#### **⚠** 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



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# **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**

1

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

2

Challenge to develop business innovations for future generations

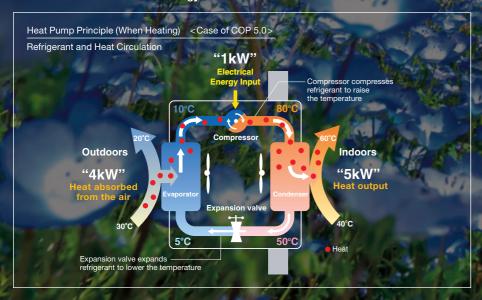
3

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.

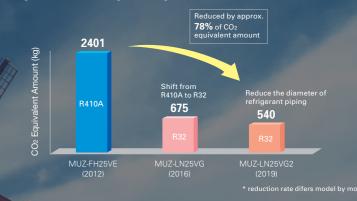


Mitsubishi Electric takes on the challenge of creating new value and contribute to a sustainable future in order to solve various environmental problems.

#### **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)

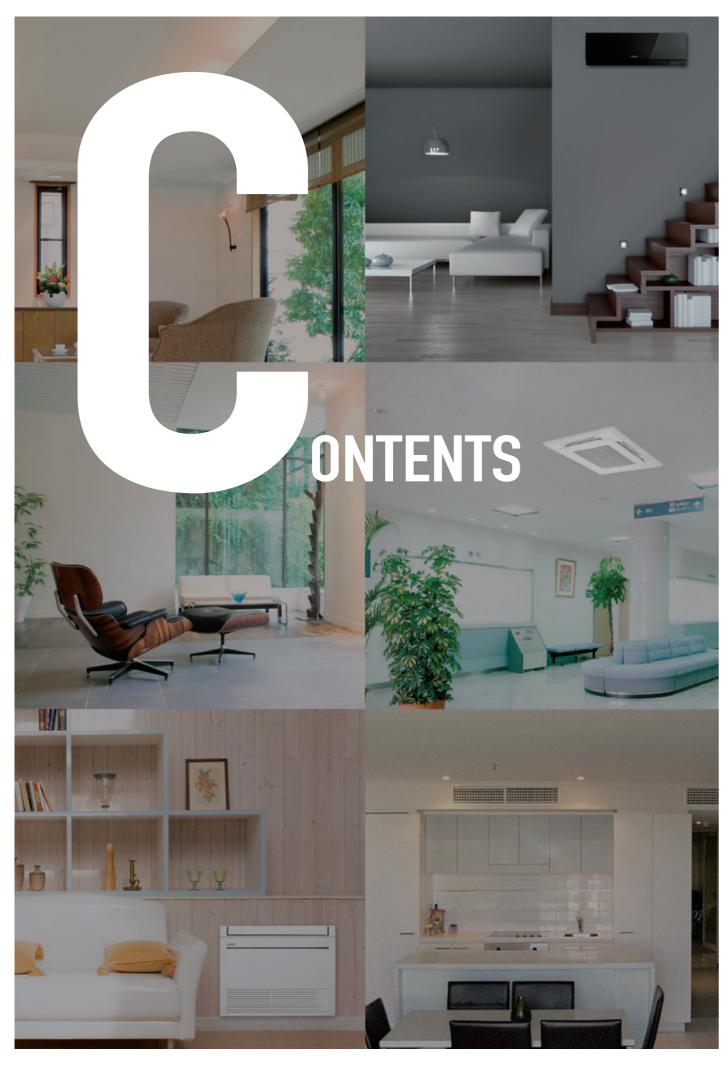
- Accelerating the downsizing technology to reduce material use while balancing energy saving performance.
- Designing products that are easy to separate and recycle.
- 3. All models are designed for WEEE and RoHS (II) compliance.\*

\*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.

	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
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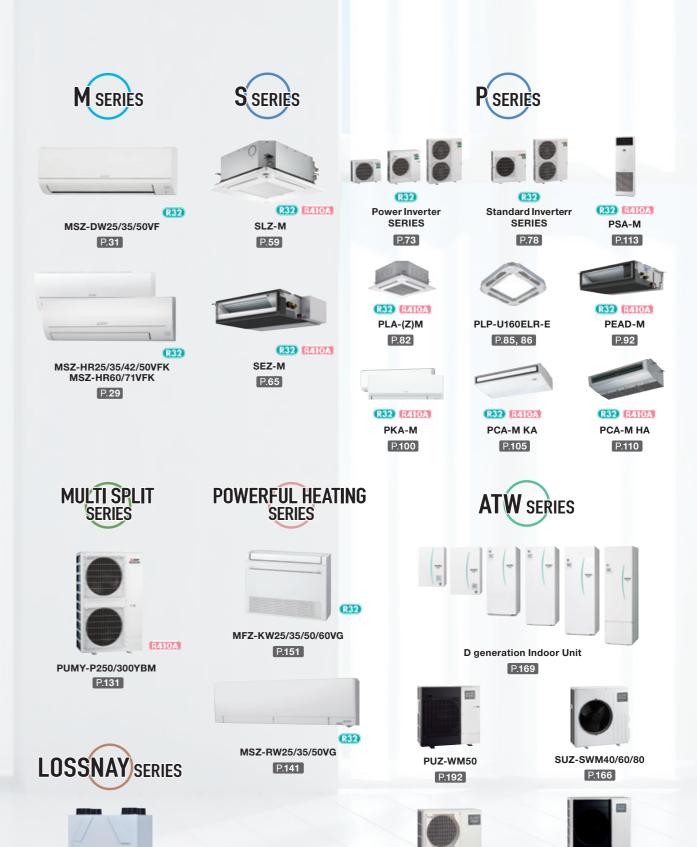


# **RW**Series

Hyper Heating
Flagship Model

Available Now

# New releases in 2022





PUZ-WM60/85/112 P.167 PUD-SWM60/80/100/120

PUD-SHWM60/80/100/120/140

P.**167** 

PUZ-HWM140

P.192

#### TRIPLE 1 outdoor unit & 3 indoor units QUADRUPLE 1 outdoor unit & 4 indoor units

# M SERIES INVERTER Models

		1.5kW	1.8kW	2.0kW	2.2kW	2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	D
Model Nan	ne	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	Page
	MSZ-L Series R32 R410A *2		W-V-R-B Multi connection only			WYRB SINGLE	W-V-R-B SINGLE		WYRB SINGLE	W-VR-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		W-S-B Multi connection only		WS-B Multi connection only	WSB SINGLE H	WS-B SINGLE H	WSB SINGLE	WSB SINGLE			25
	MSZ-BT Series			SINGLE		SINGLE	SINGLE		SINGLE			27
	MSZ-HR25/35/42/50VF(K)  MSZ-HR60/71VF(K)					SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	29
Wall-	MSZ-DW Series					SINGLE	SINGLE		SINGLE			31
mounted	MSYTP 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 (R410A)					SINGLE	SINGLE					39
	MSZ-H Series MSZ-HJ25/35/50  R410A  MSZ-HJ60/71					SINGLE	SINGLE		SINGLE	SINGLE	SINGLE	41
Compact	MFZ Series (R32)					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.

Model Nam	na	1.5kW	2.5kW	3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	Page
Wodel Wall		1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	. ugo
2 x 2 cassette	SLZ Series R32 R410A	Multi connection only	SINGLE	SINGLE	SINGLE	SINGLE	TWIN	TWIN	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	55
Compact ceiling- concealed	SEZ Series  R32  R410A		* SINGLE	* SINGLE	* SINGLE	* SINGLE	SINGLE	TWIN	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	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
		1-phase	1-phase	1-phase	1-phase	3-phase	3-phase	1- & 3-phase	3-phase	3-phase	
4-way cassette	PLA Series	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	78
Ceiling-	PEAD Series	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	109

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

\* R32 Power Inverter Model only

Madal Nama	odel Name		5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	Done
Wiouei Name		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 *	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

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)	0	1	1	1				125
PUMY-P (R410A)		1	1	1	1	1	1	127

# POWERFUL HEATING SERIES INVERTER Models

Model Name			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
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

			Decentralized	d Ventilation			
	(	Ceiling Concealed Typ	ре		Vertical Type	Wall Mour	nted 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

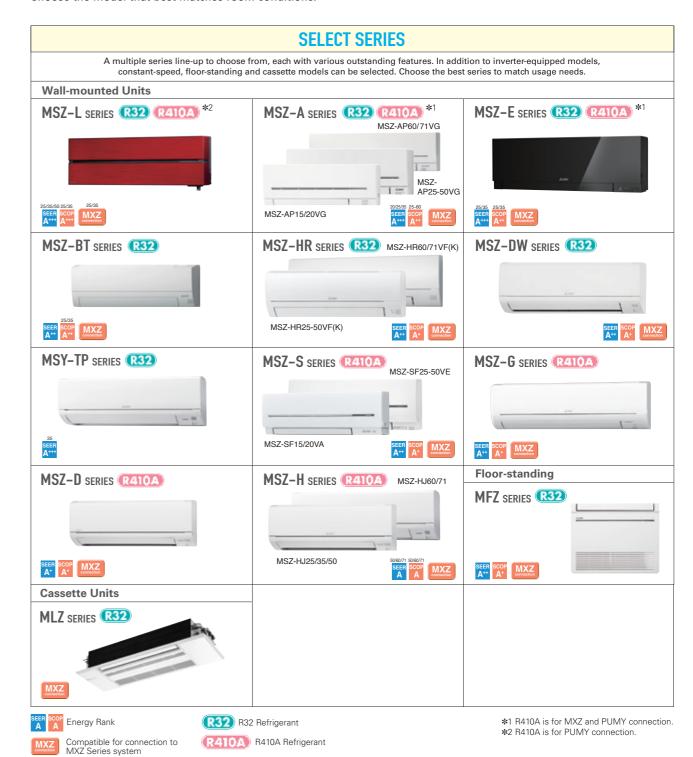






### **SELECTION**

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-EF25/35VGH MUZ-SF25/35VGH MUZ-SF25/35/42/50VEH



MUZ-LN25/35VG

#### Hyper Heating

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

# MUZ-

#### 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.





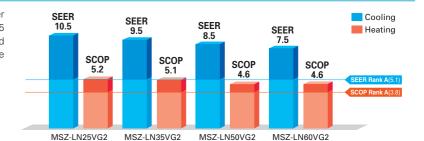




Developed to complement modern interior room décor, the LN Series is available in four colours specially chosen to blend in naturally wherever installed. Not only the sophisticated design, but also the optimum energy efficiency and operational comfort add even more value to this

#### **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.



Onyx Black matches darker interiors, creating a comfortable environment.



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

#### **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.



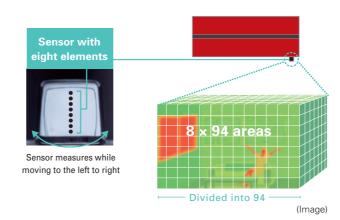






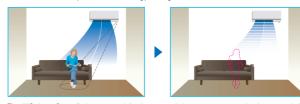
#### 3D i-see Sensor

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.



#### **Direct Airflow**

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



#### Even Airflow \*LN Series only Normal swing mode

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

Even airflow mode

The 3D i-see sensor memorizes human 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 for all.

#### 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 No. 28-002

#### Molds



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

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

#### Allergens



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

<Test No.> ITEA Report No. T1606028

#### PM2.5



Test results have confirmed that Plasma Quad Plus removes 99% of PM2.5 in 145 minutes in a 28m<sup>3</sup> 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

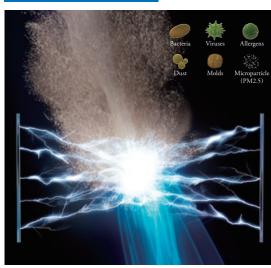
B: Effective

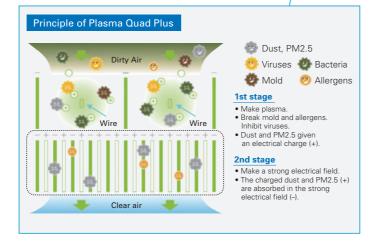
C: Partially effective

\*PM2.5:

Particles smaller than 2.5µm

#### Image of Plasma Quad Plus





# **Dual Barrier Coating**

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



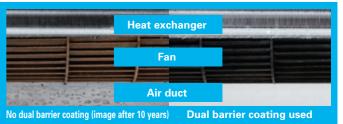


#### State-of-the-art coating technology

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)





<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.

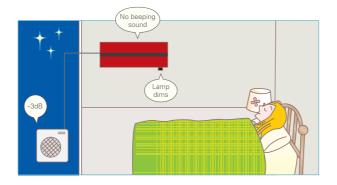




#### Night Mode

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

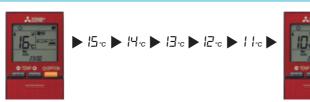
- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated operating noise specification.
- \*The cooling/heating capacity may drop.



#### 10°C Heating

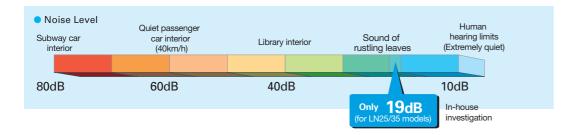
During heating operation, the temperature can be set in 1°C increments down to 10°C.

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.

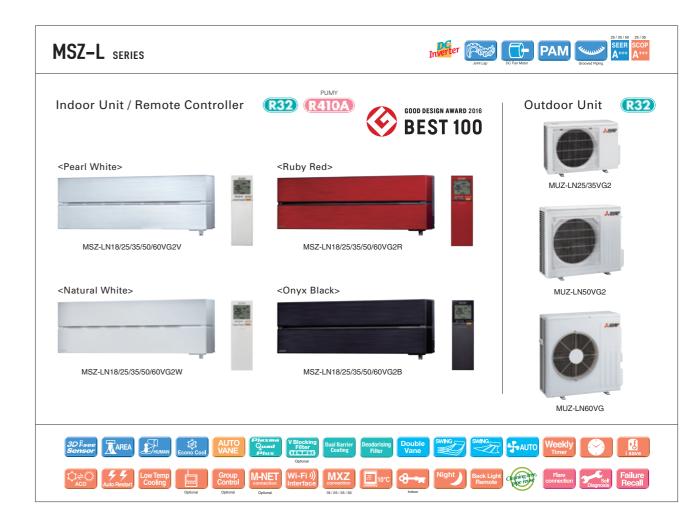


#### Built-in Wi-Fi Interface

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	Unit			for MXZ connection	MUZ-LN25VG2	MUZ-LN35VG2	MUZ-LN50VG2	MUZ-LN60VG
Refrigera	nt				Sir	ngle: R32 <sup>(1)</sup> / Multi: R410A or R3	2 <sup>(*1)</sup>	
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 (14)			-	10.5	9.5	8.5	7.5
Cooling		Energy efficiency class		-	A+++	A+++	A+++	A++
	Capacity	Rated	kW	-	2.5	3.5	5.0	6.1
	Сарасну	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)
	Сарасну	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)(15)	SCOP (*4)			-	5.2	5.1	4.6	4.6
		Energy efficiency class		-	A+++	A+++	A++	A++
	0	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	ent(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 Unit	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
Ollit	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
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	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
	Air Volume	Cooling	m³/min	-	34.3	34.3	40.0	50.1
Outdoor	All Volume	Heating	m³/min	-	32.7	32.7	40.5	51.3
Unit	Sound Level (SPL)	Cooling	dB(A)	-	46	49	51	55
Oilit	Sourid Level (SPL)	Heating	dB(A)	-	49	50	54	55
	Sound Level (PWL)	Cooling	dB(A)	-	60	61	64	65
	Operating Curre	ent (Max)	А	-	6.8	9.6	13.5	14.8
	Breaker Size		Α	-	10	10	16	16
Ext.	Diameter	Liquid/Gas	mm	-	6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7
Piping	Max.Length	Out-In	m	-	20	20	30	30
ba	Max.Height	Out-In	m	-	12	12	12	15
Guarante	eed Operating	Cooling	℃	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (C	Outdoor)	Heating	℃	-	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24
(*1) Refrigera	ant leakage contribute	es to climate change. Refrigerar	nt with low	ver global warming potential (GWP) w	ould contribute less to global warming	than a refrigerant with higher GWP.	if leaked to the atmosphere. This app	pliance contains a refrigerant fluid with

<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 can be 1650. 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 the contribute of the second of the second

<sup>[2]</sup> Ellegy Consumption based on issantial user results. Actual energy consumption will depend on now the applicable is used and where it is located.

(3) SHE, Super Paid 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 (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-AP15/20VG

# GOOD DESIGN AWARD 2017

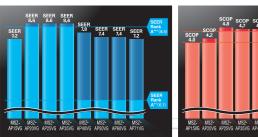


R32 Single / Multi



#### High energy saving

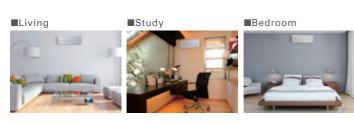
The classes from the low-capacity 25 to the high-capacity 60, have achieved either the "Rank A+++" or "Rank A++" for SEER and SCOP as energy-savings rating. Our air conditioners are contributing to reduce energy consumption in a wide range.





#### 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.

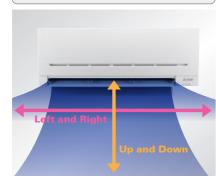




#### Evolved comfortable convenience function



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

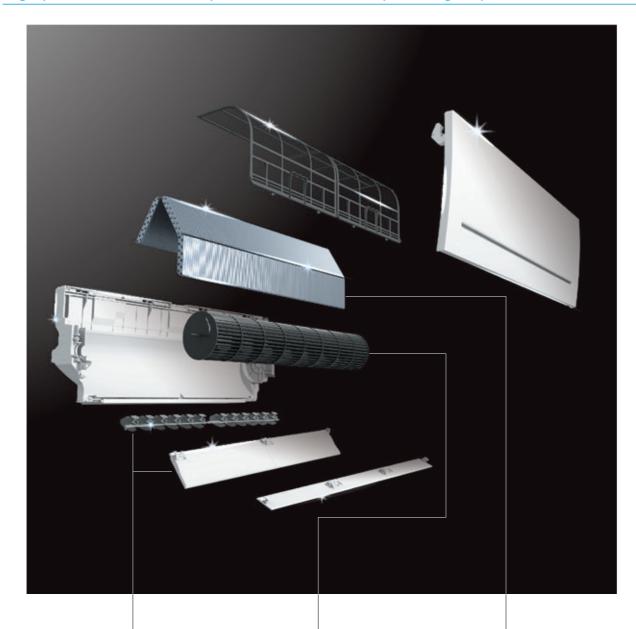


**Auto Vane Control** 

Auto vanes can be moved left and right, and

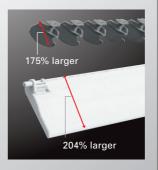
# The Function

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



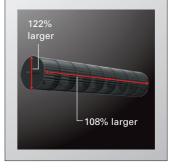
#### Vertical and **Horizontal Vane**

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"

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	ı.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
ON 2	0°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
	'		Automatically change	s to high-power opera	tion at wake-up time		
OF	F	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
		Automatic	ally turned off during w	ork hours			
_							
ON 2	0°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
		Automatically turn	ns on, synchronized wi	th arrival at home		Automatically raises ten	nperature setting to
			. ,			Inacci time when outsit	de-all terriperature is low
ON 1	8°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
	,	Automa	tically lowers tempera	ture at bedtime for en	ergy-saving operation a	t night	
	ON 2	ON 20°C  OFF  ON 20°C  ON 18°C	ON 20°C  OFF  OFF  Automatic  ON 20°C  ON 20°C  Automatically turn  ON 18°C  ON 18°C	ON 20°C ON 20°C Automatically change  OFF OFF OFF  Automatically turned off during w  ON 20°C ON 20°C ON 20°C  Automatically turns on, synchronized with the control of the	ON 20°C ON 20°C ON 20°C  Automatically changes to high-power opera  OFF OFF OFF  Automatically turned off during work hours  ON 20°C ON 20°C ON 20°C ON 20°C  Automatically turns on, synchronized with arrival at home  ON 18°C ON 18°C ON 18°C ON 18°C	ON 20°C ON 20°C ON 20°C ON 20°C  Automatically changes to high-power operation at wake-up time  OFF OFF OFF OFF  Automatically turned off during work hours  ON 20°C ON 20°C ON 20°C ON 20°C ON 20°C  Automatically turns on, synchronized with arrival at home  ON 18°C ON 18°C ON 18°C ON 18°C ON 18°C	ON 20°C ON 20°C ON 20°C ON 20°C ON 20°C ON 20°C  Automatically changes to high-power operation at wake-up time  OFF OFF OFF OFF OFF  Automatically turned off during work hours  ON 20°C ON 20°C ON 20°C ON 20°C ON 20°C  Automatically turns on, synchronized with arrival at home  ON 20°C ON 20°C ON 20°C  Automatically raises ten match time when outside

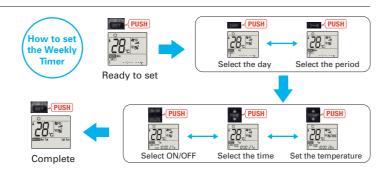
Settings

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 -





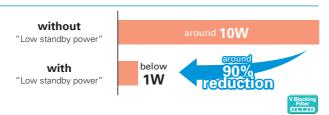
- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired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

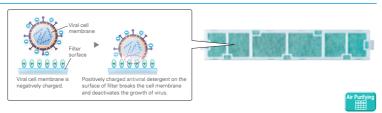
#### Low Standby Power

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.



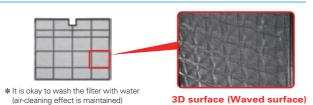
#### V Blocking Filter

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.



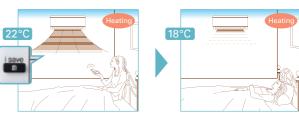
#### Air Purifying Filter

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

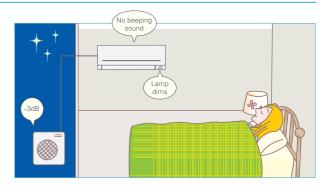
(MSZ-AP20/25/35/42/50/60/71)



(MS7-AP25/35/42/50)

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

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



#### **Quiet Operation**

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



#### Built-in Wi-Fi Interface

(MSZ-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.

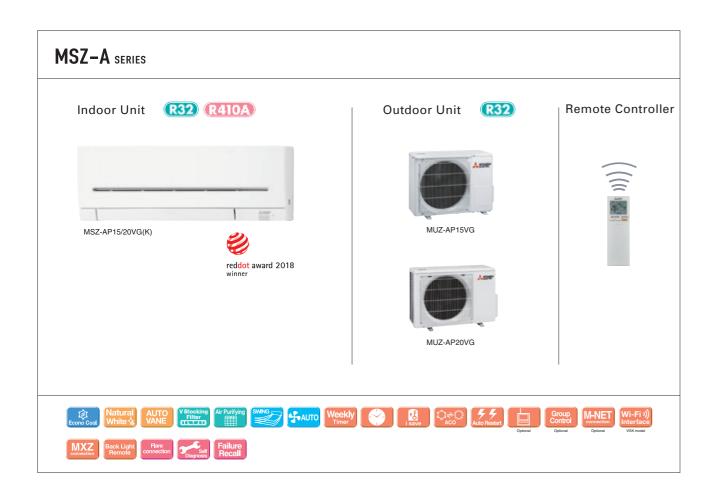
This eliminates the need to install a Wi-Fi interface, and also contributes to the beautiful appearance since the interface is hidden.

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



22

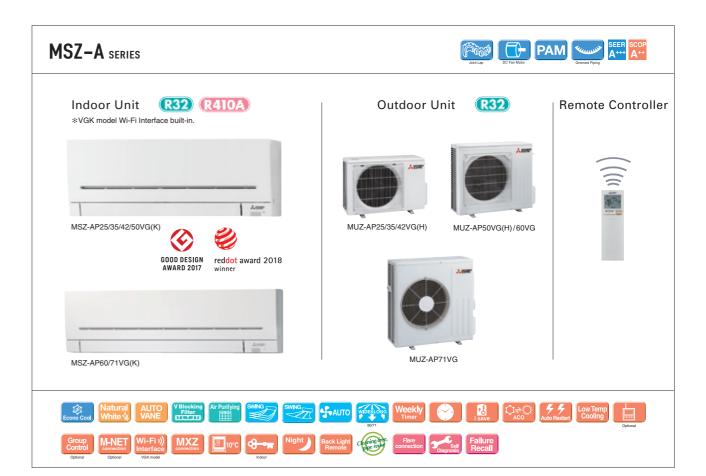
Blacklight function incorporated, making screen easy to read in the dark. Even in dimly lit rooms, the screen can be seen clearly for trouble-free remote controller operation.



Туре						Inverter H	leat Pump		
Indoor 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 <sup>(*1)</sup> / Mul	ti: R410A or R32 <sup>(*1)</sup>		
Power	Source					Outdoor Po	ower supply		
Supply	Outdoor (V/Ph	ase / 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	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)
	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)
leating	Back up heating	capacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
Average	Annual electricity	consumption (*2)	kWh/a	559	766	698	703	862	873
Geason)(*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)		Α	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 Curre	ent (Max)	Α	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 Jnit	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 - 11.4
	(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 - 12.9
	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
	Air Volume	Cooling	m³/min	26	32.2	32.2	32.2	32.2	32.2
Outdoor	All Volume	Heating	m³/min	21	29.8	29.8	29.8	33.8	33.8
Jutaoor Jnit	Sound Level (SDL)	Cooling	dB(A)	50	47	47	47	49	49
	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	ent (Max)	Α	5.3	6.8	6.8	6.8	8.2	8.2
	Breaker Size		Α	10	10	10	10	10	10
xt.	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. Piping	Max.Length	Out-In	m	20	20	20	20	20	20
.pig	Max.Height	Out-In	m	12	12	12	12	12	12
	ed Operating	Cooling	℃	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (C	Outdoor)	Heating	°C	-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

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Туре			_			Inverter H	leat Pump		
Indoor Un	it			MSZ-AP42VG(K)	MSZ-AP42VG(K)	MSZ-AP50VG(K)	MSZ-AP50VG(K)	MSZ-AP60VG(K)	MSZ-AP71VG(K)
Outdoor L				MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH	MUZ-AP60VG	MUZ-AP71VG
Refrigeran	it				Single: R32 <sup>(*1)</sup> / Mu				/ Multi: R32 <sup>(*1)</sup>
$\overline{}$	Source				9		ower supply		
J	Outdoor ( V / Ph	ase / Hz )					nale / 50		
	Design load		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)			7.8	7.8	7.4	7.4	7.4	7.2
Cooling		Energy efficiency class		A++	A++	A++	A++	A++	A++
		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
Ì	Total Input	Rated	kW	1,300	1,300	1,550	1,550	1,590	2.010
	Design load	1.000	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)
İ		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)
	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)
leating	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)
	Annual electricity		kWh/a	1120	1134	1250	1275	1398	2132
	SCOP (*4)	consumption	KWIII	4.7	4.6	4.7	4.6	4.6	4.4
	Energy efficience			A++	A++	A++	A++	A++	A+
ŀ		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
ŀ	Total Input	Rated	kW	1,490	1.490	1,600	1,600	1,670	2.120
	Current (Max)	i iatou	A	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 Curre		A	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
	Weight		kg	10.5	10.5	10.5	10.5	16.0	17.0
ndoor	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			9.4 - 11.0 - 13.2 - 16.0 - 18.9	
	(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	
ŀ	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
ŀ	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
Ì		Cooling	m³/min	30.4	30.4	40.5	40.5	52.1	54.1
	Air Volume	Heating	m³/min	32.7	32.7	40.5	40.5	52.1	47.9
Outdoor		Cooling	dB(A)	50	50	52	52	56	56
Jnit	Sound Level (SPL)	Heating	dB(A)	51	51	52	52	57	55
ŀ	Sound Level (PWL)	Cooling	dB(A)	61	61	64	64	69	69
	Operating Curre	1	A A	9.6	9.6	13.3	13.3	13.6	16.0
	Breaker Size	ant (max)	A	9.0	10	16	16	16	20
_	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
xt.	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
auarante Range (O		Heating	00	-10 ~ +46 -15 ~ +24	-10 ~ +46 -20 ~ +24	-15 ~ +24	-10 ~ +46 -20 ~ +24	-10 ~ +46 -15 ~ +24	-10 ~ +46 -15 ~ +24
.unge (O	ataooij	I rearring		-10 ~ +24	-20 ~ +24	-10 ~ +24	-2U ~ +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 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".



# MSZ-E

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	_	~	~	~	~	~	~				
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.

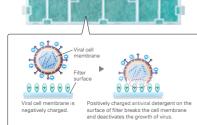


#### **V** Blocking Filter

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

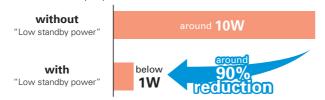
Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.

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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** 





5--

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



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



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

GOOD DESIGN AWARD 2015







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

























Туре							Inverter F	eat Pump				
Indoor Ur	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	Unit			for MXZ o	for MXZ connection MUZ-EF25VG MUZ-EF25VGH MUZ-EF35VG MUZ-EF35VGH MUZ-EF42VG MUZ-EF50VG							
Refrigera	nt				R32 <sup>(*)</sup>							
Power	Source						Outdoor Po	ower supply				
Supply	Outdoor (V / Phase / Hz)			230/Single/50								
	Design load		kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0	
	Annual electricity	y 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	
	Сарасну	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)	
		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)	
	Declared 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)	
	Capacity	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)	

Energy efficiency class   -		Annual electricity	consumption (*2)	kWh/a	-	-	96	96	139	139	186	233
Capacity   Paried   NW   -		SEER (*4)			-	-	9.1	9.1	8.8	8.8	7.9	7.5
Capacity   Min-Max   MW   -	Cooling		Energy efficiency class		-	-	A+++	A+++	A+++	A+++	A++	A++
No.		Oit	Rated	kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0
Design Toad		Capacity	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
Declared Capacity		Total Input	Rated	kW	-	-	0.540	0.540	0.910	0.910	1.200	1.540
Declared Capacity   Bibliert temperature   MW   -   -   2.4 (-10°C)   2.4 (-10°C)   2.9 (-10°C)   3.8 (-10°C)   4.2 (-10°C)   3.4 (-10°C)		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)
Capacity   a tower temperature   NW   -   -   2.4 (1)(1)(1)   2.9 (1)(1)(2)   2.9 (1)(1)(3)   3.8 (1)(1)(3)   3.4 (1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(			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)
Second   S			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)
Annual electricity consumption		Сарасну	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)
Anual electricity consumption	Heating	Back up heating	capacity	kW	-	-	0.0 (-10°C)					
Energy efficiency class	Average	Annual electricity	consumption (*2)	kWh/a	-	-	713	727	882	900	1151	1304
Pated	Season)("5)	SCOP (14)			-	-	4.7	4.6	4.6	4.5	4.6	4.5
Capacity   Min-Max   MW   -			Energy efficiency class		-	-	A++	A++	A++	A+	A++	A+
Total Input   Rated   KW   -   -		Oit	Rated	kW	-	-	3.2	3.2	4.0	4.0	5.4	5.8
		Сарасіту	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
Input		Total Input	Rated	kW	-	-	0.700	0.700	0.950	0.950	1.455	1.560
Operating Current (Max)	Operating	Current (Max)		А	-	-	7.1	7.1	7.1	7.1	10.0	14
Dimensions   H'W'D   mm   299-885-195   29		Input	Rated	kW	0.026	0.026	0.026	0.026	0.030	0.030	0.033	0.043
Weight   Kg   11.5		Operating Curre	ent (Max)	A	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Air Volume   Air Volume   Cooling   m²/min   40-46-63-83-105   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   40-46-62-89-112   4		Dimensions	H*W*D	mm	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195
Air Volume		Weight		kg	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Sund Level (SPL)   Cooling   Mi/min   40-46-62-89-119   40-46-62-89-119   40-46-62-89-112   40-46-62			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	5.8 - 6.8 - 7.9 - 9.2 - 11.3
Side-Lo-Mid-Hi-SHi <sup>7</sup>     Heating   dB A  21-24-29-37-45   21-24-29-37-45   21-24-29-37-45   21-24-29-37-45   21-24-30-38-46   21-24-30-38-46   28-30-35-41-48   30-33-37-43-49   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39   30-33-37-43-39	Jiiic	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	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	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 12.7	4.0 - 4.6 - 6.2 - 8.9 - 12.7	5.5 - 6.3 - 7.8 - 9.9 - 13.2	6.4 - 7.2 - 9.0 - 11.1 - 14.6
Sound Level (PML)   Cooling   dB(A)   60   60   60   60   60   60   60   6			Cooling	dB(A)	19 - 23 - 29 - 36 - 42	19 - 23 - 29 - 36 - 42	19 - 23 - 29 - 36 - 42	19 - 23 - 29 - 36 - 42	21 - 24 - 30 - 36 - 42	21 - 24 - 30 - 36 - 42	28 - 31 - 35 - 39 - 43	30 - 33 - 36 - 40 - 43
Dimensions   H*W*D   mm   -		(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 30 - 38 - 46	21 - 24 - 30 - 38 - 46	28 - 30 - 35 - 41 - 48	30 - 33 - 37 - 43 - 49
Weight		Sound Level (PWL)	Cooling	dB(A)	60	60	60	60	60	60	60	60
Air Volume		Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285	714-800-285
Air Volume		Weight		kg	-	-			34	34	35	40
Heating   m'/min   -   -   29.8   29.8   32.7   32.7   32.7   40.2		Air Volumo		m³/min	-	-	27.8	27.8	34.3	34.3	32.0	40.2
	Outdoor.	All Volume	Heating	_	-	-				-	-	
Sound Level (PML)   Cooling   dB A  48		Sound Level (SPL)	Cooling	,	-	-						
Operating Current (Max)		,		/	-	-	_					
Breaker Size		,	1	dB(A)	-	-					-	
Diameter   Liquid/Gas   mm   -   -   6.35/9.52   6.3			ent (Max)	_	-	-						
Max.Length   Out-ln   m   -   -   20   20   20   20   20   20		Breaker Size		A	-	-						
Max.Length   Out-in   m 20   20   20   20   20   20   30     Max.Height   Out-in   m 12   12   12   12   12   15     Guaranteed Operating   Cooling   C 10 - +46   -10 - +46		Diameter	4	mm	-	-						
Max.Height   Out-In   m   -   12   12   12   12   15	Pipina			m	-	-						
and unious operating				_	-	-						
Range (Outdoor)   Heating   "C 15 ~ +24 -20 ~ +24 -15 ~ +24 -20 ~ +24 -15 ~ +24 -15 ~ +24 -15 ~ +24				_	-	-						
	Range (O	utdoor)	Heating	0°	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

<sup>(\*1)</sup> Refrigerant leakage contributes to dimate 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 COs, 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 H32 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.

<sup>(2)</sup> Ellergy consultription based on standard less results. Actual energy consultription will depend on now the applicable sused and water it is located.

(3) SHE, Super Parid 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.



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



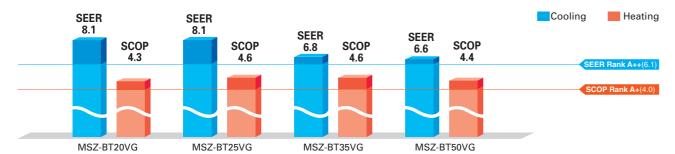






All models in the series, from the low-capacity 20 to the high-capacity 50, have achieved the "Rank A++" for SEER and size 25 and 35 have achieved the "Rank A++" for SCOP as energy-savings rating. For home use, such as in bedrooms and living rooms, to light commercial use, such as in offices, our air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



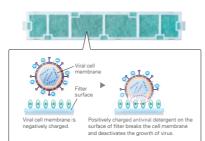
(MSZ-BT20/25/35/50VGK)

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.



# Inverter PAM SEER SCOP MSZ-BT SERIES Indoor Unit (R32) **Outdoor Unit** Remote Controller (E) MUZ-BT25/35VG MSZ-BT20/25/35/50VG(K) Natural White & AUTO WANE Pitter CANE STATE Controlling SWING SWING AUTO AUTO Controlling 
Туре					Inverter I	Heat Pump	
Indoor Ur	nit			MSZ-BT20VG(K)	MSZ-BT25VG(K)	MSZ-BT35VG(K)	MSZ-BT50VG(K)
Outdoor l	Jnit			MUZ-BT20VG	MUZ-BT25VG	MUZ-BT35VG	MUZ-BT50VG
Refrigerar	nt					32(*1)	
Power	Source				Outdoor P	ower supply	
Supply	Outdoor (V / Ph	ase / Hz )			230V/Si	ingle/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 <sup>++</sup>	A++	A++	A++
	Capacity	Rated	kW	2.0	2.5	3.5	5.0
	Сарасіту	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)
	Сарасну	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	capacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
(Average	Annual electricity	Innual electricity consumption (*2)		487	577	727	1209
Season)(TS)	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)	•	A	5.6	7.0	7.0	10.0
	Input	Rated	kW	0.024	0.024	0.031	0.037
	Operating Curre	ent(Max)	А	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 Unit	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.
OIIIL	(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.
	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
	Air Volume	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 Unit	Sound Level (SPL)	Cooling	dB(A)	50	50	52	50
O.III	Sound Level (SPL)	Heating	dB(A)	50	50	52	51
	Sound Level (PWL)	Cooling	dB(A)	63	63	64	64
	Operating Curre	ent (Max)	A	5.3	6.7	6.7	9.6
	Breaker Size		Α	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. Piping	Max.Length	Out-In	m	20	20	20	20
ripilig	Max.Height	Out-In	m	12	12	12	12
Guarante	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (O		Heating	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

<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 1 his 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 circuity yourself and daways ask a professional.

The GWP of R2 is 675 in the IPCC 4 his seasonment 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> SEE, Super High
(4) SEER, 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.

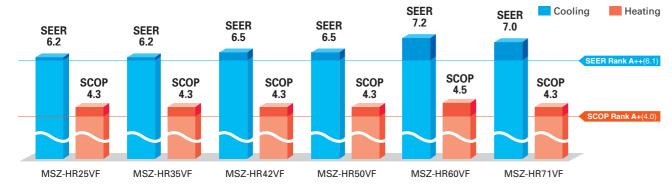


#### "Rank A++/A+" Energy Savings Achieved for Entire Range of Series





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.

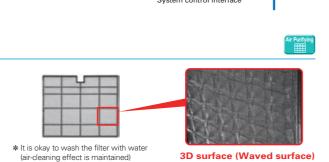
#### System Control Interface (Optional)

- •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

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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) Natural AUTO V Blocking AUTO White & VANE VIEW AUTO WHITE A AUTO White & Cooling Could Control 
Туре						Inverter H	leat Pump		
Indoor Ur	nit			MSZ-HR25VF(K)	MSZ-HR35VF(K)	MSZ-HR42VF(K)	MSZ-HR50VF(K)	MSZ-HR60VF(K)	MSZ-HR71VF(K)
Outdoor I	Unit			MUZ-HR25VF	MUZ-HR35VF	MUZ-HR42VF	MUZ-HR50VF	MUZ-HR60VF	MUZ-HR71VF
Refrigera	nt					R3	2(*1)		
Power	Source					Outdoor Po	ower supply		
Supply	Outdoor (V/Ph	nase / Hz )				230V/Sin	igle/50Hz		
	Design load		kW	2.5	3.4	4.2	5.0	6.1	7.1
	Annual electricity	consumption (*2)	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
	Сарасну	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)
	Dardened .	at reference design 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)
	Declared 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)
	Сариону	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	g capacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
(Average	Annual electricity	consumption (*2)	kWh/a	614	781	928	1224	1430	1755
Season) <sup>(*5)</sup>	SCOP (*4)			4.3	4.3	4.3	4.3	4.5	4.3
		Energy efficiency class		A+	A+	A+	A+	A <sup>+</sup>	A <sup>+</sup>
	Capacity	Rated	kW	3.15	3.6	4.7	5.4	6.8	8.1
	Сарасну	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)		A	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	ent(Max)	A	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
	Weight		kg	8.5	8.5	9	9	12.5	12.5
Indoor 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	All Volume	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	℃	-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

<sup>(\*1)</sup> Refrigerant leakage contributes to dimate 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 classsemble the product yourself and always ask a professional.

The GWP of H32 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.

<sup>(2)</sup> Sets Super High (2) Se



# 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.

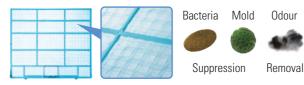


#### Air Purifying Filter

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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.



# Inverter PAM SEER A\*\* A\*\* MSZ-DW SERIES Indoor Unit R32 **Outdoor Unit** Remote Controller MUZ-DW35VF MSZ-DW25/35/50VF

_						
Туре	<u> </u>				Inverter Heat Pump	
Indoor Ur				MSZ-DW25VF	MSZ-DW35VF	MSZ-DW50VF
Outdoor l				MUZ-DW25VF	MUZ-DW35VF	MUZ-DW50VF
Refrigerar					R32 <sup>(*1)</sup>	
Power	Source				Outdoor Power supply	
Supply	Outdoor (V/Ph	ase / Hz )			230V/Single/50Hz	
	Design load		kW	2.5	3.4	5.0
	Annual electricity	consumption (12)	kWh/a	135	184	261
	SEER (*4)			6.2	6.2	6.5
Cooling		Energy efficiency class		A++	A++	A++
	Capacity	Rated	kW	2.5	3.4	5.0
	Oupdoity	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)
		at reference design temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	Declared Capacity	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
	Capacity	at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)
Heating	Back up heating	capacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
(Average	Annual electricity	consumption (*2)	kWh/a	618	781	1174
Season)(15)	SCOP (*4)			4.3	4.3	4.3
		Energy efficiency class		A <sup>+</sup>	A <sup>+</sup>	A+
	0	Rated	kW	3.15	3.6	5.4
	Capacity	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
Operating	g Current (Max)		A	5.0	6.7	10.0
	Input	Rated	kW	0.023	0.028	0.029
	Operating Curre	ent(Max)	Α	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
Indoor Unit	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
OIIIL	(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
Outdoor		Cooling	dB(A)	50	51	50
Unit	Sound Level (SPL)	Heating	dB(A)	50	51	51
	Sound Level (PWL)	Cooling	dB(A)	63	64	64
	Operating Curre	ent (Max)	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
Ext.	Max.Length	Out-In	m	20	20	20
Piping	Max.Height	Out-In	m	12	12	12
Guarante	eed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (O		Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24
						o the atmosphere. This appliance contains a refrigerant fluid with

Herngerant 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 applicance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid with a sake a professional.

The GWP of R23 kg 75 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.

SIH: Super Figure

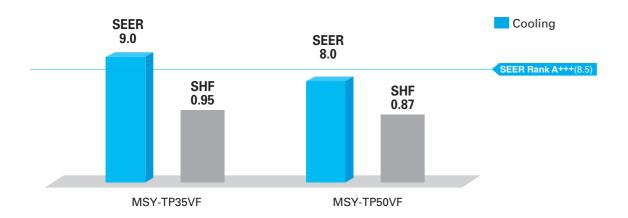
<sup>[3]</sup> SH:: Superbulling to the related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season". 15) Please see page 33-55 for heating (warmer season) specifications.





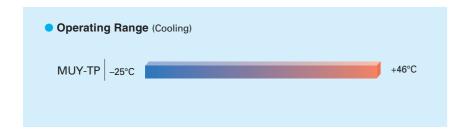
Cooling only model with high-perfomance provide high SHF in various environments thanks to wide operation range.

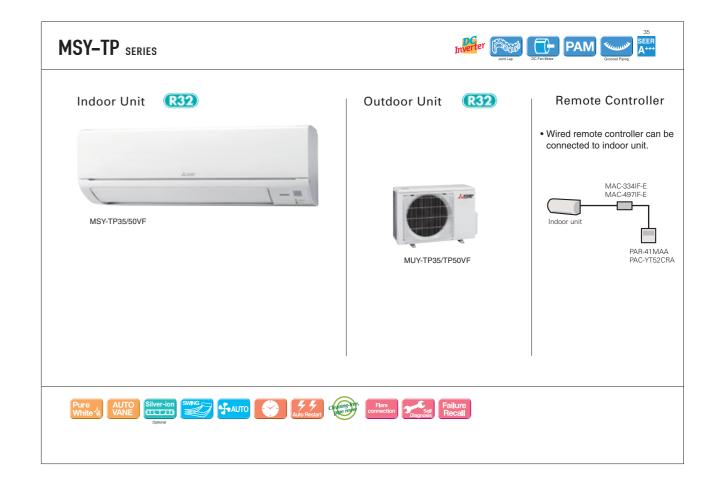
#### High Energy-Saving Performance with High SHF



#### 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.





				invert	ter Heat Pump
door Un	nit			MSY-TP35VF	MSY-TP50VF
tdoor l	Jnit			MUY-TP35VF	MUY-TP50VF
frigerar	nt				R32 <sup>(*1)</sup>
wer	Source			Indoo	r Power supply
pply	Outdoor (V/Ph	ase / Hz )			/ 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++
		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	1	kW	-	-
	2 colgii louu	at reference design temperature			
	Declared	at bivalent temperature	kW		-
	Capacity	at operation limit temperature	kW	<del>-</del>	-
	Back up heating		kW	<del>-</del>	-
ating	Annual electricity		kWh/a	<del>-</del>	-
erage ison) <sup>(*5)</sup>	SCOP (*4)	consumption	Kvvil/a	<del>-</del>	-
2001.1	SCOP	=			
		Energy efficiency class		<del>-</del>	-
L	Capacity	Rated	kW	-	-
		Min-Max	kW	<u> </u>	-
	Total Input	Rated	kW	<u> </u>	-
erating	g Current (Max)		A	9.6	9.6
	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	-	-
	Sound Level (SPL)	Cooling	dB(A)	31 - 36 - 40 - 45	31 - 36 - 40 - 45
	(Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	=	-
-	Sound Level (PWL)	Cooling	dB(A)	60	60
-	Breaker Size		A	10	10
	Dimensions	H*W*D	mm	550-800-285	550-800-285
	Weight		kg	34	34
		Cooling	m³/min	29.3	29.3
tdoor	Air Volume	Heating	m³/min		-
it		Cooling	dB(A)	45	47
	Sound Level (SPL)	Heating	dB(A)	-	
	Sound Level (PWL)	Cooling	dB(A)	58	61
	Operating Curre		A	9.2	9.2
	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52
L.	Max.Length	Out-In		20	20
oing			m		
	Max.Height eed Operating	Out-In Cooling	°C	12	12
			1 G L	-25 ~ +46	-25 ~ +46

<sup>(1)</sup> herigetain learage controlles to crimate craining. Heringerant with ower global warning political servery would controlle is so global warning that a reingerant with right of West and the anticipreter. This application contains a reingerant limit 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 RS2 is 675 in the IPCC 4th Assessment Benot.

<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.



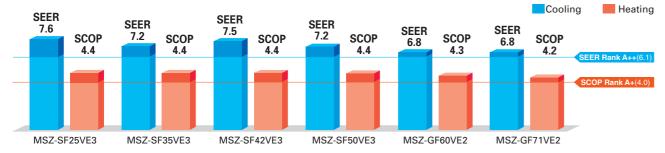
#### "Rank A++/A+" Energy Savings Achieved for Entire Range of Series







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

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

	Mo	on.	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
5:00				Automatically change	es to high-power opera	tion at wake-up time		
800								
10:00	0	FF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00 14:00			Automatic		Midday is warmer, 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 turns on, synchronized with arrival at home					Automatically raises ten match time when outsid	nperature setting to de-air temperature is low
55:00	L							·
(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	

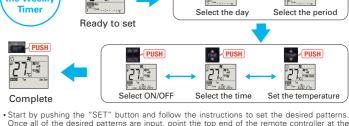
Pattern Settings: Input up to four settings for each day

to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

**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

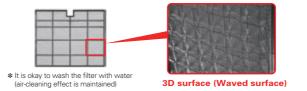
Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



#### 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



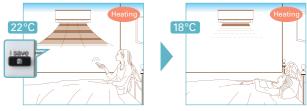
#### Outdoor Units for Cold Region (25/35/42/50)

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

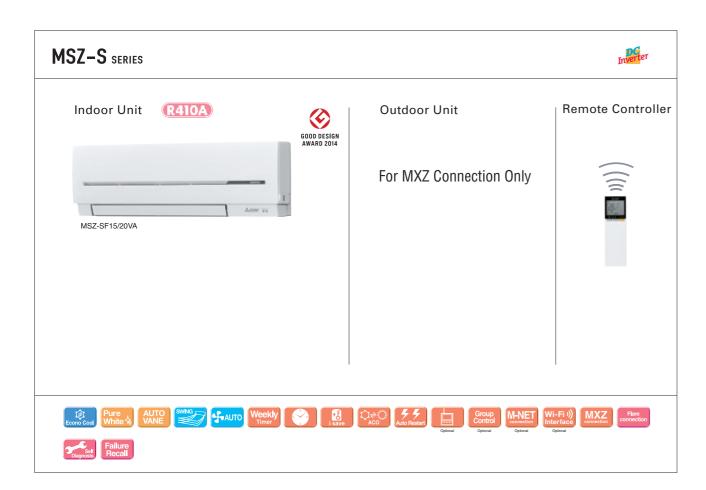


"i save" is a simplified setting function that recalls the preferred (preset) temperature by pressing a single button on the remote controller. Press the same button twice in repetition to immediately return to the previous temperature setting. Using this function contributes to comfortable, waste-free 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 H	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		kW	-	-	2.5	2.5	3.5	3.5
	Annual electricity consumption (*2)		kWh/a	-	-	116	116	171	171
	SEER ('4)			-	-	7.6	7.6	7.2	7.2
	Energy efficiency class			_	_	A++	A++	A++	A++
	Bated		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	riatou	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)
	Back up bacting		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
leating	Back up heating capacity		kWh/a	-	-	764	790	923	948
Average eason) <sup>(*5)</sup>	Annual electricity consumption (*2)		Kvvrva						
Jeason	SCOP			-	-	4.4 A+	4.3 A+	4.4 A+	4.3 A+
		Energy efficiency class		-	-				
	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)	1	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
Jnit	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 <sup>(16)</sup> - 24 - 30 - 36 - 42	19 <sup>(*6)</sup> - 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 <sup>(*3)</sup> )	Heating	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	19 <sup>(16)</sup> - 24 - 34 - 39 - 45	19 <sup>(*6)</sup> - 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
	A: V-1	Cooling	m³/min	-	-	31.1	31.1	35.9	35.9
	Air Volume	Heating	m³/min	-	-	30.7	30.7	35.9	35.9
otdoor Init		Cooling	dB(A)	-	-	47	47	49	49
iiit	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	-	0.00/0.02	20	20	20	20
iping	Max.Height	Out-In	m			12	12	12	12
·		Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Guarante Range (C	ed Operating	Heating	°C	-	-	-10 ~ +40 -15 ±24	-10 ~ +40	-10 ~ +40 -15 - ±2/	-10 ~ +40 -20 - ±24

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 19dBIA). For multi use (MXZ): 21dBIA).

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MSZ-S SERIES MSZ-G SERIES	Inverter Coop DC FAI MODE	PAM SEER A++ SCOP A++
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 Ny AUTO Silver-ion Air Purifying SWNC SWNC SWNC SWNC SWNC SWNC SWNC SWNC		
Group Control Octobal		Optional

Туре						Inverter H	leat Pump		
Indoor Un	nit			MSZ-SF42VE3	MSZ-SF42VE3	MSZ-SF50VE3	MSZ-SF50VE3	MSZ-GF60VE2	MSZ-GF71VE2
Outdoor l				MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH	MUZ-GF60VE	MUZ-GF71VE
Refrigerar				11102 01 1212	MIGE OF TEVER	l e	OA <sup>(1)</sup>	MOZ GI GOVE	11102 017172
Power	Source					Outdoor Po	ower supply		
Supply	Outdoor (V / Ph	ase / Hz )					nale/50		
	Design load		kW	4.2	4.2	5.0	5.0	6.1	7.1
	Annual electricity	consumption (*2)	kWh/a	196	196	246	246	311	364
	SEER (*4)			7.5	7.5	7.2	7.2	6.8	6.8
Cooling		Energy efficiency class		A++	A++	A++	A++	A++	A++
		Rated	kW	4.2	4.2	5.0	5.0	6.1	7.1
	Capacity	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)
	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	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	ick up heating capacity		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	Annual electricity consumption (*2)		1215	1242	1351	1380	1489	2204
-	SCOP (*4)			4.4	4.3	4.4	4.3	4.3	4.2
	Energy efficiency class			A+	A+	A+	A+	A+	A+
		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
Operating	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
Oilit	(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>(*7)</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>(*7)</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 Volume	Cooling	m³/min	35.2	35.2	44.6	44.6	49.2	50.1
Outdoor	All Volume	Heating	m³/min	33.6	33.6	44.6	44.6	49.2	48.2
Unit	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52	55	55
	, ,	Heating	dB(A)	51	51	52	52	55	55
	Sound Level (PWL)		dB(A)	63	63	65	65	65	65
	Operating Curre	ent (Max)	Α	9.2	9.2	12	12	14	16.1
	Breaker Size		Α	10	10	16	16	20	20
Ext.	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. Piping	Max.Length	Out-In	m	20	20	30	30	30	30
9	Max.Height	Out-In	m	12	12	15	15	15	15
	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Range (O	utdoor)	Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

Installing Countries to climate thange, Refrigerant with lower global warming than a refrigerant with pile rGWP, if leaded to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1075. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere. This appliance contains a refrigerant fluid would be leaked to the atmosphere, the refrigerant fluid would be leaked to the atmosphere, the refrigerant fluid would be leaked to the atmosphere, the refrigerant fluid with a good to 100 years. Never try to interfere with the refrigerant circuit yourself of disassemble the product yourself or disassemble the product yourself or disassemble that yourself yourse

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.

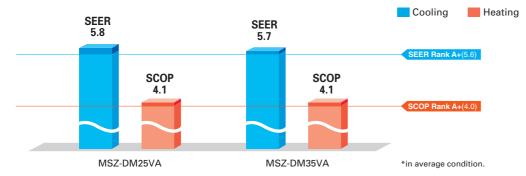
R410A

#### Advanced Inverter Control -Efficient Operation All the Time



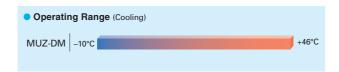
Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A+".

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)

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

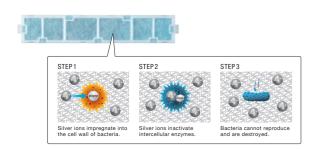
#### **System Control Interface (Optional)**

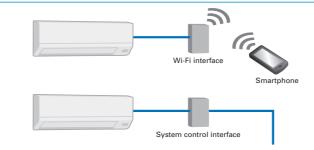
- •Remote on/off operation is possible by input to the connector.
- •Depending on the interface used, connecting a wired remote-control such as the PAR-41MAA is possible.
- •Centralised control is possible when connected to M-NET.

\*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.

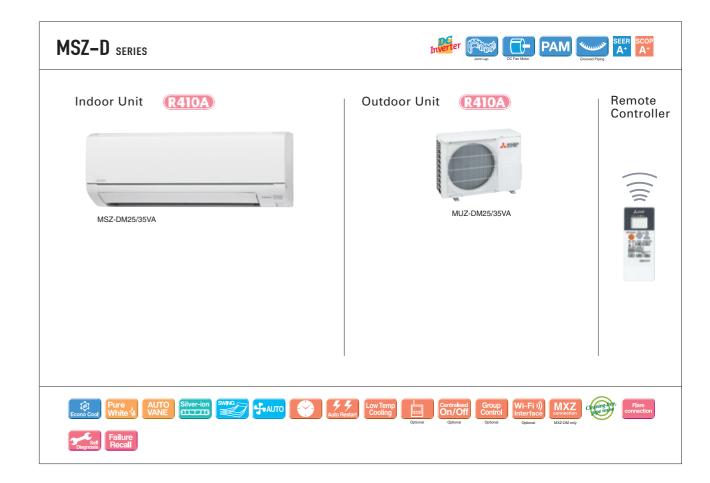




#### **Compact Units**

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





ре				<u>Inverter</u>	r Heat Pump
door Unit				MSZ-DM25VA	MSZ-DM35VA
utdoor Un	it			MUZ-DM25VA	MUZ-DM35VA
efrigerant					410A <sup>(*1)</sup>
	ource			Indoor F	Power supply
pply O	utdoor (V/Ph	ase / Hz )		230V/5	Single/50Hz
D	esign load		kW	2.5	3.1
A	nnual electricity	consumption (*2)	kWh/a	149	190
	EER (*4)	•		5.8	5.7
oling		Energy efficiency class		A <sup>+</sup>	A <sup>+</sup>
~  -		Rated	kW	2.5	3.15
C	apacity	Min-Max	kW	1.3 - 3.0	1.4 - 3.5
To	otal Input	Rated	kW	0.710	1.020
	esign load		kW	1.9 (-10°C)	2.4 (-10°C)
		at reference design temperature	kW	1.9 (-10°C)	2.4 (-10°C)
	eclared	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)
C	apacity	at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)
B	ack up heating	and the same	kW	0.0 (-10°C)	0.0 (-10°C)
	nnual electricity		kWh/a	647	809
	COP (*4)	oooumption		4.1	4.1
, 3		Energy efficiency class		4.1 A <sup>+</sup>	4.1 A <sup>+</sup>
$\vdash$		Rated	kW	3.15	3.6
C	apacity	Min-Max	kW	0.9 - 3.5	1.1 - 4.1
-	-4-114	Rated	kW	0.9 - 3.5	
	otal Input	Haleu			0.975
	Current (Max)	Rated	A kW	5.8 0.020	6.5 0.024
	perating Curre		A	0.3	0.3
_	imensions	H*W*D	mm	290-799-232	290-799-232
or 🗀	/eight	I	kg	9	9
.  A	ir Volume	Cooling	m³/min	3.8 - 5.5 - 7.3 - 9.5	3.8 - 5.7 - 7.8 - 10.9
, ·		Heating	m³/min	3.5 - 5.5 - 7.5 - 10.0	3.5 - 5.5 - 7.5 - 10.3
	ound Level (SPL)	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45
<u> -</u>	Lo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	23 - 30 - 37 - 43	23 - 30 - 37 - 44
_	ound Level (PWL)	Cooling	dB(A)	57	60
	imensions	H*W*D	mm	538-699-249	538-699-249
W	/eight		kg	24	25
_	ir Volume	Cooling	m³/min	31.5	31.5
	iii voidine	Heating	m³/min	31.5	31.5
door	ound Level (SPL)	Cooling	dB(A)	50	51
3	ound Level (SPL)	Heating	dB(A)	50	51
S	ound Level (PWL)	Cooling	dB(A)	63	64
0	perating Curre	ent (Max)	A	5.5	6.2
В	reaker Size		A	10	10
D	iameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52
N	lax.Length	Out-In	m	20	20
ona ⊢	lax.Height	Out-In	m	12	12
	d Operating	Cooling	°C	-10 ~ +46	-10 ~ +46
inge (Out		Heating	°C	-10 ~ +24	-10 ~ +24

<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 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 daways ask a professional.

