

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

Core Environmental Policy

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

#### **Environmental Vision 2021**



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

#### Preventing Global Warming

- Reduce CO₂ emissions from product usage by 30%
   Reduce total CO₂ emissions from production by 30%
- Aim to réduce CO₂ emissions from power generation

#### Creating a Recycling-Based Society

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

**Ensuring Harmony with Nature Fostering Environmental Awareness** 

#### The New Refrigerant R32

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

#### **Comparison of Global Warming Potential**

2088

**Global warming** potential approx

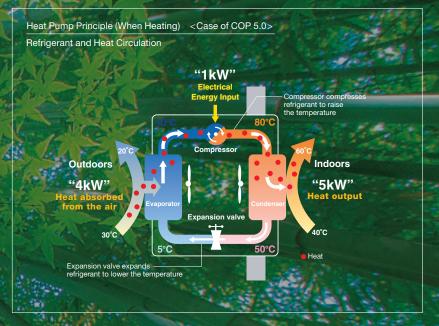
R410A

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

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

#### **Preventing Global Warming**

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



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

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

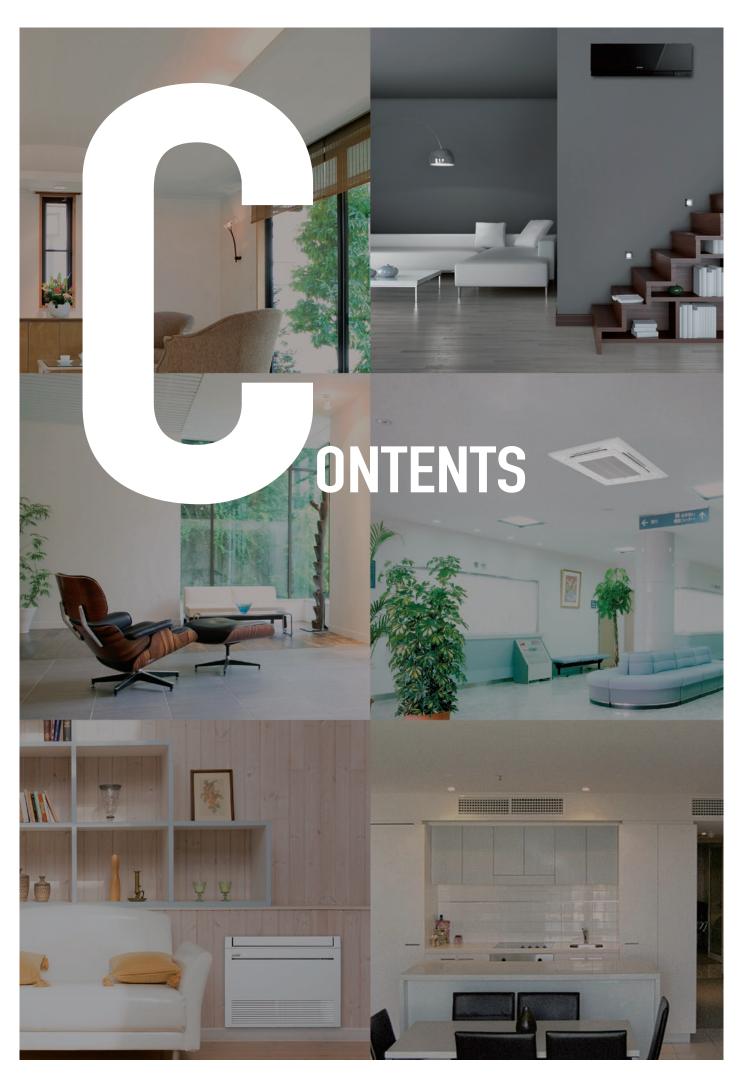
#### Creating a Recycling-Based Society

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

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

#### Ensuring Harmony with Nature / Fostering Environmental Awareness

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



Air Conditioners	
LINE-UP	007-010
M SERIES	··· 011-052
S SERIES	··· 053-062
P SERIES	··· 063 <b>-</b> 100
MULTI SPLIT SERIES	··· 101–118
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Air Conditioners	
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LOSSNAY





