qu	adruple
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	ard Inverter (PUHZ-P)	-	-		-	100x1	-	-	-	-	-	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	Standard Inverter (PUHZ-P)  Distribution Pipe		-	-	_	_	_	_	_	_	_	MSI	DD-50	TR-E	MSDD- 50WR-E	_	MS	DT-111	IR-E	MSDF-	1111R-E



















		Optional		Optional Optional					
Туре						Inverter l	leat Pump		
ndoor Uni	t			PKA-M35LA(L)2	PKA-M50LA(L)2	PKA-M60KA(L)2	PKA-M71KA(L)2	PKA-M100KA(L)2	PKA-M100KA(L)2
utdoor U	Init			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3
efrigeran	t <sup>(*1)</sup>				•	R4	10A	•	
ower	Source					Outdoor p	ower supply		
upply	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
	11	Min-Max	kW	1.6 - 4.5	2.3 - 5.4	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4
	Total Input	Rated	kW	0.940	1.424	1.601	1.802	2.398	2.398
	EER	•		3.80	3.23	3.81	3.94	3.96	3.96
	Design load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual electricity consum	ption(*2)	kWh/a	206	263	324	367	522	532
	SEER(*4)			6.1	6.1	6.5	6.7	6.3	6.2
		Energy efficiency class		A++	A++	A++	A++	A++	A++
eating	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	1.070	1.501	1.960	2.191	3.043	3.043
	COP			3.83	3.33	3.57	3.65	3.68	3.68
	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	0.0	0.0	0.0
	Annual electricity consum	otion (*2)	kWh/a	841	1126	1466	1529	2659	2660
	SCOP(*4)	, and a second	IKT TII JU	3.9	4.1	4.2	4.3	4.1	4.1
		Energy efficiency class		A A	A+	A+	A+	A+	A+
neratino	Current(Max)	ziioigy cincionoy ciaco	lΑ	13.4	13.4	19.4	19.4	27.1	8.6
door	Input [cooling / Heating ]	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
nit	Operating Current(Max)	Indica	A	0.35	0.35	0.43	0.43	0.57	0.57
	Dimensions	H*W*D	mm	299-898-237	299-898-237	365-1170-295	365-1170-295	365-1170-295	365-1170-295
	Weight		ka	12.6	12.6	21	21	21	21
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	7.5-8.2-9.2-10.9	7.5-8.2-9.2-10.9	18-20-22	18-20-22	20-23-26	20-23-26
	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	34-37-40-43	34-37-40-43	39-42-45	39-42-45	41-45-49	41-45-49
	Sound Level (PWL)		dB(A)	60	60	64	64	65	65
utdoor	Dimensions	H*W*D	mm	630-809-300	630-809-300	943-950-330(+30)	943-950-330(+30)	1338-1050-330(+40)	1338-1050-330(+40
nit	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	13	19	19	26.5	8
	Breaker Size		Α	16	16	25	25	32	16
ct.Pipino	Diameter(*5)	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
iuarante	ed Operating Range (Outdoor)		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
.aarunte	ca opolating name (Outdoor)	Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21
		li leatilià	-	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +Z1	-20 ~ +21	-20 ~ +21

<sup>\*1</sup> 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant cricuit yourself or disassemble the producy ourself 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. \*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

PKA-M SERIES























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Capacity   Rated   Min-Max     Total Input   Rated   EER     Design load   Rated   Rated     Design load   Rated   Rated     Design load   Rated   Rated   Rated     Design load   Rated   R					PUHZ-P100YKA
wer S	Source				
pply 0	Outdoor(V/Phase/Hz)			VKA • VHA:230/Single/5	0, YKA:400/Three/50
ooling	Capacity		kW	9.4	9.4
- 1		Min-Max	kW	3.7 - 10.6	3.7 - 10.6
1	Total Input	Rated	kW	3.122	3.122
	EER			3.01	3.01
Г	Design load		kW	9.4	9.4
	Annual electricity consump	otion(*2)	kWh/a	586	586
	SEER(*4)			5.6	5.6
Indoor Unit		A+			
ating	Capacity	Rated	kW		11.2
1		Min-Max	kW	2.8 - 12.5	
	Total Input				
		•			
	Design load		kW		
1		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)
			kW		
	Back up heating capacity	1			
		otion (*2)	kWh/a		2799
		Energy efficiency class			
erating C	Current(Max)	, ,	Α	20.6	12.1
		Rated	kW		
			Α	0.57	0.57
		H*W*D	mm		365-1170-295
V	Veight	•	kg	21	21
Α	Air Volume (Lo-Mi2-Mi1-Hi)			20-23-26	20-23-26
S	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	41-45-49	41-45-49
S	Sound Level (PWL)		dB(A)	65	65
		H*W*D	mm	981-1050-330	981-1050-330
nit V	Veight		kg	76	78
A	Air Volume	Cooling	m³/min	79	79
		Heating	m³/min	79	79
S	Sound Level (SPL)	Cooling	dB(A)	51	51
		Heating		54	
S	Sound Level (PWL)	Cooling	dB(A)	70	70
C	Operating Current(Max)	-	A	20	11.5
			А	32	16
t.Piping D	Diameter <sup>(*5)</sup>	Liquid/Gas	mm		9.52 / 15.88
			m		
		Out-In	m		
		Cooling(*3)			
			1		

<sup>\*1</sup> 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 divoud be leaked to the atmosphere, the impact on global warming would be 550 immes higher than 1 kg of CO<sub>2</sub>, 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.

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\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

# PCA-KA SERIE



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.

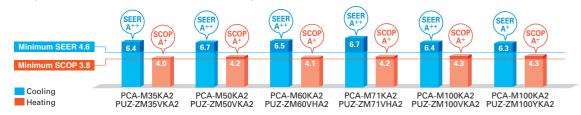
# Stylish Indoor Unit Design

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.



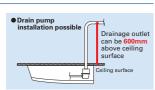
# ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

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.



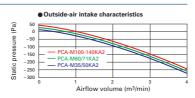
# Optional Drain Pump for Full-capacity Models

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

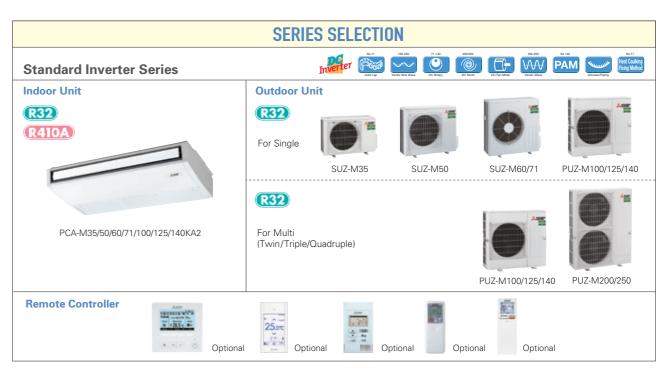
Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match room height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.

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-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor Ur	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
			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	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	N	1SDD-	50TR2	-E		DD- R2-E	MSE	DT-111	R3-E		DF- R2-E



PCA-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

									Outd	oor U	nit Cap	acity								
Indoor Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	ıadruple
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standard Inverter (PUZ-M&SUZ)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe	-		-	-	-			-	-	-	MSD	D-50T	R2-E	MSI 50W	DD- R2-E	MSE	OT-111	R3-E	MS 1111	DF- R2-E























TOWER	INTERVER	Optional Op	otional	Opposition	tional Optional		Connection	Opti	onal Optional	DOWII		liagnosis	
Туре							_	Inverter F			_		_
Indoor Unit	t			PCA-M35KA2	PCA-M50KA2	PCA-M60KA2	PCA-M71KA2	PCA-M100KA2	PCA-M100KA2	PCA-M125KA2	PCA-M125KA2	PCA-M140KA2	PCA-M140KA2
Outdoor U	nit			PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM100YKA2	PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140YKA2
Refrigerant									32				
	Source								ower supply				
	Outdoor(V/Phase/Hz)						VKA•V	HA:230/Single		hree/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
	,		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		kW	0.829	1.250	1.521	1.829	2.375	2.375	3.846	3.846	3.941	3.941
	EER			4.34	4.00	4.01	3.88	4.00	4.00	3.25	3.25	3.40	3.40
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual electricity consump		kWh/a	197	260	328	371	516	527	_	_	_	
	SEER(*4)	51.011	ice en y a	6.4	6.7	6.5	6.7	6.4	6.3	_	_	_	_
	022.1	Energy efficiency class		A++	A++	A++	A++	A++	A++	_	_	_	
Heating	Capacity		kW	4.1	5.5	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
	Capacity		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		kW	1.019	1.361	1.745	2.156	3.018	3.018	3.954	3.954	4.432	4.432
	COP	riateu	KVV	4.02	4.04	4.01	3.71	3.71	3.71	3.54	3.54	3.61	3.61
	Design load		kW	2.4	3.8	4.4	4.7	7.8	7.8	3.54	3.54	3.01	3.01
	Declared Capacity		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)	_	_	_	
	Deciared Capacity	at bivalent temperature	kW		3.8 (-10°C)		4.7 (-10°C) 4.7 (-10°C)	7.8 (-10°C) 7.8 (-10°C)	7.8 (-10°C) 7.8 (-10°C)	_	_	_	_
			kW	2.4 (-10°C)	3.8 (-10°C) 3.7 (-11°C)	4.4 (-10°C) 2.8 (-20°C)	3.4 (-20°C)	7.8 (-10°C) 5.8 (-20°C)	7.8 (-10°C) 5.8 (-20°C)	_	_	_	
	2 1 1 2	at operation limit temperature		2.2 (-11°C)						_	_	_	
	Back up heating capacity	. (*2)	kW	0.0	0.0	0.0	0.0	0.0	0.0	_		_	
	Annual electricity consump SCOP(*4)	otion ' -/	kWh/a	838	1266	1501	1567	2536	2537		-		
	SCOP	F (C : 1		4.0	4.2	4.1	4.2	4.3	4.3	-	-	-	-
		Energy efficiency class		A+	A+	A+	A+	A+	A+	-	-	-	-
	Current(Max)		A	13.3	13.4	19.4	19.4	20.7	8.7	27.3	9.8	30.9	12.7
Indoor	Input [cooling / Heating ]	Rated	kW	0.04 / 0.04	0.05 / 0.05	0.06 / 0.06	0.06 / 0.06	0.09 / 0.09	0.09 / 0.09	0.11 / 0.11	0.11 / 0.11	0.14 / 0.14	0.14 / 0.14
Unit	Operating Current(Max)	LIEVA/ED	A	0.29	0.37	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions	H*W*D	mm		60-680		80-680	37	37	230-160		40	40
	Weight Air Volume (Lo-Mi2-Mi1-Hi)		kg	25	26	32 15-16-17-19	32 16-17-18-20	22-24-26-28	22-24-26-28	38 23-25-27-29	38 23-25-27-29	40 24-26-29-32	40 24-26-29-32
	Sound Level (Lo-Mi2-Mi1-Hi)	(CDI)	m³/min dB(A)	10-11-12-14 31-33-36-39	10-11-13-15 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)	(SPL)	dB(A)	60	60	60	62	63	63		39-41-43-45 65		68
Outdoor	Dimensions	H*W*D	mm		630-809-300					65		68	
Unit	Weight	IN W D	_										
Oill	Air Volume	Cooling	kg m³/min	46 45	46 45	67 55	67 55	105 110	111 110	105 120	114 120	105 120	118 120
	Air voiume	Heating	m³/min m³/min	45 45	45 45	55	55	110	110	120	120	120	120
	Cound Lovel (CDL)												120 50
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49 51	50	50	50	50
	O II I (DIAII)	Heating		46	46	49	49	51		52	52	52	
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current(Max)		A	13	13	19	19	20	8	26.5	9	30	11.8
	Breaker Size	lu uno	А	16	16	25	25	32	16	32	16	40	16
	Diameter <sup>(*5)</sup>	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
													-15 ~ +46
	ed Operating Range (Outdoor)	Cooling <sup>(*3)</sup> Heating	°C	-15 ~ +46 -11 ~ +21	-15 ~ +46 -11 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-20 ~ +21				

<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with like 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant cricuit yourself or disassemble the producy ourself 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. \*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

# PCA-M KA SERIES











































JIANUA	IKU INVEKIEK	Limit Back-up	ptional	Control	nection Interfa	ce	connection	Opp Person	onal Lift Up	Down	Connection	iagnosis Reca	
Type								Inverter H	leat Pump				
Indoor Un	it			PCA-M35KA2	PCA-M50KA2	PCA-M60KA2	PCA-M71KA2	PCA-M100KA2		PCA-M125KA2	PCA-M125KA2	PCA-M140KA2	PCA-M140KA2
Outdoor U	Jnit			SUZ-M35VA	SUZ-M50VA			PUZ-M100VKA2					
Refrigerar	nt <sup>(*1)</sup>								32	1	1		
Power	Source								wer supply				
Supply	Outdoor(V/Phase/Hz)						VA•VI	KA:230/Single/5		ree/50			
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.1	12.1	13.4	13.4
3		Min-Max	kW	0.8 - 3.9	1.5 - 5.6	1.6 - 6.3	2.2 - 8.1	4.0 - 10.6	4.0 - 10.6	5.7 - 13.0	5.7 - 13.0	5.7 - 14.1	5.7 - 14.1
	Total Input	Rated	kW	0.900	1.515	1.648	1.972	2.941	2.941	4.019	4.019	5.360	5.360
	EER			4.00	3.30	3.70	3.60	3.23	3.23	3.01	3.01	2.50	2.50
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual electricity consump	ntion (*2)	kWh/a	198	291	333	381	553	553	_		_	_
	SEER (*4)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Iceanna	6.3	6.0	6.4	6.5	6.0	6.0	_	_	_	_
		Energy efficiency class		A++	A+	A++	A++	A+	A+	_	_	_	_
Heating	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0
outg	Jupanity	Min-Max	kW	1.0 - 5.0	1.5 - 7.2	1.6 - 8.0	2.0 - 10.2	2.8 - 12.5	2.8 - 12.5	4.1 - 15.0	4.1 - 15.0	4.2 - 15.8	4.2 - 15.8
	Total Input	Rated	kW	1.025	1.617	1.750	2.216	3.284	3.284	3.958	3.958	4.285	4.285
	COP	riated	KVV	4.00	3.71	4.00	3.61	3.41	3.41	3.41	3.41	3.50	3.50
	Design load		kW	2.6	4.3	4.6	5.8	8.0	8.0	- 0.41	- 0.41	-	-
	Declared Capacity	at reference design temperature	_	2.3 (-10°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	_	_	_	_
	Deciared Supacity	at bivalent temperature	kW	2.3 (-7°C)	3.8 (-7°C)	4.1 (-7°C)	5.2 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	_	_	_	_
		at operation limit temperature		2.3 (-10°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	_	_	_	_
	Back up heating capacity	at operation innit temperature	kW	0.3	0.5	0.5	0.6	2.0	2.0	_	_	_	_
	Annual electricity consump	otion(*2)	kWh/a	910	1458	1558	1974	2729	2729	_	_	_	_
	SCOP (*4)	otion	KVVII/a	4.0	4.1	4.1	4.1	4.1	4.1	_	_	_	_
	0001	Energy efficiency class		A+	A+	A+	A+	A+	A+	_	_	_	_
Operating	g Current(Max)	Energy emotericy class	Α	8.8	13.9	15.2	15.2	20.7	12.2	27.3	12.3	30.9	12.4
Indoor	Input [cooling / Heating ]	Rated	kW	0.04 / 0.04	0.05 / 0.05	0.06 / 0.06	0.06 / 0.06	0.09 / 0.09	0.09 / 0.09	0.11 / 0.11	0.11 / 0.11	0.14 / 0.14	0.14 / 0.14
Unit	Operating Current(Max)	Indica	A	0.29	0.0370.03	0.39	0.0070.00	0.65	0.65	0.76	0.76	0.14 / 0.14	0.90
0	Dimensions	H*W*D	mm		60-680		80-680	0.00	0.00	230-16		0.00	0.50
	Weight		kg	25	26	32	32	37	37	38	38	40	40
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	10-11-12-14	10-11-13-15	15-16-17-19		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 (Lo-Mi2-Mi1-Hi)	(SPL)	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	Dimensions	H*W*D	mm	550-800-285	714-800-285	880-840-330	880-840-330	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)
Unit	Weight		kg	35	41	54	55	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	34.3	45.8	50.1	50.1	79	79	86	86	86	86
		Heating	m³/min	32.7	43.7	50.1	50.1	79	79	92	92	92	92
	Sound Level (SPL)	Cooling	dB(A)	48	48	49	49	51	51	54	54	55	55
		Heating	dB(A)	48	49	51	51	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	59	64	65	66	70	70	72	72	73	73
	Operating Current(Max)	•	А	8.5	13.5	14.8	14.8	20	11.5	26.5	11.5	30	11.5
	Breaker Size		А	10	20	20	20	32	16	32	16	40	16
Ext.Pipin	Diameter <sup>(*5)</sup>	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	55	55	65	65	65	65
	Max.Height	Out-In	m	12	30	30	30	30	30	30	30	30	30
Guarante	ed 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

<sup>\*1</sup> 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<sub>2</sub>, 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.

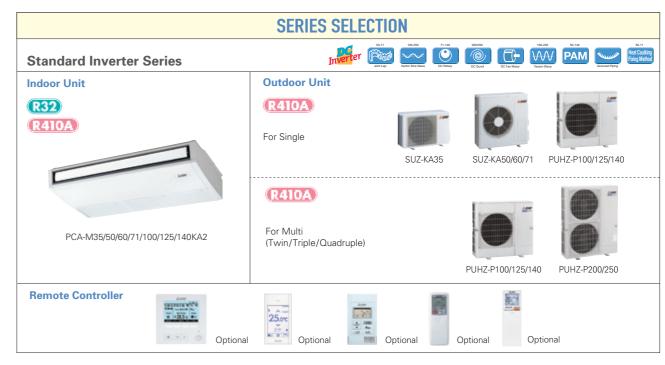
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

**SERIES SELECTION** Inverter (Rocaliver Receiver Ring Metro) **Power Inverter Series Indoor Unit Outdoor Unit R32** R410A **R410A** For Single PUHZ-ZRP35/50 PUHZ-ZRP60/71 PUHZ-ZRP100/125/140 R410A For Multi (Twin/Triple/Quadruple) PCA-M35/50/60/71/100/125/140KA2 PUHZ-ZRP100/125/140/200/250 **Remote Controller** Optional

# PCA-M KA Indoor Unit Combinations Indoor unit combinations shown below are possible.

									Outd	oor U	nit Cap	acity								
Indoor Unit Combination				Fo	or Sing	gle						For 7	Twin			Fo	or Trip	le	For Qua	adruple
	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	-	-	-	-	-	-	-	-	-	ı	MSDD-	-50TR-	E	MS 50V	DD- VR-E	MS	DT-111	IR-E	MS 1111	DF- 1R-E



# PCA-M KA Indoor Unit Combinations Indoor unit combinations shown below are possible.

									Outd	oor U	nit Cap	acity								
Indoor Unit Combination				Fo	r Sing	le						For 7	Twin			Fo	or Trip	le	For Qu	adruple
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standard Inverter (PUHZ-P&SUZ)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe	-	-	-	-	-	-	-	-	-	-	MSE	DD-507	ΓR-E	MS 50V	DD- VR-E	MSI	DT-111	R-E	MS 111	DF- 1R-E























		Optional O	ptional	Op	otional Optiona			Opti	ional Optional				
Туре									leat Pump				
Indoor Uni	t							PCA-M100KA2					
Outdoor U	nit			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
Refrigeran	t(*1)							R4	10A				
Power	Source							Outdoor po	ower supply				
Supply	Outdoor(V/Phase/Hz)						VKA•V	/HA:230/Single/	/50, YKA:400/T	hree/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	0.857	1.351	1.694	1.821	2.417	2.435	3.980	3.980	3.952	3.952
	EER	·		4.19	3.73	3.67	3.90	3.93	3.90	3.14	3.14	3.39	3.39
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	_	_	_	_
	Annual electricity consump	otion(*2)	kWh/a	202	282	340	367	542	553	_	_	_	_
	SEER(*4)			6.2	6.1	6.2	6.7	6.1	6.0	_	_	_	_
		Energy efficiency class		A++	A++	A++	A++	A++	A+	_	_	_	_
Heating	Capacity		kW	4.1	5.5	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
			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	1.450	1.930	2.197	3.043	3.043	3.804	3.804	4.571	4.571
	COP			4.02	3.79	3.63	3.64	3.68	3.68	3.68	3.68	3.50	3.50
	Design load		kW	2.4	3.8	4.4	4.7	7.8	7.8	-	-	-	_
	Declared Capacity	at reference design temperature		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)	_	_	_	_
			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	at operation mine temperature	kW	0.0	0.0	0.0	0.0	0.0	0.0	_	_	_	_
	Annual electricity consump	otion (*2)	kWh/a	817	1259	1461	1522	2784	2785	_	_	_	_
	SCOP(*4)	7	100011/10	4.1	4.2	4.2	4.3	3.9	3.9	_	_	_	_
	555.	Energy efficiency class		A+	A+	A+	A+	A	A	-	_	-	_
Operating	Current(Max)	, ,	А	13.3	13.4	19.4	19.4	27.2	8.7	27.3	10.3	28.9	13.9
Indoor	Input [cooling / Heating ]	Rated	kW	0.04 / 0.04	0.05 / 0.05	0.06 / 0.06	0.06 / 0.06	0.09 / 0.09	0.09 / 0.09	0.11 / 0.11	0.11/0.11	0.14 / 0.14	0.14 / 0.14
Unit	Operating Current(Max)		А	0.29	0.37	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions	H*W*D	mm		60-680		80-680			230-16			
	Weight		kg	25	26	32	32	37	37	38	38	40	40
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	10-11-12-14	10-11-13-15	15-16-17-19	16-17-18-20	22-24-26-28	22-24-26-28	23-25-27-29	23-25-27-29	24-26-29-32	24-26-29-32
	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	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	Dimensions	H*W*D	mm	630-809-300		943-950-330(+30)			1338-1050-330(+40)			1338-1050-330(+40)	
Unit	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
			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)		А	13	13	19	19	26.5	8	26.5	9.5	28	13
	Breaker Size		А	16	16	25	25	32	16	32	16	40	16
Ext.Piping	Diameter(*5)	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
Guarante	ed 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

<sup>\*1</sup> 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 wide be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

# PCA-M KA SERIES













































SIANUA	RD INVERTER	Optional Optional	ontrol	Control con	nection Interfa ptional Optional	cé	connection	pipe reuse Reu	Lift Up	Down	connection	Self Reca	<b>1</b>
Туре								Inverter H	leat Pump				
ndoor Uni	t			DCV M3EKV3	DCV MEUKVS	DCV MEUKVS	DCA M71KA2			DCA M12EKA2	DCA M12EKA2	PCA-M140KA2	DCA MIANKA
Outdoor U												PUHZ-P140VKA	
Refrigeran				002 KA00VA0	002 KA30VA0	1 002 KA00VA0	1002 NA7 1 VA0		10A	1 01121 1201104	1 01121 120110	11 01121 1401104	1 01121 14011
ower	Source								ower supply				
Supply	Outdoor(V/Phase/Hz)						\/Δ•\/	KA:230/Single/		ree/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
Jooning	Capacity	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	1.547	1.722	2.057	3.051	3.051	4.245	4.245	5.643	5.643
	EER	riatod	1000	3.43	3.23	3.31	3.45	3.08	3.08	2.85	2.85	2.41	2.41
	Design load		kW	3.6	5.0	5.7	7.1	9.4	9.4		-	-	
	Annual electricity consump	otion (*2)	kWh/a	209	299	325	408	584	584				_
	SEER(*4)	711011	KVVIII/G	6.0	5.8	6.1	6.0	5.6	5.6				
	OLLII	Energy efficiency class		A+	A+	A++	A+	A+	A+	_	_		
eating	Capacity	Rated	kW	4.1	5.5	6.9	7.9	11.2	11.2	13.5	13.5	15.0	15.0
9		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	1.051	1.519	1.911	2.182	3.373	3.373	4.066	4.066	4.477	4.477
	COP	riotod	1000	3.90	3.62	3.61	3.62	3.32	3.32	3.32	3.32	3.35	3.35
	Design load		kW	2.6	4.0	4.8	5.8	8.0	8.0	-	- 0.02	-	-
	Declared Capacity	at reference design temperature		2.3 (-10°C)	3.6 (-10°C)	4.0 (-10°C)	5.2 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	_	_	_	_
	Deciared Suparity	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	at operation in it temperature	kW	0.3	0.4	0.8	0.6	2.0	2.0	_			_
	Annual electricity consump	otion(*2)	kWh/a	886	1388	1680	2029	2729	2729	_	_	_	_
	SCOP(*4)	, tion	KVVIII/G	4.1	4.0	4.0	4.0	4.1	4.1	_	_	_	_
	0001	Energy efficiency class		A+	A+	A+	A+	A+	A+	_	_	_	-
nerating	Current(Max)	Energy emolency diass	Α	8.5	12.4	14.4	16.5	20.7	12.2	27.3	12.3	30.9	12.4
door	Input [cooling / Heating ]	Rated	kW	0.04 / 0.04	0.05 / 0.05	0.06 / 0.06	0.06 / 0.06	0.09 / 0.09	0.09 / 0.09	0.11/0.11	0.11/0.11	0.14 / 0.14	0.14 / 0.14
nit	Operating Current(Max)	Hated	A	0.29	0.037 0.03	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.1470.15
	Dimensions	H*W*D	mm	230-96			80-680	0.00	0.00	230-16		0.50	0.50
	Weight		kg	25	26	32	32	37	37	38	38	40	40
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	10-11-12-14	10-11-13-15		16-17-18-20	22-24-26-28	22-24-26-28		23-25-27-29		24-26-29-3
	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	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		41-43-45-4
	Sound Level (PWL)		dB(A)	60	60	60	62	63	63	65	65	68	68
utdoor	Dimensions	H*W*D	mm	550-800-285	880-840-330	880-840-330	880-840-330	981-1050-330	981-1050-330	981-1050-330	981-1050-330	981-1050-330	981-1050-3
nit	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)		А	8.2	12	14	16.1	20	11.5	26.5	11.5	30	11.5
	Breaker Size		А	10	20	20	20	32	16	32	16	40	16
ct.Piping	Diameter(*5)	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 / 15.8
	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
uarante	ed 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

<sup>\*1</sup> 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant cricuit yourself or disassemble the producy ourself 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.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

# PCA-HA

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.

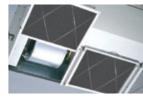
# High-performance Oil Mist Filter

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 mainte-

# 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

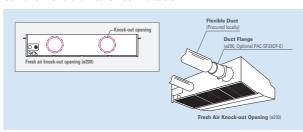
# Easy Maintenance -Even for Cleaning the Fan

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)

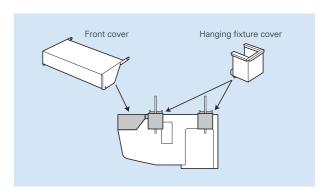
There is a knock-out opening on the rear panel of the unit that can be used to bring fresh air into the unit. This helps to improve ventilation and make the kitchen comfortable.

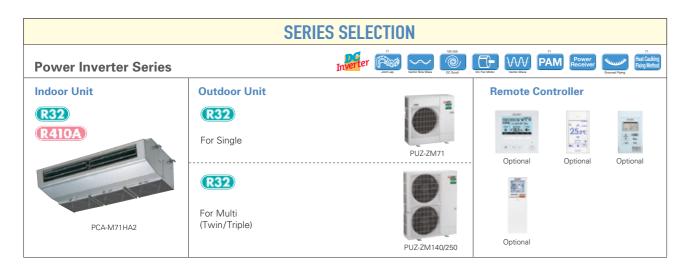


Notes: 1) A fresh-air duct flange is required (sold separately) 2) Intake air is not 100% fresh (outside) air.

# 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.





# PCA-M HA Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	jle						For	Twin			Fo	or Trip	le	For Qu	adruple
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power	Inverter (PUZ-ZM)	-	-	-	71x1	-	-	-	-	-	-	-	-	71x2	-	-	-	-	71x3	-	-
	Distribution Pipe	-	_	_	_	_	_	_	_	_	_	-	-	MSDD- 50TR2-E	_	-	-	-	MSDT- 111R3-E	-	_

	SERIE	S SELECTION		
Power Inverter Series		Inverter Act Lap Vector Sites 1804	DC Fan Motor Vector-Waves PAM Power Received	er Heat Caulking Fixing Method
Indoor Unit	Outdoor Unit	-	Remote Controller	
R32 R410A	R410A For Single	PUHZ-ZRP71	25sr	
PCA-M71HA2	For Multi (Twin/Triple)	0	Optional	
		PUHZ-ZRP140/250	Optional	

# PCA-M HA Indoor Unit Combinations Indoor unit combinations shown below are possible.

									Outd	oor Ui	nit Cap	pacity								
Indoor Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
	3	5 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	_	_



















		Optional		
Type				Inverter Heat Pump
Indoor Uni	it			PCA-M71HA2
Outdoor U				PUZ-ZM71VHA2
Refrigeran				B32
Power	Source			Outdoor power supply
Supply	Outdoor(V/Phase/Hz)			230/Single/50
Cooling	Capacity	Rated	kW	2007171
Cooming			kW	3.3-8.1
	Total Input	Rated	kW	3.3 - 6.1 2.028
	EER	nateu	KVV	2.028 3.50
	Design load		kW	3.50 7.1
	Annual electricity consump	4: (*2)	kWh/a	
	SEER(*4)	otion(*2)	kvvn/a	443
	SEER			5.6
		Energy efficiency class		A+
Heating	Capacity		kW	7.6
			kW	3.5 - 10.2
	Total Input	Rated	kW	2.171
	COP			3.50
	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	3.4 (-20°C)
	Back up heating capacity		kW	0.0
	Annual electricity consump	otion (*2)	kWh/a	1684
	SCOP(*4)			3,9
		Energy efficiency class		A
Operating	Current(Max)		А	19.4
Indoor		Rated	kW	0.10 / 0.10
Unit	Operating Current(Max)		Α	0.43
		H*W*D	mm	280-1136-650
	Weight		kg	42
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	16-18
	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	37-39
	Sound Level (PWL)		dB(A)	57
Outdoor		H*W*D	mm	943-950-330(+25)
Unit	Weight		kg	67
	Air Volume	Cooling	m³/min	55
		Heating	m³/min	55
	Sound Level (SPL)	Cooling	dB(A)	47
		Heating	dB(A)	49
	Sound Level (PWL)		dB(A)	67
	Operating Current(Max)		A	19
	Breaker Size		A	25
Ext.Piping	Diameter(*5)	Liquid/Gas	mm	9.52 / 15.88
	Max.Length	Out-In	m	55
	Max.Height	Out-In	m	30
Guaranto		Cooling(*3)	°C	-15 ~ +46
Guardiile	eu Operating nange (Outdoor)	Cooling		-13 ~ ±40

<sup>\*1</sup> 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<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC. Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.







































		Optional		
Туре				Inverter Heat Pump
Indoor Unit				PCA-M71HA2
Outdoor Unit				PUHZ-ZRP71VHA2
Refrigerant(*1)				R410A
Power Sour	rce			Outdoor power supply
Supply Outo	door(V/Phase/Hz)			230/Single/50
		Rated	kW	7.1
"		Min-Max	kW	3.3 - 8.1
To	otal Input	Rated	kW	2.170
	ER			3.27
De	esign load		kW	7.1
	nnual electricity consump	tion(*2)	kWh/a	444
	EER(*4)			5.6
		Energy efficiency class		A+
eating Ca	apacity	Rated	kW	7.6
	,	Min-Max	kW	3.5 - 10.2
To	otal Input	Rated	kW	2.350
	OP	1.000		3.23
	esign load		lkW	3.23 4.7
		at reference design temperature		47./10°C)
		at bivalent temperature	kW	4.7 (-10°C)
			kW	3.5 (20°C)
P.	ack up heating capacity	at operation innit temperature	kW	3.5 (-2.0 C) 0.0
	nnual electricity consump	tion (*2)	kWh/a	0.0
	COP(*4)	tion ·	KVVII/a	7724
30		Energy efficiency class		3.0 A
perating Curr			IA	19.4
			kW	0.10 / 0.10
	erating Current(Max)	Indica	A	0.43
		H*W*D	mm	280-1136-650
Weig			kg	42
	Volume (Lo-Mi2-Mi1-Hi)		m³/min	7-2 16-18
	nd Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	37-39
	nd Level (PWL)		dB(A)	57
utdoor Dime	ensions	H*W*D	mm	943-950-330(+30)
Jnit Weig	ght		kg	70
	Volume	Cooling	m³/min	55
		Heating	m³/min	55
Sour	nd Level (SPL)	Cooling	dB(A)	47
		Heating	dB(A)	48
Sour	nd Level (PWL)	Cooling	dB(A)	67
	erating Current(Max)		A	19
	aker Size		A	25
xt.Piping Dian		Liquid/Gas	mm	9.52 / 15.88
	.Length	Out-In	m	50
	c.Height	Out-In	m	30
		Cooling(*3)	°C	
iuaranteed Op	3 3 3	Heating	°C	-20 ~ +21

<sup>\*1</sup> 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<sub>2</sub>, 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.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.







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.

# A slim design the fits neatly into any space

With a width of only 600mm, this slim unit can fit neatly into narrow spaces.



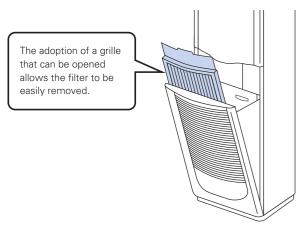


# Built-in MA smart remote controller

The large and easy-to-read LCD makes it easy to perform a variety of functions.

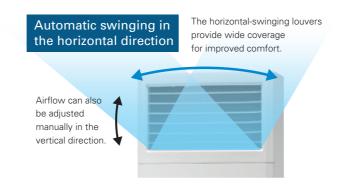


# Equipped with a long-life filter as standard



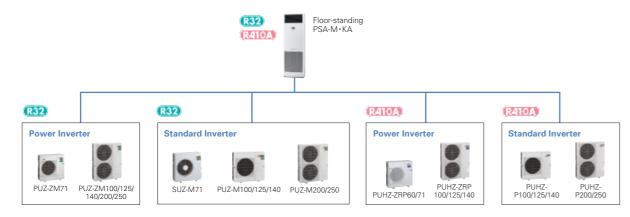
# A wide airflow range with horizontal swinging

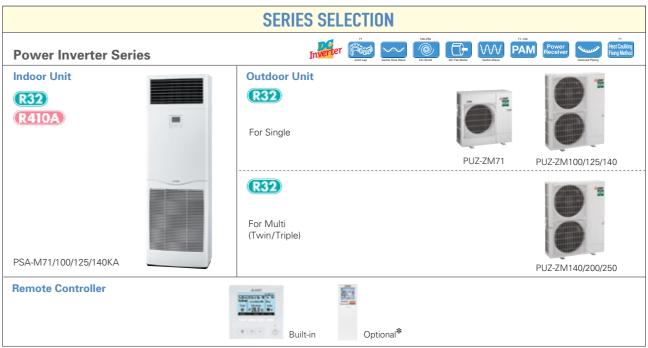
The horizontal swinging function can be turned on or off via the remote controller to deliver comfort over a wider area.



# Floor-standing Line-up

The PSA series was previously only able to be connected to P series outdoor units. However, it can now also be connected to S series outdoor units. This wider lineup provides our customers with a more flexible range of options.

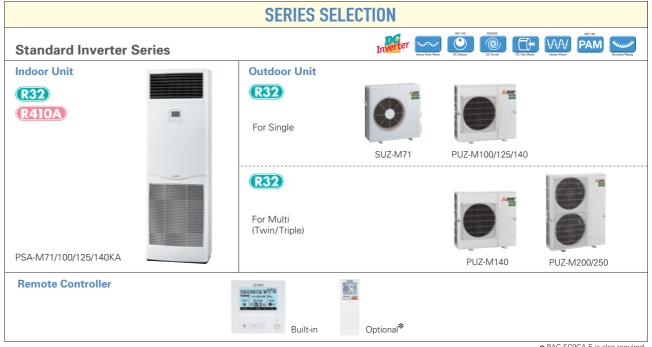




PSA-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

\* PAC-SC9CA-E is also required.

										Outd	oor Ui	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power	Inverter (PUZ-ZM)	-	-	-	71x1	100x1	125x1	140x1	-	-	-	-	-	71x2	100x2	125x2	-	-	71x3	-	_
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	-	-	MSDD -50TR2-E	MSDD-5	0WR2-E	-	-	MSDT -111R3-E	-	-



PSA-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

\* PAC-SC9CA-E is also required.

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										Outd	oor Uı	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Гwin			Fo	or Trip	le	For Qu	adruple
			50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	rd Inverter (PUZ-M)	-	-	-	71x1	100x1	125x1	140x1	-	-	-	-	-	71x2	100x2	125x2	-	-	71x3	-	_
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	-	-	MSDD -50TR2-E	MSDD-5	0WR2-E	-	-	MSDT -111R3-E	_	_





















		Optional								
Type						ı	Inverter Heat Pum	p		
Indoor Uni	it			PSA-M71KA	PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor U	Init			PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM100YKA2	PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140YKA2
Refrigeran	t <sup>(*1)</sup>					•	R32			
Power	Source						Outdoor power suppl	V		
Supply	Outdoor(V/Phase/Hz)					VKA•VHA:	230/Single/50, YKA:41	00/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	1.888	2.493	2.493	3.955	3.955	3.976	3.976
	EER	•		3.76	3.81	3.81	3.16	3.16	3.37	3.37
	Design load		kW	7.1	9.5	9.5	_	_	_	_
	Annual electricity consump	otion(*2)	kWh/a	388	581	592	_	_	_	-
	SEER(*4)			6.4	5.7	5.6	_	_	_	-
		Energy efficiency class		A++	A+	A+	-	-	-	-
Heating	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 - 16.0	5 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	2.338	3.172	3.172	4.501	4.501	5.000	5.000
	COP	•		3.25	3.53	3.53	3.11	3.11	3.20	3.20
	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	3.4 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	-	-	-
	Back up heating capacity		kW	0.0	0.0	0.0	-	-	-	-
	Annual electricity consump	otion(*2)	kWh/a	1636	2658	2659	-	-	-	-
	SCOP(*4)			4.0	4.1	4.1	-	-	-	-
		Energy efficiency class		A+	A+	A+	-	-	-	-
Operating	Current(Max)		А	19.4	20.7	8.7	27.2	9.7	30.7	12.5
Indoor	Input [cooling / Heating ]	Rated	kW	0.06 / 0.06	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11
Unit	Operating Current(Max)		Α	0.4	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions	H*W*D	mm	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360
	Weight		kg	46	46	46	46	46	48	48
	Air Volume (Lo-Mi2-Mi1-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 (Lo-Mi2-Mi1-Hi)	(SPL)	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)	Living	dB(A)	60	65	65	66	66	66	66
Outdoor Unit	Dimensions	H*W*D	mm	943-950-330(+25)		1338-1050-330(+40)				
Unit	Weight Air Volume	0 1	kg .	67	105	111	105	114	105	118
	Air volume	Cooling	m³/min	55	110	110	120	120	120	120
	0 11 1/081)	Heating	m³/min	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	47	49	49	50	50	50	50
		Heating	dB(A)	49	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	67	69	69	70	70	70	70
	Operating Current(Max)		Α	19	20	8	26.5	9	30	11.8
Ford Direct	Breaker Size	I ::-//C	/ \	25	32	16	32	16	40	16
EXT.Piping	Diameter(*5)	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	55	100	100	100	100	100	100
-	Max.Height	Out-In	m	30	30	30	30	30	30	30
Guarante	ed Operating Range (Outdoor)	Cooling <sup>(*3)</sup>	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46

<sup>\*1</sup> 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<sub>2</sub>, 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 who with eappliance is used and where it is located.

\*3 Optional air protection guide is required where ambient temperature is lower than –5°C. \*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.



































Type							Inverter Heat Pump	<u> </u>		
ndoor Un	nit			PSA-M71KA	PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor U	Init			SUZ-M71VA	PUZ-M100VKA2	PUZ-M100YKA2	PUZ-M125VKA2	PUZ-M125YKA2	PUZ-M140VKA2	PUZ-M140YKA
efrigerar							R32			
ower	Source						Outdoor power suppl	/		
upply	Outdoor(V/Phase/Hz)						30/Single/50, YKA:40			
ooling	Capacity	Rated	kW	7.1	9.4	9.4	12.1	12.1	13.6	13.6
Jooning	Cupacity	Min-Max	kW	2.2 - 8.1	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	1.972	2.686	2.686	4.481	4.481	5.037	5.037
	EER	riateu	KVV	3.60	3.50	3.50	2.70	2.70	2.70	2.70
	Design load		kW	7.1	9.4	9.4	2.70	2.70	2.70	2.70
	Annual electricity consump	ntian(*2)	kWh/a	394	591	591	_		_	
	SEER(*4)	Otton:	KVVII/d	6.3	5.5	5.5	_		_	
	SEER! */	F (C: 1								-
4!	Compositor	Energy efficiency class	LAA	A++	A 11.2	A 11.2	10.5	10.5	15.0	15.0
eating	Capacity	Rated	kW	8.0	11.2	11.2	13.5	13.5	15.0	15.0
		Min-Max	kW	2.1 - 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	2.492	3.246	3.246	4.355	4.355	4.761	4.761
	СОР			3.21	3.45	3.45	3.10	3.10	3.15	3.15
	Design load		kW	5.8	8.0	8.0	-	-	-	-
	Declared Capacity	at reference design temperature	kW	5.2 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	-	-	-	-
		at bivalent temperature	kW	5.2 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	-	-	-	-
		at operation limit temperature	kW	5.2 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	-	-	-	_
	Back up heating capacity		kW	0.6	2.0	2.0	-	-	-	-
	Annual electricity consump	otion(*2)	kWh/a	2003	2745	2745	-	-	-	-
	SCOP(*4)			4.0	4.0	4.0	-	-	-	-
		Energy efficiency class		A+	A+	A+	-	-	-	-
perating	g Current(Max)		А	15.2	20.7	12.2	27.2	12.2	30.7	12.2
ndoor	Input [cooling / Heating ]	Rated	kW	0.06 / 0.06	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11
nit	Operating Current(Max)		А	0.4	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions	H*W*D	mm	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360
	Weight		kg	46	46	46	46	46	48	48
	Air Volume (Lo-Mi2-Mi1-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 (Lo-Mi2-Mi1-Hi)	(SPL)	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
utdoor	Dimensions	H*W*D	mm	880-840-330	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+4
nit	Weight		kg	55	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	50.1	79	79	86	86	86	86
		Heating	m³/min	50.1	79	79	92	92	92	92
	Sound Level (SPL)	Cooling	dB(A)	49	51	51	54	54	55	55
		Heating	dB(A)	51	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	66	70	70	72	72	73	73
	Operating Current(Max)		Α	14.8	20	11.5	26.5	11.5	30	11.5
	Breaker Size		Α	20	32	16	32	16	40	16
xt.Pipin	g Diameter(*5)	Liquid/Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max.Length	Out-In	m	30	55	55	65	65	65	65
	Max.Height	Out-In	m	30	30	30	30	30	30	30
luaranto	eed Operating Range (Outdoor)	Cooling(*3)	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Juanante	ca operating natige (Outdoor)	Heating	°C	-10 ~ +40 -10 ~ ±24	-15 ~ +40 -15 ~ ±21	-15 ~ +40	-15 ~ +40 -15 ~ ±21	-15 ~ +40 -15 ~ ±21	-15 ~ +40	-15 ~ +40

Gouranteed Operating Range (Outdoor) Cooling. Co

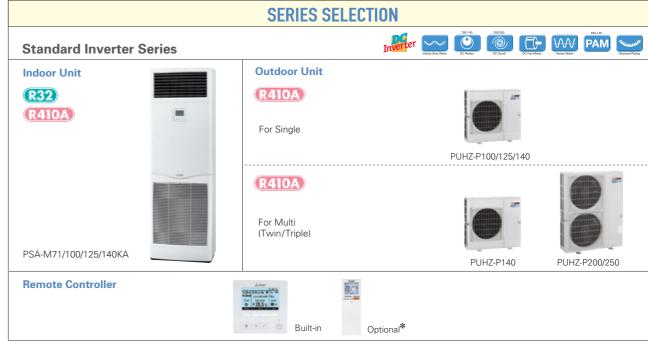
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PSA-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

ŀ	PAC-SC9CA-E	s also require	h

										Outd	oor U	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Qu	adruple
			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	-	-



PSA-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

\* PAC-SC9CA-E is also required.

										Outd	oor U	nit Cap	oacity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			F	or Trip	le	For Qu	adruple
				60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	rd Inverter (PUHZ-P)	-	-	-	-	100x1	125x1	140x1	-	-	-	-	-	71x2	100x2	125x2	-	-	71x3	-	_
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	-	-	MSDD -50TR-E	MSDD-	50WR-E	-	-	MSDT -111R-E	_	-





















		Optional								
Type			_				Inverter Heat Pum	p		
Indoor Un	iit			PSA-M71KA	PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor U	Jnit			PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
Refrigerar	nt(*1)						R410A			
Power	Source						Outdoor power suppl	V		
Supply	Outdoor(V/Phase/Hz)					VKA•VHA:	230/Single/50, YKA:4	00/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	1.890	2.500	2.500	4.084	4.084	4.060	4.060
	EER			3.76	3.80	3.80	3.06	3.06	3.30	3.30
	Design load	tdoor(V/Phase/Hz)  apacity Rated  Min-Max  otal Input Rated  ER  Design load  Innual electricity consumption(*2)  EEER!**  Energy efficiency class  capacity Rated  Min-Max  otal Input Rated  Cop  Design load  Declared Capacity at reference design temperature at bivalent temperature at operation limit temperat		7.1	9.5	9.5	-	-	-	-
		otion(*2)	kWh/a	394	584	595	-	-	-	-
	SEER(*4)			6.3	5.6	5.5	-	-	-	-
		Energy efficiency class		A++	A+	A	-	-	-	-
Heating	Capacity		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	2.210	3.080	3.080	4.242	4.242	4.790	4.790
	COP			3.44	3.64	3.64	3.30	3.30	3.34	3.34
	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	0.0	0.0	-	-	-	-
		otion(*2)	kWh/a	1668	2730	2731	_	_	_	-
	SCOP(*4)			3.9	3.9	3.9	_	_	_	-
		Energy efficiency class		A	A	A	-	-	-	-
Operatin	g Current(Max)		А	19.4	27.2	8.7	27.2	10.2	28.7	13.7
Indoor	Input [cooling / Heating ]	Rated	kW	0.06 / 0.06	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11
Unit	Operating Current(Max)		А	0.4	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions	H*W*D	mm	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360
	Weight		kg	46	46	46	46	46	48	48
			m³/min	20-22-24	25-28-30	25-28-30	25-28-31	25-28-31	25-28-31	25-28-31
		(SPL)	dB(A)	40-42-44	45-49-51	45-49-51	45-49-51	45-49-51	45-49-51	45-49-51
Outdoor		11414/40	dB(A)	60	65	65	66	66	66	66
Unit		H-W-D	mm	943-950-330(+30)			1338-1050-330(+40)			
Unit		ICII	kg	70	116	123	116 120	125	118	131
	Air volume		m³/min m³/min	55	110 110	110 110	120	120 120	120 120	120 120
	Count Louis (CDL)		dB(A)	55	49		50			
	Sound Level (SPL)		dB(A)	47		49		50	50	50
	Council I arrel (DMII)			48 67	51 69	51 69	52	52	52	52
		Cooling	dB(A)				70	70	70	70
			A	19	26.5	8	26.5	9.5	28	13
Fort Dississ	g Diameter(*5)	Liquid/Gas	-	25	32	16	32	16	40	16
Ext.Pipin			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 30	75	75 30	75	75 30	75 30	75 30
C	Max.Height	Out-In	m		30		30			
Guarante	eed 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

<sup>\*1</sup> 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the proteyt 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.

\*4 SEER and SCOP are based on 2009/125/EC.Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.





































	Optional		
ES	Pump Down	Flare connection	Self Diagnosis





Туре						Invertor	Heat Pump		
Indoor Ur	ii+			PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor I				PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YK
Refrigera				FUNZ-FIUUVNA	FUHZ-F1001KA		10A	FUHZ-F140VKA	FUNZ-F14U1N
Power	Source						ower supply		
Supply	Outdoor(V/Phase/Hz)	In	II VAZ				), YKA:400/Three/50	100	
Cooling	Capacity	Rated	kW	9.4	9.4	12.1	12.1	13.6	13.6
	l	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	3.122	3.122	5.020	5.020	6.384	6.384
	EER			3.01	3.01	2.41	2.41	2.13	2.13
	Design load		kW	9.4	9.4	-	-	-	-
	Annual electricity consump	otion(*2)	kWh/a	644	644	_	-	_	-
	SEER(*4)			5.1	5.1	_	_	_	-
		Energy efficiency class		A	A	-	-	-	-
Heating	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	3.284	3.284	4.804	4.804	4.823	4.823
	COP			3.41	3.41	2.81	2.81	3.11	3.11
	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 consump	otion(*2)	kWh/a	2797	2797	_	_	_	-
	SCOP(*4)			4.0	4.0	_	_	_	_
		Energy efficiency class		A+	A+	_	_	_	_
peratin	g Current(Max)	,	Α	20.7	12.2	27.2	12.2	30.7	12.2
ndoor	Input [cooling / Heating ]	Rated	kW	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11
nit	Operating Current(Max)		A	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions	H*W*D	mm	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360
	Weight		kg	46	46	46	46	48	48
	Air Volume (Lo-Mi2-Mi1-Hi)		m³/min	25-28-30	25-28-30	25-28-31	25-28-31	25-28-31	25-28-31
	Sound Level (Lo-Mi2-Mi1-Hi)	(SPL)	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
utdoor	Dimensions	H*W*D	mm	981-1050-330	981-1050-330	981-1050-330	981-1050-330	981-1050-330	981-1050-330
Init	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	11.5	26.5	11.5	30	11.5
	Breaker Size		A	32	16	32	16	40	16
xt.Pipin	g Diameter(*5)	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
Guarante	eed Operating Range (Outdoor)	Cooling(*3)	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
, au uille	occupations runge (Outdoor)	Heating	°C	-15 ~ +40 -15 ~ +21	-15 ~ +46 -15 ~ +21	-15 ~ +46 -15 ~ +21	-15 ~ +40 -15 ~ +21	-15 ~ +40 -15 ~ +21	-15 ~ +40 -15 ~ +21

<sup>\*1</sup> 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, the impact on global warming would be 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<sub>2</sub>, 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.

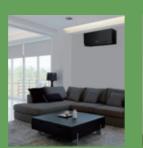
\*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

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

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.

# MULT SPLIT SERIES







# **SELECTION**

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





# **CHECK SYSTEM COMPATIBILITY**

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

Check Inc

the outdoo

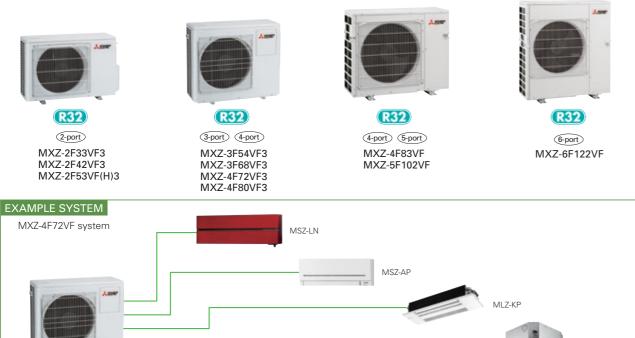
Refer to the "Indoor Unit Compatibility Table" to check if the indoor units selected can be used with the outdoor unit selected. (Indoor units not listed in the table cannot be used.)

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.

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





# Units can be used even if it is connected to only one indoor unit (4F83/5F102/6F122)

This unit can be used even if it is connected to only one indoor unit. This offers more flexibility for wide range of application that satisfies various customers' demand.

# No necessity for refrigerant charging

Depending on the pipe length and the indoor units that are connected, conventional models have required refrigerant charging, but no R32 MXZ model needs to be charged with additional refrigerant. This eliminates troublesome work at the site of installation, and reduces the amount of additional work for the installer.

# Handle Up to 6 Rooms with a Single Outdoor Unit

The MXZ Series for R32 offers a ten-system line-up to choose from, ranging between 3.3 and 12.2kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

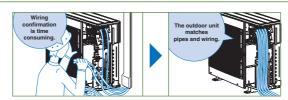
# **Support Functions –**

MXZ-4F72VF3

# Wiring/Piping Correction Function\* (3F54/3F68/4F72/4F80/4F83/5F102/6F122)

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.)













Type (Inv	erter Multi - Split He	at Pump)			Up to 2 In	door Units		Up to 3 In	door Units	Up	to 4 Indoor U	nits	Up to 5 Indoor Units
Indoor Un	it							P	lease refer to *	3			
Outdoor U	Init			MXZ-2F33VF3	MXZ-2F42VF3	MXZ-2F53VF3	MXZ-2F53VFH3	MXZ-3F54VF3	MXZ-3F68VF3	MXZ-4F72VF3	MXZ-4F80VF3	MXZ-4F83VF3	MXZ-5F102VF
Refrigerar	nt								R32*1				
Power	Source							Out	door power sup	oply			
Supply	Outdoor (V/Phase/H	lz)						220 - 23	0 - 240V / Singl	e / 50Hz			
Cooling	Capacity	Rated	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.0	8.3	10.2
	Input	Rated	kW	0.85	0.98	1.40	1.40	1.32	1.84	1.85	2.25	1.97	2.80
	EER*3			3.88	4.29	3.79	3.79	4.10	3.70	3.89	3.56	4.21	3.64
	Design Load		kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.0	8.3	10.2
	Annual Electricity	Consumption*2	kWh/a	189	169	216	216	222	301	311	368	342	436
	SEER*3,*5			6.1	8.7	8.6	8.6	8.5	7.9	8.1	7.6	8.5	8.2
		Energy Efficiency C	class*3	A++	A+++	A+++	A+++	A+++	A++	A++	A++	A+++	A++
Heating	Capacity	Rated	kW	4.0	4.5	6.4	6.4	7.0	8.6	8.6	8.8	9.3	10.5
(Average	Input	Rated	kW	0.91	0.88	1.56	1.56	1.40	1.91	1.87	2.00	2.00	2.28
Season)	COP*3			4.40	5.11	4.10	4.10	5.00	4.50	4.60	4.40	4.65	4.60
	Design Load		kW	2.7	3.5	3.5	3.5	5.2	6.8	7.0	7.0	7.0	7.4
	Declared at referen	ce design temperature	kW	2.2	2.7	2.7	2.7	4.2	5.7	5.6	5.6	5.8	5.9
	Capacity at bivaler	nt temperature	kW	2.4	2.9	2.9	2.9	4.7	6.4	6.2	6.2	6.2	6.4
	at operat	ion limit temperature	kW	1.6	2.3	2.3	2.1	3.2	4.6	4.8	4.8	4.9	4.9
	Back Up Heating (	Capacity	kW	0.5	0.8	0.8	0.8	1.0	1.1	1.4	1.4	1.2	1.5
	Annual Electricity	Consumption*2	kWh/a	944	1065	1065	1089	1583	2321	2389	2389	2087	2205
	SCOP*3,*5			4.0	4.6	4.6	4.5	4.6	4.1	4.1	4.1	4.7 4.7	
		Energy Efficiency C	lass*3	A <sup>+</sup>	A++	A++	A <sup>+</sup>	A++	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A++	A++
Operating	Current (max)		Α	10.0	12.2	12.2	12.2	18.0	18.0	18.0	18.0	21.4	21.4
	Dimensions	$H \times W \times D$	mm		550 - 8	00 (+69) - 285	(+59.5)	710 - 8	340 (+30) - 330	(+66)		796 - 99	50 - 330
Unit	Weight		kg	33	37	37	38	58	58	59	59	62	62
	Air Volume	Cooling	m³/min	31.5	28.4	32.7	32.7	31	35.4	35.4	40.3	57	63
		Heating	m³/min	32.3	33.5	34.7	34.7	31	39.6	42.7	44.1	62	75
	Sound Level (SPL)	Cooling	dB(A)	49	44	46	46	46	48	48	50	49	52
		Heating	dB(A)	50	50	51	51	50	53	54	55	51	56
	Sound Level (PWL)	Cooling	dB(A)	60	59	61	61	60	63	63	65	61	65
	Operating Current	Cooling	Α	4.3 - 4.1 - 3.9	4.9 - 4.7 - 4.5	6.5 - 6.2 - 6.0	6.5 - 6.2 - 6.0	6.0 - 5.7 - 5.5				9.1 - 8.7 - 8.3	12.9 - 12.3 - 11.8
		Heating	Α	4.6 - 4.4 - 4.2	4.4 - 4.3 - 4.1	-	7.5 - 7.1 - 6.8		8.8 - 8.4 - 8.0	8.6 - 8.2 - 7.9		9.2 - 8.8 - 8.4	10.5 - 10.0 - 9.6
	Breaker Size		Α	15	15	15	15	25	25	25	25	25	25
Ext.	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 ×	4/12.7×1+9	.52 × 3	6.35x5/12.7x1+9.52x
Piping	Total Piping Length		m	20	30	30	30	50	60	60	60	70	80
	Each Indoor Unit Pip	ing Length (max)	m	15	20	20	20	25	25	25	25	25	25
	Max. Height		m	10	15(15)	15(15)	15(15)	15(15)	15(15)	15(15)	15(15)	15	15
	Chargeless Length		m	20	30	30	30	50	60	60	60	70	80
	d Operating Range	Cooling	°C		-10 ~ +46		-10 ~ +46				~ +46		
[Outdoor]		Heating	℃		-15 ~ +24		-20 ~ +24			-15 ·	~ +24		

Type (Inv	erter Multi - Split He	at Pump)		Up to 6 Indoor Units		
Indoor Un	•	ac r ump/		Please refer to (*4)		
Outdoor U				MX7-6F122VF		
Refrigerar				R32*1		
Power	Source			Outdoor power supply		
Supply	Outdoor (V/Phase/F	1-1		220 - 230 - 240V / Single / 50		
Cooling	Capacity	Rated	kW	12.2		
Cooling	Input	Rated	kW	3.66		
	FFR*4	nateu	KVV	3.33		
Heating		Rated	kW	14.0		
neating	Capacity	Rated	kW	3.31		
	Input COP*4	nated	KVV			
0			Α	4.23		
	g Current (max)	I	<del>  /`  </del>	29.8		
Outdoor Unit	2	$H \times W \times D$	mm	1048 - 950 - 330		
OIIIL	Weight		kg	87		
	Air Volume	Cooling	m³/min	63		
		Heating	m³/min	77		
	Sound Level (SPL)	Cooling	dB(A)	55		
		Heating	dB(A)	57		
	Sound Level (PWL)	Cooling	dB(A)	69		
	Breaker Size		А	32		
Ext.	Diameter	Liquid	mm	6.35 x 6		
Piping		Gas	mm	12.7 x 1 + 9.52 x 5		
	Total Piping Length	(max)	m	80		
	Each Indoor Unit Piping	Length (max)	m	25		
	Max. Height		m	15		
	Chargeless Length		m	80		
Guarantee	ed Operating Range	Cooling	°C	-10 ~ +46		
[Outdoor]		Heating	°C	-15 ~ +24		

<sup>\*1</sup> 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<sub>2</sub>, 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.