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

Eleventy 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







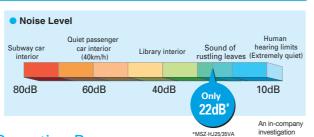




#### Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A" rating for 25/35 classes and "A\*" for 50/60/71 classes.

#### **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.



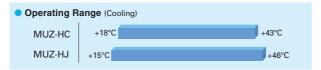
#### **Long Piping Length**

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**

41

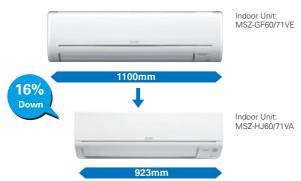
The widths of both indoor and outdoor units are compact, making installation in smaller, tighter spaces possible.

Indoor Unit: MSZ-HJ25/35/50VA



Outdoor Unit: MUZ-HJ25/35VA

Compared to 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

Туре					Inverter Heat Pump			
Indoor Ur	nit			MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA
Outdoor U				MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA
Refrigerar				IVIOZ-I IJZJVA	IVIOZ-I IOGOVA	B410A <sup>(*1)</sup>	IVIOZ-I IJOUVA	1 100Z-1107 1 VA
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)	kWh/a	171	212	292	354	441
	SEER (*4)			5.1	5.1	6.0	6.0	5.6
Cooling		Energy efficiency class		A	A A	A+	A+	A+
		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)
		at reference design temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	Declared	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	Capacity	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	ck up heating capacity		0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
(Average	Annual electricity	ectricity consumption (*2)		698	885	1267	1544	1854
Season)("5)	SCOP (*4)			3.8	3.8	4.2	4.1	4.0
		Energy efficiency class	;	A	A	A+	A+	A+
	Conneity	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 Current(Max)		0.3	0.3	0.4	0.5	0.5
		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
Indoor 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
	(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		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
	` '	Heating	dB(A)	50	50	51	55	55
	, , , ,		dB(A)	63	64	64	65	66
	Operating Current (Max)		A	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
	Max.Height	Out-In	m	12	12	12	15	15
	ed Operating	Cooling	°C	+15 ~ +46	+15 ~ +46	+15 ~ +46	+15 ~ +46	+15 ~ +46
Range (O	utacor)	Heating	℃	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

In the Appelant is inserted as 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 would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of COs, over a period of 100 years. Never ty to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

The GWP of RATO is 2086 in the IPCO 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.

SH: 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.

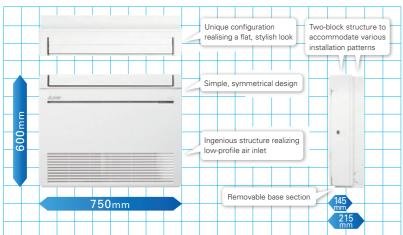
# MFZ SERIES

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.

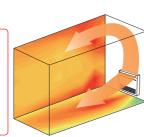
Capacity	2.5kW	3.5kW	5.0kW	6.0kW				
MFZ-KJ	✓	✓	✓					
1								
MFZ-KT	✓	✓	✓	✓				

#### Multi-flow Vane

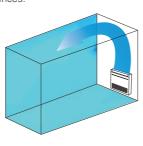
Three uniquely shaped vanes control the airflow and allow the freedom to customize comfort according to preferences.











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

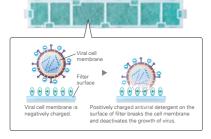
#### Weekly Timer (Introduced in response to market demand)

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-

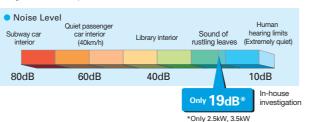
ful substances, such as bacteria, mold and allergen. Two-layered filter with non-woven fabric and electrostatic filter can effectively capture and remove small particles from the air in your room.

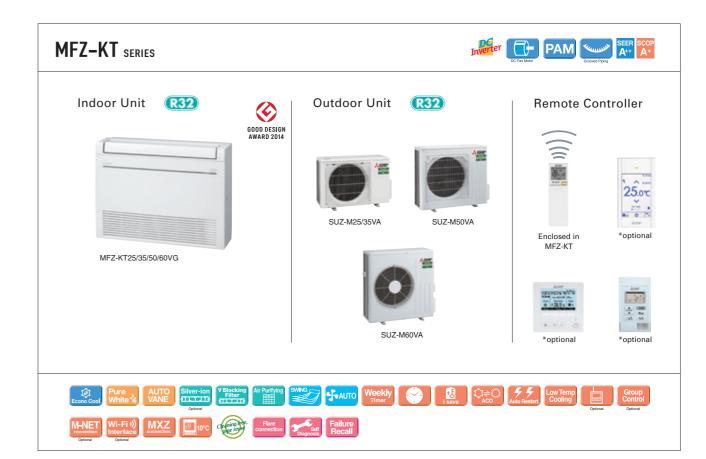


#### **Quiet Operation**

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

\* Single connection only.





Туре					Inverter	Heat Pump				
Indoor Ur	nit			MFZ-KT25VG	MFZ-KT35VG	MFZ-KT50VG	MFZ-KT60VG			
Outdoor l	Jnit			SUZ-M25VA	SUZ-M35VA	SUZ-M50VA	SUZ-M60VA			
Refrigera	nt			R32 <sup>(*1)</sup>	R32 <sup>(*1)</sup>	R32 <sup>(*1)</sup>	R32 <sup>(*1)</sup>			
Power	Source			Outdoor power supply						
Supply	Outdoor(V/Phase/Hz)				230 / Si	ngle / 50				
	Design load		kW	2.5	3.5	5.0	6.1			
	Annual electricity consun	nption (*2)	kWh/a	134	185	257	343			
	SEER (*4), (*5)			6.5	6.6	6.8	6.2			
Cooling		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)			
Heating	Back up heating capacity	•	kW	0.2	0.3	0.8	0.5			
Average	Annual electricity consun	nption (*2)	kWh/a	732	825	1423	1568			
Season)	SCOP (*4), (*5)			4.2	4.4	4.2	4.1			
		Energy efficiency class		A <sup>+</sup>	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			
Operatin	g Current (Max)	•	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)			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		kg	14.5	14.5	14.5	15.0			
ndoor Unit	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 - 1			
UIIIL	(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 - 1			
	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		kg	30	35	41	54			
	Air Volume	Cooling	m³/min	36.3	34.3	45.8	50.1			
Outdoor		Heating	m³/min	34.6	32.7	43.7	50.1			
Jutaoor Jnit	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)		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			
Ext.	Max.Length	Out-In	m	20	20	30	30			
Piping	Max.Height	Out-In	m	12	12	30	30			
Guarante	ed Operating Range	Cooling	°℃	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46			
Outdoorl		Heating	℃	-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 Gassasemble the product, ourself and always ask a professional. The GWP of R410A is 2088 in the IPCO 4th Assessment Report.

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

(?3) SHs. 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) 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.



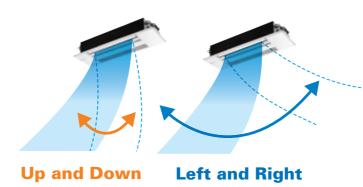
#### Set Airflow According to Ceiling Height

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**

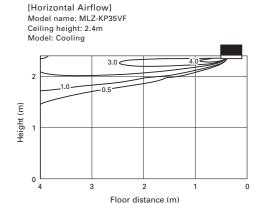
Outlet vanes can be moved left and right, and up and down using the remote controller. This improved airflow control feature solves the problem of drafts.



\*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							
15:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
		Automatio	cally turned off during v	vork hours		Midday is warmer, so the temperatur	
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		match time when outsid	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	

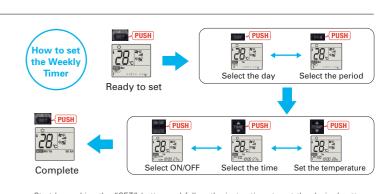
Settings

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 Start 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**

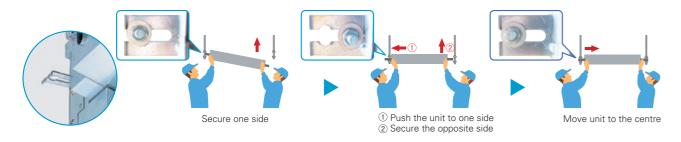
Inovative size which enables to fold the refrigerant piping above



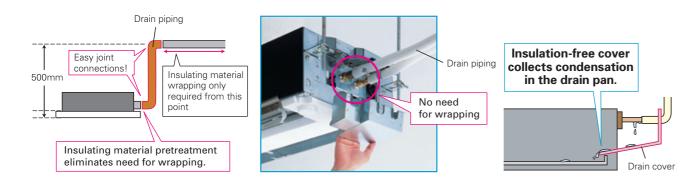
Dimension: 185(H)×1102(W)×360(D)mm

#### Temporary hanging hook

Work efficiency has improved during installation.

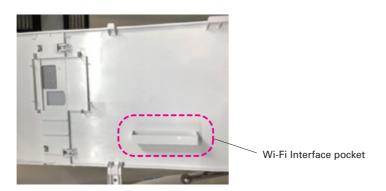


#### **Drain Piping Supporters + Drain Cover**



#### 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.





уре					Inverter Heat Pump			
ndoor Unit				MLZ-KP25VF	MLZ-KP35VF	MLZ-KP50VF		
utdoor Un	iit			SUZ-M25VA	SUZ-M35VA	SUZ-M50VA		
efrigerant					R32 <sup>(*1)</sup>			
ower S	ource				Outdoor Power supply			
upply 0	outdoor (V/Ph	ase / Hz )		230V / Single / 50Hz				
D	esign load		kW	2.5	3.5	5.0		
A	nnual electricity	consumption (*2)	kWh/a	141	175	260		
S	EER (*4, (*8)			6.2	7.0	6.7		
ooling		Energy efficiency class		A++	A++	A++		
	·	Rated	kW	2.5	3.5	5.0		
	apacity	Min-Max	kW	1.4 - 3.2	0.8 - 3.9	1.7 - 5.6		
To	otal Input	Rated	kW	0.59	0.94	1.38		
D	esign load		kW	2.2	2.6	4.3		
		at reference design temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)		
	eclared	at bivalent temperature	kW	2.0 (-7°C)	2.3 (-7°C)	3.8 (-7°C)		
-	apacity	at operation limit temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)		
ating B	ack up heating	capacity	kW	0.2	0.3	0.5		
	Annual electricity consumption (*2)		kWh/a	697	791	1397		
	COP (*4), (*5)			4.4	4.6	4.3		
		Energy efficiency class		A+	A++	A <sup>+</sup>		
_		Rated	kW	3.2	4.1	6.0		
C	apacity	Min-Max	kW	1.4 - 4.2	1.1 - 4.9	1.7 - 7.2		
To	otal Input	Rated	kW	0.80	1.10	1.86		
erating (	Current (Max)		A	7.2	8.9	13.9		
In	nput	Rated	kW	0.04	0.04	0.04		
0	perating Curre	nt(Max)	A	0.40	0.40	0.40		
D	imensions	H*W*D	mm	185-1102-360	185-1102-360	185-1102-360		
W	Weight		kg	15.5	15.5	15.5		
door nit Ai	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		
	SLo-Lo-Mid-Hi <sup>(*3)</sup> )	Heating	m³/min	6.0-7.0-8.2-9.2	6.0-7.7-8.8-9.9	6.0-8.8-10.3-11.8		
S	ound Level (SPL)	Cooling	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		
Sc	ound Level (PWL)	Cooling	dB(A)	52	53	59		
, D	imensions	H*W*D	mm	24-1200-424	24-1200-424	24-1200-424		
inel W	Veight		kg	3.5	3.5	3.5		
D	imensions	H*W*D	mm	550-800-285	550-800-285	550-800-285		
W	Veight		kg	30	35	41		
	ir Volume	Cooling	m³/min	36.3	34.3	45.8		
	ir volume	Heating	m³/min	34.6	32.7	43.7		
itdoor S		Cooling	dB(A)	45	48	48		
"  S	ound Level (SPL)	Heating	dB(A)	46	48	49		
S	ound Level (PWL)	Cooling	dB(A)	59	59	64		
0	perating Curre	nt (Max)	A	6.8	8.5	13.5		
	reaker Size	-	A	10	10	20		
	iameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7		
ct. M	Max.Length	Out-In	m	20	20	30		
	Max.Height	Out-In	m	12	12	30		
	d Operating	Cooling	°C	-10~+46	-10~+46	-15~+46		
ange (Out		Heating	°C	-10~+24	-10~+24	-10~+24		

<sup>)</sup> Hemgerant 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. The means that if 1 kg of the 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 Ref 101 kg 1088 in the IPCO 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> SHE specified in a white is a condition for the specified in the speci

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

Туре					Inverter Heat Pump	
Indoor Ur	nit			MSZ-RW25VG	MSZ-RW35VG	MSZ-RW50VG
Outdoor I	Unit			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
	Design load Annual electricity consumption   Raman   Design load Design load Declared Declare			11.2	9.4	7.6
		Energy efficiency class		A+++	A+++	A <sup>++</sup>
	Design load		kW	1.8	2.2	3.3
		at reference design temperature	kW	1.8	2.2	3.3
		at bivalent temperature	kW	1.8	2.2	3.3
Heating (Warmer	Сарасну	at operation limit temperature	kW	2.6	2.6	4.0
Season)			kW	0.0	0.0	0.0
,	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
	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
Season)	Back up heating	capacity	kW	1.0	1.9	3.2
2220011)	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	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)
0000011,	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	capacity	kW	_	2.1 (-22°C)	-	2.5 (-22°C)	-	3.7 (-22°C)	-
	Annual electricity	consumption (*2)	kWh/a	_	2425	_	3075	_	5340	_
	SCOP			_	4.0	_	4.0	_	3.4	_
		Energy efficiency class		_	A <sup>+</sup>	_	A <sup>+</sup>	_	A	_

Туре					Inverter Heat Pump	
	nit			MSZ-FT25VG	MSZ-FT35VG	MSZ-FT50VG
				MUZ-FT25VGHZ	MUZ-FT35VGHZ	MUZ-FT50VGHZ
Refrigera	nt				R32 (*3)	
	Design load		kW	2.5	3.5	5.0
Cooling	cor Unit tdoor Unit frigerant    Design load	consumption (*2)	kWh/a	101	142	243
Cooling		· ·		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)
		at bivalent temperature	kW	1.8 (2°C)	2.2 (2°C)	G MSZ-FT50VG MUZ-FT50VGH 5.0 243 7.2 A++ 2.7 (2°C) 2.7 (2°C) 3.6 (25°C) 0.0 (2°C) 684 5.5 A+++ 7.4 (22°C) 4.0 (-22°C) 5.0 (-10°C) 3.6 (-25°C)
Heating	Capacity	at operation limit temperature	kW	3.0 (-25°C)	3.4 (-25°C)	3.6 (-25°C)
Season)	Back up heating	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		MUZ-FT25VGHZ   MUZ-FT35VGHZ	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)
		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)			kW	1.6 (-22°C)	2.2 (-22°C)	3.4 (-22°C)
Jeason,	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	AP50VG	MSZ-AP60VG(K)	MSZ-AP71VG
Outdoor	Jnit			MUZ-AP15VG	MUZ-AP20VG	MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH	MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH	MUZ-AP60VG	MUZ-AP71V0
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
0009	SEER			7.2	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)
	Declared Capacity	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)	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	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		Δ++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++	Δ+++

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				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)	2.1 (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)	2.3 (2°C)
Heating (Warmer	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)
Season)			kW	0.0 (2°C)					
,	Annual electricity	nual electricity consumption (*2) kWh/a			311	398	398	489	595
	SCOP			5.9	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				R32 <sup>(*3)</sup>						
	Design load		kW	2.0	2.5	3.5	5.0				
Cooling	Annual electricity consumption (*2) SEER			86	108	180	265				
0009				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	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 capacity Annual electricity consumption (*2)  SCOP (*4)		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)				
0000011,			kWh/a	234	268	304	543				
				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	ling L		kWh/a	141	191	226	269	296	355
0009	SEER			6.2	6.2	6.5	6.5	7.2	7.0
		Energy efficiency class		A <sup>++</sup>	A++	A++	A++	A++	A++
	Design load		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)
		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					nverter Heat Pump	)			
Indoor Ur	nit			MSZ-DW25VF	MSZ-DW35VF	MSZ-DW50VF			
Outdoor l	Unit			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 <sup>++</sup>	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	Сарасну	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)			
Coasonj	Annual electricity	consumption (*2)	kWh/a	287	351	508			
	SCOP			5.3	5.1	5.3			
		Energy efficiency class		A+++	A+++	A+++			

T.m.s						Jan. 1	la et Demon		
Туре							leat Pump		
Indoor Ur	nit				H25VE2	MSZ-F	H35VE2	MSZ-F	H50VE2
Outdoor I	Jnit			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) kV		kWh/a	96	96	138	138	244	244
0009	SEER			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)
0000011	Annual electricity consumption (*2) kWh/a			376	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) Retrigerant leakage contributes to climate change. Retrigerant with lower global warming potential (GWP) would contribute less to global warming than a retrigerant 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.

(a) Large constance for the standard set received. Accordance of the construction will be appealed to standard and the construction of the constru

 $_{9}$ 

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

_								_			
Туре							Inverter H	eat Pump			
Indoor Ur	nit			MSZ-S	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	nt					•	R410	)A (*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	Capacity	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			R410A (*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	Capacity	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	g capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)		
oodoon	Annual electricity consumption (*2)		kWh/a	664	963	304	362		
	SCOP (*4)			5.3	5.4	5.0	5.0		
		Energy efficiency class		A+++	A+++	A++	A++		

T							lancardon I I and Dones			
Туре							Inverter 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	Capacity	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)
2220011)	Annual electricity consumption (*2) kWh/a		kWh/a	356	426	539	674	813	325	386
	SCOP	SCOP			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 hind 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 fluid with 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.









### **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 Controller
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



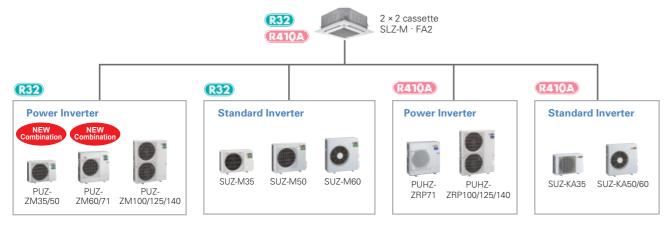
 $<sup>\</sup>hbox{\bf \$ To confirm compatibility with the MXZ Series multi-type system, refer to the MXZ Series page.}$ 



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

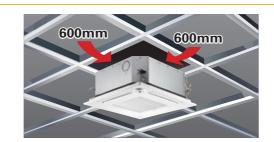
1.5kW has been introduced for multi connection. The diverse selection enables the best solution for both customer and location.

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.

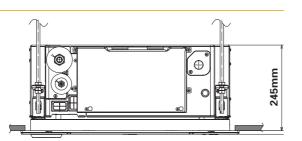
Of course, design matched 2x2 (600mm\*600mm) ceiling construction specifications.



#### 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.

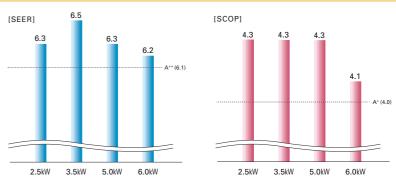
Of course, in addition to our products, replacing competitors' product is simplified too.



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

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

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



#### Quietness

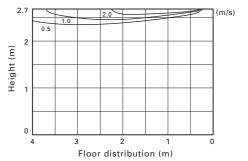
Low sound level has been realized by introduction of 3D turbo fan. New SLZ can give users quieter and move comfortable room condi-



#### **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

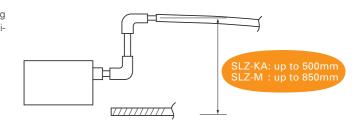
Installation is possible without removing the screws for control box simply loosen them. This eliminates the risk of losing screws.





#### **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.

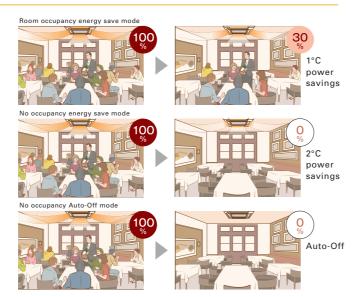
#### No occupancy energy-saving mode

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



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

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#### Seasonal airflow\*

#### <When cooling>

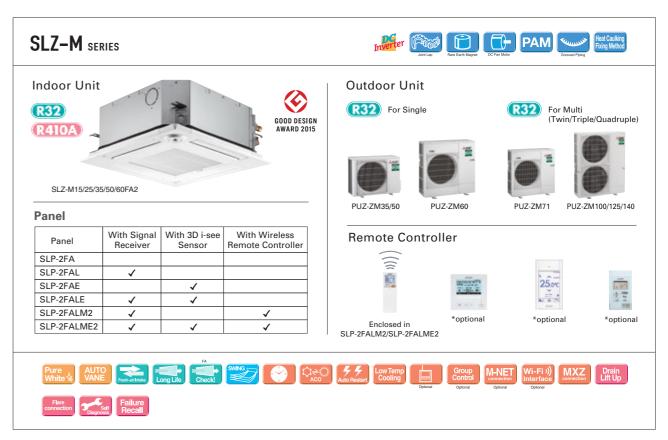
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping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

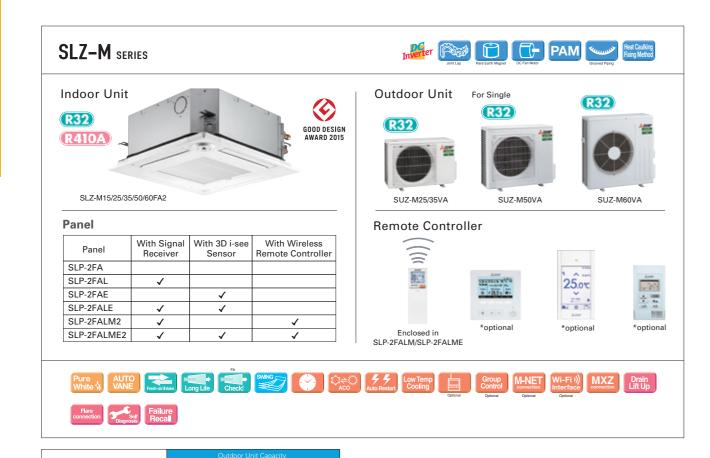


							Outdo	oor Unit Cap							
ination				For Single					For Twin			For Triple		For Qu	adruple
	35	50	60	71	100	125	140	71	100	125	100	125	140	125	140
UZ-ZM)	35×1	50×1	60×1	-	-	-	-	35×2	50×2	60×2	35×3	50×3	50×3	35×4	35×4
stribution Pipe	-	-	-	-	-	-	-	M	SDD-50TR2	2-E	N	ISDT-111R3	-E	MSDF-1	111R2-E
·I	UZ-ZM)	35 UZ-ZM) 35×1	35 50 UZ-ZM) 35×1 50×1	35 50 60 UZ-ZM) 35×1 50×1 60×1	35 50 60 71 UZ-ZM) 35×1 50×1 60×1 -	35 50 60 71 100 UZ-ZM) 35×1 50×1 60×1	35   50   60   71   100   125   UZ-ZM)   35×1   50×1   60×1   -   -   -	ination For Single    35   50   60   71   100   125   140	ination For Single    35   50   60   71   100   125   140   71     UZ-ZM    35×1   50×1   60×1   -   -   -   35×2	35   50   60   71   100   125   140   71   100   UZ-ZM)   35x1   50x1   60x1   -   -   -   35x2   50x2	ination For Single For Twin    35   50   60   71   100   125   140   71   100   125     UZ-ZM)   35×1   50×1   60×1   -   -   -   35×2   50×2   60×2	ination For Single For Twin  35 50 60 71 100 125 140 71 100 125 100  UZ-ZM) 35x1 50x1 60x1 35x2 50x2 60x2 35x3	ination For Single For Twin For Triple  35 50 60 71 100 125 140 71 100 125 100 125  UZ-ZM) 35×1 50×1 60×1 35×2 50×2 60×2 35×3 50×3	ination For Single For Twin For Triple    35   50   60   71   100   125   140   71   100   125   100   125   140     UZ-ZM  35x1   50x1   60x1   -   -   -   -   35x2   50x2   60x2   35x3   50x3   50x3	ination For Single For Twin For Triple For Qu  35 50 60 71 100 125 140 71 100 125 100 125 140 125  UZ-ZM) 35×1 50×1 60×1 35×2 50×2 60×2 35×3 50×3 50×3 35×4

Туре					Inverter Heat Pump	
ndoor Unit				SLZ-M35FA2	SLZ-M50FA2	SLZ-M60FA2
utdoor Unit				PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2
efrigerant(*1)					R32	
wer Source	ce				Outdoor power supply	
pply Outdo	oor(V/Phase/Hz)				230/Single/50	
ooling Cap	pacity	Rated	kW	3.6	5.0	6.1
- 11		Min-Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5
Tota	al Input	Rated	kW	0.800	1.315	1.648
EER				4.50	3.80	3.70
Des	sign load		kW	3.6	5.0	6.1
Anr	nual electricity consump	tion(*2)	kWh/a	194	280	346
SEE	ER(*4)			6.5	6.2	6.1
		Energy efficiency class		A++	A++	A++
ating Cap		Rated	kW	4.1	5.0	6.4
		Min-Max	kW	1.6 - 5.0	2.5 - 5.5	2.8 - 7.3
Tota		Rated	kW	1.205	1.470	2.064
COL	P			3.40	3.40	3.10
Des	sign load		kW	2.4	3.8	4.4
Dec	clared 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)
Bac	k up heating capacity		kW	0.0	0.0	0.0
	nual electricity consump	tion(*2)	kWh/a	820	1273	1560
	OP(*4)			4.0	4.1	3.9
		Energy efficiency class		A+	A+	A
erating Curre		3,	IA I	13.2	13.3	19.4
loor Input	[cooling / Heating ]	Rated	kW	0.02 / 0.02	0.03 / 0.03	0.04 / 0.04
	ating Current(Max)		Α	0.24	0.32	0.43
Dime	nsions	H*W*D	mm	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>
Weigh		•	kg	15 <3>	15 <3>	15 <3>
Air Vo	olume (Lo-Mi2-Mi1-Hi)		m³/min	6.5-8.0-9.5	7.0-9.0-11.5	7.5-11.5-13.0
	d Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	25-30-34	27-34-39	32-40-43
	d Level (PWL)		dB(A)	51	56	60
		H*W*D	mm	630-809-300	630-809-300	943-950-330(+25)
it Weigh			kg	46	46	67
Air Vo		Cooling	m³/min	45	45	55
		Heating	m³/min	45	45	55
Sound		Cooling	dB(A)	44	44	47
		Heating	dB(A)	46	46	49
		Cooling	dB(A)	65	65	67
	ating Current(Max)		A	13	13	19
	er Size		А	16	16	25
t.Piping Diame		Liquid/Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88
		Out-In	m	50	50	55
		Out-In	m	30	30	30
uaranteed Ope	erating Range (Outdoor)	Cooling(*3)	°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 and the product your energy consumption based on standard test results. Actual energy consumption based on standard test results. Actual energy consumption based on standard test results actual energy consumption based on standard test results. Actual energy consumption based on standard test results actual energy consumption based on standard



				25	35	50	60	71		
	S Se	eires		25×1	35×1	50×1	60×1	-		
			Distribution Pipe	-	-	-	-	-		
L										
ре									Inverter	Heat Pump
or l	Jnit						S	LZ-M25FA2	SLZ-M35FA2	SLZ-M50FA2
doo	r Unit						S	UZ-M25VA	SUZ-M35VA	SUZ-M50VA
iger	rant <sup>(*1)</sup>									332
er		urce								ower supply
ply			Phase/Hz)							ingle/50
ling	9    0	Capacity		Rated		kW		2.5	3.5	4.6
	1			Min-Max		kW		1.4 - 3.2	0.7 - 3.9	1.0 - 5.2
		Total Inpu	ıt	Rated		kW		0.657	1.093	1.352
		EER						3.80	3.20	3.40
		Design lo				kW		2.5	3.5	4.6
			ectricity consumpt	tion(*2)		kWh/a		139	183	253
	1	SEER(*4)						6.3	6.7	6.3
_				Energy efficiency	y class			A++	A++	A++
ting	9    9	Capacity		Rated		kW		3.2	4.0	5.0
	-			Min-Max		kW		1.3 - 4.2	1.0 - 5.0	1.3 - 5.5
		Total Inpu	ıt	Rated		kW		0.886	1.078	1.562
						II.VA/		3.61	3.71	3.20
	1 1	Design lo	ad			kW		2.2	2.6	3.6

For Single

	Source				Outdoor po	ower supply	
	Outdoor(V/Phase/Hz)				230/Si	ngle/50	
Cooling	Capacity	Rated	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	tion(*2)	kWh/a	139	183	253	321
	SEER(*4)			6.3	6.7	6.3	6.2
		Energy efficiency class		A++	A++	A++	A++
eating	Capacity	Rated	kW	3.2	4.0	5.0	6.4
_		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
1		at reference design temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.1 (-10°C)
		at bivalent temperature	kW	2.0 (-7°C)	2.3 (-7°C)	3.2 (-7°C)	4.1 (-7°C)
		at operation limit temperature		2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.1 (-10°C)
	Back up heating capacity	at operation mine temperature	kW	0.2	0.3	0.4	0.5
	Annual electricity consump	ation(*2)	kWh/a	716	845	1192	1560
	SCOP(*4)	, uon	KVVII/G	4.3	4.3	4.2	4.1
- 1		Energy efficiency class		4.5 A+	4.5 A+	A+	A+
nerating C	Current(Max)	Energy emelency class	Α	7.0	8.7	13.8	15.2
		Rated	kW	0.02 / 0.02	0.02 / 0.02	0.03 / 0.03	0.04 / 0.04
	Operating Current(Max)	Indica	Δ	0.20	0.027	0.32	0.43
		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)	(SPL)	dB(A)	25-28-31	25-30-34	27-34-39	32-40-43
S	Sound Level (PWL)		dB(A)	48	51	56	60
utdoor D	Dimensions	H*W*D	mm	550-800-285	550-800-285	714-800-285	880-840-330
nit V	Weight		kg	30	35	41	54
Δ	Air Volume	Cooling	m³/min	36.3	34.3	45.8	50.1
		Heating	m³/min	34.6	32.7	43.7	50.1
s	Sound Level (SPL)	Cooling	dB(A)	45	48	48	49
		Heating	dB(A)	46	48	49	51
s	Sound Level (PWL)	Cooling	dB(A)	59	59	64	65
C	Operating Current(Max)		A	6.8	8.5	13.5	14.8
	Breaker Size		A	10	10	20	20
lB.		Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88
	Diameter(*5)						
xt.Piping D		Out-In	m				30
xt.Piping D				20	20 12	30 30	30 30

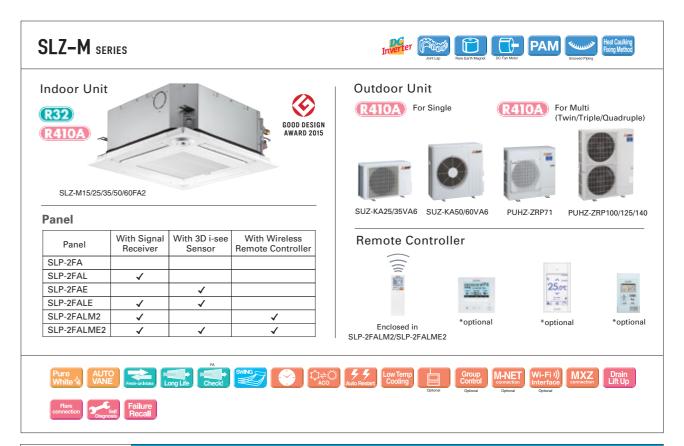
<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means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

Indoor Unit Combination



										nit Capacity							
	Indoor Unit Combination				For S	Single					For Twin			For Triple		For Qu	adruple
		25	35	50	60	71	100	125	140	71	100	125	100	125	140	125	140
	Power Inverter (PUZ-ZM)	25×1	35×1	50×1	60×1	-	-	-	-	35×2	50×2	60×2	35×3	50×3	50×3	35×4	35×4
	Distribution Pipe	-	-	-	-	-	-	-	-	M	SDD-50TR	-E	M	SDT-111R-I		MSDF-	1111R-E
	ē											Heat Pum					
)(	or Unit					SLZ-	M25FA2		S	LZ-M35FA2	2		SLZ-M50	FA2		SLZ-M	60FA2

Туре				Inverter Heat Pump								
Indoor Unit				SLZ-M25FA2	SLZ-M35FA2	SLZ-M50FA2	SLZ-M60FA2					
Outdoor Unit				SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6					
Refrigerant(*1)					R4	10A						
	ource					ower supply						
Supply O	utdoor(V/Phase/Hz)				230/Sir							
Cooling	Capacity	Rated	kW	2.6	3.5	4.6	5.6					
-	1	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	tion(*2)	kWh/a	144	188	256	316					
- 1	SEER(*4)			6.3	6.5	6.3	6.2					
		Energy efficiency class		A++	A++	A++	A++					
leating	Capacity	Rated	kW	3.2	4.0	5.0	6.4					
		Min-Max	kW	1.3 - 4.2	1.7 - 5.0	1.7 - 6.0	2.5 - 7.4					
	Total Input	Rated	kW	0.886	1.108	1.558	2.278					
	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		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		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					
	nnual electricity consumption(*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 Co	urrent(Max)		А	7.2	8.4	12.3	14.4					
door In	put [cooling / Heating ]	Rated	kW	0.02 / 0.02	0.02 / 0.02	0.03 / 0.03	0.04 / 0.04					
nit 0	perating Current(Max)		А	0.20	0.24	0.32	0.43					
		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					
	leight 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)		dB(A)	48	51	56	60					
	imensions	H*W*D	mm	550-800-285	550-800-285	880-840-330	880-840-330					
	leight eight		kg	30	35	54	50					
Ai	ir Volume	Cooling	m³/min	32.6	36.3	44.6	40.9					
L		Heating	m³/min	34.7	34.8	44.6	49.2					
S	ound Level (SPL)	Cooling	dB(A)	47	49	52	55					
		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		А	10	10	20	20					
xt.Piping Di		Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88					
	lax.Length	Out-In	m	20	20	30	30					
	lax.Height	Out-In	m	12	12	30	30					
Quarantood	Operating Range (Outdoor)	Cooling(*3)	°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46					
Guaranteeu		Heating	°C	-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 are 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 on with depend on 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.

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# SEZ SERIES

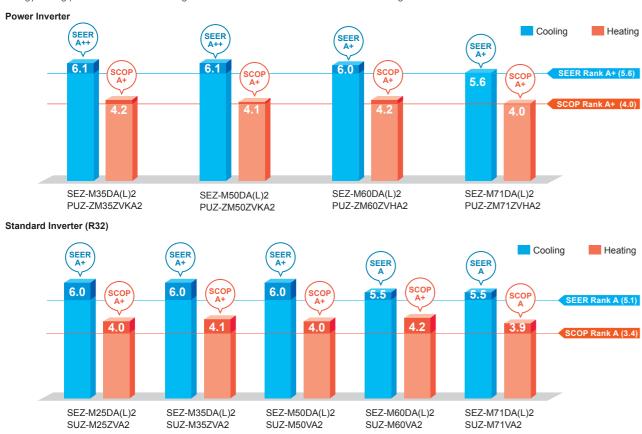


This concealed ceiling-mounted indoor unit series is compact, and fits easily into rooms with lowered ceilings. Highly reliable energy-saving performance makes it a best match choice for concealed unit installations.

#### **High Energy Efficiency**

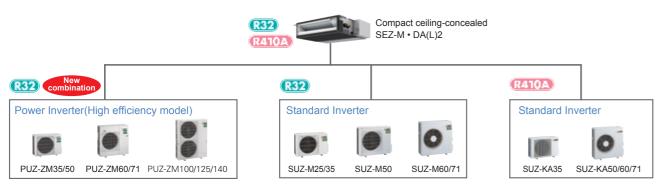


Highly efficient indoor units with DC inverter contribute to a reduction in electricity consumption throughout a year. The SEZ series has achieved energy-saving performance of "A+" or higher when connected to PUZ series and "A" or higher when connected to SUZ-M series.



#### 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	11	90

#### **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 level	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

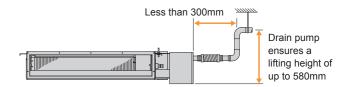
External static pressure can be selected from 5, 25, 35, and 50 Pa (set to 25 Pa at the time of factory shipment).

Four levels Available for All Medels

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

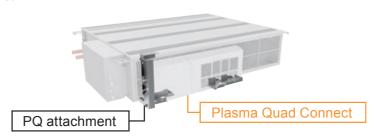
The PAC-KE07DM-E drain pump is available as an option. The drain connection can be raised as high as  $580 \, \text{mm}$ , allowing more freedom in piping layout design.

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

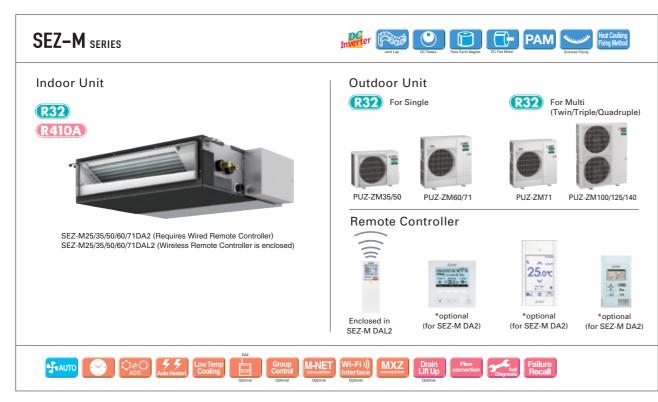


#### Connectable to Plasma Quad Connect

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



								Outdo	oor Unit Ca	pacity						
Indoor Unit C	Combination				For Single					For Twin			For Triple		For Qu	adruple
		35	50	60	71	100	125	140	71	100	125	100	125	140	125	140
Power Invert	ter (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	-	-	-	-	-	-	-	M	ISDD-50TR	2-E	N	ISDT-111R3	3-E	MSDF-1	111R2-E

Туре					Inverter l	Heat Pump	
Indoor Uni	t			SEZ-M35DA(L)2	SEZ-M50DA(L)2	SEZ-M60DA(L)2	SEZ-M71DA(L)2
Outdoor U				PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2
Refrigeran				1 OF ENGOTION		32	1022.00100
Power	Source					ower supply	
Supply	Outdoor(V/Phase/Hz)					ingle/50	
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1
	1		kW	1.6 - 3.9	2.3 - 5.6	2.7 - 6.3	3.3 - 8.1
	Total Input		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		kWh/a	205	287	352	440
	SEER(*4)(*5)		100011110	6.1	6.1	6.0	5.6
	022	Energy efficiency class		A++	A++	A+	A+
leating	Capacity		kW	4.1	6.0	7.0	8.0
9			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)	1.000		4.00	3.80	4.10	3.90
	Design load		kW	2.4	3.8	4.10	4.7
	Declared Capacity		kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 4.7 (-10°C)
	Decialed Capacity		kW	2.4 (-10 C) 2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)
			kW	2.4 (-10 C) 2.2 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.5 (-20°C)
	Back up heating capacity	at operation in the temperature	kW	0.0	0.0	0.0	0.0
	Annual electricity consump	ation(*2)	kWh/a	791	1279	1464	1633
	SCOP(*4)(*5)	Juon	KVVII/a	4.2	4.1	4.2	4.0
	3001	Energy efficiency class		4.2 A+	A+	4.2 A+	4.0 A+
Inerating	Current(Max)		A	13.7	13.8	19.9	20.0
ndoor	Input [cooling / Heating ]		kW	0.047	0.077	0.084	0.102
Jnit	Operating Current(Max)		A	0.65	0.82	0.88	1.00
,,,,,	Dimensions	H*W*D	mm	200 - 990 - 700	200 - 990 - 700	200 - 1190 - 700	200 - 1190 - 700
	Weight	11 11 5	kg	22	22	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)	Rated	dB(A)	23 - 27 - 31	30 - 34 - 37	30 - 34 - 38	30 - 35 - 40
		5Pa(*8)	dB(A)	22 - 26 - 30	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39
	Sound Level (PWL)		dB(A)	51	57	58	60
Outdoor	Dimensions	H*W*D	mm	630-809-300	630-809-300	943-950-330(+25)	943-950-330(+25)
Jnit	Weight	•	kg	46	46	67	67
	Air Volume	Cooling	m³/min	45	45	55	55
		Heating	m³/min	45	45	55	55
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47
		Heating	dB(A)	46	46	49	49
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67
	Operating Current(Max)		A	13	13	19	19
	Breaker Size		A	16	16	25	25
xt.Pipino	Diameter(*6)	Liquid/Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88
	Max.Length	Out-In	m	50	50	55	55
	Max.Height	Out-In	m	30	30	30	30
Guarante	ed Operating Range (Outdoor)	Cooling(*3)	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
	paung nango (Catabol)	Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21
		ricating	U	*11 ~ TZ1	*11 ~ TZ1	720 ~ TZ I	-ZU ~ TZ 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 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 EER/COP and SEER/SCOP for M35-71 are measured at ESP 25Pa

\*5 SEER and SCOP are based on 2009/12/5/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    Control   Cont
Indoor Unit	Outdoor Unit For Single
R32 R410A	SUZ-M25/35VA SUZ-M50VA SUZ-M60/71VA
	Remote Controller
SEZ-M25/35/50/60/71DA2 (Requires Wired Remote Controller) SEZ-M25/35/50/60/71DAL2 (Wireless Remote Controller is enclosed)	25.0°C
	Enclosed in *optional *optional *optional SEZ-M DAL2 (for SEZ-M DA2) (for SEZ-M DA2)  **Optional *optional
AUTO  ACO  ACO  AUTO Restart  Low Temp Cooling  Cystonal   Wi-Fi )) MXZ Drain Lift Up Connection Connec	
Outdoor Unit Capacity	

Туре						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-M25VA	SUZ-M35VA	SUZ-M50VA	SUZ-M60VA	SUZ-M71VA
Refrigeran	t(*1)					R32		
Power	Source					Outdoor power supply		
Supply	Outdoor(V/Phase/Hz)					230/Single/50		
Cooling	Capacity	Rated	kW	2.5	3.5	5.0	6.1	7.1
		Min-Max	kW	1.4 - 3.2	0.7 - 3.9	1.1 - 5.6	1.6 - 6.3	2.2 - 8.1
	Total Input	Rated	kW	0.714	1.000	1.547	1.848	2.151
	EER(*4)	•		3.50	3.50	3.23	3.30	3.30
	Design load		kW	2.5	3.5	5.0	6.1	7.1
	Annual electricity consump	ption(*2)	kWh/a	146	202	290	385	451
	SEER(*4)(*5)			6.0	6.0	6.0	5.5	5.5
		Energy efficiency class		A+	A+	A+	A	A
Heating	Capacity	Rated	kW	2.9	4.2	6.0	7.4	8.0
-		Min-Max	kW	1.3 - 4.2	1.1 - 5.0	1.5 - 7.2	1.6 - 8.0	2.0 - 10.2
	Total Input	Rated	kW	0.803	1.076	1.617	2.049	2.285
	COP(*4)	-		3.61	3.90	3.71	3.61	3.50
	Design load		kW	2.2	2.6	4.3	4.6	5.8
	Declared Capacity	at reference design temperature	kW	2.0 (-10°C)	2.3 (-10°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C)
		at bivalent temperature	kW	2.0 (-7°C)	2.3 (-7°C)	3.8 (-7°C)	4.1 (-7°C)	5.2 (-7°C)
		at operation limit temperature	kW	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	ption(*2)	kWh/a	769	878	1501	1516	2030
	SCOP(*4)(*5)			4.0	4.1	4.0	4.2	3.9
		Energy efficiency class		A+	A+	A+	A+	A
Operating	Current(Max)		Α	7.4	9.2	14.3	15.7	15.8
Indoor	Input [cooling / Heating ]	Rated	kW	0.043	0.047	0.077	0.084	0.102
Unit	Operating Current(Max)		Α	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
	Sound Level (PWL)	5Pa <sup>(*7)</sup>	dB(A)	22 - 25 - 29	22 - 26 - 30	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39
Outdoor	Dimensions	lH*W*D	mm	50 550-800-285	51 550-800-285	57 714-800-285	58 880-840-330	60 880-840-330
Unit	Weight	IH W D	kg	30	35	/ 14-800-285 41	54 54	55
UIIIL	Air Volume	Cooling	m³/min	36.3	34.3	45.8	50.1	50.1
	Air volume	Cooling Heating	m³/min	36.3	34.3	45.8	50.1	50.1
	Sound Level (SPL)	Cooling	dB(A)	34.0 45	32.7 48	43.7	49	49
	Sound Level (SPL)	Heating	dB(A)	45	48	48	51	51
	Sound Level (PWL)	Cooling	dB(A)	59	48 59	64	65	66
	Operating Current(Max)	Cooming	A A	6.8	8.5	13.5	14.8	14.8
	Breaker Size		A	10	8.5 10	20	20	20
Evt Dining	Diameter(*6)	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88
-xt.riping	Max.Length	Out-In	m	20	20	30	30	30
	Max.Height	Out-In	m	12	12	30	30	30
Guaranto	ed Operating Range (Outdoor)		°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Guarante	ca operating name (Outdoor)	Heating	°C	-10 ~ +40 -10 ~ +24	-10 ~ +46 -10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24
		li icatili 9	-	-10 ~ +24	-1U ~ +Z4	-10 ~ +24	-1U ~ +Z4	-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 R41DA 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.

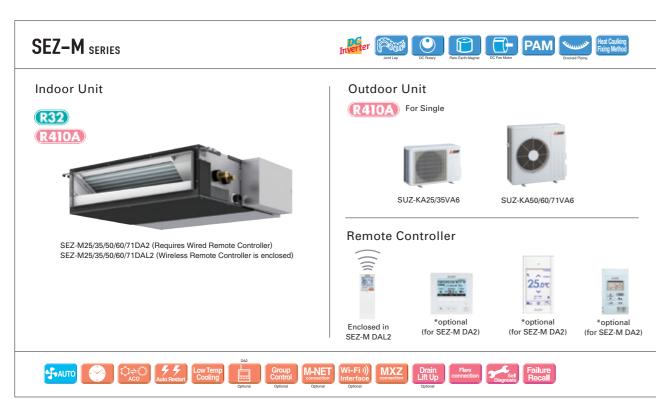
\*7 SPL measured at ESP 5Pa.

For Single 
 25
 35
 50
 60
 71

 25x1
 35x1
 50x1
 60x1
 71x1

S Seires

Distribution Pipe



			0.4	da ar I lait Can	a alta c			
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 Un	it			SEZ-M25DA(L)2	SEZ-M35DA(L)2	SEZ-M50DA(L)2	SEZ-M60DA(L)2	SEZ-M71DA(L)2	
Outdoor L				SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	
Refrigerar				002 10 2017 10	002 10 100 17 10	R410A	002 10 100 77 10	00210171710	
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)	1		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 consum	ntion(*2)	kWh/a	159	203	297	353	449	
	SEER(*4)(*5)	<b>54.0.1</b>	ice erry d	5.5	6.0	6.0	5.5	5.5	
	OLLIN	Energy efficiency class		A A	0.0 A+	A+	A A	A A	
Heating	Capacity	Rated	kW	2.9	4.2	6.4	7.4	8.1	
outing	Joseph Control of the	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)	1.10.00		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		kW	1.9 (-10°C)	2.5 (-10°C)	4.1 (-10°C)	4.5 (-10°C)	5.3 (-10°C)	
	Declared Capacity	at bivalent temperature	kW	1.9 (-7°C)	2.5 (-7°C)	4.1 (-10 C) 4.1 (-7°C)	4.8 (-7°C)	5.3 (-7°C)	
			kW	1.9 (-10°C)	2.5 (-7 C) 2.5 (-10°C)	4.1 (-10°C)	4.5 (-10°C)	5.3 (-10°C)	
	Back up heating capacity	at operation in it temperature	kW	0.3	0.3	4.1 (-10°C) 0.5		0.7	
	Annual electricity consump	- 4 ° (†2)	kWh/a	789	977	1614	1.0 1857	2147	
	SCOP(*4)(*5)	ption <sup>( 2)</sup>	KVVII/a	3.9	4.0	3.9	4.1	3.9	
	SCOP: W. S	Energy efficiency class		3.9 A	4.0 A+	3.9 A	4.1 A+	3.9 A	
0	Current(Max)	Energy emiciency class	Α	7.6	8.9	12.8	14.9	17.1	
Indoor	Input [cooling / Heating ]	Rated	kW	0.043	0.047	0.077	0.084	0.102	
Unit	Operating Current(Max)	nateu	A	0.62	0.047	0.077	0.084	1.00	
Oilit	Dimensions	H*W*D	mm	200 - 790 - 700	200 - 990 - 700	200 - 990 - 700	200 - 1190 - 700	200 - 1190 - 700	
	Weight	III VV D	kg	18	200 - 390 - 700	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)	Bated	dB(A)	23 - 26 - 30	23 - 27 - 31	30 - 34 - 37	30 - 34 - 38	30 - 35 - 40	
	,	5Pa(*7)	dB(A)	22 - 25 - 29	22 - 26 - 30	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39	
	Sound Level (PWL)	1	dB(A)	50	51	57	58	60	
Outdoor	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330	880-840-330	880-840-330	
Unit	Weight	•	kg	30	35	54	50	53	
	Air Volume	Cooling	m³/min	32.6	36.3	44.6	40.9	50.1	
		Heating	m³/min	34.7	34.8	44.6	49.2	48.2	
	Sound Level (SPL)	Cooling	dB(A)	47	49	52	55	55	
		Heating	dB(A)	48	50	52	55	55	
	Sound Level (PWL)	Cooling	dB(A)	58	62	65	65	69	
	Operating Current(Max)	,	Α	7	8.0	12	14	16.1	
	Breaker Size		A	10	10	20	20	20	
Ext.Pipine	Diameter(*6)	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	
Saurante	on operating name (Outdoor)	Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	
		li icanii 8	U .	-10 ~ +24	-1U ~ +24	-1U ~ +24	-1U ~ +24	-1U ~ +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.

# **CONTROL TECHNOLOGIES**

**User-friendly Deluxe Remote Controller with Excellent Operability and Visibility** 



#### 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

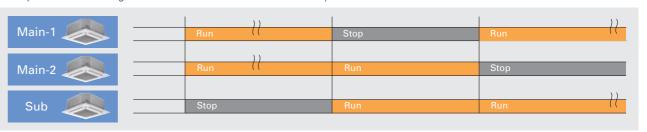
#### Back-up Function

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.



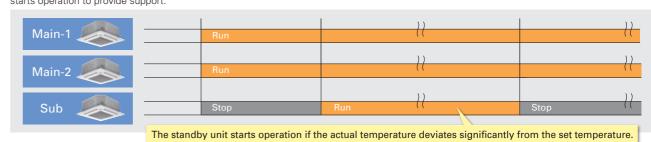
#### **Rotation Function**

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.

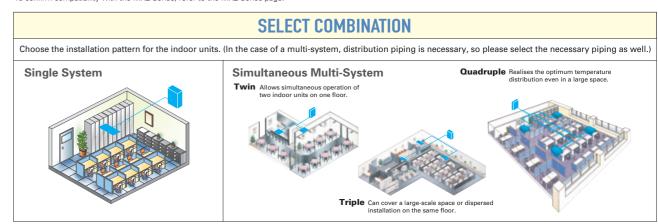


\* Some indoor units cannot be used with this unit.



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 technologies.









PUZ-ZM35/50VKA2

VKA2 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.

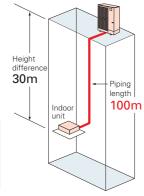
Introduction of new R32 refrigerant reduces energy consumption and realises energy savings.



#### 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.

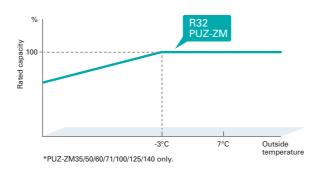




Outdoor unit

# Rated heating capacity maintained down to –3°C\*

Rated heating capacity maintained even when the outside temperature is down to  $-3\,^{\circ}\text{C}$ . 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.

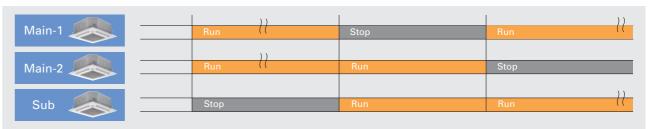
#### Back-up Function

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.



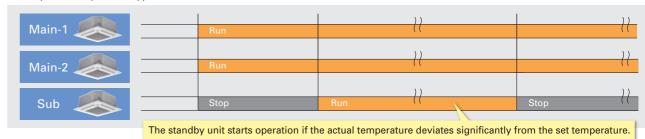
#### **Rotation Function**

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.

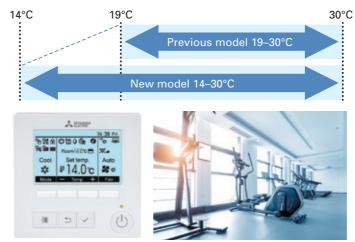


#### Extended cooling set temperature range\*

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.

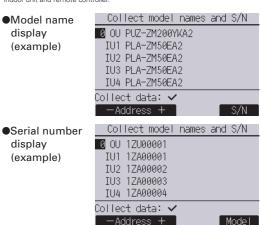
\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



# 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\*

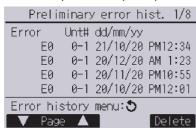
In addition to error history, the history of preliminary abnormalities can be displayed. The feature enables the unit status check during inspection

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 >

Every 30 minutes (example)

2019-1-1

Return: 🐧

0:30 123.4kWh

1:00 123.4kWh

1:30 123.4kWh

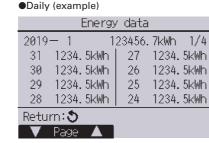
Time data: Every 30 minutes over the past month Monthly/daily data: Monthly over the past 14 months

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.



#### •Monthly (example)

Ene	rgy 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 🛦		

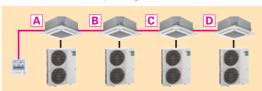
#### Improved defrosting performance\*

\*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

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	Defrosting Heat	in room temperature!

#### Defrosting When People Are Absent

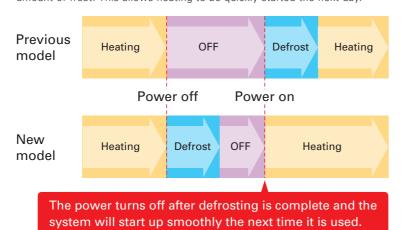
The use of the 3D i-see sensor allows a more comfortable defrosting schedule. After a large amount of frost has built up, the system will switch to defrosting when the 3D i-see sensor detects that no people are present. By minimizing defrosting while people are in the room, there is a much lower chance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

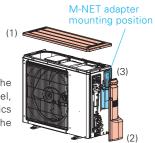
# Conventional Model PAC-SJ96MA-E Removed parts

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.

# M-NET adapter mounting position

#### 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	$\rightarrow$	PUZ-ZM 100V (Y)KA2	100m	40m
PUZ-ZM 125V (Y)KA	100m	30m	$\rightarrow$	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.

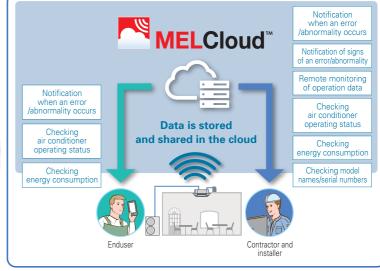
#### [Basic Operation Functions]

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

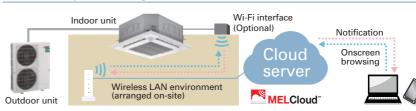
#### [Data Collection and Display]

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

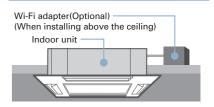




#### **MELCloud System Configuration**



#### 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.

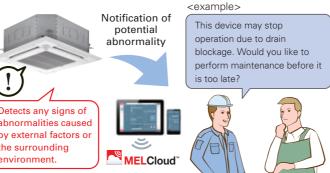
#### Notification of potential abnormality

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...

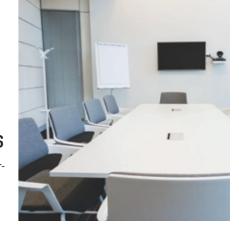




data is strange.

# Standard Inverter SERIES

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





SUZ-M35VA





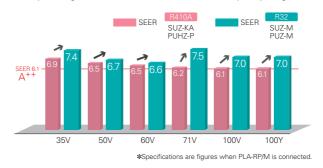




PUZ-M100/125/140V(Y)KA2 PUZ-M200/250YKA2

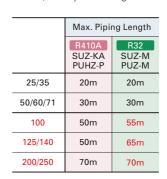
#### Improved energy efficiency

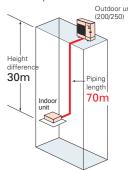
Introduction of new R32 refrigerant realises improved cooling efficiency. Rating of more than 6.6 achieved for all capacity range.



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

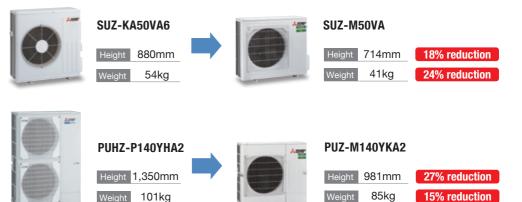
Longer piping length realised for 100, 125, 140, 200 and 250 classes, widely increasing installation flexibility.





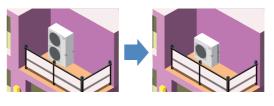
#### Light weight and compact size

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



#### 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.

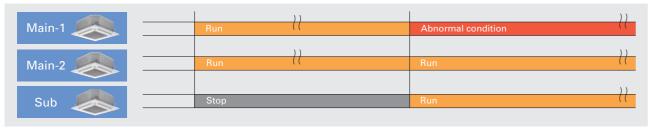
#### 2+1 Back-up rotation\*

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

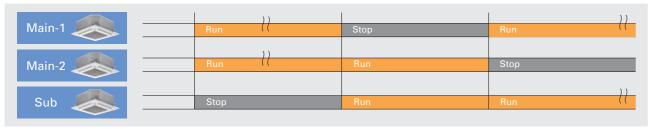
#### Back-up Function

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**

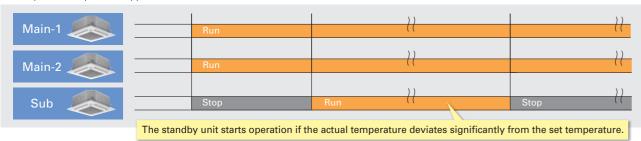
A single remote controller is used to operate three-refrigerant air conditioning system in a rotation pattern. Reducing the burden on the equipment allows you to maintain a longer time between maintenance and increases product life.