## LINE-UP

## M SERIES

Madal Nam			1.5kW	1.8kW	2.0kW	2.2kW	2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	Page
Model Nam	ie –		1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1 age
	MSZ-L Series R32 R410A*2			Multi connection only			W-V-R-B SINGLE	W-V-R-B SINGLE		WVRB SINGLE	W-V-R-B SINGLE		13
	MSZ-A Series  R32  R410A*1	MSZ-AP15/20VG	SINGLE		SINGLE								19
		MSZ-AP25/35/42/50VG					SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	19
	MSZ-E Series  R32  R410A*1	-/,,		W-S-B Multi connection only		WSB Multi connection only	W-S-B SINGLE H	W-S-B SINGLE H	W-S-B SINGLE	W-S-B SINGLE			25
	MSZ-BT Series	100			SINGLE		SINGLE	SINGLE		SINGLE			27
	MSZ-HR Series	MSZ-HR25/35/42/50VF					SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	29
mounted	MSY-TP Series	1-4						SINGLE		SINGLE			31
	MSZ-S Series R410A	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	1					SINGLE	SINGLE					41
	MSZ-H Series R410A	MSZ-HJ25/35/50					SINGLE	SINGLE		SINGLE	SINGLE	SINGLE	43
C	MFZ Series						SINGLE	SINGLE		SINGLE	SINGLE		45
	MLZ Series						SINGLE	SINGLE		SINGLE			47

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

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

#### **Indoor Combinations**

SINGLE 1 outdoor unit & 1 indoor unit

TWIN 1 outdoor unit & 2 indoor units

TRIPLE 1 outdoor unit & 3 indoor units

QUADRUPLE 1 outdoor unit & 4 indoor units

## S SERIES

Model Nan	Model Name		2.5kW	3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	Page
Wiodel Ivali			1-phase	1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	
2 x 2 cassette	SLZ Series R32 R410A	Multi connection only	SINGLE	SINGLE	SINGLE	SINGLE	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	55
Compact ceiling- concealed	SEZ Series R32 R410A		* SINGLE				60				

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

#### P SERIES

#### R32 Power Inverter Models / R32 Standard Inverter Models

Model Name		3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	Page
Model Name		1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	гауе
4-way cassette	PLA Series	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	67
Ceiling-	PEAD Series  R32	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	76
concealed	PEA Series  R32								SINGLE	SINGLE	81
Wall- mounted	PKA Series	* SINGLE	* SINGLE	* SINGLE	SINGLE * TWIN *	SINGLE	TWIN	TWIN	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE	84
Ceiling- suspended	PCA-KA Series	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	89
for Professional Kitchen	PCA-HA Series*				SINGLE*			* TWIN		TRIPLE	94

\* R32 Power Inverter Model only

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

Model Name		3.5kW	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	Pogo
woder warne		1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	Page
4-way cassette	PLA Series R410A	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	67
Ceiling-	PEAD Series R410A	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	76
concealed	PEA Series R410A								SINGLE	SINGLE	81
Wall- mounted	PKA Series R410A	* SINGLE	* SINGLE	* SINGLE	SINGLE * TWIN *	SINGLE	TWIN	TWIN	TWIN TRIPLE QUADRUPLE	TRIPLE	84
Ceiling- suspended	PCA-KA Series R410A	SINGLE	SINGLE	SINGLE	SINGLE *	SINGLE	SINGLE	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE	89
for Professional Kitchen	PCA-HA Series*  R410A				SINGLE*			TWIN *		TRIPLE	94
Floor- standing	PSA Series R410A				SINGLE*	SINGLE	SINGLE	SINGLE TWIN	TWIN	TWIN TRIPLE	97

\* Power Inverter Models only

## LINE-UP

### MXZ SERIES INVERTER Models

Model Name	Capacity Class	Page
up to 2 indoor units MXZ-2F33VF3	3.3kW <1-phase>	103
up to 2 indoor units MXZ-2F42VF3	4.2kW <1-phase>	103
up to 2 indoor units MXZ-2F53VF(H)3	5.3kW <1-phase>	103
up to 3 indoor units MXZ-3F54VF3	5.4kW <1-phase>	103
up to 3 indoor units MXZ-3F68VF3	6.8kW <1-phase>	103
up to 4 indoor units MXZ-4F72VF3	7.2kW <1-phase>	103
up to 4 indoor units MXZ-4F80VF3	8.0kW <1-phase>	103
up to 4 indoor units MXZ-4F83VF	8.3kW <1-phase>	103
up to 5 indoor units MXZ-5F102VF	10.2kW <1-phase>	103
up to 6 indoor units MXZ-6F122VF	12.2kW <1-phase>	103
up to 2 indoor units MXZ-2HA40VF	4.0kW <1-phase>	107
up to 2 indoor units MXZ-2HA50VF	5.0kW <1-phase>	107
up to 3 indoor units MXZ-3HA50VF	5.0kW <1-phase>	107