\*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 EER/COP, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.

MX2-2F33VF3 

MSZ-4P15VG + MSZ-LN18VG2

MX2-2F33VF3 

MSZ-LN18VG2 + MSZ-LN25VG2

MX2-2F35VF(H)3 

MSZ-LN18VG2 + MSZ-LN25VG2

MX2-3F34VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2

MX2-3F64VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2

MX2-4F30VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2

MX2-4F80VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2

MX2-4F80VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2

MX2-4F80VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2

MX2-4F80VF3 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2

MX2-4F80VF 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2

MX2-4F80VF 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2

MX2-5F102VF 

MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2 MX2-4F72VF3 → MSZ-LN18VG2 + MSZ-LN18VG2 + MXZ-LN18VG2 + MXZ-LN18VG2 + MXZ-LN18VG2 + MXZ-4F83VF → MSZ-LN18VG2 + MSZ-LN18VG2 + MXZ-5F102VF → MSZ-LN18VG2 + MSZ-LN18VG2 + MXZ-5F102VF → MSZ-LN18VG2 + MSZ-LN18VG2 + MXZ-N18VG2 + MXZ-N18VZ-N18VZ + MXZ-N18VZ +

when connected to the indoor units listed below.

MXZ-6F122VF → MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2

<sup>\*5</sup> SFFR and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulati

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







MXZ-2D53VA(H)2





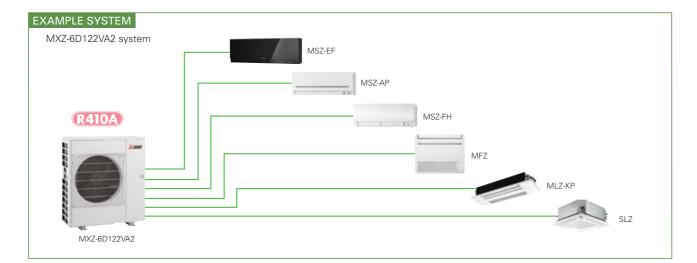












# Handle Up to 6 Rooms with a Single Outdoor Unit

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.)

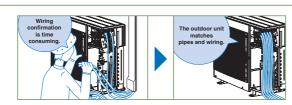
\* Function cannot be used when the outdoor temperature is below 0°C. The correction process requires 10–20 minutes to complete and must be conducted with the unit set to the "Cooling" mode.

# 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.)













Type (Inv	erter Mult	ti - Split He	at Pump)			Up to 2 Inc	door Units		Up to 3 Inc	door Units	Up to 4 In	door Units	Up to 5 Indoor Units
Indoor Un								F	Please refer to (*				
Outdoor l					N: MXZ-2D33VA	N: MXZ-2D42VA2	N: MXZ-2D53VA2		N: MXZ-3E54VA		N: MXZ-4E72VA	MXZ-4E83VA	MXZ-5E102VA
Refrigera	nt								R410A*1				
Power	Source				Outdoor power supply								
Supply	Outdoor	(V/Phase/H	lz)					220 -	230 - 240V / Sing	ile / 50			8.3 10.2 3.7 - 9.2 3.9 - 11.0 2.44 3.15 8.3 10.2 460 537 6.3 6.6 A++ A++ 9.3 10.5 3.4 - 11.6 4.1 - 14.0 2.00 2.34 8.7 8.9 7.1 7.3 7.8 7.9 6.0 6.3 1.6 1.6 2889 2958 4.2 4.2 A+ A+ 21.4 21.4 796 - 950 - 330 63 64 55.6 65.1 55.6 68.0 49 52 51 56 61 65 25 25 6.35 × 4 6.35 × 5 7×1+9.52×3 12.7×1+9.52×4 70 80
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 (Indo	oor+Outdoor)	Rated	kW	0.90	1.00	1.54	1.54	1.35	2.19	2.25	2.44	3.15
	Design Lo	oad		kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
	Annual E	lectricity Co	onsumption*2	kWh/a	211	216	262	262	295	425	443	460	537
	SEER*4.*	7			5.5	6.8	7.1	7.1	6.4	5.6	5.7	6.3	6.6
			Energy Efficiency C	Class*4	А	A++	A++	A++	A++	A+	A+	A++	A++
Heating	Capacity		Rated	kW	4.0	4.5	6.4	6.4	7.0	8.6	8.6	9.3	10.5
(Average			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
Season)	Input (Indo	oor+Outdoor)	Rated	kW	0.96	0.93	1.70	1.70	1.59	2.38	2.28	2.00	2.34
	Design Lo	oad		kW	2.7	3.2	4.5	4.5	5.0	6.8	7.0	8.7	8.9
	Declared	at reference	design temperature	kW	2.1	2.7	3.7	3.6	4.0	5.4	5.6	7.1	7.3
	Capacity	at bivalent t	emperature	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 Ca	pacity	kW	0.6	0.5	0.8	0.9	1.0	1.4	1.4	1.6	1.6
	Annual E	lectricity Co	onsumption*2	kWh/a	926	1065	1507	1546	1751	2466	2516	2889	2958
	SCOP*4.*	7			4.1	4.2	4.2	4.1	4.0	3.9	3.9	4.2	4.2
			Energy Efficiency C	Class*4	A+	A+	A+	A+	A+	А	А	A+	A+
Max. Ope	erating Cu	rrent (Indo	or+Outdoor)	А	10.0	12.2	12.2	12.2	18.0	18.0	18.0	21.4	21.4
Outdoor	Dimensio	ons	$H \times W \times D$	mm		550 - 800 (+69	9) - 285 (+59.5)		710 -	840 (+30) - 330	(+66)	796 - 99	50 - 330
Unit	Weight		•	kg	32	37	37	38	58	58	59	63	64
	Air Volun	ne	Cooling	m³/min	32.9	27.7	32.9	32.9	42.1	42.1	42.1	55.6	65.1
			Heating	m³/min	33.7	33.3	33.3	33.3	43.0	43.0	43.0	55.6	68.0
	Sound Le	evel (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 Le	evel (PWL)	Cooling	dB(A)	63	60	64	64	64	64	64	61	65
	Breaker S	Size		А	10	15	15	15	25	25	25	25	25
Ext.	Diameter	-	Liquid	mm	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 2	6.35 x 3	6.35 x 3	6.35 x 4	6.35 × 4	6.35 × 5
Piping			Gas	mm	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 2	9.52 x 3	9.52 x 3	12.7×1+9.52×3	12.7×1+9.52×3	12.7×1+9.52×4
	Total Pipi	ing Length	(max)	m	20	30	30	30	50	60	60	70	80
	Each Indo	oor Unit Pip	ing Length (max)	m	15	20	20	20	25	25	25	25	25
	Max. Hei	ght		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
	Chargele	ss Length		m	20	20	20	20	40	40	40	25	0
	d Operatin	ng Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
[Outdoor]			Heating	℃	-15 ~ +24	-15 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24
											-	J: Please refer to	the NOTE below.

120

Type (Inv	erter Multi - Split He	at Pump)		Up to 6 Indoor Units		
Indoor Un	<u>'</u>			Please refer to (*5)		
Outdoor l	Jnit			MXZ-6D122VA2		
Refrigera	nt			R410A*1		
Power	Source			Outdoor power supply		
Supply	Outdoor (V/Phase/F	łz)		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		А		
Heating	Capacity	Rated kV		14.0		
		Min - Max	kW	3.5 - 16.5		
	Input*5	Rated	kW	3.31		
	COP*6			4.23		
		EEL Rank		A		
Operatin	g Current (max)*5		Α	26.8		
	Dimensions	$H \times W \times D$	mm	1048-950-330		
Unit	Weight		kg	88		
	Air Volume	Cooling	m³/min	63.0		
		Heating	m³/min	77.0		
	Sound Level (SPL)	Cooling	dB(A)	55		
		Heating	dB(A)	57		
	Sound Level (PWL)	Cooling	dB(A)	70		
	Breaker Size		Α	32		
Ext.	Diameter	Liquid	mm	6.35×6		
Piping		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)* <sup>3</sup>		
	Chargeless Length		m	30		
	ed Operating Range	Cooling	°C	-10 ~ +46		
[Outdoor]		Heating	°C	-15 ~ +24		

ecting the MFZ-KJ series indoor unit(s) to this outdoor unit, charge additional refrigerant according to ions in the diagram below.

# MXZ-2D33VA

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

# MXZ-2D42VA2 MXZ-2D53VA2 MXZ-2D53VAH2

	No. of	Pipe le	ngth (L)	Maximum amount
1	MFZ-KJ indoor units	~20m	~30m	of refrigerant
	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

Pipe lei	Maximum amount	
~40m	~50m	of refrigerant
100g additional (Total 2800g)	100g+{(L-40)m×20g/m)}	3000g
200g additional (Total 2900g)	200g+{(L-40)m×20g/m)}	3100g
300g additional (Total 3000g)	300g+{(L-40)m×20g/m)}	3200g
	~40m 100g additional (Total 2800g) 200g additional (Total 2900g)	100g additional (Total 2800g) 100g+{(L-40)m×20g/m)} 200g additional (Total 2900g) 200g+{(L-40)m×20g/m)}

# MXZ-3E68VA MXZ-4E72VA

No. of	Pipe lei	ngth (L)	Maximum amount
MFZ-KJ indoor units	~40m	~60m	of refrigerant
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
	MFZ-KJ indoor units  1 unit 2 units	MFZ-KJ indoor units         ~40m           1 unit         100g additional (Total 2800g)           2 units         200g additional (Total 2900g)	MFZ-KJ indoor units         ~40m         ~60m           1 unit         100g additional (Total 2800g)         100g+{(L-40)m×20g/m)}           2 units         200g additional (Total 2900g)         200g+{(L-40)m×20g/m)}

<sup>\*1</sup> 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 CO2, 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

<sup>4</sup> EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.

MX2-2D33VA → MSZ-SF16VA + MSZ-EF18VE
MX2-2D42V2 → MSZ-EF18VE + MSZ-EF28VE
MX2-2D53VA(H)2 → MSZ-EF18VE + MSZ-EF38VE
MX2-3E64VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MX2-3E64VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MX2-4E72VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MX2-4E72VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF25VE
MX2-4E72VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF25VE
MX2-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF25VE
MX2-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE

MXZ-bE10ZVA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF2ZVE + MSZ-EF18VE + MSZ

# MXZ-HA SERIES

Multi-port outdoor units exclusively for MSZ-HR indoor units.





# 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.

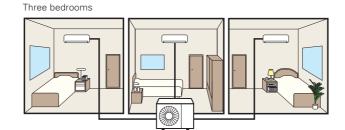


# Easy to create various combinations

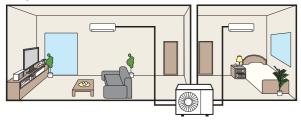
Wide range of simple combinations only possible using multi-port outdoor units.

# Two bedrooms

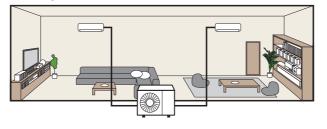




# Living room and one bedroom

















/pe (Inverter Multi - Sp	lit Heat Pump)		Up to 2 Ind	oor Units	Up to 3 Indoor Units				
door Unit				Please refer to (*4)					
utdoor Unit			MXZ-2HA40VF	MXZ-2HA50VF	MXZ-3HA50VF				
frigerant			R32*1						
wer Source				Outdoor power supply					
Outdoor (V/Pi	nase/Hz)		220-230-240 / Single / 50						
ooling Capacity	Rated	kW	4.0	5.0	5.0				
Input*4	Rated	kW	1.05	1.52	1.26				
EER*4	'		3.81	3.29	3.97				
	EEL Rank*4		A	A	A				
Design Load	1	kW	4.0	5.0	5.0				
Annual Elec	tricity Consumption*2	kWh/a	172	225	241				
SEER*4.*5			8.12	7.78	7.26				
	Energy Efficiency		A++	A++	A++				
ating Capacity	Rated	kW	4.3	6.0	6.0				
verage Input	Rated	kW	0.91	1.54	1.30				
cop*4			4.73	3.90	4.62				
	EEL Rank*4		A	A	A				
Design Load	i	kW	3.2	3.2	4.0				
Declared at	<b>Declared</b> at reference design temperature		2.4	2.4	3.0				
Capacity at	bivalent temperature	kW	2.9	2.9	3.6				
at	operation limit temperature	kW	2.1	2.1	2.6				
Back Up He	ating Capacity	kW	0.8	0.8	1.0				
Annual Elec	Annual Electricity Consumption*2 kl		1043	1043	1394				
SCOP*4,*5			4.30	4.30	4.02				
	Energy Efficiency (	Class*4	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>				
erating Current (max	)	А	12.2	12.2	18.0				
tdoor Dimensions	$H \times W \times D$	mm	550 - 800 (+69) - 285 (+59.5)	550 - 800 (+69) - 285 (+59.5)	710 - 840 (+30) - 330 (+66)				
it Weight	•	kg	37	37	57				
Air Volume	Cooling	m³/min	28.4	32.7	31.0				
	Heating	m³/min	33.5	34.7	29.1				
Sound Level (	SPL) Cooling	dB(A)	44	47	46				
	Heating	dB(A)	50	51	50				
Sound Level (	PWL) Cooling	dB(A)	59	64	61				
Operating Cur	rent Cooling	А	4.9	6.8	5.6				
	Heating	А	4.6	6.9	5.8				
Breaker Size		А	15	15	25				
. Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3				
Total Piping L	ength (max)	m	30	30	50				
Each Indoor U	nit Piping Length (max)	m	20	20	25				
Max. Height	•	m	15 (10)* <sup>3</sup>	15 (10)* <sup>3</sup>	15 (10)* <sup>3</sup>				
Chargeless Le	ngth	m	30	30	40				
aranteed Operating Ra				-10 ~ +46					
Outdoor] Heating				-15 ~ +24					

<sup>\*1</sup> 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 COz, 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, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.

MXZ-2HA40VF MSZ-HR25VF + MSZ-HR25VF

MXZ-2HA50VF MSZ-HR25VF + MSZ-HR25VF

MXZ-3HA60VF MSZ-HR25VF + MSZ-HR25VF

MSZ-HR25VF + MSZ-HR25VF

\*5 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

# MXZ-DM SERIES

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





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.



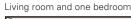
# Easy to create various combinations

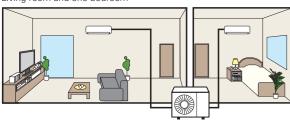
Wide range of simple combinations only possible using multi-port outdoor units.

# Two bedrooms

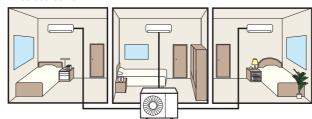




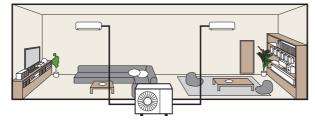


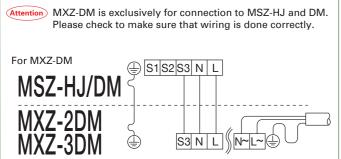


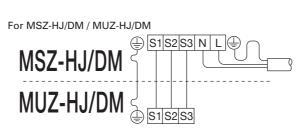




Wide living room

















ype (Inver	ter Multi - Split He	at Pump)		Up to 2 Indoor Units	Up to 3 Indoor Units					
ndoor Unit				Please re	fer to (*4)					
utdoor Uni	it			MXZ-2DM40VA	MXZ-3DM50VA					
Refrigerant				R410A*1						
	ource			Outdoor power supply						
o ylqqu	Outdoor (V/Phase/H	lz)			230 / Single / 50					
ooling	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.*5			6.1	6.1					
	Energy Efficiency		lass*4	A++	A++					
ating	Capacity	Rated	kW	4.3	6.0					
rerage	Input	Rated	kW	1.16	1.31					
ason)	COP*4	1		3.71	4.58					
		EEL Rank*4		Α	A					
	Design Load		kW	3.2	4.0					
	Declared at reference design temperature		kW	2.73	3.34					
		t 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			1105	1455					
	SCOP*4,*5		kWh/a	4.0	3.8					
		Energy Efficiency C	lass*4	Α+	A					
erating (	Current (max)	3,	Α	12.2	18.0					
tdoor D	)imensions	$H \times W \times D$	mm	550 - 800 (+69) - 285 (+59.5)	710 - 840 (+30) - 330 (+66)					
it v	Veight		kg	32	57					
	ir Volume	Cooling	m³/min	29.2	37.5					
		Heating	m³/min	31.9	39.6					
s	ound Level (SPL)	Cooling	dB(A)	48	50					
-		Heating	dB(A)	52	53					
s	ound Level (PWL)	Cooling	dB(A)	63	64					
-	perating Current	Cooling	A	5.1	5.0					
		Heating	Α	5.6	5.8					
В	reaker Size		Α	15	25					
_	ort 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)			20	25					
	/lax. Height	5g (wan)	m m	15 (10)* <sup>3</sup>	15 (10)*3					
	hargeless Length		m	20	40					
	Operating Range	Cooling	℃		- +46					
utdoorl		Heating	℃		- +24					

<sup>\*\*1</sup> 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 COz, 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-3DM40VA MSZ-DMZ5VA + MSZ-DMZ5VA + MSZ-DMZ5VA

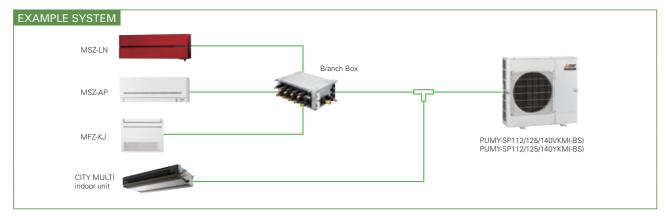
\*5 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

# 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.



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



# 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.



# 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 loca-

tions that would have been inappropriate.



# Easy installation and transportation

An external static pressure of 30Pa

The installation location is flexible, An external static pressure

thanks to its 30Pa static pressure. of 30Pa allows outdoor

You can install it in locations that you unit to be installed on bal-

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

could not before.



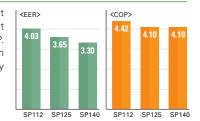
conies in high-rise building

or spaces near louvers.

# 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 (An incompany investigation)



# 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.

# \*Noise level will increase when using this function















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 / 2	20V 60Hz	3-phase 3	880 - 400 - 415V 50Hz / 3	80V 60Hz	
Cooling Capacity		*1	kW	12.5	14.0	15.5	12.5	14.0	15.5	
(nominal)	Power Inpu	ıt	kW	3.10	3.84	4.70	3.10	3.84	4.70	
	Current Input A		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	Indoor Temp. W.B.		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	
of Cooling*4	Outdoor Te	mp. *3	D.B.	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	
Heating Capacity		*2	kW	14.0	16.0	16.5	14.0	16.0	16.5	
(nominal)	Power Inpu	ıt	kW	3.17	3.90	4.02	3.17	3.90	4.02	
	Current Inp	ut	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 / 6.4	
	COP		kW/kW	4.42	4.10	4.10	4.42	4.10	4.10	
Temp. Range	Indoor Tem	p.	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	
of Heating	Outdoor Te	mp.	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	
ndoor Unit	Total Capac	ity			50	to 130% of outdoor unit	capacity			
Connectable	Model / Quantity		City Multi*10	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	
			Branch Box*9	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	
	Mixed System	Branch	City Multi	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	
		Box 1 unit	Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	
		Branch	City Multi	10 - 140 / 3 or 2*7	10 - 140 / 3	10 - 140 / 3	10 - 140 / 3 or 2*7	10 - 140 / 3	10 - 140 / 3	
		Box 2 units	Branch Box	15 - 100 / 7 or 8*7	15 - 100 / 8	15 - 100 / 8	15 - 100 / 7 or 8*7	15 - 100 / 8	15 - 100 / 8	
Sound Pressure Le (Cooling / Heating			dB <a></a>	52 / 54	53 / 56	54 / 56	52 / 54	53 / 56	54 / 56	
Sound Power Leve	el (Cooling)		dB <a></a>	72	73	74	72	73	74	
Refrigerant Piping	Liquid Pipe		mm	9.52 Flare						
Diameter	Gas Pipe	Gas Pipe mm		15.88 Flare						
Fan	Type x Qua	ntity				Propelle	er Fan x 1			
	Air Flow Ra	ate	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 Out	put	kW			0.	20			
	External Sta	tic Press.	Pa			0 Pa / 3	30 Pa*8			
Compressor	Type x Qua	ntity				Twin rotary herme	tic compressor × 1			
	Starting M	ethod				Inve	erter			
	Motor Out	out	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)*5	•		94 (207)*6			
Pre-Chareged	Weight		kg	3.5	3.5	3.5	3.5	3.5	3.5	
Quantity	CO <sub>2</sub> Equiva	lent	t	7.31	7.31	7.31	7.31	7.31	7.31	
Max Added	Weight		kg	9.0	9.0	9.0	9.0	9.0	9.0	
Quantity	CO <sub>2</sub> Equiva	lent	t	18.79	18.79	18.79	18.79	18.79	18.79	

\*1,\*2 Nominal conditions

	Indoor	Outdoor Piping Length L		Level Difference   External Static Press. (Outdoo	
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, PKFY-P10/15/20/25/32VLM, PFFY-P20/P25/P32VKM, PFFY-P20/P25/23VCM, 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 11 units when connecting via 2 branch boxes. \*5 94 (207), for PUMY-SP112/125/140VKM-BS
- \*5 94 (2017), for PUMYS-P112/125/14UVKM-BS
  \*6 95 (209), for PUMYS-P112/125/14UVKM-BS
  \*7 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.
  \*8 0 Pa as initial setting
  \*9 At least 2 indoor units must be connected when using branch box.
  \*10 It is possible to connect 1 Fresh Air type indoor unit to 1 outdoor unit. (1:1 system)

Туре				Branc	h Box	
Model Name				PAC-MK54BC	PAC-MK34BC	
Connectable	Number of Indoor	Units		Maximum 5	Maximum 3	
Power Supp	ly (from outdoor u	nit)		~ / N, 220 / 230 / 240 V, 50 I	Hz, ~ / N, 220 / 230 V, 60 Hz	
Input			kW	0.0	003	
Running Cur	rent		Α	0.05 (Max. 6)		
Dimensions		$H \times W \times D$	mm	170 × 450 × 280		
Weight			kg	7.4	6.7	
Piping	Branch	Liquid	mm	ø6.35 × 5	ø6.35 × 3	
Connection	[Indoor Side]	Gas	mm	ø9.52 × 4, ø12.7 × 1	ø9.52 × 3	
(Flare)	Main	Liquid	mm	ø9.52		
[Outdoor Side] Gas			mm	ø15.88		

# <Branch box compatible table>

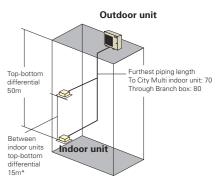
Outdoor unit	Branch box	PAC-MK31/ 51BC(B)	PAC-MK32/ 52BC(B)	PAC-MK33/ 53BC(B)	PAC-MK34/ 54BC
Outdoor unit	PUMY-SP112/125/140V/ YKM(-BS)	✓	N/A	N/A	N/A
1fan	PUMY-SP112/125/140V/ YKMR1(-BS)	N/A	N/A	✓	✓
	PUMY-SP112/125/140V/ YKM(-BS)R2	N/A	N/A	✓	✓
Outdoor unit	PUMY-P112/125/140V/YKM4(-BS)	√*	✓	✓	✓
2fan	PUMY-P112/125/140V/YKM4R1(-BS)	√*	✓	✓	✓
	PUMY-P112/125/140VKM5(-BS)	√*	✓	✓	✓
	PUMY-P112/125/140V/YKM4(-BS)R2	√*	✓	✓	✓
Outdoor unit	PUMY-P200YKM2(-BS)	✓	✓	✓	✓
8HP	PUMY-P200YKM2R1(-BS)	✓	✓	✓	✓
	PUMY-P200YKM2(-BS)R2	✓	✓	✓	✓

\*ecodan is NG

# [SP112-140V/YKM(-BS)]

Refrigerant Piping Lengths	Maximum meters
Total length	120
Maximum allowable length	To City Multi indoor
	unit: 70
	Through Branch hov: 9

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



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\*In case of branch box connection: 12m

<sup>\*</sup> The piping connection size differs according to the type and capacity of outdoor/indoor units.

Match the piping connection size of branch box with outdoor/indoor unit. If the piping connection size of branch box does not match the piping connection size of outdoor/indoor unit, use optional different-diameter (deformed) joints to the branch box side. (Connect deformed joint directly to the branch box side.)

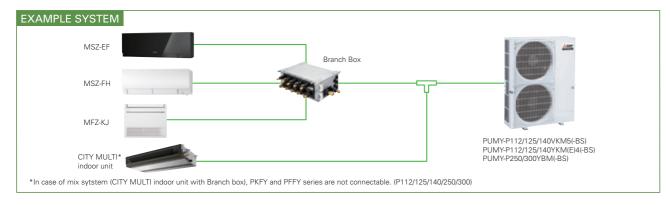
# PUMY-P<sub>SERIES</sub>

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





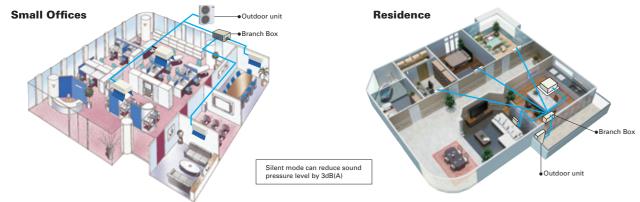
PUMY-P112/125/140VKM5(-BS) PUMY-P112/125/140YKM(E)4(-BS) PUMY-P200YKM2(-BS) PUMY-P250/300YBM(-BS)



# 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

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 (P250/300: Up to 30) 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.



				Maximu	ım Meters			
			Only City Multi*1	Only Branch Box	Mixed System (City Multi*1	Mixed System (City Multi*1 Indoor Unit + Branch Box)		
			Indoor Unit	Connection	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	-	30	-		
		Piping Length Between Outdoor Unit and Branch Boxes	-	55	-	55		
	Vertical Differentials	Indoor/Outdoor (Outdoor higher)	50	50	50	)		
	Between Units	Indoor/Outdoor(Outdoor Lower)	40*2	40	40			
		Indoor/Indoor	15	12	12			
200	Refrigerant Piping Length	Total Length	150	150	15	0		
		Maximum Allowable Length	80 (90 equivalent)	80	80 (90 equivalent)	80		
		Farthest Indoor From First Branch	30	-	30	-		
		Piping Length Between Outdoor Unit and Branch Boxes	-	55	-	55		
	Vertical Differentials	Indoor/Outdoor (Outdoor higher)	50	50	50	)		
	Between Units	Indoor/Outdoor (Outdoor Lower)	40	40	40	)		
		Indoor/Indoor	15	12	12	2		
250/300	Refrigerant Piping Length	Total Length	310	240	31	0		
		Maximum Allowable Length	150 (175 equivalent)	80	85 (95 equivalent)	80		
		Farthest Indoor From First Branch	30	-	30	-		
		Piping Length Between Outdoor Unit and Branch Boxes	-	95	-	95		
	Vertical Differentials	Indoor/Outdoor (Outdoor higher)	50	50	50	)		
	Between Units	Indoor/Outdoor (Outdoor Lower)	40	40	40	)		
		Indoor/Indoor	15	12	12			

<sup>\*1</sup> Include system with connection kit 
\*2 In case of including PKFY or PFFY, height between units is 30m

# 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-P112/125/140VKM5(-BS), PUMY-P112/125/140YKM(E)4(-BS) only.
- \* Noise level will increase when using this function













Model				DUBAY D112//VMS/ DO	DUBAY DISEL/VALE DO	DUBAY DI 401/VMC/ DO	DUBLY D112VVM 4/ DO	DUMAN DISCUMMAN DOL	DUBAY DI 40VVM 41 DOL	DI IBAY DOGGVENION DOG	DUMAY DODOVDIAL DO	DUMV POOLVEM/- PO
Power Source					se 220 - 230 - 240V		PUMY-PTT2YKM4(-BS)	PUMY-P125YKM4(-BS)	3-phase 380 - 4		PUMY-PZ50YBM(-BS)	PUMY-P300YBM(-BS)
		*1	1114/				40.5	110			1 000	00.5
Cooling Capacity (nominal)			kW	12.5	14.0	15.5	12.5	14.0	15.5	22.4	28.0	33.5
(IIOIIIIIII)	Power Inpu		kW	2.79	3.46	4.52	2.79	3.46	4.52	6.05	8.21	10.12
	Current Inp	out	A			20.86 - 19.95 - 19.12		5.84 - 5.55 - 5.35	7.23 - 6.87 - 6.62	9.88 - 9.39 - 9.05		16.36 - 15.54 - 14.98
	EER		kW/kW	4.48	4.05	3.43	4.48	4.05	3.43	3.70	3.41	3.31
Temp. Range of Cooling	Indoor Ten	<u> </u>	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	15.0 - 24.0°C	15.0 - 24.0°C
3	Outdoor Te	emp.*3	D.B.	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C	-5.0 - 52.0°C
Heating Capacity (nominal)			kW	14.0	16.0	18.0	14.0	16.0	18.0	25.0	31.5	37.5
(IIOIIIIIai)	Power Inpu		kW	3.04	3.74	4.47	3.04	3.74	4.47	5.84	7.41	9.12
	Current Inp	out	A			20.63 - 19.73 - 18.91		6.31 - 6.00 - 5.78	7.15 - 6.79 - 6.55	9.54 - 9.06 - 8.74		14.74 - 14.01 - 13.50
	COP		kW/kW	4.61	4.28	4.03	4.61	4.28	4.03	4.28	4.25	4.11
Temp. Range	Indoor Ten		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	15.0 - 27.0°C	15.0 - 27.0°C
of Heating	Outdoor Te		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	-20.0 - 15.0°C	-20.0 - 15.0°C
Indoor Unit	Total Capacity				50 to 130% of outdoor unit capacity							
Connectable	Model / Quantity		City Multi*8	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	10 - 200 / 12	10 - 250 / 30	10 - 250 / 30
			Branch Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 50 / 12	15 - 50 / 12
	System	Branch Box	City Multi	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 200 / 5	10 - 250 / 25	10 - 250 / 25
		1 unit	Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 50 / 5	15 - 50 / 5
		Branch Box	City Multi	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3	10 - 200 / 3	10 - 250 / 23	10 - 250 / 23
		2 units	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	15 - 50 / 10	15 - 50 / 10
		Branch Box	City Multi	-	-	-	-	-	-	-	10 - 250 / 22	10 - 250 / 22
-		3 units	Branch Box	-	-	-	-	-	-	-	15 - 50 / 12	15 - 50 / 12
Sound Pressure Le (measured in aned			dB <a></a>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53	56 / 61	55 / 61	57 / 62
Refrigerant Piping	Liquid Pipe	•	mm			9.52	Flare			9.52*6 Flare	9.52*7 Flare	12.7 Flare
Diameter	Gas Pipe		mm			15.88	Flare			19.1 Flare	22.4 Flare	25.4 Flare
Fan	Type x Qua	antity						Propeller Fan x 2				
	Air Flow R	ate	m³/min			11	10			139	165 / 183	165 / 183
			L/s			1,8	883			2,316	2,750 / 3,050	2,750 / 3,050
			cfm		3,884					4,908	5,826 / 6,462	5,826 / 6,462
	Motor Out	put	kW			0.074 -	+ 0.074			0.20 + 0.20	0.375 × 2	0.375 × 2
Compressor	Type x Qua	antity					Scrol	I hermetic compressi	or x 1			
	Starting M	lethod						Inverter				
	Motor Out	put	kW	2.9	3.5	3.9	2.9	3.5	3.9	5.3	5.7	6.9
External Dimension	ns (H x W x	D)	mm			1,3	338 × 1,050 × 330 (+	-40)			1,662 × 1,05	0 × 460 (+45)
Weight kg			123 125				141	196 (198)	196 (198)			

, =										
	Indoor		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-P10/15/20/25/32VLM, PKFY-P15/20/25VBM, PFFY-P20/25/32VKM and PFFY-P20/25/32VCM, 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.

  \*7 Liquid pipe diameter: 12.7mm, when further piping length is longer than 90m, and when PEFY-P200. or P250 is connected.
- \*8 It is possible to connect 1 Fresh Air type indoor unit to 1 outdoor unit. (1:1 system)

Model				PUMY-P112YKME4(-BS)	PUMY-P125YKME4(-BS)	PUMY-P140YKME4(-BS)				
Power Source				3-phase 380 - 400 - 415V 50Hz						
Cooling Capacity		*1 kW		12.5	14.0	15.5				
(nominal)	Power Input	kW		2.79	3.46	4.52				
	Current Input	t 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	Indoor Temp.	Indoor Temp. W.B.		15 to 24°C						
of Cooling	Outdoor Temp.*3 D.B.				−5 to 52°C					
<b>Heating Capacity</b>		*2 kW		14.0	16.0	18.0				
nominal)	Power Input	kW		3.04	3.74	4.47				
	Current Input	t 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				
emp. Range	Indoor Temp.	. D.B.			15 to 27°C					
of Heating	Outdoor Tem	ip. W.B.		-20 to 15°C						
ndoor Unit	Total Capacit	y		50 to 130% of outdoor unit capacity						
Connectable	Model / Quar	ntity City Mu	ılti* <sup>6</sup>	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12				
		Branch	Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8				
		ranch City Mu	ılti	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5				
	System	unit Branch	Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5				
		ranch City Mu	ılti	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3				
	2	ox units Branch	Box	15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8				
Sound Pressure Le measured in anec		dB <a></a>		49 / 51	50 / 52	51 / 53				
Refrigerant Piping	Liquid Pipe	mm								
Diameter	Gas Pipe	mm		9.52 Flare 15.88 Flare						
an	Type × Quan	tity			Propeller Fan × 2					
	Air Flow Rate	e m³/min			110					
		L/s			1,833					
		cfm			3,884					
	Motor Outpu	nt kW			0.074 + 0.074					
Compressor	Type x Quan	tity			Scroll hermetic compressor x 1					
	Starting Method			Inverter						
	Motor Output kW			2.9	3.5	3.9				
External Dimensio	ns (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					

<sup>\*3 10</sup> to 52°C D.B.; When connecting PKFY-P15/20/25VBM, PFFY-P20/25/32VKM and

\*3 10 to 52"C D.B.: When connecting PKFYP-1020/25/03M, PFFYP-20/25/32VKM and PFFYP-20/25/32UKL (R)M, PEFYP-2VMA3, 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 It is possible to connect 1 Fresh Air type indoor unit to 1 outdoor unit. (1:1 system)

					0 It is possible
Туре				Branch	Вох
Model Name	•			PAC-MK54BC	PAC-MK34BC
Connectable	Number of Indoo	or Units		Maximum 5	Maximum 3
Power Supp	ly (from outdoor	unit)		~ / N, 220 / 230 / 240 V, 50 H	Iz, ~ / N, 220 / 230 V, 60 Hz
Input			kW	0.00	03
Running Cur	rent		A	0.05 (M	lax. 6)
Dimensions		$H \times W \times D$	mm	170 × 45	0 × 280
Weight			kg	7.4	6.7
Piping	Branch	Liquid	mm	ø6.35 × 5	ø6.35 × 3
Connection	[Indoor Side]	Gas	mm	ø9.52 × 4, ø12.7 × 1	ø9.52 × 3
(Flare)	Main	Liquid	mm	ø9.5	52
	[Outdoor Side]	Gas	mm	ø15.	88

<sup>\*</sup> The piping connection size differs according to the type and capacity of outdoor/indoor units.

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of outdoor/indoor units.

Match the piping connection size of branch box with outdoor/indoor unit. 
If the piping connection size of branch box does not match the piping connection size of outdoor/indoor unit, use optional different-diameter (deformed) joints to the branch box side. 
(Connect deformed joint directly to the branch box side.)

# Indoor Unit Compatibility Table

■ MXZ Series R32

	Outdoor Unit	MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3		dels Heat			MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3	MXZ
Unit		2F33VF3	2F42VF3	2F53VF(H)3	2F53VFHZ		3F68VF3	4F72VF3	4F80VF3		4F83VFHZ	5F102VF	6F122VF		2HA50VF	
ies Wall-	MSZ-RW25VG	•	•	•	•	•	•	•	•	•	•	•	•			
Mounted	MSZ-RW35VG		•	•	•	•	•	•	•	•	•	•	•			
	MSZ-RW50VG					•		•	•		•	•	•			
	MSZ-LN18VG2(W)(V)(R)(B)	•	•	•	•	•	•	•	•	•	•	•	•			
	MSZ-LN25VG2(W)(V)(R)(B)	•		•	•							•	•			
	MSZ-LN35VG2(W)(V)(R)(B)		•	•	•	•	•	•	•	•	•	•	•			
	MSZ-LN50VG2(W)(V)(R)(B)										•		•			
	MSZ-FT25VG				•						•					
	MSZ-FT35VG				•						•					
	MSZ-FT50VG															
	MSZ-AP15VG(K) MSZ-AP20VG(K)		•	•	•	•	•	•		•	•	•	•			
	MSZ-AP25VG(K)	•	•	•	•		•	•		•	•	•	•			
	MSZ-AP35VG(K)		•	•	•	•	•	•	•	•	•	•	•			
	MSZ-AP42VG(K)			•	•	•	•	•	•	•	•	•	•			
	MSZ-AP50VG(K)			•	•	•	•	•	•	•	•	•	•			
	MSZ-AP60VG(K)						•	•	•	•	•		•			
	MSZ-AP71VG(K)									•	•	•	•			
	MSZ-EF18VG(K)(W)(B)(S)															
	MSZ-EF22VG(K)(W)(B)(S)	•	•	•	•	•	•	•	•	•	•	•	•			
	MSZ-EF25VG(K)(W)(B)(S)	•		•	•		•	•		•	•	•	•			
	MSZ-EF35VG(K)(W)(B)(S)		•	•	•	•	•	•	•	•	•	•	•			
	MSZ-EF42VG(K)(W)(B)(S)			•	•	•	•	•	•	•	•	•	•			
	MSZ-EF50VG(K)(W)(B)(S)			•	•	•	•	•	•	•	•	•	•			
	MSZ-BT20VG(K)	•		•							•					
	MSZ-BT25VG(K)	•	•	•	•	•	•	•	•	•	•	•	•			
	MSZ-BT35VG(K)			•	•	•		•	•		•	•	•			
	MSZ-BT50VG(K)															
	MSZ-HR25VF(K)															
	MSZ-HR35VF(K)													•	•	(
	MSZ-HR42VF(K)														•	(
	MSZ-HR50VF(K)															
	MSZ-HR60VF(K)															
	MSZ-HR71VF(K)															
	MSZ-DW25VF															
	MSZ-DW35VF													•	•	
	MSZ-DW50VF															
Floor-	MFZ-KT25VG	•	•	•	•	•	•	•	•	•	•	•	•			
Standing	WFZ-K135VG				•						•					
	MFZ-KT50VG					•	•	•	•	•	•	•	•			
1-way Cassette	MLZ-KP25VF	•		•	•						•	•	•			
Casselle	MLZ-KP35VF		•	•	•	•	•	•	•	•	•	•	•			
	MLZ-KP50VF										•	•	•			
ies 2×2 Cassette	SLZ-M15FA2	•	•	•	•	•	•	•	•	•	•	•	•			
Cuocom	SLZ-MZ5FAZ	•			•	•		•	•	•	•	•	•			
	SLZ-M35FA2		•	•	•	•	•	•	•	•	•	•	•			
	SLZ-M50FA2							•			•		•			
Ceiling- Conceal	SEZ-M25DA2*2	•	•	•	•	•	•	•	•		•	•	•			
	SEZ-M25DAL2 *2	•	•	•	•	•	•	•	•	•	•	•	•			
	SEZ-M35DA2		•	•	•	•	•	•	•	•	•	•	•			
	SEZ-M35DAL2			•	•			•	•	•	•	•	•			
	SEZ-M50DA2					•	•	•	•	•	•	•	•			
	SEZ-M50DAL2						•	•	•	•	•	•	•			
	SEZ-M60DA2						•	•		•	•	•				
	SEZ-M60DAL2								•	•	•	•	•			
	SEZ-M71DA2									•	•	•	•			
On Cailin-	SEZ-M71DAL2						6	6		•	•	•	•			
ies Ceiling- Suspend	PCA-M50KA2					•	•	•	•							
32253	PCA-IVIOURA2							•								
	PCA-M71KA2					611	611	611	611							
Ceiling- Conceal	PEAD-M50JA2					011	<b>0</b> *1	<b>0</b> *1	<b>0</b> *1							
	FEAD-WISOSALZ					•1	<b>*</b> 1	<b>*</b> 1	●*1							
Conoca																
Conocal	PEAD-M60JA2															
Concea	PEAD-M60JAL2 PEAD-M71JA2															

# ■ MXZ Series R410A

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

		Outdoor Unit	MXZ-*3	MXZ-*3			MXZ-*3	odels Heat MXZ-*3	MXZ-*3	MXZ-*3		MXZ-*3	MXZ-*3	MXZ-*3	MX
ndoor Unit M series	1A/-II	MOZ I NI40//O/M/// (D)/D)	2D33VA	2D42VA2	2D53VA(H)2	2E53VAHZ	3E54VA	3E68VA	4E72VA	4E83VA	4E83VAHZ	5E102VA	6D122VA2	2DM40VA	3DM5
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-AP15VG*7		•				•							
		MSZ-AP20VG*7	•	•	•	•	•	•	•	•	•	•	•		
		MSZ-AP25VG*7		•			•	•					•		
		MSZ-AP35VG*7		•	•	•		•	•	•	•	•	•		
		MSZ-AP42VG*7					•	•					•		
		MSZ-AP50VG*7			•	•	•	•	•	•	•	•	•		
		MSZ-EF18VG(W)(B)(S)		•	•							•			
		MSZ-EF22VG(W)(B)(S)	•	•	•	•	•	•	•	•	•	•	•		
		MSZ-EF25VG(W)(B)(S)		•	•							•			
		MSZ-EF35VG(W)(B)(S)		•	•	•	•	•	•	•	•	•	•		
		MSZ-EF42VG(W)(B)(S)			•	•		•					•		
		MSZ-EF50VG(W)(B)(S)			•	•	•	•	•		•	•	•		
		MSZ-FH25VE2		•	•	•	•	•	•		•	•	•		
		MSZ-FH35VE2		•	•	•	•	•	•	•	•	•	•		
		MSZ-FH50VE2					•		•		•	•	•		
		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-	MFZ-KJ25VE2	*4*5	•*4	•*4		*4	•*4	•				•		
	Standing	MFZ-KJ35VE2		●*4	•*4	•	•*4	<b>●</b> *4	•	•	•	•	•		
		MFZ-KJ50VE2					*4	*4	•		•				
	1-way	MLZ-KP25VF	•	•	•	•	•	•	•	•	•	•	•		
	Cassette	MLZ-KP35VF		•	•	•			•		•				
		MLZ-KP50VF					•	•	•	•	•	•	•		
S series	2×2	SLZ-M15FA													
	Cassette	SLZ-M25FA	•	•	•	•	•	•	•	•	•	•	•		
		SLZ-M35FA		•	•	•	•	•	•	•	•	•	•		
		SLZ-M50FA					•	•	•	•	•	•	•		
	Ceiling-	SEZ-M25DA*2		•	•	•	•	•	•	•	•	•	•		
	Concealed	SEZ-M25DAL*2	•	•	•	•	•	•	•	•	•	•	•		
		SEZ-M35DA		•	•	•	•	•	•	•	•	•	•		
		SEZ-M35DAL		•	•	•	•	•	•	•	•	•	•		
		SEZ-M50DA					•	•	•	•	•	•	•		
		SEZ-M50DAL						•	•	•	•	•	•		
		SEZ-M60DA						•	•	•	•	•	•		
		SEZ-M60DAL						•	•	•	•	•	•		
		SEZ-M71DA								•	•	•	•		
		SEZ-M71DAL								•	•	•	•		
P series	4-way	PLA-M50EA						•	•	•	•	•	•		
	Cassette	PLA-M60EA						•	•	•	<b>●</b> *6	•	•		
		PLA-M71EA								•	<b>6</b> *6	•	•		
	Ceiling-	PCA-M50KA						•	•	•	<b>●</b> *6	•	•		
	Suspended	PCA-M60KA						•	•	•	<b>6</b> *6	•	•		
		PCA-M71KA								•	<b>6</b> *6	•	•		
	Ceiling-	PEAD-M50JA					<b>•</b> *1	<b>●</b> *1	*1	<b>*</b> 1	*1*6	<b>●</b> *1	*1		
	Concealed	PEAD-M50JAL					<b>●</b> *1	<b>●</b> *1	<b>●</b> *1	<b>*</b> 1	*1*6	<b>®*1</b>	<b>●</b> *1		
		PEAD-M60JA								<b>*</b> 1	<b>*1*6</b>	<b>*</b> 1	■*1		
		PEAD-M60JAL								<b>*</b> 1	*1*6	<b>®*1</b>	<b>●</b> *1		
		PEAD-M71JA								<b>*</b> 1	<b>*1*6</b>	<b>*</b> 1	■*1		
		PEAD-M71JAL								<b>•</b> *1	●*1*6		<b>•</b> *1		_

<sup>\*1</sup> 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.

<sup>\*\*1</sup> 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 106.

\*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-2D53VA2-E4, MXZ-2E53VAHZ-E2, MXZ-3E54VA-E2, MXZ-3E68VA-E2, MXZ-4E72VA-E2, MXZ-4E83VAHZ-E3, MXZ-5E102VA-E4.

■ PUMY-SP Series
Branch Box Connection Compatibility Table

Series	T	Model Name						Capacity					
Series	Type	Woder Name	15	18	20	22	25	35	42	50	60	71	100
M series	Wall-Mounted	MSZ-LN•VG2					•	•		•			
		MSZ-AP•VG(K)	<b>●</b> *1		<b>●</b> *1		<b>•</b> *1	<b>●</b> *1	<b>•</b> *1	<b>●</b> *1			
		MSZ-FH•VE2					•			•			
		MSZ-EF•VG(K)		<b>*</b> 1		<b>•</b> *1	<b>•</b> *1	<b>●</b> *1	<b>•</b> *1	<b>•</b> *1			
		MSZ-SF•VA											
		MSZ-SF•VE3					•	•	•				
		MSZ-GF•VE2									•	•	
	Floor-Standing	MFZ-KT•VG					<b>•</b> *1	<b>●</b> *1		<b>●</b> *1			
	1-way Cassette	MLZ-KP•VF					<b>•</b> *1	<b>•</b> *1		<b>@*1</b>			
S series	Ceiling-Concealed	SEZ-M•DA(L)					<b>•</b> *1	<b>•</b> *1		<b>•</b> *1	<b>•</b> *1	<b>•</b> *1	
	2×2 Cassette	SLZ-M•FA	<b>•</b> *1				<b>•</b> *1	<b>•</b> *1		<b>•</b> *1			
P series	Ceiling-Suspended	PCA-M•KA						•		•	•	•	•
	4-way Cassette	PLA-M•EA						<b>•</b> *1		<b>@*1</b>	<b>•</b> *1	<b>•</b> *1	<b>•</b> *1
	Ceiling-Concealed	PEAD-M•JA(L)								<b>●</b> *1	<b>●</b> *1	<b>•</b> *1	<b>●</b> *1

<sup>\*1</sup> Connectable outdoor units are PUMY-SP112/125/140V(Y)KMR1(R2)(-BS).TH only.

# LEV Kit Connection Compatibility Table

Series	1/11/7	Model Name					Сар	acity				
Series	I/U Type	Model Name	15	18	20	22	25	35	42	50	60	71
M series	Wall-Mounted	MSZ-LN•VG2					<b>•</b> *1	<b>•</b> *1		<b>•</b> *1		
		MSZ-AP•VG(K)	<b>●</b> *1		<b>•</b> *1		<b>•</b> *1	<b>0</b> *1	<b>•</b> *1	<b>*</b> 1		
		MSZ-FH•VE2					•					
		MSZ-EF•VG(K)		<b>•</b> *1		<b>•</b> *1	<b>*</b> 1	<b>●</b> *1	<b>•</b> *1	<b>●</b> *1		
		MSZ-SF•VA	•		•							
		MSZ-SF•VE3					•	•	•	•		
	Floor-Standing	MFZ-KT•VG					<b>•</b> *1	<b>•</b> *1		<b>0</b> *1		

<sup>\*1</sup> Connectable outdoor units are PUMY-SP112/125/140V(Y)KMR1(R2)(-BS).TH only.

# CITY MULTI Indoor Unit Compatibility Table for PUMY-SP112/125/140

Series	Type	Model Name							Cap	acity						
Series	Туре	Wodel Name	P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY	1-way cassette	PMFY-P•VBM-E			•	•	•	•								
MULTI series	2-way cassette	PLFY-P•VLMD-E			•	•	•	•	•	•		•	•	•		
361163	4-way cassette	PLFY-M•VEM-E			•		•	•	•	•		•	•	•		
		PLFY-EP•VEM-E *3							•	•		•				
		PLFY-P•VFM-E		•	•		•	•								
	Ceiling-concealed	PEFY-P•VMR-E-L/R			•	•	•									
		PEFY-P•VMS1(L)-E		•	•	•	•	•	•	•						
		PEFY-M•VMA(L)-A			•	•	•	•	•	•	•	•	•	•	•	
		PEFY-P•VMA3-E*1				•	•	•								
		PEFY-P•VMHS-E						•	•	•	•	•	•	•	•	
		PEFY-P•VMHS-E-F *4												•		
	Ceiling-suspended	PCFY-P•VKM-E						•		•			•	•		
	Wall-mounted	PKFY-P•VLM-E		•	•	•	•	•	•							
		PKFY-P•VKM-E								•			•			
	Floor-standing	PFFY-P•VKM-E2			•	•	•	•								
		PFFY-P•VLEM-E			•	•	•	•	•	•						
		PFFY-P•VCM-E			•	•	•	•	•	•						
	Lossnay *2					•			GUF-50/1	00RD(H)4						

# ■ PUMY-P Series

Branch Box Connection Compatibility Table

Series	Type	Model Name						Capacity					
Series	Туре	Model Name	15	18	20	22	25	35	42	50	60	71	100
M series	Wall-Mounted	MSZ-LN•VG2					•	•		•			
		MSZ-AP•VG(K)	<b>•</b> *1		<b>●</b> *1		•	•	•	•			
		MSZ-FH•VE2					•						
		MSZ-EF•VG(K)		•		•	•	•	•				
		MSZ-SF•VA			•								
		MSZ-SF•VE3							•				
		MSZ-GF•VE2											
	Floor-Standing	MFZ-KT•VG											
	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-M•EA						•			•	•	•
	Ceiling-Concealed	PEAD-M•JA(L)									•	•	•

<sup>\*1</sup> MSZ-AP15/20VGK are not connectable.

# LEV Kit Connection Compatibility Table

Series	I/U Type	Model Name					Сар	acity				
Selles	1/O Type	Woder Name	15	18	20	22	25	35	42	50	60	71
M series	Wall-Mounted	MSZ-LN•VG2					•	•		•		
		MSZ-AP•VG(K)	<b>•</b> *1		<b>•</b> *1		•	•	•	•		
		MSZ-FH•VE2					•	•		•		
		MSZ-EF•VG(K)		•		•	•	•				
		MSZ-SF•VA	•		•							
		MSZ-SF•VE3					•	•	•	•		
	Floor-Standing	MFZ-KT•VG					•	•		•		

<sup>\*1</sup> MSZ-AP15/20VGK are not connectable.

# CITY MULTI Indoor Unit Compatibility Table for PUMY-P112/125/140

Series	Type	Model Name							Cap	acity						
Selles	туре	woder Name	P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY	1-way cassette	PMFY-P•VBM-E			•	•	•	•								
MULTI series	2-way cassette	PLFY-P•VLMD-E			•	•	•			•		•	•	•		
361163	4-way cassette	PLFY-M•VEM-E			•	•	•	•	•	•		•	•	•		
		PLFY-EP•VEM-E *4							•	•		•				
		PLFY-P•VFM-E														
	Ceiling-concealed	PEFY-P•VMR-E-L/R			•	•	•									
		PEFY-P•VMS1(L)-E			•				•							
		PEFY-M•VMA(L)-A			•	•	•	•	•	•	•	•	•	•	•	
		PEFY-P•VMA3-E *1				•	•	•								
		PEFY-P•VMHS-E						•	•	•	•	•	•	•	•	
		PEFY-P•VMHS-E-F												•		
	Ceiling-suspended	PCFY-P•VKM-E						•		•			•			
	Wall-mounted	PKFY-P•VLM-E		•	•	•	•	•	•							
		PKFY-P•VKM-E											•			
	Floor-standing	PFFY-P•VKM-E2			•	•	•	•								
		PFFY-P•VLEM-E			•											
		PFFY-P•VCM-E			•	•	•	•	•	•						
	ATW	PWFY-P•VM-E1 *2											•			
	Lossnay								GUF-50/1	00RD(H)4						

# CITY MULTI Indoor Unit Compatibility Table for PUMY-P200

Series	Type	Model Name							Cap	acity						
Series	Туре	woder warne	P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY	1-way cassette	PMFY-P•VBM-E			•	•	•	•								
MULTI series	2-way cassette	PLFY-P•VLMD-E											•			
361163	4-way cassette	PLFY-M•VEM-E			•	•	•	•		•		•	•			
		PLFY-EP•VEM-E *4								•						
		PLFY-P•VFM-E		•	•	•	•	•								
	Ceiling-concealed	PEFY-P•VMR-E-L/R			•	•	•									
		PEFY-P•VMS1(L)-E			•	•		•								
		PEFY-M•VMA(L)-A			•	•	•	•		•	•		•	•	•	
		PEFY-P•VMA3-E *1						•		•						
		PEFY-P•VMHS-E						•		•	•	•	•			
		PEFY-P•VMHS-E-F														
	Ceiling-suspended	PCFY-P•VKM-E						•		•			•	•		
	Wall-mounted	PKFY-P•VLM-E		•	•	•	•	•	•							
		PKFY-P•VKM-E								•			•			
	Floor-standing	PFFY-P•VKM-E2			•	•	•	•								
		PFFY-P•VLEM-E			•	•	•	•	•	•						
		PFFY-P•VCM-E			•	•	•	•	•	•						
	Lossnay *3								GUF-50/1	00RD(H)4						

<sup>11</sup> Authorized connectable indoor units are as follows;
PUMY-SP112: PEFY-P25x2+P32x2,PUMY-SP125: PEFY-P25x1+P32x3, PUMY-SP140: PEFY-P32x2+P40x2
22 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)
33 PLFY-EP can not connect more than 3 units
44 Connectable outdoor units are PUMY-SP112/125/140V(Y)KMR2(-BS). TH only.