#### 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.

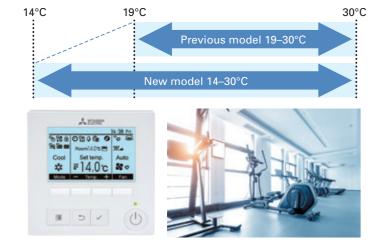


#### Extended cooling set temperature range\*

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.

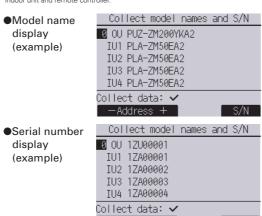
\*Availability of this function is depending on outdoor unit, indoor unit and remote controller.



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

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.



#### 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 0-1 21/10/20 PM12:34 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 history menu: ▼ Page 🛦

#### 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

Life19)	r 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)

	E	ine rgy	/ 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
Retu	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.

En	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 o	data: 🗸	
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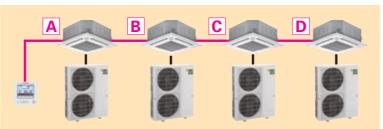
#### Improved defrosting performance\*

\*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		Defrosting Heating	in room temperature!

#### Utilizing IoT for Improved Convenience\*

\*Availability of IoT functions are depending on MELCloud version

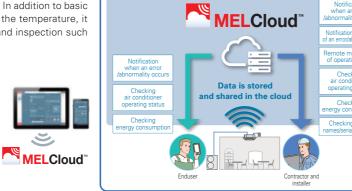
By connecting to a MAC-587IF-E Wi-Fi interface, it is possible to collect data and perform air conditioning control via MELCloud. In addition to basic functions such as turning the power on/off and setting the temperature, it is also possible to acquire data used for maintenance and inspection such as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



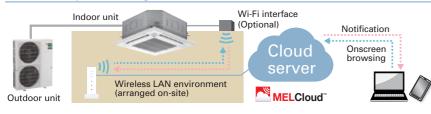
- ●Operation on/off ●Temperature setting
- ●Operation mode ●Airflow speed
- •Airflow direction etc...

#### [Data Collection and Display]

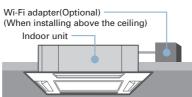
- ■Model name display
  ■Serial number display
- Collection of operation data
- •Energy consumption display etc...



#### **MELCloud 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

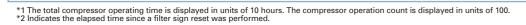
> This operation data is strange..

#### 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.

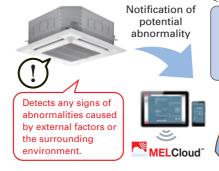
e.g. <Peak cut control> It is possible to utilize an external demand signal to reduce power consumption during peak hours. By satisfying the need for reducing peak power consumption or shifting consumption to a non-peak period, we have increased the range of options for our customers.

#### Notification of potential abnormality

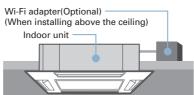
The comprehensive analysis of operating data allows the early detection of abnormalities in small functional parts by alerting the operator of any signs of abnormal behaviour. The recognition in advance of abnormalities in each unit further improves the ease of servicing and maintenance. Since this allows 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.

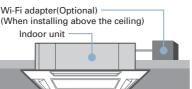
#### [Abnormalities That Have Their Signs Monitored]

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



## <example> This device may stop operation due to drain blockage. Would you like to perform maintenance before it is too late?





#### ■Line-up 35 50 60 71 100 Series **R32** 4-way Cassette (PLA-ZM) (R410A)

**R32** 4-way Cassette (R410A) (PLA-M)

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.

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-

## ■Indoor/Outdoor Unit Combinations Deluxe 4-way Cassette (R410A) **R32** (R410A) Power Inverte



125

140

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



Deluxe 4-way Cassette Line-up

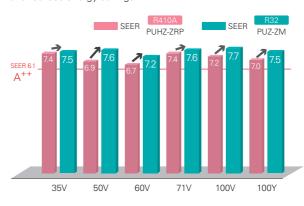




PUHZ- PUHZ- PUHZ-ZRP35/50 ZRP60/71 ZRP100/125/

#### 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.

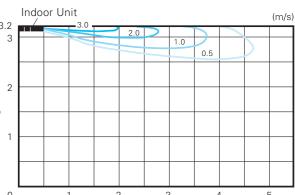


#### **Horizontal Airflow**

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

ceiling. The ideal airflow for offices and restaurants.

[Horizontal airflow] Model name: PLA-ZM140EA2 Ceiling height: 3.2m Mode: Cooling Indoor Unit



Floor distance (m)

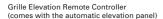
78

#### 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)

Lightweight decorative panel

After reviewing the structure and materials,

weight has been reduced approximately 20%

compared to the previous model, reducing the

#### 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.









### 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.

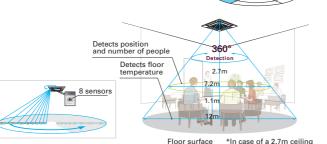
#### Detects people's position

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.

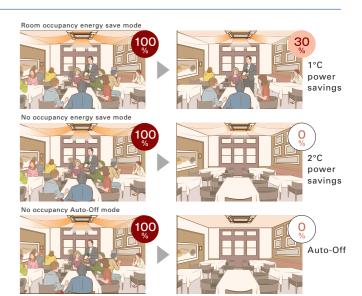
#### No occupancy energy-saving mode

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.

<sup>\*</sup>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\*

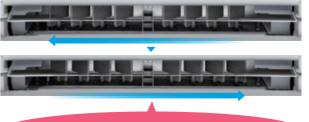
3D Total Flow is an innovative function. Our original 3D i-see sensor detects the temperature of the floor, and then the newly installed 3D Total Flow unit automatically controls the airflow in the left/right directions in a smart manner.

\*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)

4-way cassette model **3D Total Flow unit** (PLP-U160ELR-E) Panel with 3D i-see sensor

#### 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)

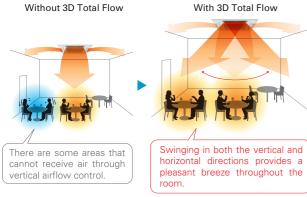


#### Swinging

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.



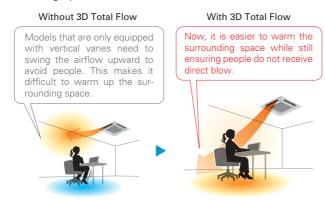


#### Indirect mode

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

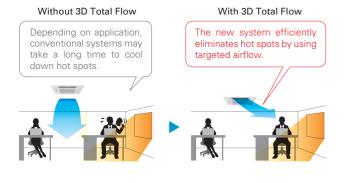


#### Targeting

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.

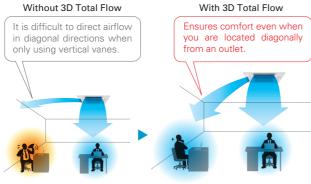


#### Direct mode

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 preference. 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.

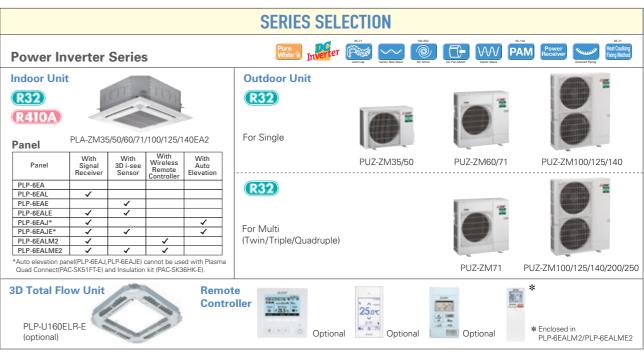


# Connectable to Plasma Quad Connect\*

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

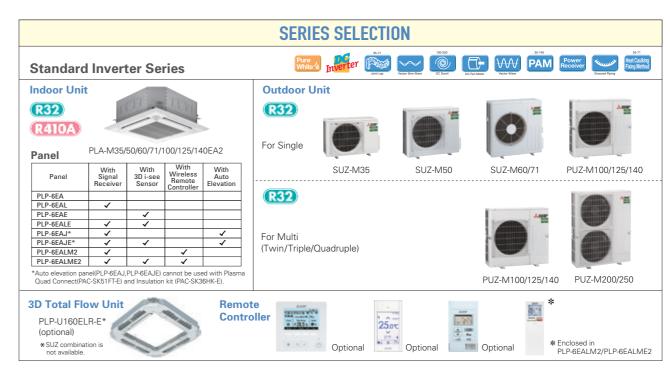
\*Plasma Quad Connect(PAC-SK51FT-E) cannot be used with PLP-U160ELR-E(3D Total Flow unit), Insulation kit (PAC-SK36HK-E), Auto elevation panel(PLP-6EAJ, PLP-6EAJE), Multi functional casement(PAC-SJ41TM-E) and High-efficiency filter element(PAC-SH59KF-E).





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

		Outdoor Unit Capacity																			
Indoor Unit Combination			For Single									For Twin					For Triple			For Quadruple	
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power In	verter (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	)T-111	R3-E		SDF- 1R2-E



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

		Outdoor Unit Capacity																			
Indoor Unit Combination		For Single									For Twin					Fo	For Triple			For Quadruple	
		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	100×2	125x2	50x3	60x3	71x3	50x4	60x4	
Distribution Pipe	-	-	-	-	-	-	-	-	-	-	MSD	D-50T	R2-E	MS 50W	DD- /R2-E	MSE	)T-111	R3-E		DF- IR2-E	























TOWER	INVENTER	Silent & Limit Bar	ptional	Optional	Optional		Optional	Optio	LIILUP	Down		lagnosis	
Туре								erter Heat Pu					
Indoor Un	it			PLA-ZM35EA2	PLA-ZM50EA2	PLA-ZM60EA2		PLA-ZM100EA2		PLA-ZM125EA2		PLA-ZM140EA2	
Outdoor L				PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2			PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140YKA
Refrigerar	nt (*1)							R					
Power	Source							Outdoor po	wer supply				
Supply	Outdoor(V/Phase/Hz)						VKA-V	HA:230/Single/	50, YKA:400/TI	nree/50			
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
_		Min-Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.705	1.106	1.452	1.651	2.159	2.159	3.378	3.378	3.722	3.722
	EER	<u> </u>		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	-	-	-	-
	Annual electricity consump	tion (*2)	kWh/a	168	230	296	327	431	442	_	_	_	_
	SEER (*4)		ice erry a	7.5	7.6	7.2	7.6	7.7	7.5	_		_	
	022.1	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
ricating	Capacity	Min-Max	kW	1.6 - 5.2	2.5 - 7.3	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	0.820	1.363	1.707	1.818	2.604	2.604	3.674	3.674	4.312	4.312
	COP	nateu	KVV	5.00	4.40	4.10	4.40	4.30	4.30	3.81	3.81	3.71	3.71
			kW	2.5	3.8	4.10	4.40	7.8	7.8	3.01	3.01	3./1	3.71
	Design load							7.8 (-10°C)					
	Declared Capacity	at reference design temperatur	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)		7.8 (-10°C)	-	-	-	-
		at bivalent 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)	-	-	-	-
		at operation limit temperature		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	rtion (*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++	-	-	-	-
	g Current(Max)		A	13.2	13.2	19.2	19.3	20.5	8.5	27.0	9.5	30.7	12.5
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)		A	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 <40-95					10-840 <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	24-26-29-32
	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	36-39-42-44
	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(+25)			1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40
Unit	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		А	16	16	25	25	32	16	32	16	40	16
Ext.Pipin	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	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)	°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 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.



































Ontroduct		Optional Optional	Optional	Contact	Optional	Option	al pipero	Optional	Lilt op	DOWII	Diac	nosis	
Type							Inverter	Heat Pump					
Indoor Unit				PLA-M35EA2	PLA-M50EA2	PLA-M60EA2	PLA-M71EA2	PLA-M100EA2	PLA-M100EA2	PLA-M125EA2	PLA-M125EA2	PLA-M140EA2	PLA-M140EA2
Outdoor Un	it									PUZ-M125VKA2			
Refrigerant <sup>()</sup>									32				
Power	Source							Outdoor po	ower supply				
Supply	Outdoor(V/Phase/Hz)						\/Δ.\/K/	A:230/Single/5		hraa/50			
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 consumpti	(*2)	kWh/a	170	285	320	331	475	475	_	_		
	SEER (*4)	OII ·	KVVII/d	7.4	6.7	6.6	7.5	7.0	7.0	<del></del>		<del></del>	
	JEEN .	Energy efficiency class		A++	A++	A++	7.5 A++	A++	A++	_	_	_	_
Heating	Consolar	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0
пеаціід	Capacity	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
	Totallound					1.6 - 8.0	2.0 - 10.2				3.638		4.2 - 15.8
	Total Input COP	Rated	kW	0.976 4.20	1.734 3.46	3.80	3.61	3.018	3.018	3.638	3.638	4.398 3.41	4.398 3.41
			kW				5.8	_	_	3./1	3./1	3.41	3.41
	Design load	T		2.6	4.3	4.6		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 consumpti	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)		A	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)	Lunana	А	0.20	0.22	0.24 <40-950-950>	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions	H*W*D	mm	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	<40-950-950> 26 <5>	26 <5>	26 <5>
	Weight Air Volume (Lo-Mi2-Mi1-Hi)		kg 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	26 <5>	20 <5>	26 <5>	26 <5>
	Sound Level (Lo-Mi2-Mi1-Hi) (S	DI.)	dB(A)	26-28-29-31	27-29-31-32		28-30-32-34		31-34-37-40		33-37-41-44		
	Sound Level (PWL)	FL)	dB(A)	51	54	54	56	61	61	65	65	65	65
Outdoor	Dimensions	H*W*D	mm	550-800-285		880-840-330			981-1050-330(+40)	981-1050-330(+40)	981-1050-330(+40)		981-1050-330(+40)
Unit	Weight	11 VV D	kg	35	41	54	55	76	78	84	85	84	85
Oilit	Air Volume	Cooling	m³/min	34.3	45.8	50.1	50.1	79	79	86	86	86	86
	All volume	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
	Sound Level (SFL)	Heating	dB(A)	48	49	51	51	54	54	56	56	57	57
	Sound Level (PWL)			59	64	65	66	70	70	72	72	73	73
		Cooling	dB(A)	8.5	13.5	14.8	14.8	20	11.5	26.5	11.5	30	11.5
	Operating Current(Max)		, ,										
E . B	Breaker Size	l	А	10	20	20	20	32	16	32	16	40	16
Ext.Piping	Diameter(*5)	Liquid/Gas	mm	6.35 / 9.52			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
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				Optional										
	60-1401/200/250							_							
Silent	Ampere Limit	Rotation Back-up	Optional	Group Control	M-NET connection	СОМРО	Wi-Fi i)) Interface	Cleaning-free, plipe reuse	Wiring Reuse Optional	Drain Lift Up	Pump Down	Flare connection	Self Diagnosis	Failure Recal	

		Option	na	Optional	Optional		Optional	Optio	nal				
Туре								erter Heat Pu					
Indoor Unit												PLA-M140EA2	
Outdoor Ur				PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM100YKA2	PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140YKA2
Refrigerant								R:					
Power	Source							Outdoor po					
Supply	Outdoor(V/Phase/Hz)							HA:230/Single					
	Capacity		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 - 6.5	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	0.751	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
Cooming	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual electricity consump	tion(*2)	kWh/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		kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
			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	0.890	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		kW	2.5	3.8	4.4	4.7	7.8	7.8	-	-	-	-
(Average	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)	-	-	-	-
Season)			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)	3.4 (-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	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	13.2	13.2	19.2	19.3	20.5	8.5	27.2	9.7	30.7	12.5
	Input [cooling / Heating ]		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)		A	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions		mm	10.5		<40-950-950>	04 5	04.5	04.5		<40-950-950>	00 5	00 5
Indoor	Weight Air Volume (Lo-Mid-Hi)		kg m³/min	19 <5> 11-13-15-16	19 <5> 12-14-16-18	21 <5> 12-14-16-18	21 <5> 14-17-19-21	24 <5> 19-23-26-29	24 <5> 19-23-26-29	26 <5> 21-25-28-31	26 <5> 21-25-28-31	26 <5> 24-26-29-32	26 <5> 24-26-29-32
Unit	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 (Lo-IVIId-HI) (SPL		dB(A)	51	54	54	28-30-32-34 56	61	61	65	65	65	65
	Dimensions		mm	630-809-300		943-950-330(+25)			1338-1050-330(+40)			1338-1050-330(+40)	1338-1050-330(+40)
	Weight		kg	46	46	67	67	105	111	105	114	105	118
	Air Volume		m³/min	45	45	55	55	110	110	120	120	120	120
	7 70.40		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	554114 25151 (51 2)		dB(A)	46	46	49	49	51	51	52	52	52	52
	Sound Level (PWL)		dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current(Max)	1	A A	13	13	19	19	20	8	26.5	9	30	11.8
	Breaker Size		A	16	16	25	25	32	16	32	16	40	16
	Diameter(*5)		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	4	m	50	50	55	55	100	100	100	100	100	100
g	Max.Height		m	30	30	30	30	30	30	30	30	30	30
Guarantee	d 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
	p	Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21
		3											

<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 Ui	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 (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-111	IR-E		DF- 1R-E

25-71 Heat Caulking Fixing Method
der.
-
100
5/140
ALC: N
-
-
250

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

85

									Outd	oor U	nit Cap	acity								
Indoor Unit Combination				Fo	or Sing	jle						For <sup>-</sup>	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 (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	Ampere Limit	Rotation Back-up Optional	Optional	Group Control	M-NET connection	СОМРО	Wi-Fi i) Interface	Cleanir	ng froe, reuse Reu Opto		in Up	Pump Down	Flan connec	e etion	Self liagnosis	Failur Recal	e I
								nvert	ter Heat Pu	mp							
			PLA-ZM35E	A2 PLA-ZI	M50EA2 F	PLA-ZM60EA2	PLA-ZM71	A2 P	LA-ZM100EA2	PLA-ZM100E	EA2 P	LA-ZM125EA	2 PLA-Z	M125EA2	PLA-ZM1	140EA2	PLA-ZN
			PUHZ-ZRP35VK	A2 PUHZ-ZF	RP50VKA2 P	PUHZ-ZRP60VHA2	PUHZ-ZRP71V	HA2 PL	UHZ-ZRP100VKA3	PUHZ-ZRP100Y	KA3 Pl	JHZ-ZRP125VKA	3 PUHZ-2	ZRP125YKA3	PUHZ-ZRP	140VKA3	PUHZ-ZRI
									R41	10A							
									Outdoor po	wer supply	,						
							VKA	A-VHA	1:230/Single/	50, YKA:40	0/Thre	ee/50					

Outdoor L	Init			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
Refrigeran	it <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
		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	otion (*2)	kWh/a	170	253	318	335	461	472	-	-	-	-
	SEER(*4)			7.4	6.9	6.7	7.4	7.2	7.0	-	-	-	-
		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	0.850	1.550	1.890	1.900	2.600	2.600	3.674	3.674	4.848	4.848
	COP			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	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
		at bivalent temperature	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
		at operation limit temperature	kW	2.1 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.5 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	_	-	-
	Back up heating capacity		kW	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-
	Annual electricity consump	otion (*2)	kWh/a	713	1108	1335	1337	2223	2224	-	-	-	-
	SCOP(*4)			4.9	4.8	4.6	4.9	4.9	4.9	-	-	-	-
		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	27.0	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)		Α	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		10-840 < 40-950					0-840 <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	24-26-29-32
	Sound Level (Lo-Mi2-Mi1-Hi) (	SPL)	dB(A)	26-28-29-31	27-29-31-32	27-29-31-32	28-30-33-36		31-34-37-40	33-36-39-41	33-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL)	T	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)		1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)		1338-1050-330(+40)	1338-1050-330(+40)
Unit	Weight	le "	kg	43	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45 45	45	55	55	110	110	120	120	120 120	120 120
		Heating	m³/min		45	55	55	110	110	120	120		
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
	0 11 1/894/13	Heating	dB(A)	46	46 65	48	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	65		67	67	69	69	70	70	70	70
	Operating Current(Max)		A	13	13 16	19	19	26.5	8	26.5	9.5	28	13
	Breaker Size	lu una	Α	16	6.35 / 12.7	25	25	32	16	32	16	40	16
Ext.Piping	Diameter <sup>(*5)</sup>	Liquid/Gas	mm	6.35 / 12.7		9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max.Length	Out-In	m	50	50 30	50	50	75	75	75	75	75	75
	Max.Height	Out-In	m	30	-15 ~ +46	30	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	-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 leaves to global warming than a refrigerant with ligher 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 consumed to the standard test results. Actual energy consumption based on standard test results are consumed to the standard test results. Actual energy consumption based on standard test results. Actual energy consumption based on standard test results. \*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.























OIMIDAN	DINVENTER	Silent & Back-up	Control	Control	Conference	Inter	ace connection	pipe reuse	Reuse	Lift Up D	own	Diagno	Recall
Туре							Inverter	Heat Pump					
Indoor Unit				ΡΙ Δ.Μ35ΕΔ2	ΡΙ Δ.Μ50ΕΔ2	ΡΙ Δ-Μ60ΕΔ2			ΡΙ Δ.Μ100ΕΔ2	ΡΙ Δ.Μ125ΕΔ2	PLA-M125EA2	ΡΙ Δ-Μ1//0ΕΔ2	PLA-M140FA2
Outdoor Ur					SUZ-KA50VA6						PUHZ-P125YKA		PUHZ-P140YKA
Refrigerant				002 10 100 17 10	1002101001710	1002 10 100 17 10	100210171710		10A	1 01121 1201101	T OTILE T TEOTION	11011211101101	1 01121 110110
Power	Source								wer supply				
Supply	Outdoor(V/Phase/Hz)						VA-VK	A:230/Single/5		Three/50			
Cooling	Capacity	Rated	kW	3.6	5.5	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6
		Min-Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	1.020	1.610	1.760	2.100	3.186	3.186	4.101	4.101	5.418	5.418
	EER	riotod	1000	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	-	-	-	2.51
	Annual electricity consumpt	tion (*2)	kWh/a	181	296	306	400	537	537	_			
	SEER(*4)		IKTTIG	6.9	6.5	6.5	6.2	6.1	6.1	_			_
	022.1	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
auiiig	Capacity	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	2.0 - 10.2	3.265	3.265	3.846	3.846	4.9 - 15.6	4.9 - 15.6
	COP	Inateu	KVV	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	3.51	3.51	- 3.21	J.Z1
	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)		<del>-</del> -	+ -	
	Decialed Capacity	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)	4.1 (-7 C) 4.0 (-10°C)	4.7 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	<del>-</del>	<del>-</del> -	<del></del>	_
	Back up heating capacity	at operation limit temperature	kW	0.3	0.5	0.6	1.1	2.0	2.0		<del>-</del>	<del></del>	
	Annual electricity consumpt	tion (*2)	kWh/a	826	1499	1493	1888	2433	2433	_	<del>                                     </del>	<del>                                     </del>	_
	SCOP(*4)	uon	KVVIIJa	4.4	4.0	4.3	4.3	4.6	4.6	<del>-</del>	<del>-</del>	<del>                                     </del>	
	SCOP	Energy efficiency class		A+	4.0 A+	4.5 A+	4.5 A+	4.0 A++	4.0 A++	_	<del>                                     </del>	<del>-</del>	_
0	Current(Max)	Ellergy efficiency class	lΑ	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)	Indied	A	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
Oille	Dimensions	H*W*D	mm	0.20	258-840-840			0.40			<40-950-950>		0.00
	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				19-23-26-29	19-23-26-29		21-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (Lo-Mi2-Mi1-Hi) (	SPL)	dB(A)	26-28-29-31				31-34-37-40	31-34-37-40				36-39-42-44
	Sound Level (PWL)	•	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	-	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		A	10	20	20	20	32	16	32	16	40	16
Ext.Piping		Liquid/Gas	mm	6.35 / 9.52	6.35 / 12.7		9.52 / 15.88				9.52 / 15.88	9.52 / 15.88	
g	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
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
	(outdoor)	Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21
		1	10	1	1	1	1			1	1	1	1 1

<sup>|</sup> Testing | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 - 12 | 10 -























		Opt	ional	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	t <sup>(*1)</sup>							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
	1 1	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
		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)		Α	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>		
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)	THEOLOGIC	dB(A)	51	54	54	56	61	61	65	65	65	65
	Dimensions Weight	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)
		To 1:	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
	0 11 1(001)	Heating	m³/min	45	45	55	55	110	110	120	120	120	120
Outdoor Unit	Sound Level (SPL)		dB(A)	44	44	47	47	49	49	50	50	50	50
Unit	0 11 1/01/11		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	11: 110	А	16	16	25	25	32	16	32	16	40	16
D	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.



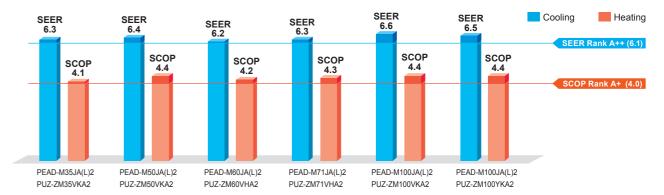
Energy efficiency has been improved. A reduced electricity consumption contributes to a further reduction in operating cost. The thin body with a wide-ranged external static pressure of this series is the perfect answer for the air conditioning needs of buildings with minimum ceiling installation space.

#### 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.

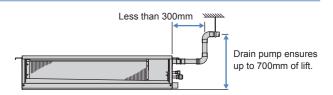
#### Selectable Static Pressure Levels

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	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)	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	100-200   25-11   200-200   25-12
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)
	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	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	MS 50W	DD- /R2-E	MSE	)T-111	R3-E	MS 1111	SDF- 1R2-E





















		Optional											
Туре							Inverter	Heat Pump					
Indoor Uni	t			PEAD-M35JA(L)2	PEAD-M50JA(L)2	PEAD-M60JA(L)2			PEAD-M100JA(L)2	PEAD-M125JA(L)2	PEAD-M125JA(L)2	PEAD-M140JA(L)2	PEAD-M140JA(L)2
Outdoor U	nit				PUZ-ZM50VKA2					PUZ-ZM125VKA2			
Refrigeran	t <sup>(+1)</sup>							R	32				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor(V/Phase/Hz)						VKA-V	HA:230/Single/	50, YKA:400/TI	nree/50			
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
_		Min-Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.3	6.2 - 15.3
	Total Input	Rated	kW	0.837	1.190	1.487	1.775	2.261	2.261	3.333	3.333	3.701	3.701
	EER(*4)	-	-	4.30	4.20	4.10	4.00	4.20	4.20	3.75	3.75	3.62	3.62
	Design load		kW	3.6	5.0	6.1	7.1	9.5	9.5	_	_	_	_
	Annual electricity consump	tion (*2)	kWh/a	199	273	342	393	499	510	-	-	-	-
	SEER(*4)(*5)			6.3	6.4	6.2	6.3	6.6	6.5	-	-	_	_
		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
	11.	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	0.911	1.363	1.590	1.904	2.545	2.545	3.763	3.763	4.102	4.102
	COP(*4)			4.50	4.40	4.40	4.20	4.40	4.40	3.72	3.72	3.90	3.90
	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)	_	_	_	_
			kW	2.2 (-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	tion(*2)	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+	_	_	_	_
Operating	Current(Max)	,	Α	14.2	14.4	20.9	20.9	22.3	10.3	28.8	11.3	32.6	14.4
Indoor		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	250×900×732	250×900×732	250×1100×732	250×1100×732	250×1400×732	250×1400×732	250×1400×732	250×1400×732	250×1600×732	250×1600×732
	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				23.0-28.0-32.0	28.0-34.0-37.0			29.5-35.5-40.0
	External Static Pressure(*7)		Pa		-<100>-<150>		40-<50>-<70>				<40>-50-<70>		
	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	35-39-41	35-39-41	34-38-41	34-38-41
	Sound Level (PWL)		dB(A)	54	58	56	58	62	62	66	66	66	66
Outdoor		H*W*D	mm	630-809-300	630-809-300	943-950-330(+25)	943-950-330(+25)	1338-1050-330(+40)	1338-1050-330(+40)		1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)
Unit	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		А	16	16	25	25	32	16	32	16	40	16
Ext.Piping	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
	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
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 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 based on standard test results are standard test results. Actual energy consumption based on standard test results and the standard test results. Actual energy consumption based on standard test results are standard test results. Actual energy consumption actually the standard test results are standard test results. Actual energy consumption actually the standard test results are standard test results. Actual energy consumption actually the standard test results are standard test results. Actu























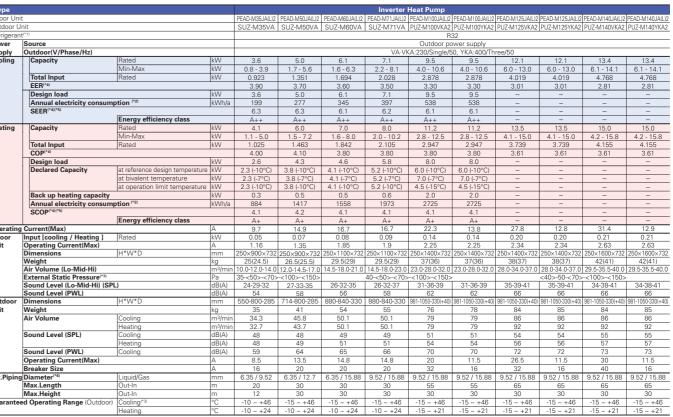












<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with impler GWP, if leaked to the atmosphere, the impact on global warming would be 550. This means that if 1 kg of this refrigerant 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	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	/ISDD-	50TR-	E	MS 50V	DD- VR-E	MSI	DT-111	1R-E		DF- 1R-E

	SERIES SELE	CTION		
Standard Inverter Series	Inverter	35-71 100-250 71-140    One of the Control of the Water Sine Water	200/250    C Snot   C Fan Motor   Wactor-Wise	S5-71  Sacrate Page   Sacrate   Sacr
Indoor Unit	Outdoor Unit			
R32 R410A	R410A For Single		0	
	roi Siligle	SUZ-KA35	SUZ-KA50/60/71	PUHZ-P100/125/140
PEAD-M35/50/60/71/100/125/140JA(L)2	R410A  For Multi (Twin/Triple/Quadruple)		0	0
			PUHZ-P100/125/140	PUHZ-P200/250
Remote Controller  Optional	25or Optional	Optional Opt	ional* Optional*	

PEAD-M JA(L) Indoor Unit Combinations Indoor unit combinations shown below are poss

sible	* PAR-SC9CA-E is also required.

										Outd	oor U	nit Cap	acity								
Indooi	r Unit Combination				Fo	or Sing	gle						For 7	Γwin			F	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
Standa	ard Inverter (PUHZ-P&SUZ)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe		-	-	-	-	-		-	-	-	MSI	D-501	ΓR-E	MSDD-	50WR-E	MS	DT-111	IR-E	MSDF-1	1111R-E























Demand Control Long Life Check PAUTO Check Long Life Check C

Туре								Heat Pump					
Indoor Uni								PEAD-M100JA(L)2					
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 <sup>(*1)</sup>							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
_	11 ' '	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 consump	otion (*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		2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.9 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	_	_	_	_
	Decial ou capacity	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	at operation milit temperature	kW	0.0	0.0	0.0	0.0	0.0	0.0	_	_	_	_
	Annual electricity consump	otion (*2)	kWh/a	831	1232	1487	1718	2593	2594		_	_	
	SCOP(*4)(*5)	, tion	KVVIII/G	4.0	4.3	4.1	3.9	4.2	4.2	_	_	_	
		Energy efficiency class		A+	A+	A+	A	A+	A+	_	_	_	
Operating	Current(Max)	Lifetgy efficiency class	IA	14.2	14.4	20.9	20.9	28.8	10.3	28.8	11.8	30.6	15.6
Indoor		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)	riated	A	1.16	1.35	1.85	1.9	2.25	2.25	2.34	2.34	2.63	2.63
Ome		H*W*D	mm					250×1400×732					
	Weight		ka	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	35-<50>-<70>				-<100>-<150>			<40>-50-<70>		
	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	35-39-41	35-39-41	34-38-41	34-38-41
	Sound Level (PWL)		dB(A)	54	58	56	58	62	62	66	66	66	66
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)	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)		Α	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(*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
	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
	3	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, the impact on global warming goal warming than 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 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.























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Type								Heat Pump							
Indoor Un	it		PEAD-M55JAILI2   PEAD-M50JAILI2   PEAD-M60JAILI2   PEAD-M71JAILI2   PEAD-M100JAILI2   PEAD-M100JAILI2   PEAD-M125JAILI2   PEAD-M125JAILI2   PEAD-M140JAILI2   PEAD-M140JAILIA   PEAD-M140JAILI2   PEAD-M140JAILIA   PEAD-M140JAILIA   PEAD-M140JAILIA												
Outdoor U	Jnit			SUZ-KA35VA6 SUZ-KA50VA6 SUZ-KA60VA6 SUZ-KA71VA6 PUHZ-P100VKA PUHZ-P100YKA PUHZ-P125VKA PUHZ-P125VKA PUHZ-P140VKA PUHZ-P140											
Refrigerar	nt(*1)							R4	10A						
Power	Source							Outdoor po	ower supply						
Supply	Outdoor(V/Phase/Hz)						VA•V	KA:230/Single/5		ree/50					
Cooling	Capacity	Rated	kW	3.6	4.9	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6		
0009	Joapasity	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	1.029	1.458	1.652	2.060	2.965	2.965	4.143	4.143	5.551	5.551		
	EER(*4)	Inated	IVA A	3.50	3.36	3.45	3.45	3.17	3.17	2.92	2.92	2.45	2.45		
	Design load		lkW	3.6	4.9	5.7	7.1	9.4	9.4	2.32	2.32	2.45	2.40		
	Annual electricity consump	- A.* (*2)	kWh/a			326	395		596	_	_	_	_		
	SEER(*4)(*5)	otion 1 2	KVVN/a	210	284			596		_			_		
	SEER! SI SI	F #: 1		6.0	6.0 A+	6.1	6.2	5.5	5.5	_	-	-	_		
	la i	Energy efficiency class	le s a s	A+		A++	A++	A	A	-	-	-	-		
Heating	Capacity	Rated	kW	4.1	5.9	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0		
	<del>                                   </del>		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	1.111	1.620	1.928	2.040	2.947	2.947	3.739	3.739	4.347	4.347		
	COP(*4)			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	-	-	-	-		
	Declared Capacity	at reference design temperature		2.5 (-10°C)	3.9 (-10°C)	4.1 (-10°C)	5.3 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	-	-	-	-		
		at bivalent temperature	kW	2.5 (-7°C)	3.9 (-7°C)	4.1 (-7°C)	5.3 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	-	-	-	-		
		at operation limit temperature	kW	2.5 (-10°C)	3.9 (-10°C)	4.1 (-10°C)	5.3 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	-	-	-	-		
	Back up heating capacity		kW	0.3	0.5	0.4	0.7	2.0	2.0	-	-	-	_		
	Annual electricity consump	otion (*2)	kWh/a	975	1455	1559	2132	2797	2797	-	-	-	-		
	SCOP(*4)(*5)			4.0	4.2	4.0	3.9	4.0	4.0	-	-	-	-		
		Energy efficiency class		A+	A+	A+	Α	A+	A+	-	-	-	-		
Operatin	g Current(Max)	, ,	Α	9.4	13.4	15.9	18.0	22.3	13.8	27.8	12.8	31.4	12.9		
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	250×900×732		250×1100×732	250×1100×732	250×1400×732	250×1400×732	250×1400×732		250×1600×732	250×1600×732		
	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	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	28.0-34.0-37.0	28.0-34.0-37.0	29.5-35.5-40.0	29.5-35.5-40.0		
	External Static Pressure(*7)		Pa	35-<50>-<70>	-<100>-<150>		40-<50>-<70>	-<100>-<150>			<40>-50-<70>	-<100>-<150>			
	Sound Level (Lo-Mid-Hi) (SPI	_)	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		
	Sound Level (PWL)		dB(A)	54	58	56	58	62	62	66	66	66	66		
Outdoor	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	981-1050-330		
Unit	Weight		kg	35	54	50	53	76	78	84	85	84	85		
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	79	79	86	86	86	86		
		Heating	m³/min	34.8	44.6	49.2	48.2	79	79	92	92	92	92		
	Sound Level (SPL)	Cooling	dB(A)	49	52	55	55	51	51	54	54	56	56		
		Heating	dB(A)	50	52	55	55	54	54	56	56	57	57		
	Sound Level (PWL)	Cooling	dB(A)	62	65	65	69	70	70	72	72	75	75		
	Operating Current(Max)		A	8.2	12	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		
Ext.Pipin	g 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 / 15.88		
	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		
Guaranta	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		
Guarante	eu operating name (Outdoor)		°C	-10 ~ +46 -10 ~ +24	-15 ~ +46 -10 ~ +24	-15 ~ +46 -10 ~ +24	-15 ~ +46 -10 ~ +24	-15 ~ +46 -15 ~ +21	-15 ~ +46 -15 ~ +21		-15 ~ +46 -15 ~ +21		-15 ~ +46 -15 ~ +21		
		Heating								-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 liuli with a GWP equal to 550. This means that if 1 kg of this refrigerant would be 160 into 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.

\*2 Energy consumption based on standard test results. Actual energy consumption will depend on whe 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.

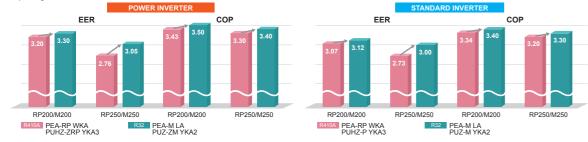
\*6 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



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.

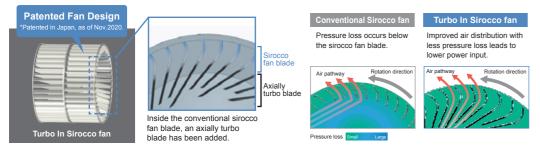
#### Improved Energy Efficiency

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.

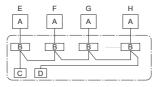


PEA-M200/250LA <60>/75/<100>/<150>/<200> Pa

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























Туре				Inverter l	leat Pump
Indoor Uni				PFA-M200LA	PFA-M250LA
Dutdoor Uni				PUZ-ZM200YKA2	PUZ-ZM250YKA2
Refrigeran	Source				32
Power					ower supply
Supply	Outdoor(V/Phase/Hz)				nree/50
Cooling	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
leating	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
perating	Current(Max)		А	25.7	25.9
ndoor	Input [cooling / Heating ]	Rated	kW	0.35/0.35	0.53/0.53
Init	Operating Current(Max)	•	А	3.1	3.4
	Dimensions	H*W*D	mm	470 - 13	70 - 1120
	Weight	•	kg		37
	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)	(SPL)	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	137	138
	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 Current(Max)		A	22.5	22.5
	Breaker Size		A	32	32
xt.Pipino	Diameter(*3)	Liquid/Gas	mm	9.52 / 25.4	12.7 / 25.4
	Max.Length	Out-In	m	100	100
	Max.Height	Out-In	m	30	30
Guarante	ed Operating Range (Outdoor)	Cooling(*2)	°C	-15~+46	-15~+46
	(Cutdool)	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.

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























Гуре				Inverter	Heat Pump					
door Unit				PEA-M200LA	PEA-M250LA					
ıtdoor Unit				PUZ-M200YKA2	PUZ-M250YKA2					
frigerant(*1)			İ		R32					
wer Sou	urce			Separate power supply						
ipply Out	tdoor(V/Phase/Hz)			400/	/Three/50					
oling C	Capacity	Rated	kW	19.0	22.0					
- 11		Min-Max	kW	9.2 - 22.4	9.9 - 27.0					
		Rated	kW	6.089	7.333					
E	ER			3.12	3.00					
ating C			kW	22.4	27.0					
		Min-Max	kW	6.8 - 25	7.3 - 31					
		Rated	kW	6.588	8.181					
	COP			3.40	3.30					
erating Cur			А	25.7	25.9					
		Rated	kW	0.35/0.35	0.53/0.53					
	erating Current(Max)		А	3.1	3.4					
		H*W*D	mm	470 - 1	1370 - 1120					
	eight		kg		87					
	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		00)/(150)/(200)					
	und Level (Lo-Mi2-Mi1-Hi)	(SPL)	dB(A)	35-40-43	38-43-47					
	und Level (PWL)	LIEVALED	dB(A)	63-64-64	67-67-68					
		H*W*D	mm	1338-1050-330(+40)	1338-1050-330(+40)					
	eight	0 1	kg	129	138					
Air	Volume	Cooling	m³/min	140	140					
	II LODI)	Heating	m³/min	140	140					
Sou	und Level (SPL)	Cooling	dB(A) dB(A)	58	59					
-		Heating		60	62					
		Cooling	dB(A)	78	77					
	erating Current(Max)		A	22.5	22.5					
	eaker Size	1	А	32	32					
t.Piping Dia		Liquid/Gas	mm	9.52 / 25.4	12.7 / 25.4					
		Out-In	m	70	70					
		Out-In	m	30	30					
Jaranteed O			°C	-15~+46	-15~+46					
		Heating	l°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.

























POWERI	IVI SEKIES NVERTER	555	Group Control	M-NET Wi-Fi i) Interface Pump Down Rare connection Reconnection	illure ecal
Туре		Optional		Optional Optional	Heat Pump
Indoor Un	i+			iliverter	neat Fullip
Outdoor U				PEA-M200LA	PEA-M250LA
Refrigerar					0A(*1) PUHZ-ZRP250YKA3
Power	Source				ower supply
Supply	Outdoor (V/Phase/	Hz)			hree / 50
Cooling		Rated	kW	19.0	22.0
	1	Min - Max	kW	9.0 - 22.4	11.2 - 27.0
		Rated	kW	5.937	7.971
	EER			3.20	2.76
leating	Capacity	Rated	kW	-	-
Average	' '	Min - Max	kW	22.4	27.0
eason)	Total Input	Rated	kW	9.5 -25	12.5 - 31
	COP		'	6.530	8.181
peratin	Current (max)			3.43	3.30
ndoor	Input [Cooling / Hea	ting] Rated	kW	22.2	24.4
Jnit	Operating Current	(max)	A	0.35 / 0.35	0.53 / 0.53
	Dimensions	H x W x D	mm	3.1 470-13	70-1120 3.4
	Weight		kg		37
	Air Volume [Lo-Mid-	-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 Pres	ssure	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	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 Current	(max)	A	19	21
	Breaker Size		A	32	32
Ext.	Diameter (*3)	Liquid / Gas	mm	9.52/25.4	12.7/25.4

<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 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 profess

# PEA-M SERIES

95

Max. Length



























100







wed Piping	Control Optional	Q≑Q aco	Auto Restart	Low Temp Cooling	Silent	Optional	
ailure ecall							

STANDAR	RD INVERTER		connecti	Interface	Down connection Self Diagnosis Recall	
Туре			Орили	Optional	Inverter	Heat Pump
ndoor Un	nit				PEA-M200LA	PEA-M250LA
utdoor l					PUHZ-P200YKA3	PUHZ-P250YKA3
efrigerar	nt(*1)				R41	I 0A(*1)
ower	Source				Separate p	nower supply
upply	Outdoor (V/Phas	se/Hz)			400 / T	hree / 50
ooling	Capacity	Rated	l	kW	19.0	22.0
		Min -	Max	kW	9.0-22.4	11.2-27.0
	Total Input	Rated	I	kW	6.188	8.058
	EER			·	3.07	2.73
eating	Capacity	Rated	I	kW	22.4	27.0
verage		Min -	Max	kW	9.5-25	12.5-31
eason)	Total Input	Rated	I	kW	6.706	8.437
	СОР			·	3.34	3.20
peratin	g Current (max)				22.2	24.4
door	Input [Cooling / H	leating]	Rated	kW	0.35/0.35	0.53/0.53
nit	Operating Curre	nt (max	)	A	3.1	3.4
	Dimensions		H x W x D	mm	470-13	370-1120
	Weight		'	kg		87
	Air Volume [Lo-N	∕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(200Pa
	External Static P	ressure		Pa	(60)/75/(10	0)/(150)/(200)
	Sound Level (SPI	<b>L)</b> [Lo-Mi	id-Hi]	dB(A)	35-40-43	38-43-47
	Sound Level (PW	/L)		dB(A)	63-64-64	67-67-68
	Dimensions		HxWxD	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 (SPI	L)	Cooling	dB(A)	58	59
			Heating	dB(A)	60	62
	Sound Level (PWI	L)	Cooling	dB(A)	78	77
	Operating Curre	nt (max	)	A	19	21
	Breaker Size			А	32	32
ĸt.	Diameter (*3)		Liquid / Gas	mm	9.52/25.4	12.7/25.4
iping	Max. Length		Out-In	m	70	70
	Max. Height		Out-In	m	30	30
	ed Operating Range	•	Cooling(*2)	°C	-15~+46	-15~+46
Outdoor)			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**

PKA-M60/71/100KA(L)2

PKA-M35/50LA(L)2





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

#### New Design (M35-50)

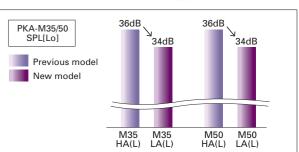
A sharp and simple form that combines beauty and function. The simple square design harmonizes beautifully with the straight lines created by the intersection of the walls, floor and ceiling of the space, leading to a better quality of space. Also adopted a new white body color. It will make your life 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.



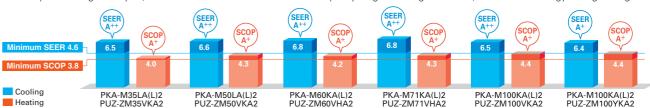
Main Functions of new Wireless Remote Controller ·Weekly Timer Backlight

Dual set point

·Battery replacement sign

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

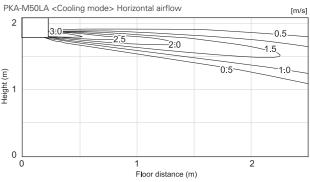
Highly efficient indoor unit heat exchangers and and newly designed power inverters (PUHZ-ZM) contribute to an amazing reduction in electricity consumption throughout a year, and have resulted in models in the full-capacity range attaining the rank A, A+ and A++ energy savings rating.



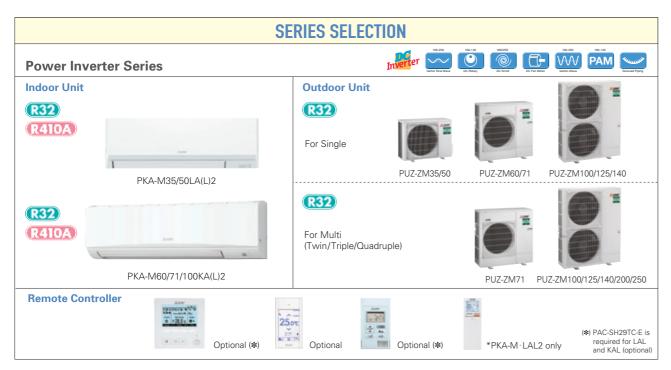
#### Airflow Control - Horizontal Airflow - (M35-50)

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 quide 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								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			F	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	-	-	-	-	35x2	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	N	1SDD-	50TR2	-E	MSDD- 50WR2-E	-	MSE	)T-111	R3-E	MS 1111	DF- R2-E

SI	ERIES SELECTION
Standard Inverter Series	Inverter
Indoor Unit	Outdoor Unit
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 Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			F	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	rd Inverter (PUZ-M)	-	-	-	-	100x1	-	-	-	-	-	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-		-	-	-	-	MSD	D-50T	R2-E	MSDD- 50WR2-E	-	MSE	OT-111	R3-E		DF- R2-E

























Туре						Inverter I	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)	)				•	B	32		
Power So	ource					Outdoor p	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
- 11		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
	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
П	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
	put [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
	perating Current(Max)		A	0.35	0.35	0.43	0.43	0.57	0.57
	imensions	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	41-45-49	41-45-49
	ound Level (PWL) imensions	H*W*D	dB(A)	60	60		64	65	65
		H-W-D	mm	630-809-300	630-809-300	943-950-330(+25)	943-950-330(+25)	1338-1050-330(+40)	1338-1050-330(+40)
	/eight ir Volume	Cooling	kg m³/min	46	46	67	67	105	111
Ai	ir volume	Heating		45 45	45 45	55 55	55 55	110	110 110
<u>-</u>	ound Level (SPL)	Cooling	m³/min dB(A)	45 44	45 44	47	55 47	110 49	49
50	ound Level (SPL)	Heating	dB(A)	44	44	47	47	49 51	49 51
	ound Level (PWL)		dB(A)	46 65	46 65				
	perating Current(Max)	Cooling	ab(A)	13	13	67 19	67 19	69	69
	reaker Size		A	13	13	25	25	32	16
Ext.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	
	lax.Lengtn lax.Height	Out-In	m	30	30	30	30	30	100
	Operating Range (Outdoor)	Cooling(*3)	°C						
Guaranteed	Operating Range (Outdoor)		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21
		Heating	-C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-2U ~ +2T	-20 ~ +21

<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming open the strong of the















































Type				Inverter He	eat Pumn
ndoor Uni	†			PKA-M10	
utdoor U				PUZ-M100VKA2	PUZ-M100YKA2
efrigeran				R3	
wer	Source			Outdoor pov	
pply	Outdoor(V/Phase/Hz)			VKA•VHA:230/Single/5	
oling	Capacity	Rated	kW	9.5	9.5
Ulling	Capacity		kW	4.0 - 10.6	4.0 - 10.6
	Total Input		kW	2.941	2.941
	EER	Indieu	KVV		
	Design load		kW	3.23 9.5	3.23 9.5
	Annual electricity consum		kWh/a		9.5 573
	SEER(*4)	ption ( 2)	kvvn/a	573	
	SEER	F #: 1		5.8	5.8
	10 11	Energy efficiency class	134/	A+	A+
ating	Capacity		kW	11.2	11.2
			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		6.0 (-10°C)	6.0 (-10°C)
			kW	7.0 (-7°C)	7.0 (-7°C)
		at operation limit temperature		4.5 (-15°C)	4.5 (-15°C)
	Back up heating capacity		kW	2.0	2.0
	Annual electricity consum	ption (*2)	kWh/a	2780	2780
	SCOP(*4)			4.0	4.0
		Energy efficiency class		A+	A+
erating	Current(Max)		А	20.6	12.1
oor	Input [cooling / Heating ]	Rated	kW	0.08 / 0.07	0.08 / 0.07
it	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)		m³/min	20-23-26	20-23-26
	Sound Level (Lo-Mi2-Mi1-Hi	(SPL)	dB(A)	41-45-49	41-45-49
	Sound Level (PWL)		dB(A)	65	65
tdoor	Dimensions	H*W*D	mm	981-1050-330 (+40)	981-1050-330(+40)
it	Weight		kg	76	78
	Air Volume	Cooling	m³/min	79	79
		Heating	m³/min	79	79
	Sound Level (SPL)	Cooling	dB(A)	51	51
			dB(A)	54	54
	Sound Level (PWL)	Cooling	dB(A)	70	70
	Operating Current(Max)		A	20.0	11.5
	Breaker Size		A	32	16
t.Pipino	Diameter(*5)	Liquid/Gas	mm	9.52 / 15.88	9.52 / 15.88
	Max.Length	Out-In	m	55	55
	Max.Height	Out-In	m	30	30
Jarante	ed Operating Range (Outdoor)		°C	-15 ~ +46	-15 ~ +46
	ou opoluting .itinge (Outdoor)	Heating	°C	-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 clicuit 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 LA(L)/KA(L) Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	oor U	nit Cap	pacity								
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			F	or Trip	ole	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 (PUHZ-ZRP)	35x1	50x1	60x1	71x1	100x1	-	-	-	-	35x2	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	ı	иSDD-	50TR-	E	MSDD- 50WR-E	-	MS	DT-11	1R-E		DF- 1R-E

	SERIES SELECTION		
Standard Inverter Series	Inverter	100-200 100-140 2000000 Ctor Sine Wave DC Retary DC Scroll DC Far Mater	Victor-Wave PAM Canned Pping
Indoor Unit	Outdoor Unit		
R32	R410A		
Auto-	For Single		
DIVA MODIFICIA A (L) O		PUHZ-P100	
PKA-M35/50LA(L)2	(R410A)		-
Acres 1	For Multi (Twin/Triple/Quadruple)		
PKA-M60/71/100KA(L)2		PUHZ-P100/125/140	PUHZ-P200/250
Remote Controller  Optional (*)	25or Optional Optional (*)	*PKA-M·LAL2 only	(*) PAC-SH29TC-E is required for LAL and KAL (optional)

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

99

										Outd	oor U	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	jle						For	Гwin			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
	Distribution Pipe	-	-	-	-	-	-	_	-	-	-	MSI	DD-50	ΓR-E	MSDD- 50WR-E	-	MSI	DT-111	R-E	MSDF-1	1111R-E

























Type						Inverter I	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	nit			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA
efrigeran	t <sup>(*1)</sup>					R4	10A		
ower	Source					Outdoor p	ower supply		
upply	Outdoor(V/Phase/Hz)						/50, YKA:400/Three/50		
ooling	Capacity	Rated	kW	3.6	4.6	6.1	7.1	9.5	9.5
		Min-Max	kW	1.6 - 4.5	2.3 - 5.4	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	riotod		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 consump	ntion(*2)	kWh/a	206	263	324	367	522	532
	SFFR(*4)	, tion	K V V I I / G	6.1	6.1	6.5	6.7	6.3	6.2
	JEEN .	Energy efficiency class		0.1 A++	A++	0.5 A++	0.7 A++	0.3 A++	0.2 A++
eating	Capacity	Rated	kW	4.1	5.0	7.0	8.0	11.2	11.2
aung	Сарасну	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 Innut	Rated	kW	1.6 - 5.2	1.501			3.043	3.043
	Total Input COP	nated	KVV			1.960	2.191		
				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		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 consump	otion (*2)	kWh/a	841	1126	1466	1529	2659	2660
	SCOP(*4)			3.9	4.1	4.2	4.3	4.1	4.1
		Energy efficiency class		A	A+	A+	A+	A+	A+
perating	Current(Max)		A	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)		А	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		kg	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(+4
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)	1 3	A	13	13	19	19	26.5	8
	Breaker Size		A	16	16	25	25	32	16
rt 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
ipiliy	Max.Length	Out-In	m	50	50	50	50	75	75
	Max.Height	Out-In	m	30	30	30	30	30	30
uoronto	ed Operating Range (Outdoor)	Cooling(*3)	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
	eu Operaung nange (Outdoor)	[COOIIIIg	-	-10 ~ +40	-10 ~ +40	-10 ~ +40	-10 ~ +40	-10 ~ ±40	-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 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 vourself 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.



























<sup>-15 ~ +21</sup> \*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO<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.

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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.

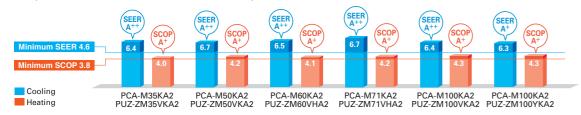
#### Stylish Indoor Unit Design

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.



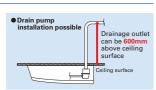
#### ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

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.



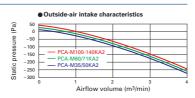
#### Optional Drain Pump for Full-capacity Models

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

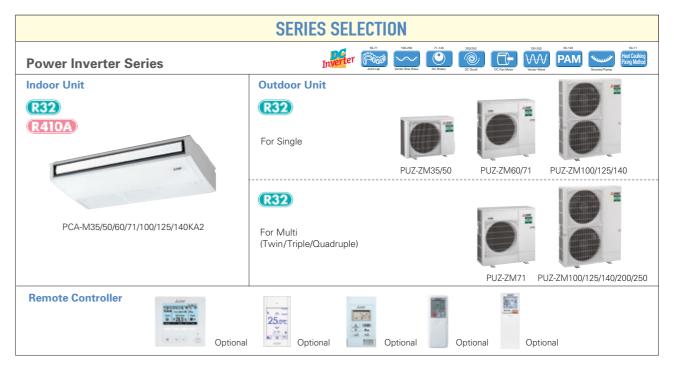
In addition to the conventional 4-speed setting, units are now equipped with an automatic air-speed adjustment mode. This setting automatically adjusts the air-speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool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

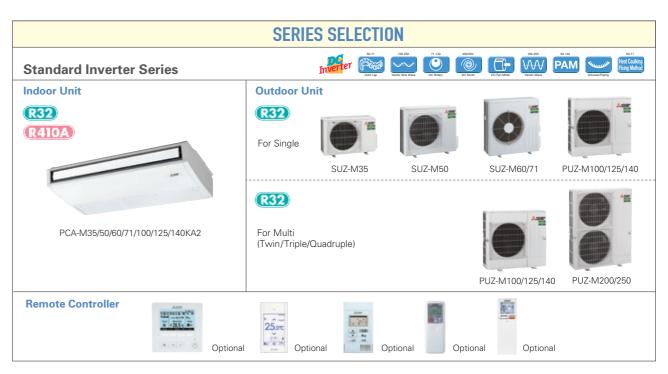
Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match room height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.