Model Name		Capacity Class	Page
up to 2 indoor units MXZ-2D33VA		3.3kW <1-phase>	105
up to 2 indoor units MXZ-2D42VA2		4.2kW <1-phase>	105
up to 2 indoor units MXZ-2D53VA (H)2		5.3kW <1-phase>	105
up to 3 indoor units MXZ-3E54VA		5.4kW <1-phase>	105
up to 3 indoor units MXZ-3E68VA	0	6.8kW <1-phase>	105
up to 4 indoor units MXZ-4E72VA		7.2kW <1-phase>	105
up to 4 indoor units MXZ-4E83VA	•	8.3kW <1-phase>	105
up to 5 indoor units MXZ-5E102VA		10.2kW <1-phase>	105
up to 6 indoor units MXZ-6D122VA	0	12.2kW <1-phase>	105
up to 2 indoor units MXZ-2DM40VA		4.0kW <1-phase>	109
up to 3 indoor units MXZ-3DM50VA	0	5.0kW <1-phase>	109

#### PUMY SERIES INVERTER Models

Model Name	12.5kW 1 & 3-phase	14.0kW 1 & 3-phase	15.5kW 1 & 3-phase	22.4kW 3-phase	- Page
PUMY-SP R410A	1	1	1		111
PUMY-P R410A	<b>✓</b>	1	1	<b>✓</b>	113

## POWERFUL HEATING SERIES INVERTER Models

Model Nam	ne		2.5kW	3.5kW	5.0kW	5.3kW	8.3kW	10.0kW	12.5kW	Page
		MSZ-L VGHZ Series  (R32)  (R410A)*	1-phase	1-phase	1-phase	1-phase	1-phase	1- & 3-phase	3-phase	121
Wal	ll-mounted	MSZ-FTVGHZ Series  R32  SINGLE H SINGLE H			123					
Con	mpact floor	MFZVEHZ Series R410A	SINGLE	SINGLE	SINGLE	PLE H		127		
	4-way cassette	PLA Series  R32  R410A						SINGLE	SINGLE	130
ZUBADAN	Ceiling-concealed	PEAD Series R32 R410A						SINGLE		132
	Wall-mounted	PKA Series  R32  R410A						SINGLE		133
Mul	lti split	MXZ-F VFHZ Series MXZ-E VAHZ Series R32 R410A				2PORT H	4PORT H			134

\*R410A is for PUMY connection.

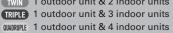
H: Freeze-prevention heater is included as standard equipment.