<sup>\*1</sup> Authorized connectable indoor units are as follows;
PUMY-P112:PEFY-P25x2+P32x2, PUMY-P125:PEFY-P32x4, PUMY-P140:PEFY-P32x3+P40x1, PUMY-P200YKM2:PEFY-P40x2+P63x2

\*2 Note that connect too PUMY-P200YKM2.

\*3 Do not connect to PUMY-P200YKM2.

\*3 Do not connect to PUMY-P200YKM2.

\*4 PUMY-P112/125/140: PLFY-EP can not connect more than 3 units
PUMY-P200: Authorized connectable indoor units are only as follows; PLFY-EP63VEM-Ex3.

■ PUMY-P250/300 Series
Branch Box/LEV Kit Connection Compatibility Table

Seri	ioo I/I	J Type	Model Name					Сар	acity		
Sell	ies i/C	туре	Woder Name	15	18	20	22	25	35	42	50
M se	ries Wall-Mo	ounted	MSZ-LN•VG2						•		•
			MSZ-AP•VG(K)	•		•		•	•	•	
			MSZ-FH•VE2					•	•		
			MSZ-EF•VG(K)		•		•	•	•	•	
	Floor-S	tanding	MFZ-KT•VG					•	•		•

# CUTY MULTI Indoor Unit Compatibility Table

0	T	Madal Nama								Capacity							
Series	Type	Model Name	P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
CITY	1-way cassette	PMFY-P•VBM-E			•	•	•	•									
MULTI series	2-way cassette	PLFY-P•VLMD-E			•	•	•	•	•	•		•	•	•			
series	4-way cassette	PLFY-M•VEM-E			•	•	•	•	•	•		•	•	•			
		PLFY-EP•VEM-E *1							•	•							
		PLFY-P•VFM-E		•	•	•	•	•	•								
	Ceiling-concealed	PEFY-P•VMR-E-L/R			•												
		PEFY-P•VMS1(L)-E		•	•	•	•	•	•	•							
		PEFY-M•VMA(L)-A			•			•	•	•	•		•	•	•		
		PEFY-P•VMA3-E *2								•	•	•					
		PEFY-P•VMHS-E						•	•	•	•		•	•	•	•	•
		PEFY-P•VMHS-E-F															•
	Ceiling-suspended	PCFY-P•VKM-E						•		•			•	•			
	Wall-mounted	PKFY-P•VLM-E		•	•			•	•								
		PKFY-P•VKM-E								•			•				
	Floor-standing	PFFY-P•VKM-E2			•			•									
		PFFY-P•VLEM-E			•	•	•	•	•	•							
		PFFY-P•VCM-E			•			•	•								
	Lossnay *3								GUF	-50/100RE	)(H)4						

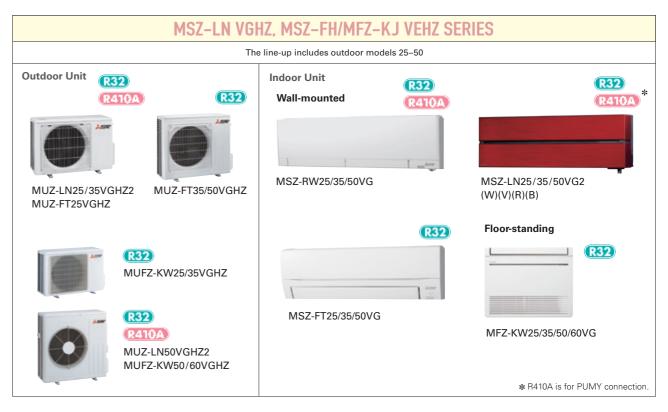
\*11 Authorized connectable indoor units are as follows; PUMY-P250: PLFY-EP63VEM-E × 4, PUMY-P300: PLFY-EP50VEM-E × 1 + PLFY-EP63VEM-E × 4
\*2 Authorized connectable indoor units are as follows; PUMY-P250: PEFY-P63VMA3-E × 4, PUMY-P300: PEFY-P80VMA3-E × 1 + PEFY-P71VMA3-E × 3
\*3 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

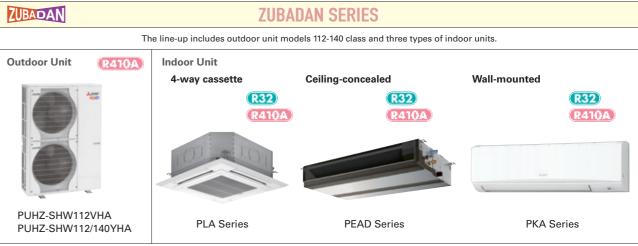
# POWERFUL HEATING SERIES



# **SELECTION**

Choose the series that best matches the building layout.







# SERIES RAIDA SERIES

As a flagship model, RW series realises further outstanding heating performances under extremely cold outdoor temperature even with high energy efficiency. Moreover, excellent air purifying functions and many other smart features deliver a great comfort to you.





MSZ-RW25/35/50VG

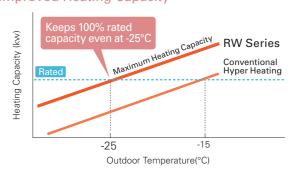
# **Heating Performance**

Excellent heating performance of RW series delivers the prime warmth into your room. RW series' powerful compressor realises re-

markable maximum heating capacity in low ambient temperature with a high energy efficiency. Also, RW series performs 100% rated capacity even at -25°C, and the operation is guaranteed down to -30°C for all classes



# Improved Heating Capacity

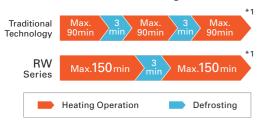


# Wider Heating Operation Range



# **Longer Continuous Heating Operation**

RW series with a high frost-detecting technology, made it possible to provide maximum continuous heating operation as long as 150 minutes with less frequent defrosting operations, maintaining a comfortable indoor environment in a long term.



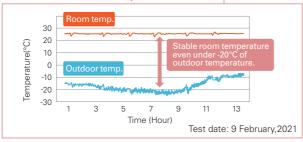
<sup>\*1</sup> The time for heating and defrosting operation depends on the environmental conditions

# Tested in Sweden and Norway

We have conducted field tests in several cold sites and received high user satisfactions with sufficient air volume and remarkable heating performance of RW series. As the test result shows, we confirmed that RW series provides stable indoor comfortability even in extremely low ambient temperature.



# Test result in Norway



# 3D i-see Sensor

3D i-see sensor with the sophisticated hemispherical design measures the temperature of the room with an infrared sensor and detects the position of people, which allows you to choose your preferable airflow such as indirect and direct airflow.





# Circulator Mode

In heating mode, after reaching the setting temperature, indoor unit automatically starts FAN mode to circulate the air and eliminate temperature unevenness in your room.





# Plasma Quad Plus

Plasma Quad Plus is a plasma-based filtering system which contributes to a better air quality in your room. Plasma Quad Plus applies a voltage of approximately 6,000 volts to the electrode to generate plasma, effectively removing various kinds of airborne particles such as viruses, bacteria, mold, allergen, dust, and PM2.5.



99% inhibited\*1

Virus (Airborne)



We have confirmed Plasma Quad Plus inhibits 99.8% of adhered COVID-19. \*2

- \*1 Tested Organization: vrc. Center, SMC Test Report No: 28-002 Test Method: JEM1467 Test result: Neutralised 99% of In-
- fluenza A virus in 72 minutes in a 25m³ test space.

  \*2 Tested Organization: Japan Textile Products Quality and Technology Center, Test Report No: 20KB070569, Tested Materials:

  SARS-CoV-2, Test Method: Original (The test was conducted on the Plasma Quad device alone, not designed to evaluate product performance.) Test Result: Inhibited 99.8% in 360 minutes. The result without the effect of natural attenuation is 96.3%.

# Quick Air Purifying Set

If you press "PURIFIER" button when the unit is turned off, Plasma Quad Plus starts to operate with a fan mode and purifies the air in your room.



# **Deodorising Filter**

The catalyst in Deodorising Filter denatures the odorous components and destroys them from the source of the odour, quickly delivering fresh air to your room.

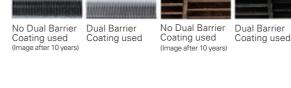






Mitsubishi Electric's Dual Barrier Coating prevents dust and greasy dirt from accumulating on the inner surface of the indoor unit; keeping your air conditioner clean. Blended "fluorine particles" prevent hydrophilic dirt penetration, and "hydrophilic particles" prevent hydrophobic dirt from getting into the air conditioner.





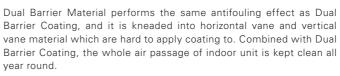
1 Heat Exchanger







3 Air Duct



**Dual Barrier Material** 







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<sup>\*1 \*2</sup> Verified by SIAA test method (JIS Z 2911) with No. JP0501014A0002O on SIAA antifungal agent positive list. Antifungal effect depends on the working environment. Fungicides comply with the SIAA safety criteria. What is SIAA? https://www.kohkin.net/en\_index/en\_siaa.html

# **Drive Mode Selector**

Drive Mode Selector allows you to select a preferred control setting according to your residential environment from three modes, Wide Room mode, Quiet mode, and Eco mode.

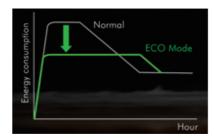
# Wide Room Mode

Provides a better air distribution in your room and raises the comfort level.



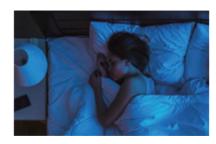
# Eco Mode

Suppresses a sharp increase in energy consumption by a gradual start-up operation.



# **Quiet Mode**

Lowers operation noise level, creating quieter and peaceful environment.



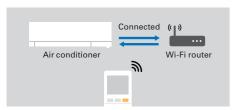
# Built-in Wi-Fi & App Control

Indoor unit is equipped with Wi-Fi interface which allows you to access MELCloud app, providing you with a flexible control of air conditioner on your smartphone, tablets, and PC.



# Easy Wi-Fi Set Up

You can easily connect Wi-Fi adaptor in the indoor unit and your local router with just a simple operation of remote controller.



# Remote Controller with Backlight

The remote controller screen is equipped with LED backlight. The luminous screen allows you to check the setting easily even in the dark.



# Back Plate with a Hole

With a hole as default in the center of the back plate, the piping can be easily taken out from the back. The edge of the hole is reinforced to ensure the strength.





reinforced to ensure the strength.

# Spacer

A part of the packing material can be used as a spacer to lift indoor unit during the left-side piping work, which makes stable installation work possible.



# **Bottom Removable Structure**

The corner box and the bottom panel are individually removable. and it makes easy to insert tools even in the case of left-side





# Easy Plugging/Unplugging of Drain Hose

One-touch structure with screw- free claw fixing. Easy to plug and unplug the drain hose when changing on the left and right.



# MSZ-RW SERIES













# Indoor Unit / Remote Controller

<White>





# **Outdoor Unit**







MUZ-RW50VGHZ































Туре				Inverter Heat Pump				
Indoor Unit				MSZ-RW25VG	MSZ-RW35VG	MSZ-RW50VG		
Outdoor Unit				MUZ-RW25VGHZ	MUZ-RW35VGHZ	MUZ-RW50VGHZ		
Refrigera	nt				R32 (*1)			
Power	Source			Outdoor Power supply				
Supply	Outdoor (V/Phase/Hz)			230/Single/50				
Cooling	Design Load k			2.5	3.5	5.0		
	Annual Electricity Consumption (*2)		kWh/a	78	130	230		
	SEER (*4)			11.2	9.4	7.6		
	Energy Efficiency Class			A+++	A+++	A++		
	Capacity	Rated	kW	2.5	3.5	5.0		
		Min - Max	kW	0.9 - 3.5	1.0 - 4.0	1.4 - 5.8		
	Total Input	Rated	kW	0.435	0.770	1.380		
Heating	Design Load	•	kW	3.2	4.0	6.0		
(Average	Declared Capacity	at reference design temperature	kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)		
Season)(+5)		at bivalent temperature	kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)		
		at operation limit temperature	kW	2.6 (-25°C)	2.6 (-25°C)	4.0 (-25°C)		
	Back Up Heating Capacity		kW	0.0	0.0	0.0		
	Annual Electricity Consumption (*2)		kWh/a	856	1097	1800		
	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	0.8 - 6.3	1.1 - 7.0	1.8 - 8.7		
	Total Input Rated		kW	0.580	0.810	1.450		
Operatin	g Current (max)	•	Α	9.8	11.2	15.2		
Indoor	Input Rated		kW	0.021	0.022	0.041		
Unit	Operating Current (max)		Α	0.21	0.22	0.37		
	Dimensions H × W × D		mm	305 - 998 - 247	305 - 998 - 247	305 - 998 - 247		
	Weight		kg	14.5	14.5	14.5		
	Air Volume Cooling		m³/min	5.1 - 6.5 - 9.0 - 11.5 - 13.7	5.1 - 6.9 - 9.0 - 11.5 - 14.1	7.8 - 9.5 - 11.1 - 13.1 - 16.2		
	(SLo-Lo-Mid-Hi-SHi **		m³/min	5.1 - 7.8 - 9.5 - 11.7 - 14.1	5.1 - 7.8 - 9.5 - 11.7 - 14.5	7.8 - 10.7 - 12.5 - 14.7 - 18.2		
	Sound Level (SPL)	Cooling	dB(A)	19 - 23 - 29 - 36 - 42	19 - 24 - 29 - 36 - 43	26 - 30 - 34 - 39 - 45		
	(SLo-Lo-Mid-Hi-SHi *		dB(A)	19 - 25 - 30 - 36 - 41	19 - 25 - 30 - 36 - 42	25 - 32 - 37 - 41 - 46		
	Sound Level (PWL)		dB(A)	58	59	59		
Outdoor	Dimensions	$H \times W \times D$	mm	714 - 800 - 285	714 - 800 - 285	880 - 840 - 330		
Unit	Weight		kg	39.5	40	54		
	Air Volume	Cooling	m³/min	35.1	37.8	49.3		
		Heating	m³/min	37.8	37.8	55.6		
	Sound Level (SPL)	Cooling	dB(A)	46	49	51		
	004114 20101 (01 2)	Heating	dB(A)	49	50	54		
	Sound Level (PWL)	Cooling	dB(A)	60	61	64		
	Operating Current (max)		A	9.6	11.0	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		
Guaranta		Cooling	℃	-10 ~ +46	-10 ~ +46	-10 ~ +46		
10 141 1			℃	-10 ~ +46 -30 ~ +24	-10 ~ +46 -30 ~ +24			
		Heating	L	-3U ~ +24	_3U ~ +24	-30 ~ +24		

<sup>(\*1)</sup> 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 1975 times higher than 1 kg of CO2, 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.

<sup>(\*2)</sup> Energy consumption based on standard test results. Actual energy consumption will depend on now the applications of the standard test results. Actual energy consumption will depend on now the applications of the standard test results. Actual energy consumption is a standard test results. Actual energy consumption based on standard test results. Actual energy consumption is a standard test results. Actual energy consum

# LIVE TO SERIES RATIOA Single / MXZ, PUMY PUMY PUMY SERIES

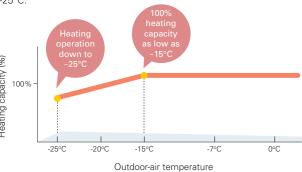
Unlike conventional air conditioning systems, the LN Series don't lose heating capacity when it's cold outside. Original technologies ensure excellent heating performance under extremely low outdoor temperatures and an impressive guaranteed operating range.



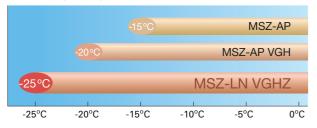
MSZ-LN25/35/50VG2(W)(V)(R)(B)

# **Unparalleled Heating Performance**

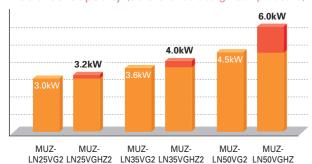
LN Series outdoor units are equipped with a high-output compressor that provides enhanced heating performance under low outdoor temperatures. The heating operation range is extended down to



# **Operating Range**

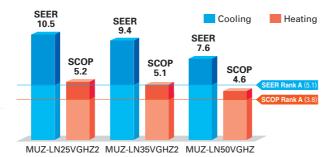


# Declared Capacity (at reference design temperature)



# High Energy Efficiency – Energy Rank of A<sup>+</sup> 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 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**





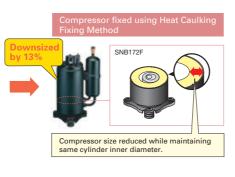
Without Freeze-prevention heater

With Freeze-prevention heater

# 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.





# R32 Interior (2000) [T- PAM SER SCOP A\*\*\* A\*\*\* MSZ-LN VGHZ SERIES Indoor Unit / Remote Controller Outdoor Unit GOOD DESIGN AWARD 2016 **BEST 100** <Pearl White> <Ruby Red> MSZ-LN25/35/50VG2V MSZ-LN25/35/50VG2R <Natural White> <Onyx Black> MS7-I N25/35/50VG2W MS7-I N25/35/50VG2B AUTO Quad Oual Barrier Coating Filter Double Vane SMNG SWNG SAUTO

Туре				Inverter Heat Pump				
Indoor Ur	it			MSZ-LN25VG2(W)(V)(R)(B)	MSZ-LN35VG2(W)(V)(R)(B)	MSZ-LN50VG2(W)(V)(R)(E		
Outdoor l	Jnit			MUZ-LN25VGHZ2	MUZ-LN35VGHZ2	MUZ-LN50VGHZ		
Refrigera	nt				R32 (*1)			
Power Source				Outdoor Power supply				
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	Design Load		kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)		
Average Season)(+5)	Declared Capacity	at reference design temperature	kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)		
caSUII)		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 Cap	pacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)		
	Annual Electricity Co	onsumption (*2)	kWh/a	861	1098	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	0.8 - 6.3	0.9 - 6.6	1.8 - 8.7		
	Total Input Rated		kW	0.600	0.820	1.480		
peratin	g Current (max)		А	9.9	10.5	15.2		
ndoor	Input Rated		kW	0.027	0.027	0.034		
Jnit	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	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		
	(SLo-Lo-Mid-Hi-SHi (*	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.		
	Sound Level (SPL)	Cooling	dB(A)	19 - 23 - 29 - 36 - 42	19 - 24 - 29 - 36 - 43	27 - 31 - 35 - 39 - 46		
	(SLo-Lo-Mid-Hi-SHi <sup>(*)</sup>	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		
utdoor	Dimensions H × W × D			550 - 800 - 285	550 - 800 - 285	880 - 840 - 330		
Jnit	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)		А	9.6	10.2	14.8		
	Breaker Size		А	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 Cooling °C			°C	-10 ~ +46	-10 ~ +46	-10 ~ +46		
Outdoor]		Heating	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24		

nemgerant reasage commontes to climate change. Hetrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmospher 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 CO2, 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 now the applications are supported by the consumption based on standard test results. Actual energy consumption will depend on now the applications are supported by the consumption based on standard test results. Actual energy consumption will depend on now the applications are supported by the consumption based on standard test results. Actual energy consumption will depend on now the applications are supported by the consumption based on standard test results. Actual energy consumption will depend on now the applications are supported by the consumption based on standard test results. Actual energy consump 141

## ETVGHZ (R32) Single / Multi SERIES

Unlike conventional air conditioning systems, the FT 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. Furthermore, the smaller and stylish indoor unit does not give you the limitation of installation



MSZ-FT25/35/50VG(K)

#### **Compact Design**

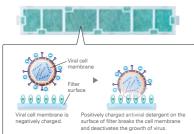
The FT series features its compact design with 280mm height and 229mm depth, which is suitable for the installation above the door.



#### V Blocking Filter (Optional)

V Blocking Filter with antiviral effect inhibits 99% of adhered virus, and other harmful substances, such as bacteria, mold and allergen

Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.



#### Remote Controller with Backlight

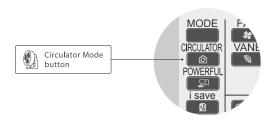
The remote controller screen is equipped with an LED backlight. The luminous screen allows you to check the setting easily even in the dark.



#### Circulator Mode

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After reaching the target temperature, heating mode will automatically switch to Circulator mode, which makes the unit go into "fan-only" state and mixes warm air in the room.



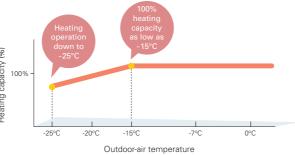
## Built-in Wi-Fi

(MSZ-FT25/35/50VGK)

Mitsubishi Electric Wi-Fi Control gives you the freedom to tailor your heating and cooling needs through computers, tablets, or smartphones from anywhere.

#### Hyper Heating

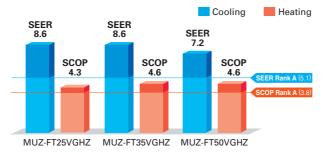
Mitsubishi Electric's powerful compressor and highly cold-resistant parts enable the heat pump to provide 100% or more heating capacity even at -15°C, and also the heating operation is guaranteed down to -25°C.



#### High Energy Efficiency – Energy Rank of A<sup>+</sup> 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-FT VGHZ simultaneously achieves high heating capacity and energy-saving performance.



(MSZ-FT25/35/50VG(K)-SC Scandinavian Model)

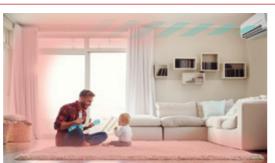


Image is for illustration purposes.

#### MSZ-FT SERIES



Outdoor Unit











Remote Controller



MSZ-FT25/35/50VG(K)

































ре					Inverter Heat Pump		
ndoor Ur	nit			MSZ-FT25VG(K)	MSZ-FT35VG(K)	MSZ-FT50VG(K)	
otdoor				MUZ-FT25VGHZ	MUZ-FT35VGHZ	MUZ-FT50VGHZ	
efrigera				WIGETTESVOTIE	R32 (*1)	WIGET TOOVGITE	
	Source				Outdoor power supply		
Power Source Supply Outdoor (V/Phase/Hz)			230 / Single / 50				
ooling	Design Load		kW	2.5	3.5	5.0	
coming	Annual Electricity Co	onsumption (*2)	kWh/a	101	142	243	
	SEER (*4)	onsumption	KVVIIJU	8.6	8.6	7.2	
	022	Energy Efficiency Class		A+++	A+++	A++	
	Capacity	Rated	kW	2.5	3.5	5.0	
	Cupucity	Min - Max	kW	0.8 - 3.5	0.8 - 4.0	0.8 - 5.2	
	Total Input	Rated	kW	0.580	0.910	1.630	
eating	Design Load	Indica	kW	3.2 (–10°C)	4.0 (–10°C)	5.0 (–10°C)	
verage	Declared Capacity	at reference design temperature	kW	3.2 (–10°C)	4.0 (-10°C) 4.0 (-10°C)	5.0 (-10°C) 5.0 (-10°C)	
eason)(+5	Decial Eu Capacity	at bivalent temperature	kW	3.2 (–10°C)	4.0 (-10°C) 4.0 (-10°C)	5.0 (-10°C)	
		at operation limit temperature	kW	3.2 (-10°C) 3.0 (-25°C)	4.0 (-10°C) 3.4 (-25°C)	3.6 (-25°C)	
	Back Up Heating Ca	<del></del>	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	
	Annual Electricity Co		kWh/a	973	1216	1625	
	SCOP (*4)	onsumption	KVVII/G	4.6	4.6	4.3	
	SCOP	Energy Efficiency Class		4.0 A++	4.0 A++	4.3 A+	
	Capacity	Rated	kW	3.2	4.0	5.0	
	Сарасіту	Min - Max	kW	0.9 - 6.2	0.9 - 6.6	0.9 - 7.8	
	Total Input			0.9 - 6.2	1.020	1.300	
novotin	g Current (max)	hateu	kW A	10.0	11.6	13.9	
ndoor	Input Rated		kW	0.039	0.04	0.047	
nit			A	0.039 0.04 0.047			
	Operating Current (max)		mm				
		Dimensions H × W × D		280 - 838 - 229 10			
	Weight Air Volume	Cooling	kg m³/min	3.9 - 5.9 - 8.2 - 10.4 - 12.3	3.9 - 6.1 - 8.3 - 10.7 - 13.1	F 70 00 100 101	
	(SLo-Lo-Mid-Hi-SHi <sup>(*</sup>	314	_			5.5 - 7.6 - 9.8 - 12.0 - 13.1	
	Sound Level (SPL)	· Heating	m³/min	3.9 - 6.3 - 9.0 - 12.0 - 13.2	3.9 - 6.9 - 10.2 - 13.5 - 14.7	5.5 - 8.4 - 11.4 - 14.4 - 15.5	
	(SLo-Lo-Mid-Hi-SHi(*	Cooling	dB(A)	19 - 27 - 36 - 41 - 46	19 - 27 - 36 - 42 - 47	28 - 34 - 40 - 45 - 48	
	Sound Level (PWL)	Heating	dB(A)	19 - 31 - 39 - 46 - 49	19 - 33 - 42 - 49 - 52	28 - 36 - 45 - 51 - 54	
utdoor	Dimensions	H × W × D	<del></del>	FF0 000 00F	60	744 000 005	
utaoor nit		lu x vv x D	mm	550 - 800 - 285	714 - 800 - 285	714 - 800 - 285	
	Weight	Caslina	kg m³/min	34	40	40	
	Air Volume	Cooling	-	30.4	40.2	40.2	
	Canadianal (CDL)	Heating	m³/min	30.4	40.2	40.2	
	Sound Level (SPL)	Cooling	dB(A)	46	49	51	
	Sound Level (PWL)	Heating	dB(A)	49	52	54	
	,	Cooling	dB(A)	60	61	64	
	Operating Current (	тах)	A	9.6	11.2	13.5	
	Breaker Size	h: :1/0	A	12	12	16	
xt. iping	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	
-Pinia	Max. Length	Out-In	m	20	30	30	
	Max. Height	Out-In	m	12	15	15	
uarante	ed Operating Range	Cooling	°C	−10 ~ +46	-10 ~ +46	-10 ~ +46	

neurogerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant lithin figher 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<sub>2</sub>, 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.

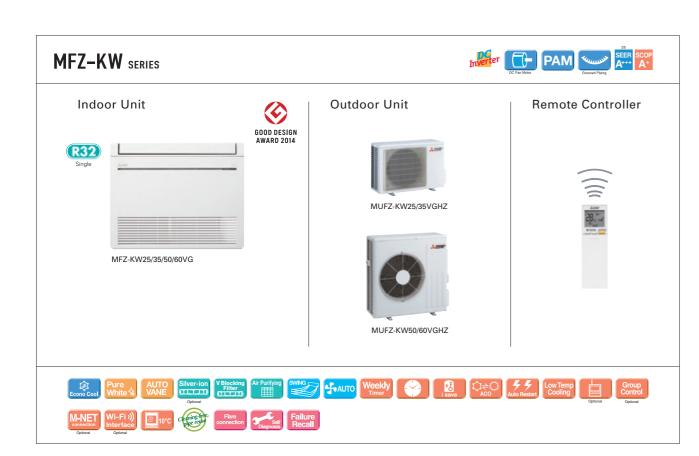
The GWP of R410A is 2088 in the IPCC 4th Assessment Report.

I —25 ~ +24

I —25 ~ +24

I Expert yourself and always ask a professional.

<sup>(\*2)</sup> Energy consumption based on standard test results. Actual energy consumption will depend on now trie applications as used on standard test results. Actual energy consumption will depend on now trie applications as used on the consumption are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season" (\*3) Please see page 53-55 for heating (warmer season) specifications.



Туре				Inverter Heat Pump					
Indoor Ur	nit				MFZ-KW25VG	MFZ-KW35VG	MFZ-KW50VG	MFZ-KW60VG	
Outdoor					MUFZ-KW25VGHZ	MUFZ-KW35VGHZ	MUFZ-KW50VGHZ	MUFZ-KW60VGHZ	
Refrigera	nt						2 (*1)		
Power			Outdoor power supply						
Supply	Outdoor (V/Phase/I	łz)					ingle / 50		
Cooling	Design Load			kW	2.5	3.5	5.0	6.1	
	Annual Electricity Consumption (*2)		tion (*2)	kWh/a	103	151	255	316	
	SEER (*4)				8.5	8.1	6.8	6.7	
		Energ	y Efficiency Class		A+++	A++	A++	A++	
	Capacity	Rated		kW	2.5	3.5	5.0	6.1	
		Min - N	Vlax	kW	0.7 - 3.6	0.7 - 4.3	1.0 - 5.8	1.0 - 6.5	
	Total Input	Rated		kW	0.57	0.90	1.36	1.73	
Heating	Design Load			kW	3.5	3.6	4.5	4.8	
(Average Season)		at refe	rence design temperature	kW	3.5 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	4.8 (-10°C)	
Season)		at biva	lent temperature	kW	3.5 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	4.8 (-10°C)	
		at ope	ration limit temperature	kW	2.6 (-25°C)	2.6 (-25°C)	4.0 (-25°C)	4.0 (-25°C)	
	Back Up Heating Ca	pacity		kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	
	Annual Electricity C	onsump	tion (*2)	kWh/a	1188	1211	1500	1624	
	SCOP (*4)				4.1	4.1	4.2	4.1	
		Energ	y Efficiency Class		A+	A+	A+	A+	
	Capacity Rated			kW	3.4	4.3	6.0	6.5	
	Min		Vlax	kW	0.2 - 5.1	0.2 - 6.0	1.2 - 8.4	1.2 - 9.0	
	Total Input	Rated		kW	0.83	1.21	1.60	1.88	
Operatin	g Current (max)			Α	9.9	10.3	15.3	15.4	
Indoor	Input (Cooling/Heat	ing)	Rated	kW	0.019/0.025	0.019/0.025	0.026/0.052	0.063/0.059	
Unit	Operating Current (	max)		Α	0.22	0.22	0.47	0.55	
	Dimensions		$H \times W \times D$	mm		600 - 7	50 - 215		
	Weight			kg	15	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	5.6 - 8.0 - 9.6 - 12.3 - 15.0	
	(SLo-Lo-Mid-Hi-SHi <sup>(*)</sup>	30)	Heating	m³/min	3.5 - 5.1 - 6.2 - 7.7 - 9.7	3.5 - 5.1 - 6.2 - 7.7 - 9.7	6.0 - 7.4 - 9.4 - 11.6 - 14.0	6.0 - 7.7 - 9.7 - 12.5 - 14.6	
	Sound Level (SPL)		Cooling	dB(A)	20 - 25 - 30 - 35 - 39	20 - 25 - 30 - 35 - 39	27 - 31 - 35 - 39 - 44	27 - 35 - 39 - 46 - 53	
	(SLo-Lo-Mid-Hi-SHi <sup>(*</sup>	30)	Heating	dB(A)	18 - 25 - 30 - 35 - 41	18 - 25 - 30 - 35 - 41	29 - 35 - 40 - 45 - 50	29 - 35 - 41 - 47 - 51	
	Sound Level (PWL)			dB(A)	49	50	56	65	
	Dimensions		$H \times W \times D$	mm	550 - 8	00 - 285	880 - 8	40 - 330	
Unit	Weight			kg	35	35	54	54	
	Air Volume		Cooling	m³/min	32.7	32.7	43.8	48.8	
			Heating	m³/min	27.3	27.3	46.3	51.3	
	Sound Level (SPL)		Cooling	dB(A)	47	47	50	52	
			Heating	dB(A)	46	47	54	56	
	Sound Level (PWL)		Cooling	dB(A)	61	61	65	66	
	Operating Current (	max)		А	9.6	10.0	14.8	14.8	
	Breaker Size			А	10	12	16	16	
Ext.	Diameter		Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7	
Piping	Max. Length		Out-In	m	20	20	30	30	
	Max. Height		Out-In	m	12	12	15	15	
	ed Operating Range		Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	
[Outdoor]	l		har as	00	05 04	05 04	05 04	05 04	

<sup>(\*1)</sup> 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 1 kg of CO2, 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.

## ZUBADAN

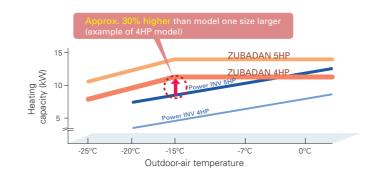
The ZUBADAN Series incorporates an original Flash Injection technology that improves the already high heating capacity of the system. This new member of the series line-up ensures comfortable heat pump-driven heating performance in cold regions.

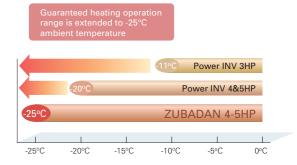


\* Units in photo are Japanese models European model specifications are different

#### 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.

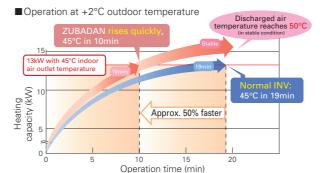


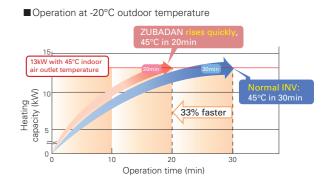


#### **Enhanced Comfort**

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.

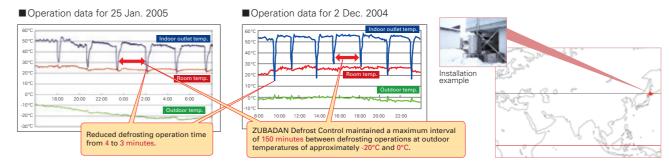
#### Quick Start-up





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ZUBADAN Defrost Control and Faster Recovery from Defrost Operation Field Test Results: Office building in Asahikawa, Hokkaido, Japan



<sup>(\*2)</sup> 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"

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

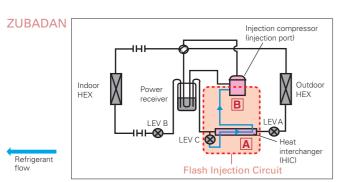


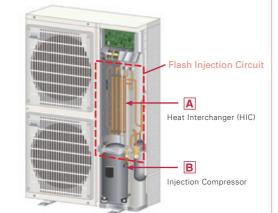
Powerful heating yet annaully high energy efficiency in both cooling and heating, achieving rank A and A+.



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

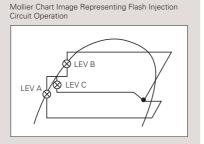
#### ■ Flash Injection Circuit





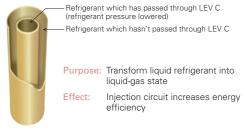
The ZUBADAN Series is equipped with Mitsubishi Electric's original Flash Injection Circuit, which is comprised of a bypass circuit and heat interchanger (HIC). The HIC transforms rerouted liquid refrigerant into a gas-liquid state to lower compression load. This process ensures excellent heating performance 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.

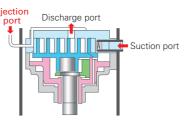


#### A Heat Interchanger (HIC)

HIC cross-sectional view



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.



Purpose: To increase the volume of refrigerant being circulated 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.

#### Inverter WVV PAM Power Receiver ZUBADAN PLZ-SHW SERIES Indoor Unit Remote Controller **Outdoor Unit R32 R410A** 25.00 Z . PLA-ZM100/125EA2 Enclosed in \*optional PLP-6EALM2/ **Panel** PUH7-SHW112VHA(-RS) Panel With Signal With 3D i-see With Wireless With Auto Receiver Sensor Remote Controller Flevation PLIHZ-SHW112/140YHA(-BS) PLP-6EA Acr PLP-6EAL PLP-6EAE PLP-6EALE PLP-6EAJ PLP-6EAJE ✓

Demand Control White AUTO White AUTO Cooling C

Ampere Limit Back-up Control C

PLP-6EALM2

PLP-6EALME2

ре			T		Inverter Heat Pump	
ndoor Un	it			PLA-2	ZM100EA2	PLA-ZM125EA2
utdoor l	Jnit			PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
efrigera	nt				R410A*1	
ower	Source				Outdoor power supply	
upply	Outdoor (V/Phase/H	lz)			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	2.857	2.857	5.000
	EER			3.50	3.50	2.50
		EEL Rank		-	-	_
	Design Load		kW	10.0	10.0	_
	Annual Electricity Co	onsumption*2	kWh/a	633	633	_
	SEER*4			5.5	5.5	_
		Energy Efficiency Class		A	A	-
ating	Capacity	Rated	kW	11.2	11.2	14.0
verage		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
eason)	Total Input	Rated	kW	2.667	2.667	4.000
	СОР			4.20	4.20	3.50
		EEL Rank	$\neg$		_	_
	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 Car		kW	1.5	1.5	_
	Annual Electricity Consumption*2 kWh/a		$\overline{}$	4420	4420	_
	SCOP*4		KVVIII	4.0	4.0	_
		Energy Efficiency Class		A+	A+	_
eratin	g Current (max)	3,	А	35.5	13.5	13.5
door	Input [Cooling/Heating]	Bated	kW	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08
it .	Operating Current (r		A	0.47	0.47	0.52
	Dimensions <panel></panel>		mm	0.47	298-840-840 <40-950-950>	0.02
	Weight <panel></panel>	III A TA A S	kg	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-N	Mi1-Hil	m³/min	19 - 22 - 25 - 28	19 - 22 - 25 - 28	21 - 24 - 26 - 29
	Sound Level (SPL) [L	-	dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 36 - 39 - 41
	Sound Level (PWL)	5 TVII	dB(A)	61	61	62
ıtdoor	Dimensions	H x W x D	mm	01	1350 - 950 - 330 (+30)	02
nit	Weight		kg	120	134	134
	Air Volume	Cooling	m³/min	100	100	100
	, Joiume	Heating	m³/min	100	100	100
	Sound Level (SPL)	Cooling	dB(A)	51	51	51
	Country Level (of L)	Heating	dB(A)	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69	69
	Operating Current (r		A A	35	13	13
	Breaker Size	iiua,	A	40	16	16
rt.	Diameter Size	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
α. ping	Max. Length	Out-In	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
				30	30	30
oront-	Max. Height ed Operating Range	Out-In	m °C			
uarante Outdoor]	u operating nange	Cooling*3 Heating	℃	-15 ~ +46 -25 ~ +21	-15 ~ +46 -25 ~ +21	-15 ~ +46 -25 ~ +21

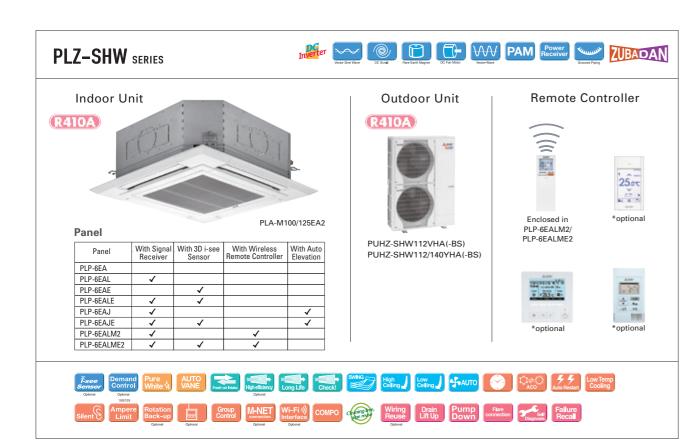
<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means 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 CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself and always ask a professional.

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

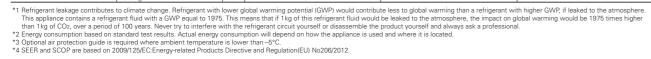
\*3 Optional air protection guide is required where ambient temperature is lower than -5°C.

\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

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Туре					Inverter Heat Pump		
ndoor Un	it			PLA-	M100EA2	PLA-M125EA2	
Outdoor L	Jnit			PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA	
efrigerar	nt				R410A*1		
Power Source					Outdoor power supply		
upply	Outdoor (V/Phase/H	z)			VHA: 230 / Single / 50, YHA: 400 / Three / 50		
	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	·		3.40	3.40	2.50	
		EEL Rank		-	-	_	
	Design Load	·	kW	10.0	10.0	_	
	Annual Electricity Co	onsumption*2	kWh/a	661	661	_	
	SEER*4			5.3	5.3	-	
		Energy Efficiency Class		A	A	-	
eating	Capacity	Rated	kW	11.2	11.2	14.0	
verage		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	
eason)	Total Input	Rated	kW	2.793	2.793	4.000	
	СОР	-		4.01	4.01	3.50	
		EEL Rank		-	-	-	
	Design Load	1	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 Cap		kW	1.5	1.5	_	
			kWh/a	4445	4445		
	SCOP*4	1	,u	4.0	4.0	_	
		Energy Efficiency Class		A+	A+	_	
perating	Current (max)	,	А	35.5	13.5	13.7	
door	Input [Cooling/Heating]	Rated	kW	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08	
nit	Operating Current (n		A	0.47	0.47	0.52	
	Dimensions <panel></panel>		mm	298-840-840 <40-950-950>		-	
	Weight <panel></panel>		kg	26 <5>	26 <5>	26 <5>	
	Air Volume [Lo-Mi2-N	Лі1-Ні]	m³/min	19 - 22 - 25 - 28	19 - 22 - 25 - 28	21 - 24 - 26 - 29	
	Sound Level (SPL) [L		dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 36 - 39 - 41	
	Sound Level (PWL)		dB(A)	61	61	62	
utdoor	Dimensions	$H \times W \times D$	mm	-	1350 - 950 - 330 (+30)		
nit	Weight		kg	120	134	134	
	Air Volume	Cooling	m³/min	100	100	100	
		Heating	m³/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 (n			35	13	13	
	Breaker Size		A	40	16	16	
xt.	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	
iping	Max. Length	Out-In	m	75	75	75	
. •	Max. Height	Out-In	m	30	30	30	
	d Operating Range	Cooling*3	°℃	-15 ~ +46	-15 ~ +46	-15 ~ +46	
Guarantee							



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Inverter WI PAM Power Receiver ZUBADAN PEDZ-SHW JA SERIES Indoor Unit Remote Controller Outdoor Unit **R32** (R410A) **R410A** <u>((()</u> 25.00 \*optional \*optional \*optional PEAD-M100/125JA(L)2 PUHZ-SHW112VHA(-BS) PUHZ-SHW112/140YHA(-BS) Acr Demand Control Control Coronal Wiring Reuse Drain Lift Up Down Connection Set Daynoise Recall

<b>T</b>					Landa Hart Barra	
Туре	ia.			DEAD A4	Inverter Heat Pump	DEAD M425 IA/L/2
Indoor Un					100JA(L)2	PEAD-M125JA(L)2
Outdoor l				PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
Refrigera					R410A*1	
Power	Source				Outdoor power supply	
Supply	Outdoor (V/Phase/H	-			VHA: 230 / Single / 50, YHA: 400 / Three / 50	
Cooling	Capacity	Rated	kW	10.0	10.0	12.1
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0
	Total Input	Rated	kW	2.904	2.904	4.172
	EER			3.44	3.44	2.90
		EEL Rank		-	-	-
	Design Load		kW	10.0	10.0	12.1
	Annual Electricity Co	onsumption*2	kWh/a	686	686	-
	SEER*4			5.1	5.1	-
		Energy Efficiency Class		A	A	-
Heating	Capacity	Rated	kW	11.2	11.2	14.0
(Average		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
Season)	Total Input	Rated	kW	3.103	3.103	3.879
	COP			3.61	3.61	3.61
		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	9.4 (-25°C)	9.4 (-25°C)	_
	Back Up Heating Car	pacity	kW	1.5	1.5	_
	Annual Electricity Consumption*2		kWh/a	4601	4601	_
	SCOP*4			3.8	3.8	_
		Energy Efficiency Class		A	A	_
Operatin	g Current (max)		Α	37.7	15.7	15.8
Indoor	Input [Cooling / Heating	ng] Rated	kW	0.14	0.14	0.20
Unit	Operating Current (n	nax)	Α	2.25	2.25	2.34
	Dimensions	$H \times W \times D$	mm	250 - 1400 - 732	250 - 1400 - 732	250 - 1400 - 732
	Weight	<u>'</u>	kg	36	36	37
	Air Volume [Lo-Mid-H	Hi]	m³/min	23.0-28.0-32.0	23.0 - 28.0 - 32.0	28.0 - 34.0 - 37.0
	External Static Press	sure*5	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	<40> - 50 - <70> - <100> - <150>
	Sound Level (SPL) [L	.o-Mid-Hi]	dB(A)	31 - 36 - 39	31 - 36 - 39	35 - 39 - 41
	Sound Level (PWL)		dB(A)	62	62	66
Outdoor	Dimensions	$H \times W \times D$	mm	1350 - 950 - 330 (+30)	1350 - 950 - 330 (+30)	1350 - 950 - 330 (+30)
Unit	Weight	•	kg	120	134	134
	Air Volume	Cooling	m³/min	100	100	100
		Heating	m³/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 (n	nax)	Α	35	13	13
	Breaker Size		А	40	16	16
Ext.	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
Piping	Max. Length	Out-In	m	75	75	75
	Max. Height	Out-In	m	30	30	30
Guarantee	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor]		Heating	°C	-25 ~ +21	-25 ~ +21	-25 ~ +21
*1 Refrine	rant laakaga contributos				ite less to global warming than a refrigerant wi	

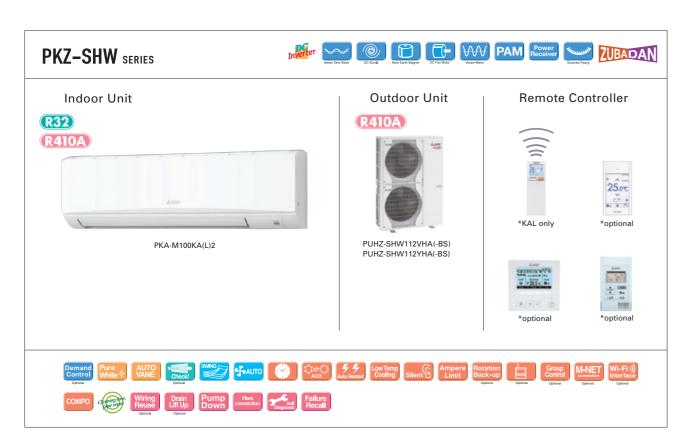
<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means 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 CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit vestel or disassemble the product yourself and always ask a professional.

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

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

\*4 SEER and SCOP are based on 2009/12E/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

\*5 The factory setting of ESP is shown without < >.



Туре				Inverter H	eat Pumn
Indoor Un	iit				00KA(L)2
Outdoor U				PUHZ-SHW112VHA	PUHZ-SHW112YHA
					0A*1
Refrigerant Power Source			ower supply		
Supply				, YHA: 400 / Three / 50	
Cooling	Gatagor (1)1 Hagging		kW	10.0	10.0
Cooling	Сарасіту	Min - Max		4.9 - 11.4	4.9 - 11.4
	Table 1	Rated	kW		
	Total Input	Rated	kW	2.924 (2.904)	2.924 (2.904)
	Design Load		kW	3.42	3.42
	Annual Electricity Co	onsumption*2	kWh/a	673	673
	SEER**			5.2	5.2
	-	Energy Efficiency Class		А	A
Heating (Average	Capacity	Rated	kW	11.2	11.2
Season)		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 (-10°C)	11.2 (-10°C)
		at bivalent temperature	kW	11.2 (-7°C)	11.2 (-7°C)
		at operation limit temperature	kW	9.4 (-25°C)	9.4 (-25°C)
			kW	1.5	1.5
			kWh/a	4664	4664
	SCOP*4			3.8	3.8
		Energy Efficiency Class		A	A
	g Current (max)		Α	35.6	13.6
Indoor	Input	Rated	kW	0.08 / 0.07	0.08 / 0.07
Unit	Operating Current (n		Α	0.57	0.57
	Dimensions <panel></panel>	$H \times W \times D$	mm	365 - 11	70 - 295
	Weight <panel></panel>		kg	21	21
	Air Volume [Lo-Mid-H	li]	m³/min	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL) [L	o-Mid-Hi]	dB(A)	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL)		dB(A)	65	65
	Dimensions	$H \times W \times D$	mm	1350 - 950	- 330 (+30)
Unit	Weight		kg	120	134
	Air Volume	Cooling	m³/min	100	100
		Heating	m³/min	100	100
	Sound Level (SPL)	Cooling	dB(A)	51	51
		Heating	dB(A)	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69
	Operating Current (n	nax)	А	35	13
	Breaker Size		А	40	16
Ext.	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88
Piping	Max. Length	Out-In	m	75	75
	Max. Height	Out-In	m	30	30
	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46
Guarantee					

<sup>\*1</sup> 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 CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
\*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
\*3 Optional air protection guide is required where ambient temperature is lower than -5°C.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

## MXZ-VAHZ SERIES

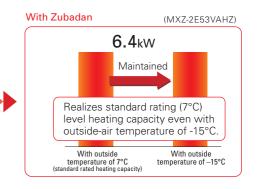
New hyper-heating MXZ allows you to create an oasis of comfort throughout your home and office in the rooms you use most, any time of the year.



#### 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.

(MXZ-2D53VA2) 6.4kW Our conventional model was not able to maintain standard Falls 3.0kW rated heating capacity, making it hard to provide Capacity decreased due to warming in case of low outdoor-air temperature low outside-air temperatures. With outside With outside



#### 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.

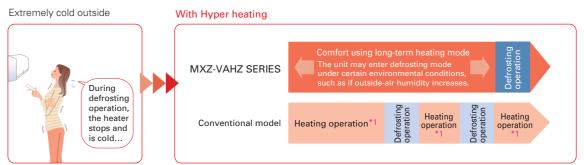
#### Freeze-prevention heater standard equipment

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.

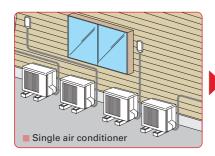


<sup>1:</sup> Conventional model performs continuous heating approximately 30min up to a maximum of 90min.

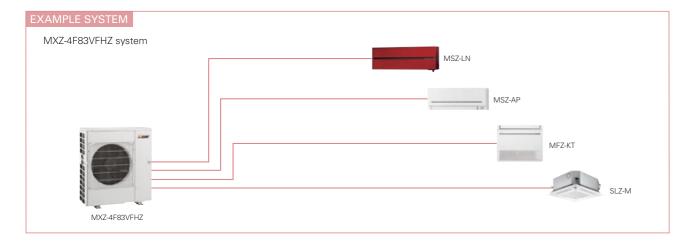
#### One outdoor unit supports multiple indoor units.

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.

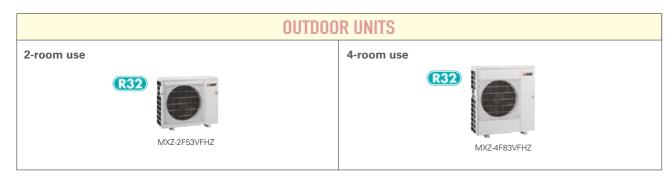






#### Freedom of combinations in cold region greatly enhanced

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





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



Туре					Inverter H				
Indoor Unit					Please re	er to*4 *5			
Outdoor Unit			MXZ-2F53VFHZ	MXZ-4F83VFHZ	MXZ-2E53VAHZ	MXZ-4E83VAHZ			
Refrigerant			R3	R32*6 R410A*1					
ower	Source			Outdoor power supply					
upply	Outdoor (V/Phase/H	lz)			220 - 230 - 240	V / Single / 50			
Cooling	Capacity	Rated	kW	5.3	8.3	5.3	8.3		
		Min - Max	kW	1.1 - 6.0	3.5 - 9.2	1.1 - 6.0	3.5 - 9.2		
	Total Input	Rated	kW	1.29	1.90	1.29	2.25		
	Design Load		kW	5.3	8.3	5.3	8.3		
	Annual Electricity Co	onsumption*2	kWh/a	274	398	282	447		
	SEER*4,*7			6.8	7.3	6.5	6.5		
		Energy Efficiency Class*4		A++	A++	A++	A++		
eating	Capacity	Rated (7°C)	kW	6.4	9.0	6.4	9.0		
verage		Rated (-7°C)	kW	6.4	9.0	6.4	9.0		
eason)		Rated (-15°C)	kW	6.4	9.0	6.4	9.0		
		Min - Max	kW	1.0 - 7.0	3.5 - 11.6	1.0 - 7.0	3.5 - 11.6		
	Total Input	Rated	kW	1.36	1.70	1.36	1.90		
	Design Load	•	kW	6.4	10.1	6.4	10.1		
	Declared Capacity	at reference design temperature	kW	6.9	10.6	6.4	9.0		
		at bivalent temperature	kW	7.4	11.5	6.4	9.0		
		at operation limit temperature	kW	4.1	5.7	2.4	2.5		
	Back Up Heating Capacity		kW	0.0	0.0	0.0	1.1		
	Annual Electricity Consumption*2		kWh/a	2172	3286	2165	3446		
	SCOP*7			4.1	4.3	4.1	4.1		
		Energy Efficiency Class*4		A+	A <sup>+</sup>	A+	A+		
lax. Ope	erating Current (Indoo	or+Outdoor)	А	15.6	28.0	15.6	28.0		
	Dimensions	$H \times W \times D$	mm	796 × 950 × 330	1048 × 950 × 330	796 × 950 × 330	1048 × 950 × 330		
nit	Weight		kg	61	86	61	87		
	Air Volume	Cooling	m³/min	43	63	47.0	63.0		
		Heating	m³/min	41	77	47.0	77.0		
	Sound Level (SPL)	Cooling	dB(A)	45	55	45	53		
		Heating	dB(A)	47	57	47	57		
	Sound Level (PWL)	Cooling	dB(A)	55	66	55	66		
	Breaker Size		Α	16	30	16	30		
xt.	Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35×4/12.7×1+9.52×3	6.35 × 2 / 9.52 × 2	6.35× 4 / 12.7 × 1+9.52 ×		
ping	Total Piping Length	(max)	m	30	70	30	70		
	Each Indoor Unit Pip	ing Length (max)	m	20	25	20	25		
	Max. Height		m	15	15	15 (10) * <sup>3</sup>	15 (10) * <sup>3</sup>		
	Chargeless Length		m	30	70	20	25		
	ed Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46		
Outdoor]		Heating	°C	-25 ~ +24	-25 ~ +24	−25 ~ +24	-25 ~ +24		

<sup>\*1</sup> 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<sub>2</sub>, 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 only 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 unit is its inclose units its installed higher indoor unit is its installed higher than the indoor unit is installed higher than the indoor unit is

<sup>\*4</sup> EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.

MX-2F53VFHZ MSZ-LN18VG2 + MSZ-LN35VG2

MX-4F83VFHZ MSZ-LN18VG2 + MSZ-LN35VG2 + MSZ-LN25VG2 + MSZ-LN25VG2

MX-4F83VFHZ MSZ-EF18VE + MSZ-EF18VE + MSZ-EF52VE

MX-4E83VAHZ MSZ-EF18VE + MSZ-EF18VE + MSZ-EF52VE + MSZ-EF25VE

\*5 Indoor unit compatibility table is shown on page 115-116.

\*6 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<sub>2</sub>, 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.

\*7 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

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

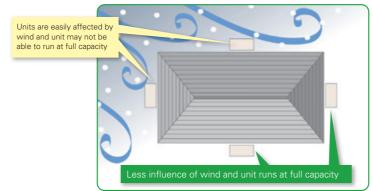
Wind and snow can significantly reduce capacity.

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.

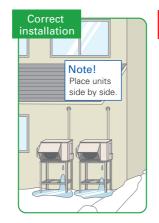


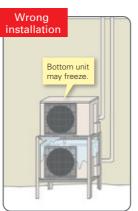




#### Case 2: Multiple units are installed

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

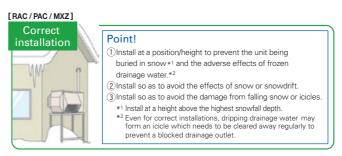


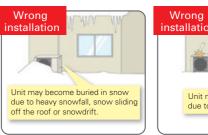


## 3 Measures for Snow

#### Unit is installed on the ground

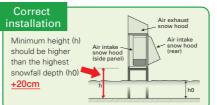
To avoid the adverse effects of snow and frozen drainage water, install the unit on a stand to ensure a sufficient height from the ground.