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	pacity								
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	MS 50W	DD- R2-F	MSE	OT-111	R3-E	MS 1111	DF- R2-F



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

										Outd	oor U	nit Cap	oacity								
Indoor	Unit Combination				Fo	or Sing	le						For	Twin			F	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 (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	DT-111	R3-E	MS 1111	DF- R2-E























	Optional		0	ptional								
ES	Ampere Rotation		Group M-	NET Wi-Fi		MXZ connection	ming free, Wir Reu	ing Drain Lift Up	Pump Down	Flare connection	Self Failu Reca	re
		otional		tional Optional	ce	connection			DOWII		Diagnosis	
							Investor I	leat Pump				
			PCA-M35KA2	PCA-M50KA2	PCA-M60KA2	DCA M71KA2			DCA M12EKA2	DCA M12EKA2	PCA-M140KA2	DCA M140KA2
			PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2						PUZ-ZM140VKA2	
			1 02-21VI00VI042	1 UZ-ZIVIJUVIKAZ	T UZ-ZIVIUUVI IAZ	1 UZ-ZIVI/ I VI IAZ		32	I UZ-ZIVI IZUVINAZ	I UZ-ZIVI IZU I KMZ	1 02-21VI 140 V NA2	1 02-2W1401NA2
								ower supply				
e/Hz)						VKA•V	HA:230/Single		hree/50			
	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
	Rated	kW	0.829	1.250	1.521	1.829	2.375	2.375	3.846	3.846	3.941	3.941
			4.34	4.00	4.01	3.88	4.00	4.00	3.25	3.25	3.40	3.40
		kW	3.6	5.0	6.1	7.1	9.5	9.5	_	_	-	_
city consump	tion(*2)	kWh/a	197	260	328	371	516	527	-	-	-	_
			6.4	6.7	6.5	6.7	6.4	6.3	_	-	-	-
	Energy efficiency class		A++	A++	A++	A++	A++	A++	_	-	-	-
		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
	Rated	kW	1.019	1.361	1.745	2.156	3.018	3.018	3.954	3.954	4.432	4.432
			4.02	4.04	4.01	3.71	3.71	3.71	3.54	3.54	3.61	3.61
		kW	2.4	3.8	4.4	4.7	7.8	7.8	-	-	-	_
	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)	-	-	-	-
		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)	3.4 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	-	-	-
ng capacity		kW	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-
city consump	tion (*2)	kWh/a	838	1266	1501	1567	2536	2537	-	-	-	-
			4.0	4.2	4.1	4.2	4.3	4.3	-	_	-	_
	Energy efficiency class		A+	A+	A+	A+	A+	A+	-	-	-	-
		A	13.3	13.4	19.4	19.4	20.7	8.7	27.3	9.8	30.9	12.7
Heating ] nt(Max)	Rated	kW A	0.04 / 0.04	0.05 / 0.05	0.06 / 0.06	0.06 / 0.06 0.42	0.09 / 0.09	0.09 / 0.09	0.11 / 0.11 0.76	0.11 / 0.11 0.76	0.14 / 0.14	0.14 / 0.14
	H*W*D	mm		60-680	230-12		0.00	0.05	230-16		0.90	0.90
	lu w n	kg	25	26	32	32	37	37	38	38	40	40
Vii2-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
-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
VL)		dB(A)	60	60	60	62	63	63	65	65	68	68



ound Level (SPL)

Diameter<sup>(\*5)</sup>
Max.Length
Max.Height











































SIANDA	IKU INVEKIEK	Limit Back-up	ptional	Control	nection Interfa	ce	connection	lipe relia Rel	ISE Lift Up	Down	Connection	iagnosis Reca	
Туре								Inverter H	leat Pump				
Indoor Un	it			PCA-M35KA2	PCA-M50KA2	PCA-M60KA2	PCA-M71KA2	PCA-M100KA2	PCA-M100KA2	PCA-M125KA2	PCA-M125KA2	PCA-M140KA2	PCA-M140KA2
Outdoor L	Jnit			SUZ-M35VA	SUZ-M50VA	SUZ-M60VA	SUZ-M71VA	PUZ-M100VKA2	PUZ-M100YKA2	PUZ-M125VKA2	PUZ-M125YKA2	PUZ-M140VKA2	PUZ-M140YKA2
Refrigerar	nt(*1)							R	32				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor(V/Phase/Hz)						VA•VI	(A:230/Single/5	0, YKA:400/Th	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
	11	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	otion (*2)	kWh/a	198	291	333	381	553	553	-	-	-	_
	SEER (*4)			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
		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			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	-	-	-	-
	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		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 consump	otion(*2)	kWh/a	910	1458	1558	1974	2729	2729	_	_	-	-
	SCOP (*4)			4.0	4.1	4.1	4.1	4.1	4.1	_	-	-	-
		Energy efficiency class		A+	A+	A+	A+	A+	A+	_	-	-	-
	g Current(Max)		А	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)		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	230-96			80-680			230-160			
	Weight		kg .	25	26	32	32	37	37	38	38	40	40
	Air Volume (Lo-Mi2-Mi1-Hi) 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	15-16-17-19	16-17-18-20	22-24-26-28 37-39-41-43	22-24-26-28	23-25-27-29 39-41-43-45	23-25-27-29 39-41-43-45	24-26-29-32 41-43-45-48	24-26-29-32 41-43-45-48
	Sound Level (PWL)	(SPL)	dB(A)	60	60	33-35-37-40 60	35-37-39-41 62	63	37-39-41-43 63	39-41-43-45 65	39-41-43-45 65	68	68
Outdoor	Dimensions	H*W*D	mm	550-800-285	714-800-285	880-840-330					981-1050-330(+40)		
Unit	Weight	1	kg	35	41	54	55	76	78	84	85	84	85
J.III	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
	,5,2,	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)	1 3	A	8.5	13.5	14.8	14.8	20	11.5	26.5	11.5	30	11.5
	Breaker Size		A	10	20	20	20	32	16	32	16	40	16
Ext.Pipin	g 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
	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
	3 mg (,	Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21
		1 5	_	1.0 1.2.1	1								

<sup>\*\*</sup>Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant mith higher GWP, if leaked to the atmosphere, the impact on global warming would be \$50 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 Ui	nit Cap	acity								
Inc	loor 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
Po	wer Inverter (PUHZ-ZRP)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	_	-	-	-	-	1	MSDD-	50TR-	E	MSI 50V	DD- /R-E	MSI	DT-111	R-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	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
Standa	rd Inverter (PUHZ-P&SUZ)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe			-		-	-		-	-	-	-	MSI	DD-50	ΓR-E	MS 50V	DD- VR-E	MS	DT-111	R-E	MS 111	DF- 1R-E

<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 producty vourself 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.

























ΡΙ.Δ-	-M KA SERIES	60-140V/200/250											
	INVERTER	Ampere Rotation Back-up		Group Control	NET Wi-Fi	)) COMPO	MXZ connection	wing free, Wir Ret	ing Drain Lift Up	Pump Down	Flare connection	Self Disgnosis Reca	re
TONEIL	INVERTER		lptional		tional Optional		Connection	Opt	onal Optional	DOWII	تا ر	liagnosis	
Туре								Inverter F	leat Pump				
Indoor Un	t			PCA-M35KA2	PCA-M50KA2	PCA-M60KA2	PCA-M71KA2	PCA-M100KA2	PCA-M100KA2	PCA-M125KA2	PCA-M125KA2	PCA-M140KA2	PCA-M140KA2
Outdoor L	Init			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3
Refrigerar	t <sup>(*1)</sup>							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 consum	ption(*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	Rated	kW	4.1	5.5	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
_		Min-Max	kW	1.6 - 5.2	2.5 - 6.6	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
	Total Input	Rated	kW	1.019	1.450	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	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	_
		at bivalent temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	_
		at operation limit temperature	kW	2.2 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.5 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	_	-	-	_
	Back up heating capacity		kW	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	_
	Annual electricity consum	ption (*2)	kWh/a	817	1259	1461	1522	2784	2785	-	-	-	_
	SCOP(*4)			4.1	4.2	4.2	4.3	3.9	3.9	-	-	-	_
		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

## PCA-M KA SERIES







































	·	Optional Optional		Optional C	ptional Optiona			Opti	onal Optional				
Туре									leat Pump				
Indoor Un	it			PCA-M35KA2	PCA-M50KA2	PCA-M60KA2	PCA-M71KA2	PCA-M100KA2	PCA-M100KA2	PCA-M125KA2	PCA-M125KA2	PCA-M140KA2	PCA-M140KA2
Outdoor L	Jnit			SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerar	nt(*1)							R4	10A				
Power	Source							Outdoor po	ower supply				
Supply	Outdoor(V/Phase/Hz)						VA•V	KA:230/Single/S	50, YKA:400/Th	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
		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			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)			6.0	5.8	6.1	6.0	5.6	5.6	-	-	-	-
		Energy efficiency class		A+	A+	A++	A+	A+	A+	-	-	-	-
Heating	Capacity	Rated	kW	4.1	5.5	6.9	7.9	11.2	11.2	13.5	13.5	15.0	15.0
		Min-Max	kW	1.7 - 5.0	1.7 - 6.6	2.5 - 8.0	2.6 - 10.2	2.8 - 12.5	2.8 - 12.5	4.8 - 15.0	4.8 - 15.0	4.9 - 15.8	4.9 - 15.8
	Total Input	Rated	kW	1.051	1.519	1.911	2.182	3.373	3.373	4.066	4.066	4.477	4.477
	COP	•		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	-	-	-	-
	Declared Capacity	at reference design temperature	kW	2.3 (-10°C)	3.6 (-10°C)	4.0 (-10°C)	5.2 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	-	-	-	-
		at bivalent temperature	kW	2.3 (-7°C)	3.6 (-7°C)	4.3 (-7°C)	5.2 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	_	-	-	-
		at operation limit temperature	kW	2.3 (-10°C)	3.6 (-10°C)	4.0 (-10°C)	5.2 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	-	-	-	_
	Back up heating capacity		kW	0.3	0.4	0.8	0.6	2.0	2.0	-	-	-	_
	Annual electricity consump	otion(*2)	kWh/a	886	1388	1680	2029	2729	2729	-	-	-	-
	SCOP(*4)			4.1	4.0	4.0	4.0	4.1	4.1	-	-	-	-
		Energy efficiency class		A+	A+	A+	A+	A+	A+	-	-	-	-
Operating	g Current(Max)		А	8.5	12.4	14.4	16.5	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)		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	23-25-27-29			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		39-41-43-45		41-43-45-48	41-43-45-48
0.11	Sound Level (PWL)	TI INIA/AD	dB(A)	60	60	60	62	63	63	65	65	68	68
Outdoor Unit	Dimensions Weight	H*W*D	mm	550-800-285	880-840-330 54	880-840-330		981-1050-330				981-1050-330 84	
Unit	Air Volume	Cli	kg	35		50	53	76	78	84	85		85
	Air volume	Cooling	m³/min	36.3	44.6	40.9	50.1	79	79	86	86	86	86
	0 11 1(001)	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
	Sound Level (PWL)	Heating		50	52	55	55	54	54	56	56	57	57
		Cooling	dB(A)	62	65	65	69	70	70	72	72	75	75
	Operating Current(Max) Breaker Size		A	8.2	12	14 20	16.1	20 32	11.5	26.5	11.5	30 40	11.5
F. A Dinin		11::-1/0		10	20		20		16	32	16		16
Ext.Pipin	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 / 15.88
	Max.Length Max.Height	Out-In Out-In	m	20	30	30	30	50	50 30	50	50	50	50
C			m °C	12	30	30	30	30		30	30	30	30
Guarante	ed Operating Range (Outdoor)	Cooling(*3)		-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 producty 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.







Pull the handle to easily slide

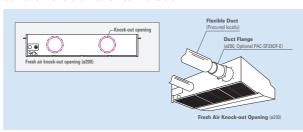
#### Easy Maintenance -Even for Cleaning the Fan

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)

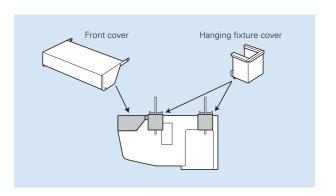
There is a knock-out opening on the rear panel of the unit that can be used to bring fresh air into the unit. This helps to improve ventilation and make the kitchen comfortable.



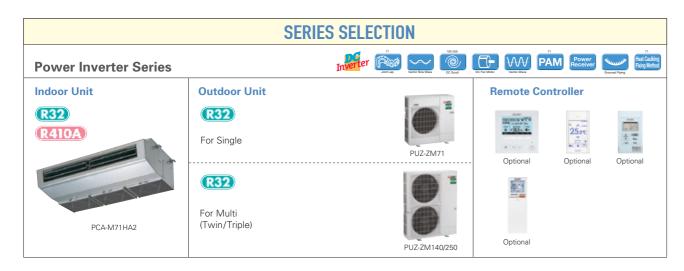
Notes: 1) A fresh-air duct flange is required (sold separately) 2) Intake air is not 100% fresh (outside) air.

## 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.



ated Products Directive and Regulation(EU) No206/2012. \*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



#### 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
			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	-	

er Sol Lee Wood for Visua Cr for United Cr f	ower ceiver Heat Cauking Fixing Method
Remote Controlle	r
PUHZ-ZRP71 Optional Option	
Optional	

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

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										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 (PUHZ-ZRP)	-	-	-	71x1	-	-	-	-	-	-	-	-	71x2	-	-	-	-	71x3	-	-
	Distribution Pipe	_	_	-	_	-	-	-	-	_	-	-	-	MSDD-50TR-E	-	-	-	-	MSDT-111R-E	-	_



















				1
Туре		<u>"</u>		Inverter Heat Pump
Indoor Unit				PCA-M71HA2
Outdoor U				PUZ-ZM71VHA2
Refrigerant				
Power	Source			Outdoor power supply
	Outdoor(V/Phase/Hz)			230/Single/50
Cooling	Capacity		kW	7.1
			kW	3.3 - 8.1
	Total Input	Rated	kW	2.028
	EER			3.50
	Design load		kW	7.1
	Annual electricity consump	ption(*2)	kWh/a	443
	SEER(*4)			5.6
		Energy efficiency class		A+
Heating	Capacity		kW	7.6
3			kW	3.5 - 10.2
	Total Input		kW	2.171
	COP	riatou	100	3.50
	Design load		kW	4.7
	Declared Capacity	at reference design temperature		4.7 (-10°C)
	Deciared Supacity	at bivalent temperature	kW	4.7 (-10°C)
		at operation limit temperature		3.4 (-20°C)
	Back up heating capacity	lat operation innit temperature	kW	0.0
	Annual electricity consum	ntion (*2)	kWh/a	1684
	SCOP(*4)	ption	KVVII/a	3.9
	SCOP: 9	Energy efficiency class		3.9 A
Onevetina	Current(Max)	Lifergy efficiency class	Α	19.4
Indoor	Input [cooling / Heating ]	Rated	kW	0.10/0.10
	Oneveting Correspt/Max	nated	Λ	
	Operating Current(Max)		A	0.43
	Dimensions	H*W*D	mm	280-1136-650
	Dimensions Weight	H*W*D	mm kg	280-1136-650 42
	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi)	H*W*D	mm kg m³/min	280-1136-650 42 16-18
	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi)	H*W*D	mm kg m³/min dB(A)	280-1136-650 42 16-18 37-39
	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL)	H*W*D	mm kg m³/min dB(A) dB(A)	280-1136-650 42 16-18 37-39 57
Outdoor	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions	H*W*D	mm kg m³/min dB(A) dB(A) mm	280-1136-650 42 16-18 37-39 57 943-950-330(+25)
Outdoor	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight	H*W*D   (SPL)  H*W*D	mm kg m³/min dB(A) dB(A) mm kg	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67
Outdoor	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions	(SPL)   H*W*D	mm kg m³/min dB(A) dB(A) mm kg m³/min	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume	H*W*D    SPL    H*W*D    Cooling    Heating	mm kg m³/min dB(A) dB(A) mm kg m³/min m³/min	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  56
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight	(SPL)  (SPL)  (SPL)  (Cooling Heating)  (Cooling	mm kg m³/min dB(A) dB(A) mm kg m³/min m³/min dB(A)	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  56  47
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL)	(SPL)  (SPL)  Cooling Heating Cooling Heating Heating	mm kg m³/min dB(A) dB(A) mm kg m³/min m³/min dB(A) dB(A)	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  55  47  49
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL)	(SPL)  (SPL)  Cooling  Heating  Cooling  Heating	mm kg m³/min dB(A) dB(A) mm kg m³/min m³/min dB(A) dB(A)	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  47  49  67
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Operating Current(Max)	(SPL)  (SPL)  Cooling Heating Cooling Heating Heating	mm kg m³/min dB(A) dB(A) mm kg m³/min dB(A) dB(A) dB(A)	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  47  49  67  19
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Operating Current(Max) Breaker Size	H*W*D  (SPL)   H*W*D  Cooling  Heating  Cooling  Heating  Cooling	mm kg m³/min dB(A) dB(A) mm kg m³/min dB(A) dB(A) dB(A) dB(A)	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  55  47  49  67  19  25
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (SPL) Sound Level (PWL) Operating Current(Max) Breaker Size Diameter*	H*W*D (SPL)  H*W*D  Cooling  Heating  Cooling  Heating  Cooling  Liquid/Gas	mm kg m³/min dB(A) dB(A) mm kg m³/min dB(A) dB(A) dB(A) dB(A) A	280-1136-650 42 16-18 37-39 57 943-950-330(+25) 67 56 55 47 49 67 19 25 9,527   15,88
Outdoor Unit	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Operating Current(Max) Breaker Size Diameter**	(SPL)  (SPL)  (SPL)  (Cooling Heating Cooling Heating Cooling Heating Cooling Cooling Cooling Cooling Heating Cooling	mm kg m³/min dB(A) dB(A) mm kg m³/min dB(A) dB(A) dB(A) dB(A) A A	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  47  49  67  19  25  9.52 / 15.88  56
Outdoor Unit Ext.Piping	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Operating Current(Max) Breaker Size Diameter**51 Max.Length Max.Height	H*W*D  (SPL)  H*W*D  Cooling Heating Cooling Heating Cooling Liquid/Gas Out-In Out-In	mm kg m³/min dB(A) dB(A) mm kg m³/min dB(A) dB(A) dB(A) A A A mm m	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  56  47  49  67  19  25  9,52/15.88  55  30
Outdoor Unit Ext.Piping	Dimensions Weight Air Volume (Lo-Mi2-Mi1-Hi) Sound Level (Lo-Mi2-Mi1-Hi) Sound Level (PWL) Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Operating Current(Max) Breaker Size Diameter**	H*W*D  (SPL)  H*W*D  Cooling Heating Cooling Heating Cooling Liquid/Gas Out-In Out-In	mm kg m³/min dB(A) dB(A) mm kg m³/min dB(A) dB(A) dB(A) A A	280-1136-650  42  16-18  37-39  57  943-950-330(+25)  67  55  47  49  67  19  25  9.52 / 15.88  56

<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.

\*5 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 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.

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\*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.



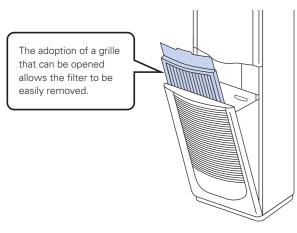


Built-in MA smart remote controller

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



#### Equipped with a long-life filter as standard



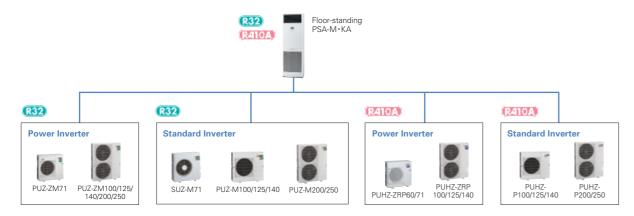
#### A wide airflow range with horizontal swinging

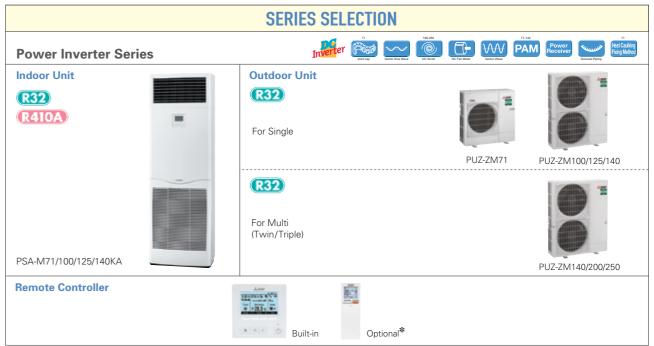
The horizontal swinging function can be turned on or off via the remote controller to deliver comfort over a wider area.



#### 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.



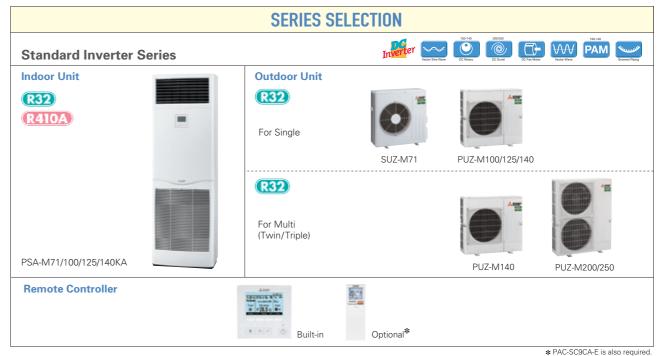


PSA-M Indoor Unit Combinations Indoor unit combinations shown below are possible.

\* PAC-SC9CA-E is also required.

110

										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	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.

										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	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		-

























Туре						l l	Inverter Heat Pump			
Indoor Uni	t			PSA-M71KA	PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor U				PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM100YKA2	PUZ-ZM125VKA2	PUZ-ZM125YKA2	PUZ-ZM140VKA2	PUZ-ZM140YKA2
Refrigeran							R32			
Power	Source						Outdoor power suppl			
Supply	Outdoor(V/Phase/Hz)						230/Single/50, YKA:40			
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		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+	-	-	-	-
	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)	Limiting	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 Air Volume (Lo-Mi2-Mi1-Hi)		kg m³/min	46 20-22-24	46 25-28-30	46 25-28-30	46 25-28-31	46 25-28-31	48 25-28-31	48 25-28-31
	Sound Level (Lo-Mi2-Mi1-Hi)	(CDI)	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)	(SFL)	dB(A)	60	65	65	66	66	66	66
Outdoor	Dimensions	H*W*D	mm				1338-1050-330(+40)			
Unit	Weight	P	kg	67	105	111	105	114	105	118
	Air Volume	Cooling	m³/min	55	110	110	120	120	120	120
		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)		A	19	20	8	26.5	9	30	11.8
	Breaker Size		Α	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(*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 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 wow 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.

























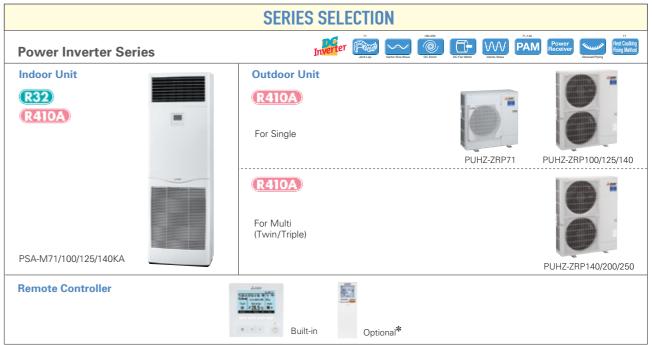




		Op	tional Optional	Option
	l l	Inverter Heat Pump	p	
00KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	
0VKA2	PUZ-M100YKA2	PUZ-M125VKA2	PUZ-M125YKA2	Р

Туре						ı	Inverter Heat Pumi	n		
Indoor Un	it			PSA-M71KA	PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor L	·			SUZ-M71VA	PUZ-M100VKA2	PUZ-M100YKA2	PUZ-M125VKA2	PUZ-M125YKA2	PUZ-M140VKA2	PUZ-M140YKA2
Refrigerar				302-W/7TVA	1 02-W1100VKAZ	1 02-10110011042	R32	1 02-10112311042	1 02-10114001042	1 02-10114011042
Power	Source						Outdoor power suppl			
Supply	Outdoor(V/Phase/Hz)						30/Single/50, YKA:40			
Cooling		Rated	kW	7.4	9.4				40.0	40.0
Jooling	Capacity		kW	7.1		9.4	12.1	12.1	13.6	13.6
	l <u> </u>			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			3.60	3.50	3.50	2.70	2.70	2.70	2.70
	Design load		kW	7.1	9.4	9.4	_	-	-	-
	Annual electricity consump	otion(*2)	kWh/a	394	591	591	_	-	-	_
	SEER(*4)			6.3	5.5	5.5	-	-	-	-
		Energy efficiency class		A++	A	A	_	-	-	_
leating	Capacity		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
	COP			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+	_	-	_	_
Operating	Current(Max)	,	Α	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
Jnit	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)		dB(A)	60	65	65	66	66	66	66
Outdoor	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
Jnit	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.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	30	55	55	65	65	65	65
	Max.Height	Out-In	m	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
	pgo (outdoon)	Heating	°C	-10 ~ +24	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21

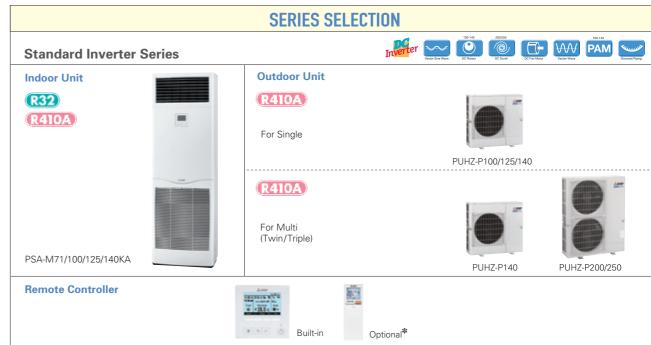
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\*5 Joint pipe is required depending on installed refrigerant pipes, outdoor units and indoor units.



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 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)	-	-	-	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 Uı	nit Cap	acity								
Indoor	Unit Combination				Fo	or Sing	gle						For	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
Standa	ard Inverter (PUHZ-P)	-	-	-	-	100x1	125x1	140x1	-	-	-	-	-	71x2	100x2	125x2	-	-	71x3	-	-
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	-	-	MSDD -50TR-E	MSDD-	50WR-E	-	-	MSDT -111R-E	_	-







Wiring Reuse Pump Connection Self Self Recal

















_										
Туре							Inverter Heat Pum			
Indoor Un	·			PSA-M71KA	PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor L				PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3		PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA
Refrigeran							R410A			
Power	Source						Outdoor power suppl			
Supply	Outdoor(V/Phase/Hz)						230/Single/50, YKA:40			
Cooling	Capacity		kW	7.1	9.5	9.5	12.5	12.5	13.4	13.4
			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		kW	7.1	9.5	9.5	_	-	-	_
	Annual electricity consum	ption(*2)	kWh/a	394	584	595	_	-	-	_
	SEER(*4)			6.3	5.6	5.5	_	_	_	_
		Energy efficiency class		A++	A+	A	-	-	-	-
Heating	Capacity	Rated	kW	7.6	11.2	11.2	14.0	14.0	16.0	16.0
			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	-	-	-	_
	Annual electricity consum	ption(*2)	kWh/a	1668	2730	2731	_	_	_	_
	SCOP(*4)		, ,	3.9	3.9	3.9	_	_	_	_
		Energy efficiency class		A	A	A	_	_	_	_
Operating	Current(Max)		Α	19.4	27.2	8.7	27.2	10.2	28.7	13.7
Indoor	Input [cooling / Heating ]		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)		A	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
Outdoor	Dimensions	H*W*D	mm	943-950-330(+30)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40)	1338-1050-330(+40
Unit	Weight		kg	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	55	110	110	120	120	120	120
		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)	48	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	67	69	69	70	70	70	70
	Operating Current(Max)	-	А	19	26.5	8	26.5	9.5	28	13
	Breaker Size		A	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	50	75	75	75	75	75	75
	Max.Height	Out-In	m	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
		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 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.



































Cleaning-line, pipe reuse	Wiring Reuse
	Optional

Туре						Inverter H	leat Pump		
ndoor Un	it			PSA-M100KA	PSA-M100KA	PSA-M125KA	PSA-M125KA	PSA-M140KA	PSA-M140KA
Outdoor L	Jnit			PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigerar	nt(*1)					R4	10A	-	
ower	Source					Outdoor po	wer supply		
Supply	Outdoor(V/Phase/Hz)					VKA:230/Single/50	, YKA:400/Three/50		
Cooling	Capacity	Rated	kW	9.4	9.4	12.1	12.1	13.6	13.6
	1 1	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 consun	nption(*2)	kWh/a	644	644	_	-	-	_
	SEER(*4)			5.1	5.1	_	_	_	_
		Energy efficiency class		A	A	_	_	_	_
eating	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	riatou	12.0	3.41	3.41	2.81	2.81	3.11	3.11
	Design load		kW	8.0	8.0	-	-	-	- 0.11
	Declared Capacity	at reference design temperature	kW	6.0 (-10°C)	6.0 (-10°C)	_	_	_	
	Deciared Supacity	at bivalent temperature	kW	7.0 (-7°C)	7.0 (-7°C)	_	_	_	_
			kW	4.5 (-15°C)	4.5 (-15°C)				
	Back up heating capacity		kW	2.0	2.0	_	_	_	
	Annual electricity consun		kWh/a	2797	2797	_		_	
	SCOP(*4)	iiptioii·	KVVII/a	4.0	4.0	_	_	_	
	SCOP	Energy efficiency class		4.0 A+	4.0 A+			_	
ln orotin	Current(Max)	Ellergy efficiency class	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
iaoor Init	Operating Current(Max)	nated	Δ	0.11 / 0.11	0.1170.11	0.11 / 0.11	0.11 / 0.11	0.11 / 0.11	0.11/0.11
IIIL	Dimensions	H*W*D	mm	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360	1900-600-360
	Weight	III VV D	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-H		dB(A)	45-49-51	45-49-51	45-49-51	45-49-51	45-49-51	45-49-51
	Sound Level (PWL)	1, (01 L)	dB(A)	65	65	66	66	66	66
Outdoor	Dimensions	H*W*D	mm	981-1050-330	981-1050-330	981-1050-330	981-1050-330	981-1050-330	981-1050-330
Jnit	Weight	J. *** 5	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
	Count Level (SF L)	Heating	dB(A)	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	70	70	72	72	75	75
	Operating Current(Max)	Cooming	A A	20		26.5		30	
	Breaker Size		A	32	11.5 16	26.5 32	11.5 16	40	11.5 16
ve Dinin	Diameter(*5)	Liquid/Gas	mm						
xt.ripin	Max.Length	Out-In		9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
			m	50	50	50	50	50	50
	Max.Height	Out-In	m	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, 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.

# MULTI SPLIT







## **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

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

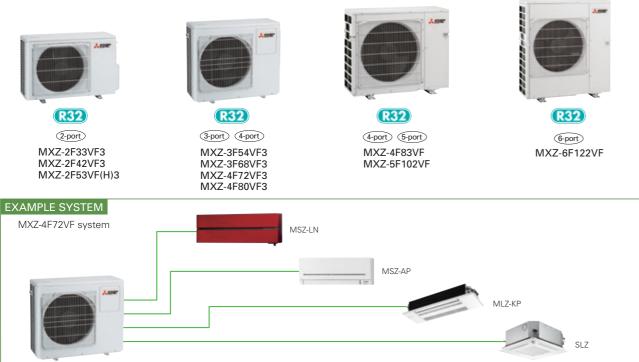
Check Indoor Unit Capacity
Combination

Refer to the "Combination Table" to check if the capacity combination of the indoor unit selected is connectable. (Combinations not listed cannot be connected.)

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

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.

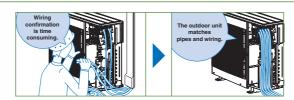
#### **Support Functions –**

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 Hea	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							Р	lease refer to *	3			
Outdoor U	Jnit			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 bivalen	nt temperature	kW	2.4	2.9	2.9	2.9	4.7	6.4	6.2	6.2	6.2	6.4
	at operati	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	class*3	A+	A++	A++	A+	A++	A+	A+	A+	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	А	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	8.4 - 8.0 - 7.7	8.5 - 8.1 - 7.8	10.3 - 9.9 - 9.5	9.1 - 8.7 - 8.3	12.9 - 12.3 - 11.8
		Heating	А	4.6 - 4.4 - 4.2	4.4 - 4.3 - 4.1	7.5 - 7.1 - 6.8	7.5 - 7.1 - 6.8	6.4 - 6.1 - 5.9	8.8 - 8.4 - 8.0	8.6 - 8.2 - 7.9	9.2 - 8.8 - 8.4	9.2 - 8.8 - 8.4	10.5 - 10.0 - 9.6
	Breaker Size		А	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+9.52x4
Piping	Total Piping Length	(max)	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
Guarantee	d Operating Range	Cooling	°C		-10 ~ +46		-10 ~ +46			-10 -	~ +46		
[Outdoor]		Heating	°C		-15 ~ +24		-20 ~ +24			-15 ·	~ +24		

Type (Inv	erter Multi - Split He	at Pump)		Up to 6 Indoor Units
Indoor Un	iit			Please refer to (*4)
Outdoor U	Jnit			MXZ-6F122VF
Refrigerar	nt			R32*1
Power	Source			Outdoor power supply
Supply	Outdoor (V/Phase/F	lz)		220 - 230 - 240V / Single / 50
Cooling	Capacity	Rated	kW	12.2
	Input	Rated	kW	3.66
	EER*4			3.33
Heating	Capacity	Rated	kW	14.0
	Input	Rated	kW	3.31
	COP*4			4.23
Operating	g Current (max)		А	29.8
Outdoor	Dimensions	$H \times W \times D$	mm	1048 - 950 - 330
Unit	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
	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.

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\*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 \*5 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.









3-port 4-port MXZ-3E54VA



MXZ-4E83VA

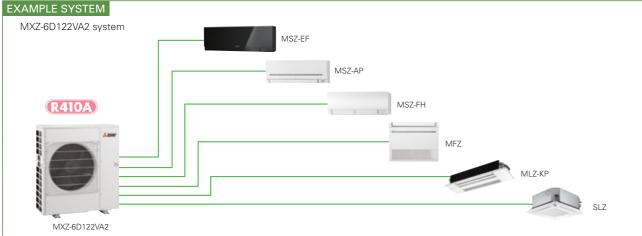
MXZ-5E102VA



6-port

MXZ-6D122VA2





#### 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)

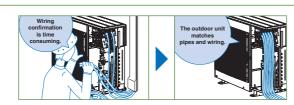
Simply press a single button to confirm if wiring and piping are properly connected. Wiring errors are corrected automatically when discovered. This eliminates the need to confirm complicated wiring connections when expanding the system. (For details, refer to the outdoor unit installation manual.)

\* 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	i - Split He	at Pumn)			Up to 2 Inc	loor Units		Un to 3 in	door Units	Un to 4 in	door Units	Up to 5 Indoor Units
Indoor Un		i opiit rici	at i dilip;			Op to 2 iii	door Omes	-	Please refer to (*		Op to 4 iii	door office	op to 3 maoor omts
Outdoor U					N: MX7-2D33VA	N: MXZ-2D42VA2	N: MX7-2D53VA2				N: MXZ-4E72VA	MXZ-4E83VA	MXZ-5E102VA
Refrigera					111111111111111111111111111111111111111	110/12/20 12/0/12	110/12/2000/01/2	110/2 200001112	R410A*1	110000000	10002 127201	141712 1200471	THE OF TOP WY
Power	Source							Oı	ıtdoor power sup	nnlv			
Supply		(V/Phase/H	lz)						230 - 240V / Sinc				
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	or+Outdoor)		kW	0.90	1.00	1.54	1.54	1.35	2.19	2.25	2.44	3.15
	Design Lo		1.000	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
			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	A	A++	A++	A++	Δ++	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	or+Outdoor)		kW	0.96	0.93	1.70	1.70	1.59	2.38	2.28	2.00	2.34
	Design Lo		1	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		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 I	Heating Ca	pacity	kW	0.6	0.5	0.8	0.9	1.0	1.4	1.4	1.6	1.6
	Annual El	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+	Α+
Max. Ope	erating Cui	rrent (Indo	or+Outdoor)	Α	10.0	12.2	12.2	12.2	18.0	18.0	18.0	21.4	21.4
Outdoor	Dimensio	ns	$H \times W \times D$	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	пе	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	vel (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	vel (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	ng Length	(max)	m	20	30	30	30	50	60	60	70	80
	Each Indo	or Unit Pip	ing Length (max)	m	15	20	20	20	25	25	25	25	25
	Max. Heig	ght		m	10	15 (10)*3	15 (10)*3	15 (10)* <sup>3</sup>	15 (10)* <sup>3</sup>	15 (10)*3	15 (10)*3	15 (10)* <sup>3</sup>	15 (10)*3
	Chargeles			m	20	20	20	20	40	40	40	25	0
	ed Operatin	g Range	Cooling	℃	-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
													the NOTE below

N: Please refer to the NOTE below

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Type (Inv	erter Multi - Split Hea	at Pump)		Up to 6 Indoor Units
Indoor Un	it			Please refer to (*5)
Outdoor U	Jnit			MXZ-6D122VA2
Refrigerar	nt			R410A*1
Power	Source			Outdoor power supply
Supply	Outdoor (V/Phase/H	lz)		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	kW	14.0
		Min - Max	kW	3.5 - 16.5
	Input*5	Rated	kW	3.31
	COP*6			4.23
		EEL Rank		А
Operating	Current (max)*5		Α	26.8
Outdoor	Dimensions	$H \times W \times D$	A mm	26.8 1048-950-330
		$H \times W \times D$	<del></del>	
Outdoor	Dimensions	H × W × D	mm kg m³/min	1048-950-330
Outdoor	Dimensions Weight		mm kg	1048-950-330 88
Outdoor	Dimensions Weight	Cooling	mm kg m³/min	1048-950-330 88 63.0
Outdoor	Dimensions Weight Air Volume	Cooling Heating	mm kg m³/min m³/min	1048-950-330 88 63.0 77.0
Outdoor	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL)	Cooling Heating Cooling	mm kg m³/min m³/min dB(A)	1048-950-330 88 63.0 77.0 55
Outdoor	Dimensions Weight Air Volume Sound Level (SPL)	Cooling Heating Cooling Heating	mm kg m³/min m³/min dB(A) dB(A)	1048-950-330 88 63.0 77.0 55 57
Outdoor Unit	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL)	Cooling Heating Cooling Heating	mm kg m³/min m³/min dB(A) dB(A)	1048-950-330 88 63.0 77.0 55 57 70
Outdoor Unit	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Breaker Size	Cooling Heating Cooling Heating Cooling	mm kg m³/min m³/min dB(A) dB(A)	1048-950-330 88 63.0 77.0 55 57 70 32
Outdoor Unit	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Breaker Size	Cooling Heating Cooling Heating Cooling Liquid Gas	mm kg m³/min m³/min dB(A) dB(A) dB(A)	1048-950-330 88 63.0 77.0 55 57 70 32 6.35×6
Outdoor Unit	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Breaker Size Diameter	Cooling Heating Cooling Heating Cooling Liquid Gas (max)	mm kg m³/min dB(A) dB(A) A mm mm	1048-950-330 88 63.0 77.0 55 57 70 32 6.35×6 12.7×1+9.52×5 80 25
Outdoor Unit	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Breaker Size Diameter Total Piping Length	Cooling Heating Cooling Heating Cooling Liquid Gas (max)	mm kg m³/min m³/min dB(A) dB(A) a mm mm mm	1048-950-330 88 63.0 77.0 55 57 70 32 6.35×6 12.7×1+9.52×5 80
Outdoor Unit	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Breaker Size Diameter Total Piping Length Each Indoor Unit Piping	Cooling Heating Cooling Heating Cooling Liquid Gas (max)	mm kg m³/min m³/min dB(A) dB(A) dB(A) A mm mm	1048-950-330 88 63.0 77.0 55 57 70 32 6.35×6 12.7×1+9.52×5 80 25
Outdoor Unit Ext. Piping	Dimensions Weight Air Volume Sound Level (SPL) Sound Level (PWL) Breaker Size Diameter Total Piping Length Each Indoor Unit Piping Max. Height	Cooling Heating Cooling Heating Cooling Liquid Gas (max)	mm kg m³/min m³/min dB(A) dB(A) dB(A) nm mm mm	1048-950-330 88 63.0 77.0 55 57 70 32 6.35×6 12.7×1+9.52×5 80 25 15 (10)*3

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

#### MXZ-2D33VA

No. of	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	Maximum amount	
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

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

#### MXZ-3E68VA MXZ-4E72VA

No. of	Pipe le	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

<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

4 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-FF18VE + MSZ-FF26VE

MX2-2D42V42 → MSZ-EF18VE + MSZ-FF38VE

MX2-2D53VA(H)2 → MSZ-EF18VE + MSZ-FF38VE

MX2-3E64VA → MSZ-EF18VE + MSZ-FF38VE + MSZ-EF18VE

MX2-3E64VA → MSZ-EF18VE + MSZ-FF38VE + MSZ-FF38VE

MX2-4E72VA → MSZ-FF18VE + MSZ-FF38VE + MSZ-FF38VE + MSZ-FF38VE

MX2-4E33VA → MSZ-FF18VE + MSZ-FF38VE + MSZ-FF25VE

MX2-FF38VA → MSZ-FF18VE + MSZ-FF38VE + MSZ-FF22VE + MSZ-FF25VE

MX2-FF38VA → MSZ-FF18VE + MSZ-FF38VE + MSZ-FF22VE + MSZ-FF25VE

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

# MXZ-HA SERIES

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





MXZ-3HA50VF

### 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.

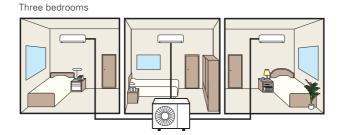


#### Easy to create various combinations

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

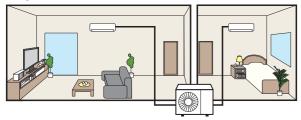
#### Two bedrooms



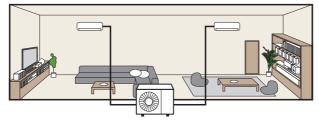


#### Living room and one bedroom

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Type (Inv	erter Multi - Split He	at Pump)		Up to 2 Ind	Up to 3 Indoor Units			
ndoor Un					Please refer to (*4)			
Outdoor l	Jnit			MXZ-2HA40VF	MXZ-2HA50VF	MXZ-3HA50VF		
Refrigerant					R32*1			
Power Source					Outdoor power supply			
upply	Outdoor (V/Phase/I	-lz)		220-230-240 / Single / 50				
cooling	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		А	А	A		
	Design Load		kW	4.0	5.0	5.0		
	Annual Electricity	Consumption*2	kWh/a	172	225	241		
	SEER*4,*5			8.12	7.78	7.26		
		Energy Efficiency	Class*4	A++	A++	A++		
eating	Capacity	Rated	kW	4.3	6.0	6.0		
verage	Imput	Rated	kW	0.91	1.54	1.30		
Season)	COP*4			4.73	3.90	4.62		
		EEL Rank*4		А	А	A		
	Design Load		kW	3.2	3.2	4.0		
	Declared at reference design temperature		kW	2.4	2.4	3.0		
	Capacity at bivale	nt temperature	kW	2.9	2.9	3.6		
		tion limit temperature	kW	2.1	2.1	2.6		
	Back Up Heating Capacity		kW	0.8	0.8	1.0		
	Annual Electricity Consumption*2 kWh			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>		
peratin	g Current (max)		А	12.2	12.2	18.0		
utdoor	Dimensions	$H \times W \times D$	mm	550 - 800 (+69) - 285 (+59.5)	550 - 800 (+69) - 285 (+59.5)	710 - 840 (+30) - 330 (+66)		
nit	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 Current	Cooling	А	4.9	6.8	5.6		
	Heating		А	4.6	6.9	5.8		
	Breaker Size A		А	15	15	25		
xt.	Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3		
iping	Total Piping Length	(max)	m	30	30	50		
	Each Indoor Unit Pi	ping 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 Length		m	30	30	40		
	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 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-3HA60VF MSZ-HR25VF + MSZ-HR25VF
MXZ-3HA60VF MSZ-HR25VF + MSZ-HR25VF
MXZ-3HA60VF 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.

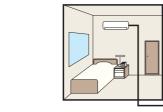


#### Easy to create various combinations

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

#### Two bedrooms

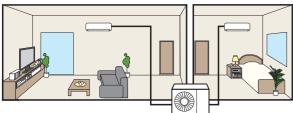




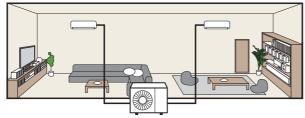


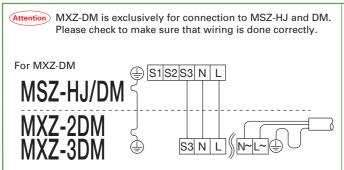


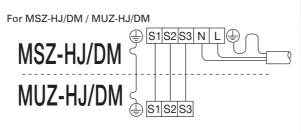
Living room and one bedroom





















Type (Inv	erter Multi - Split	Heat Pump)		Up to 2 Indoor Units	Up to 3 Indoor Units			
Indoor Unit				Please refer to (*4)				
utdoor l	Jnit			MXZ-2DM40VA	MXZ-3DM50VA			
Refrigerant				R41	R410A*1			
wer	Source			Outdoor p	ower supply			
pply	Outdoor (V/Phas	e/Hz)			ingle / 50			
Cooling	Capacity	Rated	kW	4.0	5.0			
	Input*4	Rated	kW	1.05	1.13			
	EER*4	•		3.81	4.42			
		EEL Rank*4		A	A			
	Design Load	<u>'</u>	kW	4.0	5.0			
	Annual Electric	ity Consumption*2	kWh/a	226	283			
	SEER*4.*5	-		6.1	6.1			
		Energy Efficiency (	Class*4	A++	A++			
ating	Capacity	Rated	kW	4.3	6.0			
erage/	Input	Rated	kW	1.16	1.31			
eason)	COP*4			3.71	4.58			
	EEL Rank*4			A	A			
	Design Load		kW	3.2	4.0			
	Declared at reference design temperature		kW	2.73	3.34			
	.   -	alent temperature	kW	3.01	3.73			
		eration 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			4.0	3.8			
			Class*4	A <sup>+</sup>	A			
eratin	Current (max)		Α	12.2	18.0			
	Dimensions	$H \times W \times D$	mm	550 - 800 (+69) - 285 (+59.5)	710 - 840 (+30) - 330 (+66)			
it	Weight		kg	32	57			
	Air Volume	Cooling	m³/min	29.2	37.5			
		Heating	m³/min	31.9	39.6			
	Sound Level (SPI	.) Cooling	dB(A)	48	50			
		Heating	dB(A)	52	53			
	Sound Level (PW		dB(A)	63	64			
	Operating Currer	t Cooling	А	5.1	5.0			
	_	Heating	Α	5.6	5.8			
	Breaker Size		А	15	25			
t.	Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3			
oing	Total Piping Leng	th (max)	m	30	50			
		Piping Length (max)	m	20	25			
	Max. Height		m	15 (10)*3	15 (10)*³			
	Chargeless Lengt	h	m	20	40			
Jarante	d Operating Range		℃		~ +46			
utdoorl		Heating	°C		~ +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.

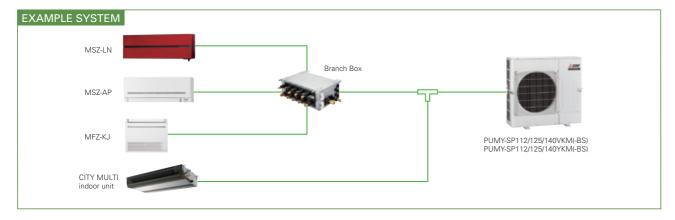
MXZ-3DM40VA MSZ-DMZ5VA + MSZ-DMZ5V

# 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.

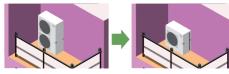
Light weight design facilitates easy installation and transportation.



#### 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.



## 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.

# You can install it in locations that you unit to be installed on balcould not before.

Easy installation and transportation

An external static pressure of 30Pa

The installation location is flexible, An external static pressure

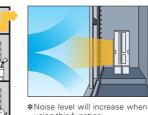
thanks to its 30Pa static pressure. of 30Pa allows outdoor

The reduced weight and height allow for better

transportation performance.

Carrying and installing be-

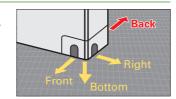
come easier.



using this function

conies in high-rise building

or spaces near louvers.















Model				DUBBLO CRACO (ICAL DO)	DI INNI ODIONI II/ANI DOI	DUBBLODA (A) WAR DO	DI 1851/ OB 4401///51/ DO	DI HAY OR CONTROL DO	DUBBLION OF LOWER DO	
				PUMY-SP112VKM(-BS)	PUMY-SP125VKM(-BS)	PUMY-SP140VKM(-BS)	PUMY-SP112YKM(-BS)	PUMY-SP125YKM(-BS)	PUMY-SP140YKM(-BS)	
Power Source		×1	11147		220 - 230 - 240V 50Hz / 2			880 - 400 - 415V 50Hz / 3		
Cooling Capacity (nominal)	<u> </u>		kW	12.5	14.0	15.5	12.5	14.0	15.5	
(IIOIIIIIII)	Power Inpu		kW	3.10	3.84	4.70	3.10	3.84	4.70	
	Current Inp	ut	A	14.38 - 13.75 - 13.18 / 14.38	17.81 - 17.04 - 16.33 / 17.81		4.96 - 4.71 - 4.54 / 4.96	6.14 - 5.83 - 5.62 / 6.14	7.52 - 7.14 - 6.88 / 7.52	
	EER		kW/kW	4.03	3.65	3.30	4.03	3.65	3.30	
Temp. Range of Cooling*4	Indoor Tem		W.B.	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	
	Outdoor Te		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	KVV	14.0	16.0	16.5	14.0	16.0	16.5	
(nominal)	Power Inpu	rt	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 / 6.43	
	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	
Indoor 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	Branch Box	City Multi	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	
	System	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 Level (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		mm	15.88 Flare						
Fan	Type × Qua	ntity		Propeller Fan × 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 / 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	
				10.70	10.70			.0.70		

\*1,\*2 Nominal conditions

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

- \*3 10 to 52°C; incase of connecting PKFY-P15/P20/P25VBM, 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				Branch Box					
Model Name	•			PAC-MK54BC	PAC-MK34BC				
Connectable Number of Indoor Units				Maximum 5 Maximum 3					
Power Supply (from outdoor unit)				~ / N, 220 / 230 / 240 V, 50 Hz, ~ / N, 220 / 230 V, 60 Hz					
Input kW			kW 0.003						
Running Cur	Running Current A		A	0.05 (Max. 6)					
Dimensions		$H \times W \times D$	mm	170 × 450 × 280					
Weight	<b>Weight</b> kg		7.4	6.7					
Piping	Branch [Indoor Side]	Liquid	mm	ø6.35 × 5	ø6.35 × 3				
Connection		Gas	mm	ø9.52 × 4, ø12.7 × 1	ø9.52 × 3				
(Flare)	Main	Liquid	mm	ø9.52					
	[Outdoor Side]	Gas	mm	ø15.88					

#### Pranch hav compatible tables

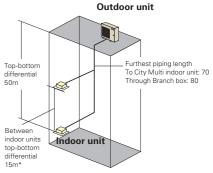
Branch box	compatible table>				
Outdoor unit	Branch box	PAC-MK31/ 51BC(B)	PAC-MK32/ 52BC(B)	PAC-MK33/ 53BC(B)	PAC-MK34/ 54BC
Outdoor unit	PUMY-SP112/125/140V/ YKM(-BS)	✓	N/A	N/A	N/A
1fan	PUMY-SP112/125/140V/ YKMR1(-BS)	N/A	N/A	✓	✓
	PUMY-SP112/125/140V/ YKM(-BS)R2	N/A	N/A	✓	✓
Outdoor unit	PUMY-P112/125/140V/YKM4(-BS)	√*	✓	✓	✓
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 lengthTo	City Multi indoor
	unit: 70
т	brough Branch boy: 90

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.)

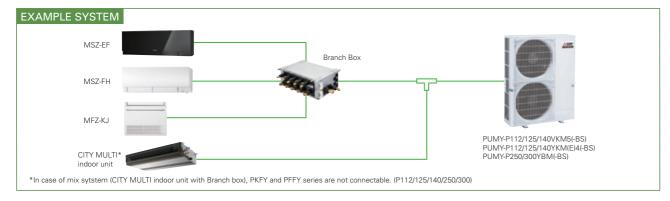
# PUMY-P<sub>SERIES</sub>

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





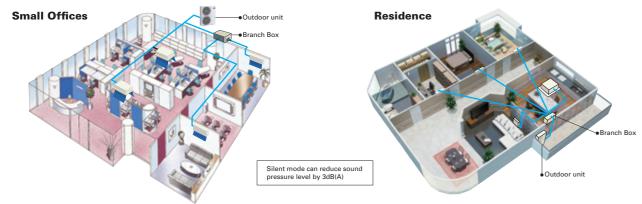
PUMY-P112/125/140VKM5(-BS) PUMY-P112/125/140YKM(E)4(-BS) PUMY-P200YKM2(-BS) PUMY-P250/300YBM(-BS)



#### 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	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	150	)	
		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		
250/300	Refrigerant Piping Length	Total Length	310	240	310	)	
		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			PLIMY-P112VKM5(-RS)	PUMY-P125VKM5(-RS)	PLIMY-P140VKM5(-RS)	PLIMY-P112VKM4(-RS)	PLIMY-P125VKM4/-RS)	PUMY-P140YKM4(-RS)	PLIMY-P200VKM2(-RS)	PUMY-P250YBM(-BS)	PLIMY-P300YBM(-RS)
Power Source				se 220 - 230 - 240V		TOMET FIRE TRAINING BOY	Tomit i Estimit, 50	3-phase 380 - 4		1 01111 1 2001 5111 ( 50)	r omr rootism( so)
Cooling Capacity		*1 kW	12.5	14.0	15.5	12.5	14.0	15.5	22.4	28.0	33.5
(nominal)	Power Input	kW	2.79	3.46	4.52	2.79	3.46	4.52	6.05	8.21	10.12
	Current Input	A	12.87 - 12.32 - 11.80	15.97 - 15.27 - 14.64	20.86 - 19.95 - 19.12	4.99 - 4.74 - 4.57	5.84 - 5.55 - 5.35	7.23 - 6.87 - 6.62	9.88 - 9.39 - 9.05	13.35 - 12.68 - 12.22	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	Indoor Temp.	W.B.	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C	15.0 - 24.0°C
of Cooling	Outdoor Temp.	*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		*2 kW	14.0	16.0	18.0	14.0	16.0	18.0	25.0	31.5	37.5
(nominal)	Power Input	kW	3.04	3.74	4.47	3.04	3.74	4.47	5.84	7.41	9.12
	Current Input	A	14.03 - 13.42 - 12.86	17.26 - 16.51 - 15.82	20.63 - 19.73 - 18.91	5.43 - 5.16 - 4.98	6.31 - 6.00 - 5.78	7.15 - 6.79 - 6.55	9.54 - 9.06 - 8.74	12.11 - 11.51 - 11.09	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 Temp.	D.B.	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C	15.0 - 27.0°C
of Heating	Outdoor Temp.	W.B.	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C	-20.0 - 15.0°C
Indoor Unit	Total Capacity					50 to 130% of ou	tdoor unit capacity				
Connectable	Model / Quantit	ty 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 <sup>∗⁵</sup>	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
	Mixed Brai		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
	System 1 un	it 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
	Bran Box		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 un	its 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
	Bran Box	ch City Multi	-	-	-	-	-	-	-	10 - 250 / 22	10 - 250 / 22
	3 un	its Branch Box	-	-	-	-	-	-	-	15 - 50 / 12	15 - 50 / 12
Sound Pressure Le (measured in anec		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 × Quantity	1					Propeller Fan x 2				
	Air Flow Rate	m³/min			1	10			139	165 / 183	165 / 183
		L/s			1,8	383			2,316	2,750 / 3,050	2,750 / 3,050
		cfm			3,8	384			4,908	5,826 / 6,462	5,826 / 6,462
	Motor Output	kW			0.074	+ 0.074			0.20 + 0.20	0.375 × 2	0.375 × 2
Compressor	Type × Quantity					Scrol	I hermetic compresso	or x 1			
	Starting Metho						Inverter				
	Motor Output	kW	2.9	3.5	3.9	2.9	3.5	3.9	5.3	5.7	6.9
External Dimension	ns (H × W × D)	mm			1,	338 × 1,050 × 330 (+				1,662 × 1,05	
Weight		kg		123			125		141	196 (198)	196 (198)

.,				
	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-P15/20/25/93VBM, 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;
- \* At least 2 indoor units via branch box, connectable indoor units are 2,
   \* 5 At least 2 indoor units wia 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	t kW	2.79	3.46	4.52
	Current Inpo	ut 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
emp. Range	Indoor Temp	p. W.B.		15 to 24°C	
of Cooling	Outdoor Ter	<b>np.</b> *3 D.B.		−5 to 52°C	
leating Capacity		*2 kW	14.0	16.0	18.0
nominal)	Power Input	t kW	3.04	3.74	4.47
	Current Inpo	ut 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	p. D.B.		15 to 27°C	
f Heating	Outdoor Ter	mp. W.B.		−20 to 15°C	
ndoor Unit	Total Capac	ity		50 to 130% of outdoor unit capacity	
onnectable	Model / Qua	antity City Mul	* <sup>6</sup> 10 - 140 / 9	10 - 140 / 10	10 - 140 / 12
		Branch B	ox*5 15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
	IVIIACU	Branch Box City Mul	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5
	System	1 unit Branch E	ox 15 - 100 / 5	15 - 100 / 5	15 - 100 / 5
		Branch Box	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3
		2 units Branch E	ox 15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8
ound Pressure Le neasured in aned		dB <a></a>	49 / 51	50 / 52	51 / 53
efrigerant Piping	Liquid Pipe	mm		9.52 Flare	
iameter	Gas Pipe	mm		15.88 Flare	
an	Type x Qua	ntity		Propeller Fan × 2	
	Air Flow Ra	te m³/min		110	
		L/s		1,833	
		cfm		3,884	
	Motor Outp	ut kW		0.074 + 0.074	
ompressor	Type x Qua	ntity		Scroll hermetic compressor × 1	
	Starting Me	thod		Inverter	
	Motor Outp	ut kW	2.9	3.5	3.9
xternal Dimension	ns (H × W × D	)) mm		1,338×1,050×330 (+40)	
Veight		kg		136	

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

- \*3 10 to 52\*C D.B.: When connecting PKFY-P15/20/25/98M, PFFY-P20/25/32VKM and PFFY-P20/25/32VLF(RIM), 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 It is possible to connect 1 Fresh Air type indoor unit to 1 outdoor unit. (1:1 system)

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Model Name DVC-WKEVBC PAC-MK34BC ~ / N. 220 / 230 / 240 V. 50 Hz. ~ / N. 220 / 230 V. 60 Hz Power Supply (from outdoor unit) Running Current Branch ø6.35 × 5 ø6.35 × 3 ø9.52 × 4, ø12.7 × 1 ø9.52 × 3 ø15.88

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

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 Hea			MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3	MXZ
r Unit										4F80VF3				6F122VF		2HA50VF	3HA50
ries	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														_	_
-	Floor-	MSZ-DW50VF															
	Standing	MFZ-KT25VG MFZ-KT35VG	•	•	•	•	•	•	•	•	•	•	•	•			
										•		•		•			
-	1	MFZ-KT50VG					•	•	•	_	•	_	_	_			
	1-way Cassette	MLZ-KP25VF		•	•	•	•	•	•	•	•	•	•	•			
		MLZ-KP35VF		•	•	•	•	•	•	•	•	•	•	•			
		MLZ-KP50VF							•	•	•	•	•	•			
ries	2×2 Cassette	SLZ-M15FA2	•	•	•	•	•	•	•	•	•	•	•	•			
	Ousselle	SLZ-M25FA2			•				•	•	•	•	•	•			
		SLZ-M35FA2		•	•	•	•	•	•	•	•	•	•	•			
		SLZ-M50FA2							•	•	•	•	•	•			
	Ceiling- Concealed	SEZ-M25DA2*2	•	•	•	•	•	•	•	•	•	•	•	•			
	Concealed	SEZ-M25DAL2 *2			•	•		•	•	•	•	•	•	•			
		SEZ-M35DA2		•	•	•	•	•	•	•	•	•	•	•			
		SEZ-M35DAL2			•	•			•	•	•	•	•	•			
		SEZ-M50DA2					•		•	•	•	•	•	•			
		SEZ-M50DAL2							•	•	•	•	•	•			
		SEZ-M60DA2							•	•	•	•	•	•			
		SEZ-M60DAL2							•	•	•	•	•	•			
		SEZ-M71DA2									•	•	•	•			
		SEZ-M71DAL2									•	•	•	•			
ries	Ceiling-	PCA-M50KA2					•	•	•	•							
	Suspended	PCA-M60KA2						•	•	•							
		PCA-M71KA2															
	Ceiling-	PEAD-M50JA2					<b>0</b> *1	<b>•</b> *1	<b>•</b> *1	<b>•</b> *1							
	Concealed	PEAD-M50JAL2					•1	0*1	0*1	•1							
		PEAD-M60JA2															
		PEAD-M60JAL2															
		PEAD-M71JA2 PEAD-M71JAL2															

#### ■ 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	147.11	1107   1100   0 010 0 0 (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	Tuno	Model Name						Capacity					
Selles	Type	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		<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>●*1</b>
	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.	Model Name	Capacity											
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	ssnay *2							GUF-50/1	00RD(H)4						

#### ■ PUMY-P Series

Branch Box Connection Compatibility Table

Series	Tuno	Model Name						Capacity					
Series	Type	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				
Series	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					P140 P200					
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 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			•	•	•	•	•	•						
	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

Series	I/I Tuno	Model Name					Сар	acity		
Selles	I/U Type	Model Name	15	18	20	22	25	35	42	50
M series	Wall-Mounted	MSZ-LN•VG2								•
		MSZ-AP•VG(K)	•						•	
		MSZ-FH•VE2								
		MSZ-EF•VG(K)		•		•	•	•	•	
	Floor-Standing	MFZ-KT•VG					•	•		•

#### CUTY MULTI Indoor Unit Compatibility Table

0 :	_									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			•	•	•	•	•	•		•	•	•			
Selles	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						

\*1 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

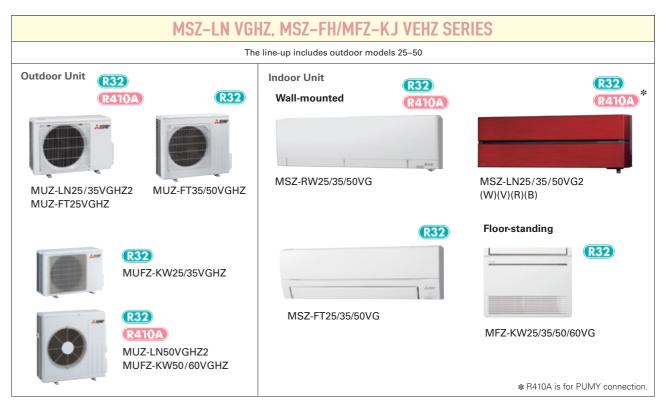
\*3 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

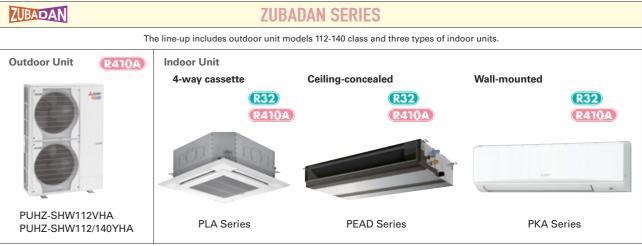
# POWERFUL HEATING HEATING SERIES



## **SELECTION**

Choose the series that best matches the building layout.