#### **Indoor Combinations**

SINGLE 1 outdoor unit & 1 indoor unit
TWIN 1 outdoor unit & 2 indoor units

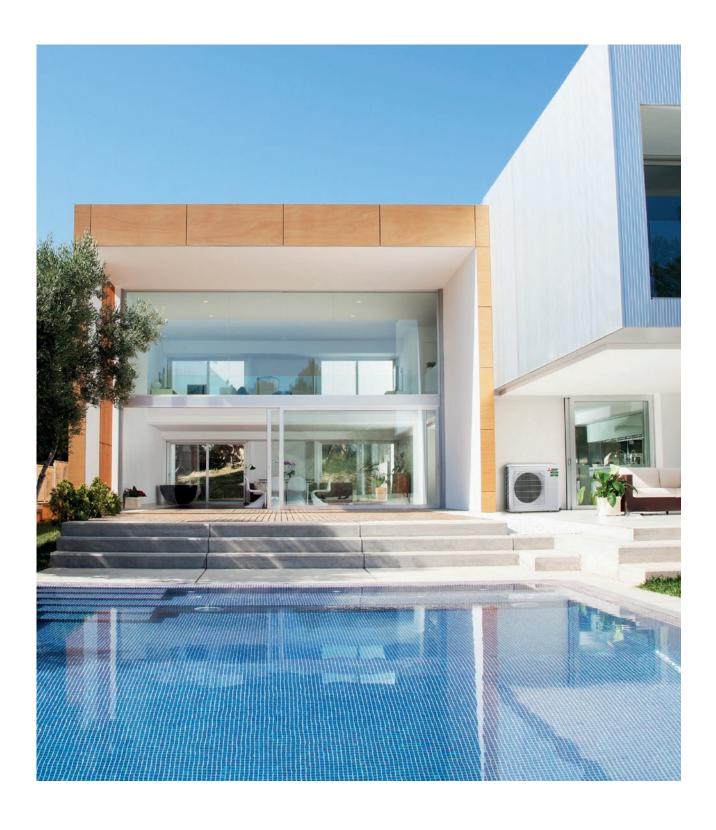


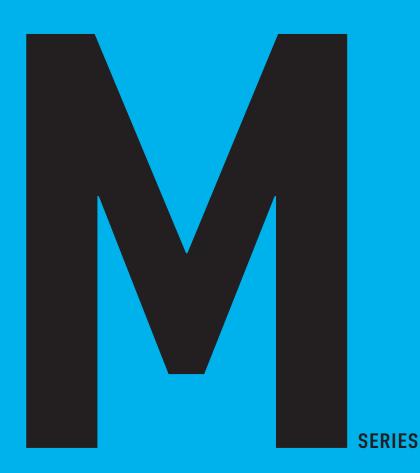
TRIPLE 1 outdoor unit & 3 indoor units



## **LOSSNAY** SERIES

			Decentralized	d Ventilation			
	С	Vertical Type	Wall Mour	ited Type			
LGH-RVX Series	LGH-RVXT Series	GUF Series	GUG Series (Optional Unit)	VI-220CZGV-E	VL-CZPVU Series	VL-100(E)Us-E	VL-50(E)S2-E VL-50SR2-E





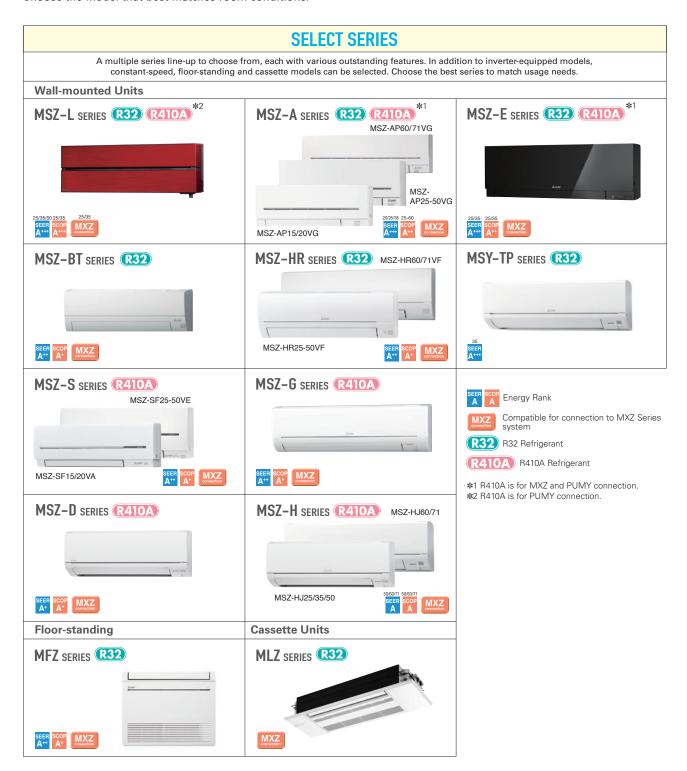






#### **SELECTION**

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-SF25/35/42/50VEH



#### **Hyper Heating**

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



MUZ-LN50VG

#### Selecting a Heater-equipped Model

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

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

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



## MSZ-L SERIES





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



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

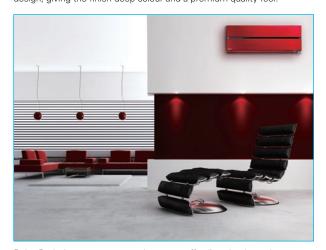
Natural White, Pearl White, Ruby Red, and Onyx Black. LN Series indoor units are available in four colours to match various lifestyles. The appearance of the indoor unit differs depending on the lighting in the room, attracting the attention of everyone that enters the room.



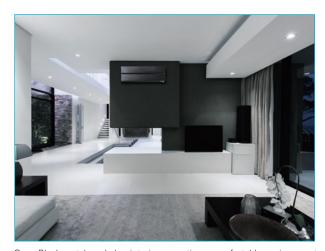
Master craftsmanship painting technology has resulted in a refined design, giving the finish deep colour and a premium quality feel.



Pearl White blends in with any interior.



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



Onyx Black matches darker interiors, creating a comfortable environment.