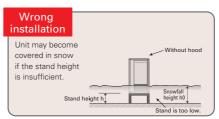






Use a stand to add sufficient height to protect the unit heat exchanger from snow and prevent icicles forming during defrost operation.





#### Install snow protection hood as necessary

[RAC/PAC/MXZ]



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

	Snowy region	Cold region			
	Countermeasures for snow		Remarks		
Drain socket, Centralised drain pan	Not used	Not used	Prevents freezing		
Stand	Needed	Needed	IRAC / PAC / MXZ I  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).		
Snow protection hood	Needed  *When the installation position is subject to snowfall.	_	Prevents heat exchanger from being covered in snow.     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.		

#### **A** 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.

156

\* 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.

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

## **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.

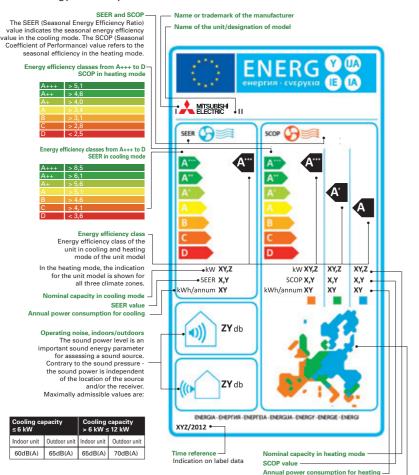
#### **NEW ENERGY LABEL AND MEASUREMENTS**

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



For heating mode, the EU is divided into three climate zones for calculation and classification purposes. This aims at calculating the energy efficiency taking into consideration the actual regional ambient temperatures.

#### ■Climate Zones for Heating Mode

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



	Temperat	ure conditions	
Partial	Outdoors		Indoors
oad	DB	WB	DB
-	-	-	20°C
100%	2°C	1°C	20°C
64%	7°C	6°C	20°C
29%	12°C	11°C	20°C

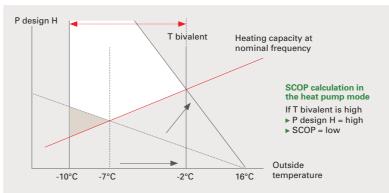
	Temperat	ure conditions	
Partial	Outdoors		Indoors
load	DB	WB	DB
88%	-7°C	-8°C	20°C
54%	2°C	1°C	20°C
35%	7°C	6°C	20°C
15%	12°C	11°C	

	Temperat	ture conditions				
Partial	Outdoors	Outdoors				
load	DB	WB	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.

## 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.

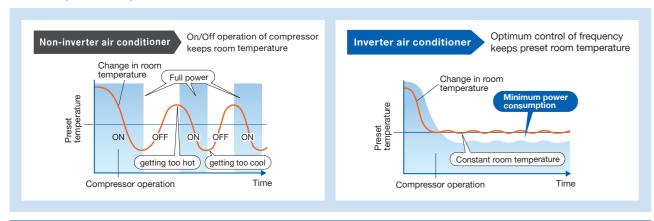
#### **ECONOMIC OPERATION**

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 quarantees 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 highdensity, high-magnetic force, leading to extremely high efficiency and reliability.





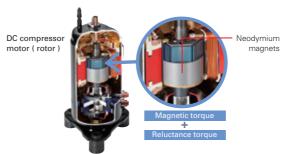
#### Magnetic Flux Vector Sine Wave Drive

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

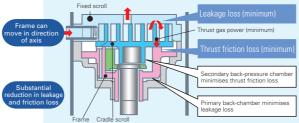
Powerful neodymium magnets are used in the rotor of the reluctance DC motor. More efficient operation is realised by strong magnetic and reluctance torques produced by the magnets.



#### 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.



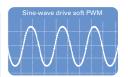


A highly efficient DC motor drives the fan of the outdoor unit. Efficiency is much higher than an equivalent AC motor.

#### ₩ Vector-Wave Eco Inverter

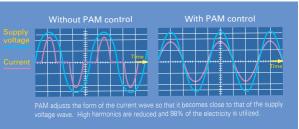
This inverter monitors the varying compressor motor frequency and creates the most efficient waveform for the motor speed. As the result, operating efficiency in all speed ranges is improved, less power is used and annual electricity cost is reduced.

Inverter size has been reduced using insertmolding, 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 PAM (Pulse Amplitude Modulation)

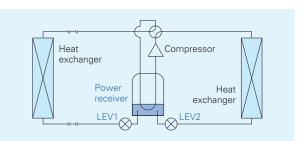
PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.





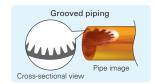
#### Power Receiver and Twin LEV Control

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.

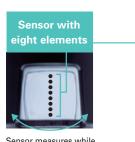


## **COMFORT**

#### 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.



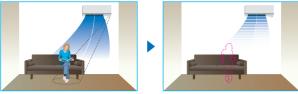
moving to the left to right

8 x 94 areas

(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.



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

#### **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 mode



ut The 3D i-see sensor memorizes human moveno ment 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 F-see Sensor for S & P SERIES

#### Detects number of people

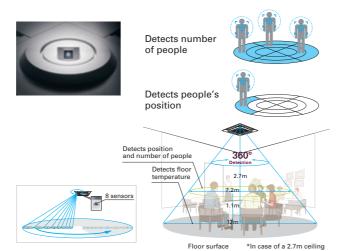
The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced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

The 3D r-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.

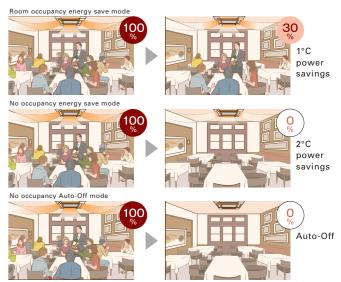
#### No occupancy energy-saving mode

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-41MAA 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!



\*PAR-41MAA or PAR-SL101A-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

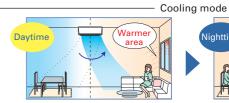
The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes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



\*PAR-41MAA is required for each setting.

#### 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.





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## **COMFORT**

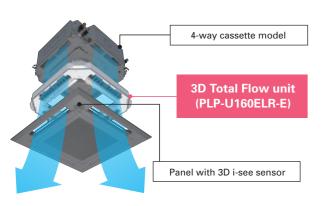
#### **3D TOTAL FLOW**

#### 3D Total Flow\*

3D Total Flow is an innovative function. Our original 3D i-see sensor detects the temperature of the floor, and then the newly installed 3D Total Flow unit automatically controls the airflow in the left/right directions in a smart manner.

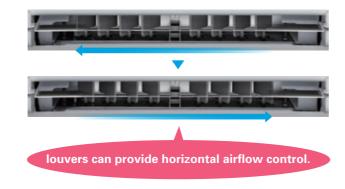
\*3D Total Flow unit(PLP-U160ELR-E) cannot be used with Plasma Quad Connect(PAC-SK51FT-E), Insulation kit(PAC-SK36HK-E), Shutter Plate(PAC-SJ37SP-E),

Multi functional casement(PAC-SJ41TM-E) and High-efficiency filter element(PAC-SH59KF-E)



#### Horizontal louver (3D Total Flow)

In addition to the ability of conventional models to control airflow in the vertical direction, the adoption of a horizontal louver unit allows each outlet to blow air over a horizontal angle of 90 degrees. The combination of four outlets delivers 360° airflow control around the entire circumference. This now makes it possible to blow air in diagonal directions which eliminates temperature irregularities.



#### Fine-tuned sensing & airflow direction control (3D Total Flow)



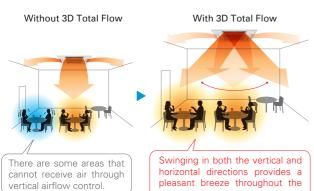
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#### Swinging

Since airflow can be controlled in the horizontal and vertical directions, you can efficiently make the entire room comfortable.

#### Horizontal, vertical, and diagonal airflow delivered to every corner

The combination of the vertical vanes with the horizontal louver unit makes it possible to direct airflow in any direction. This quickly makes the entire room comfortable, even when diagonal airflow is necessary.





#### Indirect mode

When set to "Indirect" mode, the system detects the position of a person and maintains comfort while diverting airflow away from them.

#### Prevents direct airflow and keeps you comfortable

This function prevents people from being directly exposed to airflow while still ensuring comfort. The "Indirect" mode of 3D Total Flow keeps the downward airflow while avoiding direct blow to people, delivering a pleasant warmth.

#### Without 3D Total Flow

Models that are only equipped with vertical vanes need to swing the airflow upward to avoid people. This makes it difficult to warm up the surrounding space.



#### With 3D Total Flow

Now, it is easier to warm the surrounding space while still ensuring people do not receive direct blow.



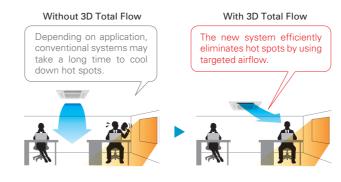
\*If people are present throughout the entire airflow range of an outlet, the airflow is shifted horizontally to avoid direct airflow.

#### **Targeting**

The system can detect spaces with uneven temperatures and target them by sending air even if they are in a diagonal direction.

#### Detects and targets areas with uneven temperatures

3D i-see sensor detects areas with uneven temperatures, even if they are caused by the installation orientation of the air conditioner or the influence of strong sunlight. Efficient air conditioning is possible thanks to the ability to send focused airflow to such areas, even those in a diagonal position.



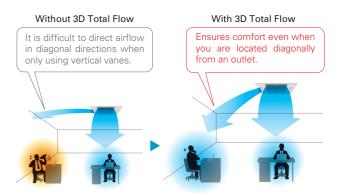


#### Direct mode

When set to "Direct" mode, the system detects the position and diverts airflow towards wherever they are located.

#### Delivers airflow even in diagonal directions

You can freely turn on "Direct" mode depending on personal prefereuce. This allows for air conditioning in diagonal directions which was difficult for models that could only swing the airflow up and down. This feature is perfect for when you come back home on a hot day.



## **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.)

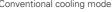
	Conventional	Econo Cool
Ambient temperature	35°C	35°C
Set temperature	25°C	27°C
Perceived temperature	30°C	29.3°C

#### 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



#### Permand 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 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.

#### Circulator Mode

After reaching the target temperature, heating mode will automatically switch to circulator mode, which makes the unit go into "fan-only" state and mixes warm air to eliminate uneven temperature in the room.

## **AIR QUALITY**

### 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

Bacteria



Test results have confirmed that Plasma Quad Plus neutralizes 99% of bacteria in 162 minutes in a 25m3 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 25m³ 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 25m³ 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 28m³ test space.

<In-company investigation>

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

<Test No.> ITEA Report No. T1606028

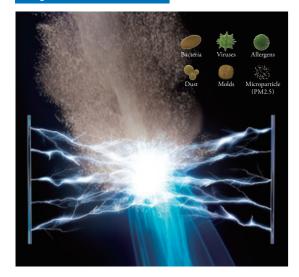
Model	Name	Method	Bacteria	Viruses	Molds	Allergens	Dust	PM2.5*
FH Series	Plasma Quad	One-Stage Plasma	А	А	В	В	С	
LN Series	Plasma Quad Plus	Two-Stage Plasma	А	А	А	А	А	А

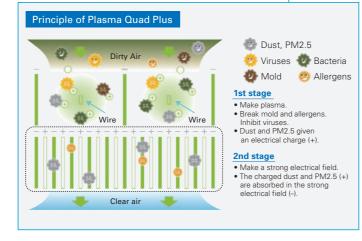
- A: Highly effective
- B: Effective

- C: Partially effective

\*PM2.5: Particles smaller than 2.5um

#### mage of Plasma Quad Plus



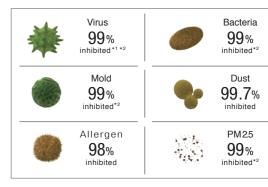


Hi-performance Plasma Filtration System

#### Plasma Quad Connect (Optional Parts)

Plasma Quad Connect is an high-performance air purifying device which can even be installed on the existing units, contributing to a better air quality in your room. Plasma Quad Connect applies a voltage of 6,000 volts to the electrode to generate plasma, effectively removing various kinds of particles such as viruses, bacteria, molds, allergens, dust, and PM2.5.





- \*1 The result of test with Influenza A virus.
- \*2 The result is based on the test with a device installed on the representative indoor unit. (MSZ-AP series)

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#### **Specifications**

Model Name	MAC-100FT-E	PAC-HA11PAR, PAC-HA31PAR PAC-HA21PAU, PAC-HA31PAU (Attachment for Ducted Indoor Units)*1,*3	PAC-KE91PTB-E, PAC-KE92PTB-E PAC-KE93PTB-E, PAC-KE94PTB-E PAC-KE95PTB-E (Box for Ducted Indoor Units) *1, *3	PAC-SK51FT-E <sup>-4</sup>
Product Image		PQ attachment	PQ box	
Compatible with	MSZ, PKA, and PKFY*2 (Wall mounted models)	SEZ, PEAD, and PEFY*2	PEAD, and PEFY*2	PLA and PLFY*2 (4-way Cassette 3x3 models)
Input Voltage	Single Phase AC220~240V	_	_	Single Phase AC220~240V
Fequency	50/60Hz	-	-	50/60Hz
Power Consumption	4W	_	_	4W
Size H×W×D	56mm×499.5mm×168mm	_*6	247mm×917mm×179mm*7	134mm×840mm×840mm
Weight	1,600g	360g**6	4,570g* <sup>7</sup>	8,700g

- \*1 Both MAC-100FT-E and PQ Attachment or PQ box will be required when using with ducted models. \*2 Please contact your nearest sales office about compatible model. \*3 Specifications are subject to change without notice. \*4 When multi-functional casement or automatic filter elevation panel is used/installed, PAC-SK51FT-E can not be used. \*5 The image shows rear suction. \*6 Depends on model. Shows weight of PAC-HA11PAR. \*7 Depends on model. Shows size/weight of PAC-KE92PTB-E.
- Test Report Results Following test results were conducted under controlled laboratory conditions. Performance might differ in real life environmen

Tested Materials		Tested Standard	Capacity	Time	Result	Testing Organization	Test Report
Virus	New Coronavirus (SARS-CoV-2)	Original	_ *8	360min	99.8% inhibited*9	Japan Textile Products Quality and Technology Center	20KB070569
Virus	Influenza A	JEM1467	25m <sup>3</sup>	175min	99% inhibited* <sup>10</sup>	SMC Virus Research Center Japan (JAPAN)	R2-003
Bacteria	Staphylococcus Aureus	GB21551.6-2010	30m <sup>3</sup>	335min	99% inhibited* <sup>10</sup>	CHEARI (Beijing) Certification & Testing Co., Ltd.	WK-21-50161
Mold	Penicillium Citrinum	JEM1467	25m <sup>3</sup>	160min	99% inhibited* <sup>10</sup>	Life Science Research Laboratory (JAPAN)	LSRL- 51021E-E091
Allergen	Cat Fur and Pollen	Original	*8	-	98% inhibited* <sup>11</sup>	Institute of Tokyo Environmental Allergy (JAPAN)	No.T1606028
Dust	Dust and Mites	Original	*8	-	99.7% inhibited* <sup>11</sup>	Institute of Tokyo Environmental Allergy (JAPAN)	No.T1606028
PM 2.5	Cigarette smoke	JEM1467	25m <sup>3</sup>	300min	99% inhibited* <sup>10</sup>	Life Science Research Laboratory (JAPAN)	SRL-21010E- E091

- \*8 The test was conducted on the Plasma Quad device alone, not designed to evaluate product performance. \*9 The result without the effect of natural attenuation is 963%.
  \*10 The result is based on the test with a device installed on the representative indoor unit.(MSZ-AP series) \*11 It shows the result when allergen and dust pass through the c

## **AIR QUALITY**

#### **Filters & Cleaning Functions**



#### 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 also generates antibacterial, antifungal, and deodorant effects.



#### 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

Silver-ionized Air Purifier Filter made of non-woven fabric can capture tiny particles. Silver ions and enzymes contained in the filter effectively act on bacteria and allergens and neutralises them.



#### 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



#### Dual Barrier Material

Antifouling materials are kneaded into horizontal vane and vertical vane, preventing dust and greasy dirt accumulating on the surface of



#### Deodorising Filter Deodorising Filter

The catalyst in the Deodorising Filter denatures the odorous components and destroys them from the source of the odour, quickly delivering fresh air to your room.



#### V Blocking Filter

V Blocking Filter with antiviral effect inhibits 99% of adhered virus, and other harmful substances, such as bacteria, mold and allergen. Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your

## **AIR QUALITY**



Provide clean air and protection for your indoor air quality around the clock without taking up floorspace.

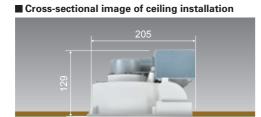


#### Plasma Quad Technology

Plasma Quad technology was developed by Mitsubishi Electric in 2012. It suppresses airborne viruses, bacteria and allergens as they pass through an electrical field that is generated by applying DC voltage to a discharger comprising a discharging electrode and counter electrode.

#### Simple & Floorspace-saving Installation

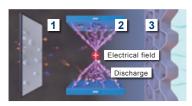
No duct work is needed, and no floorspace is taken up.



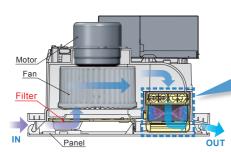
OF THE PERSON NAMED IN 240

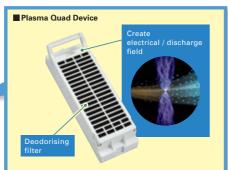


#### Structure

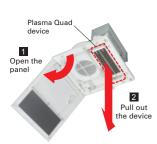


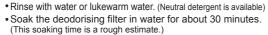
- 1 Large particles are collected by the filter
- 2 Particles that pass through the filter are suppressed and collected by the Plasma Quad device.
- 3 Clean air is released into the room.





#### Maintenance-saving









#### **Dual Barrier Coating**

Dual Barrier Coating effectively prevents buildup of dust and dirt in the fan.

■ Comparison of the buildup of dust and dirt containing moisture on fan blades after 10 years of operation. (Test according to Mitsubishi Electric standards)



Without coating



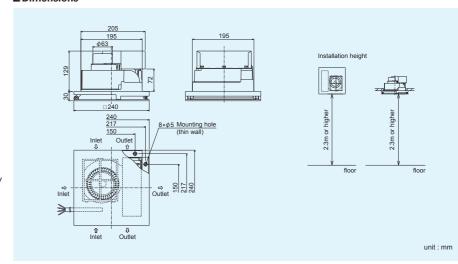
#### **Specifications**

# JC-4K-EU type

#### **Key Features**

- -Plasma Quad Device -Dual Barrier Coating
- -Low Noise Operation and Energy Efficiency -Installed to Ceiling and Wall

#### **■** Dimensions



#### ■ Specifications

- opecinication						
Model	Voltage	Fan speed	Power consumption [W]	Air volume [m³/ h]	Noise level [dB]	Weight [kg]
	220V	High	11.5	38	35	
	2200	Low	7.5	19	20	2.4
JC-4K-EU	230V	High	12.5	40	36.5	
JC-4K-EU		Low	8	20	21	2.4
	240V	High	13.5	42	38.5	
	2400	Low	8.5	21	22	

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#### **Test Report Results**

Following test results were conducted under controlled laboratory conditions. Performance might differ in real life environment

0				,	Ü		
	Tested Materials	Tested Standard	Capacity	Time	Result	Testing Organization	Test Report
Virus	SARS-CoV-2	New Coronavirus (SARS-CoV-2)	-	480min	99.4% suppression*1	Japan Textile Products Quality and Technology Center	20KB070532
	Influenza A	JEM1467	25m³	416min	99% suppression	Sendai Medical Center	R2-001
Bacteria	Staphylococcus aureus	JEM1467	25m <sup>3</sup>	388min	99% suppression	Kitasato Research Center for Environmental Science	No.2015_0046
Allergen	Pollen	Original	-	-	88% suppression*2	Institute of Tokyo Environmental Allergy	15M-RPTMAY021
PM2.5	Cigarette smoke	JEM1467	27.5m <sup>3</sup>	370min	99% suppression	Mitsubishi Electric	-

- \* 1 It shows the result against the virus attached to the testing equipment which using the plasma quad technology.
  \* 2 The test was conducted on the Plasma Quad device only. It shows the result when allergen pass through the device once.

## 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.



#### Ending 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

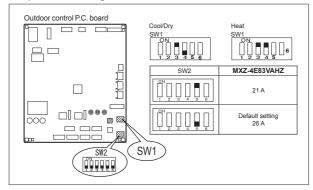
Especially useful at the time of power outages, the unit turns back on automatically when power is restored.

#### 10°C Heating

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

\*MLZ and MFZ series: Only when using "i-save" mode, the temperature can be set to 10°C, but not in 1°C increments.

#### ■ 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.
- \*Night mode does not function when connected to MXZ.



#### 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.



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.
c.00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
6:00			Automatically change	es to high-power opera	tion at wake-up time		
800			, , , ,	3   1 1 1 1			
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00 14:00		Automatic	Midday is warmer, so the temperature is set lower				
15:00							
18:00	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C
2000 2000	Automatically turns on, synchronized with arrival at home					Automatically raises ten match time when outsid	nperature setting to de-air temperature is low
(during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
		Automa	atically lowers tempera	ture at bedtime for ene	ergy-saving operation a	t night	
						_	



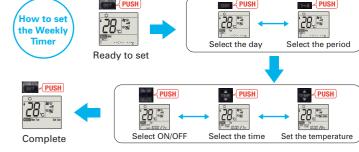
Pattern Settings: Input up to four settings for each day

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



- · 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 in putting 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



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.



The setting can be easily checked in the dark.

## **INSTALLATION & MAINTENANCE**

#### **INSTALLATION**



#### Cleaning-free Pipe Reuse

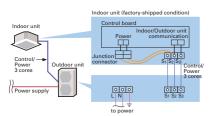
It is possible to reuse the same piping. It allows cleaning-free renewal of air conditioning systems that use R22 or R410 refrigerant.

#### Reuse of Existing Wiring

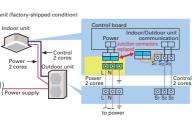
#### Wiring recycling problem solved! Compatible with other wiring connection methods\*

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.

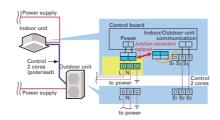
#### Single Harness Control/Power Line Method



#### **Dual Harness Control Line/Power Line Method**



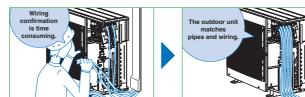
#### Separate Power Supply Method



#### Wiring/Piping Correction Function\*

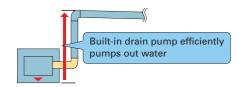
The push of a single button is all that is required to confirm that piping and wiring are properly connected. Corrections are made automatically if a wiring error is detected, eliminating the need for complicated wiring confirmation work when expanding the number of

- \* 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.



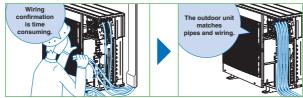
#### Drain Pump

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.



#### Pump Down Switch



stop refrigerant recovery peration automatically. Valve in refrigerant circuit

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#### **MAINTENANCE**

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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.



Operation failures are recorded, allowing confirmation when needed.

## SYSTEM CONTROL

#### SYSTEM CONTROL

#### PAR-41MAA/PAC-YT52CRA/PAC-CT01MAA

Units are compatible for use with the PAR-41MAA, PAC-YT52CRA or PAC-CT01MAA remote controller, which has a variety of management

#### Group Control System Group Control

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

#### M-NET Connection

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

#### COMPO (Simultaneous Multi-unit Operation)

(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

#### Wi-Fi i) 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
- 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







Multiple indoor units can be connected to a single outdoor unit.

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

#### 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

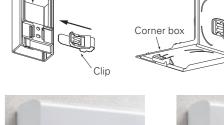


\*When mounting on the right side of the unit

# Interface

#### 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.













Interface

Right side

Bottom right

Bottom left

#### Extended cooling set temperature range\*

In environments such as gyms where people do strenuous exercise, even if the room is cooled to an appropriate temperature, people may feel that it is hot, and they need a cooler air. To satisfy such demands, we have extended the lower limit of the cooling set temperature range from 19–30°C. to 14–30°C.

\*Insulation kit (PAC-SK36HK-E) is required when indoor unit is PLA series.

\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



#### Display of model names and serial numbers\*

The model names and serial numbers of the indoor/outdoor units that are connected to the MA smart remote controller can be automatically acquired and displayed through one simple operation. This eliminates the need to directly check each unit and helps with inquiries in the case of an abnormality.

\*Availability of this function is depending on outdoor unit,



Collect model names and S/N
0 OU PUZ-ZM200YKA2
IU1 PLA-ZM50EA2
IU2 PLA-ZM50EA2
IU3 PLA-ZM50EA2
IU4 PLA-ZM50EA2
Collect data: ✔
-Address + S/N

 Serial number display (example)

a III			^ /N I
—Address +			S/N
Collect model	names	and	S/N
0 OU 1ZU00001			
IU1 1ZA00001			
IU2 1ZA00002			
IU3 1ZA00003			
IU4 1ZA00004			
Collect data: 🗸			
—Address +		N	1ode I

#### Preliminary error history\*

\$ #14.0°c \$0

In addition to error history, the history of permissible abnormalities can be displayed. The feature enables the unit status check during inspection and maintenance. \*Availability of this function is depending on outdoor unit, indoor unit and remote controller

#### ●Error history (Sample)

	Error	history	1/4
Error	Unt#	dd/mm/yy	
E0	0-1	21/10/20	PM12:34
E0	0-1	20/12/20	AM 1:23
E0	0-1	20/11/20	PM10:55
E0	0-1	20/10/20	PM12:01
Error hi	story	menu:🔊	
<b>▼</b> Pag	je 🔺		Delete

#### Preliminary error history (Sample)

Preli	minary	/ error	hist.	1/8
Error	Unt#	dd/mm/y	'y	
E0	0-1	21/10/2	0 PM1:	2:34
E0	0-1	20/12/2	0 AM	1:23
E0	0-1	20/11/2	0 PM1	0:55
E0	0-1	20/10/2	0 PM1:	2:01
Error hi	story	menu:	)	
<b>▼</b> Pag	e 🛦		De	lete

#### Display of power consumption\*

It is possible to measure, acquire, and display the amount of energy used by each air conditioning system.

\*Availability of this function is depending on outdoor unit, indoor unit and remote contro

< Data Collection Period >

Time data: Every 30 minutes over the past month Monthly/daily data: Monthly over the past 14 months Energy consumption values are calculated from estimated power consumption values according to the operating conditions. They may vary from the actual power consumption values. Please note that the power consumption of optional parts is not included except in the case of optional parts that have their power supplied directly by the outdoor unit.

#### ●Every 30 minutes (example)

Ener	gy data
2019- 1-1	1234.5kWh 1/6
0:30 123.4kWh	n   2:30 123.4kWh
1:00 123.4kWh	n   3:00 123.4kWh
1:30 123.4kWh	n   3:30 123.4kWh
2:00 123.4kWh	n   4:00 123.4kWh
Return: 5	
— Date +	▼ Page ▲

#### ●Daily (example)

		-			
	[	Energ:	y data		
2019	- 1	1	23456.	7kWh	1/4
31	1234.	5kWh	27	1234.	5kWh
30	1234.	5kWh	26	1234.	5kWh
29	1234.	5kWh	25	1234.	5kWh
28	1234.	5kWh	24	1234.	5kWh
Retui	m: <b>5</b>				
▼	Page				

When 3D Total Flow is equipped

	E	nergy data	
1/4	▶2019- 1	123456. 7kWh	1/3
5kWh	2018-12	123456.7kWh	
5kWh	2018-11	123456.7kWh	
5kWh	2018-10	123456.7kWh	
skWh	2018- 9	123456. 7kWh	
	View daily	data: <b>✓</b>	
	▼ Cursor	A	

#### Horizontal airflow settings

The 4-way cassette model with 3D Total Flow system lets you easily set the horizontal airflow direction. This allows you to freely tailor the air conditioning performance according to your particular space and purpose.

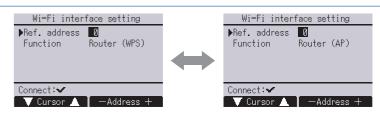
\*PLP-P160ELR-E is required to activate this function.

●Monthly (example)							
Ene	ergy data						
▶2019- 1	123456.7kWh	1/3					
2018-12	123456.7kWh						
2018-11	123456.7kWh						
2018-10	123456.7kWh						
2018- 9	123456.7kWh						
View daily data:✓							
▼ Cursor 🗸	▼ Cursor ▲						



#### Wi-Fi interface setting

When setting up a wireless LAN connection, it is now possible to switch between WPS and AP modes via the remote controller. You can configure a wireless network using the most convenient method according to the installation environment.



#### Easy To Read & Easy To Use Inverted display screen

The screen background color can be set to black to suit the atmosphere of the installation location.



#### 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



#### Control panel operation in fourteen different languages

Choose the desired language, among the following languages.

English	Spanish	Italian	Turkish	
French	Greek	Portuguese	Swedish	
German	Russian	Polish	Czech	
Hangarian	Dutch			

#### Temperature Control

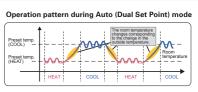


#### Two preset temperatures

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.





<sup>\*</sup>Please refer to the function list on pages 193-200 for the combination of the available units

#### **Energy-efficient Control Operation Control Functions**

#### 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. Airconditioning 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	$\rightarrow$	12:00	80%
12:00	$\rightarrow$	13:00	50%
13:00	$\rightarrow$	17:00	90%
17:00	$\rightarrow$	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.

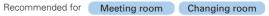
\*Auto-return cannot be used when Temperature Range Restrictions is in use.

#### 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 10minute units, in a range between 30 minutes and 4 hours. Eliminates all anxiety about forgetting to turn off the unit.







#### 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.

#### Operation Lock

#### Fixed temperature setting promotes energy savings

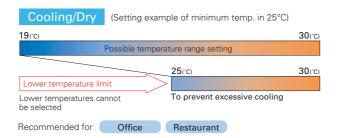
In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous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

Recommended for Office School Public hall Hospital Computer server facility

#### Temperature Range

#### 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



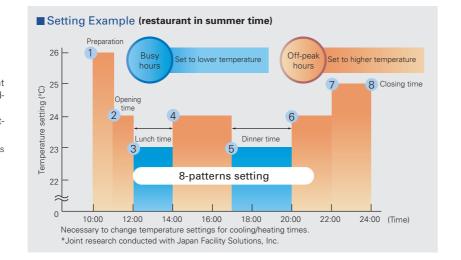
## Weekly

#### Weekly Timer with Two Types of Settings

Weekly schedule timer can save two different settings which can be easily switched according to different seasons

In addition, it offers eight different pattern setting per day. (on, off and temperature setting)

\*Weekly Timer cannot be used when On/Off Timer is



#### Installation/Maintenance Support Functions



Outdoor unit data accessed immediately, enabling fast maintenance (only PUZ/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



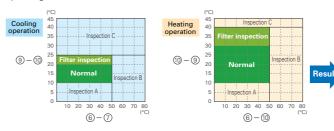
#### Display information (11 items)

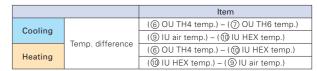
	Compressor	6	OU TH4 temp. (°C)		
COMP. current (A)		7	OU TH6 temp. (°C)		
② COMP. run time (Hr)			OU TH7 temp. (°C)		
3 COMP. ON/OFF (times)			Indoor Unit		
4	COMP. frequency (Hz)	9	IU air temp. (°C)		
Outdoor Unit			IU HEX temp. (°C)		
⑤ Sub cool (°C)			IU filter operating time* (Hr)		

\*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





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

#### 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.

## 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.

#### Auto-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.



#### Password for initial settings

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

#### 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 [ \* Dutton will switch the vane direction.

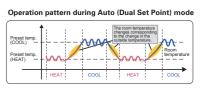


#### Y KENER. Flat 4-23/32 i back ATEMP DO. Max 14.5mm (9/16 in) 70mm (2-3/4 in)

#### **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.



- \*Please refer to the function list on pages 193-200 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.

**MA Touch Remote Controller** PAR-CT01MAA-SB PAR-CT01MAA-PB





PAC-CT01MAA-SB

PAR-CT01MAA-PB

#### User-friendly Visible big size icons on the full color touch panel display.

#### Full color touch panel display





#### Operation panels







Touch Panel

#### Flexibility Customized display, color on parameter and background, editable parameter, logo image on the initial display.

#### Multiple color pattern

180 color patterns can be selected for control parameters or background on the display.

#### Control parameter customize

Users can customize the panel todisplay the selected parameters only.

#### Control parameter customize

Simple operation panel is liked by users, especially in hotels. It is available to display only ON/OFF, set temp., fan speed.



#### Logo image customization

Logo image can be displayed on the initial



160 pixels

#### Available in a wide variety of colors to suit the decor of any room.





#### **Expandability** Smartphone / tablet App is available for setting, customize, and control.

#### Bluetooth® low energy technology

Remote controller can communicate with smartphone or tablet device via Bluetooth Low Energy (BLE). Operation & Setting App are available on the App store.



- \*The Bluetooth® word mark is trademark of Bluetooth SIG, Inc., USA.
- \*Contact the sales company for information on "Bluetooth" function.





#### Convenient BLE transmission functions for installation contractors

Initial setup for the remote controller can be easily performed using BLE transmission via a smartphone

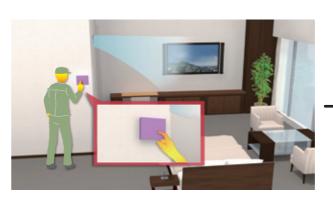
#### Previous model

Previously, initial setup (selecting function parameters) was only available via the remote controller installed each room.



New model

#### The initial setup (selecting function parameters) can now be performed in advance on a smartphone with the settings transmitted to the remote controller by enabling BLE transmission upon entry





#### Convenient BLE transmission functions for guests

The remote controller has been further upgraded with hotels in mind, to allow smartphone connectivity and multilingual support.

#### Smartphone connectivity

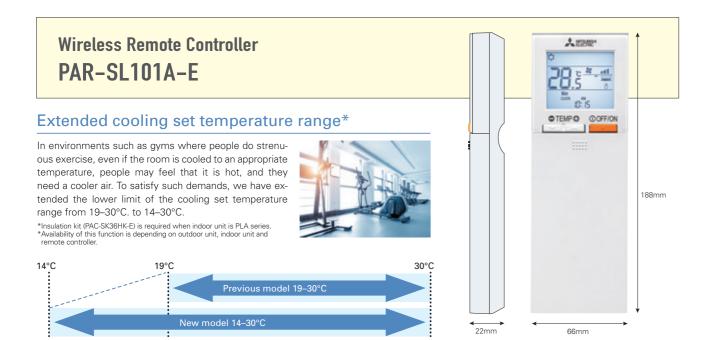
For example, hotel guests can operate the air conditioner via their smartphones, without getting out of bed.



#### Multilingual support

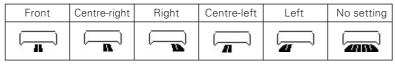
The smartphone app can be displayed in the language that the guest's smartphone is set to.

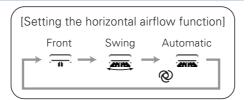




#### Horizontal airflow settings

The 4-way cassette model complete with the Smart 360-degree Airflow system lets you easily set the horizontal airflow direction. This allows you to freely tailor the air conditioning performance according to your particular space and purpose.





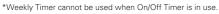
YESSE.

#### 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.
5.00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
6:00			Automatically change	es to high-power opera	tion at wake-up time		
800							
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
15:00						Midday is warmer	
1400		Automatic	ally turned off during v	vork hours		so the temperatur	e is set lower
15:00							
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 tur	ns on, synchronized w	ith arrival at home		Automatically raises ter	nperature setting to
22:00		Automatically tun	na on, aynomonized w	itii ailivai at lioilie		match time when outsi	de-air temperature is low
(during	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
sleeping hours)				ture at bedtime for ene		t night	
nours,			1			1	



<sup>\*</sup>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.

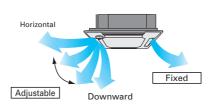




#### Individual Vane Settings

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





#### 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-SL101A-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.



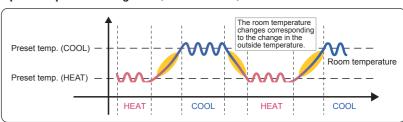
#### **Dual Set Point**

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



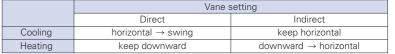
<sup>\*</sup> Only available for compatible models.

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

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









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

#### **Basic Functions**

Functions	Button	Liquid crystal
OFF / ON	① OFF/ON	
Preset temperature	● TEMP ◆	<b>88</b> .5
Mode	MODE	Cool Dry Heat Fan Auto Dual set point  *Dual Set Point function not operational first use.
Fan speed	FAN	<b>35 -111 35 @</b> 4-Speed Auto
Vane angle	VANE 🐚	5-step Swing Auto
Louver	WIDE VANE	Fixed Swing
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

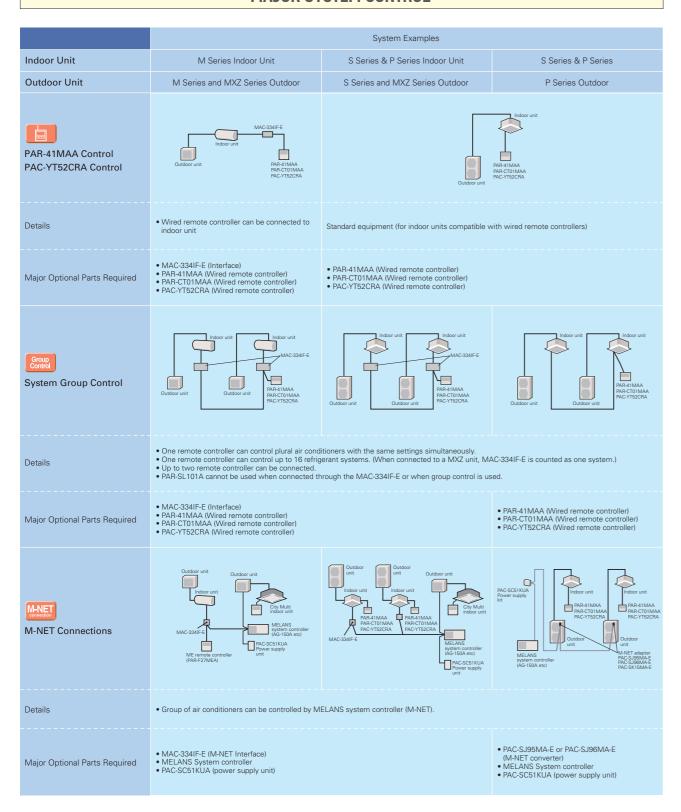
<sup>\*</sup>This remote controller is only compatible with the following models: SLZ-M15/25/35/50/60FA, PLFY-P15/20/25/32/40/50VFM-E1, PLA-ZM/RP35/50/60/71/100/125/140EA, PLFY-P20/25/32/40/50/63/80/100/125VEM-E

<sup>\*</sup>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



#### **OTHERS**

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

	System Examples	Connection Details	Control Details	Major Optional Parts Required
Remote On/Off Operation  • Air conditioner can be started/ stopped remotely.  (1) and 2) can be used in combination)	MAC-334IF-E Switch Switch Outstoor unit Remote control section (to be purchased locally)	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-334IF-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)	NAC-334IF-E Power supply Indoor unit Resistance LED Perchased locality	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-334IF-E (Interface)     Parts for circuit to be purchased locally (DC power source needed)     External power source (12V DC) is required when using MAC-334IF-E.

#### For P Series and S Series Indoor Units

	System E	Examples	D	
	Wired remote controller	Wireless remote controller	Details	Major Optional Parts Required
A 2-remote Controller Control With two remote controllers, control can be performed locally and remotely from two locations.	PAR-41MAA PAC-YTS2CRA  * Set "Main" and "Sub" remote controllers.  (Example of 1 : 1 system)	PAR-SL97/101A-E PAR-SL97/101A-E PAR-41MAA PAC-YT52CPA  * 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-41MAA     PAC-YT52CRA     (for PKA, PAC-SH29TC-E is required)     Wireless Remote Controller     PAR-SL97A-E/PAR-SL101A-E     (only for SLZ)     Wireless Remote Controller Kit for PC/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.	Relay box (to be purchased locally)  Adapter for remote controller  (Example of 1 : 1 system x 2)	Relay box to be purchased locally)  Adapter for removed for On/OH  PAR-SL97/101A-E  (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	Relay box (to be purchased) locally)  Connector remains Remote the purchased locally connector remote controller  (Example of 1 : 1 system x 2)	Relay box to be purchased locally)  Connector remote display  Remote PAR-SL97/101A-E (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.  The pulse signal can be turned on the pulse 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.	Remote operation adapted / Relay box  Remote period of the company	Remote operation adapted / Connector cable for remote display + Relay box  Remote PAR-SL97/101A-E  (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"
Allows On/Off operation with timer *For control by an external timer, refer to B Operation Control by Level Signal.	PAR-41MAA/ PAR-CT01MAA (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-41MAA / PAR-CT01MAA

## **FUNCTION LIST (1)**

Category	Icon					M si	ERIES								Mes	ERIES				
outogoty		_	MSZ-RW25/35/	MSZ-LN18/25/35/	MSZ-FT25/35/			MSZ-EF18/22/25/35/	MSZ-BT20/25/	MSZ-HR25/35/	MSZ-DW25/35/	MSZ-FH25/35/	MSZ-SF25/35/				MSZ-HJ25/35/		MFZ-KT25/35/	MLZ-KP25/35/
		Indoor unit	50VG	50/60VG2 (W)(V)(R)(B)	50VG	MSZ-AP15/20VG	50/60/71VG	42/50VG(W)(B)(S)	35/50VG	42/50/60/71VF	50VF	50VE2	42/50VE3	MSZ-GF60/71VE2	MSZ-WN25/35VA	MSZ-DM25/35VA	50VA	MSZ-HJ60/71VA	50/60VG	50VF
		Outdoor unit	MUZ-RW	MUZ-LN	MUZ-FT	MU	Z-AP	MUZ-EF	MUZ-BT	MUZ-HR	MUZ-DW	MUZ-FH	MUZ-SF	MUZ-GF	MUZ-WN	MUZ-DM	MUZ-HJ	MUZ-HJ	SUZ-M	SUZ-M
echnology	DC Inverter		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Joint Lap DC Mo	otor	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Reluctance DC R	Rotary Compressor																		
	Heating Caulking	g (Compressor)	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	DC Fan Motor		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
		olitude Modulation)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		and Twin LEV Control																		
T. 0	Grooved Piping		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
i-see Sensor		Control (3D i-see Sensor)	•	•								•								
_	AREA Temperatu		•	•								•								
Energy Saving		rgy-saving Feature	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Air Quality		Consumption Cut	•	•	•	•	•	•	•			•	•	•					•	
Air Quality	Plasma Quad Plu	us	•	•								-								
	Plasma Quad  Dual Barrier Coa	ating										•								
	Dual Barrier Mate		•	•																
	Silver-ionized Air		•	0.74	•				0	0.1	0.1				•		0	0.1		0.1
	V Blocking Filter		Opt	Opt Opt	•	•	Opt	•	Opt	Opt	Opt	•	Opt	Opt	•	•	Opt	Opt	•	Opt
	Air Purifying Filte		Орг	Орг	•	•	•	•	•	Opt	Opt		•	•						
Air	Double Vane	31	•	•	•	_		•			•	•		_						
Distribution	Horizontal Vane		•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•
	Vertical Vane		•	•	•	•	•	•			•	•	•	-						•
	High Ceiling Mod	de .																		•
	Auto Fan Speed		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	Circulator Mode	mode	<b>•</b> *5	•*5	<b>•</b> *5															
Convenience	On/off Operation	Timer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	"i save" Mode		•	•	•	•	•	•	•	•	•	•	•	•					•	•
	Auto Changeove	er	•	•	•	•	•	•	•	•1	•1	•	•	•					•*1	•
	Auto Restart		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2	Low-temperature	e Cooling	•	•	•	•	•	•	•	•	•	•	•	•					•	•
	10°C Heating			•	•	•	•		•	•	•									
-		ation (Outdoor Unit)																		
	Night Mode		•	•	•	•	•		•											
	Ampere Limit Adj	ljustment																		
	Operation Lock (	(Indoor)	•	•	•	•	•		•	•	•									
	Operation Lock (																			
	Built-in Weekly T	imer Function	•	•	•	•	•	•				•	•	•					•	•
	Drive Mode Sele	ector	•																	
System	PAR-41MAA Con	ntrol *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
Control	PAR-CT01MAA	Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
	PAC-YT52CRA C	Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt			Opt	Opt
	Centralised On/C	Off Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt			Opt	Opt
	System Group Co	Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt			Opt	Opt
	M-NET Connection	ion *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt			Opt	Opt
	Wi-Fi Interface		•	•	<b>●</b> *6	<b>•</b> *6	<b>●</b> *6	<b>●</b> *6	<b>●</b> *6	<b>●</b> *6	<b>●</b> *6	Opt	Opt	Opt	Opt	Opt			Opt	Opt
	Energy Consumption	n Monitoring through MELCloud																		
Installation	Cleaning-free Pip	pe Reuse	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Wiring/Piping Co	prrection Function																		•
	Drain Pump																			•
	Flare Connection	n	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Maintenance	Self-Diagnosis Fun	nction (Check Code Display)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		unction	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

<sup>\*1</sup> 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 pages 115-116 for details.

\*3 Please refer to "System Control" on pages for details.

\*4 When connected to MXZ outdoor units, the outdoor operating sound will not change.

\*5 Available only for Scandinavian model.

\*6 Only VGK model

## **FUNCTION LIST (2)**

Category	Icon					S SERIES											P SERIES			
	ig Indoor unit			SLZ-M15/25/3	85/50/60FA2 *4		SE	Z-M25/35/50/60/71DA	A(L)2		PLA-2	ZM35/50/60/71/100/125	5/140EA2			PLA-M3	5/50/60/71/100/125/	140EA2		
	Outdoor unit		SUZ-M	SUZ-KA	PUZ-ZM	PUHZ-ZRP	SUZ-M	SUZ-KA	PUZ-ZM		PUHZ-SHW	PUZ-ZM	PUHZ-ZRP	PUHZ-SHW	PUZ-ZM	PUHZ-ZRP	SUZ-M	SUZ-KA	PUZ-M	PUHZ-P
nction	3D Total Flow											•			•				•	
erit-up	2+1 Back-up rotation				•				•			•			•				•	
	Extended cooling set temperature r	nge										•			•				•	
	Display of model names and serial	umbers			•				•			•			•				•	
	Display of power consumption		•		•		•		•			•			•		•		•	
	Avoiding simmltaneous defrosting				•				•			•			•				•	
	Defrosting when people are abse	t			•							•			•					
	Defrosting when operation is stop	ed			•				•			•			•					
	Collection of operation data via M	LCloud			•				•			•			•				•	
	Demand control via MELCloud				•				•			•			•				•	
	Notification of potential abnormality vi	MELCloud			•				•			•			•				•	
Technology	DC Inverter		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	Joint Lap DC Motor		•	•			•	•				35-71	35-71		35-71	35-71	•	•	100	100
	Magnetic Flux Vector Sine Wave Driv				•	•					•	•	•	•	•	•			•	•
	Reluctance DC Rotary Compressor		•	•			•	•				35-71	35-71		35-71	35-71	•	•	100-140	100-140
	Highly Efficient DC Scroll Compresso				•	•	_				•	100-250	100-250	•	100-250	100-250		_	200-250	200-250
	Heating Caulking (Compressor)		•	•			•	•				35-71	35-71		35-71	35-71	•	•	100	100
	DC Fan Motor		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	Vector-Wave Eco Inverter			-	•	•					•	05.140	05.440	•	05.440	05.440			400 4401/	100 1101/
	PAM (Pulse Amplitude Modulation Power Receiver and Twin LEV Contro		•	•	•	•	•	•			•	35-140	35-140	•	35-140	35-140	•	•	100-140V	100-140V
	Grooved Piping		•	•	•	•	•	•			•	35-250	35-140	•	35-250	35-140	•	•	100-250	100-140
i-saa Sans	Felt Temperature Control (3D i-see Sens	rl					•	•												
1-366 3613	AREA Temperature Monitor	1)	Opt	Opt	Opt	Opt					Opt Opt	Opt	Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt	Opt Opt	Opt Opt	Opt
Energy Savis	ng Demand Function		Opt	Opt	Opt	Opt					Opt	Opt	Opt	Opt	Opt	Opt	Орг	Орг	Opt	Opt
Attractive			•	•	•	•					Ф	Ф	Φ.	Ф	Ф	Орг	•	•	Орг	Орг
, madavo	Auto Vane		•	•	•	•					•	•	•	•	•	•	•	•	•	•
Air Quality			•	•	•	•					•	•	•	•	•	•	•	•	•	•
,	High-efficiency Filter										Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Oil Mist Filter										Орг	Ор.	Орг	Op.	Op.	Орг		Орг	Op.	Орг
	Long-life Filter		•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Filter Check Signal		•	•	•	•					•	•	•	•	•	•	•	•	•	•
Air	Horizontal Vane		•	•	•	•					•	•	•	•	•	•	•	•	•	•
Distributio	Vertical Vane																			
	High Ceiling Mode		•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Low Ceiling Mode										•	•	•	•	•	•	•	•	•	•
	Auto Fan Speed Mode		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
Convenienc	On/off Operation Timer		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	Auto Changeover		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	Auto Restart		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	Low-temperature Cooling		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
suo	Low-noise Operation (Outdoor Un	t)			•	•					•	•	•	•	•	•			•	•
in d	Ampere Limit Adjustment				60-140V	60-140V					112/140	60-140V 200/250	60-140V 200/250	112/140	60-140V 200/250	60-140V 200/250				
_	Operation Lock																			
	Rotation, Back-up and 2nd Stage Cut-	n Functions			•	•					•	•	•	•	•	•			•	•
	Dual Set Point *3		_	_	•	•						•	•	_	•	•			•	•
System Control	PAR-41MAA Control *1		Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	PAR-CT01MAA Control *1		Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	PAC-YT52CRA Control *1		Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Centraliesd On/Off Control *1  System Group Control *1		Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	M-NET Connection *1		Opt	Opt	Opt	Opt	Opt Opt	Opt			Opt	Opt	Ont	Ont	Ont	Opt	Opt	Opt	Opt	Opt
	COMPO *2		Opt	Opt	71-140	71-140	Орг	Opt			Opt	71-250	Opt 71-250	Opt	Opt 71-250	Opt 71-250	Opt	Opt	Opt	Opt
Installation	n Cleaning-free Pipe Reuse		•	•	71-140	71-140	•	•			•	71-250	71-250	•	71-250	71-250	•	•	•	•
ottanau0i	Reuse of Existing Wiring										Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
	Wiring/Piping Correction Function										Орг	Орг	Ορι	Орг	Ορι	Ορι			Орг	Орг
	Drain Pump		•	•	•	•	Opt	Opt			•*5	<b>●</b> *5	<b>*</b> 5	<b>●</b> *5	<b>*</b> 5	•*5	<b>●</b> *5	•*5	•*5	•*5
	Pump Down Switch		_				Орг	Орг			•	•	•	•	•	•			•	•
	Flare Connection		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
Maintenand	Self-Diagnosis Function (Check Co	e Display)	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	Failure Recall Function		•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
	to "System Control" on pages for details		-		umorical figure is liste	_			1	l			_			_		_	_	

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

<sup>11</sup> Please refer to "System Control" on pages for details.
22 Please refer to page 57 for details.
33 This function is only available with PAR-41MAA, PAC-YT52CRA, PAR-SL101A-E.
43 SLZ-M15 can be connected with R32 MXZ only.
5 PEAD-M JAL are not equipped with a drain pump.