# SFRIES RAIDA SFRIES

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.



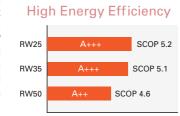


MSZ-RW25/35/50VG

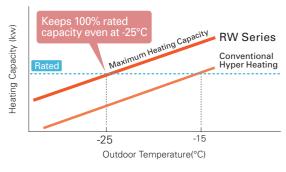
#### **Heating Performance**

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

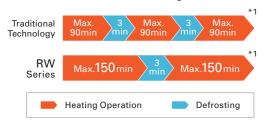


#### Wider Heating Operation Range



#### **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.



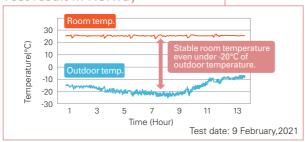
<sup>\*1</sup> The time for heating and defrosting operation depends on the environmental conditions

#### 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

year round.



Coating used

000 No Dual Barrier Dual Barrier

3 Air Duct

4 Horizontal Vane Air Duct ine Vertical Vane

**Dual Barrier Material** 

Dual Barrier Material performs the same antifouling effect as Dual

Barrier Coating, and it is kneaded into horizontal vane and vertical vane material which are hard to apply coating to. Combined with Dual

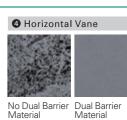
Barrier Coating, the whole air passage of indoor unit is kept clean all

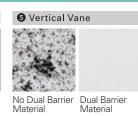


Coating used

(Image after 10 years)







\*1 \*2 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.htm

#### **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.

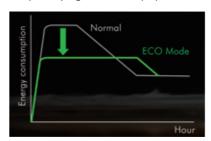
#### Wide Room Mode

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



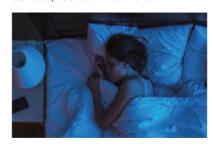
#### Eco Mode

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



#### **Quiet Mode**

Lowers operation noise level, creating quieter and peaceful environment.



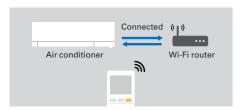
#### Built-in Wi-Fi & App Control

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.



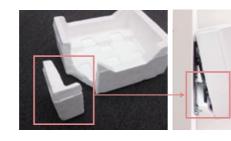
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reinforced to ensure the strength.

#### 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



MSZ-RW25/35/50VG

#### **Outdoor Unit**







MUZ-RW50VGHZ































Self Diagnosis	Failure Recal	

Туре					Inverter Heat Pump							
ndoor Un	it			MSZ-RW25VG	MSZ-RW35VG	MSZ-RW50VG						
Outdoor U	Init			MUZ-RW25VGHZ	MUZ-RW35VGHZ	MUZ-RW50VGHZ						
Refrigerar	nt				R32 (*1)							
Power	Source			Outdoor Power supply								
Supply	Outdoor (V/Phase/H	lz)			230/Single/50							
Cooling	Design Load		kW	2.5	3.5	5.0						
	Annual Electricity Consumption (*2)			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						
leating	Design Load		kW	3.2	4.0	6.0						
Average Season)(+5)	Declared Capacity	at reference design temperature	kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)						
easuii)		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			0.0	0.0	0.0						
	Annual Electricity Co	onsumption (*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						
perating	Current (max)		A	9.8	11.2	15.2						
ndoor	Input	Rated	kW A	0.021	0.022	0.041						
Jnit	Operating Current (r	Operating Current (max)		0.21	0.22	0.37						
	Dimensions	$H \times W \times D$	mm	305 - 998 - 247	305 - 998 - 247	305 - 998 - 247						
	Weight		kg	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 (*	") Heating	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 <sup>(*)</sup>	Heating	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						
utdoor	Dimensions	$H \times W \times D$	mm	714 - 800 - 285	714 - 800 - 285	880 - 840 - 330						
Jnit	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						
		Heating	dB(A)	49	50	54						
	Sound Level (PWL)	Cooling	dB(A)	60	61	64						
	Operating Current (max)			9.6	11.0	14.8						
	Breaker Size		А	10	12	16						
xt.	Diameter	Liquid / Gas	mm	6.35/9.52	6.35/9.52	6.35/9.52						
Piping	Max. Length	Out-In	m	20	20	30						
	Max. Height	Out-In	m	12	12	15						
	d Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	−10 ~ +46						
Outdoor1		Heating	°C	-30 ~ +24	−30 ~ +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 years for 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 trie applications to use the standard test results. Actual energy consumption will depend on now trie applications to use the standard test results. Actual energy consumption will depend on now trie applications used on standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used on the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results. Actual energy consumption will depend on now trie applications used to the standard test results and the standard test results are standard test results and the standard test results are standard test results and the standard test resul

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

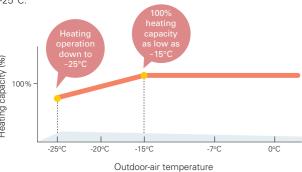
Unlike conventional air conditioning systems, the LN Series don't lose heating capacity when it's cold outside. Original technologies ensure excellent heating performance under extremely low outdoor temperatures and an impressive guaranteed operating range.



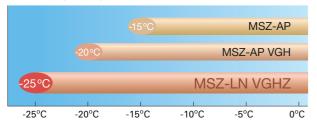


#### **Unparalleled Heating Performance**

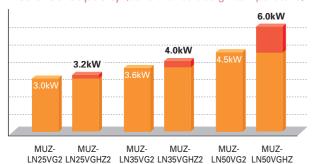
LN Series outdoor units are equipped with a high-output compressor that provides enhanced heating performance under low outdoor temperatures. The heating operation range is extended down to



#### **Operating Range**

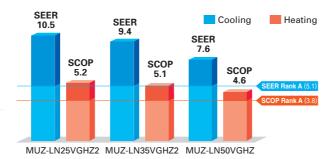


#### Declared Capacity (at reference design temperature)



#### 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

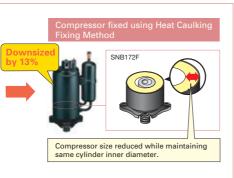
With Freeze-prevention heater

#### 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.

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## R32 Inverter ( PAM PAM 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 Plus Coating Filter Vane SWING SWING SAUTO

Туре					Inverter Heat Pump						
Indoor Un	nit			MSZ-LN25VG2(W)(V)(R)(B)	MSZ-LN35VG2(W)(V)(R)(B)	MSZ-LN50VG2(W)(V)(R)(E					
Outdoor l	Unit			MUZ-LN25VGHZ2	MUZ-LN35VGHZ2	MUZ-LN50VGHZ					
Refrigerar	nt				R32 (*1)						
Power	Source			Outdoor Power supply							
Supply	Outdoor (V/Phase/H	z)		230/Single/50							
Cooling	Design Load		kW	2.5	5.0						
	Annual Electricity Co	nsumption (*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	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)					
Jeasuii/	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		kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)					
	Annual Electricity Co	nsumption (*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					
Operating	g Current (max)		A	9.9	10.5	15.2					
Indoor	Input	Rated	kW	0.027	0.027	0.034					
Unit	Operating Current (r	nax)	A	0.3	0.3	0.4					
	Dimensions	$H \times W \times D$	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 - 15.7					
	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					
Outdoor	Dimensions	$H \times W \times D$	mm	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330					
Unit	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)			9.6	10.2	14.8					
	Breaker Size		А	10	12	16					
Ext.	Diameter Liquid / Gas		mm	6.35/9.52	6.35/9.52	6.35/9.52					
Piping	Max. Length	Out-In	m	20	20	30					
	Max. Height	Out-In	m	12 12		15					
	ed Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	−10 ~ +46					
[Outdoor]		Heating	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24					

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.

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

# 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





#### **Compact Design**

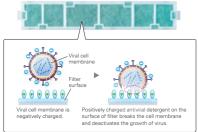
The FT series features its compact design with 280mm height and 229mm depth, which is suitable for the installation above the door.



#### 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

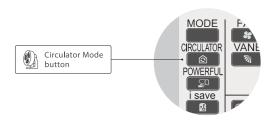
The remote controller screen is equipped with an LED backlight. The luminous screen allows you to check the setting easily even in the dark.



#### 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.



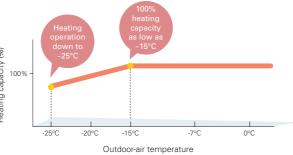
## Built-in Wi-Fi

(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

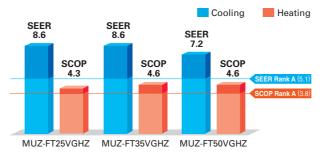
Mitsubishi Electric's powerful compressor and highly cold-resistant parts enable the heat pump to provide 100% or more heating capacity even at -15°C, and also the heating operation is guaranteed down to -25°C.



#### 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)

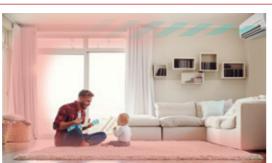


Image is for illustration purposes.

# Inverter PAM SEER SCOP A\*\* MSZ-FT SERIES Indoor Unit Remote Controller Outdoor Unit MSZ-FT25/35/50VG(K)

V Blocking Air Purifying Fifter Cooling Coolin

уре					Inverter Heat Pump		
ndoor Un	nit			MSZ-FT25VG(K)	MSZ-FT35VG(K)	MSZ-FT50VG(K)	
Outdoor U	Jnit			MUZ-FT25VGHZ	MUZ-FT35VGHZ	MUZ-FT50VGHZ	
Refrigerar	nt				R32 (*1)		
Power	Source				Outdoor power supply		
Supply	Outdoor (V/Phase/I	Hz)			230 / Single / 50		
Cooling	Design Load		kW	2.5	3.5	5.0	
	Annual Electricity C	onsumption (*2)	kWh/a	101	142	243	
	SEER (*4)			8.6	8.6	7.2	
		Energy Efficiency Class		A+++	A+++	A++	
	Capacity	Rated	kW	2.5	3.5	5.0	
		Min - Max	kW	0.8 - 3.5	0.8 - 4.0	0.8 - 5.2	
	Total Input	Rated	kW	0.580	0.910	1.630	
Heating	Design Load		kW	3.2 (-10°C)	4.0 (-10°C)	5.0 (-10°C)	
(Average Season)(+5)	Declared Capacity	at reference design temperature	kW	3.2 (-10°C)	4.0 (-10°C)	5.0 (-10°C)	
Season)"		at bivalent temperature	kW	3.2 (-10°C)	4.0 (-10°C)	5.0 (-10°C)	
		at operation limit temperature	kW	3.0 (-25°C)	3.4 (-25°C)	3.6 (-25°C)	
	Back Up Heating Ca	pacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	
	Annual Electricity C	onsumption (*2)	kWh/a	973	1216	1625	
	SCOP (+4)			4.6	4.6	4.3	
		Energy Efficiency Class		A++	A++	A <sup>+</sup>	
	Capacity Rated		kW	3.2	4.0	5.0	
	Min - Max		kW	0.9 - 6.2	0.9 - 6.6	0.9 - 7.8	
	Total Input Rated		kW	0.760	1.020	1.300	
Operating	g Current (max)		A	10.0	11.6	13.9	
Indoor	Input Rated		kW	0.039	0.04	0.047	
Unit	Operating Current (max)		A	0.4			
	Dimensions H × W × D n		mm		280 - 838 - 229		
	Weight		kg		10		
	Air Volume Cooling		m³/min	3.9 - 5.9 - 8.2 - 10.4 - 12.3	3.9 - 6.1 - 8.3 - 10.7 - 13.1	5.5 - 7.6 - 9.8 - 12.0 - 13.1	
	(SLo-Lo-Mid-Hi-SHi	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.	
	Sound Level (SPL)	Cooling	dB(A)	19 - 27 - 36 - 41 - 46	19 - 27 - 36 - 42 - 47	28 - 34 - 40 - 45 - 48	
	(SLo-Lo-Mid-Hi-SHi	Heating	dB(A)	19 - 31 - 39 - 46 - 49	19 - 33 - 42 - 49 - 52	28 - 36 - 45 - 51 - 54	
	Sound Level (PWL)		dB(A)		60		
	Dimensions	$H \times W \times D$	mm	550 - 800 - 285	714 - 800 - 285	714 - 800 - 285	
Unit	Weight		kg	34	40	40	
	Air Volume	Cooling	m³/min	30.4	40.2	40.2	
		Heating	m³/min	30.4	40.2	40.2	
	Sound Level (SPL)	Cooling	dB(A)	46	49	51	
		Heating	dB(A)	49	52	54	
	Sound Level (PWL)	Cooling	dB(A)	60	61	64	
	Operating Current (	max)	А	9.6	11.2	13.5	
	Breaker Size		А	12	12	16	
Ext.	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	
Piping	Max. Length	Out-In	m	20	30	30	
	Max. Height	Out-In	m	12	15	15	
Guarantee	ed Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	
[Outdoor]		Heating	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	

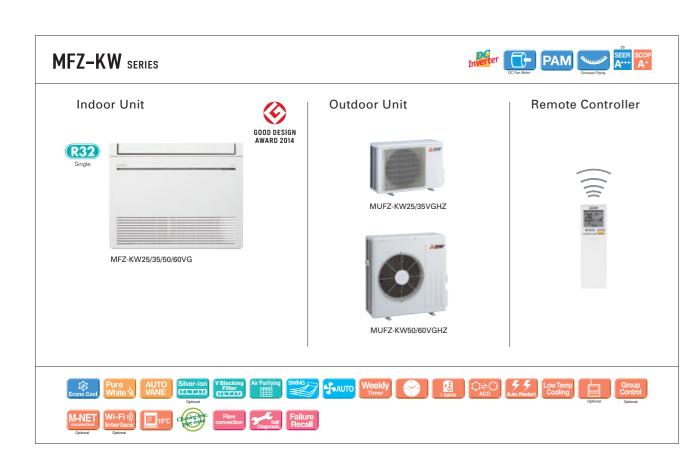
Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1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

Wi-Fi i) and the state of the s

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

<sup>(\*3)</sup> 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 53-55 for heating (warmer season) specifications.



Туре	Type ndoor Unit		Inverter Heat Pump					
			MFZ-KW25VG	MFZ-KW35VG	MFZ-KW50VG	MFZ-KW60VG		
	utdoor Unit			MUFZ-KW25VGHZ	MUFZ-KW35VGHZ	MUFZ-KW50VGHZ	MUFZ-KW60VGHZ	
Refrigerant			R32 (*1)					
Power	Source						ower supply	
Supply	Outdoor (V/Phase/F	łz)				230 / Si	ingle / 50	
Cooling	Design Load			kW	2.5	3.5	5.0	6.1
	Annual Electricity C	onsump	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		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	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	00	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>	3))	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)	201	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>	3)	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			Α	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]	I		Territoria.	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

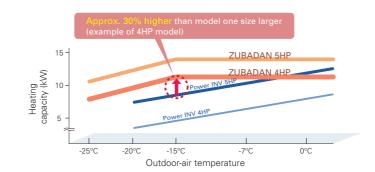
The ZUBADAN Series incorporates an original Flash Injection technology that improves the already high heating capacity of the system. This new member of the series line-up ensures comfortable heat pump-driven heating performance in cold regions.

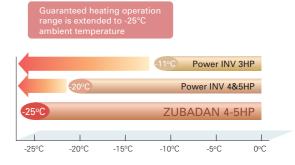


\* Units in photo are Japanese models European model specifications are different

#### 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.

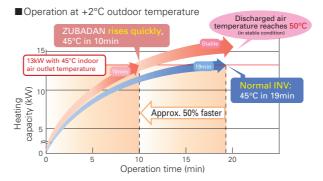


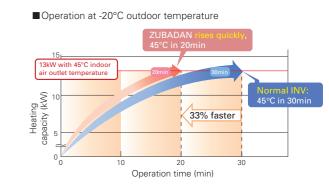


#### **Enhanced Comfort**

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.

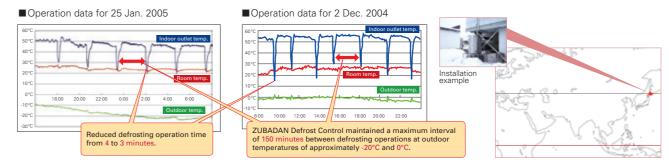
#### Quick Start-up





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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+

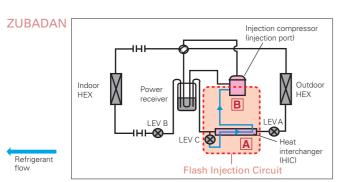


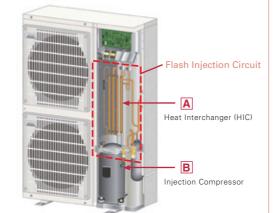
Powerful heating yet annaully high energy efficiency in both cooling and heating, achieving rank A and A+.



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

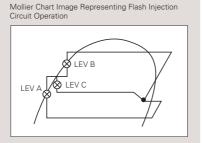
#### ■ Flash Injection Circuit





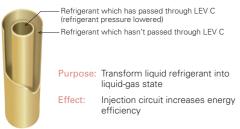
The ZUBADAN Series is equipped with Mitsubishi Electric's original Flash Injection Circuit, which is comprised of a bypass circuit and heat interchanger (HIC). The HIC transforms rerouted liquid refrigerant into a gas-liquid state to lower compression load. This process ensures excellent heating performance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

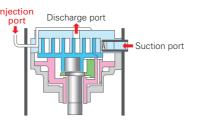


#### A Heat Interchanger (HIC)

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.

## PLZ-SHW SERIES

















#### **Panel**

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	<b>✓</b>			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM2	✓		✓	
PLP-6EALME2	✓	✓	✓	

**Outdoor Unit** R410A

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



Remote Controller



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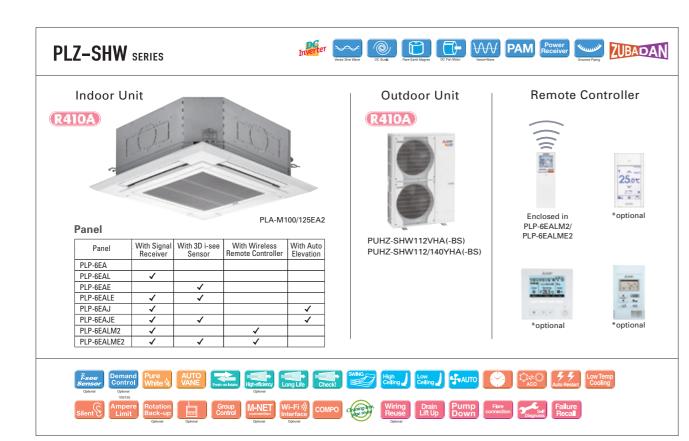


Туре					Inverter Heat Pump	
Indoor Unit				PI A-7	M100EA2	PLA-ZM125EA2
Outdoor Unit				PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
Refrigerar					R410A*1	
Power	Source				Outdoor power supply	
Supply	Outdoor (V/Phase/H	łz)			VHA: 230 / Single / 50, YHA: 400 / Three / 50	
Cooling	Capacity	Rated	kW	10.0	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	-
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	2.667	2.667	4.000
	COP			4.20	4.20	3.50
		EEL Rank		-	-	-
	Design Load		kW	12.7	12.7	_
	Declared Capacity	at reference design temperature	kW	11.2 (-10°C)	11.2 (-10°C)	_
	' '	at bivalent temperature	kW	11.2 (-7°C)	11.2 (-7°C)	_
		at operation limit temperature	kW	9.3 (-25°C)	9.3 (-25°C)	_
	Back Up Heating Ca		kW	1.5	1.5	_
	Annual Electricity Consumption*2		kWh/a	4420	4420	_
	SCOP*4			4.0	4.0	-
		Energy Efficiency Class		A+	A+	-
Operating	g Current (max)		Α	35.5	13.5	13.5
Indoor	Input [Cooling/Heating	Rated	kW	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08
Unit	Operating Current (r		Α	0.47	0.47	0.52
	Dimensions <panel></panel>		mm		298-840-840 <40-950-950>	
	Weight <panel></panel>	1	kg	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-N	Mi1-Hi]	m³/min	19 - 22 - 25 - 28	19 - 22 - 25 - 28	21 - 24 - 26 - 29
	Sound Level (SPL) [L	o-Mi2-Mi1-Hi]	dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 36 - 39 - 41
	Sound Level (PWL)	-	dB(A)	61	61	62
Outdoor	Dimensions	$H \times W \times D$	mm		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 (r		А	35	13	13
	Breaker Size		Α	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	℃	-15 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor]		3	-		.00	10 110

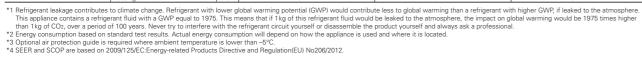
<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means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

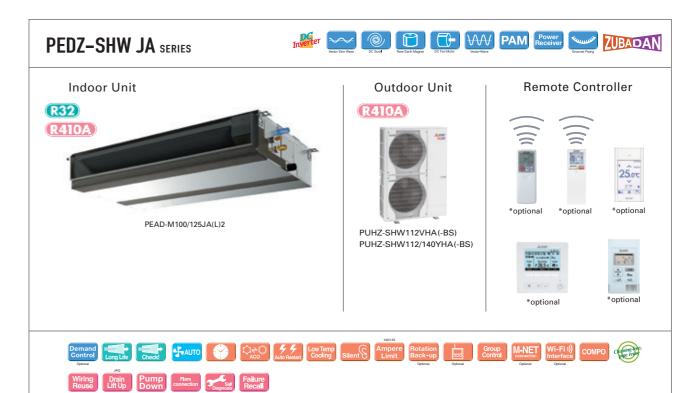
-25 ~ +21

-25 ~ +21



Туре					Inverter Heat Pump		
Indoor Un	it			PLA-M	100EA2	PLA-M125EA2	
Outdoor U				PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA	
lefrigerar					R410A*1		
ower	Source				Outdoor power supply		
upply	Outdoor (V/Phase/H	(z)			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	2.940	2.940	5.000	
	EER	riatos	1000	3.40	3.40	2.50	
		EEL Rank		-	_	-	
	Design Load		kW	10.0	10.0	_	
	Annual Electricity Co	nnsumntion*2	kWh/a	661	661	_	
	SEER*4	onsumption .	KVVII/a	5.3	5.3	_	
		Energy Efficiency Class		5.5 A	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	4.5 - 14.0 2.793	4.5 - 14.0 2.793	4.000	
	COP	nateu	KVV	4.01	4.01	3.50	
	COF	EEL Rank		4.01	4.01	3.50	
	Design Load	EEL NAIIK	kW	12.7	12.7	-	
		lat reference desire table :					
	Declared Capacity	at reference design temperature	kW	11.2 (-10°C)	11.2 (-10°C)	-	
		at bivalent temperature		11.2 (-7°C)	11.2 (-7°C)	-	
	B. I. H. H. K. O.	at operation limit temperature	kW	9.3 (-25°C)	9.3 (-25°C)	-	
	Back Up Heating Capacity  Annual Electricity Consumption*2		kW	1.5	1.5	-	
	SCOP*4	onsumption^-	kWh/a	4445	4445	-	
	SCOP	Energy Efficiency Class		4.0 A+	4.0 A+	-	
	g Current (max)	Energy Emciency Class				- 10.7	
		da	A	35.5	13.5	13.7	
door nit	Input [Cooling/Heating		kW	0.07 / 0.07	0.07 / 0.07	0.08 / 0.08	
	Operating Current (r		А	0.47 0.47		0.52	
	Dimensions <panel></panel>	H×WXD	mm		298-840-840 <40-950-950>	I	
	Weight <panel></panel>	424 112	kg	26 <5>	26 <5>	26 <5>	
	Air Volume [Lo-Mi2-N		m³/min	19 - 22 - 25 - 28	19 - 22 - 25 - 28	21 - 24 - 26 - 29	
	Sound Level (SPL) [L	LO-IVIIZ-IVIIT-HIJ	dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 36 - 39 - 41	
	Sound Level (PWL)	Tu w B	dB(A)	61	61	62	
utdoor nit	Dimensions	$H \times W \times D$	mm	100	1350 - 950 - 330 (+30)	104	
	Weight	I Continu	kg	120	134	134	
	Air Volume	Cooling	m³/min	100	100	100	
	0 11 160	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		69	69	69	
	Operating Current (r	max)	Α	35	13	13	
	Breaker Size		А	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	
	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	
Outdoor]		Heating	°C	-25 ~ +21	-25 ~ +21	-25 ~ +21	





_						
Туре				DEAD A	Inverter Heat Pump	DEAD AMOS MAILS
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		kW	1.5	1.5	_
	Annual Electricity Consumption*2		kWh/a	4601	4601	_
	SCOP*4		Keenya	3.8	3.8	_
		Energy Efficiency Class		A	A	_
Operatin	g Current (max)		Α	37.7	15.7	15.8
Indoor	Input [Cooling / Heati	ngl Bated	kW	0.14	0.14	0.20
Unit	Operating Current (r		A	2.25	2.25	2.34
	Dimensions	H × W × D	mm	250 - 1400 - 732	250 - 1400 - 732	250 - 1400 - 732
	Weight	1174775	kg	36	36	37
	Air Volume [Lo-Mid-h	4i1	m³/min	23.0-28.0-32.0	23.0 - 28.0 - 32.0	28.0 - 34.0 - 37.0
	External Static Press	<u>'</u>	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	<40> - 50 - <70> - <100> - <150>
	Sound Level (SPL) [L		dB(A)	31 - 36 - 39	31 - 36 - 39	35 - 39 - 41
	Sound Level (PWL)	to wild this	dB(A)	62	62	66
Outdoor	Dimensions	H × W × D	mm	1350 - 950 - 330 (+30)	1350 - 950 - 330 (+30)	1350 - 950 - 330 (+30)
Unit	Weight	11 \ VV \ D	kg	120	134	134
	Air Volume	Cooling	m³/min	100	100	100
	All volume	Heating	m³/min	100	100	100
	Sound Level (SPL)	Cooling	dB(A)	51	51	51
	Soulid Level (SFL)		dB(A)	52	52	52
	Sound Level (PWL)	Heating Cooling	dB(A)	69	69	69
			aB(A)	35	13	13
	Operating Current (max) Breaker Size			35 40	13	16
Ext.	Diameter	Liquid / Gas	Α	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
Ext. Piping			mm			
ba	Max. Length	Out-In	m	75	75	75
	Max. Height	Out-In	m	30	30	30
Guarantee [Outdoor]	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46
		Heating	°C	−25 ~ +21	−25 ~ +21	−25 ~ +21
*1 Refrige	rant leakage contributes	to climate change. Refrigerant with	lower a	lobal warming potential (GWP) would contribu	ite less to global warming than a refrigerant wi	th higher GWP if leaked to the atmosphere.

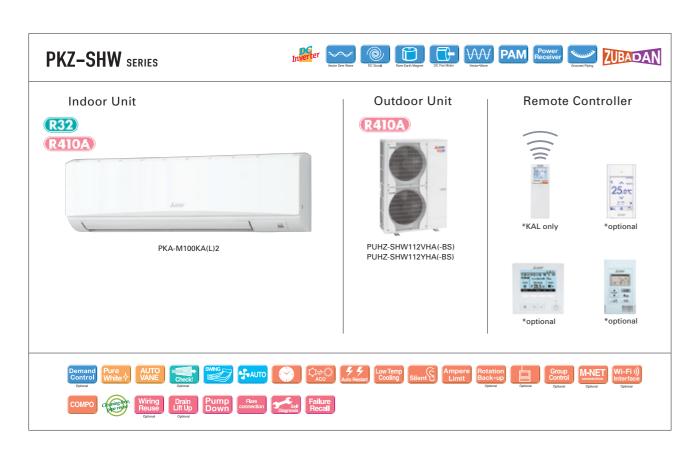
<sup>\*1</sup> Herrigerant leakage contributes to climate change. Herrigerant with lower global warming potential (Lovy) would contribute iess to global warming man a refrigerant with higher GvvP, if leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO<sub>2</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 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 The factory setting of ESP is shown without < >.



Туре				Inverter H	eat Pump
Indoor Unit Outdoor Unit Refrigerant				PKA-M1	<u> </u>
				PUHZ-SHW112VHA	PUHZ-SHW112YHA
				R41	
Power	Source			Outdoor po	
Supply	Outdoor (V/Phase/H	(z)		VHA: 230 / Single / 50,	
Cooling	Capacity	Rated	kW	10.0	10.0
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4
	Total Input	Rated	kW	2.924 (2.904)	2.924 (2.904)
	Design Load	110100	kW	3.42	3.42
	Annual Electricity Co	onsumption*2	kWh/a	673	673
	SEER*4			5.2	5.2
	0	Energy Efficiency Class		A	A
leating	Capacity	Rated	kW	11.2	11.2
Average	Supatrity	Min - Max	kW	4.5 - 14.0	4.5 - 14.0
Season)	Total Input	Rated	kW	3.103	3.103
	Design Load	Inateu	kW	12.7	12.7
	Declared Capacity	at reference design temperature	kW	12.7 11.2 (-10°C)	11.2 (-10°C)
	Deciared Capacity	at bivalent temperature	kW	11.2 (-10°C) 11.2 (-7°C)	11.2 (-10°C)
		at operation limit temperature	kW		
	Bask Ha Hastina Ca		kW	9.4 (-25°C)	9.4 (-25°C)
			kWh/a	1.5	1.5
	SCOP*4		kvvn/a	4664	4664
	SCOP**	F		3.8	3.8
	0	Energy Efficiency Class		A	Α
	g Current (max)	la	A	35.6	13.6
ndoor Init	Input	Rated	kW	0.08 / 0.07	0.08 / 0.07
	Operating Current (max)		А	0.57 0.57 365 - 1170 - 295	
	Dimensions <panel></panel>	H×W×D	mm		
	Weight <panel></panel>		kg	21	21
	Air Volume [Lo-Mid-		m³/min	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL) [L	Lo-Mid-Hi]	dB(A)	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL)		dB(A)	65	65
Outdoor Unit	Dimensions	$H \times W \times D$	mm	1350 - 950	
nit	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 (max)		А	35	13
	Breaker Size		Α	40	16
xt.	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	<b>−15</b> ~ <b>+46</b>
[Outdoor]		Heating	°C	-25 ~ +21	-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 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 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

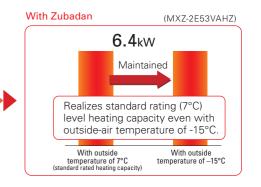
New hyper-heating MXZ allows you to create an oasis of comfort throughout your home and office in the rooms you use most, any time of the year.



#### 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.

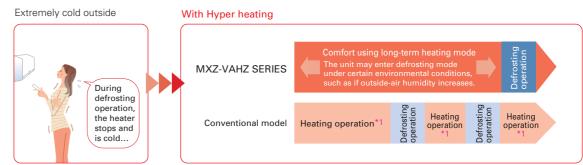
#### Freeze-prevention heater standard equipment

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

Drain water freezes after operation With Hyper heating Does not freeze! in the harsh cold Without Freeze-prevention heater With Freeze-prevention heater

#### Continuous heating for long periods

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

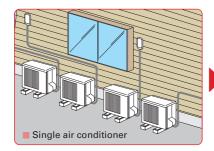


<sup>1:</sup> Conventional model performs continuous heating approximately 30min up to a maximum of 90min.

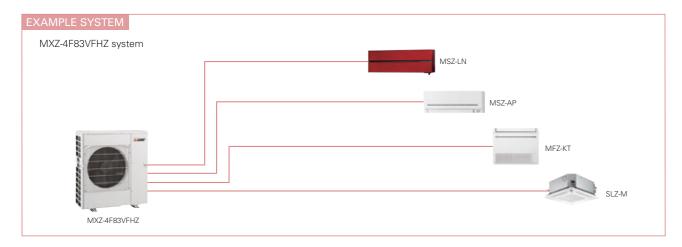
#### One outdoor unit supports multiple indoor units.

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.

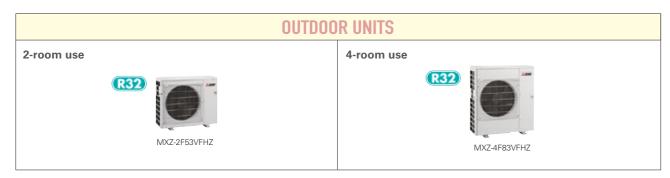






#### Freedom of combinations in cold region greatly enhanced

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 Outdoor Unit			Please refer to*4 *5				
				MXZ-2F53VFHZ	MXZ-4F83VFHZ	MXZ-2E53VAHZ	MXZ-4E83VAHZ
efrigerar	nt			R3	32*6	R	110A*1
ower	Source				Outdoor po	wer supply	
upply	Outdoor (V/Phase/H	lz)			220 - 230 - 240	V / Single / 50	
ooling	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
Average		Rated (-7°C)	kW	6.4	9.0	6.4	9.0
Season)		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 <sup>+</sup>	A+	A <sup>+</sup>	A <sup>+</sup>
Лах. Оре	erating Current (Indoo	or+Outdoor)	Α	15.6	28.0	15.6	28.0
utdoor	Dimensions	$H \times W \times D$	mm	796 × 950 × 330	1048 × 950 × 330	796 × 950 × 330	1048 × 950 × 330
Init	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>
iping	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) *3
	Chargeless Length		m	30	70	20	25
Guarante	ed Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Outdoorl		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

\*4 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

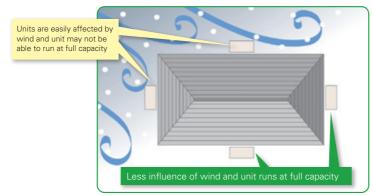


\*RAC/PAC (inc. Air to Water) /MXZ

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

#### Installation Location

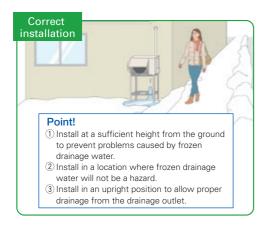
Be aware of the prevailing wind direction in winter and install the outdoor unit where it is as sheltered as possible.



#### 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.

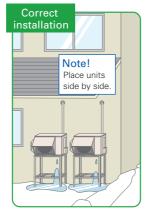


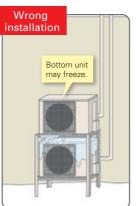




#### Case 2: Multiple units are installed

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

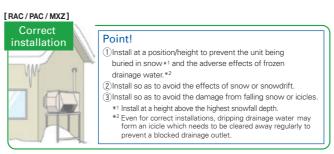




## Measures for Snow

#### Unit is installed on the ground

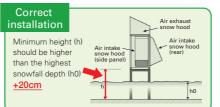
To avoid the adverse effects of snow and frozen drainage water, install the unit on a stand to ensure a sufficient height from the ground.

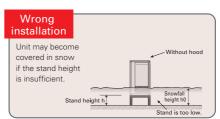






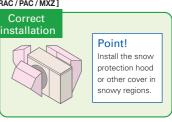
Use a stand to add sufficient height to protect the unit heat exchanger from snow and prevent icicles forming during defrost operation.





#### 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	Countermeasures for freezing	Remarks			
Drain socket, Centralised drain pan	Not used	Not used	Prevents freezing			
Stand	Needed	Needed	IRAC/PAC/MXZI  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	protection *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			[RAC/PAC/MXZ] Outdoor units equipped with a heater for cold regions are those with an "H" in the model name. For the cold-climate zone, use of a unit with a heater is strongly recommended. Even for the moderate-climate zone use of a unit with a heater is recommended for regions subject to high humidity in winter.			

#### CAUTION

#### About disposal of drainage water

When the unit is installed in cold or snowy regions:

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



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

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

Arrangement for	[RAC/PAC/MXZ]	
	Separately sold parts are available for some models.	ı
snow 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.

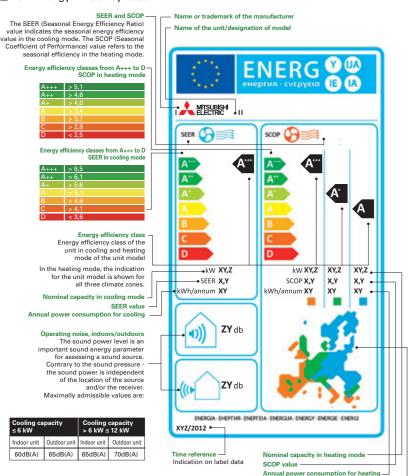
#### **NEW ENERGY LABEL AND MEASUREMENTS**

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.



	Iemperat	ure conditions	
artial	Outdoors		Indoors
oad	DB	WB	DB
_	-	-	20°C
00%	2°C	1°C	20°C
64%	7°C	6°C	20°C
29%	12°C	11°C	20°C

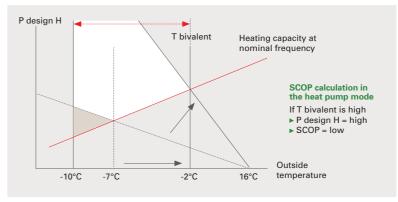
Moderate (Strasbourg)										
Temperature conditions										
Partial	Outdoors		Indoors							
load	DB	WB	DB							
88%	-7°C	−8°C	20°C							
54%	2°C	1°C	20°C							
35%	7°C	6°C	20°C							
15%	12°C	11°C	20°C							

Partial	Outdoors		Indoors
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.

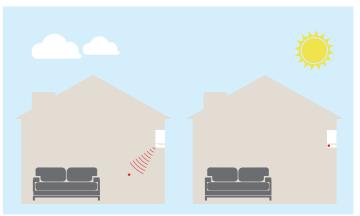
**T design:** Outside temperature which determines the P design H point. The latter is determined from the area conditions.

**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.

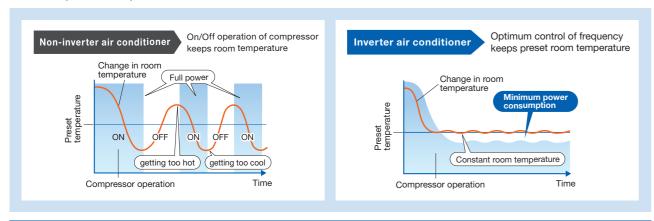
#### **ECONOMIC OPERATION**

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.





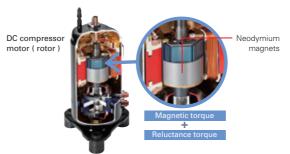
#### Magnetic Flux Vector Sine Wave Drive

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

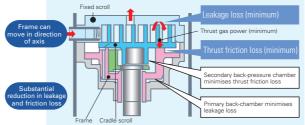
Powerful neodymium magnets are used in the rotor of the reluctance DC motor. More efficient operation is realised by strong magnetic and reluctance torques produced by the magnets.



#### 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.





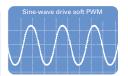
#### DC Fan Motor

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

#### ₩ Vector-Wave Eco Inverter

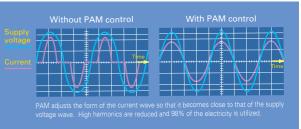
This inverter monitors the varying compressor motor frequency and creates the most efficient waveform for the motor speed. As the result, operating efficiency in all speed ranges is improved, less power is used and annual electricity cost is reduced.

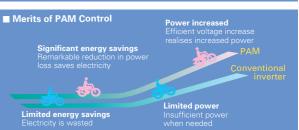
Inverter size has been reduced using insertmolding, where the circuit pattern is molded into the synthetic resin. To ensure quiet operation soft PWM control is used to prevent the metallic whine associated with conventional inverters.



#### PAM PAM (Pulse Amplitude Modulation)

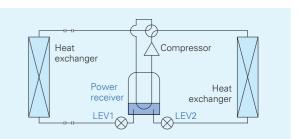
PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.





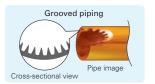
#### Power Receiver and Twin LEV Control

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.

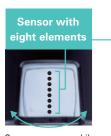


## **COMFORT**

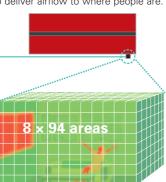
#### 3D i-see Sensor

#### 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.



Sensor measures while moving to the left to right



(Image)

Divided into 94

#### 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



out 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 i-see Sensor for S & P SERIES

#### Detects number of people

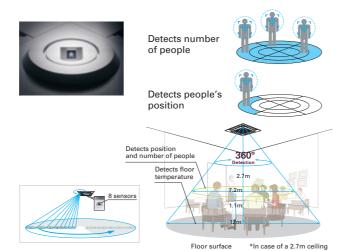
The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced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

#### Detects people's position

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

#### Highly accurate people detection

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



#### Detects number of people

#### Room occupancy energy-saving mode

The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time in order to save 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 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.

# o occupancy energy save mode 100 1°C power saving 2°C power saving o occupancy Auto-Off mode

\*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

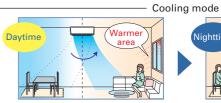
The air conditioning unit automatically switches between circulator and heating. Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the air conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes 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**

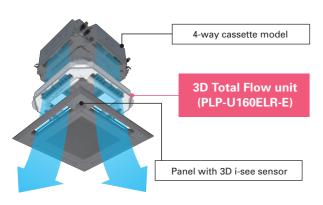
#### **3D TOTAL FLOW**

#### 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.

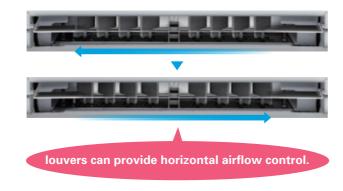
\*3D Total Flow unit(PLP-U160ELR-E) cannot be used with Plasma Quad Connect(PAC-SK51FT-E), Insulation kit(PAC-SK36HK-E), Shutter Plate(PAC-SJ37SP-E),

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)

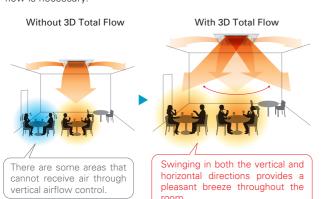


#### Swinging

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.



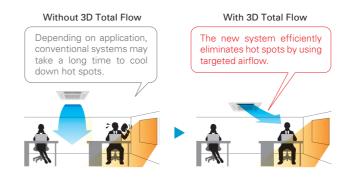
\*If people are present throughout the entire airflow range of an outlet, the airflow is shifted horizontally to avoid direct airflow.

#### **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.



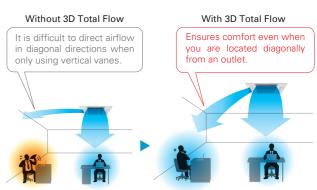


#### Direct mode

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.)

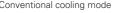
	Conventional	Econo Cool
Ambient temperature	35°C	35°C
Set temperature	25°C	27°C
Perceived temperature	30°C	29.3°C

#### 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



**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.

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

Limit energy consumption by changing the settings of SW7-1, SW2  $\,$ and SW3 on the control board of the outdoor unit. The following

SW3

OFF

OFF

ON

ON

Energy consumption

100%

75%

50%

0% (Stop)

consumption according to the signal input from outside.

[Example: Power Inverter Series]

SW2

OFF

ON

ON

settings are possible.

SW7-1

ON

**≯**PUHZ outdoor only

#### \$ 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>

|--|



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

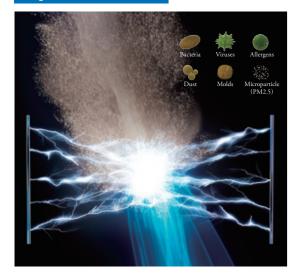
<Test No.> ITEA Report No. T1606028

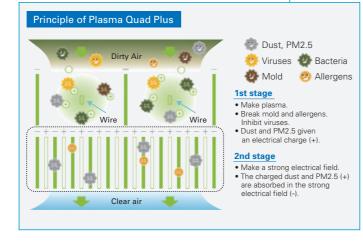
Model	Name	Method	Bacteria	Viruses	Molds	Allergens	Dust	PM2.5*
FH Series	Plasma Quad	One-Stage Plasma	А	А	В	В	С	
LN Series	Plasma Quad Plus	Two-Stage Plasma	А	А	А	А	А	А

- A: Highly effective
- B: Effective
- C: Partially effective

\*PM2.5: Particles smaller than 2.5um

#### mage of Plasma Quad Plus



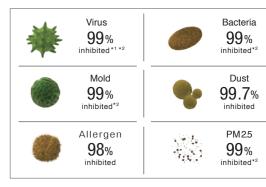


Hi-performance Plasma Filtration System

## 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 environment.

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
PM2.5	Cigarette smoke	JEM1467	25m <sup>38</sup>	300min	99% inhibited* <sup>10</sup>	Life Science Research Laboratory (JAPAN)	SRL-21010E- E091

<sup>\*8</sup> 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.

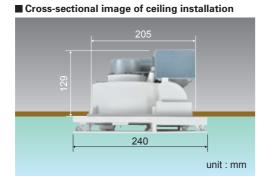


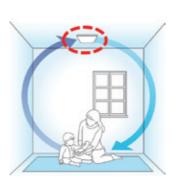
#### Plasma Quad Technology

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.

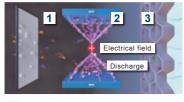
#### Simple & Floorspace-saving Installation

No duct work is needed, and no floorspace is taken up.

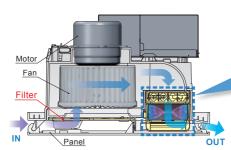


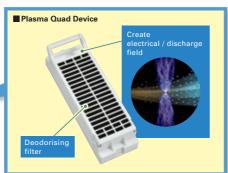


#### Structure

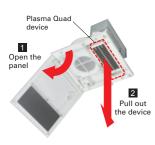


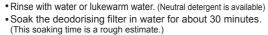
- 1 Large particles are collected by the filter
- 2 Particles that pass through the filter are suppressed and collected by the Plasma Quad device.
- 3 Clean air is released into the room.

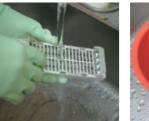




#### Maintenance-saving









## **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**

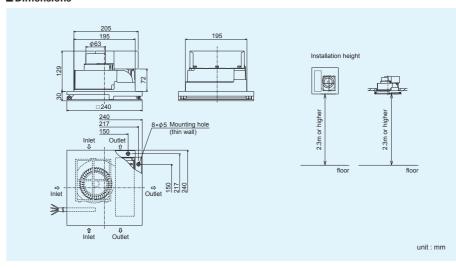
#### JC-4K-EU type



#### **Key Features**

-Plasma Quad Device -Dual Barrier Coating -Low Noise Operation and Energy Efficiency -Installed to Ceiling and Wall

**■** Dimensions



#### ■ Specifications

Model	Voltage	Fan speed	Power consumption [W]	Air volume [m³/ h]	Noise level [dB]	Weight [kg]		
	220V	High	11.5	38	35			
	22UV	Low	7.5	19	20			
JC-4K-EU	230V	High	12.5	40	36.5	2.4		
JU-4K-EU		Low	8	20	21	2.4		
	240V	High	13.5	42	38.5			
	240V	Low	8.5	21	22			

#### **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	27.5m³	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.



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

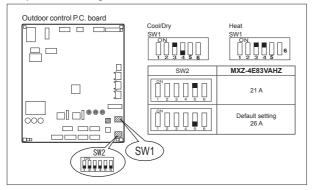
Especially useful at the time of power outages, the unit turns back on automatically when power is restored.

#### 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.

## **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.
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			,	3 1,000			
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
14:00 12:00		Automatic	cally turned off during v	vork hours		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
22:00 20:00		Automatically turns on, synchronized with arrival at home					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	
	_						

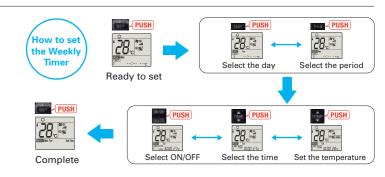
Settings

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 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

#### **Back Light 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.

# **INSTALLATION & MAINTENANCE**

#### **INSTALLATION**



#### Cleaning-free Pipe Reuse

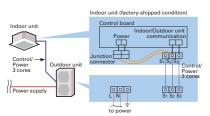
It is possible to reuse the same piping. It allows cleaning-free renewal of air conditioning systems that use R22 or R410 refrigerant.

### Reuse of Existing Wiring

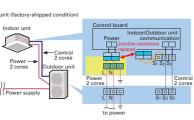
#### Wiring recycling problem solved! Compatible with other wiring connection methods\*

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.

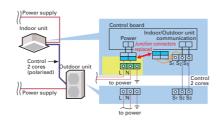
#### Single Harness Control/Power Line Method



#### **Dual Harness Control Line/Power Line Method**



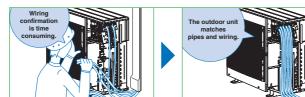
#### Separate Power Supply Method



#### Wiring/Piping Correction Function\*

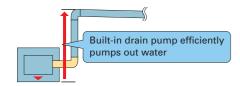
The push of a single button is all that is required to confirm that piping and wiring are properly connected. Corrections are made automatically if a wiring error is detected, eliminating the need for complicated wiring confirmation work when expanding the number of

- \* 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.



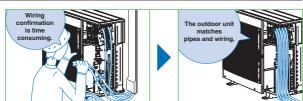
#### Drain Pump

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

#### **MAINTENANCE**

Self-Diagnostic Function (Check Code Display)

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

#### Failure Recall Function

Operation failures are recorded, allowing confirmation when needed.

## SYSTEM CONTROL

#### SYSTEM CONTROL

#### PAR-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)

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

#### MXZ Connection

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

## 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







MELCloud uses the MAC-567IF-E interface

#### Connecting the Wi-Fi interface

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

#### When mounting on the wall

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



\*When mounting on the right side of the unit

#### When mounting on the outer side of the unit

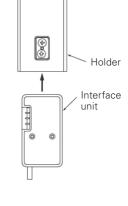
The interface can be mounted on the right side, left side, bottom right, or bottom left of the indoor unit. After inserting the clip into the holder, slip the clip over the edge of the corner box.

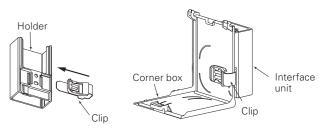


Right side



Bottom right







Left side





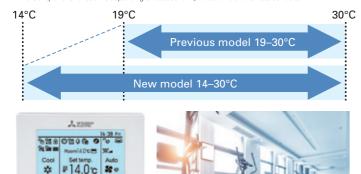
Bottom left

#### 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,

Model name display (example)

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
Collect model names and S/N
0 OU 1ZU00001

 Serial number display (example)

— A	ddres	s +			S/N
Col	lect	mode l	names	and	S/N
0 OU	1ZU0	10001			
IU1	1ZA0	10001			
IU2	1ZA0	10002			
IU3	1ZA0	10003			
IU4	1ZA0	10004			
Colle	ct da	ıta: 🗸	•		
— A	ddres	s +		N	/lode l
		•			•

#### Preliminary error history

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	ie 🛦		Delete

#### Preliminary error history (Sample)

• 10111111110	.,	notory (ourripro)
Prelim	inary er	rror hist. 1/8
Error	Unt# dd/	mm/yy
E0		/10/20 PM12:34
E0		/12/20 AM 1:23
E0		/11/20 PM10:55
E0	0-1 20/	/10/20 PM12:01
Error his	tory mer	າ <b>ມ:ຽ</b>
<b>▼</b> Page		Delete

#### 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.

Monthly (example)

#### ●Every 30 minutes (example)

		Energy	/ data		
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
Returr	াঠ				
_ [	)ate	+	V	Page	$\blacksquare$

#### ●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
Retu	rn: 🔊				
V	Page				

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 data:✔	
▼ Cursor ▲	
2018−10 123456.7kWh 2018−9 123456.7kWh View daily data:✓	

#### 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.

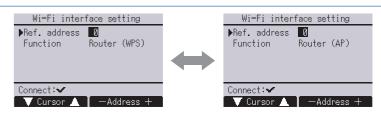
\*PLP-P160ELR-E is required to activate this function.

#### When 3D Total Flow is equipped

# - M

#### 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	German Russian		Czech
Hangarian	Dutch		

#### Temperature Control

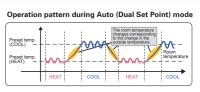


#### Two preset temperatures

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.

Recommended for Meeting room Changing room







#### 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

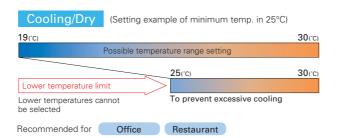
In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous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

Recommended for Office School Public hall Hospital Computer server facility



#### Temperature Range 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



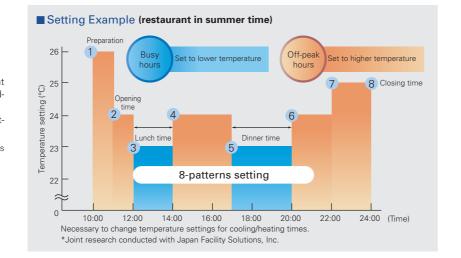
## Weekly

#### 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



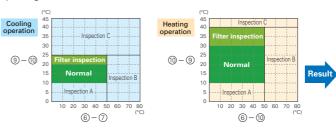
#### Display information (11 items)

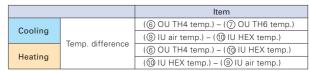
	Compressor	6	OU TH4 temp. (°C)		
1	COMP. current (A)	OU TH6 temp. (°C)			
2	COMP. run time (Hr)	OU TH7 temp. (°C)			
3	COMP. ON/OFF (times)	Indoor Unit			
4	COMP. frequency (Hz)		IU air temp. (°C)		
	Outdoor Unit	10	IU HEX temp. (°C)		
⑤	⑤ Sub cool (°C)		IU filter operating time* (Hr)		

\*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.

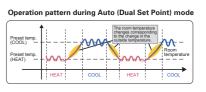


## Y KENER. Flat 4-23/32 i back A TEMP DO. Max 14.5mm (9/16 in) 70mm (2-3/4 in)

#### **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







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



#### 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.



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

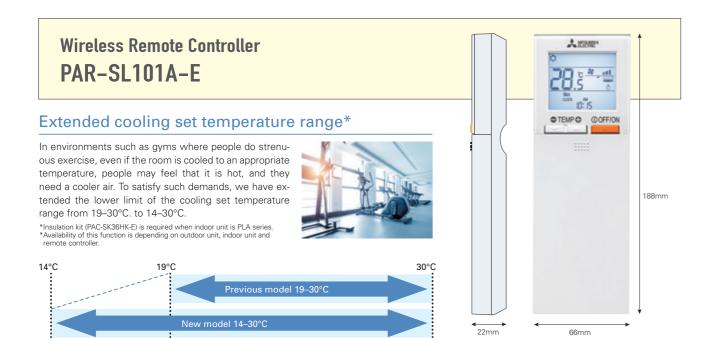
For example, hotel guests can operate the air conditioner via their smartphones, without getting out of bed.



#### Multilingual support

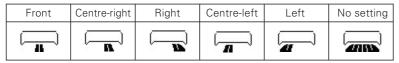
The smartphone app can be displayed in the language that the guest's smartphone is set to.

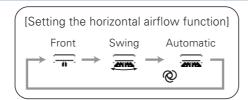




#### Horizontal airflow settings

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,	
14:00		Automatic	ally turned off during v	vork hours		so the temperature	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
50:00		Automatically tur	ns on, synchronized wi	ith arrival at home		Automatically raises ten	nperature setting to
22:00		Automatically tun		match time when outsic	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)	211 10 0			ture at bedtime for ene			511 10 0



<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.

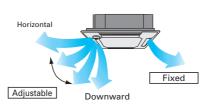




#### Individual Vane Settings

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.