#### **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.









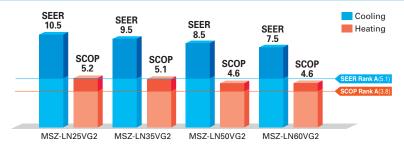


/x Na

#### **High Energy Efficiency**

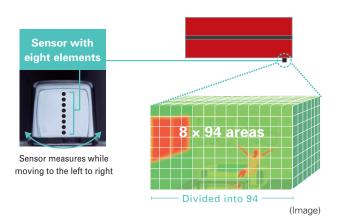


Optimum cooling/heating performance is another feature for the LN series. Models from capacities 25 to 50 have achieved the "Rank A<sup>+++</sup>" for SEER, and models for capacities 25 and 35 have achieved the "Rank A<sup>+++</sup>" for SCOP as well.



#### 3D i-see Sensor

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



#### No occupancy energy-saving mode

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



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

#### **Indirect Airflow**

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



#### **Direct Airflow**

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



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



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

Even airflow mode



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

#### No occupany Auto-OFF mode \*LN Series only

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





#### **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.



If the heating operation is continued, the warm air is formed around ceiling.



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

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 25m<sup>3</sup> 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 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 28m³ test space.

<In-company investigation>

#### Dust



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

<Test No.> ITEA Report No. T1606028

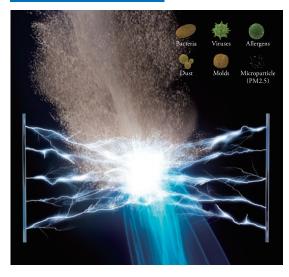
Model	Name	Method	Bacteria	Viruses	Molds	Allergens	Dust	PM2.5*
FH Series	Plasma Quad	One-Stage Plasma	А	А	В	В	С	
LN Series	Plasma Quad Plus	Two-Stage Plasma	А	А	А	А	А	А

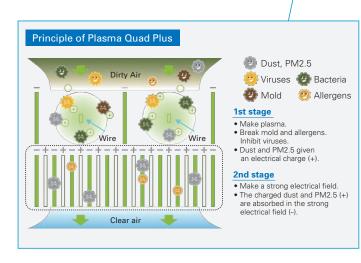
- A: Highly effective
- B: Effective
- C: Partially effective

\*PM2.5:

Particles smaller than 2.5µm

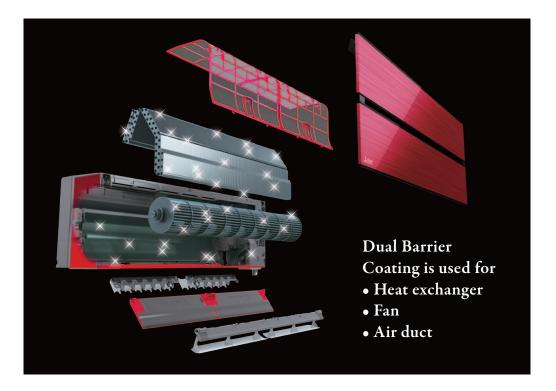
#### Image of Plasma Quad Plus





## **Dual Barrier Coating**

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

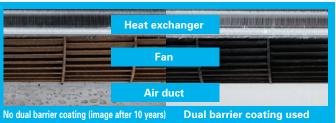


#### State-of-the-art coating technology

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)





#### **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.

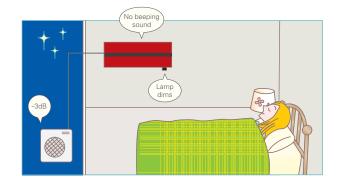




#### Night Mode

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

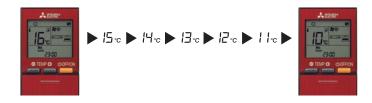
- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated operating noise specification.



#### 10°C Heating

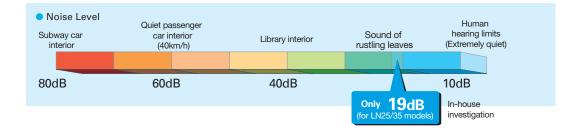
During heating operation, the temperature can be set in 1°C increments down to 10°C.

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.



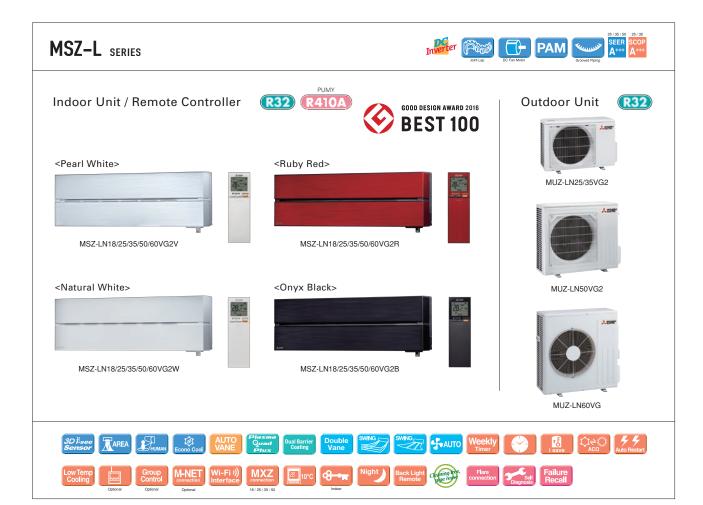
#### Built-in Wi-Fi Interface

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.