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																P SERIES										
	oinatíc	Indoor unit			PEAD-M35/50		,					200/250LA				M35/50LA(L)2				M60/71/100						71/100/125/140			PCA-M				71/100/125/1		
		Outdoor unit	PUHZ -SHW	PUZ -ZM	PUHZ -ZRP	PUZ -M	PUHZ -P	SUZ -M	SUZ -KA	PUZ -ZM	PUHZ -ZRP	PUZ -M	PUHZ -P	PUZ -ZM	PUHZ -ZRP	PUZ -M	PUHZ -P	PUHZ -SHW	PUZ -ZM	PUHZ -ZRP	PUZ -M	PUHZ -P	PUZ -ZM	PUHZ -ZRP	PUZ -M	PUHZ -P	SUZ -M	SUZ -KA	PUZ -ZM	PUHZ -ZRP	PUHZ -ZRP	PUZ -ZM	PUHZ -P	PUZ -M	SUZ -M
Function merit-up	3D Total Flow																																		
	2+1 Back-up rotation			•		•				•		•		•		•			•		•		•		•				•						
	Extended cooling set ter			•		•				•				•		•			•		•		•		•				•			•		•	
	Display of model names a			•		•		•		•		•		•		•			•		•		•		•		•		•			•		•	•
	Avoiding simmltaneous			•		•				•		•		•		•			•		•		•		•				•			•		•	
	Defrosting when people																																		
	Defrosting when operation	on is stopped		•						•				•					•				•						•			•			
	Collection of operation da	ata via MELCloud		•		•				•		•		•		•			•		•		•		•				•			•		•	
	Demand control via MEL	Cloud		•		•				•		•		•		•			•		•		•		•				•			•		•	
	Notification of potential abnor	rmality via MELCloud		•	_	•				•		•		•		•	_		•		•		•		•				•		_	•	_	•	
Technology	DC Inverter		•	05.74	05.74	400	400	•	•	•	•	•	•	05.74	05.74	400	400	•	00/74	00/74	400	400	05.74	05.74	400	400	•	•	-	-	-	-	400	100	•
	Joint Lap DC Motor  Magnetic Flux Vector Sir	ne Wave Drive	•	35-71	35-71	100	100	•	•	•	•	•	•	35-71	35-71	100	100	•	60/71	60/71	100	100	35-71	35-71	100	100	•	•	71	71	71	71	100	100	•
	Reluctance DC Rotary C			35-71	35-71	100-140	100-140	•	•					35-71	35-71	•	100-140		60/71	60/71	100-140	100-140	35-71	35-71	100-140	100-140	•	•	71	71	71	71	100-140	100-140	•
	Highly Efficient DC Scrol		•	100-250	100-250	200/250	200/250			•	•	•	•	100-200	100-200		200	•	100-250	100-250	200/250	200/250	100-250	100-250	200/250	200/250			100-250	100-250	100-250	200-250	200/250	200/250	
	Heating Caulking (Comp			35-71	35-71	100	100	•	•					35-71	35-71				60/71	60/71	100	100	35-71	35-71	100	100	•	•	71	71	71	71	100	100	•
	DC Fan Motor		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Vector-Wave Eco Inverte	er	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	
	PAM (Pulse Amplitude M		•	35-140	35-140	100-140V	100-140V	•	•					35-140		100V-140V	100V-140V	•	60-140	60-140	100-140V	100-140V	35-140	35-140	100-140V	100-140V	•	•	71-140	71-140	71-140	71-140	100-140V	100-140V	•
	Power Receiver and Twi	n LEV Control	•	35-250	35-140	100-250	100-140			•		•		35-200	35-140		100-140	•	60-250	60-140	100-250	100-140	35-250	35-140	100-250	100-140			71-250	71-140	71-140	71-250	100-140	100-250	
i-see Sensor	Grooved Piping  Felt Temperature Control (	(2D i one Conner)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
I-see Sensor	AREA Temperature Moni	, ,																																	
Energy Savino	g Demand Function	itoi	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	
Attractive	Pure White		Орг	Орг	Орг	Орг	Орг			Орг	Орг	Орг	Орг	•	<b>Θ</b>	•	•	•	Φ.	•	Φ.	Φ.	Φ.	Φ.	Φ.	•	•	•	Орг	Орг	•	•	Φ.	•	•
	Auto Vane													•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							
Air Quality	Fresh-air Intake																						•	•	•	•	•	•	•	•					
	High-efficiency Filter																						Opt	Opt	Opt	Opt	Opt	Opt							
	Oil Mist Filter																												•	•					
	Long-life Filter		•	•	•	•	•	•	•	Opt	Opt	Opt	Opt										•	•	•	•	•	•	_		•	•	•	•	•
A:-	Filter Check Signal Horizontal Vane		•	•	•	•	•	•	•	•	•	•	•	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	•	•	•	•	•	•	•	•	•	•	•	•	•
Distribution	Vertical Vane													•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•
	High Ceiling Mode																						•	•	•	•	•	•							
	Low Ceiling Mode																						•	•	•	•	•	•							
	Auto Fan Speed Mode		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•
Convenience	On/off Operation Timer		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Auto Changeover		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Auto Restart		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Low-temperature Cooling		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
stions	Low-noise Operation (Ou Ampere Limit Adjustmen		112/140	60-140\/	60-140V	•	•			•	•	•	•	71-140V	71-140V	•	•	112/140	60-140V	60-140V	•	•	60-140V	60-140V	•	•			•	71-140V	71-140V	71-140V	•	•	
Fun	Operation Lock	ı	112/140	60-140V	200/250									71-1400	200			112/140	60-140V	200/250			60-140V	200/250						200/250	200/250	71-1400			
	Rotation, Back-up and 2nd St	tage Cut-in Functions	•	•	•	•	•			•		•		•	•	•	•	•	•	•	•	•	•	•	•	•			•	•					
	Dual Set Point *4			•	•	•	•			•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•									
System	PAR-41MAA Control *1		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	•	•	•	•	•
Control	PAR-CT01MAA Control *		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 *		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 Contr		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
	System Group Control *1	1	0	•	0	•	•	Opt	Opt	•	•	•	•	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	•	•	•	•	Opt	Opt	•	•	Opt	Opt	Opt	Opt	Opt
	M-NET Connection *1  COMPO *2		Opt	Opt 71-250	Opt 71-250	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt 71-200	Opt 71-200	Opt	Opt	Opt	Opt 71-250	Opt 71,250	Opt	Opt	Opt 71-250	Opt 71-250	Opt	Opt	Opt	Opt	Opt 71-250	Opt 71-250	Opt 71-250	Opt 71-250	Opt	Opt	Opt
Installation	Cleaning-free Pipe Reus	ie	•	71-250	71-250	•	•	•	•	•	•	•	•	71-200	71-200	•	•	•	71-250	71-250	•	•	71-250	71-250	•	•	•	•	71-250	71-250	71-250	71-250	•	•	•
. I StandtiOI I	Reuse of Existing Wiring		Opt	Opt	Opt	Opt	Opt							Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt	Opt	Opt	
	Wiring/Piping Correction		- 144	- 6-											× F				- 6.		25.	- 6-1	- 61	- 61	- 61				- /**	- 67	- 6-	- 141	- 61	- 100	
	Drain Pump		<b>•</b> *3	<b>•</b> *3	<b>0</b> *3	<b>•</b> *3	●*3	<b>•</b> *3	<b>•</b> *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt							
	Pump Down Switch		•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•					
	Flare Connection		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Maintenance	Self-Diagnosis Function (C	heck Code Display)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Failure Recall Function		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

<sup>\*1</sup> Please refer to "System Control" on pages for details.
\*2 Please refer to page 64 for details.
\*3 PEAD-M JAL are not equipped with a drain pump.
\*4 This function is only available with PAR-41MAA, PAC-YTS2CRA, PAR-SL101

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)**

Cate	gory	Icon							MXZ s	SERIES										MXZ SERIES		
		Series			Std			Lo-	std	Н	2i	Lo	-std		Std				Std		Hyper H	Heating
					MXZ-VA(2)			MXZ	Z-VA	MXZ	Z-VA	MX	Z-VF		MXZ-VF3				MXZ-VF		MXZ-	-VFHZ
		Outdoor unit	2D	3E	4E	5E	6D	2DM	3DM	2E	4E	2HA	ЗНА	2F	3F	4F		4F	5F	6F	2F	4F
Tech	nology	DC Inverter	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Joiint Lap DC Motor	•	•	•	•		•	•	•		•	•	•	•	•		•	•		•	
		Magnetic Flux Vector Sine Wave Drive																				
		Reluctance DC Rotary Comperssor			83	•	•															
		Highly Efficient DC Scroll Compressor																				
		Heating Caulking (Compressor)	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		DC Fan Motor	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Vector-Wave Eco Inverter																				
		PAM (Pulse Amplitude Modulation)	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Power Receiver and Twin LEV Control		•	72				•				•		•	•						
$\vdash$		Grooved Piping	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
	-see Sensor																					
		AREA Temperature Monitor																				
- 1 ⊢		Demand Function																				
	Attractive	Pure White																				
		Auto Vane																				
	Air Quality	Fresh-air Intake																				
		High-efficiency Filter																				
		Oil Mist Filter																				_
	Air	Filter Check Signal																				
	Distribution	Horizontal Vane  Vertical vane																				
		High Ceiling Mode  Auto Fan Speed Mode																				
	Convenience																					
	Jonvenience	Auto Changeover	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Auto Restart	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Low- temperature Cooling	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		10°C Heating	<b>•</b> *1	•*1	<b>*</b> 1	<b>•</b> *1	<b>•</b> *1			<b>0</b> *1	<b>0</b> *1			<b>©</b> *1	<b>0</b> *1	<b>0</b> *1		<b>©</b> *1	<b>0</b> *1	<b>0</b> *1	<b>0</b> *1	<b>•</b> *1
		Low-noise Operation (Outdoor)	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Night Mode																				
		Ampere Linit Adjustment			83	•	•			•	•											
ons		Operation Lock (Indoor)																				
Functions		Operation Lock (Outdoor)	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
"		Built-in Weekly Timer Function																				
		Rotation, Back-up abd 2nd Stage Cut-in Functions																				
		Dual Set Point																				
	System	PAR-41MAA Control	Opt		Opt	Opt	Opt	Opt	Opt													
	Control	PAR-CT01MAA Cotrol	Opt		Opt	Opt	Opt	Opt	Opt													
		PAC-YT52CRA Control	Opt		Opt	Opt	Opt	Opt	Opt													
		Centralised On/off Control	Opt		Opt	Opt	Opt	Opt	Opt													
		System Group Control	Opt		Opt	Opt	Opt	Opt	Opt													
		M-NET Connection			Opt (83)	Opt	Opt			Opt	Opt											
		Wi-Fi Interface																				
		Energy/Consumption Monitaring trouth MEL Cloud																				
		СОМРО																				
		MXZ Connection	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>*</b> 2	<b>•</b> *2		<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>*</b> 2	<b>•</b> *2								
	nstallation	Cleaning-free Pipe Reuse										<b>●</b> *3	<b>•</b> *3	<b>●</b> *3	<b>●</b> *3	<b>●</b> *3		<b>●</b> *3	<b>•</b> *3	<b>●</b> *3	<b>•</b> *3	<b>•</b> *3
		Reuse of Existing Wiring																				
		Wiring/Piping Correction Function	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
		Drain Pump																				
		Pump Down Switch		•	•	•	•		•		•		•		•	•						
		Flare Connection	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
	Maintenance	Self-Diagnosis Function (Check Code Display)	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
		Failure Recall Function	•	•	•	•	•	•	•	•	•	•	•	•	•	•	L					

<sup>\*1</sup> 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 pages 113 for details.

\*3 Please refer to "System Control" on pages for details.

<sup>The figures listed in the table are "only when combined with an outdoor unit with the appropriate capacity range".

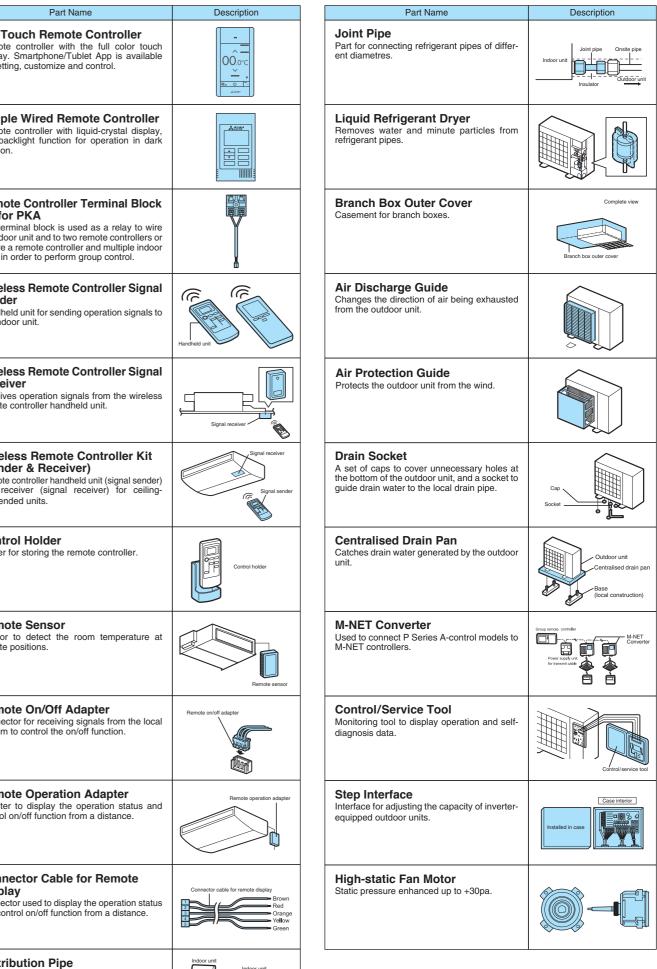
Opt: Separate parts must be purchased.</sup> 

#### Major Optional Parts

Part Name	Description
Plasma Quad Connect High performance air purifying device that effectively removes various kinds of air pollutants and is even installable on the existing indoor unit.	Plasma Quad Connect
<b>Deodorising Filter</b> Captures small foul-smelling substances in the air.	Deodorising filter
Air-cleaning Filter Removes fine dust particles from the air by means of static electricity.	Air-cleaning filter
V Blocking Filter Inhibits 99% of adhered virus, and other harmful substances, such as bacteria, mold and allergen.	V Blocking Filter
Silver-ionized Air Purifier Filter Captures the bacteria, pollen and other allergens in the air and neutralises them.	Silver-ionized Air Purifier Filter
Oil Mist Filter Element Filter element (12 pieces) that blocks the oil mist for ceiling-suspended models used in professional kitchens.	Filter frame Filter elemen Oil mist filter
High-efficiency Filter Element Element for high-efficiency filter. Removes fine dust particles from the air.	Plua (for directing airflow)  High-efficiency inter element  *For 4-way cassette units (PLA)
3D i-see Sensor Corner Panel for SLZ Corner panel holding the 3D i-see Sensor.	i-see Sensor corner panel
<b>3D Total Flow for PLA</b> Casement equipped with horizontal louver.	
3D i-see Sensor Corner Panel for PLA Corner panel holding the 3D i-see Sensor.	i-see Sensor corner panel
Shutter Plate Plate for blocking an air outlet of the 4-way cassette (PLA) indoor unit.	Shutter Plate

Part Name	Description
Multi-functional Casement Casement for fresh-air intake and attaching the high-efficiency filter element (optional).	Indoor unit body Multi-functional casement
Fresh-air Intake Duct Flange Flange attachment for adding a duct to take in fresh air from outside.	*For 4-way cassette units (PLA)
Space Panel Decorative cover for the installation when the ceiling height is low.	Space Panel
<b>Drain Pump</b> 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.	Decorative cover
MA Interface Interface for connecting with the PAR-41MAA remote controller and PAC-YT52CRA.	MA & contact terminal interface
System Control Interface Interface to connect with M-NET controllers.	System control interface Indoor unit
Wi-Fi Interface Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.	Indoor unit Indoor unit Smartphone
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.	Switch Indoor unit
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.	mar (0)

Part Name	Description
MA Touch Remote Controller Remote controller with the full color touch display. Smartphone/Tublet App is available for setting, customize and control.	
Simple Wired Remote Controller Remote controller with liquid-crystal display, and backlight function for operation in dark location.	Asser
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.	Handheld unit
Wireless Remote Controller Signal Receiver Receives operation signals from the wireless remote controller handheld unit.	Signal receiver
Wireless Remote Controller Kit (Sender & Receiver) Remote controller handheld unit (signal sender) and receiver (signal receiver) for ceiling-suspended units.	Signal receiver
Control Holder Holder for storing the remote controller.	Control holder
Remote Sensor Sensor to detect the room temperature at remote positions.	Remote sensor
Remote On/Off Adapter Connector for receiving signals from the local system to control the on/off function.	Remote on/off adapter
Remote Operation Adapter Adapter to display the operation status and control on/off function from a distance.	Remote operation adapter
Connector Cable for Remote Display Connector used to display the operation status and control on/off function from a distance.	Connector cable for remote display  Brown Red Orange Yellow Green
<b>Distribution Pipe</b> Branch pipe for P Series simultaneous multi- system use, or to connect two branch boxes for PUMY.	Indoor unit  Indoor unit  Distribution pipe  PP Series with 2 indoor units



#### Optional Parts List <Indoor>

White Prints   Whit		Option						Filter			Ι.		Plasma	Softdry	System	MA	Wi-Fi	Con	nector		V	virea Hem	ote Control Wireless		
Marchan   1960								V Blocki	ing Filter				Quad								Controller		Remote		ntrolle older
MSC-MINON	oor Unit		2360	2370	2380	2390	2450	2460	2470	2490	3000	3010	100	1001	334	497	587	1702	1710		CT01	YT52	SL100	MAC- 1200 RC-E	M 1: R
MS2-MONORMON																					_	_			-
MCS_LINESTANDON_CONTROLS	mountou																								
MSS_LENGWOVENERS    0   0   0   0   0   0   0   0   0														•							_				
MCS_LESPON_MONORMAN_						_													_		<b>0</b> *2	<b>●</b> *1			$\top$
MEZ-TROYON						•				•		•				•			•	<b>0</b> "1	<b>0</b> *2	<b>0</b> *1			
M22/TPS/C    0   0   0   0   0   0   0   0   0		MSZ-LN50VG2(W)(V)(R)(B)				•				•		•		•	•	•		•	•	●"1	<b>●</b> *2	●*1			$\top$
MSZ-FEWON		MSZ-LN60VG2(W)(V)(R)(B)				•				•		•		•	•	•		•	•	●"1	<b>●</b> *2	●"1			$\perp$
MSZ-FINYO				•									•				_	•	•	_	_	_			
MSZAPSYCO																	_		_	_	_	_			$\perp$
NEXT APPRING				•					•				_				_			_	_	_			$\perp$
MSZAPSYG   0   0   0   0   0   0   0   0   0							_										_			_	_	_			+
NEXAMPSIGN							•						_				_			_	_	_	-		+
MEX_APPLYCE													_				_				_	_			+
MSCAPPOYG   0   0   0   0   0   0   0   0   0																	_			_	_	_			+
MSS_APPIVG													_				_		_	_	_	_	1		+
MSZ.FFFVOR (MINIS)   0   0   0   0   0   0   0   0   0								•					_				_					_			+
MSZEFSOWN(MISIS)   0   0   0   0   0   0   0   0   0																	_			_	_	_			1
MSZ FEZYMONNING  S		MSZ-EF18VG(W)(B)(S)		•					•				•	•	•	•	●,3			<b>●</b> *1	<b>●</b> *2	●*1			Ţ
MSS_EFSYCON_MINIS)				•					•				•	•				•		_	_	_			I
MSZERSON MINISTER													_				_		_	_	_				ſ
MS2 EF 50VG (MY(P)(S)) MS2 AT 20VG MS3 AT		1 /1 /1 /											_				_			_	_	_			1
MS2-FT3VVG																	_			_	_	_			+
MSC-8739VG													_	•						_	_	_			+
MS2-RTSSVG													_				_			_		_			+
MSZ-PRSVE																	_			_		_			+
MSZ-HRSVF													_				_			_	_	_			+
MSZ-HRSVF													_				_			_				•	+
MSZ-HRZVF MSZ-HRZVF MSZ-HRZVF MSZ-HRZVF MSZ-MSZ-WSZ-WSZ-WSZ-WSZ-WSZ-WSZ-WSZ-WSZ-WSZ-W																	_			_		_		•	t
MSZ-HROVF MSZ-WSVF MS													_				●.3			_	_	_		•	$^{\dagger}$
MSZ-MOZENF MSZ-DWSSVF MSZ-DWSOVF MSZ-PROSVE		MSZ-HR50VF		•					•				•		•	•	<b>0</b> *3	•	•	<b>0</b> "1	<b>0</b> *2	<b>0</b> °1		•	T
MSZ-DW2SVF MSZ-DW50VF MSZ-DW50VF MSZ-PHS0VF MSZ-PSVF MSZ-PHS0VF MSZ-PSVF M		MSZ-HR60VF		•					•				•		•	•	●,3	•	•	@"1	<b>0</b> *2	<b>1</b> 1		•	
MSZ-DWSSVF MSZ-PUSOVF													_			•	_	•		_		_		•	$\perp$
MSZ-MSVFTSSVF MSZ-HSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-M																						_		•	1
MSV-FPSSVF													_					_		_		_		•	+
MSX-FRSVE2 MSZ-FHSSVE2 MSZ-FHSSVE2 MSZ-FHSSVE2 MSZ-FHSSVE3 MSZ-SE-SOVA MSZ-SE-																				_		_		•	+
MSZ-FH2VE2																				_		_			+
MSZ-FHSVE2				_					_												_	_			+
MSZ-FISOVE2  MSZ-SFISVA  MSZ-SFSOVA  MSZ-SFSOVA  MSZ-SFSOVS  MSZ-S					_						_						_				_	_			+
MSZ-SF50VA  MSZ-SF50VB3  MSZ-SF3VE3  MSZ-S											_									_	_				T
MSZ-SF20VB3  MSZ-SF23VB3  MSZ-MSZ-SF23VB3  MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-MSZ-													•				●,3				<b>0</b> *2	_			1
MSZ-SF30VE3  MSZ-SF30VE3  MSZ-SF50VE3  MSZ-SF50VE3  MSZ-GF60VE2  MSZ-GF60VE2  MSZ-GF10VE2  MSZ-GF10VE2  MSZ-MSZ-VR3VA  MSZ-WN2SVA  MSZ-WN2SVA  MSZ-WN2SVA  MSZ-WN2SVA  MSZ-MSZ-VR3VA  MSZ-WN2SVA  MSZ-MSSVA  MSZ-WN2SVA  MSZ-W		MSZ-SF20VA											•				●.3			<b>1</b> 1	<b>0</b> *2	<b>0</b> *1			
MSZ-SF42VE3 MSZ-SF60VE3 MSZ-GF0VE2 MSZ-MSSVA M																	_			_		_			
MSZ-SF50VE3 MSZ-GF0VE2 MSZ-GF0VE2 MSZ-MSZVA MSZ-WSZVA MSZ-WSZVA MSZ-WSZVA MSZ-WSZVA MSZ-WSZVA MSZ-WSZVA MSZ-DMSZVA MSZ-MSZVA													_				_			_		_			
MSZ-GF7/YE2  MSZ-M75/VA  MSZ-M																				_					1
MSZ-W125VA MSZ-W125VA MSZ-W125VA MSZ-DM35VA MSZ-DM35VA MSZ-DM35VA MSZ-DM35VA MSZ-DM35VA MSZ-DM35VA MSZ-DM35VA MSZ-HJ25VA				•	-		-						_							_		_	-		+
MSZ-WN3SVA																				_		_			+
MSZ-DM25VA MSZ-DM35VA MSZ-HJ25VA MSZ-HJ35VA MSZ-HJ35VA MSZ-HJ50VA MSZ-HJ60VA			-					-									_			_					+
MSZ-DM25VA													_		_	_		_	_	_			1		+
MSZ-HUZSVA  MSZ-HUZSVA  MSZ-HUJSVA  MSZ-HU																				_		_		•	1
MSZ-HJ35VA																								•	
MSZ-HJ50VA		MSZ-HJ25VA		•																				•	I
MSZ-HJ60VA																								•	
MSZ-HJ71VA																								•	1
MFZ-KT35VG																								•	1
MFZ-KT35VG	lee:																							•	
MFZ-KT50VG MFZ-KT60VG MFZ-KT60VG MFZ-KW25VG MFZ-KW35VG MFZ-KW35VG MFZ-KW50VG MFZ-KW60VG																					_				+
MFZ-KT60VG MFZ-KW25VG MFZ-KW25VG MFZ-KW25VG MFZ-KW25VG MFZ-KW50VG	arianig																								+
MFZ-KW25VG MFZ-KW35VG MFZ-KW35VG MFZ-KW50VG																				_	_				1
MFZ-KW35VG									•													_	1		+
MFZ-KW50VG																						_			
MFZ-KW60VG																									
				•					•						•	•	●.3	•							
28Sette MLZ-KP35VF     0																									T
MLZ-KP50VF	cassette	MLZ-KP35VF		•											•	•	●,3	•	•		<b>0</b> *2				

<sup>\*1</sup> Either MAC-334IF-E or MAC-497IF-E is required. Up to two wired remote controllers can be connected at the same time.

\*2 Either MAC-334IF-E or MAC-497IF-E is required. Only one wired remote controller can be connected.

\*3 Outside attachment only.

\*4 Available only for LN18/25/35/50/60VG2W.

#### Optional Parts List < Indoor>

	Option	Oil Mist	Long						Filter									Filter						iasilia Qi	ad Conne	CL				3D i-s Sens	or		Shutter	Insulation
		Filter Element	Long Life Filter			ment		2 *4		V B	locking Fi	ilter			Filte	r Box		Filter Box		Plasma Con	a Quad inect	Attach	ment for I	Ducted		Во	x for Duct	ted		Corn Pane	er el	Flow unit	Plate	KIL
or Unit		PAC- SG38 KF-E	PAC- KE85 LAF	PAC- SH59 KF-E	PAC-	SH89	PAC- SH90 KF-E	PAC- SK53	PAC- SK54 KF-E	PAC- SK55 KF-E	PAC- SK56 KF-E	PAC- SK57 KF-E	MAC- 2470 FT-E	MAC- 1416 FT-E	PAC- KE92 TB-E	PAC- KE93 TB-E	PAC- KE94 TB-E	PAC- KE95 TB-E	PAC- KE250 TB-F	MAC- 100 FT-E	PAC- SK51 FT-E	PAC- HA11 PAR	PAC- HA31 PAR	PAC- HA31 PAU	PAC- KE91 PTB-E	PAC- KE92 PTB-E	PAC- KE93 PTB-E	PAC- KE94 PTB-E	PAC- KE95 PTB-E	PAC- SF1 ME-E	SE1	U160	PAC- SJ37 SP-E	PAC- SK36 HK-E
way	SLZ-M15FA2								•																									
ssette	SLZ-M25FA2																																	
٤	SLZ-M35FA2		,						•																									
ξ	SLZ-M50FA2																																	
٤	SLZ-M60FA2																																	
	SEZ-M25DA(L)2																																	
onceald	SEZ-M35DA(L)2		<u> </u>																															
	SEZ-M50DA(L)2																			•		•												
	SEZ-M60DA(L)2		<u> </u>																	•		•												
	SEZ-M71DA(L)2																																	
accotto	PLA-ZM35EA2		<u> </u>					•																										
F	PLA-ZM50EA2																																	
	PLA-ZM60EA2			•				•																										•
	PLA-ZM71EA2		-																															•
	PLA-ZM100EA2			•				•													•											•		•
	PLA-ZM125EA2							•																										•
	PLA-ZM140EA2 PLA-M35EA2			•				•													•												•	•
	PLA-M35EA2 PLA-M50EA2		$\vdash$																		•													
	PLA-M60EA2																																	
-	PLA-M71EA2		-																		•												•	•
	PLA-M100EA2																														•			•
_	PLA-M125EA2			•																	•											•		•
	PLA-M140EA2			•																	•											•	•	•
	PEAD-M35JA(L)2		-																					•										
onocold	PEAD-M50JA(L)2																			•														
F	PEAD-M60JA(L)2																			•			•	•			•							
F	PEAD-M71JA(L)2																																	
F	PEAD-M100JA(L)2																			•														
F	PEAD-M125JA(L)2																																	
F	PEAD-M140JA(L)2		,																	•			•											
F	PEA-M200LA																																	
F	PEA-M250LA																																	
	PKA-M35LA(L)2																																	
nounted	PKA-M50LA(L)2		<u> </u>																															
F	PKA-M60KA(L)2																																	
F	PKA-M71KA(L)2		<u> </u>																	•														
	PKA-M100KA(L)2		4																															
uanandad	PCA-M35KA2				•																													
·	PCA-M50KA2																																	
	PCA-M60KA2 PCA-M71KA2					•					•																							
	PCA-M/1KA2 PCA-M100KA2																																	
	PCA-M100KA2 PCA-M125KA2																																	
_	PCA-M140KA2																																	
	PCA-M71HA2																																	
	PSA-M71KA																																	
tonding	PSA-M100KA																																	
	PSA-M125KA																																	
F	PSA-M140KA																																	

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<sup>\*10</sup> High-efficiency filter element(PAC-SH59KF-E) cannot be used with 3D Total Flow unit(PLP-U160ELR-E), Plasma Quad Connect(PAC-SK51FT-E), Insulation kit (PAC-SK36HK-E) and V Blocking Filter(PAC-SK53KF-E).
\*11 High-efficiency filter element(PAC-SH89KF-E) cannot be used with V Blocking Filter(PAC-SH89KF-E).
\*12 High-efficiency filter element(PAC-SH89KF-E) cannot be used with V Blocking Filter(PAC-SH89KF-E).
\*13 High-efficiency filter element(PAC-SH99KF-E) cannot be used with V Blocking Filter(PAC-SH90KF-E).

#### Optional Parts List <Indoor>

	Option	Fresh-	air Intake										System	MA &							Wi	red Remot	te Contro	ller		Wire	eless Re	mote Cont	troller		-	Remote	Remote	C
		D	uct	Space Panel				Drain Pun	пр			Decorative Cover	Control	Contact Terminal	Wi-Fi Interface		Power S	Supply Ter	minal Kit			Controller		Terminal Block kit	Signal	Sender	Si	gnal Rece	eiver	Kit	Remote Sensor	On/Off	Operation	on (
		FIE	ange										Interface	Interface										for PKA						(Sender & Receiver)		Adapter	Adapter	r
		PAC-	PAC-	PAC-	PAC-	PAC-	PAC-	PAC-	PAC-	PAC-	PAC-	PAC-	MAC-	MAC-	MAC-	PAC-	PAC-	PAC-	PAC-	PAC-	PAR-	PAR-	PAC-	PAC-	PAR-	PAR-	PAR-	PAR-	PAR-	PAR-	PAC-	PAC-	PAC-	
		SH65	SF28	SJ65		SK01		SJ93	SJ94	KE07	KE06	SF81	334	397	587	SK38	SG94	SG96	SG97	SJ39	41	CT01	YT52	SH29	SL97	SL101	SA9	SF9	SE9	SL94	SE41	SE55	SF40	
oor Unit		OF-E	OF-E	AS-E	DM-E	DM-E	DM-E	DM-E	DM-E	DM-E	DM-FI	KC-E	IF-E	IF-E	IF-E	HR-E	HR-E	HR-E	HR-E	HR-E	MAA	MAA	CRA	TC-E	A-E	A-E	CA-E	FA	FA-E	B-E	TS-E	RA-E	RM-E	
1-way cassette	SLZ-M15FA2												•	•	•						•	•				•*4		•			•	•	•*2	-
aboute	SLZ-M25FA2																									•*4		•					•*2	-
	SLZ-M35FA2												•	•	•						•	•	•			• 4		•			•	•	•*2	-
	SLZ-M50FA2																									<b>•</b> '4							•*2	-
Ceiling -	SLZ-M60FA2												•	•	•								•			• 4		•					•*2	-
onceald	SEZ-M25DA(L)2									•				•							DA2	DA2	DA2			• 4							•*2	
	SEZ-M35DA(L)2									•			•	•	•						DA2	DA2	DA2			• 4	•				•	•	•*2	_
	SEZ-M50DA(L)2									•				•	•						DA2	DA2	DA2			• 4	•				•		•*2	-
	SEZ-M60DA(L)2									•			•	•	•						DA2	DA2	DA2		•	• 4	•				•	•	•*2	-
-way	SEZ-M71DA(L)2 PLA-ZM35EA2	•		•									•	•	•						DA2	DA2	DA2		•	• 4				_		•	*2	_
Cassette	PLA-ZM50EA2			•									-1	•1						•	•		•			• 4					•	•	*2	
	PLA-ZM60EA2												71	91									•			• 4						•	•*2	-
	PLA-ZM71EA2	•											"1	•									•		•	• 4							•*2	_
	PLA-ZM100EA2	•											71	91							•		•		•	• 4						•	•*2	_
	PLA-ZM125EA2												*1	•									•			• 4							•*2	_
	PLA-ZM140EA2	•		•									•1	•1						•			•			• 4							• 2	-
	PLA-M35EA2												•1	•1									•			• 4							•*2	_
	PLA-M50EA2	•		•									91	•1									•			•*4			•				•*2	
	PLA-M60EA2												•"1	•												•*4							•*2	_
	PLA-M71EA2												•"	•"1									•			•*4							•*2	_
	PLA-M100EA2												•"1	•"												•*4							*2	_
	PLA-M125EA2	•		•									•	•	•					•	•	•	•			•*4			•		•	•	•*2	_
	PLA-M140EA2																									•*4							•*2	Ī
Ceiling -	PEAD-M35JA(L)2												•1	•"					•		•	•				•*4	•					•	•*2	_
onceald	PEAD-M50JA(L)2												•1	•"					•							•*4							•*2	Ī
	PEAD-M60JA(L)2												•1	•"1	•				•		•	•				•*4	•				•	•	•*2	Ī
	PEAD-M71JA(L)2												•"	•"												•*4							•*2	
	PEAD-M100JA(L)2												•"1	•1												•*4							•*2	
	PEAD-M125JA(L)2												•1	•1												•*4							•*2	
	PEAD-M140JA(L)2												•"	•"												•*4	•						•*2	
	PEA-M200LA												•"	•1												•*4							•*2	
	PEA-M250LA												•1	•1	•						•	•	•			•*4	•			<u> </u>	•	•	•*2	
Wall - mounted	PKA-M35LA(L)2												•1	•							•*3	•3	•,3			•*4							•*2	_
ou.nou	PKA-M50LA(L)2					•							•"1	•	•	•					•,3	•*3	•,3			•*4					•	•	•*2	_
	PKA-M60KA(L)2												•	•							•3	•3	•,3			• 4							4	
	PKA-M71KA(L)2												- "	- "							•*3	• *3	- *°			<b>•</b> '4								_
Ceiling -	PKA-M100KA(L)2												9"	• "							•3	•3	•,3			• '4								_
uspended	PCA-M35KA2						•						9"	9"	•			•			•	•	•			• 4					•		•*2	_
	PCA-M50KA2												9"	9"	•						•		•			• '4					•		•*2	_
	PCA-M60KA2								•				•4	9"	•			•			•		•			• 4				•	•	•	*2	_
	PCA-M71KA2 PCA-M100KA2													•"																			*2	
	PCA-M100KA2 PCA-M125KA2							•										•			•		•			• 4				•	•	•	*2	
	PCA-M125KA2 PCA-M140KA2							•							•			•					•			• 4					•	•	• *2	
	PCA-M140KA2																								•	• 4				•			*2	
loor -	PSA-M71KA																									• 4							*2	-
standing	PSA-M100KA																	•								• 4							•*2	
	PSA-M125KA																	•								• 4						•	•*2	_
	PSA-M140KA																	•								• 4							• 2	-

#### Optional Parts List <Outdoor>

	Option		Distribution Pipe			Joint F	Pipe		Liquid Refrigerar	t Dryer	$\neg$								Π							Step		$\overline{}$
	- Spann	For Twin (50:50)	For Triple (33:33:33)	For Quadruple (25:25:25:25)	g6.35 ø9.52	ø15.88   ø9.52	Unit   Unit   Un   06.35   09.52   012  >  >   Pipe   Pipe   09.52   012.7   09.52   012.7   09.52   012.7   09.52   012.7   09.52   012.7   01.5   01	.7 ø12.7	For For pipe ø6.35 ø9.52	For pipe a 12.7			Air	Outlet Guide		Air Protection G	uide [	Orain Socket	pre	reeze- evention Heater Drain Pan)	Centralized	Drain Pan	M-NET Adapter	M-NET Converte	Control/ Service Tool	1 PC board w/attach- ment kit	Insulation for Accumula	on High Static Fan Motor
Outdoor Unit		MSDD- MSDD- 50TR-E 50WR-E	- MSDT- MSDT- E 111R-E 111R3-E	MSDF- MSDI = 111R-E 111R2	PAC- PAC- SG72 SG73	PAC- SG75 PAC- SG76	Flare PAC- MAC- MAC- 493 A454 A45 PI JP-E JP-	C- MAC-	PAC-PAC- SG81 SG82	PAC- SG85	MAC- 890	MAC- 881	MAC- MAC- 882 856	- MAC- MAC 886 883	PAC- PAC- PA SJ07 SG59 SH	C- PAC- PAC- P. 196 SJ06 SH63 SI 1-E AG-E AG-E A	AC- PAC H95 SJ0	C- PAC- PAC- 8 SG60 SG61	MAC- 643	MAC- MAC- 644 646	PAC- PAI SG63 SG	C- PAC- 64 SH97	PAC- IF01	PAC- PA SJ96 SJ	C- 95 SK52ST		MAC- M 892 8	IAC- PAC- 893 SJ71 IS-E FM-E
RW Series	MUZ-RW25VGHZ				RJ-E RJ-E	RJ-E RJ-E	PI JP-E JP-	E JP-E	DR-E DR-E	DR-E	SG-E		SG SG	SG-E SG	SG-E SG-E SG	i-E AG-E AG-E A	G-E DS-	E DS-E DS-E	BH-E	BH-E BH-E	DP-E DP	-E DP-E	MN1-E	MA-E MA	V-F	B-E	INS-E IN	S-E FM-E
1117 001100	MUZ-RW35VGHZ											-	•															
L Series	MUZ-RW50VGHZ MUZ-LN25VG										•																	
	MUZ-LN25VGHZ											0																
	MUZ-LN35VG MUZ-LN35VGHZ											•																
	MUZ-LN50VG											-	•															
	MUZ-LN50VGHZ MUZ-LN60VG													•														
FT Series	MUZ-FT25VGHZ											•																
	MUZ-FT35VGHZ MUZ-FT50VGHZ												•															
A Series	MUZ-AP15VG													•														
	MUZ-AP20VG MUZ-AP25VG											•																
	MUZ-AP25VGH											•																
	MUZ-AP35VG MUZ-AP35VGH											•																
	MUZ-AP42VG											•																
	MUZ-AP42VGH MUZ-AP50VG											•	•															
	MUZ-AP50VGH												•															
	MUZ-AP60VG MUZ-AP71VG												•	•														
E Series	MUZ-AP71VG MUZ-EF25VG							+				•																+
	MUZ-EF25VGH MUZ-EF35VG											0																
	MUZ-EF35VGH											•	-					+ + -										+
	MUZ-EF42VG MUZ-EF50VG											•							•									
BT Series	MUZ-EF50VG MUZ-BT20VG							+					•	•					$\vdash$	•								+
	MUZ-BT25VG													•														
	MUZ-BT35VG MUZ-BT50VG							+						•			-		$\vdash$									+
HR Series	MUZ-HR25VF													•														
E	MUZ-HR35VF MUZ-HR42VF							+						•			-		$\vdash$									+
∑	MUZ-HR50VF											•																
	MUZ-HR60VF MUZ-HR71VF							+					•				_		$\vdash$									+
DW Series	MUZ-DW25VF													•														
	MUZ-DW35VF MUZ-DW50VF							+						•			_		$\vdash$									+
TP Series	MUY-TP35VF																											
F Series	MUY-TP50VF MUZ-FH25VE							+											$\vdash$									+
	MUZ-FH25VEHZ											•																
	MUZ-FH35VE MUZ-FH35VEHZ							+		_		•							$\vdash$			+						
	MUZ-FH50VE													•														
S Series	MUZ-FH50VEHZ MUZ-SF25VE							+											+									+
	MUZ-SF25VEH MUZ-SF35VE											•																
	MUZ-SF35VE MUZ-SF35VEH											•																
	MUZ-SF42VE MUZ-SF42VEH											0																
	MUZ-SF50VE													•														
G Series	MUZ-SF50VEH MUZ-GF60VE													•														
	MUZ-GF71VE													•														
W Series	MUZ-WN25VA MUZ-WN35VA																											
D Series	MUZ-DM25VA													•														
H Series	MUZ-DM35VA MUZ-HJ25VA																											
11.00.100	MUZ-HJ35VA													•														士
	MUZ-HJ50VA MUZ-HJ60VA											•		•														
	MUZ-HJ71VA													•														
Compact floor	MUFZ-KW25VGHZ MUFZ-KW35VGHZ											•																
	MUFZ-KW50VGHZ													•														
Compute	MUFZ-KW60VGHZ SUZ-M25VA											•		•														
S SERIES (R32)	SUZ-M35VA						•					•																$\pm$
	SUZ-M50VA SUZ-M60VA												•	•														
	SUZ-M71VA													•														
P SERIES (R410A)	SUZ-KA25VA6 SUZ-KA35VA6						•					•							0									
(H4TOA)	SUZ-KA50VA6													•					_	•								
	SUZ-KA60VA6 SUZ-KA71VA6													•														
														, - 1														$\overline{}$

#### Optional Parts List <Outdoor>

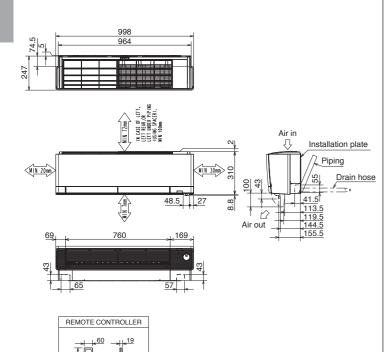
	Option	For	Distril r Twin 0:50)	For T	rinle	For	Branch Pip In case of using 2-branch	Branch	er (Joint) Header	>	5 Unit ø9.5	52 ø15.88 >	Unit Uni ø9.52 ø6.3 >>	5 ø9.52 ø	12.7 ø12.7	t.7 For	pipe pipe	r Ai	ir Outlet Guide			Air	r Outlet Guid	de	Ai	ir Protection	n Guide	Drain S	Socket	Fre	eze-preven (for Drair		er	Centrali Drain P		M-NET Adapter	M-NET Converter	Contr Servi	Step Interfa	nsul pard ch-	lation Co	High Static ion Fan
Outdoor Unit		MSDD- MSDD 50TR 50TR2 -E -E	MSDD- MSD 50WR 50W				boxes    are   Brazing   SDD- MSDD-	CMY- CI Y62- Y	MY- CMY- 64- Y68- 3-E G-E			ø19.05	ø15.88 ø9.5	2 ø12.7 ø	9.52 015.8	88			MAC- MA 881 88 SG S	AC- 82 G	MAC 856 SG	C-MAC-MAC 886 88 SG-E SG	C- PAC- PA 3 SJ07 SG	AC- PAC- P 659 SH96 S G-E SG (	AC- PAC K22 SJ0	C- PAC- PA 06 SH63 SH -E AG-E AG	AC- PAC- PA 195 SK21 S G-E AG-E D	AC- PAC- J08 SG60 S-E DS-E	PAC- PAC SG61 SK	C- MAC- M. 27 643 6	AC- PAC- F 44 645 (	PAC-PAC 646 SJ10	C- PAC- PA 0 SJ20 SG E BH-E DE	C- PAC- PAC- PAC- PAC- PAC- PAC- PAC- PA	AC- PAC- H97 SJ83 P-E DP-E	PAC- PAC IF01 SK1 MNT-E MA-	C- PAC- PA 15 SJ96 SA -E MA-E M	AC- PAC	C- PAC- PA	C-(S) MAC-	MAC- PA	C- PAC-
Power Inverter (R32)	PUZ-ZM35VKA2 PUZ-ZM50VKA2 PUZ-ZM60VHA2 PUZ-ZM71VHA2 PUZ-ZM10VKA2 PUZ-ZM100VKA2 PUZ-ZM100VKA2 PUZ-ZM105VKA2	0			•		711 L 30011 L						RJ-E PI	JP-E J	JP-E JP-E		0						•	0	•			•	0				-		•	•		0 0 0 0 0 0 0		•		
Power Inverter (R410A)	PUZ-ZM125YKA2 PUZ-ZM140VKA2 PUZ-ZM140YKA2 PUZ-ZM250YKA2 PUZ-ZM250YKA2 PUHZ-ZRP35VKA2 PUHZ-ZRP50VKA2 PUHZ-ZRP60VHA2 PUHZ-ZRP71VHA2				0					0		$\overline{}$				•	0								0												•		0	•		
P SERIES	PUHZ-ZRP100VKA3 PUHZ-ZRP100VKA3 PUHZ-ZRP125VKA3 PUHZ-ZRP125VKA3 PUHZ-ZRP140VKA3 PUHZ-ZRP140VKA3 PUHZ-ZRP200VKA3 PUHZ-ZRP250VYKA3	0	0	0	0						0	0					0							0														0 0 0 0 0 0 0 0	0	• • • • • • • • • • • • • • • • • • •		0
Standard Inverter (R32)	PUZ-M100VKA2 PUZ-M125VKA2 PUZ-M140VKA2 PUZ-M100YKA2 PUZ-M125YKA2 PUZ-M140YKA2 PUZ-M250YKA2 PUZ-M250YKA2 PUZ-M250YKA2				0 0	•											0							0																•		
Standard Inverter (R410A)	PUHZ-P100VKA PUHZ-P125VKA PUHZ-P140VKA PUHZ-P140VKA PUHZ-P1910VKA PUHZ-P140VKA PUHZ-P140VKA PUHZ-P250VKA3 PUHZ-P250VKA3		0	0	0												0							0					0									0 0 0 0 0 0 0 0				
MXZ SERIES (R32)	MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF H)3 MXZ-2F53VFHZ MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F83VF MXZ-4F83VFHZ MXZ-4F83VFHZ MXZ-5F102VF MXZ-6F122VF MXZ-2HA40VF MXZ-2HA50VF MXZ-3HA50VF												0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	• • • • • • • • • • • • • • • • • • •						0			0				0		0		0 0 0										
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-2DM40VA MXZ-3DM50VA												0 0 0 0 0 0 0 0 0	0	<ul><li>0</li><li>0</li><li>0</li><li>0</li></ul>				0		0			0				•				•				0				•	•	
PUMY Series (R410A)	PUMY-SP112VKM(-BS) PUMY-SP112VKM(-BS) PUMY-SP12VKM(-BS) PUMY-SP12SVKM(-BS) PUMY-SP12SVKM(-BS) PUMY-SP140VKM(-BS) PUMY-SP140VKM(-BS) PUMY-P112VKM5(-BS) PUMY-P112VKM5(-BS) PUMY-P12SVKM5(-BS) PUMY-P12SVKM5(-BS) PUMY-P140VKM5(-BS) PUMY-P140VKM5(-BS) PUMY-P250YKM5(-BS) PUMY-P250YFM(-ES) PUMY-P250YFM(-ES) PUMY-P250YFM(-ES)											0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													•				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0										
POWERFUL HEATING	PUHZ-SHW112VHA PUHZ-SHW112YHA PUHZ-SHW140YHA	•															•									0												• •	0	•		+

	Branch Box	Reactor Box	Different Diameter Joint												
	Outer Cover	neactor box	ø9.52>ø12.7	ø12.7>ø9.52	ø12.7>ø15.88	ø6.35>ø9.52	ø9.52>ø15.88	ø15.88>ø19.05	ø15.88>ø22.2	ø15.88>ø25.4					
	PAC- AK350CVR-E	PAC- RB01BC	MAC- A454JP	MAC- A455JP	MAC- A456JP	PAC- 493PI	PAC- SG76RJ-E	PAC- SG75RJ-E	PAC- SG71RJ-E	PAC- SG77RJ-E					
PAC-MK34BC (Flare)	•	•	•	•	•	•	•	•	•	•					
PAC-MK54BC (Flare)	•	•	•	•	•	•	•	•	•	•					

M SERIES

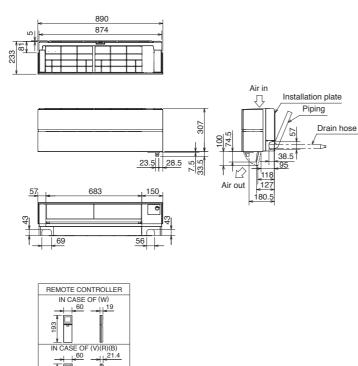
MUZ-RW25VGHZ MUZ-RW35VGHZ MUZ-RW50VGHZ MSZ-LN25VG2(

INDOOR UNIT



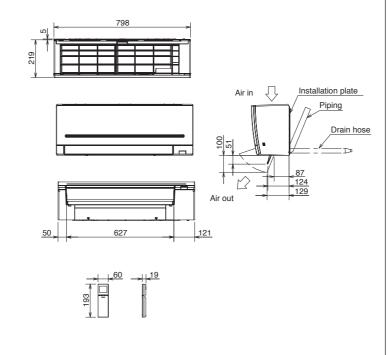
 $\begin{array}{ll} MSZ-LN25VG2(W)(V)(R)(B) & MSZ-LN35VG2(W)(V)(R)(B) \\ MSZ-LN50VG2(W)(V)(R)(B) & MSZ-LN60VG2(W)(V)(R)(B) \end{array}$ 

INDOOR UNIT



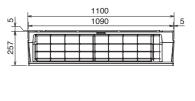
MSZ-AP25VG MSZ-AP35VG MSZ-AP42VG MSZ-AP50VG MSZ-AP25VGK MSZ-AP35VGK MSZ-AP42VGK MSZ-AP50VGK

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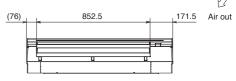


MSZ-AP60VG MSZ-AP71VG MSZ-AP60VGK MSZ-AP71VGK

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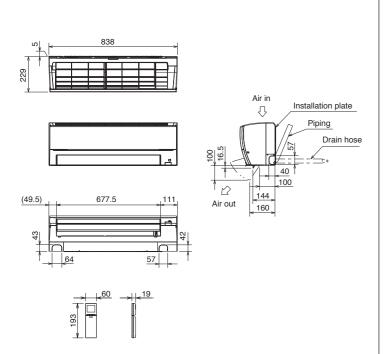






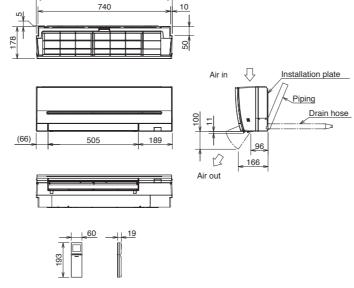
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INDOOR UNIT



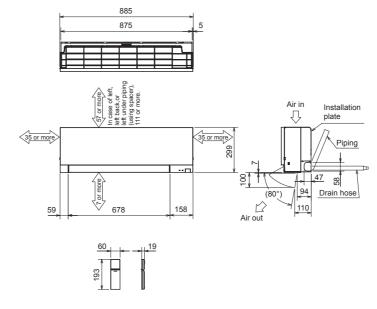
#### MSZ-AP15VG MSZ-AP20VG

INDOOR UNIT



MSZ-EF18VG(W)(B)(S) MSZ-EF22VG(W)(B)(S)
MSZ-EF25VG(W)(B)(S) MSZ-EF35VG(W)(B)(S)
MSZ-EF42VG(W)(B)(S) MSZ-EF50VG(W)(B)(S)
MSZ-EF18VGK(W)(B)(S) MSZ-EF22VGK(W)(B)(S)
MSZ-EF25VGK(W)(B)(S) MSZ-EF35VGK(W)(B)(S)
MSZ-EF42VGK(W)(B)(S) MSZ-EF50VGK(W)(B)(S)

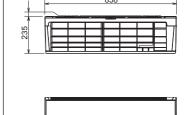
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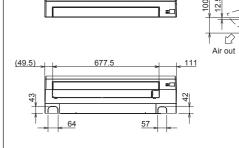


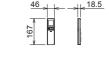
MSZ-BT20VG MSZ-BT25VG MSZ-BT35VG MSZ-BT50VG MSZ-BT20VGK MSZ-BT25VGK MSZ-BT35VGK MSZ-BT50VGK

Air in 🗸

INDOOR UNIT







209

Installation plate

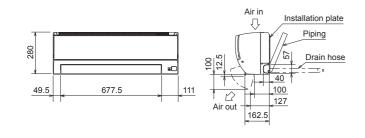
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## MSZ-HR25VF(K) MSZ-HR35VF(K) MSZ-HR42VF(K) MSZ-HR50VF(K)

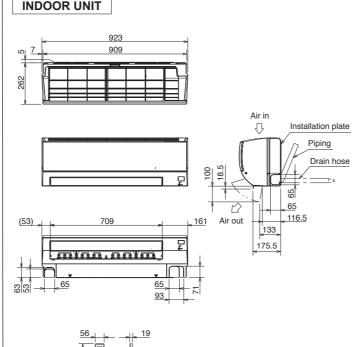
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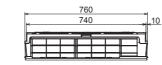
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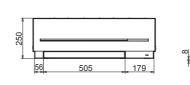


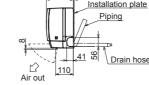




#### MSZ-SF15VA MSZ-SF20VA INDOOR UNIT



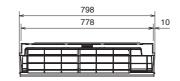


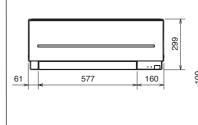


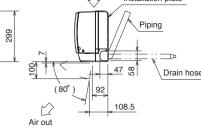


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INDOOR UNIT



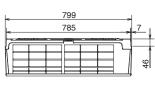


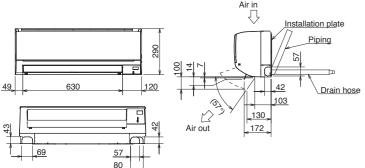


Unit: mm

MSZ-DW25VF MSZ-DW35VF MSZ-DW50VF

INDOOR UNIT

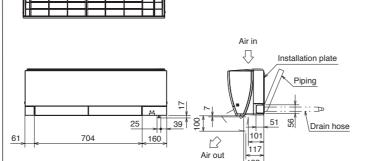






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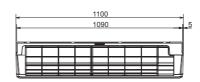
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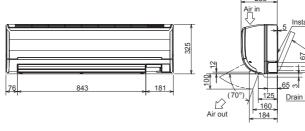




#### MSZ-GF60VE2 MSZ-GF71VE2

INDOOR UNIT

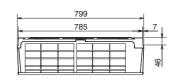


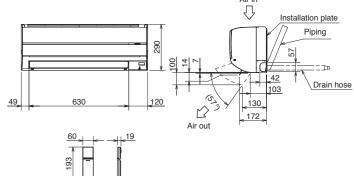




#### MSZ-WN25VA MSZ-WN35VA

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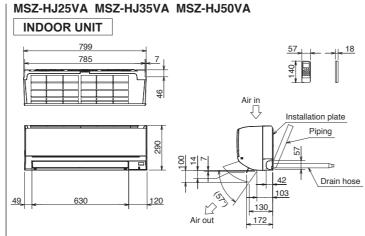


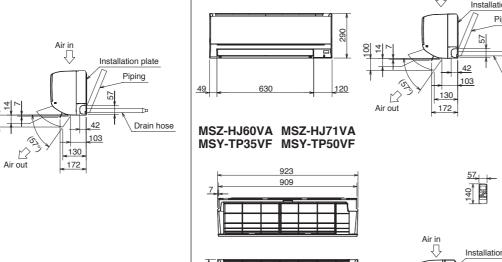


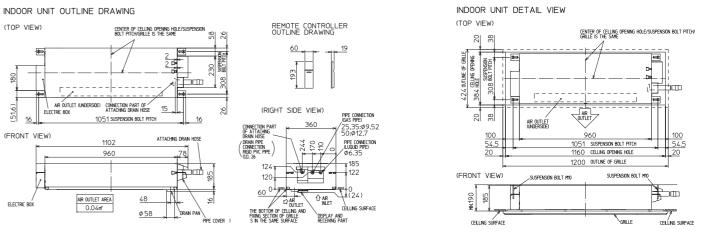


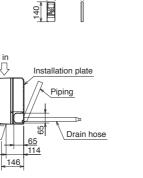


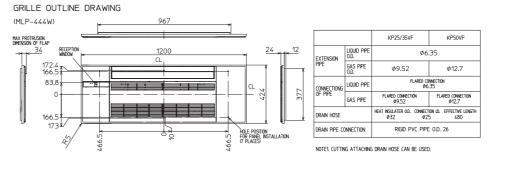
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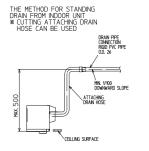




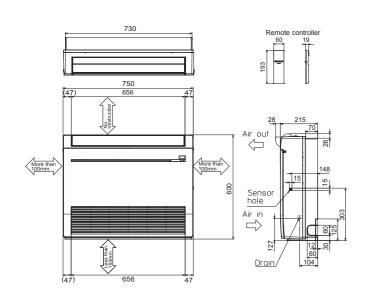




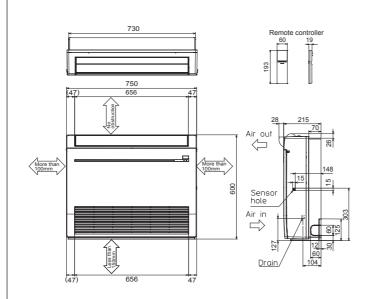




#### MFZ-KT25VG MFZ-KT35VG MFZ-KT50VG MFZ-KT60VG INDOOR UNIT



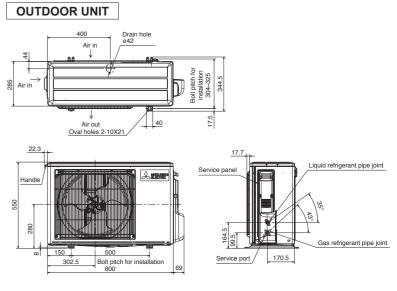


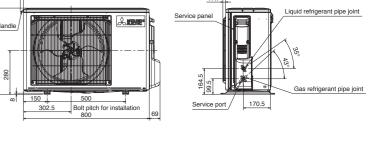


#### MUZ-LN25VGHZ MUZ-LN25VG MUZ-LN35VG MUZ-LN35VGHZ **MUZ-AP20VG MUZ-AP25VG** MUZ-AP25VGH MUZ-AP35VG **MUZ-AP35VGH** MUZ-AP42VG MUZ-AP42VGH **MUZ-HR42VF MUZ-FT25VGHZ MUZ-HR50VF** MUZ-FH25VE MUZ-FH35VE MUZ-DW50VF MUZ-FH25VEHZ MUZ-FH35VEHZ MUZ-EF25VG MUZ-EF25VGH **MUY-TP50VF** MUZ-EF35VG MUZ-EF35VGH MUZ-EF42VG MUY-TP35VF MUZ-SF35VE MUZ-SF25VE **MUZ-SF25VEH MUZ-SF42VEH** MUZ-SF35VEH MUZ-SF42VE **MUZ-HJ50VA** MUFZ-KJ25VE **MUFZ-KJ35VE** MUFZ-KJ25VEHZ MUFZ-KJ35VEHZ MUZ-BT50VG

MLZ-KP25VF MLZ-KP35VF MLZ-KP50VF

INDOOR UNIT





Unit: mm Unit: mm

216

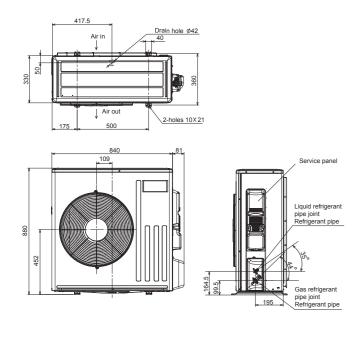
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MUZ-FH50VEHZ MUZ-SF50VEH **MUZ-GF71VE** 

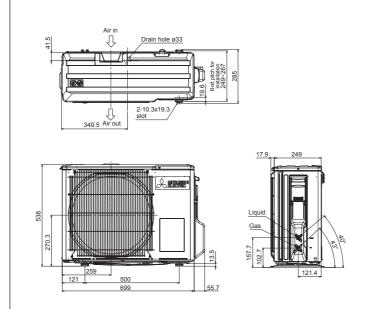
**MUZ-AP71VG** 

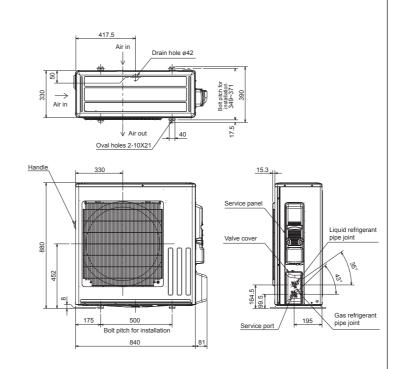
**MUZ-HJ71VA** MUFZ-KJ50VEHZ

OUTDOOR UNIT



#### MUZ-AP15VG MUZ-BT20VG OUTDOOR UNIT





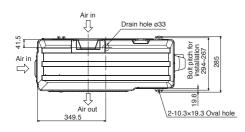
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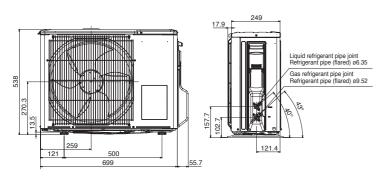
INDOOR UNIT

MUZ-WN25VA MUZ-WN35VA MUZ-HR25VF MUZ-BT25VG MUZ-DM25VA MUZ-DM35VA MUZ-HR35VF MUZ-BT35VG MUZ-HJ25VA MUZ-HJ35VA

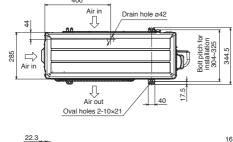
MUZ-DW25VF MUZ-DW35VF

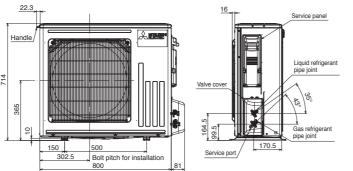
OUTDOOR UNIT





MUZ-RW25VGHZ MUZ-RW35VGHZ MUZ-LN50VG MUZ-FT35/50VGHZ MUZ-AP50VG MUZ-AP50VGH MUZ-AP60VG MUZ-EF50VG MUZ-HR60VF MUZ-HR71VF OUTDOOR UNIT



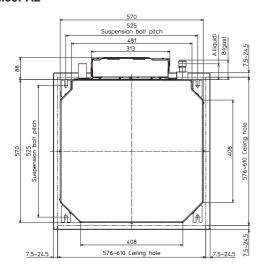


S SERIES

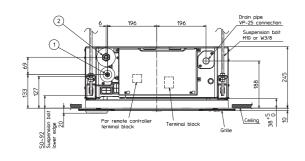
Unit: mm

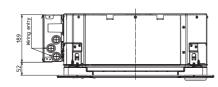
#### SLZ-M15FA2 SLZ-M25FA2 SLZ-M35FA2 SLZ-M50FA2 SLZ-M60FA2

INDOOR UNIT



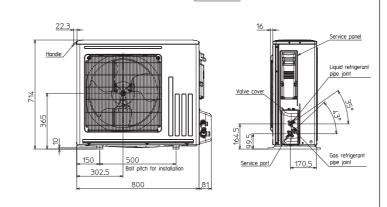
Models	Refrigerent pipe (liquid)	② Refrigerent pipe (gas)	A	В
SLZ-M15FA2 SLZ-M25FA2 SLZ-M35FA2			63mm	72mm
SLZ-M50FA2			63mm	78mm
SLZ-M60FA2			63mm	78mm





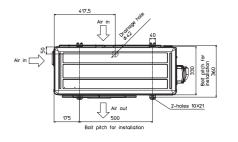
## SUZ-M50VA OUTDOOR UNIT

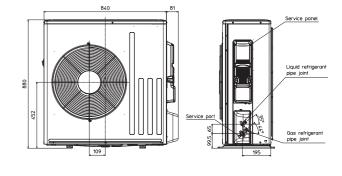
# Air in Case of base healer model #33) Air in Case of base healer model #33) Air in Case of base healer model #33) Air in Case of base healer model #33)



## SUZ-M60VA SUZ-M71VA

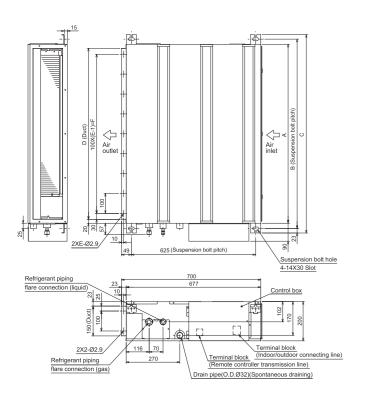
#### INDOOR UNIT





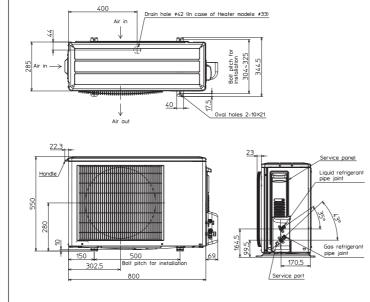
## SEZ-M25DA(L)2 SEZ-M35DA(L)2 SEZ-M50DA(L)2 SEZ-M60DA(L)2 SEZ-M71DA(L)2

INDOOR UNIT



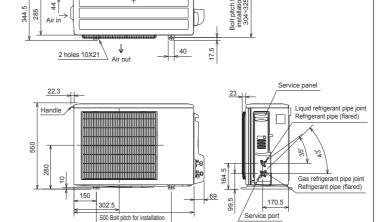
#### SUZ-M25VA SUZ-M35VA

OUTDOOR UNIT



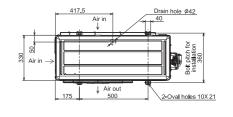
#### SUZ-KA25VA6 SUZ-KA35VA6

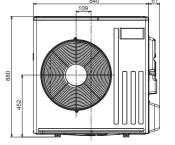
INDOOR UNIT

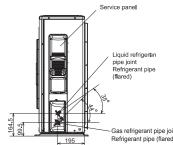


### SUZ-KA50VA6 SUZ-KA60VA6 SUZ-KA71VA6

INDOOR UNIT



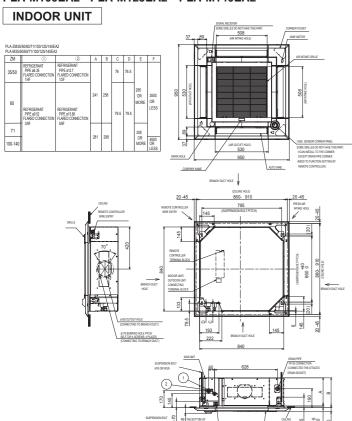




P <u>SERIES</u>

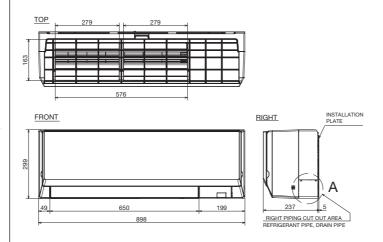
Unit: mm

PLA-ZM35EA2 PLA-ZM50EA2 PLA-ZM60EA2 PLA-ZM71EA2 PLA-ZM100EA2 PLA-ZM125EA2 PLA-ZM140EA2 PLA-M35EA2 PLA-M50EA2 PLA-M60EA2 PLA-M71EA2 PLA-M100EA2 PLA-M125EA2 PLA-M140EA2



### PKA-M35LA(L)2 PKA-M50LA(L)2

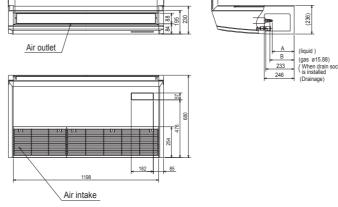
INDOOR UNIT



#### PCA-M60KA2 PCA-M71KA2

Unit: mm

INDOOR UNIT



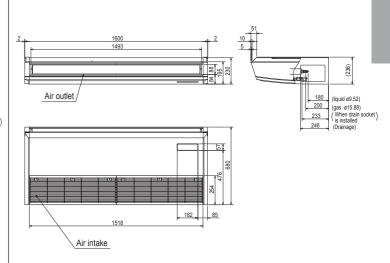
NOTES.