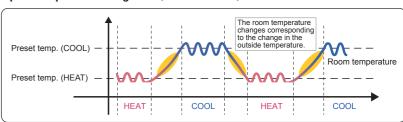
#### **Dual Set Point**

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



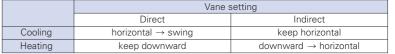
<sup>\*</sup> Only available for compatible models.

#### 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	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

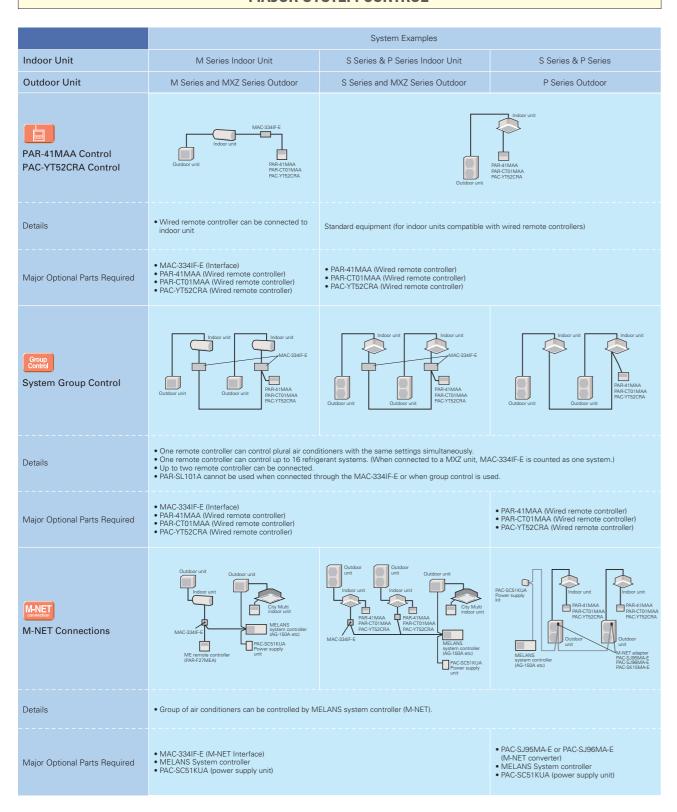
<sup>\*</sup>This remote controller is only compatible with the following models: SLZ-M15/25/35/50/60FA, PLFY-P15/20/25/32/40/50VFM-E1, PLA-ZM/RP35/50/60/71/100/125/140EA, PLFY-P20/25/32/40/50/63/80/100/125VEM-E

<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	Dataila	M: Or ID ( 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.	PRR-11MAA PRC-YTS2CRA  * Set "Main" and "Sub" remote controllers.  (Example of 1 : 1 system)	PAR-SL97/101A-E PAR-HMAA PAC-YTSCRA  *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 PCA PAR-SL94B-E
B Operation Control by Level Signal Air conditioner can be started/ stopped remotely. In addition, On/Off operation by local remote controller can be prohibited/permitted.	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 remove Cn/OH PAR-SL97/101AE  (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 remote aspity  Remote controller  (Example of 1 : 1 system x 2)	Reiny box to be purchased locally)  Connector remote display Remote PAR-SL97/101AE (Example of 1 : 1 system x 2)	The pulse signal can be turned On/Off.  Operation/emergency signal can be received at a remote location.	Connector cable for remote display PAC-SA88HA-E/PAC-725AD (10 pcs. x-PAC-SA88HA-E) Relay box (to be purchased locally) Remote control panel (to be purchased locally)
D Remote Display of Operating Status Operating status can be displayed at a remote location.	Remote operation adapter/ Connector cable for remote display + Relay box  Remote Remot	Barnote operation adapter/ Connector table for remote display + Relay box  Reporter  R	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-L1IMAA/ 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 se	ERIES								M se	ERIES				
			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/
	bination	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
	Com	Outdoor unit	MUZ-RW	MUZ-LN	MUZ-FT	MUZ	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
Technology	DC Inverter		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Joint Lap DC Motor		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Reluctance DC Rotan	y Compressor																		
	Heating Caulking (Cor	mpressor)	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	DC Fan Motor		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
	PAM (Pulse Amplitude	e Modulation)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Power Receiver and 1	Twin LEV Control																		
1	Grooved Piping		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
i-see Sensor			•	•								•								
	AREA Temperature M		•	•								•								
Energy Saving	Econo Cool Energy-s		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
41.0.11	Standby Power Cons	umption Cut	•	•	•	•	•	•	•			•	•	•					•	
Air Quality	Plasma Quad Plus		•	•																
	Plasma Quad											•								
	Dual Barrier Coating		•	•																
	Dual Barrier Material		•	6 :									-							
	Silver-ionized Air Purit  V Blocking Filter	nei Filler	Opt	Opt Opt	•	•	Opt	•	Opt	Opt	Opt	•	Opt	Opt	•	•	Opt	Opt	•	Opt
			Opt	Opt				•		Opt	Opt			•						
Air	Air Purifying Filter  Double Vane				•	•	•	•	•	•	•	•	•	•						
Distribution	Horizontal Vane		•	•	•			•	•	•	•	•	•	•	•			•	•	•
	Vertical Vane		•	•	•	•	•	•	•		•	•	•		•	•	•			•
	High Ceiling Mode																			•
	Auto Fan Speed Mod	la	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	Circulator Mode		<b>*</b> 5	<b>*</b> 5	<b>*</b> 5															
Convenience	On/off Operation Time	er	• 5	•	• 5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	"i save" Mode		•	•	•	•	•	•	•	•	•	•	•	•					•	•
	Auto Changeover		•	•	•	•	•	•	•	<b>•</b> *1	<b>•</b> *1	•	•	•					•*1	•
	Auto Restart		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SUC	Low-temperature Cod	oling	•	•	•	•	•	•	•	•	•	•	•	•					•	•
nuctio	10°C Heating	_	•	•	•	•	•		•	•	•		_							
<u> </u>	Low-noise Operation	(Outdoor Unit)																		
	Night Mode		•	•	•	•	•		•											
	Ampere Limit Adjustm	nent																		
,	Operation Lock (Indo	or)	•	•	•	•	•		•	•	•									
	Operation Lock (Outd	door)																		
	Built-in Weekly Timer	Function	•	•	•	•	•	•				•	•	•					•	•
	Drive Mode Selector		•																	
System Control	PAR-41MAA Control	*3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	 Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
Control	PAR-CT01MAA Contr	rol *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
	PAC-YT52CRA Contr	rol *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	 Opt	Opt	Opt	Opt		Opt			Opt	Opt
	Centralised On/Off Co	ontrol *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt			Opt	Opt
	System Group Contro	ol *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt			Opt	Opt
	M-NET Connection *3	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 Moni																			
Installation	Cleaning-free Pipe Re		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Wiring/Piping Correct	tion Function																		•
	Drain Pump																			•
	Flare Connection		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Maintenance	Self-Diagnosis Function		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Failure Recall Function	on	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

<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			
	category		⊆ Indoor unit		SLZ-M15/25/3	35/50/60FA2 *4	3 SEMIES	SE	Z-M25/35/50/60/71DA	A(L)2	PL A-	ZM35/50/60/71/100/125	5/140EA2			PLA-M3		/140EA2		
Mary   Mary		l di de		SUZ-M	T	T	PUHZ-ZRP		T	T				PUHZ-SHW	PUZ-ZM	T T		1	PU7-M	PUHZ-P
Marie	Function	3D Total Flow	8   04:4007 4:::::	302 111	002701	1 02 2	1 0.12 2.11	002	302.101	1 OZ ZIVI	1 0112 01111		1 0112 2111	1 0112 01111		1 0112 2111	002 W	002.101		7 01.21
Part	merit-up		ation			•				•										
Marie		-																	•	
Marie		Display of model n	names and serial numbers			•				•		•			•				•	
Marie Mari		Display of power	consumption	•		•		•		•		•			•		•		•	
Metalementane control of the control		Avoiding simmItal	neous defrosting			•				•		•			•				•	
Control Cont																				
Property Colors   Property C																				
Marrier for except \$4.00																				
Scheme																				
March   Column   Co	Technology		nia abromany va meesida	•	•		•	•	•		•		•	•		•	•	•		•
May   May			tor																	100
### March Michael Management		Magnetic Flux Vector	tor Sine Wave Drive			•	•				•	•		•	•	•			•	•
Mary Substitution   8		Reluctance DC Rot	tary Compressor	•	•			•	•			35-71	35-71		35-71	35-71	•	•	100-140	100-140
Market   Section   Secti		Highly Efficient DC	Scroll Compressor			•	•				•	100-250	100-250	•	100-250	100-250			200-250	200-250
Methods for formatic			(Compressor)																	100
Margine Conference Margine Conference Conf			La catal	•	•			•	•								•	•		•
Accordance   Acc																				400.4401/
Description   Description				•	•			•	•								•			100-140V 100-140
Marie   Properties   Properti			d TWIII EEV COINIO																	100-140
## AND PROVISION MANUAL PROVISION FOR THE PROVIS	i-see Sensor		ntrol (3D i-see Sensor)															-		Opt
March Problem   March Proble												-			-	-	-		-	Opt
Act   1.50   Company	Energy Saving	g Demand Function	n		·						Opt	Opt	Opt	Opt	Opt	Opt	<u> </u>	-	Opt	Opt
Part	Attractive	Pure White		•	•	•	•				•	•	•	•	•	•	•	•	•	•
Page   Page		Auto Vane		•	•	•	•				•	•	•	•	•	•	•	•	•	•
March Review	Air Quality	Fresh-air Intake		•	•	•	•				•	•	•	•	•	•	•	•	•	•
Languis Place   Composition			ilter								Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Part   Part														_					-	-
Marcian			.1																	•
March   Marc	Air		aı																	•
Marcoling Mode   0   0   0   0   0   0   0   0   0	Distribution	1			_		_													
Less Calley Notes			le	•	•	•	•				•	•	•	•	•	•	•	•	•	•
December   Confidence   Confi		Low Ceiling Mode	е								•	•	•	•	•	•	•	•	•	•
March Charagerier		Auto Fan Speed I	Mode	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
Marting   Mart	Convenience	On/off Operation	Timer	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
Experiment   Color		Auto Changeover	r	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
December   Control   Con																				•
Agreeve Lamil Adjustment Operation Lock  April Depth of the Comment of the Commen				•	•			•	•								•	•		•
Particular   Par	tions																		•	•
Potation Brackup and Part Stage Cut in Functions	Ĭ.		usunent			60-140V	60-140V				112/140	60-140V 200/250	60-140V 200/250	112/140	00-140 V 200/230	00-140 V 200/230				
Dial Set Point '5		-	and 2nd Stage Cut-in Functions			•	•				•	•	•	•	•	•			•	•
Control   PAR-CTOIMAA Control *1																				•
PAR-CYTSIANA Control 1 Opt Opt Opt Opt Opt Opt Opt Opt Opt Opt		PAR-41MAA Con	itrol *1	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Centralised On/Off Control *1	Control	PAR-CT01MAA C	Control *1	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
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
COMPO '2						Opt	Opt													•
Installation   Cleaning-free Pipe Reuse			on -1	Opt	Opt	74.440	74.440	Opt	Opt								Opt	Opt		Opt
Reuse of Existing Wiring         Opt         Opt <td>Installation</td> <td></td> <td>ne Reuse</td> <td></td> <td>•</td>	Installation		ne Reuse																	•
Wiring/Piping Correction Function         0 print Pump	stanauon																			Opt
Drain Pump         Opt											Орг	Орг	Ορι	Орг	Орг	Орг			Орг	Орг
Pump Down Switch         Image: Connection of Maintenance of Self-Diagnosis Function (Check Code Display)         Image: Connection of Check Code Dis				•	•	•	•	Opt	Opt		•*5	<b>•</b> *5	•*5	•*5	•*5	<b>•</b> *5	<b>•</b> *5	<b>*</b> 5	<b>●</b> *5	<b>●</b> *5
Maintenance Self-Diagnosis Function (Check Code Display)			tch																	•
		Flare Connection		•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
Failure Recall Function	Maintenance	e Self-Diagnosis Fur	nction (Check Code Display)	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
		Failure Recall Fu	nction	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•

<sup>11</sup> Please refer to "System Control" on pages for details.
2 Please refer to page 57 for details.
3 This function is only available with PAR-41MAA, PAC-YT52CRA, PAR-SL101A-E.
4 SIZ-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.

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	5							P SERIES	ı				П			<u> </u>								P SERIES										
		Indoor unit			PEAD-M35/5			,				200/250LA				M35/50LA(L)2				M60/71/100						71/100/125/140			PCA-M				171/100/125/1		
		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 to			•		•				•				•		•			•		•		•		•				•			•		•	
	Display of model names  Display of power consu			•		•				•		•		•		•			•		•		•		•		•		•			•		•	•
	Avoiding simmltaneous			•		•				•		•		•		•			•		•		•		•				•			•		•	
	Defrosting when people																																		
	Defrosting when opera	ation is stopped		•						•				•					•				•						•			•			
	Collection of operation	data via MELCloud		•		•				•		•		•		•			•		•		•		•				•			•		•	
	Demand control via ME	ELCloud		•		•				•		•		•		•			•		•		•		•				•			•		•	
	Notification of potential abn	normality via MELCloud	_	•	_	•	_			•		•		•		•	_		•	_	•		•		•				•		_	•	_	•	
Technology	DC Inverter		•	05.74	05.74	100	100	•	•	•	•	•	•	05.74	05.74	400	400	•	00/74	00/74	400	400	05.74	05.74	400	400	•	•	-	-	-	-	400	400	•
	Joint Lap DC Motor  Magnetic Flux Vector S	Sine 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			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 Scre		•	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 (Com	npressor)		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 Inver	rter	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	
	PAM (Pulse Amplitude		•	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 Tv	win 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 Contro	ol /2D i soo Consor\	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
I-see Selisoi	AREA Temperature Mo	, ,																																	
Energy Savin	ng Demand Function	Silicoi	Opt	Opt	Opt	Opt	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		Opt	Орг	Орг	Орг	Орг			Орг	Орг	Орг	Орг	•	•	•	•	•	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	r	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Auto Changeover		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Auto Restart		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Low-noise Operation (C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ctions	Ampere Limit Adjustme	-	112/140		60-140V		-			•	•	•	•	71-140V	71-140V	•		112/140	60-140V	60-140V	•	-	60-140V	60-140V	-	-			•	71-140V	71-140V	71-140V	-		
P.	Operation Lock				200/250									13.700	200					200/250			2200	200/250						200/250	200/250				
	Rotation, Back-up and 2nd	Stage Cut-in Functions	•	•	•	•	•			•		•		•	•	•	•	•	•	•	•	•	•	•	•	•			•	•					
	Dual Set Point *4			•	•	•	•			•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•									
System Control	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 Con		Opt	Opt	Opt	Opt	Opt	Opt	Opt	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  M-NET Connection *1	1	Opt	Ont	Ont	Ont	Ont	Opt	Opt	Ont	Ont	Ont	Ont	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Ont	Ont	Ont	Opt	Opt	Opt	Ont	Opt	Opt	Opt Opt	Opt	Opt	Opt
	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	71-250	Opt 71-250	71-250	Opt	Opt	Орі
Installation	Cleaning-free Pipe Reu	use	•	71-250	71-250	•	•	•	•	•	•	•	•	71-200	71-200	•	•	•	71-250	71-250	•	•	71-250	71-250	•	•	•	•	71-250	71-250	71-250	71-250	•	•	•
	Reuse of Existing Wirin		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 Correctio	on Function																																	
	Drain Pump		●*3	●*3	●*3	●*3	●•3	●*3	●*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 (		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Failure Recall Function	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

<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)**

Cat	egory	Icon							MXZ s	SERIES									MXZ SERIES		
		Series			Std			Lo-	std	н	l2i	Lo	-std		Std			Std		Hyper H	Heating
					MXZ-VA(2)			MXZ	Z-VA	MX	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
Tec	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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	i-see Sensor																				
		AREA Temperature Monitor																			
		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																				
	Convenience	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>•</b> *1			<b>•</b> *1	<b>0</b> *1	<b>©</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	•	•			•	•										
suo		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																		
	Control	PAR-CT01MAA Cotrol	Opt																		
		PAC-YT52CRA Control	Opt																		
		Centralised On/off Control	Opt																		
		System Group Control	Opt																		
		M-NET Connection			Opt (83)	Opt	Opt			Opt	Opt										
		Wi-Fi Interface																			
		Energy/Consumption Monitaring trouth MEL Cloud																			
		СОМРО																			
		MXZ Connection	●*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	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2	<b>•</b> *2
	Installation	Cleaning-free Pipe Reuse										●*3	<b>•</b> *3	<b>•</b> *3	●*3	<b>●</b> *3	<b>•</b> *3	<b>•</b> *3	<b>•</b> *3	●*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	•	•	•	•	•	•	•	•	•	•	•	•	•	•					

<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".

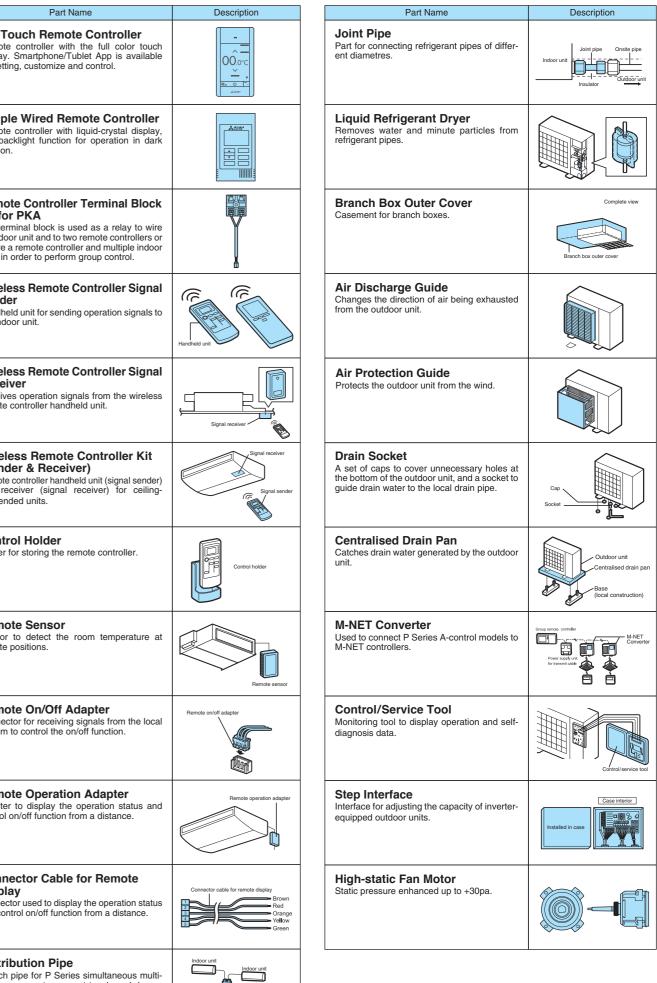
Opt: Separate parts must be purchased.</sup> 

#### 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
High-efficiency Filter Element Element for high-efficiency filter. Removes fine dust particles from the air.	Plug (for directing (for directing in the plughted) Plughted (for directing in
3D i-see Sensor Corner Panel for SLZ Corner panel holding the 3D i-see Sensor.	i-see Sensor corner panel
3D Total Flow for PLA 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

2	B
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 Panel
<b>Drain Pump</b> Pumps drain water to a point higher than that where the unit is installed.	Tor ceiling-suspended units
<b>Decorative Cover</b> 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
Wi-Fi Interface Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.	WFi interface
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 Indoor unit Relay
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.	Amer (b)

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.	- 00.0°C
Simple Wired Remote Controller Remote controller with liquid-crystal display, and backlight function for operation in dark location.	
Remote Controller Terminal Block Kit for PKA The terminal block is used as a relay to wire an indoor unit and to two remote controllers or to wire a remote controller and multiple indoor units in order to perform group control.	
Wireless Remote Controller Signal Sender Handheld unit for sending operation signals to the indoor unit.	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 multisystem use, or to connect two branch boxes for PUMY.	Indoor unit  Indoor unit  Distribution pipe  Outdoor unit



## Optional Parts List <Indoor>

	Option						Filter						0.6.	System		,	_				V	vired Rem	ote Controll	er	
				ionized fier Filter			V Blocki	ing Filter			orising Iter	Plasma Quad Connect	Softdry cloth	Control Interface	MA Interface	Wi-Fi Interface		nnector able			Controller		Wireless Remote Controller	11-	ntrolle older
door Unit		MAC- 2360 FT	MAC- 2370 FT	MAC- 2380 FT	MAC- 2390 FT	MAC- 2450 FT	MAC- 2460 FT	MAC- 2470 FT	MAC- 2490 FT	MAC- 3000 FT-E	MAC- 3010 FT-E	MAC- 100 FT-E	MAC- 1001 CL-E	MAC- 334 IF-E	MAC- 497 IF-E	MAC- 587 IF-E	MAC- 1702 RA-E	MAC- 1710 RA-E		PAR- 41MAA	PAR- CT01 MAA	PAC- YT52 CRA	MAC- SL100 M-E	MAC- 1200 RC-E	1 B
Wall -	MSZ-RW25VG				•				•		•			•	•		•	•		<b>●</b> *1	<b>0</b> *2	<b>●</b> *1			+
mounted	MSZ-RW35VG										•			•	•		•	•		<b>0</b> "1	<b>0</b> *2	<b>©</b> "1			+
	MSZ-RW50VG				•									•			•	•		<b>0</b> "1	<b>0</b> *2	<b>0</b> *1			$^{+}$
	MSZ-LN18VG2(W)(V)(R)(B)										•		•	•	•		•			<b>0</b> *1	<b>0</b> *2	<b>©</b> *1			+
	MSZ-LN25VG2(W)(V)(R)(B)										•		•	•	•		•			<b>●</b> *1	<b>●</b> *2	<b>©</b> "1			+
	MSZ-LN35VG2(W)(V)(R)(B)				•				•				•		•		•	•		*1	<b>0</b> *2	0"1			+
	MSZ-LN50VG2(W)(V)(R)(B)				•				•		•		•	•	•		•			011	•*2	0"1			+
	MSZ-LN60VG2(W)(V)(R)(B)			_	•				•	_	•		•	•	•		•			011	•*2	0"1	_		+
	MSZ-FT25VG							•					_		•	-3	•	•		-11	*2	-1			+
	MSZ-FT35VG		•					•				•		•	•	-3	•			011	•*2	0"1			+
	MSZ-FT50VG		•		_			•		_		•		•	•	9.3	•			0"1	0*2	0"1	_		+
	MSZ-AP15VG					•									•	-3	•	•		-11	*2	-1			+
	MSZ-AP20VG					•						•		•	•	-3	•	•		-11	-2	-1			+
	MSZ-AP25VG		•			_		•				•		•	•	9.3	•	•		911	-2	0"1			+
	MSZ-AP35VG													•		9.3	•			-1	*2	-11			+
	MSZ-AP42VG		•					•				•		•	•	9.3	•	•		0"1	•*2	011			+
	MSZ-AP50VG		•					•				•		•	•	9.3	•	•		0"1	•*2	011			+
	MSZ-AP60VG						•	-						•		9.3	•			9"1	*2	*1			+
	MSZ-AP71VG	•					•					•		•	•	9.3	•	•		0"1	•*2	<b>1</b> 1			+
	MSZ-EF18VG(W)(B)(S)		•	_			_	•	_	_		•	•	•	•	9.3	•	•		01	• *2	0"1	_		+
	MSZ-EF18VG(W)(B)(S)							•					•	•		9.3	•			-1	*2	-11			+
	MSZ-EF25VG(W)(B)(S)		•					•				•	•	•	•	0.3	•	•		0"1	•*2	-1			+
	MSZ-EF35VG(W)(B)(S)		•	<del>                                     </del>	1		<del>                                     </del>	•	+	<del>                                     </del>	1	•	•	•	•	9.3	•	•		0"1	•*2	011			+
	MSZ-EF42VG(W)(B)(S)							•					•		•	-3	•	•		-11	*2	-1			+
	MSZ-EF50VG(W)(B)(S)		•					•				•	•	•	•	9.3	•	•		0"1	•*2	-11			+
	MSZ-BT20VG(W)(B)(S)		•	_	_			•		_		•	_	•	•	9.3	•	•		011	<b>0</b> *2	<b>0</b> "1	_		+
	MSZ-BT25VG													•		9.3	•			1	*2	-11			+
	MSZ-BT35VG		•									•			•	9.3				01	<b>0</b> *2	-1			+
	MSZ-BT50VG		•					•		-				•		9.3	•	•			_	_	_		+
	MSZ-HR25VF							•				•		•	•	9.3	•	•		@*1 @*1	●*2 ●*2	●"1 ●"1			+
	MSZ-HR35VF		•					•				•		•	•	9.3	•	0		01	<b>0</b> *2	-1		•	+
	MSZ-HR42VF		•	-	_			•		_		•		•	•	0.3	•	•		01	<b>0</b> *2	01	_	•	+
	MSZ-HR50VF													•		9.3	•			-1	*2	-11			+
																0.3									+
	MSZ-HR60VF		•					•		-		•		•	•	0.3	•	•		@*1	●*2 ●*2	@*1	-	•	+
	MSZ-HR71VF		•					•				•		•	•	0.3	•	•		@*1	*2	●*1 ●*1		•	+
	MSZ-DW25VF							•						•	•	0.3	•	•		@*1	<b>0</b> *2			•	+
	MSZ-DW35VF		•					•		-		•		•	•	0.3	•	•		@*1	<b>0</b> *2	●"I	-	•	+
	MSZ-DW50VF MSY-TP35VF		•					•				•		•	•	9.3	•	0		@*1 @*1	*2	11	•	•	+
	MSY-TP50VF															0.3						-1	_		+
			•					•		•		•		•	•	-	•	•		@*1	●*2 ●*2	011	•		+
	MSZ-FH25VE2			•						_				•	•	<b>0.</b> 3	•	•		<b>0</b> "1	*2	-11			+
	MSZ-FH35VE2 MSZ-FH50VE2			•						•				•		0.3	•			0"1	•*2	-11			+
				•						•				•	•	9.3	•	•			_	_	_		+
	MSZ-SF15VA MSZ-SF20VA											•		•	•	0.3				@*1 @*1	●*2 ●*2	●"1 ●"1			+
	MSZ-SF25VE3											•				9.3				011	• *2	0"1			+
	MSZ-SF25VE3 MSZ-SF35VE3		•	_	1		_		_	_		•		•	•	9.3	_	+	_	01	• ²2	<b>0</b> 11	_		+
	MSZ-SF35VE3 MSZ-SF42VE3															<b>9</b> *3				*1	*2	0"1			+
	MSZ-SF50VE3		•									•		•	•	0.3				011	<b>0</b> *2	011			1
	MSZ-GF60VE2	•	-	_			•		_	_	1	•		•	•	0.3		+		011	<b>0</b> *2	01	_		+
	MSZ-GF71VE2	•												•		0.3				-1	<b>0</b> *2	0*1			+
														_	_	9.3	-								+
	MSZ-WN25VA MSZ-WN35VA		•	_			<del>                                     </del>		_	_	1	•		•	•	0.3	•	•		0°1	<b>0</b> *2	<b>0</b> "1	_		+
	MSZ-WN35VA MSZ-DM25VA													•		0.3	•			011	<b>0</b> *2	0*1			+
	MSZ-DM25VA MSZ-DM35VA		•									•		•	•	0.3	•	•		011	*2	0"1		•	+
	MSZ-HJ25VA		•	<del>                                     </del>			<del>                                     </del>	<del>                                     </del>	_	_	1	-		-	-	-	•	•	1	-	-	<u> </u>	_	•	+
	MSZ-HJ25VA MSZ-HJ35VA																•								+
	MSZ-HJ35VA MSZ-HJ50VA		•														•	•						•	+
	MSZ-HJ60VA		•	-		<del>                                     </del>	-			-						-	•	•	-	+			-	•	+
	MSZ-HJ00VA MSZ-HJ71VA																•							•	+
Floor-	MFZ-KT25VG		•											•	•	<b>0</b> *3	•	•		<b>0</b> *1	•*2	<b>1</b>			+
	MFZ-KT35VG		•	_			<del>                                     </del>		1	-	1			•	•	0.3	•	•	1	01	•*2	01	_		+
o.u.rairiy	MFZ-KT50VG													•		0.3	•			011	*2	011			+
																0.3				011	<b>0</b> *2	0"1			4
	MFZ-KT60VG		•	-				•		-				•	•	9.3	•	•		01	<b>0</b> *2	0"1	-		+
	MFZ-KW25VG							•								<b>9</b> *3	•			-1	<b>0</b> *2	0*1			+
	MFZ-KW35VG							•						•	•	0.3	•	•							+
	MFZ-KW50VG			-			-		-	-	-								-	●"1 ●"1	●*2 ●*2	@*1	-		+
1 wes	MFZ-KW60VG		•					•						•	•	<b>●</b> *3	•	•		@*1	●*2 ●*2	@*1			+
1-way cassette	MLZ-KP25VF		•											•	•	0.3	•	•		@*1	@*2	@*1			4
vasselle	MLZ-KP35VF		•	1	1									•	•	●.3 ●.3	•	•		<b>0</b> *1	●*2 ●*2	●"I			$\perp$

<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					Τ	Filter										Filter						asilia Qu	ad Conne	CL				3D i-s Sens	or			Insulation
		Oil Mist Filter Element	Life Filter			ment				V E	Blocking Fi	lter			Filter	r Box		F	ilter Box		Plasma Conr	Quad nect	Attach	nment for I	Ducted		Во	x for Duct	ted		Corn Pan		Flow unit	Plate	kit
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	PAC- SE1 ME-E	PLP- U160 ELR-E	PAC- SJ37 SP-E	PAC- SK36 HK-E
way	SLZ-M15FA2								•																										
ssette	SLZ-M25FA2																																		
	SLZ-M35FA2																																		
	SLZ-M50FA2																																		
	SLZ-M60FA2																																		
eiling -	SEZ-M25DA(L)2																																		
onceald	SEZ-M35DA(L)2																																		
	SEZ-M50DA(L)2																																		
	SEZ-M60DA(L)2																				•		•												
	SEZ-M71DA(L)2																																		
-way Cassette	PLA-ZM35EA2							•																											
สรรษแษ	PLA-ZM50EA2																																		
	PLA-ZM60EA2																																		
	PLA-ZM71EA2																																		
	PLA-ZM100EA2							•														•												•	•
	PLA-ZM125EA2																					•													•
	PLA-ZM140EA2							•														•											•		•
	PLA-M35EA2							•														•													•
	PLA-M50EA2							•														•											•		•
	PLA-M60EA2 PLA-M71EA2																					•													
	PLA-M71EA2 PLA-M100EA2			•																		•													•
	PLA-W100EA2 PLA-M125EA2																					•													
	PLA-M140EA2			•																		•										•		•	•
Ceiling -	PEAD-M35JA(L)2														•									•			•								
conceald	PEAD-M50JA(L)2														•										•		•								
	PEAD-M60JA(L)2																							•	•										
	PEAD-M71JA(L)2																							•	•										
	PEAD-M100JA(L)2																	•						•	•										
	PEAD-M125JA(L)2																	•						•	•										
	PEAD-M140JA(L)2																							•	•										
	PEA-M200LA																																		
	PEA-M250LA		•																	•															
Wall -	PKA-M35LA(L)2																																		
mounted	PKA-M50LA(L)2																																		
	PKA-M60KA(L)2																																		
	PKA-M71KA(L)2																																		
	PKA-M100KA(L)2																																		
Ceiling -	PCA-M35KA2																																		
suspended	PCA-M50KA2																																		
	PCA-M60KA2																																		
	PCA-M71KA2																																		
	PCA-M100KA2						•																												
	PCA-M125KA2																																		
	PCA-M140KA2						•																												
Eloor	PCA-M71HA2																																		
loor - tanding	PSA-M71KA																																		
	PSA-M100KA																																		
	PSA-M125KA																																		
ulti functional case asma Quad Conne ulti functional case sulation kit(PAC-Sl autter Plate(PAC-S Blocking Filter(PAC Blocking Filter(PAC)	PSA-M140KA  "LP-U160ELR-E) cannot be us ment(PAC-SJ41TM-E) and Hi esc(PAC-SK51F-E) cannot be ment(PAC-SJ41TM-E) and Hi K36HK-E) cannot be used with J373F-E), Multi functional cas C-SK53KF-E) cannot be used C-SK55KF-E) cannot be used C-SK55KF-E) cannot be used C-SK55KF-E) cannot be used C-SK56KF-E) cannot be used C-SK	gh-efficier e used wit gh-efficier h 3D Total sement(PA with High with High	ncy filter ele h PLP-U16 ncy filter ele I Flow unit( AC-SJ41TM n-efficiency	ement(PA0 0ELR-E(3 ement(PA0 PLP-U160 M-E) and F filter elem filter elem	C-SH59KF- BD Total Flo C-SH59KF- DELR-E), Pl High-efficier nent(PAC-S nent(PAC-S	-E) www.unit), In- -E). lasma Quancy filter el :H59KF-E) :H88KF-E)	ad Connected ad Connected (PA).	t (PAC-SK3	6HK-E), A	uto elevatio	on panel(Pl	_P-6EAJ, F						In *11 Hi *12 Hi	sulation ki gh-efficien gh-efficien	t (PAC-Sh icy filter el icy filter el	K36HK-E) a lement(PAC lement(PAC	and V Bloc C-SH88KF C-SH89KF	cking Filter -E) canno -E) canno	(PAC-SK5) t be used v t be used v	KF-E). vith V Bloc vith V Bloc	tal Flow uni king Filter(I king Filter(I king Filter(I	PAC-SH88	BKF-E). BKF-E).	Plasma Qu	uad Conne	ct(PAC-SK5	1FT-E),			

202

<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	rminal Kit			Controller		Terminal Block kit	Signal	Sender	Si	gnal Rece	eiver	Kit	Remote Sensor	On/Off	Operation	on C
		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		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	
Poiling	SLZ-M60FA2									_			•													<b>•</b> '4	_	•					• '2	-
ceiling - 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	
I-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	•											91	•1						•			•			• 4				_			• 2	-
	PLA-M35EA2												9"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	Ī
onceald	PEAD-M50JA(L)2												•1	•"												•*4							•*2	Ī
	PEAD-M60JA(L)2												•1	•1	•				•		•	•				•*4	•				•	•	•*2	
	PEAD-M71JA(L)2												•"	•"												•*4							•*2	Ī
	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	•1							•3	•*3	•,3			•*4				4			•*2	_
ou.nou	PKA-M50LA(L)2					•							•"1	•	•	•					•,3	•*3	•,3		•	•*4					•	•	•*2	_
	PKA-M60KA(L)2												•	•							•3	•*3	•,3			• 4				4			4	
	PKA-M71KA(L)2												- "	- "							•*3	•*3	<b>•</b> *3			<b>•</b> '4								_
Ceiling -	PKA-M100KA(L)2												9"	• "							•3	• 3	•,3			• '4				_				L
suspended	PCA-M35KA2						•						9"	9"	•			•			•		•		•	• 4					•		•*2	_
	PCA-M50KA2												<b>1</b>	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	Pipe		Liquid Refrigerant	Dryer	$\top$											Т		Т			Step		$\neg$
	op.ss.	For Twin (50:50)	For Triple (33:33:33)	For Quadruple (25:25:25:25)	ø6.35 ø9.52	ø15.88   ø9.52	Unit   Unit   Unit   06.35   09.52   012	.7 ø12.7	For For	For pipe			Air	Outlet Guide		Air Protect	tion Guide	Drain	Socket	pre H	reeze- evention leater Orain Pan)	Centralized	Drain Pan	M-NET Adapter	M-NET Converte		1 PC board w/attach- ment kit	Insulation for Accumulation	on High Static Fan Motor
Outdoor Unit		MSDD- MSDD 50TR-E 50WR-	- MSDT- MSDT- E 111R-E 111R3-E	MSDF- MSDF 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- GG85	MAC- 890	MAC- N	MAC- MAC- 882 856	MAC- MAC 886 883	C- PAC- PAC- PAC- SJ07 SG59 SI SG-E SG-E S	AC- PAC- PA H96 SJ06 SH	C- PAC- 63 SH95	PAC- P SJ08 S	AC- PAC- G60 SG61	MAC- 1	MAC- MAC- 644 646	PAC- PA SG63 SG	C- PAC- 64 SH97	PAC- IF01	PAC- PAC- SJ96 SA	AC- J95 SK52ST		MAC- N 892	IAC- PAC- 393 SJ71 IS-E FM-E
RW Series	MUZ-RW25VGHZ				NJ-E NJ-E	RJ-E	PI JP-E JP-	E JP-E	DR-E DR-E	DR-E	3G-E		0 30	3G-E 3G	30-2 30-2 3	G-E AG-E AG	I-E AG-E	D3-E D	13-E   D3-E	DN-E	DH-E DH-E	DP-E DF	-E DP-E	IVIIN I -E	IVIA-E IVI	4-6	D-E	INS-E II	3-E FIVI-E
	MUZ-RW35VGHZ MUZ-RW50VGHZ												•																
L Series	MUZ-LN25VG											•																	
	MUZ-LN25VGHZ MUZ-LN35VG										$\rightarrow$	•																	
	MUZ-LN35VGHZ										$\overline{}$	•																	
	MUZ-LN50VG MUZ-LN50VGHZ												•	•															
	MUZ-LN60VG													•															$\perp$
FT Series	MUZ-FT25VGHZ MUZ-FT35VGHZ											•	•																
	MUZ-FT50VGHZ												•																
A Series	MUZ-AP15VG MUZ-AP20VG											•		•															
	MUZ-AP25VG										$\overline{}$	•																	
	MUZ-AP25VGH MUZ-AP35VG										$\overline{}$	•																	
	MUZ-AP35VGH										$\overline{}$	•																	=
	MUZ-AP42VG MUZ-AP42VGH											•																	
	MUZ-AP50VG												•																
	MUZ-AP50VGH MUZ-AP60VG												•																
5.0-3	MUZ-AP71VG MUZ-EF25VG											•		•															
E Series	MUZ-EF25VG MUZ-EF25VGH										$\overline{}$	•																	
	MUZ-EF35VG MUZ-EF35VGH										$\overline{}$	•																	
	MUZ-EF33VGH MUZ-EF42VG											•																	
BT Series	MUZ-EF50VG MUZ-BT20VG												•								•								
D1 Selles	MUZ-BT25VG																												
	MUZ-BT35VG MUZ-BT50VG											•		•															
σ HR Series	MUZ-HR25VF													•															
H	MUZ-HR35VF MUZ-HR42VF				+					-		•	_	•								+			+				+-
<u>\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\text{\tilde{\ti</u>	MUZ-HR50VF										_	•																	
	MUZ-HR60VF MUZ-HR71VF												•				_		_						+ +				$\overline{}$
DW Series	MUZ-DW25VF													•															
	MUZ-DW35VF MUZ-DW50VF			+								•		•											+				
TP Series	MUY-TP35VF																												
F Series	MUY-TP50VF MUZ-FH25VE											•																	+-
	MUZ-FH25VEHZ											•																	
	MUZ-FH35VE MUZ-FH35VEHZ									+		•							_			+			+				+
	MUZ-FH50VE													0															
S Series	MUZ-FH50VEHZ MUZ-SF25VE											•																	+
	MUZ-SF25VEH MUZ-SF35VE											•																	
	MUZ-SF35VE MUZ-SF35VEH											•																	$\pm$
	MUZ-SF42VE MUZ-SF42VEH											•																	
	MUZ-SF50VE													•															
G Series	MUZ-SF50VEH MUZ-GF60VE													•															
	MUZ-GF71VE													•															$\perp$
W Series	MUZ-WN25VA MUZ-WN35VA																												
D Series	MUZ-DM25VA													•															
H Series	MUZ-DM35VA MUZ-HJ25VA													•															
	MUZ-HJ35VA																												
	MUZ-HJ50VA MUZ-HJ60VA													•															
Ozarazant	MUZ-HJ71VA													•															
Compact floor	MUFZ-KW25VGHZ MUFZ-KW35VGHZ											•																	
	MUFZ-KW50VGHZ													0															
S SERIES	MUFZ-KW60VGHZ SUZ-M25VA											•																	
(R32)	SUZ-M35VA SUZ-M50VA						•					•																	—
	SUZ-M60VA												•	•															
Dospies	SUZ-M71VA SUZ-KA25VA6													•						•									
P SERIES (R410A)	SUZ-KA35VA6						•					•								•									
	SUZ-KA50VA6 SUZ-KA60VA6													0							•								
	SUZ-KA71VA6													•															
		'	'		-					-														-					

## Optional Parts List <Outdoor>

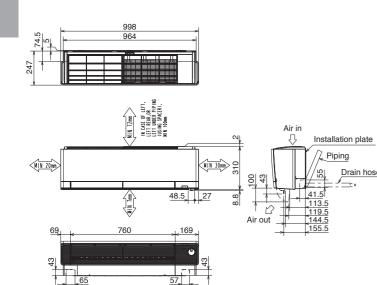
	Option		Twin	For Tri	inle F	or	Branch Pip In case of using	Branch	Header	>	Unit ø9.52	2 ø15.88 ø	Unit 9.52 Ø6.35 >>	ø9.52 ø12	it Unit 2.7 ø12.7	pipe pip	or For	Air ( Gu	Outlet uide		Air Outl	let Guide		Air Pr	rotection Guid	de D	rain Socke	et .	Freeze-pre	vention He			entralized rain Pan	M-NET Adapter	M-NE Conver	ET C	Inter	tep rface Ins board tach-	sulation ( for ne	Con- ection Kit High Static Fan Motor
Outdoor Unit		MSDD- 50TR 50TR2 -E -E				- 1	boxes  are Brazing  SDD- MSDD-  AR-E-50RR-E	CMY- CN Y62- Y6				ø19.05 ø1	15.88 ø9.52	ø12.7 ø9.5	52 ø15.88				AC-MAC- 81 882 SG SG	MAC- 856 SG	MAC- MAC- PA 886 883 S. SG-E SG SC	AC- PAC- PA J07 SG59 SH	AC- PAC- H96 SK22	PAC- F SJ06 S	PAC- PAC- PA SH63 SH95 SH	AC- PAC- F K21 SJ08 S G-F DS-F F	PAC-PAC- GG60 SG61	PAC- MAC- SK27 643 DS-F BH-F	MAC- PAC 644 645 BH-F BH-	C- PAC- P. 5 646 S	PAC-PAC- SJ10 SJ20 BH-F BH-F	PAC- PA SG63 SG	C- PAC- PA 64 SH97 SJ	C- PAC- 183 IF01 S	PAC-PAC-SK15 SJ96	PAC- F	PAC- PAC-	PAC-(S) MA	C- MAC- P	AC- PAC-
Power Inverter (R32)	PUZ-ZM35VKA2 PUZ-ZM50VKA2 PUZ-ZM60VHA2 PUZ-ZM100VKA2 PUZ-ZM100VKA2 PUZ-ZM100VKA2 PUZ-ZM102VKA2 PUZ-ZM125VKA2	0			•	•	ur Euopit E			•	0		RJ-E PI	JP-E JP-	E JP-E						- (		•	•	•	•	0					0			•	0	0	•		
Power Inverter (R410A)	PUZ-ZM125YKA2 PUZ-ZM140YKA2 PUZ-ZM140YKA2 PUZ-ZM200YKA2 PUZ-ZM250YKA2 PUHZ-ZRP50VKA2 PUHZ-ZRP50VKA2 PUHZ-ZRP60VHA2 PUHZ-ZRP71VHA2				•	0				•	0					•						(		_	0	•	0					0			0	0		•		
S Etandard	PUHZ-ZRP100VKA3 PUHZ-ZRP125VKA3 PUHZ-ZRP125VKA3 PUHZ-ZRP125VKA3 PUHZ-ZRP140VKA3 PUHZ-ZRP140VKA3 PUHZ-ZRP200YKA3 PUHZ-ZRP250YKA3 PUZ-M100VKA2	0	0	0	0						0	0				0									0		0						0			0		0		•
Standard Inverter (R32)	PUZ-M125VKA2 PUZ-M140VKA2 PUZ-M100YKA2 PUZ-M125YKA2 PUZ-M140YKA2 PUZ-M200YKA2 PUZ-M200YKA2 PUZ-M250YKA2 PUZ-M250YKA2	0			0	0										0									0		0						0			0	•	0		
Inverter (R410A)	PUHZ-P125VKA PUHZ-P140VKA PUHZ-P100YKA PUHZ-P125YKA PUHZ-P140YKA PUHZ-P200YKA3 PUHZ-P250YKA3	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-4F80VF3 MXZ-4F83VF MXZ-4F83VFL MXZ-5F102VF MXZ-6F122VF MXZ-2HA40VF MXZ-2HA40VF MXZ-2HA40VF 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											
MXZ SERIES (R410A)	MXZ-2D33VA MXZ-2D42VA2 MXZ-2D53VA(H)2 MXZ-2E53VAHZ MXZ-3E54VA MXZ-3E68VA MXZ-4E72VA MXZ-4E72VA MXZ-4E83VAHZ MXZ-4E83VAHZ MXZ-6D122VA MXZ-6D122VA MXZ-2DM40VA MXZ-3DM50VA												0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0						0							•							0						
PUMY Series (R410A)	PUMY-SP112VKM(-BS) PUMY-SP112VKM(-BS) PUMY-SP12VKM(-BS) PUMY-SP125VKM(-BS) PUMY-SP125VKM(-BS) PUMY-SP140VKM(-BS) PUMY-P112VKM(-BS) PUMY-P112VKM(-BS) PUMY-P112VKM(-BS) PUMY-P112VKM(-BS) PUMY-P12VKM(-BS) PUMY-P12VKM(-BS) PUMY-P140VKM(-BS) PUMY-P140VKM(-BS) PUMY-P140VKM(-BS) PUMY-P200YKM(-BS) PUMY-P300YBM(-BS)										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 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 Outer Cover	Reactor Box	Different Diameter Joint							
				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
F	PAC-MK34BC (Flare)	•	•	•	•	•	•	•	•	•	•
F	PAC-MK54BC (Flare)	•	•	•	•	•	•	•	•	•	•

M SERIES

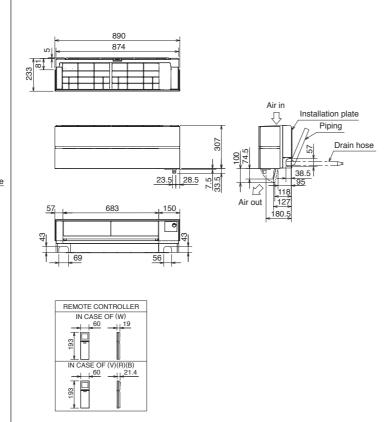
M SERIES Unit: mm

## MUZ-RW25VGHZ MUZ-RW35VGHZ MUZ-RW50VGHZ INDOOR UNIT



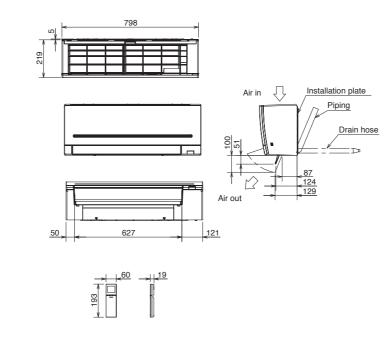


INDOOR UNIT



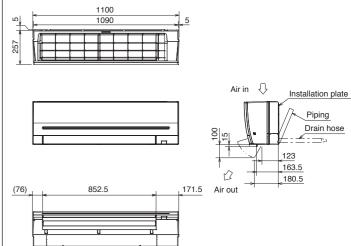
## MSZ-AP25VG MSZ-AP35VG MSZ-AP42VG MSZ-AP50VG MSZ-AP25VGK MSZ-AP35VGK MSZ-AP42VGK MSZ-AP50VGK

INDOOR UNIT



#### MSZ-AP60VG MSZ-AP71VG MSZ-AP60VGK MSZ-AP71VGK

INDOOR UNIT

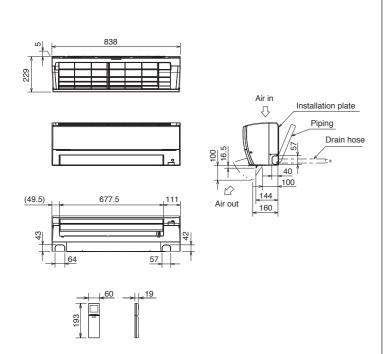


Unit: mm

## MSZ-FT25VG MSZ-FT35VG MSZ-FT50VG MSZ-FT25VGK MSZ-FT35VGK MSZ-FT50VGK

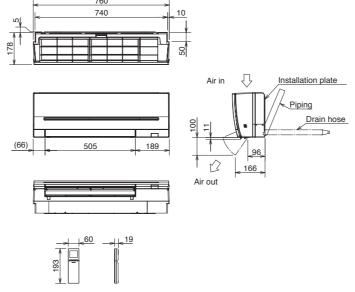
INDOOR UNIT

REMOTE CONTROLLER



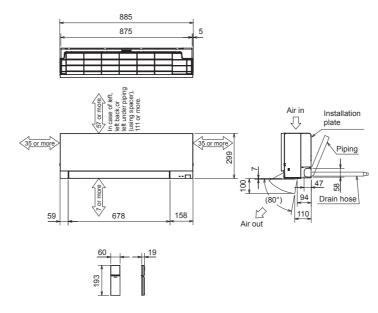
#### MSZ-AP15VG MSZ-AP20VG

INDOOR UNIT



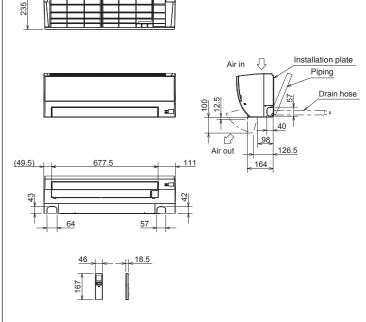
# MSZ-EF18VG(W)(B)(S) MSZ-EF22VG(W)(B)(S) MSZ-EF25VG(W)(B)(S) MSZ-EF35VG(W)(B)(S) MSZ-EF42VG(W)(B)(S) MSZ-EF50VG(W)(B)(S) MSZ-EF18VGK(W)(B)(S) MSZ-EF22VGK(W)(B)(S) MSZ-EF25VGK(W)(B)(S) MSZ-EF35VGK(W)(B)(S) MSZ-EF42VGK(W)(B)(S) MSZ-EF50VGK(W)(B)(S)

INDOOR UNIT



## MSZ-BT20VG MSZ-BT25VG MSZ-BT35VG MSZ-BT50VG MSZ-BT20VGK MSZ-BT25VGK MSZ-BT35VGK MSZ-BT50VGK

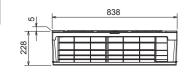
INDOOR UNIT



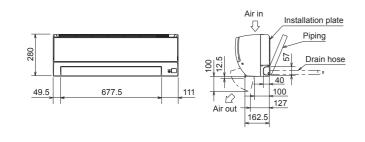
Unit: mm

## MSZ-HR25VF(K) MSZ-HR35VF(K) MSZ-HR42VF(K) MSZ-HR50VF(K)

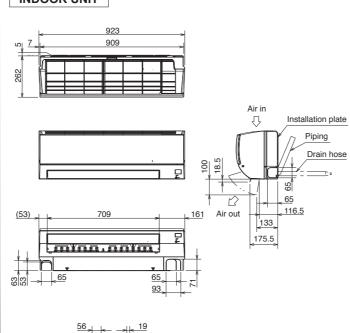
INDOOR UNIT

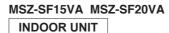


56

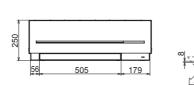


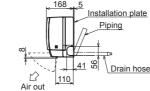








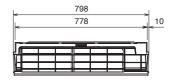


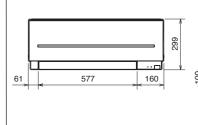


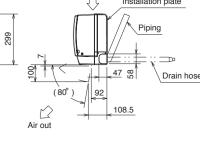


#### MSZ-SF25VE3 MSZ-SF35VE3 MSZ-SF42VE3 MSZ-SF50VE3 INDOOR UNIT







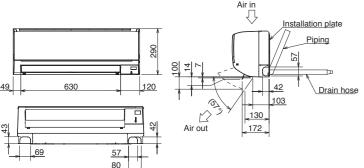


Unit: mm

## MSZ-DW25VF MSZ-DW35VF MSZ-DW50VF

INDOOR UNIT

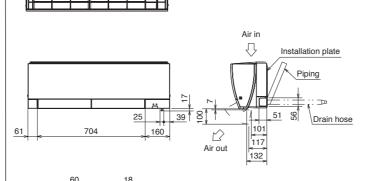






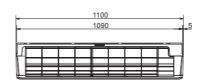
#### MSZ-FH25VE2 MSZ-FH35VE2 MSZ-FH50VE2

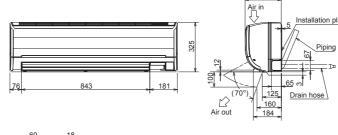
INDOOR UNIT



#### MSZ-GF60VE2 MSZ-GF71VE2

INDOOR UNIT

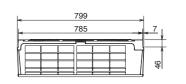


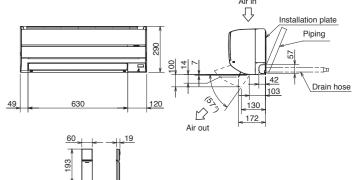




#### MSZ-WN25VA MSZ-WN35VA

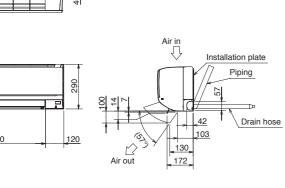
INDOOR UNIT

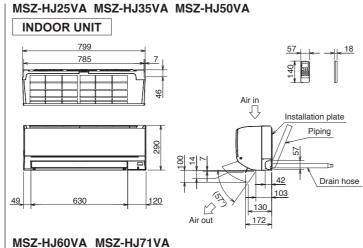


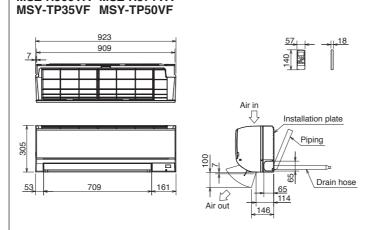


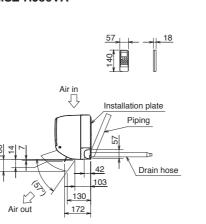


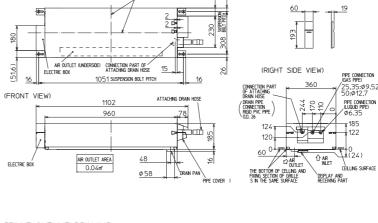
# MSZ-DM25VA MSZ-DM35VA INDOOR UNIT











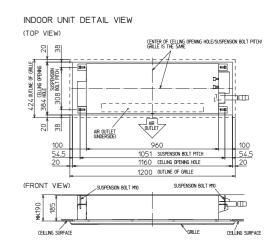
MLZ-KP25VF MLZ-KP35VF MLZ-KP50VF

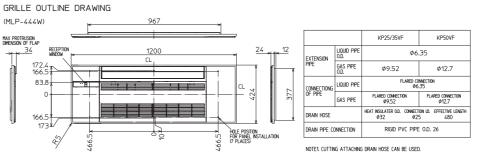
CENTER OF CELLING OPENING HOLE BOILT PITCH/GRILLE IS THE SAME

INDOOR UNIT

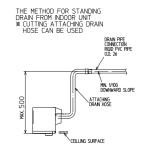
(TOP VIEW)

INDOOR UNIT OUTLINE DRAWING

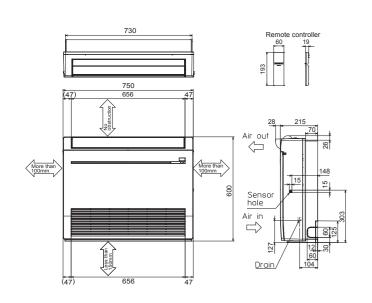




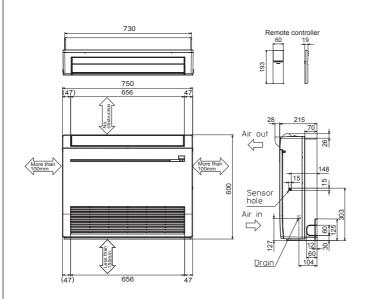
REMOTE CONTROLLER OUTLINE DRAWING



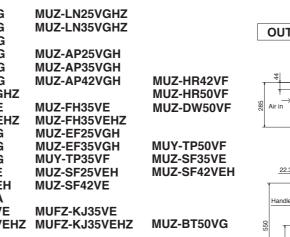
#### MFZ-KT25VG MFZ-KT35VG MFZ-KT50VG MFZ-KT60VG INDOOR UNIT

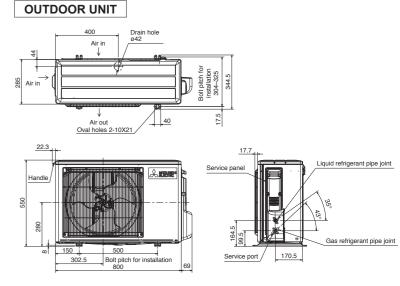


#### MFZ-KW25VG MFZ-KW35VG MFZ-KW50VG MFZ-KW60VG INDOOR UNIT



#### 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-FH25VEHZ MUZ-FH35VEHZ MUZ-EF25VG MUZ-EF25VGH **MUY-TP50VF** MUZ-EF35VG MUZ-EF35VGH MUY-TP35VF MUZ-EF42VG MUZ-SF35VE MUZ-SF25VE **MUZ-SF25VEH** MUZ-SF35VEH MUZ-SF42VE **MUZ-HJ50VA** MUFZ-KJ25VE **MUFZ-KJ35VE** MUFZ-KJ25VEHZ MUFZ-KJ35VEHZ MUZ-BT50VG





Unit: mm Unit: mm

216

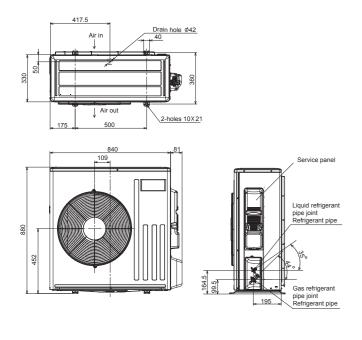
MUZ-LN50VGHZ MUZ-LN60VG MUZ-FH50VE MUZ-SF50VE **MUZ-GF60VE MUZ-HJ60VA** MUFZ-KJ50VE

MUZ-FH50VEHZ MUZ-SF50VEH

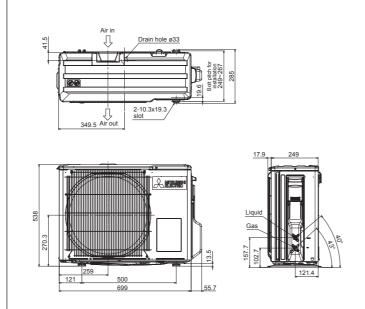
**MUZ-AP71VG** 

**MUZ-GF71VE MUZ-HJ71VA** MUFZ-KJ50VEHZ

OUTDOOR UNIT



MUZ-AP15VG MUZ-BT20VG OUTDOOR UNIT



Oval holes 2-10X21/ Service port / Bolt pitch for installation

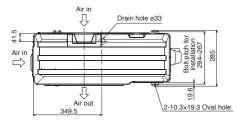
MUZ-RW50VGHZ

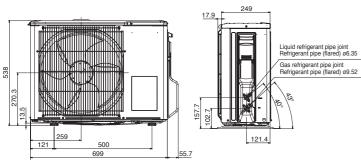
INDOOR UNIT

MUZ-WN25VA MUZ-WN35VA MUZ-HR25VF MUZ-BT25VG MUZ-DM25VA MUZ-DM35VA MUZ-HR35VF MUZ-BT35VG MUZ-HJ25VA MUZ-HJ35VA

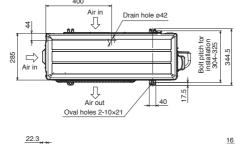
MUZ-DW25VF MUZ-DW35VF

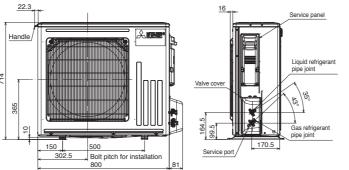
OUTDOOR UNIT





MUZ-RW25VGHZ MUZ-RW35VGHZ MUZ-LN50VG MUZ-FT35/50VGHZ MUZ-AP50VG MUZ-AP50VGH MUZ-AP60VG MUZ-EF50VG MUZ-HR60VF MUZ-HR71VF OUTDOOR UNIT



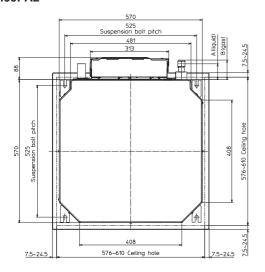


S SERIES

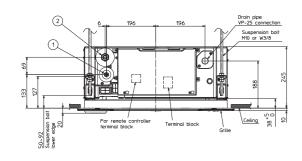
Unit: mm

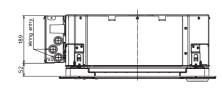
#### SLZ-M15FA2 SLZ-M25FA2 SLZ-M35FA2 SLZ-M50FA2 SLZ-M60FA2

INDOOR UNIT

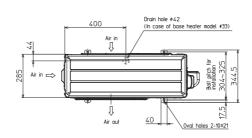


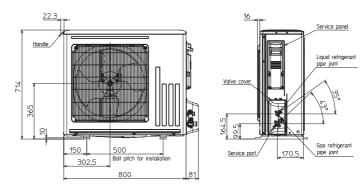
Models	① Refrigerent pipe (liquid)	② Refrigerent pipe (gas)	Α	В
SLZ-M15FA2 SLZ-M25FA2 SLZ-M35FA2			63mm	72mm
SLZ-M50FA2			63mm	78mm
SLZ-M60FA2			63mm	78mm





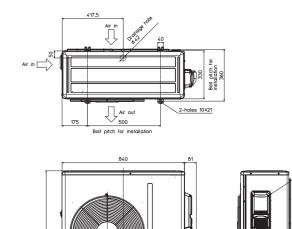
### SUZ-M50VA OUTDOOR UNIT





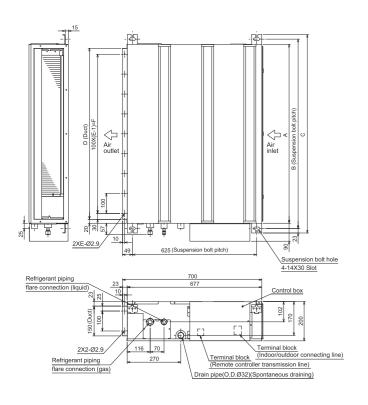
#### SUZ-M60VA SUZ-M71VA

INDOOR UNIT



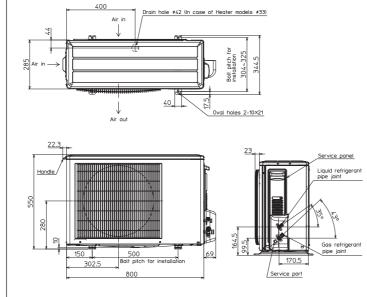
### SEZ-M25DA(L)2 SEZ-M35DA(L)2 SEZ-M50DA(L)2 SEZ-M60DA(L)2 SEZ-M71DA(L)2

INDOOR UNIT



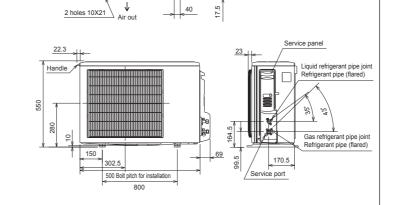
#### SUZ-M25VA SUZ-M35VA

**OUTDOOR UNIT** 



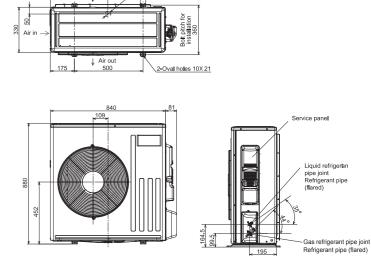
#### SUZ-KA25VA6 SUZ-KA35VA6

INDOOR UNIT



#### SUZ-KA50VA6 SUZ-KA60VA6 SUZ-KA71VA6

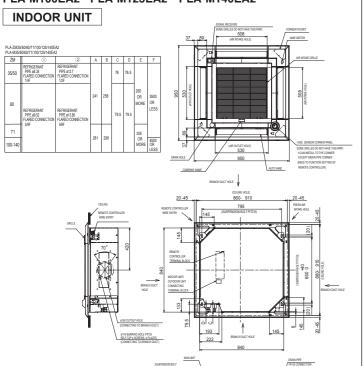
INDOOR UNIT



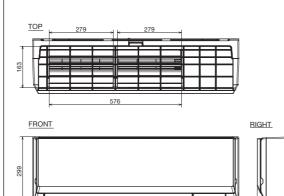
P <u>SERIES</u>

Unit: mm

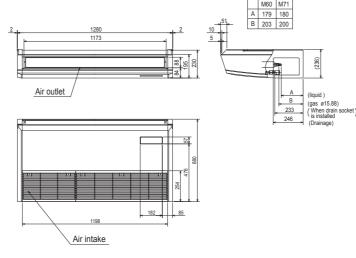




#### PKA-M35LA(L)2 PKA-M50LA(L)2 INDOOR UNIT



#### PCA-M60KA2 PCA-M71KA2 INDOOR UNIT



NOTES.