<sup>\*</sup>The cooling/heating capacity may drop.



Туре						Inverter Heat Pump						
ndoor 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>(11)</sup> / Multi: R410A or R32	2 <sup>(*1)</sup>	•				
ower	Source					Outdoor Power Supply						
Supply	Outdoor (V/Ph	ase / Hz )		230 / Single / 50								
	Design load		kW	=	2.5	3.5	5.0	6.1				
	Annual electricity	consumption (*2)	kWh/a	-	83	129	205	285				
	SEER (*4)			-	10.5	9.5	8.5	7.5				
Cooling		Energy efficiency class		-	A+++	A+++	A+++	A++				
	Conneity	Rated	kW	-	2.5	3.5	5.0	6.1				
	Capacity	Min-Max	kW	-	1.0 - 3.5	0.8 - 4.0	1.0 - 6.0	1.4 - 6.9				
	Total Input	Rated	kW	-	0.485	0.820	1.380	1.790				
	Design load		kW	-	3.0 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	6.0 (-10°C)				
		at reference design temperature	kW	-	3.0 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	6.0 (-10°C)				
	Declared Capacity	at bivalent temperature	kW	-	3.0 (-10°C)	3.6 (-10°C)	4.5 (-10°C)	6.0 (-10°C)				
	Оараспу	at operation limit temperature	kW	-	2.5 (-15°C)	3.2 (-15°C)	4.2 (-15°C)	6.0 (-15°C)				
eating	Back up heating	capacity	kW	-	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)				
verage	Annual electricity consumption (*2)		kWh/a	-	807	987	1369	1826				
eason)(*5)	SCOP ('4)			-	5.2	5.1	4.6	4.6				
		Energy efficiency class		-	A+++	A+++	A++	A++				
		Rated	kW	-	3.2	4.0	6.0	6.8				
	Capacity	Min-Max	kW	-	0.7 - 5.4	0.9 - 6.3	1.0 - 8.2	1.8 - 9.3				
	Total Input	Rated	kW	-	0.600	0.820	1.480	1.810				
peratin	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 Current(Max)		А	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)				
ndoor Init	Air Volume (SLo-Lo-	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				
nit	Mid-Hi-SHi(1-3)(Dry/Wet))	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				
	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(*3))	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				
	Air volume	Heating	m³/min	=	32.7	32.7	40.5	51.3				
utdoor nit	0	Cooling	dB(A)	=	46	49	51	55				
	Sound Level (SPL)	Heating	dB(A)	=	49	50	54	55				
	Sound Level (PWL)	Cooling	dB(A)	=	60	61	64	65				
	Operating Curre	Operating Current (Max)		-	6.8	9.6	13.5	14.8				
	Breaker Size			-	10	10	16	16				
	Diameter	Liquid/Gas	mm	-	6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7				
xt. ipina	Max.Length	Out-In	m	-	20	20	30	30				
riping	Max.Height	Out-In	m	-	12	12	12	15				
auarante	eed Operating	Cooling	°C	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46				
		tdoor) Heating			-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24				

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming 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 Gassassmible 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) SET, 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 51-52 for heating (warmer season) specifications.

## MSZ-A SERIES

Introducing a compact and stylish indoor unit with various capacity, designed to match number of rooms. High performance indoor and outdoor units enabled to achieve "Rank A $^{+++}$ " for SEER. \*MSZ-AP20/25/35VG





MSZ-AP25/35/42/50VG



MSZ-AP60/71VG







#### 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.







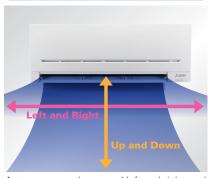


#### Evolved comfortable convenience function

# Horizontal Airflow

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

#### **Auto Vane Control**



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

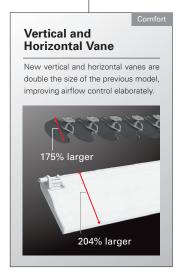
#### The Function

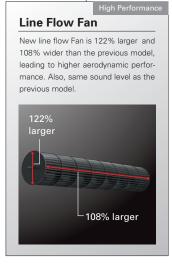


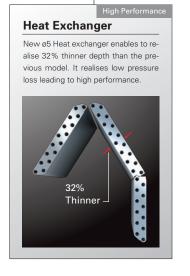
\*Only for 25/35/42/50/60/71 models.