- 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.

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

#### PCA-M100KA2 PCA-M125KA2 PCA-M140KA2

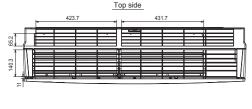
INDOOR UNIT

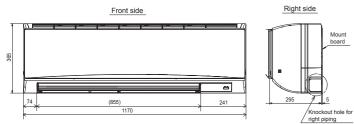


NOTES.

- 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.

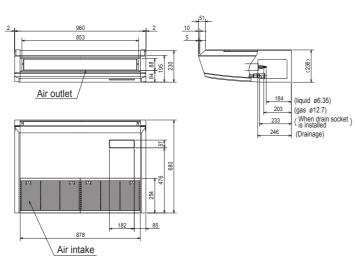
#### PKA-M60KA(L)2 PKA-M71KA(L)2 PKA-M100KA(L)2 INDOOR UNIT





#### PCA-M35KA2 PCA-M50KA2

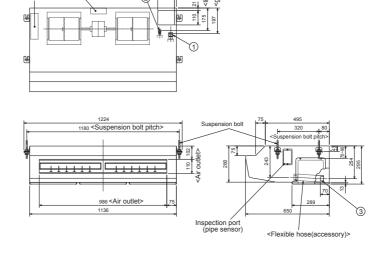
INDOOR UNIT



- 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-M71HA2

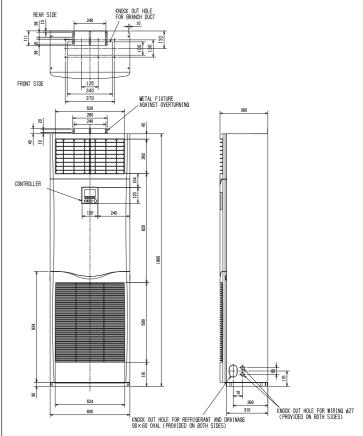
INDOOR UNIT



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

#### PSA-M71KA PSA-M100KA PSA-M125KA PSA-M140KA

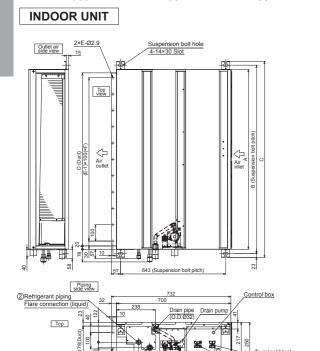
INDOOR UNIT



220

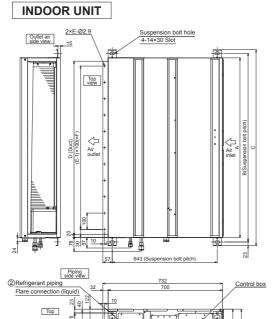
Unit: mm

#### PEAD-M35JA2 PEAD-M50JA2 PEAD-M60JA2 PEAD-M71JA2 PEAD-M100JA2 PEAD-M125JA2 PEAD-M140JA2



					Орона	neous u	rairiiriy)		
Model	Α	В	С	D	Е	F	G	① Gas pipe	② Liquid pipe
PEAD-M35, 50JA2	900	954	1000	860	9	800	858	Ø12.7	Ø6.35
PEAD-M60, 71JA2	1100	1154	1200	1060	11	1000	1058		
PEAD-M100, 125JA2	1400	1454	1500	1360	14	1300	1358	Ø15.88	Ø9.52
DEAD MILIO IAS	4000	4054	4700	4500	40	4500	4550		

#### PEAD-M35JAL2 PEAD-M50JAL2 PEAD-M60JAL2 PEAD-M71JAL2 PEAD-M100JAL2 PEAD-M125JAL2 PEAD-M140JAL2



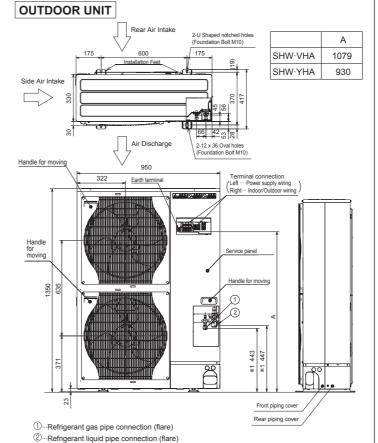
Bottom 2×2-Ø2.9

1) Refrigerant piping

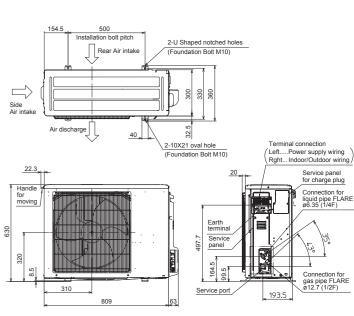
Model	Α	В	С	D	Е	F	G	① Gas pipe	② Liquid pipe	
PEAD-M35, 50JAL2	900	954	1000	860	9	800	858	Ø12.7	Ø6.35	
PEAD-M60, 71JAL2	1100	1154	1200	1060	11	1000	1058			
PEAD-M100, 125JAL2	1400	1454	1500	1360	14	1300	1358	Ø15.88	Ø9.52	
PEAD-M140JAL2	1600	1654	1700	1560	16	1500	1558			

Terminal block

#### PUHZ-SHW112VHA PUHZ-SHW112YHA PUHZ-SHW140YHA

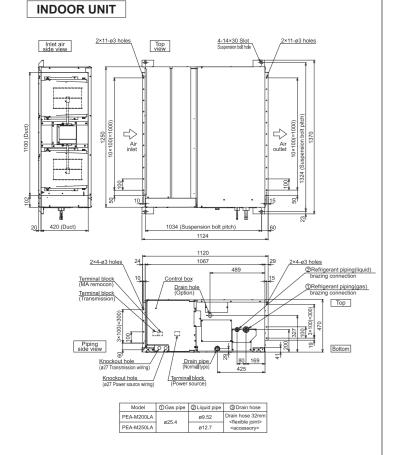






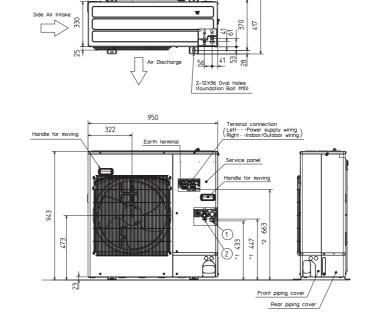
#### PEA-M200LA PEA-M250LA

Terminal block



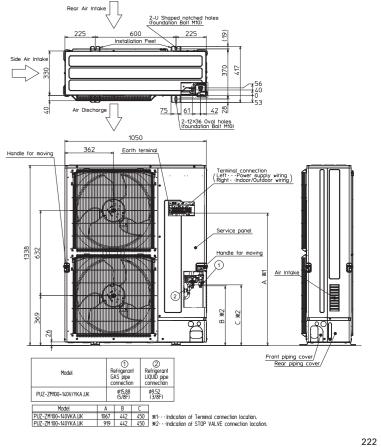
#### PUZ-ZM60VHA2 PUZ-ZM71VHA2 **OUTDOOR UNIT**

\* ···Indicates stop valve connection location.

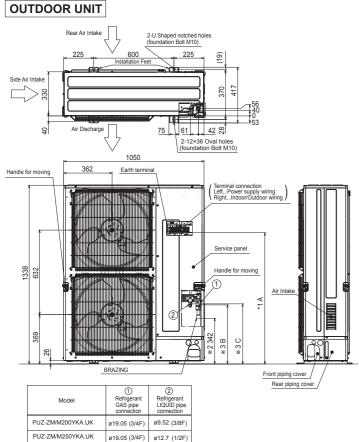


- ① · · · Refrigerant GAS pipe connection (FLARE) Ø15.88 (5/8F)
- $\bigcirc \cdots \text{Refrigerant LIQUID pipe connection (FLARE)} \quad \text{Ø9.52 (3/8F)}$
- \*1  $\cdots$  Indication of STOP VALVE connection location.
- \*2  $\cdots$  Indication of Terminal connection location.

#### PUZ-ZM100VKA2 PUZ-ZM125VKA2 PUZ-ZM140VKA2 PUZ-ZM100YKA2 PUZ-ZM125YKA2 PUZ-ZM140YKA2 **OUTDOOR UNIT**



## PUZ-ZM200YKA2 PUHZ-ZM250YKA2



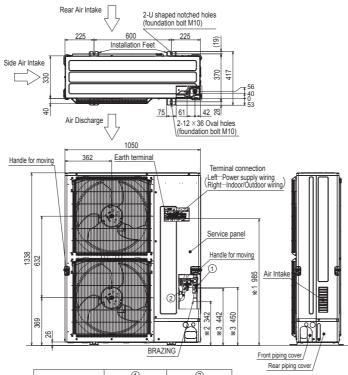
| Model | A B C | \*1...Indication of Terminal connection location. | PUZ-ZM/M200,250YKA.UK | 985 | 442 | 450 | \*2...Refrigerant GAS PIPE connection (BRAZING) O.Dø25.4. | \*3...Indication of STOP VALVE connection location.

PUZ-M100VKA2 PUZ-M100YKA2 PUZ-M125VKA2 PUZ-M125YKA2

PUZ-M140VKA2 PUZ-M140YKA2

**OUTDOOR UNIT** 

#### PUHZ-ZRP200YKA3 PUHZ-ZRP250YKA3 **OUTDOOR UNIT**



Unit: mm

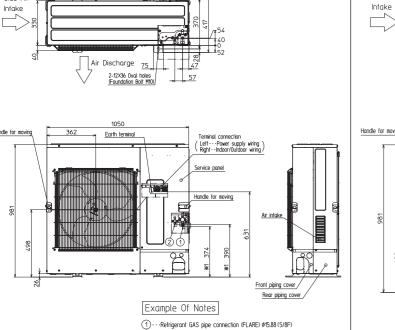
(2) Model Refrigerant GAS pipe connection connection PUHZ-ZRP200YKA3 | ø19.05 (3/4F) ø9.52 (3/8F) PUHZ-ZRP250YKA3 ø19.05 (3/4F)

- \*1···Indication of Terminal connection location.

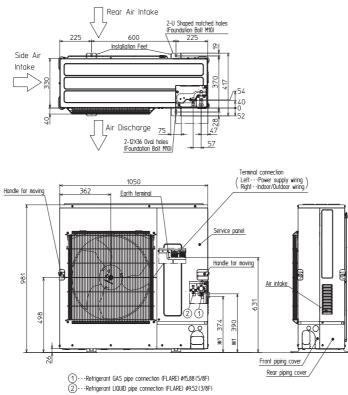
  \*2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.

  \*3···Indication of STOP VALVE connection location.

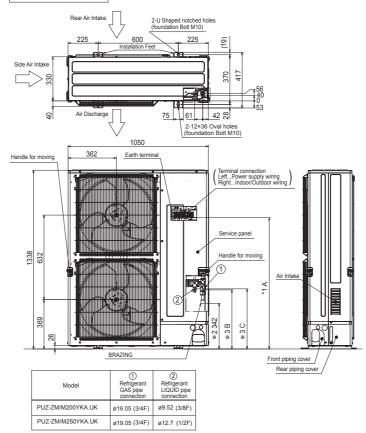
## PUHZ-P140VKA PUHZ-P140YKA



② · · · Refrigerant LIQUID pipe connection (FLARE) Ø9.52(3/8F) \*1 · · · Indication of STOP VALVE connection location.

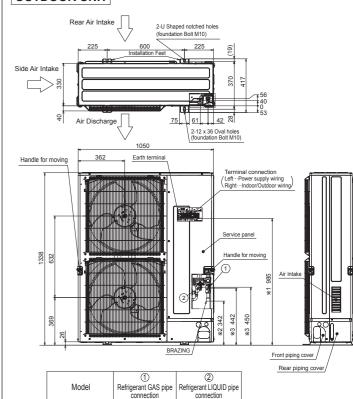


#### PUZ-M200YKA2 PUZ-M250YKA2 **OUTDOOR UNIT**



| Model | A | B | C | #1...Indication of Terminal connection location. | PUZ-ZM/M200,250YKA.UK | 985 | 442 | 450 | #2...Refrigerant GAS PIPE connection (BRAZING) O.Dø25.4. | #3...Indication of STOP VALVE connection location.

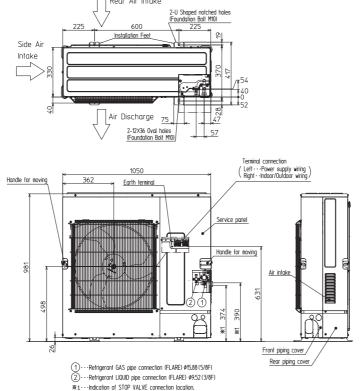
#### PUHZ-P200YKA3 PUHZ-P250YKA3 **OUTDOOR UNIT**



- 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.

#### PUHZ-P100VKA PUHZ-P100YKA PUHZ-P125VKA PUHZ-P125YKA

#### **OUTDOOR UNIT**

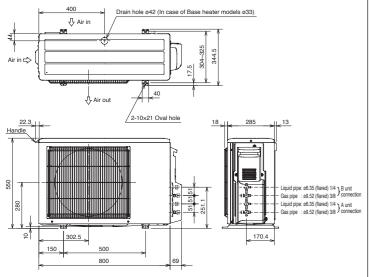


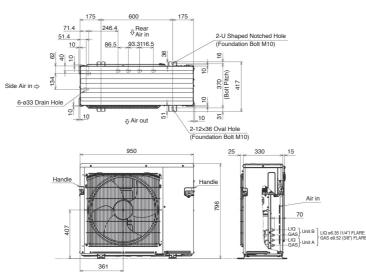
- Unit: mm

Unit: mm

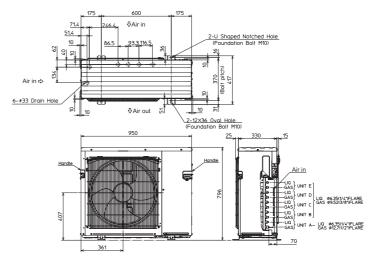
MXZ-2D33VA MXZ-2D42VA2 MXZ-2D53VA2 MXZ-2D53VAH2 MXZ-2E53VAHZ MXZ-2F53VFHZ MXZ-2HA40VF MXZ-2HA50VF MXZ-2F33VF3 MXZ-2F53VFH3 MXZ-2F53VFH3

#### **OUTDOOR UNIT**

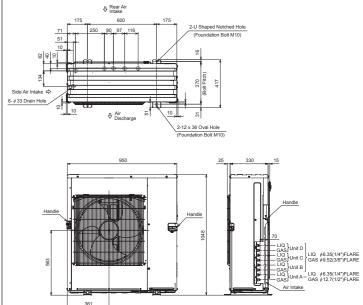




#### MXZ-4E83VA MXZ-5E102VA MXZ-4F83VF MXZ-5F102VF **OUTDOOR UNIT**

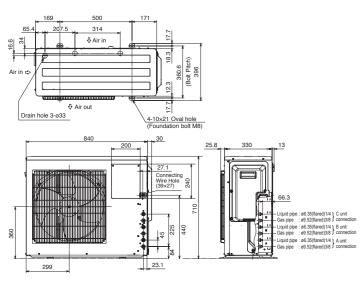


#### MXZ-4E83VAHZ MXZ-4F83VFHZ **OUTDOOR UNIT**



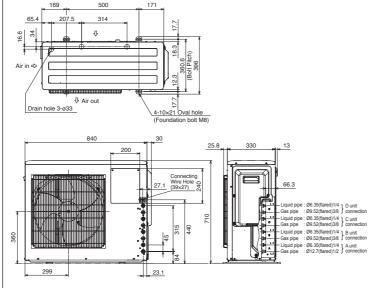
### MXZ-3E54VA MXZ-3E68VA MXZ-3DM50VA MXZ-3HA50VF MXZ-3F54VF3 MXZ-3F68VF3

#### **OUTDOOR UNIT**

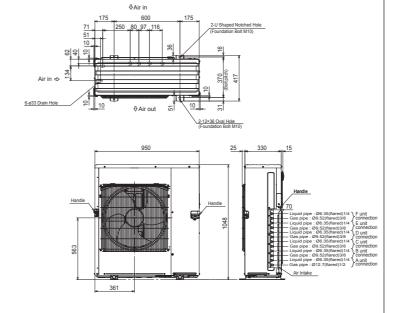


## MXZ-4E72VA MXZ-4F72VF3 MXZ-4F80VF3

#### **OUTDOOR UNIT**



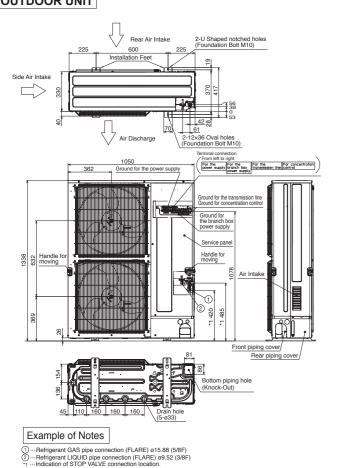
## OUTDOOR UNIT



## MXZ-6D122VA2 MXZ-6F122VF

**PUMY** SERIES Unit: mm

#### PUMY-P112/125/140VKM5(-BS) **OUTDOOR UNIT**

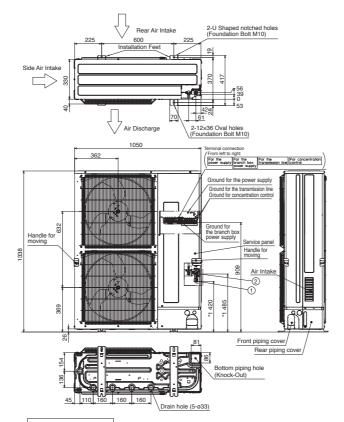


/ From left to right

For the power supply | For the power supply |

Rear piping cover

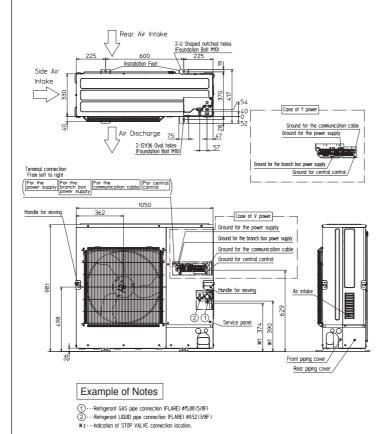
#### PUMY-P112/125/140YKM(E)4(-BS) **OUTDOOR UNIT**



#### Example of Notes

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

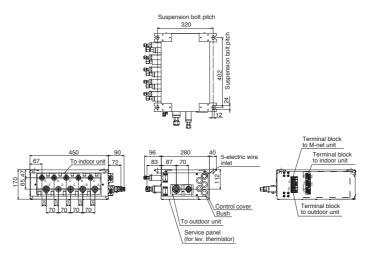
### PUMY-SP112/125/140VKM(-BS) PUMY-SP112/125/140YKM(-BS) **OUTDOOR UNIT**



#### PAC-MK54BC

Suspension bolt: W3/W8 (M10)

#### Branch box



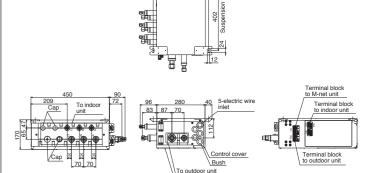
Su	S	pei	nsi	on	bolt	:	W3	3/8	(N	11	0	)
_						_						

Hetrigerant pipe flared connection								
	Α	В	С	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-MK34BC

Suspension bolt: W3/W8 (M10)

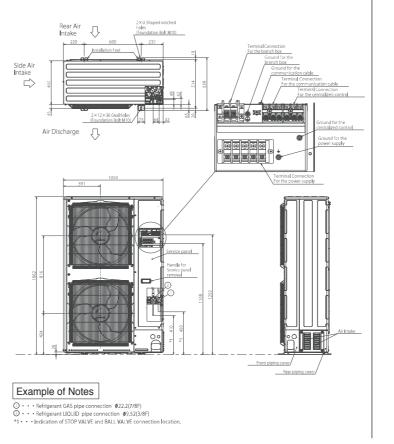
#### Branch box



#### Suspension bolt : W3/8(M10)

omgoram pi	ingerant pipe narea connection									
	Α	В	С			To outdoor unit				
iquid pipe	1/4F	1/4F	1/4F			3/8F				
ac nine	2/9E	2/0E	2/0E			5/9E				

### PUMY-P250YBM(-BS) PUMY-P300YBM(-BS) **OUTDOOR UNIT**



#### Example of Notes

PUMY-P200YKM2(-BS) **OUTDOOR UNIT** 

362

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.

45 110 160 160 Drain hole (5-ø33)

### Piping Installation

#### M SERIES

Single type

Series	Class	Maximum Piping Length (m)	Maximum Height Difference (m)	Maximum Number of Bends
Selles	<outdoor unit=""></outdoor>	Total length (A)	Outdoor unit - Indoor unit (H)	Total number
SZ-RW	25 / 35	20	12	10
	50	30	15	10
SZ-L	25 / 35	20	12	10
	50	20	12	10
	60	30	15	10
SZ-FT	25	20	12	10
	35 / 50	30	15	10
ISZ-A	15 / 25 / 35 / 42 / 50	20	12	10
	60 / 71	30	15	10
SZ-EF	25 / 35 / 42	20	12	10
	50	30	15	10
SZ-BT	20 / 25 / 35 / 50	20	12	10
SZ-HR	25 / 35 / 42 / 50	20	12	10
	60 / 71	30	15	10
SY-DW	25 / 35 / 50	20	12	10
SY-TP	35 / 50	20	12	10
SZ-F FZ	25 / 35	20	12	10
FZ	50	30	15	10
SZ-S	25 / 35 / 42	20	12	10
	50 / 60	30	15	10
SZ-G	60 / 71	30	15	10
SZ-W SZ-D	25 / 35	20	12	10
SZ-HJ	25 / 35 / 50	20	12	10
	60 / 71	30	15	10

### S SERIES & P SERIES

Single type

Series	Class	Maximum Piping Length (m)	Maximum Height Difference (m)	Maximum Number of Bends	
Series	<outdoor unit=""></outdoor>	Total length (A)	Outdoor unit - Indoor unit (H)	Total number	
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	30	15	
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 (PUZ-M & SUZ-M)	25 / 35	20	12	10	
	50 / 60 / 71	30	30	10	
	100	55	30	45	
	125 / 140	65	30	15	
Standard Inverter (PUHZ-P & SUZ-KA)	25 / 35	20	12	10	
	50 / 60 / 71	30	30	10	
	100 / 125 / 140	50	30	15	
	200 / 250	70	30	15	

Twin type

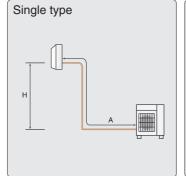
i wiri type							
		Ma	ximum Piping Length	(m)	Maximum Heig	ht Difference (m)	Maximum Number of Bends
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C	Pipe length difference from distribution pipe IB-CI	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	8	20	30	1	15
Power Inverter (PUZ-ZM)	71	55	8	20	30	1	15
	100 / 125 / 140	100	8	20	30	1	15
	200 / 250						
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 (PUZ-M)	100	55					
	125 / 140	65	8	20	30	1	15
	200 / 250						
Standard Inverter (PUHZ-P)	100 / 125 / 140	50	8	20	30	1	15
	200 / 250	70	8	30	30	1	15

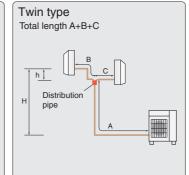
#### Triple type

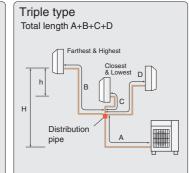
1 - 31 -							
		Ma	ximum Piping Length	(m)	Maximum Heigh	Maximum Number of Bends	
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C+D	Pipe length difference from distribution pipe IB-Cl	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
Power Inverter (PUZ-ZM)	140	100	8	20	30	1	15
	200 / 250						
Power Inverter (PUHZ-ZRP)	140	75	8	20	30	1	15
	200 / 250	100	8	30	30	1	15
Standard Inverter (PUZ-M)	140	65	8	20	30	1	15
	200 / 250						
Standard Inverter (PUHZ-P)	140	50	8	20	30	1	15
	200 / 250	70		28	20	4	15

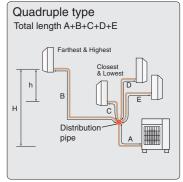
#### Quadruple type

	Class <outdoor unit=""></outdoor>	Ma	ximum Piping Length	(m)	Maximum Heigh	Maximum Number of Bends	
Series		Total length A+B+C+D+E	Pipe length difference from distribution pipe IB-CI	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
Power Inverter (PUZ-ZM, PUHZ-ZRP)	200 / 250	100	8	30	30	1	15
Standard Inverter (PUZ-M, PUHZ-P)	200 / 250	70	8	22	30	1	15









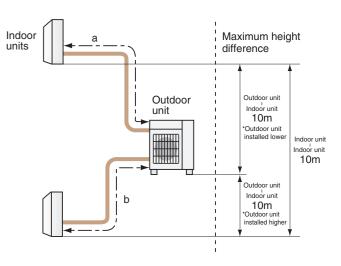
#### MXZ SERIES

MXZ-2D33VA MXZ-2F33VF3

MXZ-2D33VA, MXZ-2F33VF3							
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

<sup>\*</sup> When connecting MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.



#### MXZ-2D42VA2, MXZ-2F42VF3

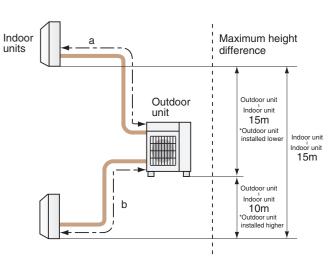
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

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)3

115 (E 12 00 17 ((1)) 7 115 (E 12 00 17 (1 12) 115 (E 12 00 17 (1 1))	
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.

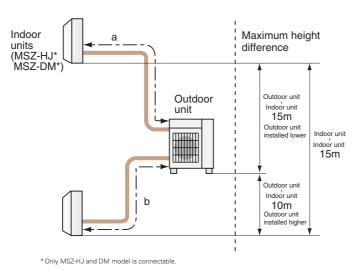
Regarding MXZ-2D33, the second unit should be a different type in the case of selecting one MFZ-KJ.

#### MXZ SERIES

#### MXZ-2DM40VA. MXZ-2HA40VF. MXZ-2HA50VF

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

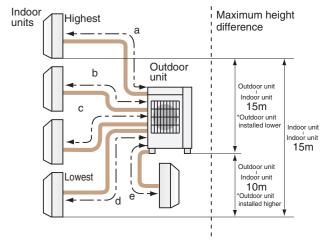
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	20
Total number (a+b)	30



#### MXZ-5E102VA, MXZ-5F102VA

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

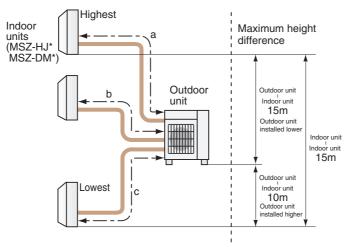
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e)	25
Total number (a+b+c+d+e)	80



#### MXZ-3DM50VA, MXZ-3HA50VF

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

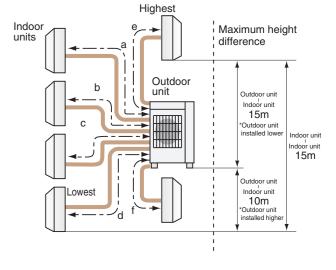


\* Only MSZ-HJ and DM model is connectable.

#### MXZ-6D122VA2, MXZ-6F122VF

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-4E72VA, MXZ-4F72VF3

Maximum Piping Length				
Outdoor unit - Indoor unit (a,b,c,d) 25m				
Total length (a+b+c+d) 60m				

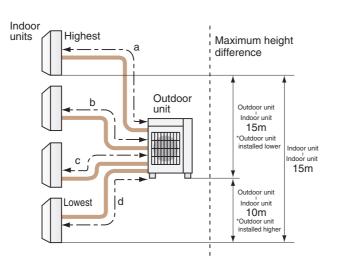
Maximum Number of Bends			
Outdoor unit - Indoor unit (a,b,c,d)	25		
Total number (a+b+c+d)	60		

<sup>\*</sup> When connecting MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

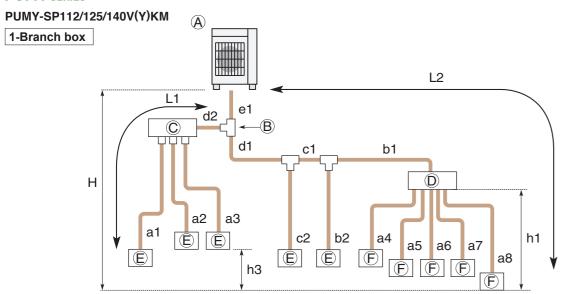
#### MXZ-4E83VA, MXZ-4E83VAHZ

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			



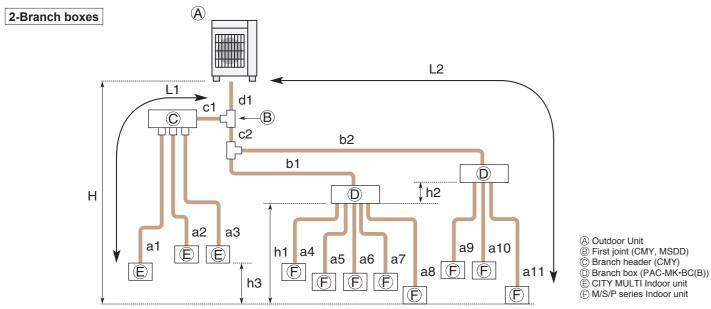
#### **PUMY** SERIES



- Outdoor Unit
   B First joint (CMY, MSDD)
   Branch header (CMY)
   Branch box (PAC-MK-BC(B)) © CITY MULTI Indoor unit
- M/S/P series Indoor unit

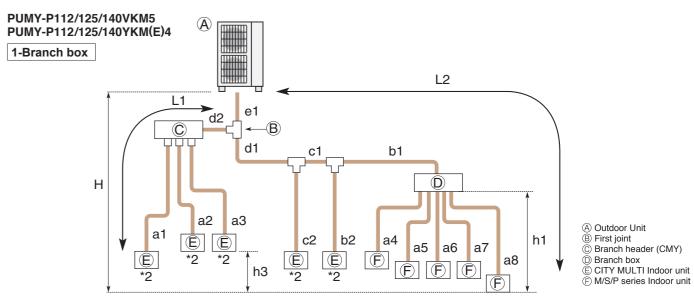
Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 120 m
(One-way)	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 70 m
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 50 m
	Piping length between outdoor 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	In index/td	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
difference (One-way)	In indoor/outdoor section (H)*1	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.



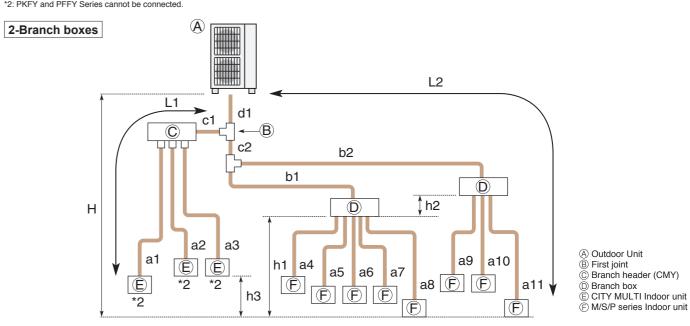
Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 120 \text{ m}$
(One-way)	Farthest piping length (L1)	d1 + c1 + a1 ≦ 70 m
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≤ 80 m
	Piping length between outdoor unit 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	$a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 95 \text{ m}$
Permissible height	In indeed outdoor coefficient (11)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
difference In indoor/outdoor section (H)*1		H ≦ 30 m (In case of outdoor unit is set lower than indoor unit)
(One-way)	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,

\*1: Branch box should be placed within the level between the outdoor unit and indoor units.



Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 300 m
(One-way)	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	In indeed, and an entire (II)*4	H ≤ 50 m (In case of outdoor unit is set higher than indoor unit)
difference (One-way)	In indoor/outdoor section (H)*1	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		$   e1 + d2 + a1 ,   e1 + d2 + a2 ,   e1 + d2 + a3 ,   e1 + d1 + c2 ,   e1 + d1 + c1 + b1 + a6 , \\   e1 + d1 + c1 + b1 + a4 ,   e1 + d1 + c1 + b1 + a6 ,   e1 + d1 + c1 + b1 + a6 , \\   e1 + d1 + c1 + b1 + a7 ,   e1 + d1 + c1 + b1 + a8  \le 15 $

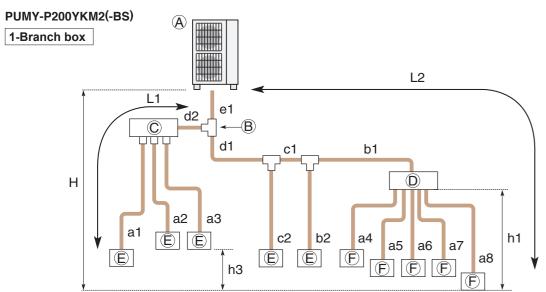
\*1: Branch box should be placed within the level between the outdoor unit and indoor units.
\*2: PKFY and PFFY Series cannot be connected.



Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 240 \text{ m}$		
(One-way)	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	In industrial and a section (II)*4	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)		
	In indoor/outdoor section (H)*1	H ≦ 40 m (In case of outdoor unit is set lower than indoor unit)		
(One-way)	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				

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- \*1: Branch box should be placed within the level between the outdoor unit and indoor units.
  \*2: PKFY and PFFY Series cannot be connected.



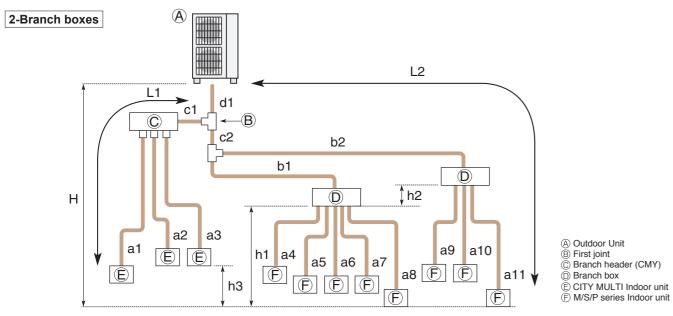
Outdoor Unit
First joint
© Branch header (CMY)

 Branch box © CITY MULTI Indoor unit

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Ð	M/S	S/P	serie	s li	ndoor	unit

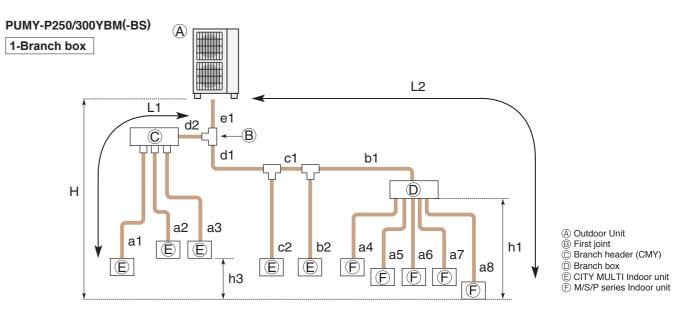
Permissible length	Total piping length	$e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 \le 150 \text{ m}$		
(One-way)	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≤ 80 m		
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 80 m		
	Piping length 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	In index // 11/4	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)		
difference (One-way)	In indoor/outdoor section (H)*1	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		

<sup>\*1:</sup> Branch box should be placed within the level between the outdoor unit and indoor units.



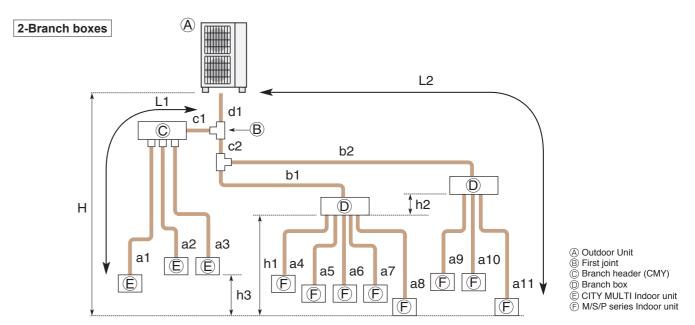
Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 150 \text{ m}$				
(One-way)	Farthest piping length (L1)	d1 + c1 + a1 ≦ 80 m				
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≤ 80 m				
	Piping length between 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	In indeer/outdeer cention (II)*4	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)				
difference	In indoor/outdoor section (H)*1	H ≦ 40 m (In case of outdoor unit is set lower than indoor unit)				
(One-way)	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,				
		$ d1 + c2 + b2 + a10 $ , $ d1 + c2 + b2 + a11  \le 15$				

<sup>\*1:</sup> Branch box should be placed within the level between the outdoor unit and indoor units.



Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 310 m				
(One-way)	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 ≦ 80 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 ≦ 145 m				
Permissible height	In indeed on the second in the	H ≤ 50 m (In case of outdoor unit is set higher than indoor unit)				
difference (One-way)	In indoor/outdoor section (H)*1	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		$   \text{le1} + \text{d2} + \text{a1l},   \text{le1} + \text{d2} + \text{a2l},   \text{le1} + \text{d2} + \text{a3l},   \text{le1} + \text{d1} + \text{c2l},   \text{le1} + \text{d1} + \text{c1} + \text{b2l}, \\   \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a4l},   \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a5l},   \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a6l}, \\   \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a7l},   \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a8l} \leq 23 $				

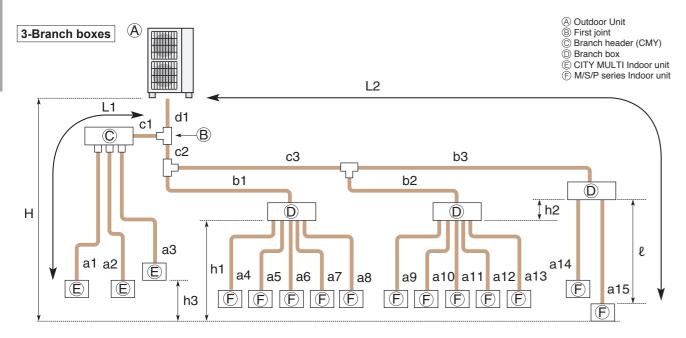
<sup>\*1:</sup> Branch box should be placed within the level between the outdoor unit and indoor units.



Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 310 \text{ m}$		
(One-way)	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 ≦ 95 m		
	Farthest piping length from the first joint	c2 + b2 or c1 + a1 ≦ 30 m		
	Farthest piping length after branch box	a11 ≦ 25 m		
	Total piping length between branch boxes and indoor units	a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 145 m		
Permissible height difference	In indeed outdoor costion (II)*4	H ≤ 50 m (In case of outdoor unit is set higher than indoor unit)		
	In indoor/outdoor section (H)*1	H ≦ 40 m (In case of outdoor unit is set lower than indoor unit)		
(One-way)	In branch box/indoor unit section	h1 + h2 ≦ 15 m		
	In each branch unit (h2)	h2 ≦ 15 m		
	In each indoor unit (h3)	h3 ≦ 12 m		
Number of bends				

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<sup>\*1:</sup> Branch box should be placed within the level between the outdoor unit and indoor units.



Permissible length (One-way)	Total piping length	$ d1 + c1 + c2 + c3 + b1 + b2 + b3 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 + a12 + a13 + a14 + a15 \le 310 \text{ m} $				
, ,,	Farthest piping length (L1)	d1 + c1 + a1 ≦ 85 m				
	Farthest piping length. Via Branch box (L2)	d1 + c2 + c3 + b3 + a15 ≦ 80 m				
	Piping length between outdoor unit and branch boxes	d1 + c2 + c3 + b1 + b2 + b3 ≦ 95 m				
	Farthest piping length from the first joint	c2 + c3 + b3 or c1 + a1 ≤ 30 m				
	Farthest piping length after branch box (ℓ)	a15≦25 m				
	Total piping length between branch boxes and indoor units	a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 + a12 + a13 + a14 + a15 ≦ 145 m				
Permissible height difference	In indeer/outdeer cection // I\*4	H ≤ 50 m (In case of outdoor unit is set higher than indoor unit)				
	In indoor/outdoor section (H)*1	H ≤ 40 m (In case of outdoor unit is set lower than indoor unit)				
(One-way)	In branch box/indoor unit section	h1 + h2 ≦ 15 m				
	In each branch unit (h2)	h2 ≦ 15 m				
	In each indoor unit (h3)	h3 ≦ 12 m				
Number of bends		$\begin{aligned} & d1+c1+a1 , d1+c1+a2 , d1+c1+a3 ,\\ & d1+c2+b1+a4 , d1+c2+b1+a5 , d1+c2+b1+a6 , d1+c2+b1+a7 ,\\ & d1+c2+b1+a8 , d1+c2+c3+b2+a9 , d1+c2+c3+b2+a10 ,\\ & d1+c2+c3+b2+a11 , d1+c2+c3+b2+a12 , d1+c2+c3+b2+a13 ,\\ & d1+c2+c3+b3+a14 , d1+c2+c3+b3+a15  \leqq 23 \end{aligned}$				

 $<sup>^{\</sup>star}$ 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
cooming	Outdoor	35°C DB, 24°C WB
Heating	Indoor	20°C DB
Heating	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		VG,VE,VA,VHA,VKA:230V/Single phase/50Hz			
P Series (except for PEA)	_	YA,YHA,YKA:400V/Three phase/50Hz			
MXZ Series		TA, THA, TRA.400 V/THIEE phase/50Hz			
POWERFUL HEATING Series					
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 of Non-inverter, "Y"= Cooling only of inverter
_	
F	Series
Н	Generation
25	Rated cooling capacity (kW base)
V	230V / Single phase / 50Hz
	"A"= R410A with new A control , "B"= R410A with conventional control ,
Е	"E"= R410A with new A control & ErP correspondance, "G"=R32 with new A control & ErP correspondance,
	"F"= 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

1	Ρ	P Series
	- 11	"K"= Wall-mounted , "S"= Floor-standing , "L"= 4-way cassette , "E"= Ceiling-concealed ,
	U	"C"= Ceiling-suspended, "U"= Outdoor unit
ŀ	Н	"H"= For heating and cooling
-	Z	"Z"= Inverter
	_	
	_	

#### ZM/M/ZRP/RP/P "ZM"= R32 Eco-conscious Power Inverter , "M"= R32 &R410A

ווחחלוו		0 -1:	f:	IDI D 4 4 0 A
/ KP	/ RP = R4104	a & cleaning	-tree nine re	use . "P"=R410A

"SH"= Powerful heating ZUBADAN , "W"= can be used as air to water application

71	Rated cooling capacity (kW base)
V	"V"= 230V / Single phase / 50Hz , "Y"= 400V / Three phase / 50Hz

H Generation

#### A "A"= A control

3) MXZ s	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
Α	"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

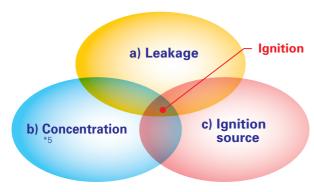
					Pre-charged		Max. added	
	Model Name	Refrige	erant	Pre- qu	cnarged lantity	qu	antity	
			GWP	Weight	CO <sub>2</sub> equivalent	Weight	CO <sub>2</sub> equivalent	
	MUZ-RW25VG	R32	675	[kg]	[t]	[kg]	[t]	
	MUZ-RW25VG MUZ-RW35VG	R32	675 675	1.10	0.81	1.30	0.95	
	MUZ-RW50VG	R32	675	1.21	0.82	1.51	1.02	
	MUZ-LN25VG MUZ-LN25VG2	R32	675 675	1.00	0.68	0.26	0.18	
	MUZ-LN35VG	R32	675	1.00	0.68	0.26	0.133	
	MUZ-LN35VG2	R32	675	0.85	0.57	0.20	0.14	
	MUZ-LN50VG	R32	675	1.25	0.85	0.26	0.18	
	MUZ-LN50VG2 MUZ-LN60VG	R32	675 675	1.25	0.85	0.10	0.07	
	MUZ-LN25VGHZ	R32	675	1.00	0.68	0.26	0.18	
	MUZ-LN35VGHZ MUZ-LN50VGHZ	R32	675 675	1.00	0.68	0.26	0.18	
	MUZ-FT25VGHZ	R32	675	0.85	0.58	0.46	0.32	
	MUZ-FT35VGHZ	R32	675	0.95	0.65	0.45	0.31	
	MUZ-FT50VGHZ MUZ-AP15VG	R32	675 675	0.95	0.65	0.45	0.31	
	MUZ-AP20VG	R32	675	0.55	0.37	0.26	0.18	
	MUZ-AP25VG	R32	675	0.55	0.37	0.26	0.18	
	MUZ-AP35VG MUZ-AP42VG	R32 R32	675 675	0.55	0.37	0.26	0.18	
	MUZ-AP50VG	R32	675	1.00	0.47	0.26	0.18	
	MUZ-AP60VG	R32	675	1.05	0.71	0.30	0.20	
	MUZ-AP71VG MUZ-AP25VGH	R32 R32	675 675	1.50 0.55	1.02 0.37	0.30	0.20	
	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 MUZ-EF25VG(H)	R32 R32	675 675	1.00 0.62	0.68	0.26	0.18	
	MUZ-EF35VG(H)	R32	675	0.62	0.42	0.26	0.18	
	MUZ-EF42VG	R32	675	0.74	0.50	0.26	0.18	
	MUZ-EF50VG MUZ-BT20VG	R32 R32	675 675	1.05 0.45	0.71	0.46	0.32	
	MUZ-BT25VG	R32	675	0.45	0.30	0.26	0.18	
	MUZ-BT35VG	R32	675	0.50	0.34	0.26	0.18	
	MUZ-BT50VG MUZ-HR25VF	R32	675 675	0.70	0.47	0.26	0.18	
	MUZ-HR35VF	R32	675	0.45	0.30	0.26	0.18	
	MUZ-HR42VF	R32	675	0.70	0.47	0.26	0.18	
	MUZ-HR50VF MUZ-HR60VF	R32	675 675	0.80 1.05	0.54	0.26	0.18	
	MUZ-HR71VF	R32	675	1.05	0.71	0.46	0.32	
	MUZ-DW25VG	R32	675	0.50	0.34	0.25	0.17	
	MUZ-DW35VG MUZ-DW50VG	R32	675 675	0.55	0.38	0.25	0.17	
	MUY-TP35VF	R410A	2088	0.85	0.57	0.13	0.09	
	MUY-TP50VF	R410A	2088	0.85	0.57	0.13	0.09	
	MUZ-FH25VE MUZ-FH35VE	R410A R410A	2088	1.15	2.41	0.39	0.82	
M-Series	MUZ-FH50VE	R410A	2088	1.55	3.24	0.46	0.97	
141 001100	MUZ-FH25VEHZ MUZ-FH35VEHZ	R410A R410A	2088	1.15	2.41	0.39	0.82	
	MUZ-FH50VEHZ	R410A	2088	1.55	3.24	0.46	0.82	
	MUZ-SF25VE(H)	R410A	2088	0.70	1.47	0.39	0.82	
	MUZ-SF35VE(H) MUZ-SF42VE(H)	R410A R410A	2088	0.80	1.68 2.41	0.39	0.82	
	MUZ-SF50VE(H)	R410A	2088	1.55	3.24	0.46	0.82	
	MUZ-GF60VE	R410A	2088	1.55	3.24	0.40	0.84	
	MUZ-GF71VE MUZ-WN25VA	R410A R410A	2088	1.90 0.70	3.97 1.47	1.10 0.26	2.30 0.55	
	MUZ-WN35VA	R410A	2088	0.70	1.47	0.26	0.55	
	MUZ-DM25VA	R410A	2088	0.70	1.47	0.26	0.55	
	MUZ-DM35VA MUZ-HJ25VA	R410A R410A	2088	0.72	1.51	0.26	0.55	
	MUZ-HJ35VA	R410A	2088	0.70	1.51	0.26	0.55	
	MUZ-HJ50VA	R410A	2088	1.15	2.41	0.26	0.55	
	MUZ-HJ60VA MUZ-HJ71VA	R410A R410A	2088	1.80	3.76 3.76	0.46	0.97	
	MUFZ-KW25VGHZ	R32	675	1.00	0.68	1.26	0.86	
	MUFZ-KW35VGHZ	R32	675	1.0	0.68	1.26	0.86	
	MUFZ-KW50VGHZ MUFZ-KW60VGHZ	R32	675 675	1.3	0.88	1.76	1.19	
	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 MXZ-3E54VA	R410A R410A	2088	1.3 2.7	2.72 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 MXZ-5E102VA	R410A R410A	2088	2.99	6.25 6.25	0.9 1.6	1.88 3.35	
	MXZ-6D122VA	R410A	2088	4.0	8.36	1.0	2.09	
	MXZ-2F33VF3	R32	675	0.8	0.54	0.8	0.54	
	MXZ-2F42VF3 MXZ-2F53VF(H)3	R32	675 675	1.0	0.675 0.675	1.0	0.675 0.675	
	MXZ-3F54VF3	R32	675	2.4	1.62	0	0.073	
	MXZ-3F68VF3	R32	675	2.4	1.62	0	0	
	MXZ-4F72VF3 MXZ-4F80VF3	R32	675 675	2.4	1.62	0	0	
	MXZ-4F83VF	R32	675	2.4	1.62	0	0	
	MXZ-5F102VF	R32	675	2.4	1.62	0	0	
	MXZ-6F122VF MXZ-2F53VFHZ	R32	675 675	2.4	1.62	0	0	
	MXZ-4F83VFHZ	R32	675	2.4	1.62	0	0	
	MXZ-2E53VAHZ	R410A	2088	2.0	4.18	0.2	0.42	
	MXZ-4E83VAHZ MXZ-2DM40VA	R410A R410A	2088	3.9 0.95	8.15 1.99	0.9	1.88 0.42	
	MXZ-3DM50VA	R410A	2088	2.7	5.64	0.2	0.42	
	MXZ-2HA40VF	R32	675	0.9	0.61	0.9	0.61	
	MXZ-2HA50VF MXZ-3HA50VF	R32 R32	675 675	0.9 1.4	0.61	0.9 1.6	1.08	
			, 5,5		2.30			