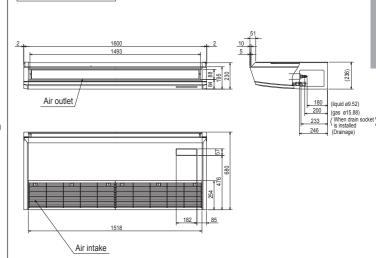
Unit: mm

- 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

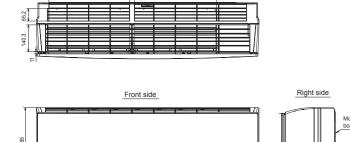


NOTES.

- 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.

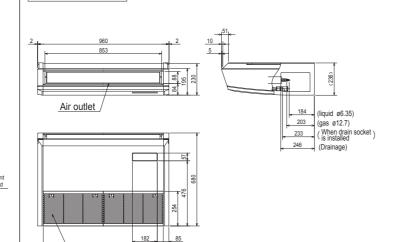
#### PKA-M60KA(L)2 PKA-M71KA(L)2 PKA-M100KA(L)2 INDOOR UNIT

Top side



#### PCA-M35KA2 PCA-M50KA2

INDOOR UNIT



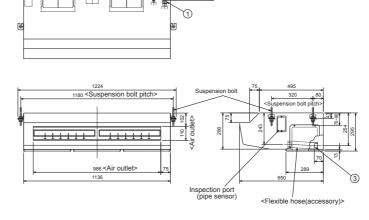
Knockout hole for right piping

- 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.

\ Air intake

#### PCA-M71HA2

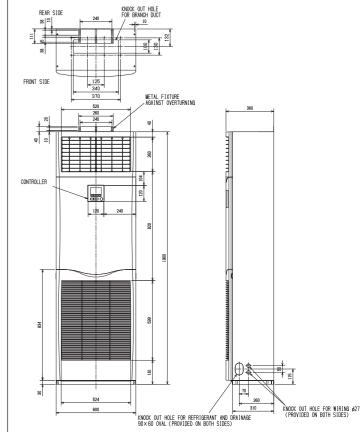
#### INDOOR UNIT



- 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

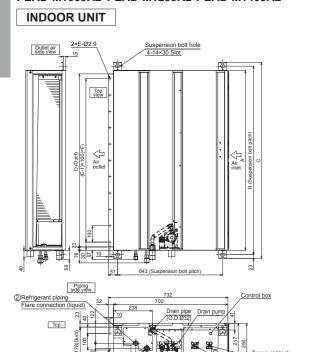
#### INDOOR UNIT



220

Unit: mm

#### PEAD-M35JA2 PEAD-M50JA2 PEAD-M60JA2 PEAD-M71JA2 PEAD-M100JA2 PEAD-M125JA2 PEAD-M140JA2

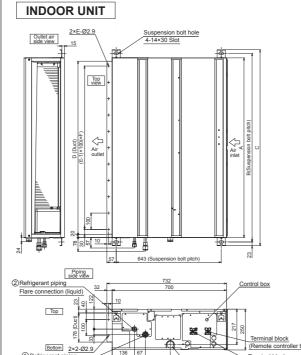


Model	Α	В	С	D	Е	F	G	① Gas pipe	② Liquid pipe
PEAD-M35, 50JA2	900	954	1000	860	9	800	858	Ø12.7	Ø6.35
PEAD-M60, 71JA2	1100	1154	1200	1060	11	1000	1058		
PEAD-M100, 125JA2	1400	1454	1500	1360	14	1300	1358	Ø15.88	Ø9.52
PEAD-M140JA2	1600	1654	1700	1560	16	1500	1558		

Terminal block

Indoor/Outdoor connecting line)

#### PEAD-M35JAL2 PEAD-M50JAL2 PEAD-M60JAL2 PEAD-M71JAL2 PEAD-M100JAL2 PEAD-M125JAL2 PEAD-M140JAL2



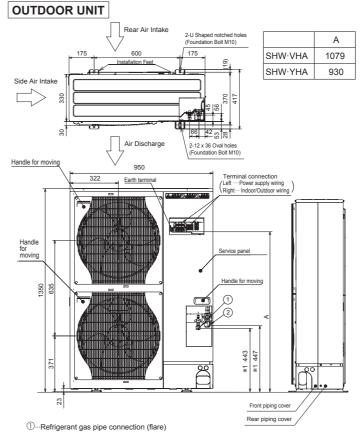
1) Refrigerant piping

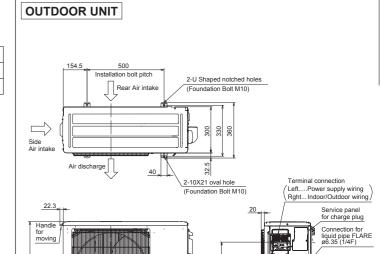
Model	Α	В	С	D	Е	F	G	① Gas pipe	② Liquid pipe	
PEAD-M35, 50JAL2	900	954	1000	860	9	800	858	Ø12.7	Ø6.35	
PEAD-M60, 71JAL2	1100	1154	1200	1060	11	1000	1058		Ø9.52	
PEAD-M100, 125JAL2	1400	1454	1500	1360	14	1300	1358	Ø15.88		
PEAD-M140JAL2	1600	1654	1700	1560	16	1500	1558			

Drain pipe (O.D.Ø32)

Terminal block

#### PUHZ-SHW112VHA PUHZ-SHW112YHA PUHZ-SHW140YHA



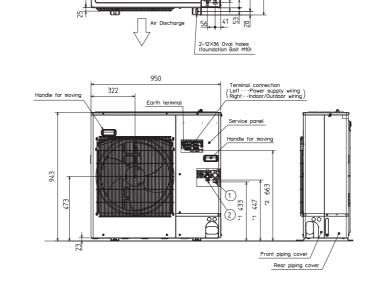


PUZ-ZM35VKA2 PUZ-ZM50VKA2

#### PUZ-ZM60VHA2 PUZ-ZM71VHA2

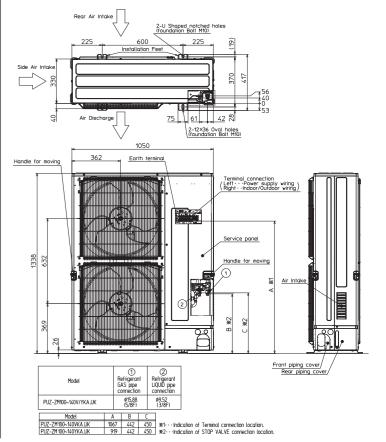
②---Refrigerant liquid pipe connection (flare) \* ···Indicates stop valve connection location.

#### **OUTDOOR UNIT**



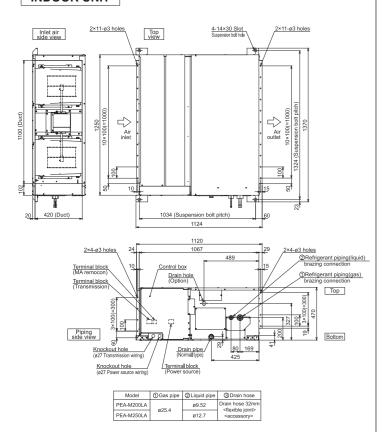
- ① · · · Refrigerant GAS pipe connection (FLARE) Ø15.88 (5/8F)
- $\bigcirc \cdots \text{Refrigerant LIQUID pipe connection (FLARE)} \quad \text{Ø9.52 (3/8F)}$
- \*1  $\cdots$  Indication of STOP VALVE connection location.
- \*2  $\cdots$  Indication of Terminal connection location.

#### PUZ-ZM100VKA2 PUZ-ZM125VKA2 PUZ-ZM140VKA2 PUZ-ZM100YKA2 PUZ-ZM125YKA2 PUZ-ZM140YKA2 OUTDOOR UNIT



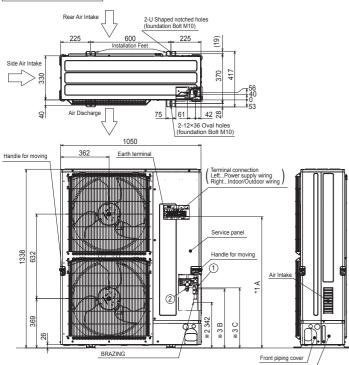
#### PEA-M200LA PEA-M250LA

#### INDOOR UNIT



#### PUZ-ZM200YKA2 PUHZ-ZM250YKA2





Refrigerant LIQUID pipe PUZ-ZM/M200YKA.UK ø9.52 (3/8F) ø19.05 (3/4F) PUZ-ZM/M250YKA.UK

ø19.05 (3/4F) | ø12.7 (1/2F)

PUZ-M125VKA2 PUZ-M125YKA2

PUZ-M140VKA2 PUZ-M140YKA2

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**OUTDOOR UNIT** 

Intake

Air Discharge 75

—⊶ <u>Earth terminal</u>

2-12X36 Oval holes (Foundation Bolt M10)

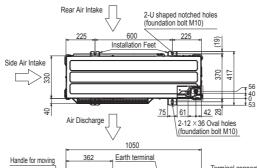
Example Of Notes

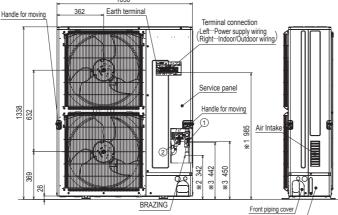
①···Refrigerant GAS pipe connection (FLARE) Ø15.88 (5/8F)

② · · · Refrigerant LIOUID pipe connection (FLARE) Ø9.52 (3/8F) \*1···Indication of STOP VALVE connection location.

PUZ-M100VKA2 PUZ-M100YKA2

#### PUHZ-ZRP200YKA3 PUHZ-ZRP250YKA3 **OUTDOOR UNIT**





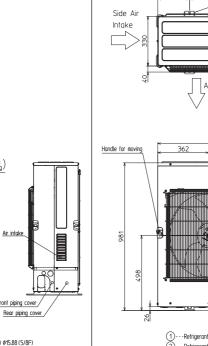
Model	Refrigerant GAS pipe connection	Refrigerant LIQUID pip connection
PUHZ-ZRP200YKA3	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-ZRP250YKA3	ø19.05 (3/4F)	ø12.7 (1/2F)

- \*\*1---Indication of Terminal connection location.

  \*\*2---Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.

  \*\*3---Indication of STOP VALVE connection location.

### PUHZ-P100VKA PUHZ-P100YKA



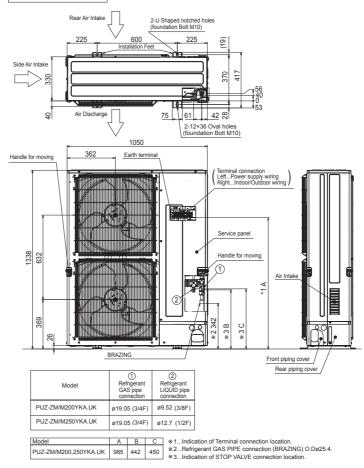
Front piping cover

# Rear Air Intake Air Discharge 2-12×36 Oval holes (Foundation Bolt M10) Terminal connection ( Left · · · Power supply wiring ) ( Right · · Indoor/Outdoor wiring ) 362 <u>Earth terminal</u> Handle for moving Front piping cover

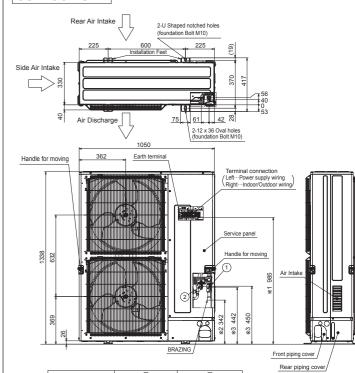
#### PUZ-M200YKA2 PUZ-M250YKA2 **OUTDOOR UNIT**

Unit: mm

Rear piping cover



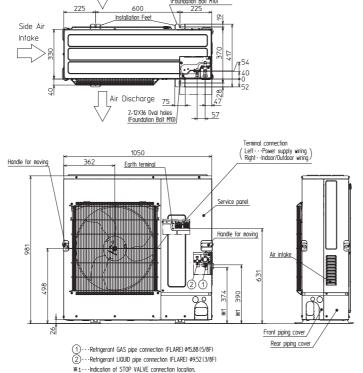
#### PUHZ-P200YKA3 PUHZ-P250YKA3 **OUTDOOR UNIT**



- Model Refrigerant GAS pipe Refrigerant LIQUID pipe connection PUHZ-P200YKA3 ø19.05 (3/4F) ø9.52 (3/8F) PUHZ-P250YKA3 ø19.05 (3/4F) ø12.7 (1/2F)
- \*1···Indication of Terminal connection location.
   \*2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
   \*3···Indication of STOP VALVE connection location.

PUHZ-P125VKA PUHZ-P125YKA PUHZ-P140VKA PUHZ-P140YKA

#### **OUTDOOR UNIT**

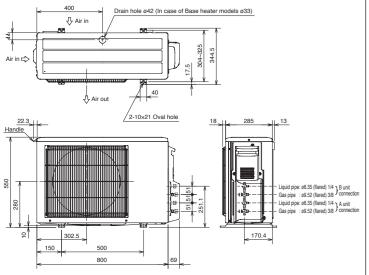


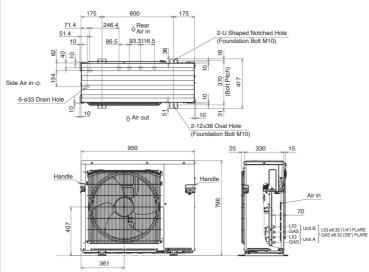
- Unit: mm

Unit: mm

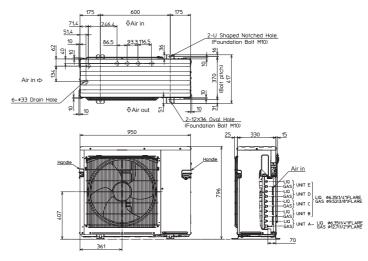
MXZ-2D33VA MXZ-2D42VA2 MXZ-2D53VA2 MXZ-2D53VAH2 MXZ-2E53VAHZ MXZ-2F53VFHZ MXZ-2HA40VF MXZ-2HA50VF MXZ-2F33VF3 MXZ-2F53VFH3 MXZ-2F53VFH3

#### **OUTDOOR UNIT**

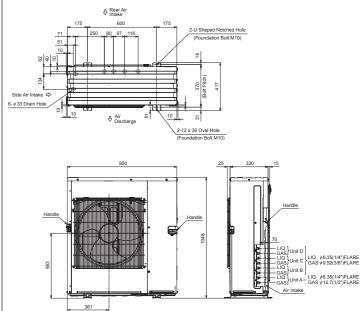




#### MXZ-4E83VA MXZ-5E102VA MXZ-4F83VF MXZ-5F102VF **OUTDOOR UNIT**

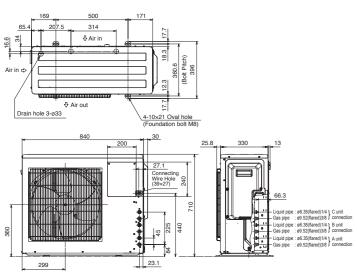


#### MXZ-4E83VAHZ MXZ-4F83VFHZ **OUTDOOR UNIT**



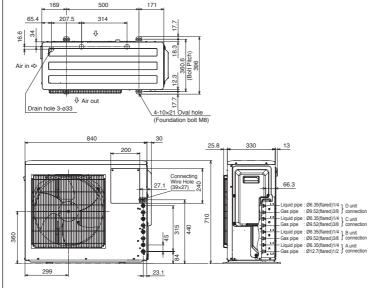
#### MXZ-3E54VA MXZ-3E68VA MXZ-3DM50VA MXZ-3HA50VF MXZ-3F54VF3 MXZ-3F68VF3

#### **OUTDOOR UNIT**

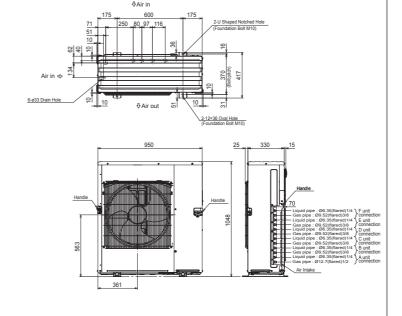


### MXZ-4E72VA MXZ-4F72VF3 MXZ-4F80VF3

#### **OUTDOOR UNIT**



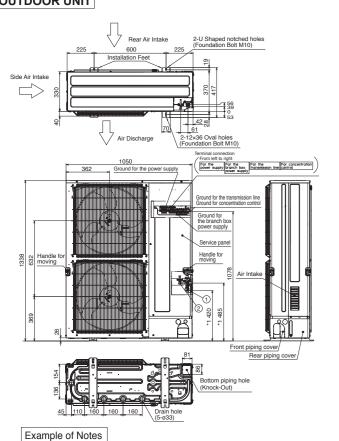
### OUTDOOR UNIT



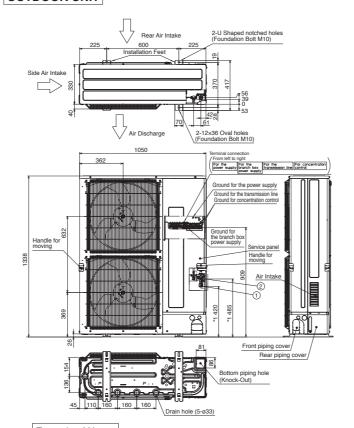
### MXZ-6D122VA2 MXZ-6F122VF

**PUMY** SERIES Unit: mm

#### PUMY-P112/125/140VKM5(-BS) **OUTDOOR UNIT**



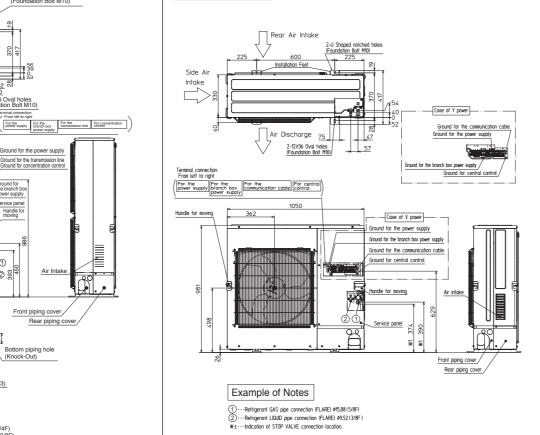
#### PUMY-P112/125/140YKM(E)4(-BS) **OUTDOOR UNIT**



#### 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)

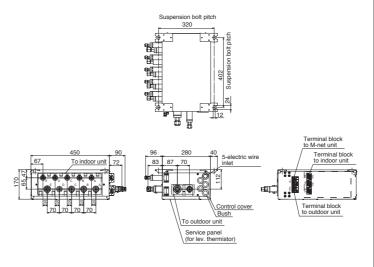
#### **OUTDOOR UNIT**



#### PAC-MK54BC

Suspension bolt: W3/W8 (M10)

#### Branch box



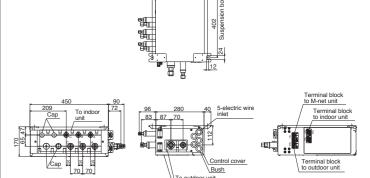
Suspension	bolt	: W3/8(M10)

Tionigorant pipo narod connection											
	Α	В	С	D	E	To outdoor unit					
Liquid pipe	1/4F	1/4F	1/4F	1/4F	1/4F	3/8F					
Gas nine	3/8F	3/8F	3/8F	3/8F	1/2F	5/8F					

#### PAC-MK34BC

Suspension bolt: W3/W8 (M10)

#### Branch box

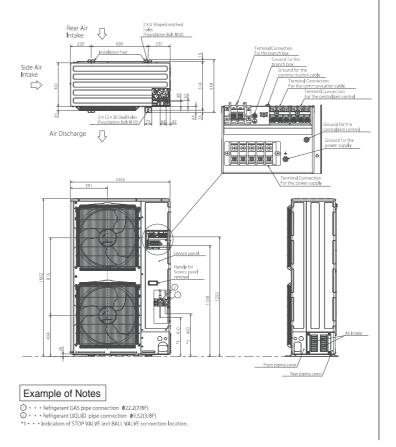


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Suspension bolt: W3/8(M10)

ricingciant pi	terrigerant pipe narea connection												
	Α	В	С			To outdoor ur							
Liquid pipe	1/4F	1/4F	1/4F			3/8F							
Gas pipe	3/8F	3/8F	3/8F			5/8F							

#### PUMY-P250YBM(-BS) PUMY-P300YBM(-BS) **OUTDOOR UNIT**



#### Example of Notes

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

45 110 160 160 Drain hole (5-ø33)

Rear piping cover

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-P200YKM2(-BS) **OUTDOOR UNIT** 

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#### Piping Installation

#### M 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	
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	
SZ-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)	OAN (PUHZ-SHW) 80 / 112 / 140 7		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	7 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

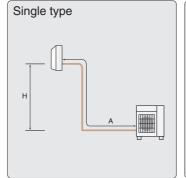
i wiri type							
		Ma	aximum Piping Length	(m)	Maximum Heig	Maximum Number of Bends	
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C	Pipe length difference from distribution pipe IB-Cl	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
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

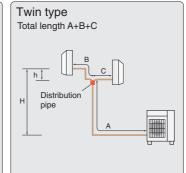
Triple type

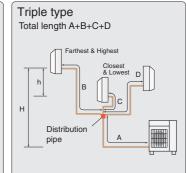
	Class <outdoor unit=""></outdoor>	Ma	aximum Piping Length	(m)	Maximum Heigh	Maximum Number of Bends	
Series		Total length A+B+C+D	Pipe length difference from distribution pipe IB-Cl	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
Power Inverter (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
	000 / 050	70	0	00	20		45

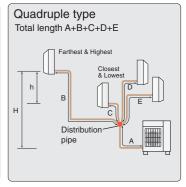
Quadruple type

		Ma	ximum Piping Length	(m)	Maximum Heigh	Maximum Number of Bends	
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C+D+E	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, PUHZ-ZRP)	200 / 250	100	8	30	30	1	15
Standard Inverter (PUZ-M, PUHZ-P)	200 / 250	70	8	22	30	1	15









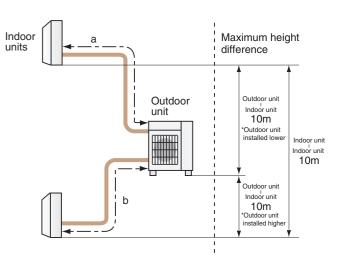
#### MXZ SERIES

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

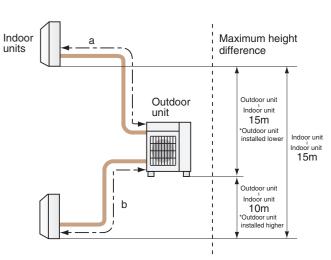
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

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

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.

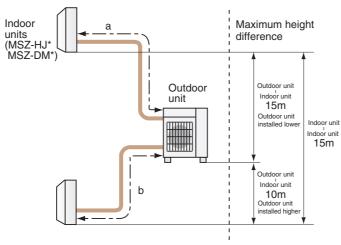
Regarding MXZ-2D33, the second unit should be a different type in the case of selecting one MFZ-KJ.

#### 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

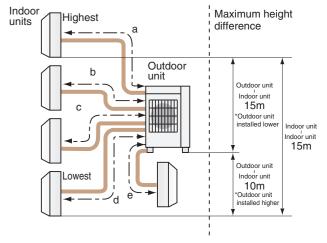


\* Only MSZ-HJ and DM model is connectable.

#### 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

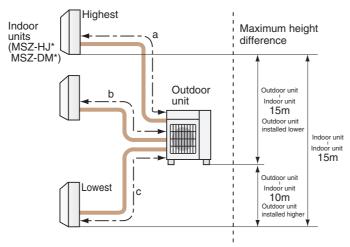
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e)	25
Total number (a+b+c+d+e)	80



#### 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

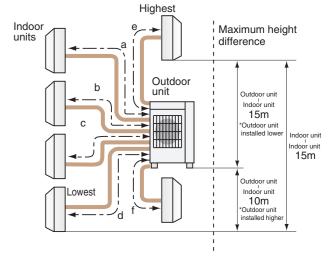


\* Only MSZ-HJ and DM model is connectable.

#### 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			

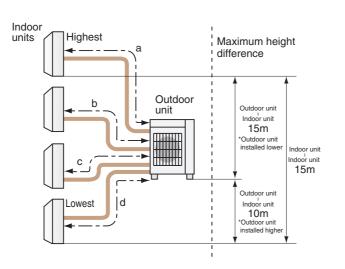
Maximum Number of Bends			
Outdoor unit - Indoor unit (a,b,c,d) 25			
Total number (a+b+c+d)	60		

<sup>\*</sup> When connecting MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

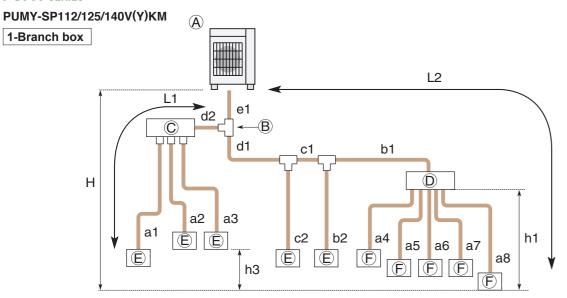
#### MXZ-4E83VA, MXZ-4E83VAHZ

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			

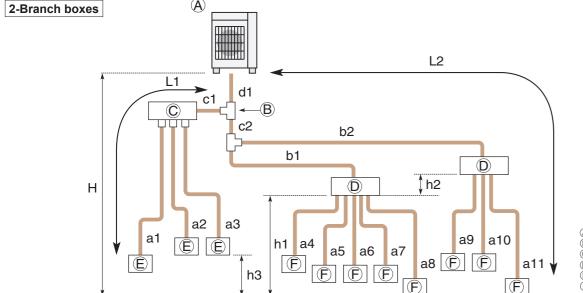


#### **PUMY** SERIES



- Outdoor Unit
- First joint (CMY, MSDD)
- © Branch header (CMY)

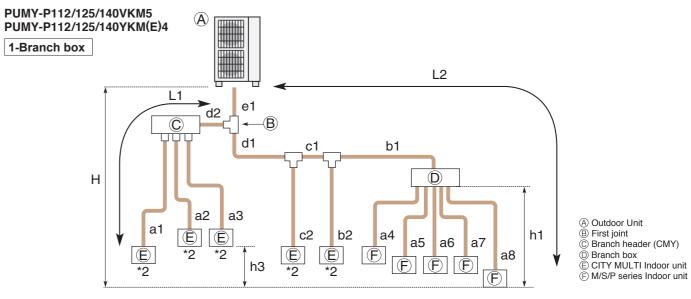
  © Branch box (PAC-MK\*BC(B))
- E) CITY MULTI Indoor unit © M/S/P series Indoor unit
- e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≤ 120 m Permissible length Total piping length Farthest piping length (L1) e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 70 m Farthest piping length. Via Branch box (L2) e1 + d1 + c1 + b1 + a8 ≦ 50 m Piping length between outdoor unit and branch box  $e1 + d1 + c1 + b1 \le 55 \text{ m}$ 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 a4 + a5 + a6 + a7 + a8 ≦ 95 m H ≦ 50 m (In case of outdoor unit is set higher than indoor unit) Total piping length between branch boxes and indoor units Permissible height 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) Number of bends le1 + d2 + a1l, le1 + d2 + a2l, le1 + d2 + a3l, le1 + d1 + c2l, le1 + d1 + c1 + b2l,  $\begin{array}{l} le1+d1+c1+b1+a4l,\ le1+d1+c1+b1+a5l,\ le1+d1+c1+b1+a6l,\\ le1+d1+c1+b1+a7l,\ le1+d1+c1+b1+a8l \leqq 15 \end{array}$
- \*1: Branch box should be placed within the level between the outdoor unit and indoor units.



- Outdoor Unit
   First joint (CMY, MSDD)
   Branch header (CMY)
- Branch box (PAC-MK-BC(B)) CITY MULTI Indoor unit
- ndoor unit

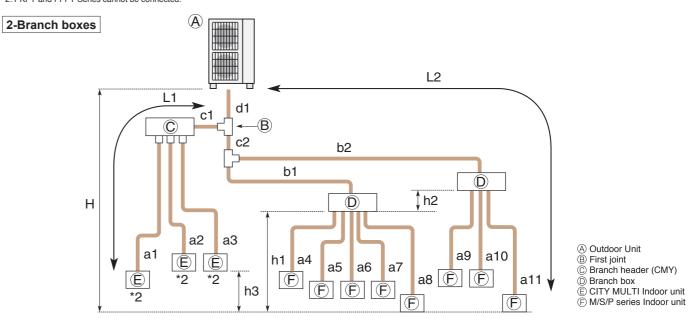
Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 120 \text{ m}$		
(One-way)	Farthest piping length (L1)	d1 + c1 + a1 ≦ 70 m		
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≤ 80 m		
	Piping length between outdoor 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 ≦ 95 m		
Permissible height	In indoor/outdoor section (H)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)		
difference		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		Id1 + 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 + b2 + a9 ,  d1 + c2 + b2 + a9 ,  d1 + c2 + b2 + a1     d1 + c2 + b2 + a2     d1 + c2 + b1 + a4 ,  d1 + c2 + b1 + a5 ,  d1 + c2 +		

\*1: Branch box should be placed within the level between the outdoor unit and indoor units.



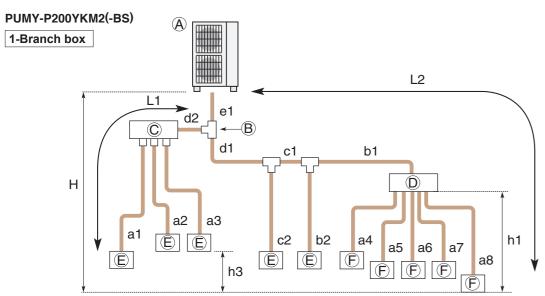
Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 300 m
(One-way)	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 85 m
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 80 m
	Piping length between outdoor 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/outdeed costion (LI)*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

\*1: Branch box should be placed within the level between the outdoor unit and indoor units.



Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 240 \text{ m}$		
Farthest piping length (L1)	d1 + c1 + a1 ≦ 85 m		
Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≤ 80 m		
Piping length between outdoor unit and branch boxes	d1 + c2 + b1 + b2 ≦ 55 m		
Farthest piping length from the first joint	c2 + b2 or c1 + a1 ≤ 30 m		
Farthest piping length after branch box	a11 ≦ 25 m		
Farthest branch box from outdoor unit	d1 + c2 + b2 ≦ 55 m		
Total piping length between branch boxes and indoor units	a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 95 m		
la independental annualism (LD*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)		
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		
	$ 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 + b2 + a9 $ , $ d1 + c2 + b2 + a10 $ , $ d1 + c2 + b2 + a11  \le 15$		
	Farthest piping length (L1) Farthest piping length. Via Branch box (L2) Piping length between outdoor unit and branch boxes Farthest piping length from the first joint Farthest piping length after branch box Farthest branch box from outdoor unit Total piping length between branch boxes and indoor units In indoor/outdoor section (H)*1 In branch box/indoor unit section (h1) In each branch unit (h2)		

- \*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	
B First joint	

© Branch header (CMY)

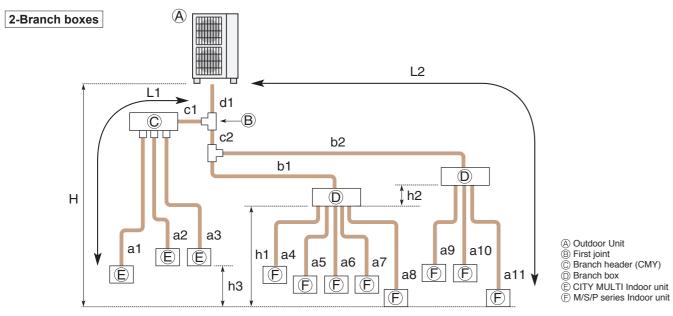
© Branch box

© CITY MULTI Indoor unit

(E)	M/S/P	series	In	door	uni

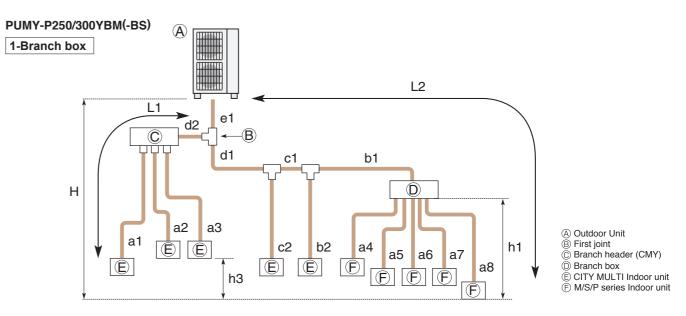
Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 150 m
(One-way)	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 80 m
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 80 m
	Piping length between outdoor 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 indoor/outdoor section (H)*1	H ≤ 50 m (In case of outdoor unit is set higher than indoor unit)
difference (One-way)		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{a6l}, \\   \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a7l}, \text{le1} + \text{d1} + \text{c1} + \text{b1} + \text{a8l} \leqq 15 $

<sup>\*1:</sup> Branch box should be placed within the level between the outdoor unit and indoor units.



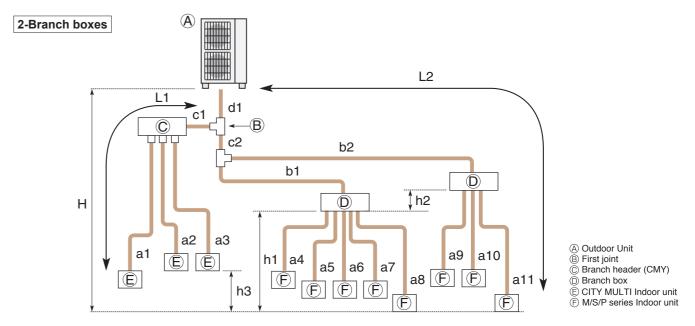
Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 150 \text{ m}$					
(One-way)	Farthest piping length (L1)	d1 + c1 + a1 ≦ 80 m					
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≦ 80 m					
	Piping length between 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	la indeeds the constitute (LIV#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							

<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 its decay (so Address and Since / I IV+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 ≤ 23

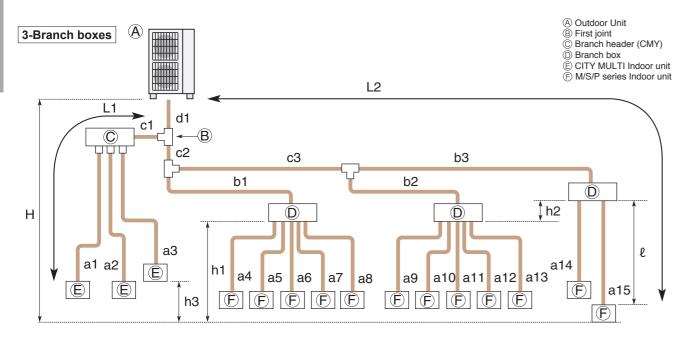
 $<sup>^{\</sup>star}1:$  Branch box should be placed within the level between the outdoor unit and indoor units.



Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 310 \text{ m}$
(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	In indeed outdoor costion (LI)*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 + 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	$d1 + c2 + c3 + b1 + b2 + b3 \le 95 \text{ m}$
	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	$a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 + a12 + a13 + a14 + a15 \le 145 \text{ m}$
Permissible height	In indoor/outdoor section (H)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
difference	III IIIdooi/outdoor section (H) T	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{array}{l}  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  \leq 23 \\ \end{array} $

 $<sup>^{\</sup>star}$ 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
	Outdoor	35°C DB, 24°C WB
Heating	Indoor	20°C DB
rieating	Outdoor	7°C DB, 6°C WB

#### Refrigerant piping length; 5m

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

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

#### Sound pressure level

- The sound pressure measurement is conducted in an anechoic chamber.
- The actual sound level depends on the distance from the unit and the acoustic environment.

#### How to read a model name

#### 1) M & S Series

M	M: M Series S: S Series			
S	"S"= Wall-mounted , "F"= Compact floor-standing , "E"= Compact ceiling-concealed ,			
5	"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 ,			
E	"E"= R410A with new A control & ErP correspondance, "G"=R32 with new A control & ErP correspondance,			
	"F"= R32 with new A control			
	"HZ"= Hyper Heating model , "H"= Anti-freeze heater equipped model ,			
HZ	"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

Р	P Series
	"K"= Wall-mounted , "S"= Floor-standing , "L"= 4-way cassette , "E"= Ceiling-concealed ,
U	"C"= Ceiling-suspended , "U"= Outdoor unit
Н	"H"= For heating and cooling
Z	"Z"= Inverter
_	

#### ZM/M/ZRP/RP/P "ZM"= R32 Eco-conscious Power Inverter , "M"= R32 &R410A

	· ·
	"ZRP"/"RP"= R410A & cleaning-free pipe reuse , "P"=R410A
SHW	"SH"= Powerful heating ZUBADAN, "W"= can be used as air to water application
71	Rated cooling capacity (kW base)
V	"V"= 230V / Single phase / 50Hz , "Y"= 400V / Three phase / 50Hz
Н	Generation
Α	"A"= A control

#### 3) MXZ Series

•,, := :	70.100
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

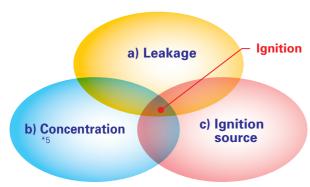
		Refrig	erant		charged uantity		x. added uantity
	Model Name		GWP	Weight [kg]	CO <sub>2</sub> equivalent [t]	Weight [kg]	CO <sub>2</sub> equivalent [t]
	MUZ-RW25VG	R32	675	1.20	0.81	1.40	0.95
	MUZ-RW35VG MUZ-RW50VG	R32 R32	675 675	1.10	0.74	1.30	1.02
	MUZ-LN25VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN25VG2	R32	675	0.8	0.54	0.20	0.135
	MUZ-LN35VG MUZ-LN35VG2	R32	675 675	1.00 0.85	0.68	0.26	0.18
	MUZ-LN50VG	R32	675	1.25	0.85	0.26	0.18
	MUZ-LN50VG2	R32	675	1.25	0.85	0.10	0.07
	MUZ-LN60VG	R32	675	1.45	0.98	0.46	0.32
	MUZ-LN25VGHZ MUZ-LN35VGHZ	R32	675 675	1.00	0.68	0.26	0.18
	MUZ-LN50VGHZ	R32	675	1.45	0.98	0.46	0.32
	MUZ-FT25VGHZ	R32	675	0.85	0.58	0.25	0.17
	MUZ-FT35VGHZ MUZ-FT50VGHZ	R32	675 675	0.95	0.65	0.45	0.31
	MUZ-AP15VG	R32	675	0.49	0.34	0.26	0.18
	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	675 675	0.55	0.37	0.26	0.18
	MUZ-AP50VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-AP60VG	R32	675	1.05	0.71	0.30	0.20
	MUZ-AP71VG	R32	675	1.50	1.02	0.30	0.20
	MUZ-AP25VGH MUZ-AP35VGH	R32 R32	675 675	0.55 0.55	0.37	0.26	0.18
	MUZ-AP42VGH	R32	675	0.70	0.47	0.26	0.18
	MUZ-AP50VGH	R32	675	1.00	0.68	0.26	0.18
	MUZ-EF25VG(H)	R32	675	0.62	0.42	0.26	0.18
	MUZ-EF35VG(H) MUZ-EF42VG	R32	675 675	0.74	0.50	0.26	0.18
	MUZ-EF50VG	R32	675	1.05	0.71	0.46	0.18
	MUZ-BT20VG	R32	675	0.45	0.30	0.26	0.18
	MUZ-BT25VG	R32	675	0.50	0.34	0.26	0.18
	MUZ-BT35VG MUZ-BT50VG	R32	675 675	0.50	0.34	0.26	0.18
	MUZ-HR25VF	R32	675	0.40	0.27	0.26	0.18
	MUZ-HR35VF	R32	675	0.45	0.30	0.26	0.18
	MUZ-HR42VF MUZ-HR50VF	R32	675 675	0.70	0.47	0.26	0.18
	MUZ-HR50VF MUZ-HR60VF	R32	675	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	R32	675	0.55	0.38	0.25	0.17
	MUZ-DW50VG MUY-TP35VF	R32 R410A	675 2088	0.97	0.66	0.25	0.17
	MUY-TP50VF	R410A	2088	0.85	0.57	0.13	0.09
	MUZ-FH25VE	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH35VE MUZ-FH50VE	R410A R410A	2088	1.15	2.41 3.24	0.39	0.82
M-Series	MUZ-FH25VEHZ	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH35VEHZ	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH50VEHZ	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-SF25VE(H) MUZ-SF35VE(H)	R410A R410A	2088	0.70	1.47	0.39	0.82
	MUZ-SF42VE(H)	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-SF50VE(H)	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-GF60VE MUZ-GF71VE	R410A R410A	2088	1.55	3.24	0.40	0.84 2.30
	MUZ-WN25VA	R410A	2088	0.70	1.47	0.26	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	1.47	0.26	0.55
	MUZ-HJ50VA	R410A	2088	1.15	2.41	0.26	0.55
	MUZ-HJ60VA	R410A	2088	1.80	3.76	0.46	0.97
	MUZ-HJ71VA MUFZ-KW25VGHZ	R410A R32	2088 675	1.80	3.76 0.68	1.26	0.97
	MUFZ-KW35VGHZ	R32	675	1.0	0.68	1.26	0.86
	MUFZ-KW50VGHZ	R32	675	1.3	0.88	1.76	1.19
	MUFZ-KW60VGHZ MX7-2D33VA	R32 R410A	675	1.3	0.88	1.76	1.19
	MXZ-2D42VA2	R410A	2088	1.15	2.72	0.0	0.00
	MXZ-2D53VA(H)2	R410A	2088	1.3	2.72	0.2	0.42
	MXZ-3E54VA	R410A	2088	2.7	5.64	0.2	0.42
	MXZ-3E68VA	R410A	2088	2.7	5.64	0.4	0.84
	MXZ-4E72VA MXZ-4E83VA	R410A R410A	2088	2.7	5.64 6.25	0.4	1.88
	MXZ-5E102VA	R410A	2088	2.99	6.25	1.6	3.35
	MXZ-6D122VA	R410A	2088	4.0	8.36	1.0	2.09
	MXZ-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	R32	675	2.4	1.62	0	0
	MXZ-4F80VF3 MXZ-4F83VF	R32	675 675	2.4	1.62	0	0
	MXZ-5F102VF	R32	675	2.4	1.62	0	0
	MXZ-6F122VF	R32	675	2.4	1.62	0	0
	MXZ-2F53VFHZ	R32	675	2.4	1.62	0	0
	MXZ-4F83VFHZ MXZ-2E53VAHZ	R32 R410A	675 2088	2.4	1.62 4.18	0.2	0.42
	MXZ-4E83VAHZ	R410A	2088	3.9	8.15	0.9	1.88
	MXZ-2DM40VA	R410A	2088	0.95	1.99	0.2	0.42
	MXZ-3DM50VA	R410A	2088	2.7	5.64	0.2	0.42
	A 0/7 0111	_					
	MXZ-2HA40VF MXZ-2HA50VF	R32	675 675	0.9	0.61	0.9	0.61

		Refrig	erant		charged lantity		c. addec 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	R410A	2088	1.60	3.35	0.46	0.9
	SUZ-KA71VA6 PUZ-ZM35VKA2	R410A	2088 675	1.80	3.76 1.35	1.265	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	R32	675	2.8	1.89	0.8	0.5
	PUZ-ZM100VKA2 PUZ-ZM100YKA2	R32	675 675	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	R32	675	3.6	2.43	2.4	1.6
	PUZ-ZM140YKA2	R32	675	3.6	2.43	2.4	1.6
	PUZ-ZM200YKA2 PUZ-ZM250YKA2	R32	675 675	6.3	4.25 4.59	9.2	6.2
	PUHZ-ZRP35VKA2	R410A	2088	2.2	4.60	0.4	0.8
	PUHZ-ZRP50VKA2	R410A	2088	2.4	5.02	0.4	0.8
	PUHZ-ZRP60VHA2	R410A	2088	3.5	7.31	1.2	2.5
	PUHZ-ZRP71VHA2	R410A	2088	3.5	7.31	1.2	2.5
	PUHZ-ZRP100VKA3 PUHZ-ZRP100YKA3	R410A R410A	2088	5.0 5.0	10.44	2.4	5.0
	PUHZ-ZRP125VKA3	R410A	2088	5.0	10.44	2.4	5.0
	PUHZ-ZRP125YKA3	R410A	2088	5.0	10.44	2.4	5.0
	PUHZ-ZRP140VKA3	R410A	2088	5.0	10.44	2.4	5.0
P-Series	PUHZ-ZRP140YKA3	R410A	2088	5.0	10.44	2.4	5.0
r-series	PUHZ-ZRP200YKA3 PUHZ-ZRP250YKA3	R410A R410A	2088	7.1	14.83 16.08	3.6 4.8	7.5
	PUZ-M100VKA2	R32	675	3.1	2.1	1.0	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 PUZ-M140VKA2	R32	675 675	3.6	2.4	1.4	0.9
	PUZ-M140VKA2	R32	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	R410A	2088	3.8	7.93	1.2	2.5
	PUHZ-P200YKA3 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	R410A	2088	5.5	11.49	2.4	5.0
	PUHZ-SHW140YHA	R410A	2088	5.5	11.49	2.4	5.0
	PUHZ-FRP71VHA PUMY-SP112VKM(-BS)	R410A R410A	2088	3.8	7.94 7.31	1.8 9.0	18.7
	PUMY-SP112YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP125VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP125YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP140VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.7
	PUMY-SP140YKM(-BS) PUMY-P112VKM5(-BS)	R410A R410A	2088	3.5 4.8	7.31	9.0	18.7
PUMY	PUMY-P112VKM5(-BS)	R410A	2088	4.8	10.02	13.8	28.8
	PUMY-P140VKM5(-BS)	R410A	2088	4.8	10.02	13.8	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) PUMY-P200YKM2(-BS)	R410A R410A	2088	4.8 7.3	10.02 15.24	13.8	28.8 27.3
	PUMY-P250YBM(-BS)	R410A	2088	9.3	19.42	32.1	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 PUZ-WM85V/YAA	R32	675 675	2.2	1.49	_	-
Packaged	PUZ-WM112V/YAA	R32	675	3.0	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	0.10
	PUD-SWM120V/YAA	R32	675	1.6	1.08	0.23	0.16
	PUD-SHWM60VAA	R32	675	1.4	0.945	0.3	0.20
	PUD-SHWM80V/YAA PUD-SHWM100V/YAA	R32	675 675	1.4	0.945 1.1475	0.3	0.20
ATW	PUD-SHWM120V/YAA	R32	675	1.7	1.1475	0.13	0.0
Split	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	R410A	2088	4.2	8.77	1.6	3.7
	PUHZ-SW120V/YHA	R410A	2088	4.6	9.61	2.9	6.0
	PUHZ-SW160YKA	R410A	2088	7.1	14.83	4.0 5.2	8.3
	PUHZ-SW200YKA PUHZ-SHW80V/YAA	R410A R410A	2088	7.7 4.6	16.08 9.61	1.4	2.9
	PUHZ-SHW112V/YAA	R410A	2088	4.6	9.61	1.4	2.9
	PUHZ-SHW140YHA	R410A	2088	5.5	11.49	2.4	5.0
	PUHZ-SHW230YKA2	R410A	2088	7.1	14.83	8.4	17.5
Mr. Slim+	PUHZ-FRP71VHA2	R410A	2088	3.8	7.94	1.8	3.70

## 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"

 $<\!\!\text{Repair/Relocation/Removal}\!\!>\cdot\!\!\text{Pump down or recovering refrigerant should be done}.$ 

#### 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\*.

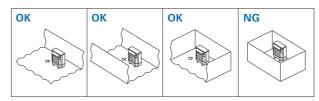
\* Refer to table and drawings below

<m se<="" th=""><th>ries&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>	ries>	<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		

Wall-mounted	Ceiling-suspended	
h0≧1.8[m]	h0≧2.2[m]	
Cassette	Ceiling-concealed	Floor-standing
h0≧2.2[m]	h0≧2.2[m]	П
		h0: max 0.15[m]

#### 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.



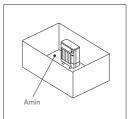
If you unavoidably install a unit in a space where all four sides are blocked or there are depressions, confirm that one of these situations (A, B or C) is satisfied.

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

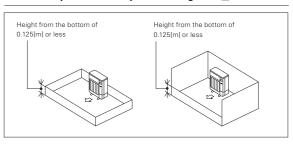
Install in a space with an installation area of Amin\* or more, corresponding to refrigerant quantity M. (M = factory-charged refrigerant + locally added refrigerant)

\* 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



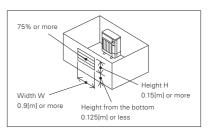
#### **B** Install in a space with a depression height of $\leq 0.125$ [m].



#### 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/F	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.	Actor or and a second or a sec	Anne

#### LOSSNAY LINEUP

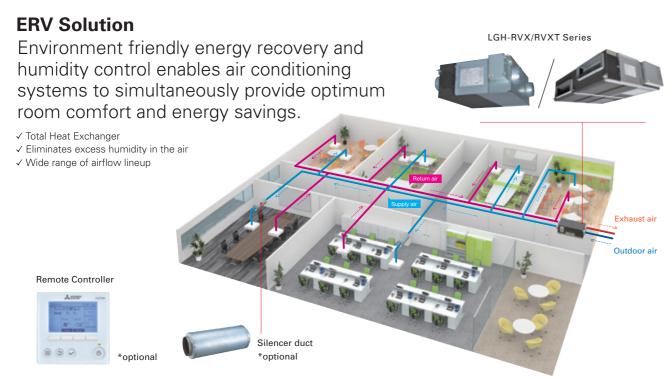
Applica	ation	Model	Airflow	50 CMH	100 CMH	150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
		LGH-RVX Series				•	•	•	•	•	•	•	•		
<u> </u>	aled	LGH-RVXT Series											•	•	•
Centralized Ventilation	Concealed	LGH-RVS Series	-						•		•	•			
lized Ve	Ceiling	GUF Series							•			•			
Centra		GUG Series (Dx-coil unit for Lossnay LGH-RVX/RVXT Series)	•						•	•	•	•	•	•	•
	Vertical Type	VL-CZPVU Series					•	•	•						
alized	l 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

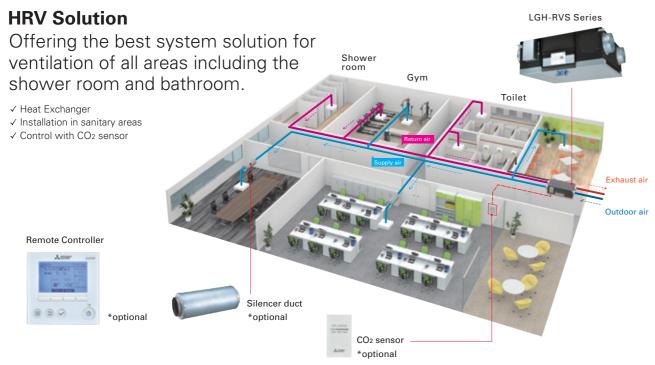
#### **Energy Recovery Ventilation**

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.

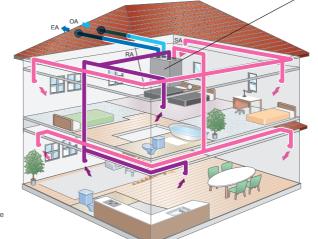
#### **Centralized Ventilation Solution**

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











#### **Energy Recovery Ventilation**

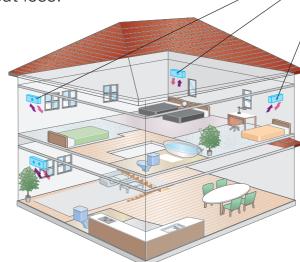
A total heat exchange ventilation system that uses paper characteristics (Lossnay Core) to perform temperature (Sensible heat) and humidity (latent heat) exchange.