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









#### "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)

	Mo	on.	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
	[			Automatically change	s to high-power opera	tion at wake-up time		
8:00								
10:00			055	055	055	055	ON 4000	ON 4000
12:00	U	FF	OFF	OFF	OFF	OFF	ON 18°C  Midday is warmer,	ON 18°C
14:00	L		Automatic	ally turned off during w	vork hours		so the temperature is set lower	
(b: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 turi	ns on, synchronized wi	th arrival at home		Automatically raises temperature setting to match time when outside-air temperature is low	
22:00	L		,				match time when outsit	de-all 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	tically lowers tempera	ture at bedtime for en	ergy-saving operation a	t night	

Settings

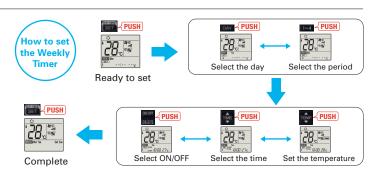
Pattern Settings: Input up to four settings for each day

The remote controller is

Settings: •Start/Stop operation •Temperature setting \*The operation mode cannot be set.

#### ■ Easy set-up using dedicated buttons





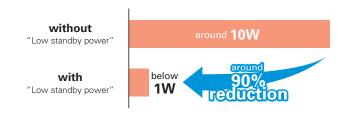
- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired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

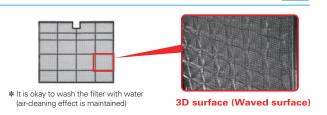
#### Low Standby Power

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.



#### Air Purifying Filter

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

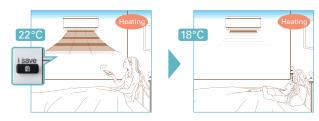


(MSZ-AP25/35/42/50/60/71)

#### "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**

(MSZ-AP25/35/42/50)

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



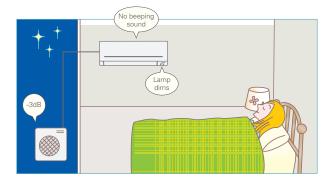
#### Night Mode

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



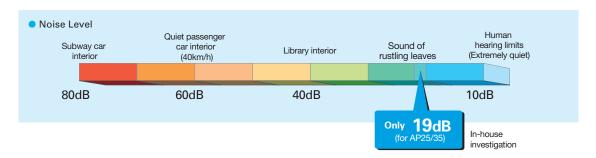
When Night Mode is activated using the wireless remote controller, air conditioner operation will switch to the following settings.

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



#### **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.

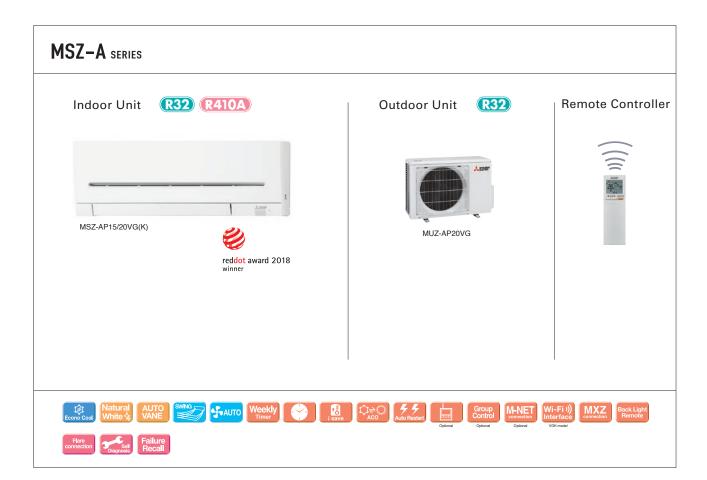
This eliminates the need to install a Wi-Fi interface, and also contributes to the beautiful appearance since the interface is hidden.

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



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.

<sup>\*</sup>The cooling/heating capacity may drop.