		Refrig	erant		charged Jantity		k. added Jantity
	Model Name		GWP	Weight [kg]	CO <sub>2</sub> equivalent	Weight [kg]	CO equiva
	SUZ-M25VA	R32	675	0.65	[t] 0.44	0.26	0.1
	SUZ-M35VA	R32	675	0.90	0.61	0.26	0.1
	SUZ-M50VA	R32	675	1.20	0.81	0.46	0.3
	SUZ-M60VA SUZ-M71VA	R32	675	1.25	0.84	0.46	0.3
S-Series	SUZ-KA25VA6	R410A	2088	0.80	1.68	0.39	0.8
	SUZ-KA35VA6	R410A	2088	1.15	2.41	0.39	0.8
	SUZ-KA50VA6	R410A	2088	1.60	3.35	0.46	0.9
	SUZ-KA60VA6 SUZ-KA71VA6	R410A R410A	2088	1.60	3.35 3.76	0.46 1.265	0.9 2.6
	PUZ-ZM35VKA2	R32	675	2.0	1.35	0.3	0.2
	PUZ-ZM50VKA2	R32	675	2.0	1.35	0.3	0.2
	PUZ-ZM60VHA2	R32	675	2.8	1.89	0.8	0.5
	PUZ-ZM71VHA2 PUZ-ZM100VKA2	R32	675 675	2.8 3.6	1.89 2.43	0.8	0.5 1.6
	PUZ-ZM100YKA2	R32	675	3.6	2.43	2.4	1.6
	PUZ-ZM125VKA2	R32	675	3.6	2.43	2.4	1.6
	PUZ-ZM125YKA2	R32	675	3.6	2.43	2.4	1.6
	PUZ-ZM140VKA2 PUZ-ZM140YKA2	R32	675 675	3.6	2.43	2.4	1.6
	PUZ-ZM200YKA2	R32	675	6.3	4.25	9.2	6.2
	PUZ-ZM250YKA2	R32	675	6.8	4.59	9.2	6.2
	PUHZ-ZRP35VKA2	R410A R410A	2088	2.2	4.60	0.4	0.8
	PUHZ-ZRP50VKA2 PUHZ-ZRP60VHA2	R410A	2088	3.5	5.02 7.31	1.2	2.5
	PUHZ-ZRP71VHA2	R410A	2088	3.5	7.31	1.2	2.5
	PUHZ-ZRP100VKA3	R410A	2088	5.0	10.44	2.4	5.0
	PUHZ-ZRP100YKA3	R410A	2088	5.0	10.44	2.4	5.0
	PUHZ-ZRP125VKA3 PUHZ-ZRP125YKA3	R410A R410A	2088	5.0	10.44	2.4	5.0
	PUHZ-ZRP140VKA3	R410A	2088	5.0	10.44	2.4	5.0
	PUHZ-ZRP140YKA3	R410A	2088	5.0	10.44	2.4	5.0
P-Series	PUHZ-ZRP200YKA3	R410A	2088	7.1	14.83	3.6	7.5
	PUHZ-ZRP250YKA3 PUZ-M100VKA2	R410A R32	2088 675	7.7 3.1	16.08 2.1	4.8 1.0	10.0
	PUZ-M100YKA2	R32	675	3.1	2.1	1.0	0.
	PUZ-M125VKA2	R32	675	3.6	2.4	1.4	0.9
	PUZ-M125YKA2	R32	675	3.6	2.4	1.4	0.9
	PUZ-M140VKA2 PUZ-M140YKA2	R32	675 675	3.6	2.4	1.4	0.9
	PUZ-M200YKA2	R32	675	5.6	3.78	1.6	1.0
	PUZ-M250YKA2	R32	675	6.8	4.59	2.4	1.6
	PUHZ-P100VKA	R410A	2088	3.3	6.89	1.2	2.5
	PUHZ-P100YKA PUHZ-P125VKA	R410A R410A	2088	3.3	6.89 7.93	1.2	2.5 2.5
	PUHZ-P125YKA	R410A	2088	3.8	7.93	1.2	2.5
	PUHZ-P140VKA	R410A	2088	3.8	7.93	1.2	2.5
	PUHZ-P140YKA PUHZ-P200YKA3	R410A	2088	3.8	7.93	1.2	2.5
	PUHZ-P250YKA3	R410A R410A	2088	6.5 7.7	13.58 16.08	3.6 4.8	7.5
	PUHZ-SHW112VHA	R410A	2088	5.5	11.49	2.4	5.0
	PUHZ-SHW112YHA	R410A	2088	5.5	11.49	2.4	5.0
	PUHZ-SHW140VHA PUHZ-SHW140YHA	R410A R410A	2088	5.5 5.5	11.49 11.49	2.4	5.0
	PUHZ-FRP71VHA	R410A	2088	3.8	7.94	1.8	3.7
	PUMY-SP112VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP112YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP125VKM(-BS) PUMY-SP125YKM(-BS)	R410A	2088	3.5	7.31 7.31	9.0	18.7
	PUMY-SP140VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP140YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
DLIP 457	PUMY-P112VKM5(-BS)	R410A	2088	4.8	10.02	13.8	28.8
PUMY	PUMY-P125VKM5(-BS) PUMY-P140VKM5(-BS)	R410A R410A	2088	4.8	10.02 10.02	13.8	28.8 28.8
	PUMY-P112YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.8
	PUMY-P125YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.8
	PUMY-P140YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.8
	PUMY-P200YKM2(-BS) PUMY-P250YBM(-BS)	R410A R410A	2088	7.3 9.3	15.24 19.42	13.1 32.1	27.3 67.0
	PUMY-P300YBM(-BS)	R410A	2088	9.3	19.42	32.1	67.0
	PUZ-WM50VHA	R32	675	2.0	1.35	-	-
ATW	PUZ-WM60VAA	R32	675	2.2	1.49	-	-
Packaged	PUZ-WM85V/YAA PUZ-WM112V/YAA	R32	675 675	3.0	1.49 2.03	_	_
	PUZ-HWM140V/YHA	R32	675	3.3	2.2275	_	_
	SUZ-SWM40VA	R32	675	1.2	0.81	0.4	0.2
	SUZ-SWM60VA	R32	675	1.2	0.81	0.4	0.2
	SUZ-SWM80VA PUD-SWM60VAA	R32	675 675	1.2	0.81 0.8775	0.4	0.2
	PUD-SWM80V/YAA	R32	675	1.3	0.8775	0.3	0.2
	PUD-SWM100V/YAA	R32	675	1.6	1.08	0.23	0.1
	PUD-SWM120V/YAA	R32	675	1.6	1.08	0.23	0.1
	PUD-SHWM60VAA PUD-SHWM80V/YAA	R32	675 675	1.4	0.945	0.3	0.2
	PUD-SHWM100V/YAA	R32	675	1.4	1.1475	0.13	0.0
ATW Split	PUD-SHWM120V/YAA	R32	675	1.7	1.1475	0.13	0.0
Spint	PUD-SHWM140V/YAA	R32	675	1.7	1.1475	0.13	0.0
	PUHZ-SW75V/YAA	R410A	2088	3.0	6.27	1.8	3.7
	PUHZ-SW100V/YAA PUHZ-SW120V/YHA	R410A R410A	2088	4.2	8.77 9.61	1.6 2.9	3.7 6.0
	PUHZ-SW160YKA	R410A	2088	7.1	14.83	4.0	8.3
	PUHZ-SW200YKA	R410A	2088	7.7	16.08	5.2	8.3
	DITITIZ CLIVA/DOV/A/A A	R410A	2088	4.6	9.61	1.4	2.9
	PUHZ-SHW80V/YAA					1.4	2.9
	PUHZ-SHW112V/YAA	R410A	2088	4.6	9.61		
		R410A R410A R410A	2088 2088 2088	4.6 5.5 7.1	11.49 14.83	2.4	5.0

## **R32 REFRIGERANT**

#### **R32 REFRIGERANT PROPERTIES**

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



	R32	R410A	R22
Chemical formula	CH <sub>2</sub> F <sub>2</sub>	CH <sub>2</sub> F <sub>2</sub> /CHF <sub>2</sub> CF <sub>3</sub>	CHCIF2
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.

Not

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

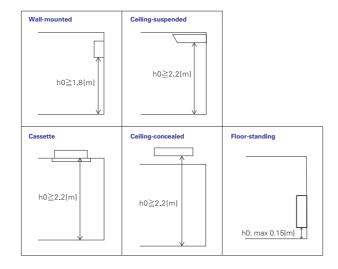
Install in a room with a floor area of Amin\* or more, corresponding to refrigerant quantity M.

(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  $hO^*$ .

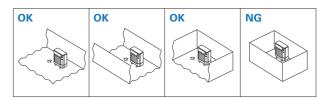
\* Refer to table and drawings below

<m ser<="" th=""><th>ies&gt;</th><th><p seri<="" th=""><th>es&gt;</th><th><mxz s<="" th=""><th>Series&gt;</th><th><only fo<="" th=""><th>r MFZ-KT/KW&gt;</th></only></th></mxz></th></p></th></m>	ies>	<p seri<="" th=""><th>es&gt;</th><th><mxz s<="" th=""><th>Series&gt;</th><th><only fo<="" th=""><th>r MFZ-KT/KW&gt;</th></only></th></mxz></th></p>	es>	<mxz s<="" th=""><th>Series&gt;</th><th><only fo<="" th=""><th>r MFZ-KT/KW&gt;</th></only></th></mxz>	Series>	<only fo<="" th=""><th>r MFZ-KT/KW&gt;</th></only>	r MFZ-KT/KW>
M[kg]	Amin[m²]	M[kg]	Amin[m²]	M[kg]	Amin[m²]	M[kg]	Amin[m²]
0.7	1.7	1.0	4	1.0	3	1.00	
0.8	2.0	1.5	6	1.5	4.5	1.50	No requirements
0.9	2.2	2.0	8	2.0	6	1.80	
1.0	2.5	2.5	10	2.5	7.5	1.84	3.63
1.1	2.7	3.0	12	3.0	9	1.90	3.75
1.2	3.0	3.5	14	3.5	12	2.00	3.95
1.3	3.2	4.0	16	4.0	15.5	2.10	4.15
1.4	3.4	4.5	20	4.5	20	2.20	4.34
1.5	3.7	5.0	24	5.0	24	2.30	4.54
1.6	3.9	5.5	29	5.5	29	2.40	4.74
1.7	4.2	6.0	35	6.0	35		
1.8	4.4	6.5	41	6.5	41		
1.9	4.6	7.0	47	7.0	47		
2.0	4.9	7.5	54	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.



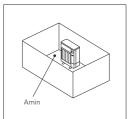
If you unavoidably install a unit in a space where all four sides are blocked or there are depressions, confirm that one of these situations (A, B or C) is satisfied.

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

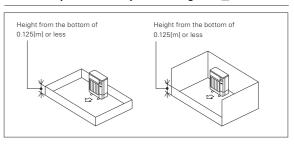
Install in a space with an installation area of Amin\* or more, corresponding to refrigerant quantity M. (M = factory-charged refrigerant + locally added refrigerant)

\* 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



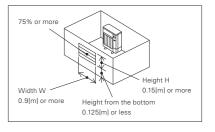
#### **B** Install in a space with a depression height of $\leq 0.125$ [m].



#### 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)

# IOSSNAY SYSTEM







## **SELECTION**

**GUF Series** 

(Lossnay with Dx-Coil Unit) Heat recovery units with a heating and cooling system that uses the City Multi outdoor units as a heat source.

Lossnay lineup consists of two types of ventilation: Energy Recovery Ventilation (ERV) and Heat Recovery Ventilation (HRV). Choose the model that best matches your building layout and indoor environment.

#### PRODUCT LINEUP

	Loss	snay	
Energy Recovery Ventilation	Heat Recove	ry Ventilation	Energy Recovery Ventilation
	Centralized Ventilation		Decentralized Ventilation
Ceiling C	Concealed	Vertical Type	Wall mounted Type
LGH-RVX Series A commercially oriented system that can be used to deliver high performance and functions virtually anywhere.  LGH-RVXT Series Thin, large airflow models of the LGH series that deliver high performance and functions.	LGH-RVS Series Sensible heat models of the LGH series that can also be installed in sanitary areas.	VL-CZPVU Series Vertical type for residential use. Centralized ventilation with sensible heat exchange.	VL-100(E)U5-E Wall mounted models. Particularly suitable for houses and small offices.  VL-50(E)S2-E VL-50SR2-E

Dx-coil unit	Remote controller							
For Lossnay LGH-RVX/RVXT Series	For LGH-RVX/RVXT/RVS Series							
GUG Series Temperature control equipment that works with	PZ-62DR-EA/EB	PZ-43SMF-E						
Lossnay units and Mr.Slim outdoor units.	Access on the contract of the	Acceptance of the control of the con						

#### LOSSNAY LINEUP

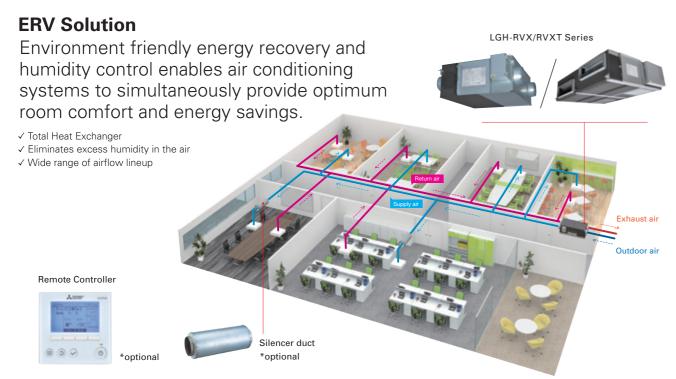
Applic	ation	Airf	low 50 CM		150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
		LGH-RVX Series	<b>a</b>		•	•	•	•	•	•	•	•		
<u> </u>	aled	LGH-RVXT Series										•	•	•
entilatic	Concealed	LGH-RVS Series						•		•	•			
Centralized Ventilation	Ceiling	GUF Series						•			•			
Centra		GUG Series (Dx-coil unit for Lossnay LGH-RVX/RVXT Series)	h					•	•	•	•	•	•	•
	Vertical Type	VL-CZPVU Series				•	•	•						
alized	mounted Type	VL-100(E)U₅-E		•										
Decentralized Ventilation	Wall mo	VL-50(E)S <sub>2</sub> -E VL-50SR <sub>2</sub> -E	•											

## **Commercial Use Lossnay**

Mitsubishi Electric offers Energy Recovery Ventilation and Heat Recovery Ventilation solutions for optimizing building air quality by Lossnay

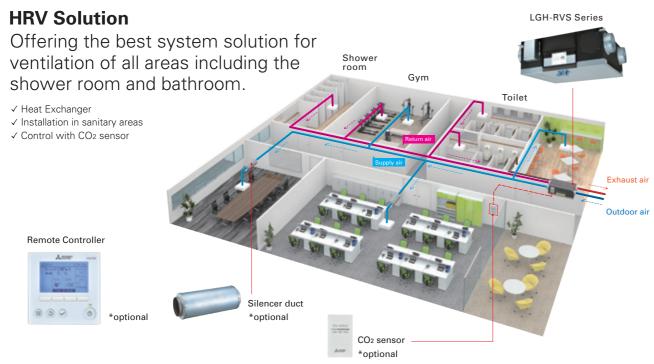
#### **Energy Recovery Ventilation**

A total heat exchange ventilation system that uses paper characteristics (Lossnay core) to perform temperature (sensible heat) and humidity (latent heat) exchange



#### **Heat Recovery Ventilation**

A heat exchange ventilation system that uses a heat exchanger (Lossnay core) to perform temperature (sensible heat) exchange



## Residential Use Lossnay

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

#### **Heat Recovery Ventilation**

A heat exchange ventilation system that uses a heat exchanger (Lossnay core) to perform temperature (sensible heat) exchange.

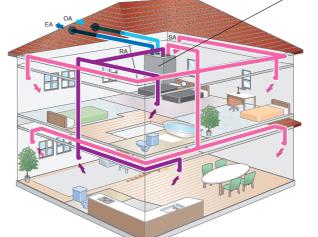
#### **Centralized Ventilation Solution**

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. A sensible heat exchanger effectively reduces excess humidity in the winter.



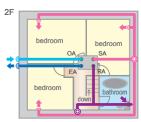
- √ Whole-house Solution
- √ Air Purification
- ✓ Quiet Operation
- ✓ MELCloud Control







VL-250/350/500CZPVU-L-E





### **Energy Recovery Ventilation**

A total heat exchange ventilation system that uses paper characteristics (Lossnay Core) to perform temperature (Sensible heat) and humidity (latent heat) exchange.

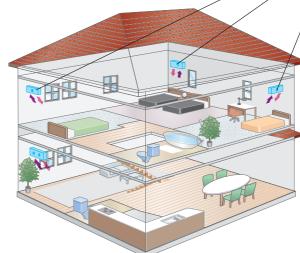
#### **Decentralized Ventilation Solution**

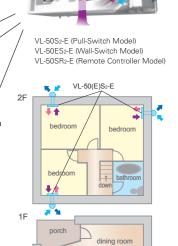
Install the wall-mounted Lossnay in each room. The heat recovery system provides fresh air at a comfortable air temperature. Total heat exchangers effectively reduce heat loss.

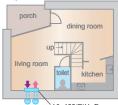
- √ Total Heat Exchanger
- √ Individual Ventilation
- √ Flexible Installation
- ✓ Easy Maintenance √ Stylish Design



VL-100EU5-E (Wall-Switch Model)

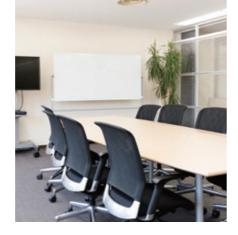






## LOSSNAY

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.



## LGH-RVX

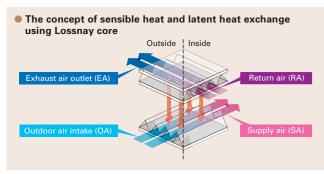
A commercially oriented system that can be used to deliver high performance and functions virtually anywhere.

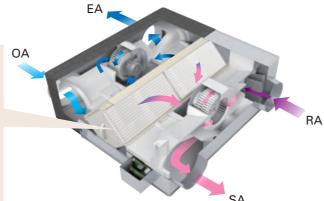
LGH-15/25/35/50/65/80/100/150RVX-E



#### Indoor air quality inside a building is optimized through temperature and humidity exchange by Lossnay

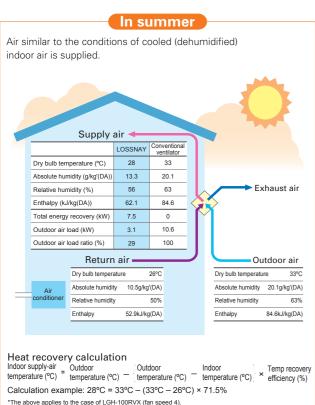
Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.

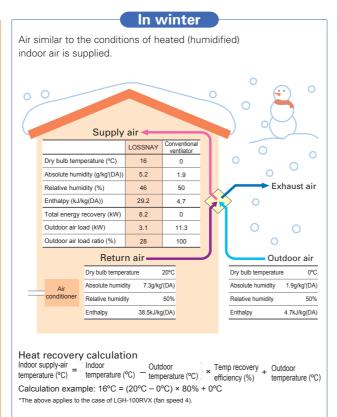




#### What can be improved by introducing Lossnay?

Ventilation with maximized comfort





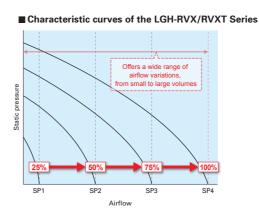
#### Improved airflow range

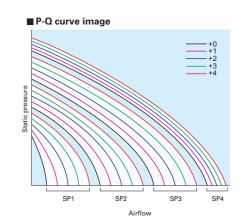
#### Wide airflow range

Each fan speed has a range setting of 25, 50, 75 and 100%, allowing much finer airflow control. When used in combination with the CO<sub>2</sub> sensor or timer function, airflow 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 in slight increments. Use the PZ-62DR-EA/EB remote controller to reset the speed.
- 1) Considering the total hours of Lossnay operation (filter clogging), fan power can be adjusted automatically after a given period of time.
- 2) After the unit is installed, fine adjustments can be made if the airflow is slightly lower than the desired airflow.





## LGH-RVXT

The LGH-RVXT Series has a large airflow of 1500-2500 CMH but a thin body of approximately 500mm. Therefore, the unit can be easily installed in the ceiling.

LGH-150/200/250RVXT-E



#### Thin body type



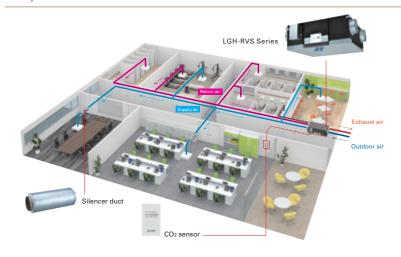
## LGH-RVS SERIES

The LGH-RVS Series of sensible heat Lossnay models allows diverse solutions and options in response to customer needs.

LGH-50/80/100RVS-E



#### A system solution for all-area ventilation



A sensible heat exchanger allows ventilation of all areas including sanitary area.

- Plug and play CO2 sensor control including power
- Digital commissioning of fan speed increments
- Built-in condensate drainage traps

#### Easy installation

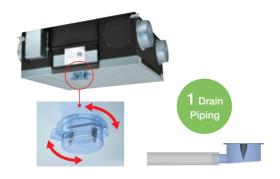
#### Light Chassis

Being light in weight is one of the most important factors for installation. The light chassis of the LGH-RVS series can provide a huge advantage in terms of installation coat and safety.



#### **Easy Drain Piping**

- Only one drain piping for both SA and EA.
- 360-degree drain pipe connection.
- Trap piping work is NOT required owing to an internal backflow stopper.



#### Various optional parts

The LGH-RVS series can connect with various optional parts. A CO2 sensor is one of the best solutions for optimized airflow control. The unit operates while optimizing airflow in accordance with the level of CO2 condensation in the room. Optimized ventilation can reduce the energy consumption of the air conditioner. A high-efficiency filter can be optionally installed in the unit as an easy solution for even better indoor air quality.



## **GUF** SERIES



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.

GUF-50/100RD4, GUF-50/100RDH4

These units can be used with R410A.

Outdoor units available in the GUF-RD/RDH series (For details see Mitsubishi Electric's CITY MULTI catalog).

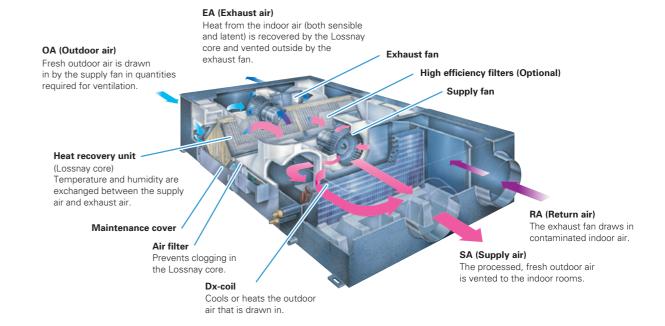
#### R410A refrigerant units

Mode	l Size	P112	P125	P140	P200	P250	P300	P350	P400	P450	P500	P550	P600	P650	P700	P750	P800
Y Series	PUHY-YGM-A				•	•	•	•	•	•	•	•	•	•	•	•	•
R2 Series	PURY-YGM-A				•	•	•	•	•	•	•	•	•	•			
DLIMV Carias	PUMY-SP	•	•	•													
PUMY Series	PUMY-P	•	•	•	•												

#### Lossnay ventilation and Air conditioning

The OA (outdoor-air) Processing Unit creates an optimum environment while providing substantial energy savings. The OA Processing Unit comprises forced air ventilation, heat recovery, heating and cooling, and air purification. This total air conditioning system keeps indoor air fresh and comfortable all year round, and keeps it free of contaminants preventing ailments such as sick building syndrome. Inside the OA Processing Unit is the Lossnay Core, a heat-exchange unit that transfers heat efficiently, cutting ventilation load by as much as 70%. A remarkable product found nowhere else, this special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.

#### **GUF-RD** type



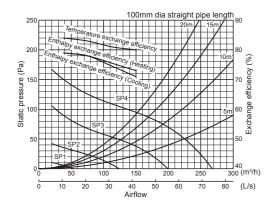
## LGH-RVX SERIES

#### **Specifications**

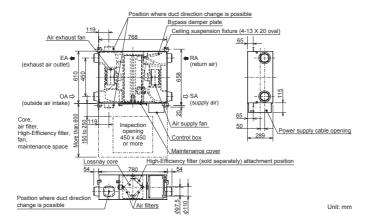
#### LGH-15RVX-E

Electrical power supply				2:	20-240V/50H	lz, 220V/60H	-lz				
Ventilation mode			Heat recovery mode				Bypass mode				
Fan speed		SP4 SP3 SP2 SP1 SP4 SP3 SP2 S						SP1			
Running current (A)		0.40	0.24	0.15	0.10	0.41 0.25 0.15 0.1					
Input power (W)		49	28	14	7	52 28 14 8					
Airflow	(m <sup>3</sup> /h)	150	113	75	38	150	113	75	38		
All Hove	(L/s)	42	31	21	10	42	31	21	10		
External static pressure (Pa)		95	54	24	6	95	54	24	6		
Temperature exchange efficiency (	%)	80	81	83	84	-	-	-	-		
Enthalpy exchange efficiency (%)	Heating	73	75.5	78	79	-	-	-	-		
Littialpy exchange efficiency (70)	Cooling	71	74.5	78	79	-	-	-	-		
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	28	24	19	17 29 24 19 1				18		
Weight (kg)		20									
Specific energy consumption class		A									

#### **Characteristic Curves**



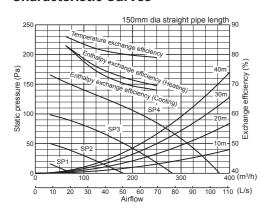
#### **Dimensions**



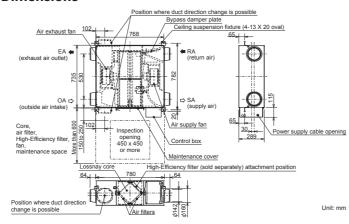
#### LGH-25RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz								
Ventilation mode			Heat recov	very mode	20-240 1/301	12, 220 0/001		s mode		
Fan speed		SP4	SP3	SP2	SP1	SP4	SP4 SP3 SP2 SP			
Running current (A)		0.48	0.28	0.16	0.10	0.48				
Input power (W)		62	33	16	7.5				9	
Airflow	(m <sup>3</sup> /h)	250	188	125	63	250	188	125	63	
All llow	(L/s)	69	52	35	17	69	52	35	17	
External static pressure (Pa)		85	48	21	5	85	48	21	5	
Temperature exchange efficiency (	%)	79	80	82	86	-	-	-	-	
Enthalpy exchange efficiency (%)	Heating	69.5	72	76	83	-	-	-	-	
Entirally exchange eniciency (78)	Cooling	68	70	74.5	83	-	-	-	-	
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	27	22	20	17	27.5	23	20	17	
Weight (kg)					2	23				
Specific energy consumption class		A								

#### **Characteristic Curves**



#### **Dimensions**



- ■For LGH-RVX and LGH-RVXT series

  \*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

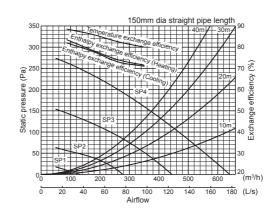
  \*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*For specifications at other frequencies, contact your dealer.

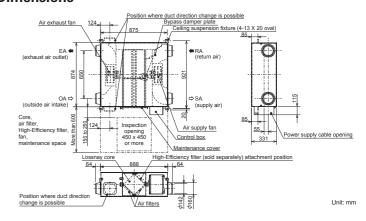
#### LGH-35RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz								
Ventilation mode			Heat recov	very mode			Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4 SP3 SP2 S				
Running current (A)		0.98	0.54	0.26	0.12	0.98	0.98 0.56 0.28 0.			
Input power (W)		140	70	31	11	145	72	35	13	
Airflow	(m <sup>3</sup> /h)	350	263	175	88	350	263	175	88	
All How	(L/s)	97	73	49	24	97	73	49	24	
External static pressure (Pa)		160	90	40	10	160	90	40	10	
Temperature exchange efficiency (	%)	80	82.5	86	88.5	-	-	-	-	
Enthalpy exchange efficiency (%)	Heating	71.5	74	78.5	83.5	-	-	-	-	
Littialpy exchange efficiency (70)	Cooling	71	73	78	82	-	-	-	-	
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	32	28	20	17	32.5	28	20	18	
Weight (kg)		30								

#### **Characteristic Curves**



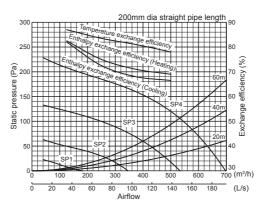
#### **Dimensions**



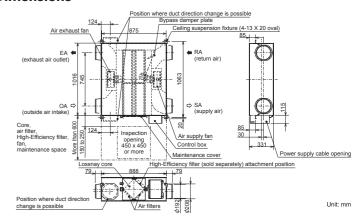
#### LGH-50RVX-E

Electrical power supply				2	20-240V/50H	Hz, 220V/60H	Ηz			
Ventilation mode			Heat recov	very mode			Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)		1.15	0.59	0.26	0.13	1.15	1.15 0.59 0.27 0.1			
Input power (W)		165	78	32	12	173	81	35	14	
Airflow	(m <sup>3</sup> /h)	500	375	250	125	500	375	250	125	
Airiow	(L/s)	139	104	69	35	139	104	69	35	
External static pressure (Pa)		120	68	30	8	120	68	30	8	
Temperature exchange efficiency (	%)	78	81	83.5	87	-	-	-	-	
Enthalpy exchange efficiency (%)	Heating	69	71	75	82.5	-	-	-	-	
Entirally exchange eniciency (70)	Cooling	66.5	68	72.5	82	-	-	-	-	
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	34	28	19	18	35	29	29 20 18		
Weight (kg)		33								

#### **Characteristic Curves**



#### **Dimensions**



- For LGH-RVX and LGH-RVXT series

  \*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

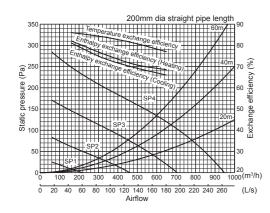
  \*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*For specifications at other frequencies, contact your dealer.

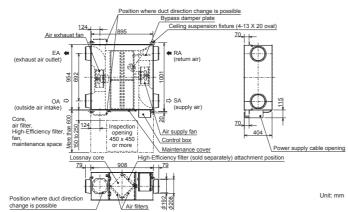
#### LGH-65RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode Bypass mode							
Fan speed	n speed			SP4         SP3         SP2         SP1         SP4         SP3         SP2					
Running current (A)		1.65	0.90	0.39	0.15	1.72	0.86	0.38	0.16
Input power (W)	252	131	49	15	262	131	47	17	
Airflow	(m <sup>3</sup> /h)	650	488	325	163	650	488	325	163
All HOVV	(L/s)	181	135	90	45	181	135	90	45
External static pressure (Pa)		120	68	30	8	120	68	30	8
Temperature exchange efficiency (	%)	77	81	84	86	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	68.5	71	76	82	-	-	-	-
Littilalpy exchange efficiency (%)	Cooling	66	69.5	74	81	-	-	-	-
Noise (dB) (Measured at 1.5m under	34.5	29	22	18	35.5	29	22	18	
Weight (kg)	38								

#### **Characteristic Curves**



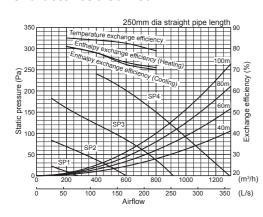
#### **Dimensions**



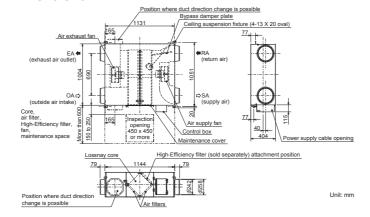
#### LGH-80RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode	/entilation mode			Heat recovery mode Bypass mode					
Fan speed		SP4         SP3         SP2         SP1         SP4         SP3         SP2						SP1	
Running current (A)		1.82	0.83	0.36	0.15	1.97	0.86	0.40	0.15
Input power (W)	335	151	60	18	340	151	64	20	
Airflow	(m <sup>3</sup> /h)	800	600	400	200	800	600	400	200
All llow	(L/s)	222	167	111	56	222	167	111	56
External static pressure (Pa)		150	85	38	10	150	85	38	10
Temperature exchange efficiency (	%)	79	82.5	84	85	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	71	73.5	78	81	-	-	-	-
Enthalpy exchange eniciency (%)	Cooling	70	72.5	78	81	-	-	-	-
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			30	23	18	36	30	23	18
Weight (kg)			48						

#### **Characteristic Curves**



#### **Dimensions**



- ■For LGH-RVX and LGH-RVXT series

  \*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

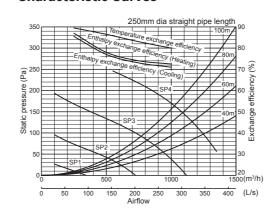
  \*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*For specifications at other frequencies, contact your dealer.

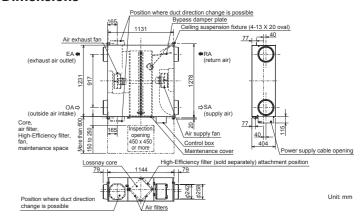
#### LGH-100RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode	/entilation mode			Heat recovery mode Bypass mode					
Fan speed		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
Input power (W)	420	200	75	21	420	200	75	23	
Airflow	(m <sup>3</sup> /h)	1000	750	500	250	1000	750	500	250
All How	(L/s)	278	208	139	69	278	208	139	69
External static pressure (Pa)		170	96	43	11	170	96	43	11
Temperature exchange efficiency (	%)	80	83	86.5	89.5	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	72.5	74	78	87	-	-	-	-
Littialpy exchange efficiency (%)	Cooling	71	73	77	85.5	-	-	-	-
Noise (dB) (Measured at 1.5m under	37	31	23	18	38	32	24	18	
Weight (kg)	54								

#### **Characteristic Curves**



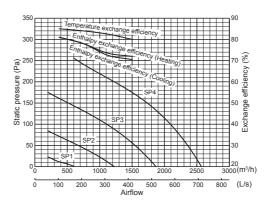
#### **Dimensions**



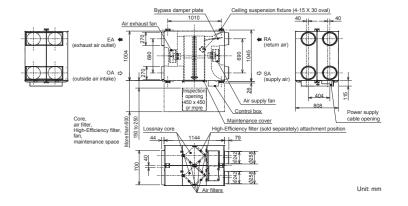
#### LGH-150RVX-E

Electrical and a second	Electrical power supply 220-240V/50Hz, 220V/60Hz									
		220-240V/50Hz, 220V/60Hz								
Ventilation mode	ation mode			Heat recovery mode Bypass mode						
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)		3.71	1.75	0.70	0.29	3.85	1.78	0.78	0.30	
Input power (W)	670	311	123	38	698	311	124	44		
Airflow	(m <sup>3</sup> /h)	1500	1125	750	375	1500	1125	750	375	
Airiow	(L/s)	417	313	208	104	417	313	208	104	
External static pressure (Pa)		175	98	44	11	175	98	44	11	
Temperature exchange efficiency (	%)	80	82.5	84	85	-	-	-	-	
Enthalpy exchange efficiency (%)	Heating	72	73.5	78	81	-	-	-	-	
Entitially exchange efficiency (%)	Cooling	70.5	72.5	78	81	-	-	-	-	
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			32	24	18	40.5	33	26	18	
Weight (kg)			98							

#### **Characteristic Curves**



#### **Dimensions**



- For LGH-RVX and LGH-RVXT series

  \*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

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

  \*For specifications at other frequencies, contact your dealer.

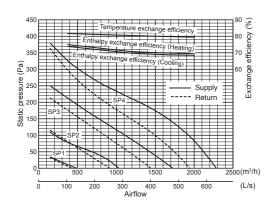
## LGH-RVXT SERIES

#### **Specifications**

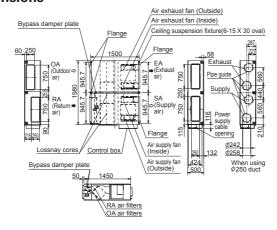
#### LGH-150RVXT-E

Electrical power supply				2:	20-240V/50H	lz, 220V/60H	-lz		
Ventilation mode		Heat recovery mode Bypass mode					mode		
Fan speed		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
Input power (W)		792	421	176	48	625	334	134	37
Airflow	(m <sup>3</sup> /h)	1500	1125	750	375	1500	1125	750	375
All How	(L/s)	417	313	208	104	417	313	208	104
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11
External static pressure (i a)	Return	100	56	25	6	100	56	25	6
Temperature exchange efficiency (	%)	80	80.5	81	81.5	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	70	71	73	75	-	-	-	-
Entirally exchange efficiency (%)	Cooling	69	70	72	74	-	-	-	-
Noise (dB) (Measured at 1.5m under	39.5	35.5	29.5	22	39	33	26.5	20.5	
Weight (kg)	156								

#### **Characteristic Curves**



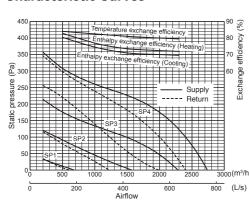
#### **Dimensions**



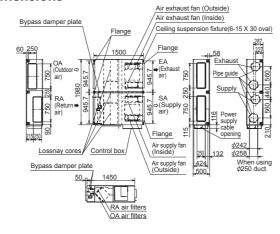
#### LGH-200RVXT-E

Electrical power supply				2:	20-240V/50H	tz, 220V/60H	-lz		
Ventilation mode		Heat recovery mode Bypass mode							
an speed			SP4 SP3 SP2 SP1 SP4 SP3 SP2 S					SP1	
Running current (A)		5.40	2.70	1.10	0.39	5.00	2.20	0.85	0.34
Input power (W)		1000	494	197	56	916	407	150	45
Airflow	(m <sup>3</sup> /h)	2000	1500	1000	500	2000	1500	1000	500
Alfilow	(L/s)	556	417	278	139	556	417	278	139
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11
External static pressure (Fa)	Return	100	56	25	6	100	56	25	6
Temperature exchange efficiency (	%)	80	81	82.5	84	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	72.5	73.5	77	83	-	-	-	-
Littialpy exchange efficiency (%)	Cooling	70	71	74.5	80.5	-	-	-	-
Noise (dB) (Measured at 1.5m under	39.5	35.5	28	22	40.5	34.5	27	20.5	
Weight (kg)	159								

#### **Characteristic Curves**



#### **Dimensions**



255

■For LGH-RVX and LGH-RVXT series

\*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

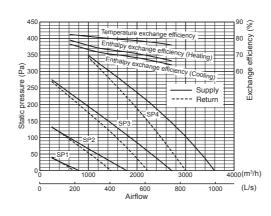
\*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

\*For specifications at other frequencies, contact your dealer.

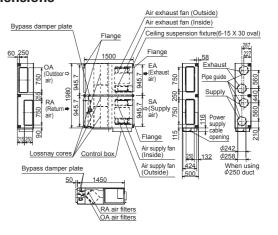
#### LGH-250RVXT-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode Bypass mode							
Fan speed	Fan speed			SP4         SP3         SP2         SP1         SP4         SP3         SP2					
Running current (A)		7.60 3.60 1.40 0.57 6.90 3.10 1.30						0.49	
Input power (W)		1446	687	244	82	1298	587	212	69
Airflow	(m <sup>3</sup> /h)	2500	1875	1250	625	2500	1875	1250	625
All llow	(L/s)	694	521	347	174	694	521	347	174
External static pressure (Pa)	Supply	175	98	44	11	175	98	44	11
External static pressure (i a)	Return	100	56	25	6	100	56	25	6
Temperature exchange efficiency (	%)	77	79	80.5	82.5	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	68	71.5	74	79	-	-	-	-
Littialpy exchange efficiency (70)	Cooling	65.5	69	71.5	76.5	-	-	-	-
Noise (dB) (Measured at 1.5m under	43	39	32	24	44	38.5	31	22.5	
Weight (kg)		198							

#### **Characteristic Curves**



#### **Dimensions**



- ■For LGH-RVX and LGH-RVXT series

  \*The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

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

  \*For specifications at other frequencies, contact your dealer.

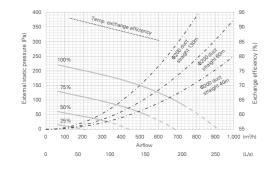
## LGH-RVS SERIES

#### **Specifications**

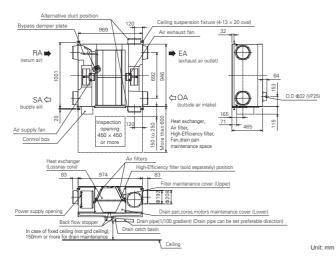
#### LGH-50RVS-E

Weight						55kg (67kg with maximum drain water)
Electrical power supply						220-240V/50Hz, 220V/60Hz
Fan speed		100%	75%	50%	25%	Test condition
Input power (W)		190	110	60	25	
A 1.01 -	(m <sup>3</sup> /h)	500	375 250 125			
Airflow (L/s)		(L/s) 139	104	69	35	ISO 16494
Specific fan power [W/(L/s	]	1.37	1.06	0.86	0.72	Temp. exchange efficiency is winter condition
External static pressure (	Pa)	150	84	38	9	
Temperature exchange e	fficiency (%)	87.0	89.0	91.0	93.0	
Noise (dB)		33.0	27.0	22.0	18.0	A-weighted sound pressure level @1.5m off from the center of the unit in an anechoic chamber
Exhaust air transfer ratio (	%)			5		Tracer gas method @100% airflow (prEN308)

#### **Characteristic Curves**



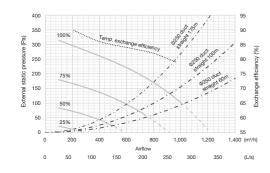
#### **Dimensions**



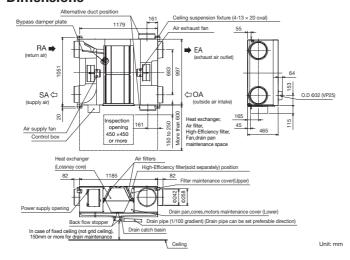
#### LGH-80RVS-E

Weight						63kg (77kg with maximum drain water)
Electrical power supply	,					220-240V/50Hz, 220V/60Hz
Fan speed		100%	75%	50%	25%	Test condition
Input power (W)		325	175	85	32	
Airflow	(m <sup>3</sup> /h)	800	600	400	200	
Airnow	(L/s)	222	167	111	56	ISO 16494
Specific fan power [W/	(L/s)]	1.46	1.05	0.77	0.58	Temp. exchange efficiency is winter condition
External static pressu	re (Pa)	170	96	43	11	
Temperature exchang	e efficiency (%)	82.0	84.0	86.0	90.0	
Noise (dB)		36.0	30.0	25.0	18.0	A-weighted sound pressure level @1.5m off from the center of the unit in an anechoic chamber
Exhaust air transfer rati	o (%)		į.	5		Tracer gas method @100% airflow (prEN308)

#### **Characteristic Curves**



#### **Dimensions**

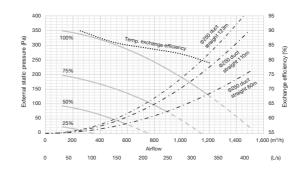


## ■The input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz. Temperature exchange efficiency (%) is measured at indoor DB 20°C/WB15°C and outdoor DB 5°C/WB3°C. It is measured according to ISO16494. When the indoor humidity is low and condensation in the heat exchanger does not occur, the exchange efficiency may be decreased in winter. ■The absolute humidity of RA shall be lower than 0.0138kg/kg (DA) in winter and relative humidity of RA shall be lower than 90%RH through the year. Example of the absolute humidity 0.0139kg/kg (DA) are 20.7°C 90%RH, 25°C 70%, 30°C 50% etc.

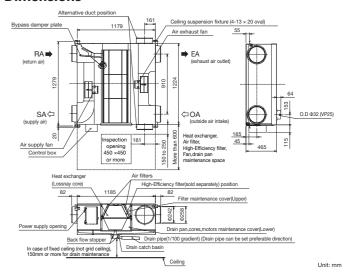
#### LGH-100RVS-E

Weight						73kg (89kg with maximum drain water)					
Electrical power supply						220-240V/50Hz, 220V/60Hz					
Fan speed		100%	75%	50%	25%	Test condition					
Input power (W)		445	225	100	35						
A1.61.	(m <sup>3</sup> /h)	1000	750	500	250						
Airflow	(L/s)	278	208	139	69	ISO 16494					
Specific fan power [W/(L/s)]		1.60	1.08	0.72	0.50	Temp. exchange efficiency is winter condition					
External static pressure (Pa)		190	107	48	12						
Temperature exchange effic	iency (%)	82.0	84.0	86.0	90.0						
Noise (dB)		37.0	32.0	24.0	18.0	A-weighted sound pressure level @1.5m off from the center of the unit in an anechoic chamber					
Exhaust air transfer ratio (%)				Tracer gas method @100% airflow (prEN308)							

#### **Characteristic Curves**



#### **Dimensions**



- ■The input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz. Temperature exchange efficiency (%) is measured at indoor DB 20°C/WB15°C and outdoor DB 5°C/WB3°C. It is measured according to ISO16494.

  When the indoor humidity is low and condensation in the heat exchanger does not occur, the exchange efficiency may be decreased in winter.

  ■The absolute humidity of RA shall be lower than 0.0139kg/kg (DA) in winter and relative humidity of RA shall be lower than 90%RH through the year.

  Example of the absolute humidity 0.0139kg/kg (DA) are 20.7°C 90%RH, 25°C 70%, 30°C 50% etc.

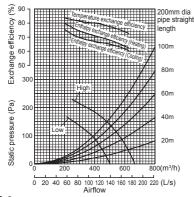
## **GUF** SERIES

#### **Specifications**

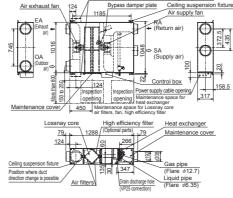
#### GUF-50RD4

Electrical power supp	ly			220-240	)V/50Hz			
Ventilation mode			Heat reco	very mode	Bypas	s mode		
Fan speed			High	Low	High	Low		
Running current (A)			1.15	0.70	1.15	0.70		
Input power (W)			235-265	150-165	235-265	150-165		
Airflow	(m³/h)		500	400	500	400		
All llow		(L/s)	139	111	139	111		
External static pressu	re (Pa)		140	90	140 90			
Temperature exchang	e efficiency (%)	ncy (%) 77.5 80 -				-		
Enthalpy exchange ef	ficionay (9/ )	Heating	68	71	-	-		
Entirally exchange en	licieticy (76)	Cooling	65	67	-	-		
Cooling capacity (kW)				5.57	(1.94)			
Heating capacity (kW)	)			6.21	(2.04)			
Capacity equivalent to	the indoor unit			PS	32			
	Humidifying			-	-			
Humidifier	Humidifying cap	acity (kg/h)		-	-			
	Water supply pre	essure		-	-			
Noise (dB) (Measur	Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		33.5-34.5	29.5-30.5	35-36	29.5-30.5		
Weight (kg) 48								

#### **Characteristic Curves**





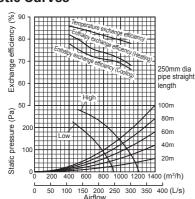


sition where duct direction change is possible

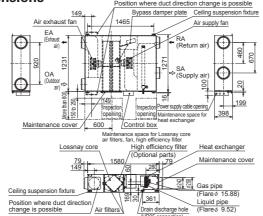
#### **GUF-100RD4**

Electrical power supp	ıly			220-240	)V/50Hz		
Ventilation mode			Heat reco	very mode	Bypass	mode	
Fan speed			High	Low	High	Low	
Running current (A)			2.20	1.73	2.25	1.77	
Input power (W)	power (W)			370-395	490-515	385-410	
Airflow	(m³/h)		1000	800	1000	800	
Airiow		(L/s)	278	222	278	222	
External static pressu	ire (Pa)		140	90	140 90		
Temperature exchange efficiency (%)			79.5	81.5			
Enthalpy exchange ef	ficioney (%)	Heating	71	74	-	-	
Littialpy excitatings et	inciency (70)	Cooling	69	71	-	-	
Cooling capacity (kW)	)			11.44	(4.12)		
Heating capacity (kW)	)			12.56	(4.26)		
Capacity equivalent to	o the indoor unit			P6	33		
	Humidifying			-	-		
Humidifier	Humidifying cap	acity (kg/h)	-				
	Water supply pr	essure		-			
Noise (dB) (Measur	loise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		38-39	34-35	38-39	35-36	
Weight (kg)			82				

#### **Characteristic Curves**



**Dimensions** 



- ■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/5°C WB

  \*The figures in () indicates heat recoverying capacity of heat exchange core.

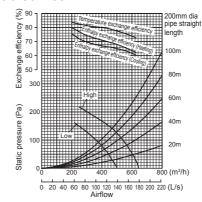
  \*Figures in the chart are measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*When the total capacity of indoor units connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of GUF needs to be 30% and less of the connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of GUF needs to be 30% and less of the capacity of GUF needs to be 30% and less of the capacity of GU

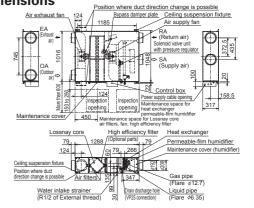
#### **GUF-50RDH4**

Electrical power supply				220-240	)V/50Hz			
Ventilation mode			Heat recov	Heat recovery mode By		ass mode		
Fan speed			High	Low	High	Low		
Running current (A)			1.15	1.15 0.70 1.15 0.70				
Input power (W)			150-165	235-265	150-165			
Airflow (m³/h) (L/s)		(m³/h)	500	400	500	400		
		(L/s)	139	111	139	111		
External static pressure (	(Pa)		125 80 125 80					
Temperature exchange efficiency (%)			77.5	80	-	-		
Enthalpy exchange efficiency (%)		Heating	68	71	-	-		
Entitlalpy exchange entitle	elicy (76)	Cooling	65	67	-	-		
Cooling capacity (kW)			5.57 (1.94)					
Heating capacity (kW)			6.21 (2.04)					
Capacity equivalent to th	ne indoor unit		P32					
Hi	umidifying			Permeable fil	lm humidifier			
Humidifier Hi	umidifying cap	pacity (kg/h)		2.7 (he	eating)			
W	Water supply pressure			Minimum pressure : 2.0 × 10 <sup>4</sup> Pa Maximum pressure : 49.0 × 10 <sup>4</sup> Pa				
Noise (dB) (Measured	at 1.5m unde	er the center of the unit in an anechoic chamber)	33.5-34.5	29.5-30.5	35-36	29.5-30.5		
Weight (kg)			51 (filled with water 55)					

#### **Characteristic Curves**



#### **Dimensions**

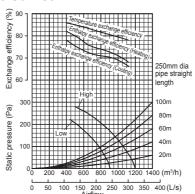


#### GUF-100RDH4

Electrical power supp	oly			220-240	)V/50Hz		
Ventilation mode			Heat reco	very mode	Bypass	mode	
Fan speed			High Low High Low				
Running current (A)			2.20 1.76 2.25 1.77				
Input power (W)			480-505 385-400 490-515 385-410				
Airflow	\(\text{Airflow}\) \(\text{(m3/h)}\) \((\text{(L/s)}\)		1000	800	1000	800	
AITIOW			278	222	278	222	
External static pressu	ıre (Pa)		135 86 135 86				
Temperature exchang	ge efficiency (%)		79.5	81.5	-	-	
Enthalpy exchange e	fficionay (%)	Heating	71	74	-		
Littialpy excitatige e	inciency (70)	Cooling	69	71	-	-	
Cooling capacity (kW	)		11.44 (4.12)				
Heating capacity (kW	/)		12.56 (4.26)				
Capacity equivalent t	o the indoor unit		P63				
	Humidifying			Permeable fil	m humidifier		
Humidifier	Humidifying cap	pacity (kg/h)		5.4 (he	eating)		
Water supply pressure			Minimum	pressure : 2.0 × 10 <sup>4</sup> Pa	Maximum pressure : 49.0	0 × 10 <sup>4</sup> Pa	
Noise (dB) (Measu	Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			34-35	38-39	35-36	
Weight (kg)				88 (filled wit	th water 96)		

**Dimensions** 

#### **Characteristic Curves**



- 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.

  \*When the total capacity of indoor units connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor units connected to 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor units connected on 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor units connected on 1 outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor units connected outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor units outdoor units (PUHY or PURY) exceeds the capacity of the total unit, the total capacity of GUF needs to be 30% and less of the connected outdoor units ou

## GUG SERIES

#### (Optional Dx-coil Unit for Lossnay)

Temperature control equipment that works with Lossnay units and Mr.Slim outdoor units.

GUG-01SL-E (Connection to LGH-50RVX-E or 65RVX-E) GUG-02SL-E (Connection to LGH-80RVX-E or 100RVX-E) GUG-03SL-E (Connection to LGH-150RVX-E, LGH-150/200/250RVXT-E)



GUG-03SL-E

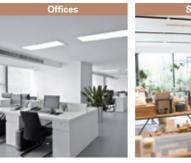
#### Supply comfortable control

#### **Product Features**

- Lossnay return air and supply air temperature control are possible by connecting the Dx-coil unit to Mr.Slim (power inverter series).
- Connecting the Dx-coil unit will expand Lossnay's temperature control range (500-2,500 CMH).
   Suitable for various applications such as offices, shops and schools etc.

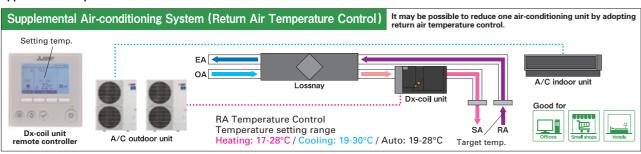


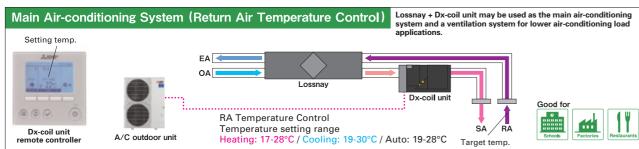
#### ■ Target Applications

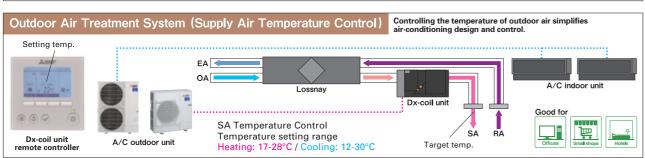




#### **Application Examples**





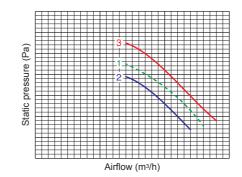


\*The above images of using the LGH-RVXT Series are simply examples for reference.

#### 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

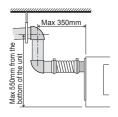
P-Q curve image

- 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 a 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-62DR-EA/EB 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.



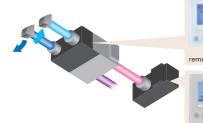
#### User-friendly system control

#### Flexible Remote Controller Selection

(A) One remote controller



#### (B) Two remote controllers



ON/OFF Fan speed Vent. mode

ON/OFF
Heating/Cooling
Temperature

Dx-coil unit
remote controller

When using only one remote controller, Lossnay fan speed is fixed at fan speed 3 or 4. When using two remote controllers, all Lossnay functions are available.