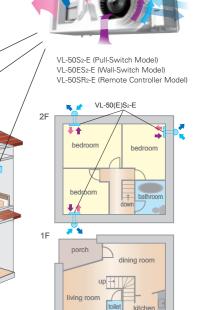
#### **Decentralized Ventilation Solution**

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

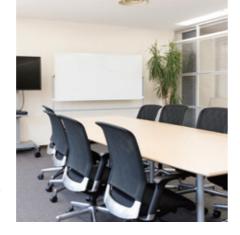






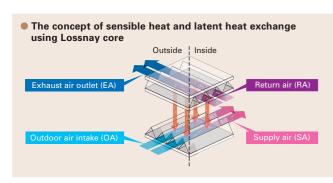
# LOSSNAY

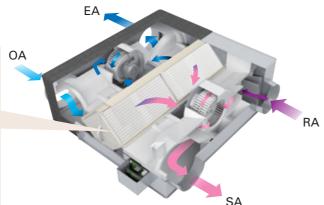
Lossnay ventilation systems are renowned industry-wide for their efficiency. They offer environment-friendly energy recovery and humidity control, and enable air conditioning systems to simultaneously provide optimum room comfort and energy savings.



## Indoor air quality inside a building is optimized through temperature and humidity exchange by Lossnay

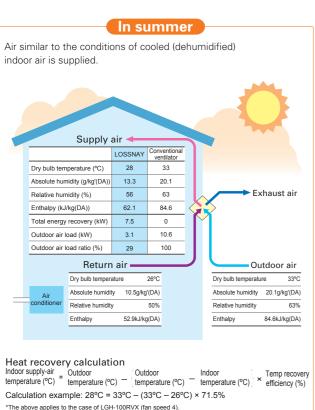
Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.

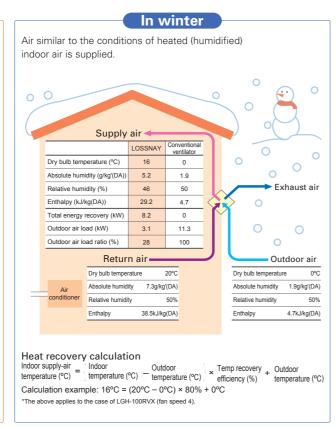




#### What can be improved by introducing Lossnay?

Ventilation with maximized comfort





# LGH-RVX s

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

# IES high performance and

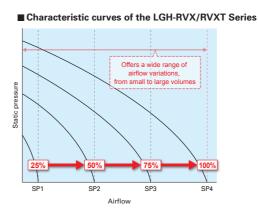
#### Improved airflow range

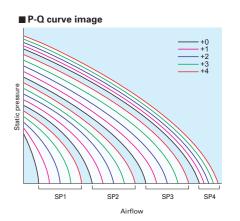
#### Wide airflow range

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 SERIE

ERIES

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



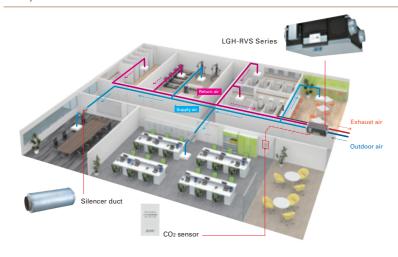
# LGH-RVS SERIES

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



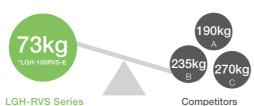
A sensible heat exchanger allows ventilation of all areas including sanitary area.

- Plug and play CO2 sensor control including power
- Digital commissioning of fan speed increments
- Built-in condensate drainage traps

#### Easy installation

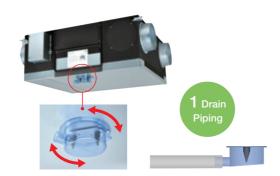
#### **Light Chassis**

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.







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).

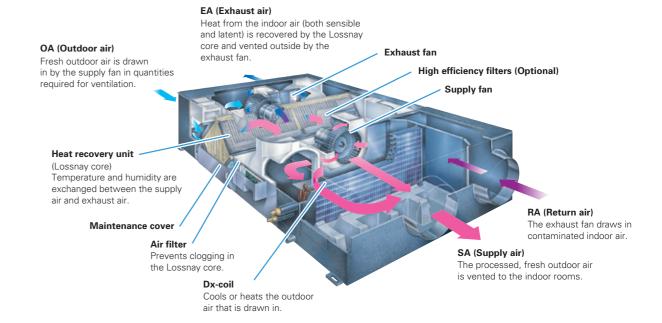
#### R410A refrigerant units

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				•	•	•	•	•	•	•	•	•	•			
DUMV 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



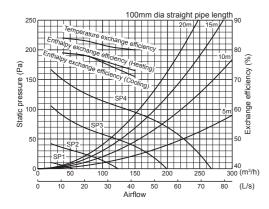
### LGH-RVX SERIES

#### **Specifications**

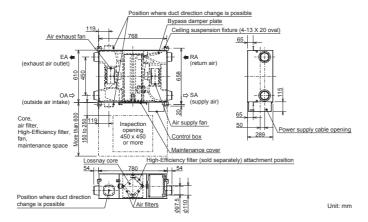
#### LGH-15RVX-E

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	SP1
Running current (A)		0.40	0.24	0.15	0.10	0.41	0.25	0.15	0.10
Input power (W)	49	28	14	7	52	28	14	8	
Airflow	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)			24	19	17	29	24	19	18
Weight (kg)					2	.0			
Specific energy consumption class					,	Α			

#### **Characteristic Curves**



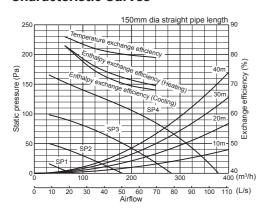
#### **Dimensions**



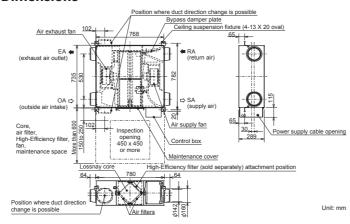
#### LGH-25RVX-E

Electrical power supply 220-240V/50Hz, 220V/60Hz									
Ventilation mode Heat recovery mode Bypass mode									
Fan speed		SP4							SP1
Running current (A)		0.48	0.28	0.16	0.10	0.48	0.29	0.16	0.11
Input power (W)		62	33	16	7.5	63	35	17	9
Airflow	(m <sup>3</sup> /h)	250	188	125	63	250	188	125	63
All HOW	(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	-	-	-	-
Cooling			70	74.5	83	-	-	-	-
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			22	20	17	27.5	23	20	17
Weight (kg)		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.

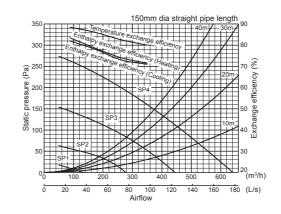
  \*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*For specifications at other frequencies, contact your dealer.

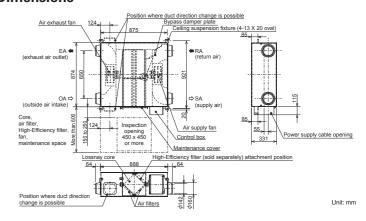
#### LGH-35RVX-E

Electrical power supply				2	20-240V/50H	tz, 220V/60H	Ηz			
Ventilation mode		Heat recovery mode Bypass mode								
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1	
Running current (A)		0.98	0.54	0.26	0.12	0.98	0.56	0.28	0.13	
Input power (W)		140	70	31	11	145	72	35	13	
Airflow (m³/h)			263	175	88	350	263	175	88	
Airnow	(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	-	-	-	-	
Cooling			73	78	82	-	-	-	-	
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			28	20	17	32.5	28	20	18	
Weight (kg)				3	80					

#### **Characteristic Curves**



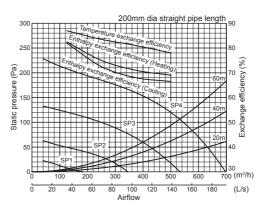
#### **Dimensions**



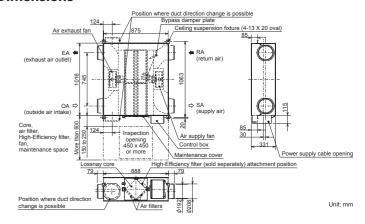
#### LGH-50RVX-E

Electrical power supply			2:	20-240V/50H	Hz, 220V/60H	Hz			
Ventilation mode		mode							
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Running current (A)		1.15	0.59	0.26	0.13	1.15	0.59	0.27	0.13
Input power (W)		165	78	32	12	173	81	35	14
Airflow (m³/h)			375	250	125	500	375	250	125
All llow	(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	-	-	-	-
Cooling		66.5	68	72.5	82	-	-	-	-
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			28	19	18	35	29	20	18
Weight (kg)				3	3				

#### **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.

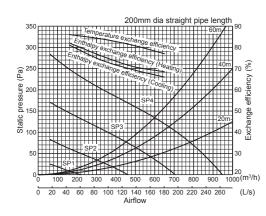
  \*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*For specifications at other frequencies, contact your dealer.

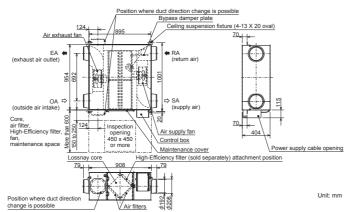
#### LGH-65RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz								
Ventilation mode		Heat recovery mode Bypass mode								
Fan speed	an 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)	nput power (W) 252					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**



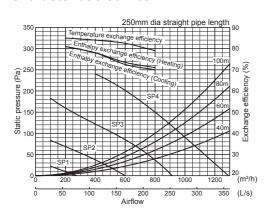
#### **Dimensions**



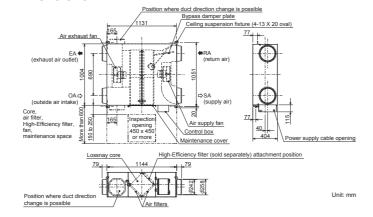
#### LGH-80RVX-E

Electrical power supply				2	20-240V/50H	tz, 220V/60H	-lz		
Ventilation mode			Heat recovery mode Bypass mode						
Fan speed		SP4         SP3         SP2         SP1         SP4         SP3         SP2						SP1	
Running current (A)	unning current (A)			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 How	(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	-	-	-	-
Entrialpy exchange eπiciency (%)	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
Veight (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.

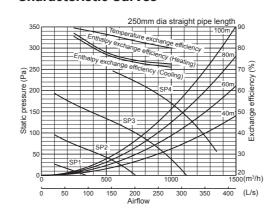
  \*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*For specifications at other frequencies, contact your dealer.

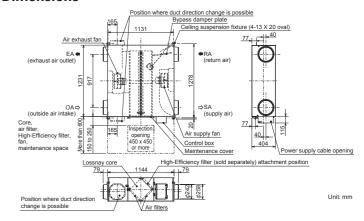
#### LGH-100RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode	Ventilation 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 (70)	Cooling	71	73	77	85.5	-	-	-	-
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			31	23	18	38	32	24	18
Weight (kg)	54								

#### **Characteristic Curves**



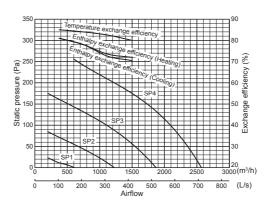
#### **Dimensions**



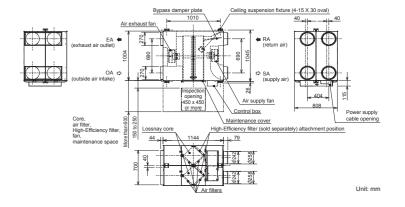
#### LGH-150RVX-E

Floatrical account account.	Electrical power supply 220-240V/50Hz, 220V/60Hz									
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
Ventilation mode	lation 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	-	-	-	-	
Entrialpy 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.

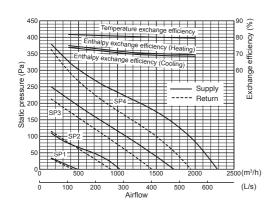
### LGH-RVXT SERIES

#### **Specifications**

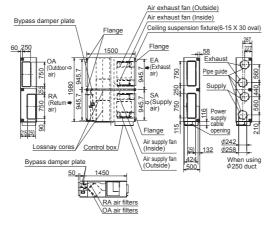
#### LGH-150RVXT-E

Electrical power supply				2	20-240V/50H	lz, 220V/60H	-lz		
Ventilation mode		Heat recovery mode Bypass mode							
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**



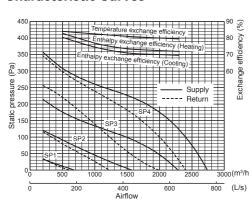
#### **Dimensions**



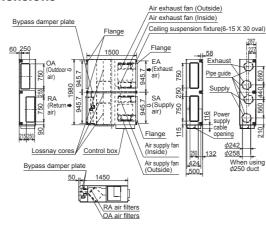
#### LGH-200RVXT-E

Floatried as your great.											
Electrical power supply		220-240V/50Hz, 220V/60Hz									
Ventilation mode		Heat recovery mode Bypass mode									
Fan speed	an speed			SP4         SP3         SP2         SP1         SP4         SP3         SP2					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		
	(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 (i a)	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 the center of the unit in an anechoic chamber)			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.

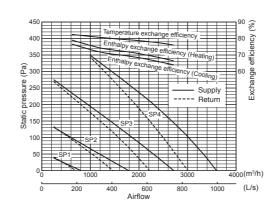
\*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

\*For specifications at other frequencies, contact your dealer.

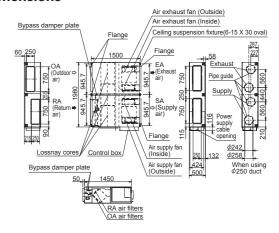
#### LGH-250RVXT-E

EGII ZOONVAT E									
Electrical power supply				2	20-240V/50H	Hz, 220V/60H	-lz		
Ventilation mode	Ventilation mode			Heat recovery mode Bypass mode					
Fan speed		SP4 SP3 SP2 SP1 SP4 SP3 SP2						SP1	
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 How	(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	-	-	-	-
Entitalpy exchange efficiency (%)	Cooling	65.5	69	71.5	76.5	-	-	-	-
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)			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.

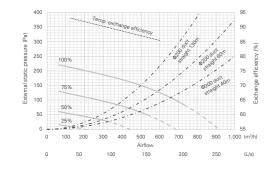
### LGH-RVS SERIES

#### **Specifications**

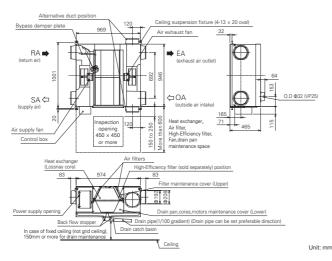
#### LGH-50RVS-E

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	
Airflow (m³/h) (L/s)		500	375	250	125	
		(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**

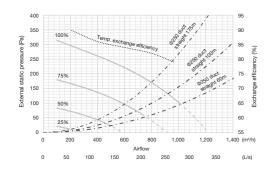


#### LGH-80RVS-E

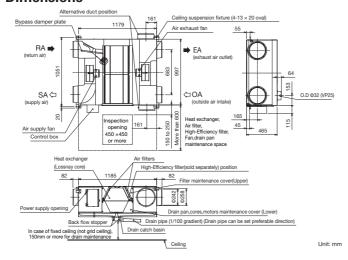
Weight						63kg (77kg with maximum drain water)				
Electrical power supply						220-240V/50Hz, 220V/60Hz				
Fan speed		100%	75%	50%	25%	Test condition				
Input power (W)		325	175	85	32					
Airflow (m³/h)		800	600	400	200					
AirtioW	(L/s)	222	167	111	56	ISO 16494				
Specific fan power [W/(L/s	)]	1.46	1.05	0.77	0.58	Temp. exchange efficiency is winter condition				
External static pressure	(Pa)	170	96	43	11					
Temperature exchange 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 ratio (	%)			5		Tracer gas method @100% airflow (prEN308)				

#### **Characteristic Curves**

257



#### **Dimensions**

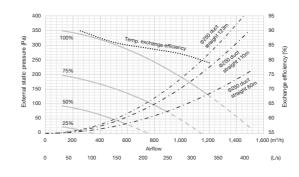


# ■The input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz. Temperature exchange efficiency (%) is measured at indoor DB 20°C/WB15°C and outdoor DB 5°C/WB3°C. It is measured according to ISO16494. When the indoor humidity is low and condensation in the heat exchanger 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.

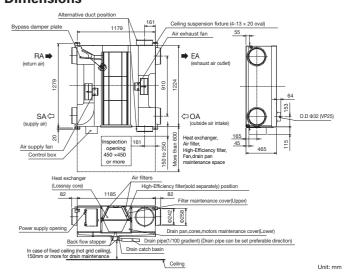
#### LGH-100RVS-E

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					
A1.01.	(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 e	fficiency (%)	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 (	%)			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 0.0139kg/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.

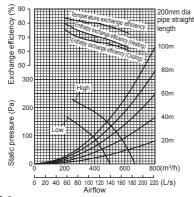
### **GUF** SERIES

#### **Specifications**

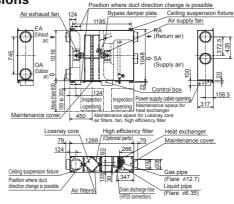
#### GUF-50RD4

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 HOW		(L/s)	139	111	139	111		
External static pressu	re (Pa)		140	90	140 90			
Temperature exchang	e efficiency (%)		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	Humidifying capacity (kg/h)		-	-			
	Water supply pre	essure		-	-			
Noise (dB) (Measur	ed at 1.5m unde	r the center of the unit in an anechoic chamber)	choic chamber) 33.5-34.5 29.5-30.5 35-36 29.			29.5-30.5		
Weight (kg)	nt (kg) 48							

#### **Characteristic Curves**



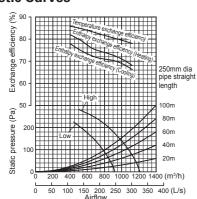




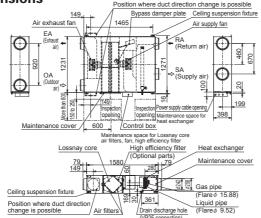
#### **GUF-100RD4**

Electrical power suppl	ly			220-240	0V/50Hz	
Ventilation mode			Heat reco	very mode	Bypass	s 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	(m <sup>3</sup> /h)			800	1000	800
AIITIOW		(L/s)	278	222	278	222
External static pressur	atic pressure (Pa)		140	90	140	90
Temperature exchange	e efficiency (%)		79.5	81.5	-	-
Enthalpy exchange eff	ficioney (%)	Heating	71	74	-	-
Littialpy excitatinge en	ilciency (70)	Cooling	69	71	-	-
Cooling capacity (kW)				11.44	(4.12)	
Heating capacity (kW)	)			12.56	(4.26)	
Capacity equivalent to	the indoor unit			P6	33	
	Humidifying			-	-	
Humidifier	Humidifying cap	acity (kg/h)		-	-	
	Water supply pr	essure		-	-	
Noise (dB) (Measure	pise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		38-39 34-35 38-39 35			35-36
Weight (kg)				8	2	

#### **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.

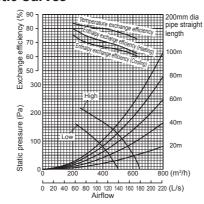
  \*Figures in the chart are measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

  \*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 connected to 1 outdoor units (PUHY or PURY) exceeds the capaci

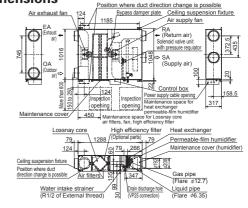
#### **GUF-50RDH4**

Electrical power supp	oly			220-240	)V/50Hz			
Ventilation mode			Heat recov	very mode	Bypass	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		
AITIOW		(L/s)	139	111	139	111		
External static pressu	ire (Pa)		125	80	125	80		
Temperature exchang	ge efficiency (%)		77.5	80	-			
Enthalpy exchange efficiency (%)		Heating	68	71	-	-		
Entitalpy exchange er	inciency (70)	Cooling	65	67	-	-		
Cooling capacity (kW)	)			5.57 (	(1.94)	•		
Heating capacity (kW)	)			6.21 (	(2.04)			
Capacity equivalent to	the indoor unit			P3	32			
	Humidifying		Permeable film humidifier					
Humidifier	Humidifying cap	acity (kg/h)		2.7 (he	eating)			
Water supply pressure		Minimum pressure : $2.0 \times 10^4$ Pa Maximum pressure : $49.0 \times 10^4$ Pa						
Noise (dB) (Measur	ed at 1.5m unde	r 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**

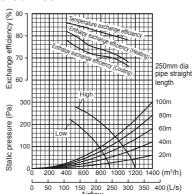


#### GUF-100RDH4

Electrical power supp	oly			220-240	OV/50Hz		
Ventilation mode			Heat reco	very mode	Bypass	s mode	
Fan speed			High	Low	High	Low	
Running current (A)			2.20	2.20 1.76 2.25 1.77			
Input power (W)			480-505 385-400 490-515 385-410				
Airflow	lirflow (m³/h)		1000	800	1000	800	
All IIOW		(L/s)	278	222	278	222	
External static pressu	ıre (Pa)		135	86	135 86		
Temperature exchange	ge efficiency (%)		79.5	81.5	-	-	
Enthalpy exchange ef	fficiency (%)	Heating	71	74	-	-	
Littialpy excitatige et	iliciericy (70)	Cooling	69	71	-	-	
Cooling capacity (kW	)			11.44	(4.12)		
Heating capacity (kW	7)			12.56	(4.26)		
Capacity equivalent to	o the indoor unit			P	63		
	Humidifying		Permeable film humidifier				
Humidifier Humidifying capacity (kg/h)		pacity (kg/h)		5.4 (he	eating)		
Water supply pressure			Minimum	pressure : $2.0 \times 10^4 Pa$	Maximum pressure : 49.	0 × 10 <sup>4</sup> Pa	
Noise (dB) (Measur	red at 1.5m unde	er the center of the unit in an anechoic chamber)	38-39	34-35	38-39	35-36	
Weight (kg)				88 (filled wi	th water 96)		

**Dimensions** 

#### **Characteristic Curves**



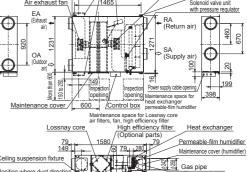
- For GUF series

  \*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 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 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 (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 out



# **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)

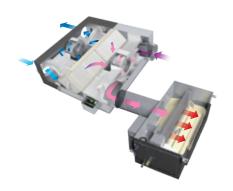


GUG-03SL-E

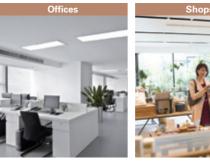
#### Supply comfortable control

#### **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.

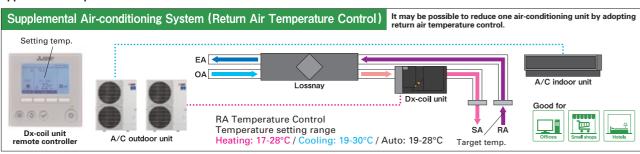


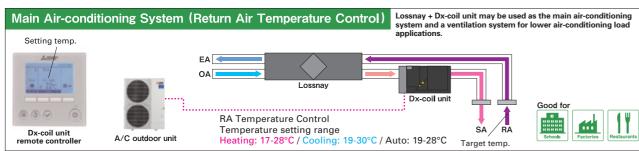
#### ■ Target Applications

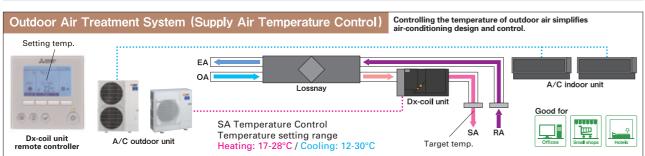




#### **Application Examples**





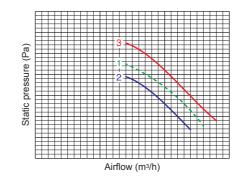


\*The above images of using the LGH-RVXT Series are simply examples for reference.

#### 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

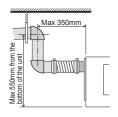
P-Q curve image

- 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.



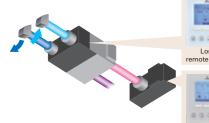
#### User-friendly system control

#### Flexible Remote Controller Selection

(A) One remote controller



#### (B) Two remote controllers



ON/OFF
Fan speed
Vent. mode

Lossnay
remote controller

ON/OFF
Heating/Cooling

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		
rd[]	FS2	FS2	FS2		
	FS1	FS1	FS1		

# **GUG** SERIES Specifications

Electrical power supply

Connectable Lossnav unit

Heating

Cooling

Heating

Cooling

[L/s]

Input power

Weight

Function

Running current

Capacity [kW]

Performance index

Airflow range at SP3 and SP4

Connectable outdoor unit

External static pressure [Pa]

SHF

Ext. piping

Fan speed

Airflow



GUG-01SL-E

LGH-65RVX-E

7.7 ( 3.2 + 4.5 )

6.6 ( 2.6 + 4.0 )

0.69

4.72

5.03

350 - 900 m<sup>3</sup>/h

PUHZ-ZRP35

Diameter Liquid / Gas: 6.35 / 12.7

Maximum length: 50m, Maximum height: 30m

SP2

325

90

24

SP3

488

135

53

SP1

163

45

#### GUG-02SL-E (Connection to LGH-80RVX-E or LGH-100RVX-E)

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] 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 Performance index Cooling

Airflow range at SP3 and SP4 4 98 700 - 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 LGH-80RVX-E Connectable Lossnay unit LGH-100RVX-E

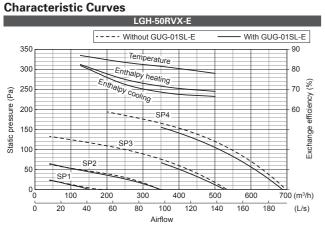
Capacity [kW]	Heating		10.0 ( 4.	0 + 6.0 )			11.4 ( 5.	.1 + 6.3 )	
	Cooling		8.3 ( 3.3	3 + 5.0)			9.5 ( 4.5	2 + 5.3 )	
SHF			0.	69			0.	.73	
Performance index	Heating		4.	62		5.09			
renormance muex	Cooling		4.	76			5.	43	
Airflow range at SP3	and SP4		560 - 12	200 m <sup>3</sup> /h		700 - 1200 m³/h			
Connectable outdoor	r unit		PUHZ-	ZRP50		PUHZ-ZRP50			
Ext. piping	Ext pining		Diameter Liquid	/ Gas: 6.35 / 12.7		Diameter Liquid / Gas: 6.35 / 12.7			
Ext. pipirig		Max	imum length: 50m,	Maximum height:	30m	Maximum length: 50m, Maximum height: 30m			30m
Required optional pa	ırts		PAC-SH30RJ-E at	nd PAC-SH50RJ-E			PAC-SH30RJ-E a	nd PAC-SH50RJ-E	
				Ventilation spec	cifications				
Connectable Lossna	y unit		LGH-80	RVX-E			LGH-10	00RVX-E	
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1
Airflow	[m³/h] 800		600	400	200	1,000	750	500	250
All llow	[L/s] 222 167		111	56	278	208	139	69	
External static pressi	ure [Pa]	130	73	33	8	130	73	33	8

125

35

650

181



500

139

105

GUG-01SL-E (Connection to LGH-50RVX-E or LGH-65RVX-E)

Heating / Fan: 2.5W, Cooling: 12.4W

21kg \*Accessories: Approx. 1kg

RA (Return Air) temperature control

220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)

Heating / Cooling / Auto / Fan \*Auto is only available for RA temperature control

LGH-50RVX-E

6.5 ( 2.4 + 4.1 )

5.6 ( 2.0 + 3.6 )

0.66

4.09

4.69

350 - 695 m<sup>3</sup>/h

PUHZ-ZRP35

Diameter Liquid / Gas: 6.35 / 12.7

Maximum length: 50m, Maximum height: 30m

SP2

250

69

26

SP3

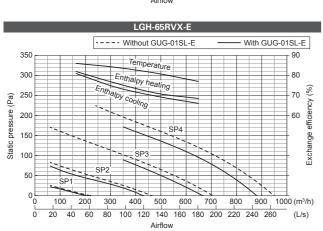
375

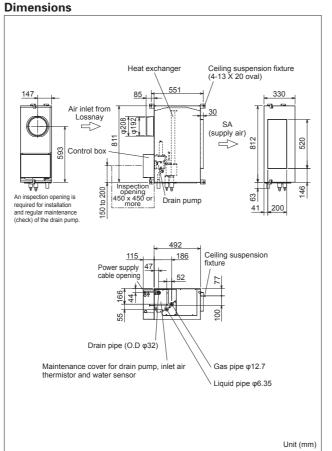
104

59

R410A

Less than 0.1A

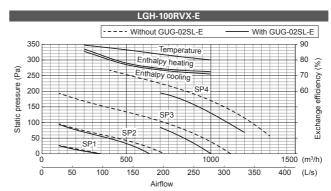




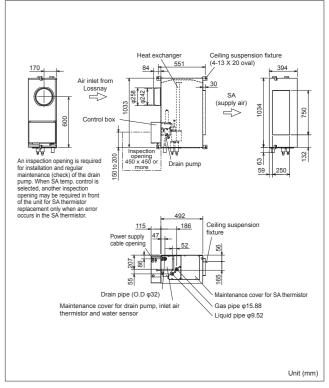
#### --- Without GUG-02SL-E With GUG-02SL-E 200 (m<sup>3</sup>/h) 200 400 600 800 1000 1200 300 350 (L/s) 100 150 200 250

Airflow

**Characteristic Curves** 



#### Dimensions



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GUG-02SL-E

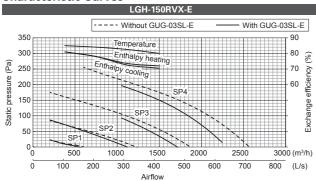


GUG-03SL-E

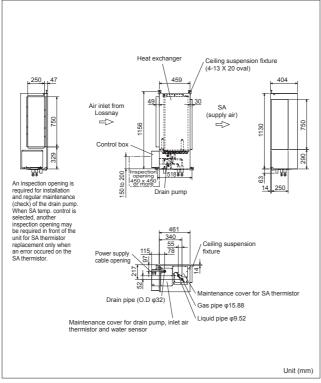
#### **GUG-03SL-E (Connection to LGH-150RVX-E)**

Refrigerant		R410A							
Electrical power supp	oly	220-240V / 50Hz, 220V / 60Hz (Sup	plied from outdoor unit)						
Input power		Heating / Fan: 2.5W, Cooling: 12.4W	1						
Running current		Less than 0.1A							
Weight		28kg *Accessories: Approx. 1kg							
		Heating / Cooling / Auto / Fan *Auto is only available for RA temperature control							
Function		RA (Return Air) temperature control	/ SA (Supply Air) temperature control						
		RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]							
		RA (Return Air) temperature control							
Connectable Lossnay	/ unit		LGH-15	0RVX-E					
Canacity [IAM]	Heating		20.7 ( 7.7	7 + 13.0 )					
Capacity [kW]	Cooling		15.8 ( 6.	3 + 9.5)					
SHF			0.6	68					
Performance index	Heating		4.2	24					
renormance index	Cooling		5.2						
Airflow range at SP3	and SP4 1050 - 2250 m³/h								
Connectable outdoor	unit	PUHZ-ZRP100							
Ext. piping				/ Gas: 9.52 / 15.88					
Lxt. piping		Maximum length: 75m, Maximum height: 30m							
		SA (Supply Air) temperature control							
Connectable Lossnay	/ unit	LGH-150RVX-E							
Capacity [kW]	Heating	16.6 ( 7.7 + 8.9 )							
, ,, ,	Cooling		13.4 ( 6.						
SHF				85					
Performance index	Heating			46					
	Cooling			32					
Airflow range at SP3				250 m³/h					
Connectable outdoor	unit		PUHZ-						
Ext. piping				/ Gas: 9.52 / 15.88					
Ext. piping				Maximum height: 30m					
				pecifications					
Connectable Lossnay	/ unit		LGH-15						
Fan speed		SP4	SP3	SP2	SP1				
Airflow	[m³/h]	1,500	1,125	750	375				
	[L/s]	417	313	208	104				
External static pressu	ıre [Pa]	150	84	38	9				

#### **Characteristic Curves**



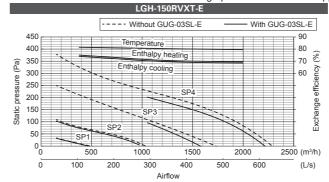
#### **Dimensions**

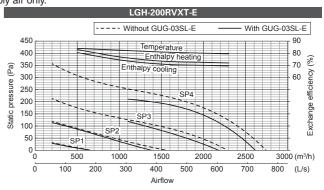


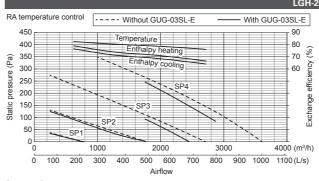
#### GUG-03SL-E (Connection to LGH-150RVXT-E, LGH-200RVXT-E or LGH-250RVXT-E)

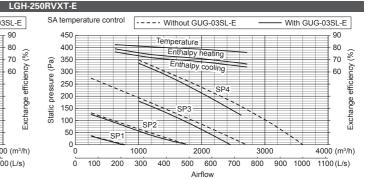
Refrigerant		R410A											
Electrical power supp	oly	220-240V /	50Hz, 220V	/ / 60Hz (Su	oplied from o	utdoor unit)							
Input power		Heating / F	an: 2.5W, Co	ooling: 12.4V	V								
Running current		Less than (	).1A										
Weight		28kg *Ac	cessories: A	pprox. 1kg									
		Heating / C	ooling / Auto	/Fan *Aı	uto is only av	vailable for RA temperature control							
Function		RA (Return [Must be se	Air) temper et at initial se	ature control etting and no	/ SA (Supply t possible to	y Air) temperature control change from remote controller]							
						RA (F	Return Air) te	emperature c	ontrol				
Connectable Lossnay	/ unit		LGH-150	ORVXT-E			LGH-200	ORVXT-E			LGH-25	0RVXT-E	
Capacity [kW]	Heating		20.4 ( 7.4	1 + 13.0 )			23.8 ( 10.	3 + 13.5)			26.1 ( 12	.1 + 14.0 )	
	Cooling		15.7 ( 6.	2 + 9.5)			18.4 ( 8.4	4 + 10.0 )			22.3 ( 9.	8 + 12.5 )	
SHF		0.68					76				.87		
Performance index	Heating	4.07					86				.75		
	Cooling	5.03		5.59			4.59						
Airflow range at SP3				250 m³/h		1050 - 2600 m³/h			1750 - 2880 m³/h				
Connectable outdoor	unit	PUHZ-ZRP100					PUHZ-2	ZRP100			PUHZ-ZRP125		
Ext. piping		Diame		/ Gas: 9.52			Diameter Liquid / Gas: 9.52 / 15.88  Maximum length: 75m, Maximum height: 30m			Diame		/ Gas: 9.52	
Ext. pipirig		Maximum	length: 75m,	Maximum h	neight: 30m					Maximum	length: 75m	, Maximum h	eight: 30m
						SA (8	Supply Air) te	mperature c	ontrol				
Connectable Lossnay	/ unit	LGH-150RVXT-E			LGH-200RVXT-E			LGH-250RVXT-E					
Capacity [kW]	Heating		16.3 ( 7.	4 + 8.9 )			19.5 ( 10.3 + 9.2 )			21.6 ( 12.1 + 9.5 )			
, ,, ,	Cooling		13.3 ( 6.	.2 + 7.1 )			15.9 ( 8.	.5 + 7.4 )		17.6 ( 9.8 + 7.8 )			
SHF			0.	86			0.	90			0.	.95	
Performance index	Heating		5.	16			6.	• •			5.	.97	
	Cooling			03				54				.31	
Airflow range at SP3	and SP4		1050 - 2	250 m³/h			1050 - 2	600 m³/h			1000 - 2	:600 m <sup>3</sup> /h	
Connectable outdoor	unit		PUHZ-	ZRP71			PUHZ-	ZRP71			PUHZ-	-ZRP71	
Eut 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
Ext. piping		Maximum	length: 50m,	Maximum h	neight: 30m	Maximum	length: 50m,	Maximum h	eight: 30m	Maximum	length: 50m	, Maximum h	eight: 30m
							Ventilation s	pecifications					
Connectable Lossnay	/ unit			ORVXT-E				ORVXT-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 pressu	ıre [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 CO2, 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

	PZ-62DI	R-EA/EB	PZ-43SMF-E
Function	Acceptance of the control of the con	Amer 130  Line (brend)	25 Lover Lov
	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

\*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		Included	A 5 11 11	Required
Material	ISO 16890	EN779 (2012)	Model Name	piece/set	Applicable model	filter pieces
		G3*	PZ-15RF <sub>8</sub> -E	2	LGH-15RVX-E	2
	Coarse 35%		PZ-25RF <sub>8</sub> -E	4	LGH-25RVX-E	4
			PZ-35RF <sub>8</sub> -E	4	LGH-35RVX-E	4
			PZ-50RF <sub>8</sub> -E	4	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	4
Non-woven	Coarse 35%		PZ-65RF <sub>8</sub> -E	4	LGH-65RVX-E	4
Fabrics			P7-80RFs-F		LGH-80RVX-E	4
			PZ-8URF8-E	4	LGH-150RVX-E	8
Carra 50%			PZ-100RFs-E	4	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	4
	0.0	PZ-150RTF-E	4	LGH-150RVXT-E	4	
	Coarse 50% G3	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	Classif ISO 16890	ication EN779 (2012)	Model Name	Included piece/set	Applicable model	Required filter pieces
	100 10000	M6*	PZ-15RFM-E	1	LGH-15RVX-E	1
			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	ePIVI10 /5%	IVID -	PZ-65RFM-E	2	LGH-65RVX-E	2
			P7-80RFM-F	2	LGH-80RVX-E	2
			PZ-8URFIVI-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	Classification		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	
		-	PZ-OUNFF2-E	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	Classif	ication	Model Name Iniciaded Applicable model		Required		
Material	ISO 16890	EN779 (2012)	IVIOUEI INAITIE	piece/set	Арріісавіе піоцеі	filter pieces	
	ePM10 75%	M6*	PZ-M6RTFM-E	E 3			
Non-woven Fabrics	ePM1 65% ePM2.5 75% ePM10 90%	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				
Filter material Classifi		ication	Model name	Included	A lia - bia del	Required
Filter material	ISO 16890 (2016)	EN779 (2012)	woder 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 material	Classif	Classification		Included	Applicable 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**



		Lossnay				
Filter meterial	Filter material Classification		Model name	Included		Required
Filter material	ISO 16890 (2016)	EN779 (2012)	Wiodel Harrie	piece/set	Applicable model	set/unit
	ePM10 90%		PZ-S50RFH-E	2	LGH-50RVS-E	1
Pleated filter	ePM2.5 75%	F8	PZ-S80RFH-E	2	LGH-80RVS-E	1
	ePM <sub>1</sub> 65%		D7-S100DEU-E	2	LGH-100RVS-E	1

#### **Accessories** For LGH-RVS Series

#### CO<sub>2</sub> Sensor

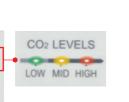
A CO<sub>2</sub> sensor connected directly to a Lossnay RVS unit optimizes the fan speed according to the level of CO2 detected. It improves total heat exchange efficiency and contributes to energy saving.

PZ-70CSW-E (Wall mounted type)

CO<sub>2</sub> levels are indicated by LED lights.

PZ-70CSB-E (Built-in type)







■ 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.

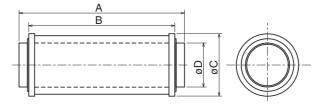


#### **Specifications**

Model	Airflow		Attenuation of sound power level [dB] for center frequency (Discharge)									
Iviouei	[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-10033-E	150	0	3	6	7	7	7	7	9			
PZ-150SS-E	250	0	1	5	8	15	21	20	14			
FZ-15055-E	350	0	1	4	8	14	21	21	16			
PZ-200SS-E	500	0	1	4	7	13	18	16	9			
FZ-20033-E	650	0	1	3	8	12	17	14	6			
PZ-250SS-E	800	0	2	4	12	22	21	14	13			
FZ-23033-E	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.

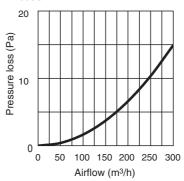
#### **Dimensions**



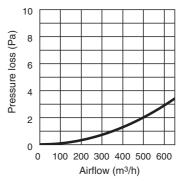
Model	Α	В	С	D	Connecting duct	Weight (kg)
PZ-100SS-E	450	400	152	99	ø100	1.9
PZ-150SS-E	560	500	202	149	ø150	3.5
PZ-200SS-E	660	600	252	199	ø200	5.3
PZ-250SS-E	660	600	332	249	ø250	8.9

#### Pressure loss curve

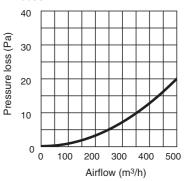
PZ-100SS-E



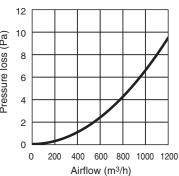
#### PZ-200SS-E



#### PZ-150SS-E



#### PZ-250SS-E



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# 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**

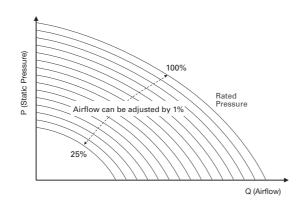
Under regulation (EU) No. 1254/2014, the VL-CZPVU series has the highest energy-saving performance in its class (ErP A+). It saves heating and cooling costs by minimizing the energy loss that occurs during ventilation.





#### 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.



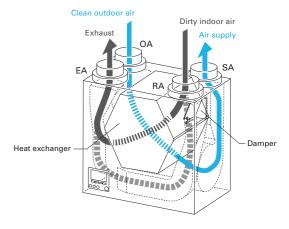
#### External airflow control

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

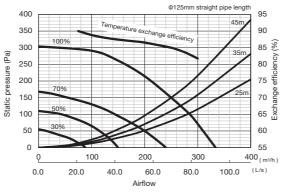
#### **Specifications**

#### 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				
All HOW	(L/s)	69	49	35	21				
External Static Pressure (Pa	)	150	74	38	14				
Temperature Exchange Effic	eiency (%)	85	85 87 88						
Noise Level (dB)		31	31 22 16 15 >						
Energy Efficiency Class			Д	+					
Weight (kg)		26							
Dimensions (mm)			(H) 565 x (W)	595 x (D) 356					

- 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.

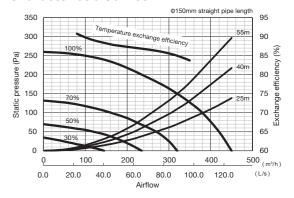
#### VL-350CZPVU-R/L-E

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)		1.08	0.52	0.31	0.18			
Input Power (W)		155	71	37	19			
Airflow	(m³/h)	320	224	160	96			
AITIOW	(L/s)	89	62	44	27			
External Static Pressure (Pa)	)	150	74	38	14			
Temperature Exchange Effici	iency (%)	85	87	88	90			
Noise Level (dB)		35 26 19 15>						
Energy Efficiency Class		A+						
Weight (kg)		32						
Dimensions (mm)		(H) 623 x (W) 658 x (D) 432						

#### ■ 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.

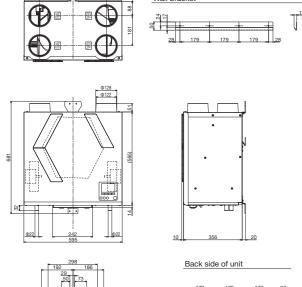
#### **Characteristic Curves**

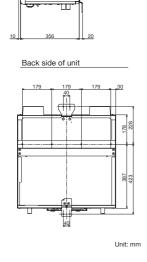


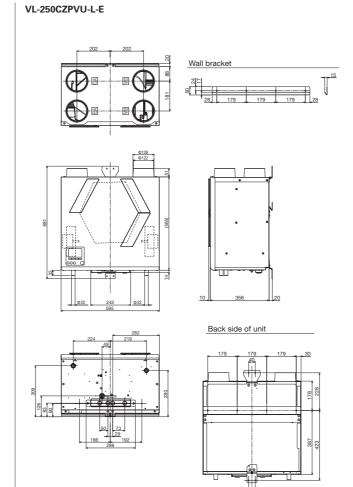
Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

#### **Dimensions**

#### VL-250CZPVU-R-E

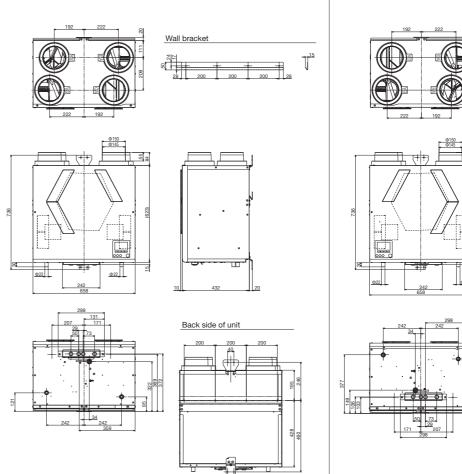






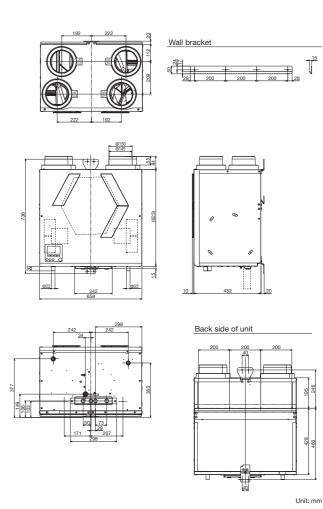
#### **Dimensions**

#### VL-350CZPVU-R-E



Unit: mm

#### VL-350CZPVU-L-E



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Unit: mm

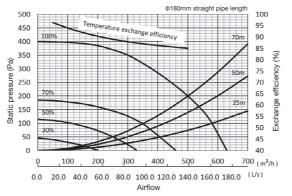
#### VL-500CZPVU-R/L-E

Electrical Power Supply			220-240V/50Hz, 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: 61	(m³/h)	500	350	250	150				
Airflow	(L/s)	139	97	69	42				
External Static Pressure (Pa	1)	200	200 98 50 18						
Temperature Exchange Effic	iency (%)	85	87	89	92				
Noise Level (dB)		37	29	22	15>				
Energy Efficiency Class			Д	+					
Weight (kg)		39							
Dimensions (mm)			(H) 632 x (W)	725 x (D) 556					

#### ■ Attention

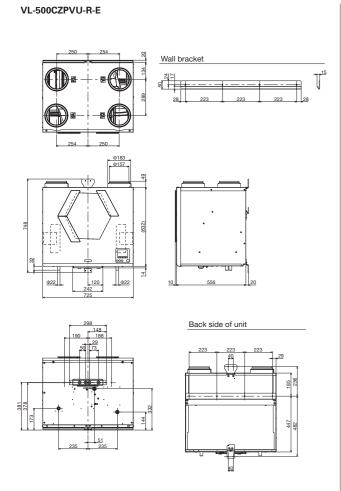
- 1. The above values are at factory default.
  2. The running current, the input power, the efficiency and the noise are based on the rating airflow, and 230V/50Hz.
  3. The sound pressure level at 3m is spherical.
  4. Temperature exchange efficiency (%) is based on winter condition.
  5. Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

#### **Characteristic Curves**



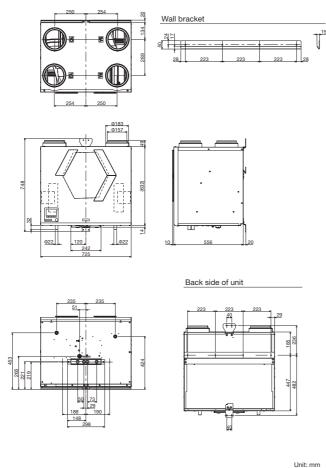
Mitsubishi Electric measures figures in the chart according to EN13141-7: 2010, and the characteristic curves are measured by chamber method.

#### **Dimensions**



Unit: mm

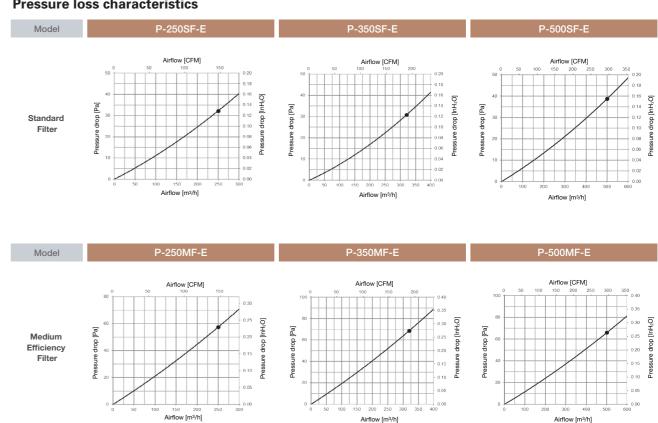
#### VL-500CZPVU-L-E



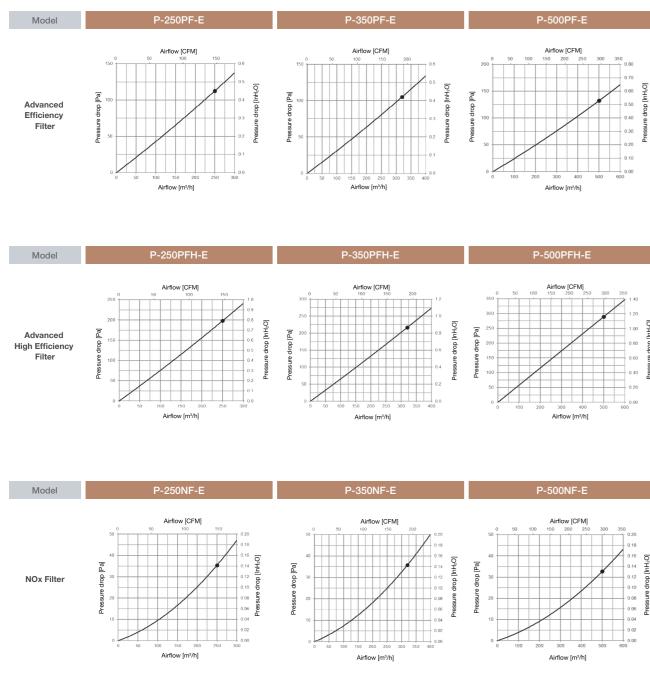
#### **Filters**

Тур	oe	Replacement Filter	Standard Filter	Medium Efficiency Filter	Advanced Efficiency Filter	Advanced High Efficiency Filter	NOx Filter
Mod	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		G3	G4	M6	M6	ePM <sub>1</sub> 55%	NO <sub>2</sub> 90%
	ISO 16890 (2016)	Coarse 55%	Coarse 90%	ePM <sub>10</sub> 80%	ePM2.5 50%		

#### **Pressure loss characteristics**



#### **Pressure loss characteristics**



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

19 29 28

#### 

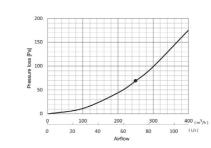
11

- 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

74

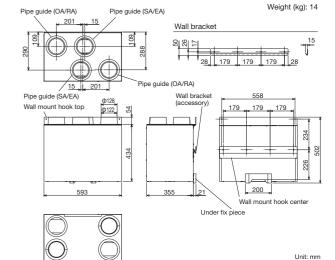
175

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

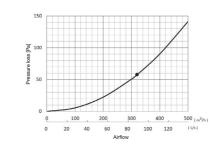
Airflow (m³/h)	Static pressure	Point	Attenu	Attenuation of sound power level for center frequency Hz (dB)								
(Pa)		63	125	250	500	1000	2000	4000	8000			
224	74	Outlet (SA/EA)	12	8	11	21	32	29	19	12		

- 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.

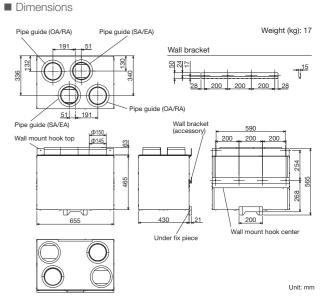
■ Pressure loss curve

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

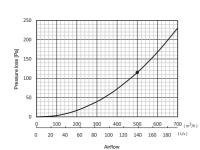
#### ■ Attenuation of sound power level for center frequency

Airflow (m³/h)	Static pressure	Point	Attenu	ation of	sound p	ower lev	el for ce	enter fred	quency I	Hz (dB)
(111711)	(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



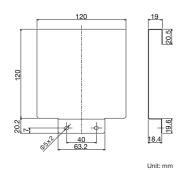
# Weight (kg): 27 554

#### **Remote Controller Cover** P-RCC-E

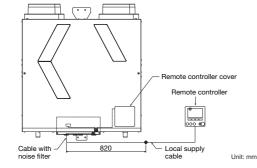
■ Dimensions

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



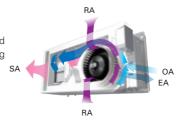
VL-100(E)U5-E

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

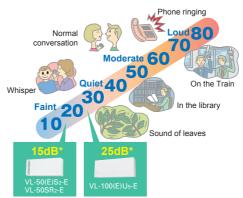
#### **Product advantages**

#### Air supplied and Exhausted Simultaneously

Air is supplied and exhausted simultaneously while transferring



Low noise levels are ideal for bedrooms and children's rooms.



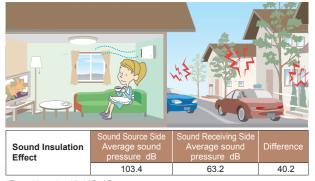
### **Energy Efficient**

- 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.



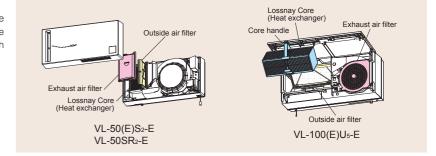
- \*Measured by average sound pressure level of more than 30dB in 500Hz according to

280

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

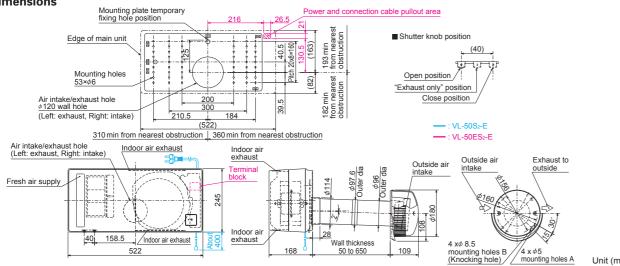
#### **Specifications**

#### 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	220V/50Hz 230V/50Hz 240V/50Hz								
Fan speed	High	High Low High Low High Low High								
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		С								

<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

#### **Dimensions**

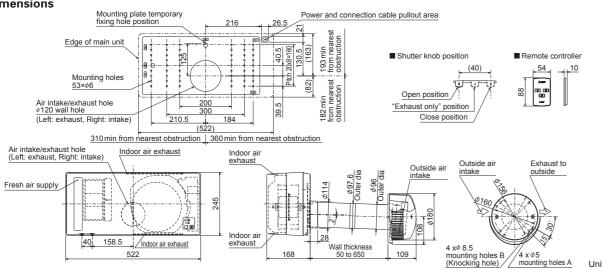


#### Model: VL-50SR<sub>2</sub>-E (Remote Controller Model)

Model		VL-50SR₂-E												
Electrical power supply	220\	//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	4.5	20	5	21	5.5	21	6						
Temperature exchange efficiency (%)	70	86	69	85	68	84	68	84						
Noise level (dB)	36.5	14	37	15	37.5	15.5	37.5	15.5						
Weight (kg)				6	.2									
Specific energy consumption class		С												

<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.

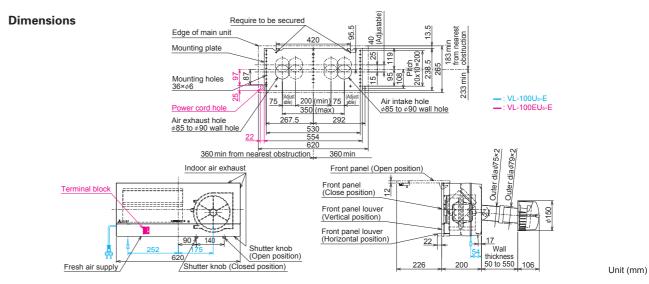
#### Dimensions



#### 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	High Low		Low	High	Low	High	Low				
Airflow (m³/h)	100	55	105	60	106	61	103	57				
Power consumption (W)	30	13	31	15	34	17	34	17				
Temperature exchange efficiency (%)	73	80	73	80	72	79	73	80				
Noise level (dB)	36.5	24	37	25	38	27	38	25				
Weight (kg)	7.5											
Specific energy consumption class	В											

<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					
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)		-	-	-	-
Classification (ISO16890)	Coarse 35%	ePM10 75%	-	-	-

#### Optional Parts for VL-100(E)U5-E

Filter and Extension Pipe

Tittor and E	Attension 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.	Joint for extension pipe     Screw-in method
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	4	4H	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	-H97	LGH	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 Filters	PZ-65RFM-E					•													
T IILEIS	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		•	•															
Duct Silencer	PZ-200SS-E				•	•							•	•			•		
	PZ-250SS-E						•	•	•						•	•		•	•
CO <sub>2</sub> Sensor	PZ-70CSW-E																	•	•
222 3000.	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	VL-250CZPVU-R/L-E	VL-350CZPVU-R/L-E	VL-500CZPVU-R/L-E			
	Туре	Classification (EN779:2012)	Classification (ISO16890)	Model	VL-25	VL-35(	VL-50
				P-250F-E			
	Replacement Filter	G3	Coarse 55%	P-350F-E		•	
	, inter			P-500F-E			•
	Charadaad			P-250SF-E	•		
	Standard Filter	G4	Coarse 90%	P-350SF-E			
				P-500SF-E			
	Medium			P-250MF-E			
	Efficiency Filter	M6	ePM <sub>10</sub> 80%	P-350MF-E			
Filter				P-500MF-E			
	Advanced Efficiency Filter	M6	ePM2.5 50%	P-250PF-E			
				P-350PF-E			
				P-500PF-E			
	Advanced		ePM1 55%	P-250PFH-E			
	High Efficiency			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	•		
	S	Gilencer Box		P-350SB-E		•	
				P-500SB-E			•
	Remote	e Controller Cover		P-RCC-E	•	•	•

#### List of optional parts for the VL-50/100 Series

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			
	Туре	Classification (EN779:2012)	Classification (ISO16890)	Model	VL-50S <sub>2</sub> -E	NL-50	VL-50	VL-10	VL-10
Filter	Replacement Filter High Efficiency Filter	G3	Coarse 35%	P-50F <sub>2</sub> -E		•	•		
Filler			Coarse 55 70	P-100F <sub>5</sub> -E				•	•
			ePM <sub>10</sub> 75%	P-50HF <sub>2</sub> -E					
		M6	ePM <sub>10</sub> 70%	P-100HF5-E					
	Ev	ktension Pipe	P-50P-E						
		Kterision ripe	P-100P-E						
		Joint	P-50PJ-E						
		JUITE		P-100PJ-E				•	
	St	ainless Hood		P-50VSQ <sub>5</sub> -E			•		