- \*1: Lossnay unit and Dx-coil unit both will synchronously switch 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<sub>2</sub>-sensor or a BMS (analog input (0 - 10 VDC) or a volt-free input).

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

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

### **GUG** SERIES **Specifications**



GUG-01SL-E

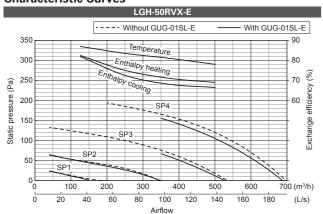
Refrigerant
Electrical power supply 194 JUA 220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit) Heating / Fan: 2.5W, Cooling: 12.4W Less than 0.1A Input power Running current 26kg \*Accessories: Approx. 1kg
Heating / Cooling / Auto / Fan \*Auto is only available for RA temperature control
RA (Return Air) temperature control / SA (Supply Air) temperature control
[Must be set at initial setting and not possible to change from remote controller] Weight Function LGH-100RVX-E 13.2 ( 5.1 + 8.1 ) Connectable Lossnay unit 10.0 ( 4.0 + 6.0 Capacity [kW] 8.3 ( 3.3 + 5.0 ) 0.69 4.62 11.3(4.2 + 7.1)SHF Performance index Heating Cooling
Airflow range at SP3 and SP4 4.98 560 - 1200 m<sup>3</sup>/r PUHZ-ZRP50 700 - 1200 m³/h PUHZ-ZRP71 Diameter Liquid / Gas: 9.52 / 15.88 Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30 PAC-SH30RJ-E and PAC-SH50RJ-E Ext. piping Maximum length: 50m, Maximum height: 30 Required optional parts Connectable Lossnay unit

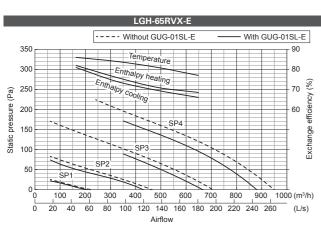
Capacity [kW] Heating
Cooling LGH-80RVX-E LGH-100RVX-E 11.4 (5.1 + 6.3) 9.5 (4.2 + 5.3) 10.0 ( 4.0 + 6.0 8.3 ( 3.3 + 5.0 ) 0.69 Performance index Heating Cooling
Airflow range at SP3 and SP4
Connectable authority 5.09 560 - 1200 m<sup>3</sup>/h 700 - 1200 m<sup>3</sup>/h 560 - 1200 m²/h
PUHZ-ZRP50
Diameter Liquid / Gas: 6.35 / 12.7
Maximum length: 50m, Maximum height: 30m
PAC-SH30RJ-E and PAC-SH50RJ-E PUHZ-ZRP50 Connectable outdoor unit Diameter Liquid / Gas: 6.35 / 12.7 Maximum length: 50m, Maximum height: 30m PAC-SH30RJ-E and PAC-SH50RJ-E Ext. piping Required optional parts Fan speed

#### GUG-02SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)

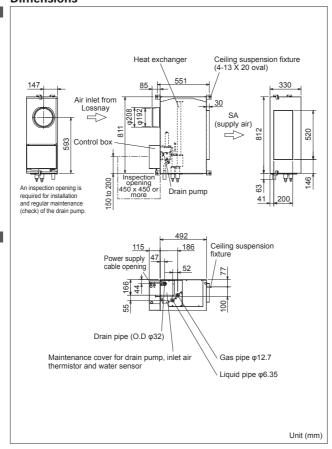
Refrigerant		R410A								
Electrical power supp	oly	220-240V / 50Hz	, 220V / 60Hz (Sup	oplied from outdoor	r unit)					
Input power		Heating / Fan: 2.5	5W, Cooling: 12.4W	V						
Running current		Less than 0.1A								
Weight		21kg *Accesso	21kg *Accessories: Approx. 1kg							
Function		Heating / Cooling	/ Auto / Fan *Au	uto is only available	for RA temperatur	re control				
runction		RA (Return Air) to	emperature control							
		RA (Return Air) temperature control								
Connectable Lossna	y unit		LGH-50	DRVX-E		LGH-65RVX-E				
Capacity [kW]	Heating		6.5 ( 2.4 + 4.1 )				7.7 ( 3.2 + 4.5 )			
Capacity [KVV]	Cooling		5.6 ( 2.0	0 + 3.6 )			6.6 ( 2.0	6 + 4.0 )		
SHF			0.	66			0.	69		
Performance index	Heating		4.	09		4.72				
renormance index	Cooling		4.	69			5.	03		
Airflow range at SP3	and SP4		350 - 6	95 m³/h			350 - 9	00 m <sup>3</sup> /h		
Connectable outdoor	unit		PUHZ-	ZRP35			PUHZ-	ZRP35		
Ext. piping			Diameter Liquio	d / Gas: 6.35 / 12.7		Diameter Liquid / Gas: 6.35 / 12.7				
Ext. piping		Max	imum length: 50m,	Maximum height:	30m	Maximum length: 50m, Maximum height: 30m				
					Ventilation s	pecifications				
Fan speed		SP4	SP4 SP3 SP2 SP1				SP3	SP2	SP1	
Airflow	[m <sup>3</sup> /h]	500	375	250	125	650	488	325	163	
AIIIIOW	[L/s]	139	104	69	35	181	135	90	45	
External static pressi	ıre [Pa]	105	59	26	7	95	53	24	6	

#### **Characteristic Curves**



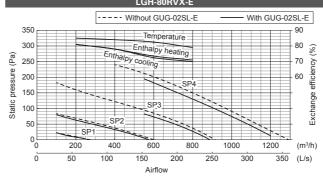


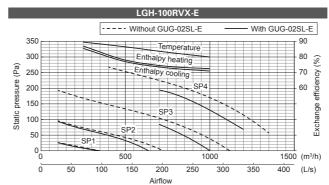
#### **Dimensions**



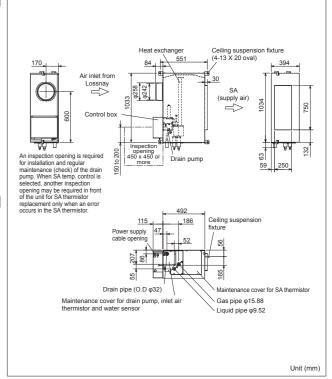
#### **Characteristic Curves**

Airflow





#### **Dimensions**



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GUG-02SL-E

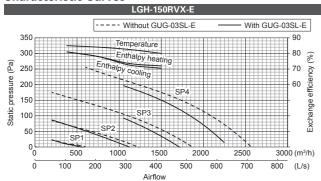


GUG-03SL-E

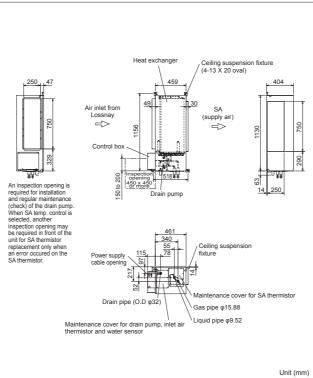
#### **GUG-03SL-E (Connection to LGH-150RVX-E)**

Electrical power supply   220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)   Input power	Refrigerant	R410A							
Input power			oplied from outdoor unit)						
Running current									
Veright   Veri									
Heating / Cooling / Auto / Fan									
RA (Return Air) temperature control / SA (Supply Air) temperature control   Must be set at initial setting and not possible to change from remote controller]									
Must be set at initial setting and not possible to change from remote controller	Function								
Connectable Lossnay unit		[Must be set at initial setting and not possible to change from remote controller]							
Capacity [kW]			RA (Return Air) te	mperature control					
Cooling   15.8 (6.3 + 9.5 )	Connectable Lossnay unit		LGH-15	0RVX-E					
SHF									
Heating	Cooling		15.8 ( 6.	3 + 9.5 )					
Section   Sect									
Cooling									
Connectable outdoor unit	Cooling								
Diameter   Liquid / Gas: 9.52 / 15.88   Maximum length: 30m									
Maximum length: 75m, Maximum height: 30m	Connectable outdoor unit								
SA (Supply Air) temperature control	Ext. piping								
Connectable Lossnay unit         LGH-150RVX-E           Capacity [kW]         Heating Cooling         16.6 (77 + 8.9)           Heating Cooling         13.4 (6.3 + 7.1)           Performance index Performance index Performance index Cooling         Heating Cooling         5.46           Airflow range at SP3 and SP4 Connectable outdoor unit         1050 - 2250 m³/h         PUHZ-ZRP71           Ext. piping         Diameter Liquid (Gas: 9.52 / 15.88         PuHZ-ZRP71           Ext. piping         Maximum length: 50m, Maximum height: 30m         Ventilation specifications           Connectable Lossnay unit         LGH-150RVX-E         SP4         SP3         SP2         SP1           Airflow         [m³/h]         1,500         1,125         750         375									
Capacity [kW]         Heating Cooling         16.6 (77 + 8.9)           SHF         0.85           Performance index Performance index Cooling         Heating Social Soci									
Cooling   13.4 (6.3 + 7.1)									
SHF									
Performance index									
Performance index	_								
Airflow range at SP3 and SP4  Connectable outdoor unit  Ext. piping  Diameter Liquid / Gas: 9.52 / 15.88  Maximum length: 50m, Maximum height: 30m  Ventilation specifications  Connectable Lossnay unit  Fan speed  SP4  SP3  SP2  SP1  Airflow  [m³/h]  1,500  1,125  750  375									
Connectable outdoor unit         PUHZ-ZRP71           Ext. piping         Diameter Liquid / Gas: 9.52 / 15.88           Maximum length: 50m, Maximum height: 30m           Ventilation specifications           Connectable Lossnay unit         LGH-150RVX-E           Fan speed         SP4         SP3         SP2         SP1           Aidflow         [m³/h]         1,500         1,125         750         375									
Ext. piping         Diameter Liquid / Gas: 9.52 / 15.88           Maximum length: 50m, Maximum height: 30m           Ventilation specifications           Connectable Lossnay unit         LGH-150RVX-E           Fan speed         SP4         SP3         SP2         SP1           Airflow         [m³/h]         1,500         1,125         750         375									
Maximum length: 50m, Maximum height: 30m           Ventilation specifications           Connectable Lossnay unit         LGH-150RVX-E           Fan speed         SP4         SP3         SP2         SP1           Airflow         [m³/h]         1,500         1,125         750         375	Connectable outdoor unit								
Ventilation specifications           Connectable Lossnay unit         LGH-150RVX-E           Fan speed         SP4         SP3         SP2         SP1           Airflow         [m³/h]         1,500         1,125         750         375	Ext. piping								
Connectable Lossnay unit         LGH-150RVX-E           Fan speed         SP4         SP3         SP2         SP1           Airflow         [m³/h]         1,500         1,125         750         375									
Fan speed         SP4         SP3         SP2         SP1           Airflow         [m³/h]         1,500         1,125         750         375	Connectable Lossnay unit								
Airflow [m³/h] 1,500 1,125 750 375		SP4			SP1				
	[m³/h]			U					
			, -						
External static pressure [Pa] 150 84 38 9	External static pressure [Pa]	150	84	38	9				

#### **Characteristic Curves**



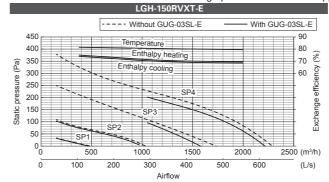
#### **Dimensions**

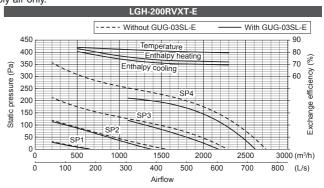


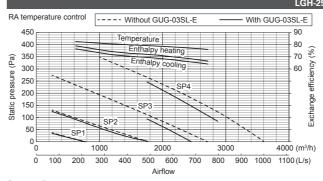
#### GUG-03SL-E (Connection to LGH-150RVXT-E, LGH-200RVXT-E or LGH-250RVXT-E)

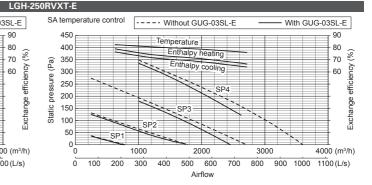
Refrigerant		R410A											
Electrical power supp	oly				oplied from o	utdoor unit)							
Input power				poling: 12.4V	V								
Running current		Less than 0											
Weight			cessories: A										
					uto is only av								
Function		RA (Return [Must be se	Air) temper et at initial se	ature control etting and no	I / SA (Supplet possible to								
						RA (F	Return Air) te	emperature c	ontrol				
Connectable Lossna	y unit		LGH-150	DRVXT-E			LGH-200	DRVXT-E			LGH-25	ORVXT-E	
Capacity [kW]	Heating	20.4 ( 7.4 + 13.0 )				23.8 ( 10.	3 + 13.5)			26.1 ( 12	1 + 14.0)		
Capacity [KVV]	Cooling		15.7 ( 6.	2 + 9.5)			18.4 ( 8.4	4 + 10.0 )			22.3 ( 9.	8 + 12.5)	
SHF		0.68				0.	76			0.	87		
Performance index	Heating	4.07				4.	86			4.	75		
renormance muex	Cooling	5.03		5.59		4.59							
Airflow range at SP3	flow range at SP3 and SP4 1050 - 2250 m <sup>3</sup> /h			1050 - 2600 m³/h			1750 - 2880 m³/h						
Connectable outdoor	unit	PUHZ-ZRP100			PUHZ-ZRP100				PUHZ-	ZRP125			
Ext. piping		Diame	ter Liquid	/ Gas: 9.52	/ 15.88	Diame	eter Liquid	/ Gas: 9.52	15.88	Diame	eter Liquid	/ Gas: 9.52	15.88
Lxt. piping		Maximum	ength: 75m,	Maximum h	neight: 30m			Maximum h		Maximum	length: 75m	Maximum h	eight: 30m
						SA (8		mperature c	ontrol				
Connectable Lossna	y unit			DRVXT-E				ORVXT-E		LGH-250RVXT-E			
Capacity [kW]	Heating		16.3 ( 7.				19.5 ( 10.3 + 9.2 )			21.6 ( 12.1 + 9.5 )			
, ,, ,	Cooling		13.3 ( 6.				15.9 ( 8.	- /				8 + 7.8 )	
SHF			0.					90				95	
Performance index	Heating		5.	16			6.					97	
	Cooling			03				54				31	
Airflow range at SP3				250 m³/h				600 m³/h				600 m³/h	
Connectable outdoor	unit		PUHZ-				PUHZ-					ZRP71	
Ext piping		Diame		/ Gas: 9.52		Diame		/ Gas: 9.52		Diame		/ Gas: 9.52 /	
Lxt. piping	Ext. piping  Maximum length: 50m, Maximum height: 30m			neight: 30m			Maximum h		Maximum	length: 50m	Maximum h	eight: 30m	
								pecifications					
Connectable Lossna	Connectable Lossnay unit LGH-150RVXT-E					LGH-200RVXT-E				LGH-250RVXT-E			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Airflow	[m³/h]	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	694	521	347	174
External static pressi	ure [Pa]	150	84	38	9	145	82	36	9	140	79	35	9

Characteristic Curves Note The graphs below show the supply air only.









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#### Attention

- 1. The running current and input power are based on 230V/50Hz.
- 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 for 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 characteristic curves. If the Lossnay airflow is out of this range, the compressor of the outdoor unit may stop for self-protection
- 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" catalog.
- 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<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit or disassemble the product yourself and always ask a professional.

## **CONTROL TECHNOLOGIES**

#### New model



PZ-62DR-EA/EB

#### Multi-language Display

Control panel operation in 17 different languages. Choose a desired language, among the following languages.

		-EA	-EB
	English	•	
	German	•	
	Spanish	•	•
	French	•	
	Italian		•
	Russian	•	
	Portuguese		•
	Swedish		
Language	Dutch		
	Turkish		
	Polish		
	Greek		
	Czech		
	Hungarian		
	Slovenian		
	Bulgarian	•	
	Danish		•

#### Compatibility Table

	P7-62D	R-EA/EB	PZ-43SMF-E
Function	Acceptance of the second secon	120  Anne  Dotte (serre)	20 Loner Loner Control
	LGH-RVX/RVXT	LGH-RVS	LGH-RVX/RVXT/RVS
Fan speed selection	4 fan speeds	4 fan speeds and Auto (Auto is available when using a CO <sub>2</sub> sensor)	2 of 4 fan speeds
Control with a CO <sub>2</sub> sensor (Mitsubishi Electric)	No	Yes (Fan speed automatically changes from 25% to 100% depending on the CO <sub>2</sub> concentration*)	No
Control with a CO <sub>2</sub> sensor (Field supply)	Yes (Fan speed automatically changes between 4 levels depending on the CO <sub>2</sub> concentration)	Yes (Fan speed automatically changes from 25% to 100% depending on the CO <sub>2</sub> concentration*)	No
Ventilation mode selection	Energy recovery / Bypass / Auto	Energy recovery / Bypass / Auto	Energy recovery / Bypass / Auto
Night-purge	Yes	Yes	No
Function setting from remote controller	Yes	Yes	No
Bypass temp. free setting	Yes (Set in Function setting menu)	Yes	No
Multi-stage airflow control	No	Yes (Both supply and exhaust fan speeds can be set separately from 25% to 100% in 5% pitches)	No
ON/OFF timer	Yes	Yes	Yes
Auto-off timer	Yes	Yes	No
Weekly timer	Yes	Yes	No
Fan speed timer	Yes	Yes	No
Operation restrictions (ON/OFF, ventilation mode, fan speed)	Yes	Yes	No
Operation restrictions (fan speed skip setting)	Yes	Yes	No
Screen contrast adjustment	Yes	Yes	No
Language selection	Yes	Yes	No (English only)
CO <sub>2</sub> concentration indication	No	Yes (available when using our manufactured CO2 sensor)	No
Filter cleaning sign	Yes	Yes (maintenance interval can be changed)	Yes
Lossnay core cleaning sign	Yes	No	No
Error indication	Yes (displays model name, serial number, contact information)	Yes (displays model name, serial number, contact information)	Yes
Error history	Yes	Yes	No
OA/RA/SA temp. display	Yes	Yes	No

<sup>\*</sup>Upper and lower limits may differ when using a CO2 sensor.

## Filters & Accessories

#### Filters For LGH-RVX Series & LGH-RVXT Series & GUF Series

#### Standard Filters

Replacements for the standard filter supplied with the Lossnay main unit.



		Filter			Lossnay	
Filter	Classif	ication	Model Name	Included	A - Cbl del	Required
Material	ISO 16890	EN779 (2012)	2) piece/set	Applicable model	filter pieces	
			PZ-15RFs-E	2	LGH-15RVX-E	2
		PZ-25RF <sub>8</sub> -E	4	LGH-25RVX-E	4	
		PZ-35RF <sub>8</sub> -E	4	LGH-35RVX-E	4	
	Coarse 35%	G3*	PZ-50RF <sub>8</sub> -E	4	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	4
Non-woven	Coarse 35%	G3.	PZ-65RFs-E	4	LGH-65RVX-E	4
Fabrics			P7-80RFs-F	4	LGH-80RVX-E	4
			PZ-8URF8-E	4	LGH-150RVX-E	8
		PZ-100RFs-E	4	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	4	
	0 500		PZ-150RTF-E	4	LGH-150RVXT-E	4
Coarse 50%	G3	PZ-250RTF-E	4	LGH-200RVXT-E, LGH-250RVXT-E	4	

<sup>\*</sup>The classification in EN779 (2002) is G3.

#### High-efficiency Filters Optional

These high-efficiency filters can be easily inserted in the Lossnay unit without the need to attach external parts.



		Filter			Lossnay		
Filter Material		ication	Model Name		Applicable model	Required filter pieces	
- Widtoria	ISO 16890	EN779 (2012)	D7.45D5145	piece/set	LOULANDING	anto: picoco	
			PZ-15RFM-E	1	LGH-15RVX-E	1	
		M6*	PZ-25RFM-E	2	LGH-25RVX-E	2	
			PZ-35RFM-E	2	LGH-35RVX-E	2	
Synthetic	ePM <sub>10</sub> 75%		PZ-50RFM-E	2	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	2	
fiber	er 10110 7 3 70	IVIO	PZ-65RFM-E	2	LGH-65RVX-E	2	
			P7-80RFM-F	2	LGH-80RVX-E	2	
			r Z-ountivi-E	2	LGH-150RVX-E	4	
			PZ-100RFM-E	2	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	2	

<sup>\*</sup>The classification in EN779 (2002) is F7.

#### Advanced High-efficiency Filters (For LGH-RVX and GUF Series) Optional

These advanced high-efficiency filters are designed to remove approx. 99.7% of airborne particulates that are 0.5µm or larger. \*GB/T14295-2008 : YG class, 99.7% ( Collecting efficiency for particles that are 0.5µm or larger )



		Filter			Lossnay	
Filter	Classif	ication		Included		Required
Material	ISO 16890	ASHRAE 52.2 (2017)	Model Name	piece/set	Applicable model	filter pieces
			PZ-15RFP <sub>2</sub> -E	1	LGH-15RVX-E	1
			PZ-25RFP <sub>2</sub> -E	2	LGH-25RVX-E	2
			PZ-35RFP <sub>2</sub> -E	2	LGH-35RVX-E	2
Synthetic	ePM <sub>1</sub> 75% ePM <sub>2.5</sub> 80%		PZ-50RFP <sub>2</sub> -E	2	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	2
fiber	ePM <sub>10</sub> 95%	IVILITY TO	PZ-65RFP2-E	2	LGH-65RVX-E	2
			P7-80RFP2-F	2	LGH-80RVX-E	2
				2	LGH-150RVX-E	4
			PZ-100RFP <sub>2</sub> -E	2	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	2

#### Advanced High-efficiency Filters (For LGH-RVXT Series) Optional

These advanced high-efficiency filters can be easily inserted in the Lossnay unit without the need to attach external parts.



		Filter			Lossnay		
Filter Material			Model Name	Included	Applicable model	Required	
iviateriai	ISO 16890	EN779 (2012)	79 (2012) Woder Name piece/set		filter pieces		
	ePM10 75%	M6*	PZ-M6RTFM-E	3			
Non-woven Fabrics ePM1 65% ePM2.5 75% ePM10 90%	ePM <sub>2.5</sub> 75%	F8*	PZ-F8RTFM-E	3	LGH-150RVXT-E, LGH-200RVXT-E, LGH-250RVXT-E	3	
	M6*	PZ-M6TDF-E	3				
	F8*	PZ-F8TDF-E	3				

<sup>\*</sup>There is no data for the classification in EN779 (2002)

#### Filters For LGH-RVS Series

#### **Filters**

A lineup of three types of filters offers optimum indoor air quality solutions! All filters are ISO and EN779:2012 certified, and can be easily installed in the units. Maintenance and exchanges can also be performed easily, simply by opening the maintenance panel.



#### **Standard Filter**



		Lossnay						
Filterterial	ISO 16890 (2016) EN779 (2012)			Model name Included		. Included		Required
Filter material	ISO 16890 (2016)	EN779 (2012)	Model name	piece/set	Applicable model	set/unit		
			PZ-S50RF-E	2	LGH-50RVS-E	1		
Non-woven fabrics	Coarse 50%	G3	PZ-S80RF-E	2	LGH-80RVS-E	1		
			PZ-S100RF-E	2	LGH-100RVS-E	1		

#### **High-efficiency** Filter



		Lossnay				
Filter meterial	Classif	Classification		Included	Appliachle model	Required
Filter material	ISO 16890 (2016)	EN779 (2012)	Model name	piece/set	Applicable model	set/unit
			PZ-S50RFM-E	2	LGH-50RVS-E	1
Pleated filter	ePM10 80%	M6	PZ-S80RFM-E	2	LGH-80RVS-E	1
			PZ-S100RFM-E	2	LGH-100RVS-E	1

#### **Advanced High-efficiency Filter**



		Filter			Lossnay		
Filter material	Classification		Model name	Included	Applicable model	Required	
Filter material	ISO 16890 (2016)	EN779 (2012)	Model name	piece/set	Applicable model	set/unit	
	ePM10 90%		PZ-S50RFH-E	2	LGH-50RVS-E	1	
Pleated filter	ePM <sup>2.5</sup> 75%	F8	PZ-S80RFH-E	2	LGH-80RVS-E	1	
	ePM1 65%		D7 0400D5U 5	_	LOUI 400DVC E	4	

#### **Accessories** For LGH-RVS Series

#### CO<sub>2</sub> Sensor

A CO<sub>2</sub> sensor connected directly to a Lossnay RVS unit optimizes the fan speed according to the level of CO2 detected. It improves total heat exchange efficiency and contributes to energy saving.

PZ-70CSW-E (Wall mounted type)





#### PZ-70CSB-E (Built-in type)

by LED lights.







■ Automatic operation with CO<sub>2</sub> sensor and PZ-62DR-E Fan speed automatically changes depending on CO<sub>2</sub> concentration.

#### Accessories For LGH-RVX/RVS Series & GUF Series

#### **Duct Silencer**

In facilities and applications requiring quiet operations, the silencer duct that reduces noise levels is the ideal solution. It contains glass wool and attenuates sound power by absorbing the noise from the airflow or operation of the unit.

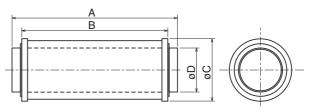


#### **Specifications**

Model	Airflow											
Wodel	[m <sup>3</sup> /h]	62.5Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz			
PZ-100SS-E	50	0	3	5	7	6	6	6	8			
FZ-10055-E	150	0	3	6	7	7	7	7	9			
PZ-150SS-E	250	0	1	5	8	15	21	20	14			
	350	0	1	4	8	14	21	21	16			
PZ-200SS-E	500	0	1	4	7	13	18	16	9			
FZ-20055-E	650	0	1	3	8	12	17	14	6			
PZ-250SS-E	800	0	2	4	12	22	21	14	13			
	1000	0	1	4	12	22	20	14	13			

- Figures on the chart above are based on the comparison with a general steel duct of the same length.
   The silencer is placed on just before the outlet during the measurement.
   When the airflow rate differs, the insertion loss is also different from the chart above.

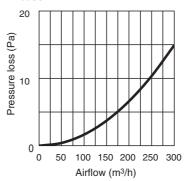
#### **Dimensions**



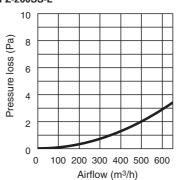
Model	Α	В	С	D	Connecting duct	Weight (kg)
PZ-100SS-E	450	400	152	99	ø100	1.9
PZ-150SS-E	560	500	202	149	ø150	3.5
PZ-200SS-E	660	600	252	199	ø200	5.3
PZ-250SS-E	660	600	332	249	ø250	8.9

#### Pressure loss curve

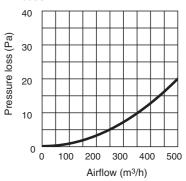
PZ-100SS-E



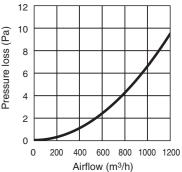
#### PZ-200SS-E



#### PZ-150SS-E



#### PZ-250SS-E



270

## VL-CZPVU SERIES

Vertical type centralized ventilation with sensible heat exchange for residential use.

VL-250CZPVU-R/L-E VL-350CZPVU-R/L-E VL-500CZPVU-R/L-E



#### Key features



#### **Quiet Operation**

Noise is one of the most common concerns for residential ventilation. Ultra quiet operation is achieved with the sirocco fan designed by Mitsubishi Electric. The balance between airflow and static pressure is optimized and the fan rotation is minimized, leading to low noise levels.

#### **Air Purification**

An optional filter removes NOx and PM2.5 and improves indoor air quality. They can be incorporated inside the unit without any filter box, which saves space

\*NOx: Nitrogen oxide, which includes nitric oxide (NO) and nitrogen dioxide (NO2).
\*PM2.5: Airborne particulates that are 2.5µm or smaller in size.

#### **Wi-Fi Control**

MELCloud is a Cloud-based solution for controlling Lossnay units either locally or remotely by computer, tablet or smartphone via the Internet. It allows Lossnay operations to be checked and controlled via MELCloud from virtually anywhere and Internet connection is available. With MELCloud, the Lossnay system can be used much more easily and conveniently.

#### **Energy efficiency**

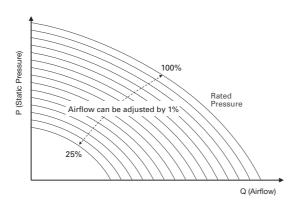
Under regulation (EU) No. 1254/2014, the VL-CZPVU series has the highest energy-saving performance in its class (ErP A+). It saves heating and cooling costs by minimizing the energy loss that occurs during ventilation.





#### Variable airflow control

The default fan speed value (Fan speed 1: 30%, Fan speed 2: 50%, Fan speed 3: 70%, and Fan speed 4: 100%) of both supply air and exhaust air can be adjusted flexibly. Within the range between 25% and 100%, airflow can be adjusted by 1% increments to satisfactorily meet the designed airflow rate.



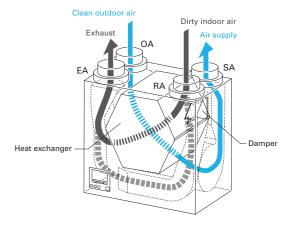
#### External airflow control

The airflow from the Lossnay unit can be altered using 0-10V signals from the controllers, such as the humidity stat and CO<sub>2</sub> sensor (field supply). The Lossnay unit is also connected to the light switch and can change to boost operation mode (input 220-240V). These devices are connected directly to the Lossnay unit, allowing automatic fan speed control according to bathroom occupation, CO<sub>2</sub> level, and humidity level.



#### Automatic bypass mode

It is possible to switch between "Lossnay ventilation (with heat exchange)" and "Bypass ventilation (without heat exchange)" either manually or automatically. When outside air is cooler than indoor air in summer, the unit directly draws in outside air, bypassing the heat exchanger.



 $^{\star}$  The figure shows VL-350CZPVU-L-E

#### Wide operating temperature range

The VL-CZPVU series can operate at temperatures down to -15°C. With a pre-heater, it can operate at temperatures down to -25°C.

- \* In areas where outdoor air falls below -20°C, an electric shutter (locally supplied) is required in the OA duct in addition to the pre-heater.
- \* The OA temperature must be higher than –15°C to use the pre-heater.

#### MELCloud for Lossnay

MELCloud enables fast, easy remote control and monitoring of Lossnay units. Wireless computer connectivity and an Internet-connected mobile or fixed terminal are all that are needed. MELCloud can also be used to control room air conditioners and Ecodan heat pumps simultaneously.

#### **Key Control and Monitoring Features**

- 1. Turn system on/off
- 2. Switching airflow & operating mode (Heat recovery / Bypass)
- 3. Confirming the status of the filter/core (Maintenance notification)



## **VL-CZPVU** SERIES

#### **Specifications**

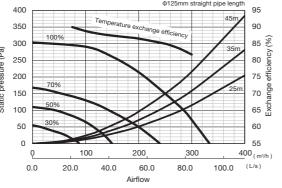
#### VL-250CZPVU-R/L-E

Electrical Power Supply			220-240V/50H	z, 220V-/60Hz			
Ventilation Mode		Heat recovery mode					
Fan Speed		FS4 (100%)	FS3 (70%)	FS2 (50%)	FS1 (30%)		
Running Current (A)		0.76	0.35	0.20	0.12		
Input Power (W)		106	44	23	11		
Airflow	(m³/h)	250	175	125	75		
Airflow	(L/s)	69	49	35	21		
External Static Pressure (Pa	)	150	74	38	14		
Temperature Exchange Effic	iency (%)	85	87	88	90		
Noise Level (dB)		31	22	16	15 >		
Energy Efficiency Class			Д	+			
Weight (kg)		26					
Dimensions (mm)			(H) 565 x (W)	595 x (D) 356			

#### ■ Attention

- 1. The above values are at factory default.
  2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
  3. The sound pressure level at 3m is spherical.
  4. Temperature exchange efficiency (%) is based on winter condition.
  5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

#### **Characteristic Curves**



#### ■ Attention

Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

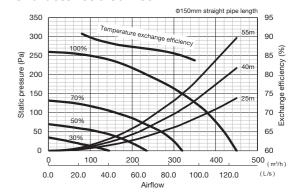
#### VL-350CZPVU-R/L-E

		220-240V/50H	z, 220V-/60Hz		
	Heat recovery mode   FS4 (100%)   FS3 (70%)   FS2 (50%)   FS1 (30%)   FS2 (50%)   FS1 (30%)   1.08   0.52   0.31   0.18   155   71   37   19				
	FS4 (100%)	00%)         FS3 (70%)         FS2 (50%)         FS1 (30           18         0.52         0.31         0.18           5         71         37         19           0         224         160         96           9         62         44         27		FS1 (30%	
	1.08	0.52	0.31	0.18	
	155	71	37	19	
(m³/h)	320	224	160	96	
(L/s)	89	62	44	27	
)	150	74	38	14	
iency (%)	85	87	88	90	
	35	26	19	15>	
		А	+		
		3	2		
		(H) 623 x (W)	658 x (D) 432		
	` ' '	1.08 155 (m³/h) 320 (L/s) 89 ) 150 iency (%) 85	Heat reco FS4 (100%) FS3 (70%) 1.08 0.52 155 71 (m³/h) 320 224 (L/s) 89 62 ) 150 74 iency (%) 85 87 35 26	FS4 (100%)   FS3 (70%)   FS2 (50%)	

#### ■ Attention

- 1. The above values are at factory default.
  2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
  3. The sound pressure level at 3m is spherical.
  4. Temperature exchange efficiency (%) is based on winter condition.
  5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

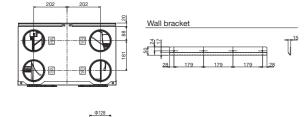
#### **Characteristic Curves**

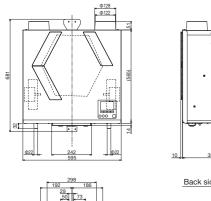


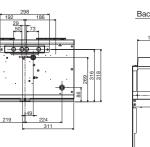
Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

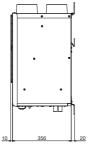
#### **Dimensions**

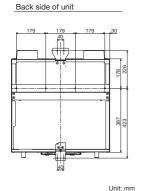
#### VL-250CZPVU-R-E



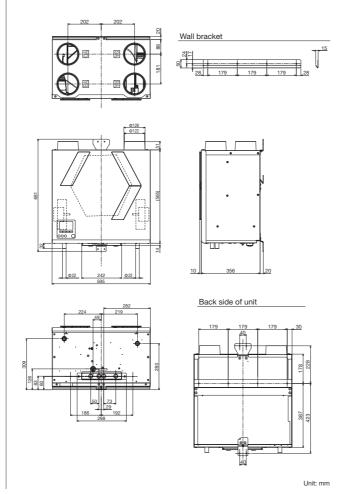






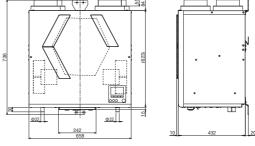


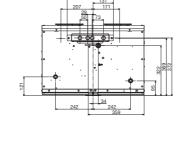
### VL-250CZPVU-L-E

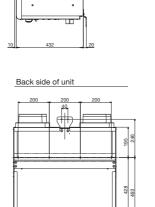


#### **Dimensions**

#### VL-350CZPVU-R-E

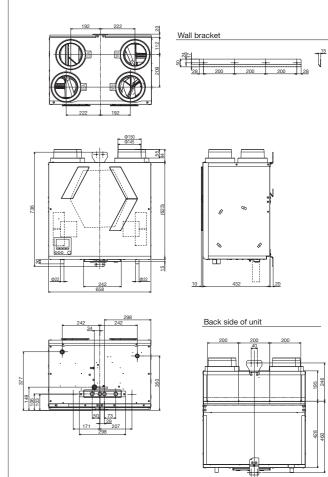






Unit: mm

#### VL-350CZPVU-L-E



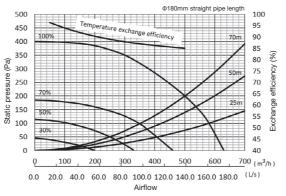
#### VL-500CZPVU-R/L-E

	•							
Electrical Power Supply			220-240V/50H	z, 220V-/60Hz				
Ventilation Mode		Heat recovery mode						
Fan Speed		FS4 (100%)	FS3 (70%)	%) FS2 (50%) FS1 (30%				
Running Current (A)		1.73	0.77	0.40	0.19			
Input Power (W)		275	104	49	21			
A : (1	(m³/h)	500	350	250	150			
Airflow	(L/s)	139	97	69	42			
External Static Pressure (Pa	1)	200	98	69 42				
Temperature Exchange Effic	eiency (%)	85	87	89	92			
Noise Level (dB)	ciency (%)         85         87         89         92           37         29         22         15>			15>				
Energy Efficiency Class	(Pa)         200         98         50         18           fficiency (%)         85         87         89         92							
Weight (kg)	ss A+ 39							
Dimensions (mm)		(H) 632 x (W) 725 x (D) 556						

#### ■ Attention

- 1. The above values are at factory default.
  2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
  3. The sound pressure level at 3m is spherical.
  4. Temperature exchange efficiency (%) is based on winter condition.
  5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

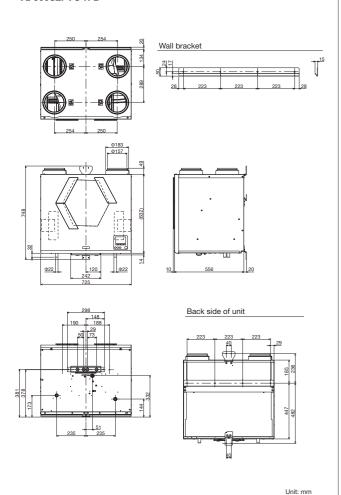
#### **Characteristic Curves**



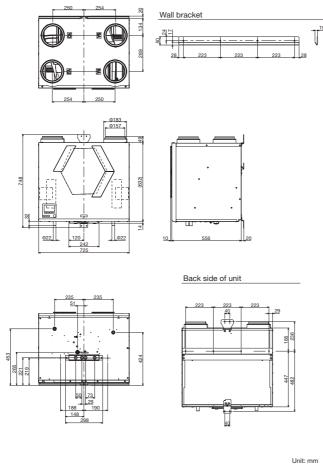
Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

## **Dimensions**





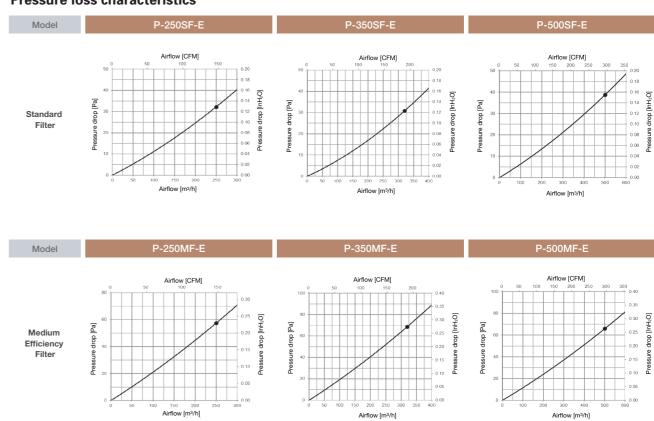
#### VL-500CZPVU-L-E



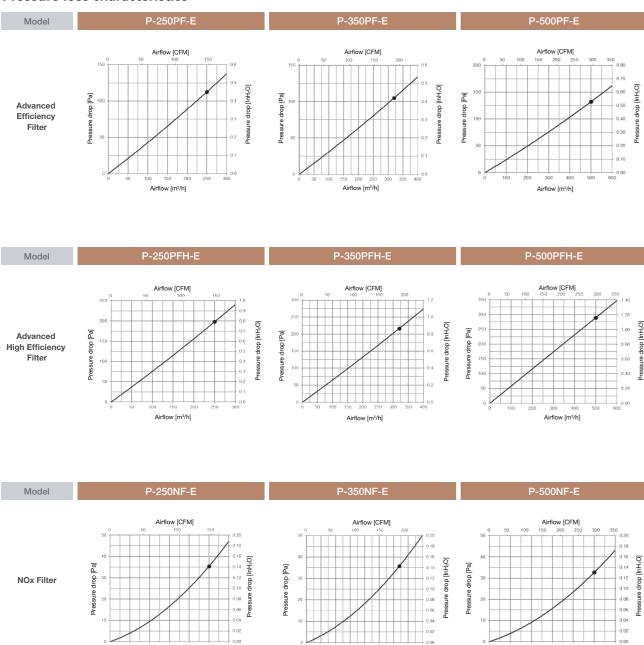
#### **Filters**

Тур	oe	Replacement Filter	Standard Filter	Medium Efficiency Filter	Advanced Efficiency Filter	Advanced High Efficiency Filter	NOx Filter
Мос	del	P-250F-E P-350F-E P-500F-E	P-250SF-E P-350SF-E P-500SF-E	P-250MF-E P-350MF-E P-500MF-E	P-250PF-E P-350PF-E P-500PF-E	P-250PFH-E P-350PFH-E P-500PFH-E	P-250NF-E P-350NF-E P-500NF-E
Classification	EN779 (2012)	G3	G4	M6	M6	ePM1 55%	NO <sub>2</sub> 90%
- Ciassification	ISO 16890 (2016)	Coarse 55%	Coarse 90%	ePM <sub>10</sub> 80%	ePM <sub>2.5</sub> 50%	GI 1911 33 70	1402 3070

#### **Pressure loss characteristics**



#### **Pressure loss characteristics**



Airflow [m3/h]

Airflow [m3/h]

Silencer Box P-250/350/500SB-E

Noise level can be further decreased by using a silencer box.





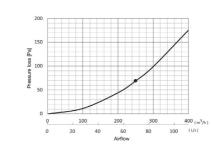
Model

#### ■ Attenuation of sound power level for center frequency

Airflow (m³/h)	Static pressure	Point	Attenu	ation of	sound p	ower lev	el for ce	enter free	quency I	Hz (dB)
(m <sup>9</sup> m) (Pa)		63	125	250	500	1000	2000	4000	8000	
175	74	Outlet (SA/EA)	9	7	11	19	29	28	21	13

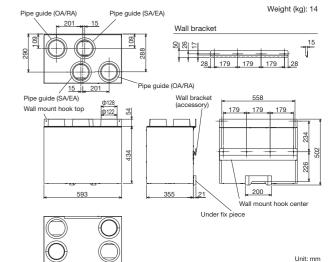
- 1. Figures in the chart above are measured by Mitsubishi Electric.
- The silencer box is placed just after the outlet of the Lossnay unit as specified in the Installation Manual.
- 3. When airflow differs, attenuation may also differ from the chart above.
- Pressure loss curve

The curve on the right shows the total pressure drop of the OA and SA or RA and EA ducts in the silencer box.



#### ■ Dimensions

P-250SB-E



Model

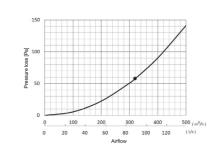
#### ■ Attenuation of sound power level for center frequency

Airflow (m³/h)	Static pressure	Point	Attenu	ation of	sound p	ower lev	el for ce	enter fred	quency F	Iz (dB)
(111 /11)	(Pa)		63	125	250	500	1000	2000	4000	8000
224	74	Outlet (SA/EA)	12	8	11	21	32	29	19	12

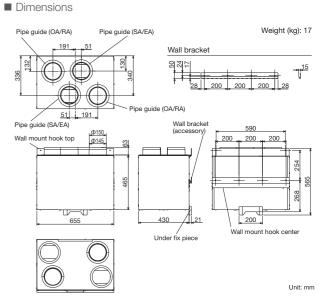
- 1. Figures in the chart above are measured by Mitsubishi Electric.
- 2. The silencer box is placed just after the outlet of the Lossnay unit as specified in the Installation Manual.
- 3. When airflow differs, attenuation may also differ from the chart above.

## ■ Pressure loss curve The curve on the right shows the

total pressure drop of the OA and SA or RA and EA ducts in the silencer box.



P-350SB-E



Model P-500SB-E

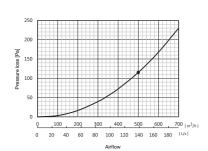
#### ■ Attenuation of sound power level for center frequency

	Airflow (m³/h)	AIITIOW		pressure	pressure	pressure	Static pressure (Pa)	Point	Attenu	ation of	sound p	ower lev	el for ce	enter fred	quency I	Iz (dB)
	(111 /11)	(Pa)		63	125	250	500	1000	2000	4000	8000					
	350	98	Outlet (SA/EA)	10.5	9.5	13.0	21.0	27.0	29.0	26.0	14.0					

- 1. Figures on the chart above are measured by Mitsubishi Electric.
- 2. The silencer box is placed on the just after the outlet of the Lossnav unit as specified in the Installation Manual.
- 3. When the airflow differs, the attenuation may be also different from the chart above.

#### ■ Pressure loss curve

The curve on the right shows the total pressure drop of the OA and SA or RA and EA ducts in



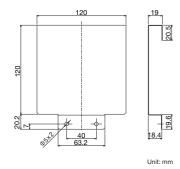
# Weight (kg): 27 554

**Remote Controller Cover** P-RCC-E

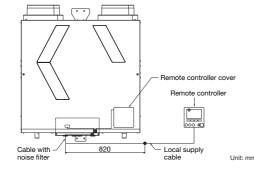
■ Dimensions

By attaching a Remote Controller Cover, the remote controller can be installed at a distance from the unit.

#### Dimensions



■ Configuration





Unit: mm

Remote Controller Cover



Cable with Noise Filter (Cable length outside the product: Approximately 820 mm)

## VL-50(E)S2-E, VL-50SR2-E VL-100(E)U<sub>5</sub>-E

Wall mounted models. Particularly suitable for houses and small offices.



VL-50(E)S<sub>2</sub>-E VL-50SR<sub>2</sub>-E



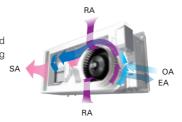
VL-100(E)U5-E

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

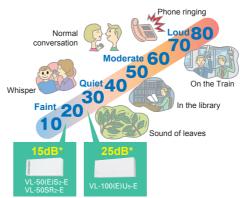
#### **Product advantages**

#### Air supplied and Exhausted Simultaneously

Air is supplied and exhausted simultaneously while transferring



Low noise levels are ideal for bedrooms and children's rooms.



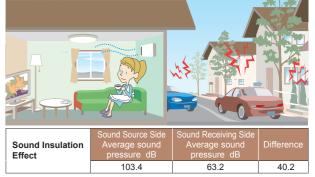
**Energy Efficient** 

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

\*VL-100(E)U5-E at low fan speed in 230V 50Hz \*VL-50(E)S2-E at low fan speed in 230V 50Hz

#### **Sound Insulation**

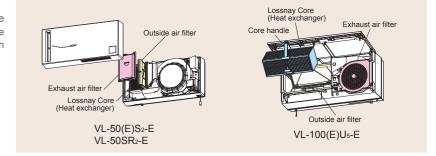
A sound insulation effect reduces the level of noise generated outside.



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



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

Both horizontal and vertical installations are possible to fit various types of rooms.



## VL-50(E)S<sub>2</sub>-E, VL-50SR<sub>2</sub>-E, VL-100(E)U<sub>5</sub>-E

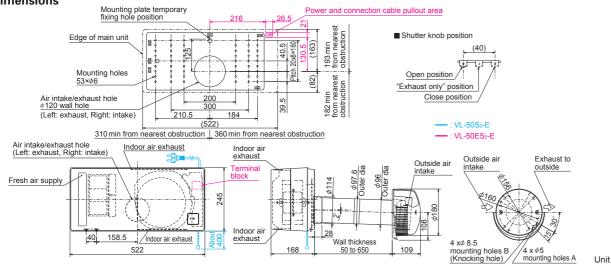
#### **Specifications**

#### Model: VL-50S2-E (Pull-Switch Model) and VL-50ES2-E (Wall-Switch Model)

Model	VL-50(E)S <sub>2</sub> -E									
Electrical power supply	220V	/50Hz	230V	/50Hz	240V	/50Hz	220V/	/60Hz		
Fan speed	High	Low	High	Low	High	Low	High	Low		
Airflow (m³/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				(	2					

<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

#### **Dimensions**

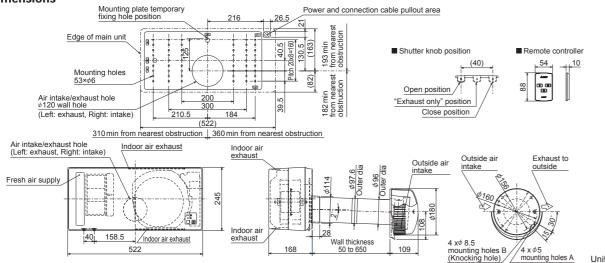


#### Model: VL-50SR<sub>2</sub>-E (Remote Controller Model)

Model		VL-50SR₂-E									
Electrical power supply	220V/	/50Hz	230V	/50Hz	240V/	/50Hz	220V/	/60Hz			
Fan speed	High	Low	High	Low	High	Low	High	Low			
Airflow (m³/h)	51	15	52.5	16	54	17	54	17			
Power consumption (W)	19	19 4.5		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				(	2						

<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

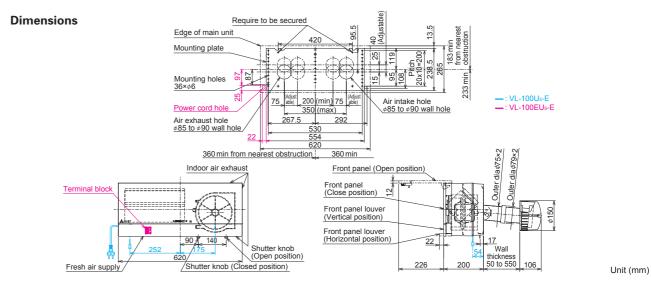
#### Dimensions



#### Model: VL-100U5-E (Pull-Switch Model) and 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		
Airflow (m³/h)	100	100 55		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				E	3					

<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.



#### **Optional Parts**

#### Optional Parts for VL-50(E)S2-E and VL-50SR2-E

Filter, Extension Pipe and Stainless Hood

Type	Replacement Filter	High Efficiency Filter	Extension Pipe	Joint	Stainless Hood
Design					1
Model	P-50F <sub>2</sub> -E	P-50HF <sub>2</sub> -E	P-50P-E	P-50PJ-E	P-50VSQ5-E
Feature	-	-	Total length when connected to the joint is 350mm.	Joint for extension pipe	Stylish stainless hood
Classification (EN779:2012)	G3	-	-	-	_
Classification (ISO16890)	Coarse 35%	ePM <sub>10</sub> 75%	-	-	-

#### Optional Parts for VL-100(E)U5-E

Filter and Extension Pipe

Tittor and E	Aterision ripe			
Туре	Replacement Filter	High Efficiency Filter	Extension Pipe	Joint
Design				00
Model	P-100F <sub>5</sub> -E	P-100HF₅-E	P-100P-E	P-100PJ-E
Feature	-	-	Total length when connected to the joint is 300mm.	<ul><li>Joint for extension pipe</li><li>Screw-in method</li></ul>
Classification (EN779:2012)	G3	M6	-	-
Classification (ISO16890)	Coarse 35%	ePM10 70%	-	-

#### List of optional parts

	Lossnay	X-E	X-E	X-E	X-E	X-E	X-E	VX-E	VX-E	LGH-150RVXT-E	LGH-200RVXT-E	LGH-250RVXT-E	40	9H4	D4	DH4	'S-E	S-E	VS-E
		15RV	25RV	35RV	50RV	65RV	80RV	100R	150R	150R	200R	250R	50RC	50RC	100R	100R	50RV	80RV	100R
Optional Parts		LGH-15RVX-E	LGH-25RVX-E	LGH-35RVX-E	LGH-50RVX-E	LGH-65RVX-E	LGH-80RVX-E	LGH-100RVX-E	LGH-150RVX-E	-H97	:-Н9П	-Н9П	GUF-50RD4	GUF-50RDH4	GUF-100RD4	GUF-100RDH4	LGH-50RVS-E	LGH-80RVS-E	LGH-100RVS-E
Lossnay	PZ-62DR-EA/EB	•	•	•	•	•	•	•	•	•								•	•
Remote Controller	PZ-43SMF-E	•	•	•	•	•	•	•	•	•	•	•					•	•	•
	PZ-15RF <sub>8</sub> -E	•																	
	PZ-25RF <sub>8</sub> -E		•																
	PZ-35RF <sub>8</sub> -E			•															
	PZ-50RF <sub>8</sub> -E				•								•	•					
	PZ-65RF <sub>8</sub> -E					•													
Standard Filter	PZ-80RF <sub>8</sub> -E						•		•										
Titter	PZ-100RF <sub>8</sub> -E							•											
	PZ-150RTF-E									•									
	PZ-250RTF-E										•	•							
	PZ-S50RF-E																•		
	PZ-S80RF-E																	•	
	PZ-S100RF-E																		•
	PZ-15RFM-E	•																	
	PZ-25RFM-E		•																
	PZ-35RFM-E			•															
	PZ-50RFM-E												•	•					
High-efficiency	PZ-65RFM-E					•													
Filters	PZ-80RFM-E						•		•										
	PZ-100RFM-E							•							•	•			
	PZ-S50RFM-E																•		
	PZ-S80RFM-E																		
	PZ-S100RFM-E																		•
	PZ-15RFP <sub>2</sub> -E																		
	PZ-25RFP <sub>2</sub> -E		•																
	PZ-35RFP <sub>2</sub> -E			•															
	PZ-50RFP <sub>2</sub> -E																		
	PZ-65RFP <sub>2</sub> -E					•													
Advanced High-efficiency	PZ-80RFP <sub>2</sub> -E						•												
Filters	PZ-100RFP <sub>2</sub> -E							•			•				•	•			
	PZ-M6RTFM-E									•	•	•							
	PZ-F8RTFM-E									•	•	•							
	PZ-S50RFH-E																		
	PZ-S80RFH-E															•			
	PZ-S100RFH-E																		•
	PZ-100SS-E	•																	
Duct Silencer	PZ-150SS-E		•	•															
	PZ-200SS-E				•	•							•	•					
	PZ-250SS-E						•	•	•						•	•		•	•
CO <sub>2</sub> Sensor	PZ-70CSW-E																•	•	•
302 36H30H	PZ-70CSB-E																	•	•

Note: Please refer to each product page for required number of pieces/sets.

### List of optional parts for the VL-CZPVU Series

Optional	Parts			Lossnay	VL-250CZPVU-R/L-E	VL-350CZPVU-R/L-E	VL-500CZPVU-R/L-E
	Type	Classification (EN779:2012)	Classification (ISO16890)	Model	VL-25	VL-35	VL-50
				P-250F-E			
	Replacement Filter	G3	Coarse 55%	P-350F-E		•	
				P-500F-E			•
	0			P-250SF-E			
	Standard Filter	G4	Coarse 90%	P-350SF-E		•	
				P-500SF-E			
	Medium	M6		P-250MF-E	•		
F:11	Efficiency Filter		ePM <sub>10</sub> 80%	P-350MF-E			
Filter				P-500MF-E			
				P-250PF-E			
	Advanced Efficiency Filter	M6	ePM <sub>2.5</sub> 50%	P-350PF-E		•	
				P-500PF-E			
	Advanced			P-250PFH-E			
	High Efficiency		ePM <sub>1</sub> 55%	P-350PFH-E		•	
	Filter			P-500PFH-E			
				P-250NF-E			
	NoxFilter		NO <sub>2</sub> 90%	P-350NF-E		•	
				P-500NF-E			•
				P-250SB-E			
	5	Silencer Box		P-350SB-E		•	
				P-500SB-E			•
	Remote	e Controller Cover		P-RCC-E			

## List of optional parts for the VL-50/100 Series

				Lossnay					
Optional	Parts	S2-E	VL-50ES <sub>2</sub> -E	VL-50SR <sub>2</sub> -E	VL-100U5-E	VL-100EU <sub>5</sub> -E			
	Type	Classification (EN779:2012)	Classification (ISO16890)	Model	VL-50S <sub>2</sub> -E	VL-50	VL-50	VL-10	VL-10
Filter	Replacement Filter	G3	Coarse 35%	P-50F <sub>2</sub> -E					
riitei		43	Coarse 33 %	P-100F <sub>5</sub> -E					
	High Efficiency		ePM10 75%	P-50HF <sub>2</sub> -E					
	Filter	M6	ePM <sub>10</sub> 70%	P-100HF5-E					
	Ev	ktension Pipe		P-50P-E					
	St	ainless Hood		P-50VSQ <sub>5</sub> -E			•		