Туре						Inverter F	leat Pump					
Indoor Ur	nit	<u> </u>		MSZ-AP15VG(K)	MSZ-AP20VG(K)	MSZ-AP25VG(K)	MSZ-AP25VG(K)	MSZ-AP35VG(K)	MSZ-AP35VG(K)			
Outdoor	Unit			MUZ-AP15VG	MUZ-AP20VG	MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH			
Refrigera	nt					Single: R32 <sup>(*1)</sup> / Mu	lti: R410A or R32 <sup>(*1)</sup>					
Power	Source					Outdoor Po						
Supply	Outdoor (V / Ph	ase / Hz )		230 / Single / 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)			
	Dardenad.	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 Capacity	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)			
	Jupacity	at operation limit temperature	kW	1.6 (-15°C)	2.2 (-15°C)	2.4 (-15°C)	2.2 (-20°C)	2.6 (-15°C)	2.4 (-20°C)			
Heating	Back up heating capacity kW		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			kWh/a	559	766	698	703	862	873			
Season)(*5)	SCOP (*4)			4.0	4.2	4.8	4.7	4.7	4.6			
		Energy efficiency class		A+	A+	A++	A++	A++	A++			
	Capacity	Rated	kW	2.0	2.5	3.2	3.2	4.0	4.0			
	Сараспу	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)		А	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			
Indoor	Weight		kg	8.2	8.2	10.5	10.5	10.5	10.5			
Unit	Air Volume (SLo-Lo-	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			
	Mid-Hi-SHi <sup>(*3)</sup> (Dry/Wet))	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	1	kg	23	31	31	31	31	31			
	Air Volume	Cooling	m³/min	26	32.2	32.2	32.2	32.2	32.2			
Outdoor		Heating	m³/min	21	29.8	29.8	29.8	33.8	33.8			
Unit	Sound Level (SPL)	Cooling	dB(A)	50	47	47	47	49	49			
		Heating	dB(A)	50	48	48	48	50	50			
	Sound Level (PWL)		dB(A)	63	59	59	59	61	61			
	Operating Current (Max)		_	5.3	6.8	6.8	6.8	8.2	8.2			
	Breaker Size	1	Α	10	10	10	10	10	10			
Ext.	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			
Piping	Max.Length	Out-In	m	20	20	20	20	20	20			
_	Max.Height	Out-In	m to	12	12	12	12	12	12			
	eed Operating	Cooling	*C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46			
Range (Outdoor)		Heating	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24			

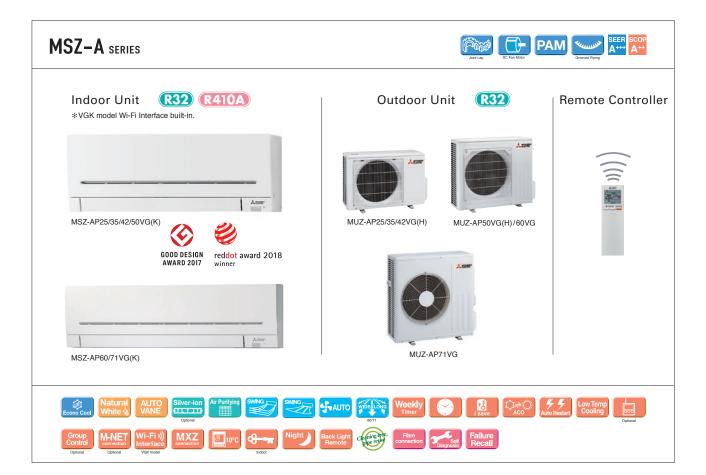
<sup>(1)</sup> Refigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means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



Туре						Inverter F	leat Pump					
Indoor Ur	nit			MSZ-AP42VG(K)	MSZ-AP42VG(K)	MSZ-AP50VG(K)	MSZ-AP50VG(K)	MSZ-AP60VG(K)	MSZ-AP71VG(K)			
Outdoor	Unit			MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH	MUZ-AP60VG	MUZ-AP71VG			
Refrigera	nt				Single: R32 <sup>(*1)</sup> / Mu	Iti: R410A or R32(*1)		Single	R32 <sup>(*1)</sup>			
Power	Source			Outdoor Power supply								
Supply	Outdoor (V / Ph	ase / Hz )		230 / Single / 50								
	Design load	<u> </u>	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			
	Total Input	Rated	kW	1.300	1.300	1.550	1.550	1.590	2.010			
	Design load		kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)			
		at reference design temperature	kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)			
	Declared	at bivalent temperature	kW	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)	4.6 (-10°C)	6.7 (-10°C)			
	Capacity	at operation limit temperature	kW	4.2 (-15°C)	3.8 (-20°C)	4.7 (-15°C)	4.2 (-20°C)	3.7 (-15°C)	5.4 (-15°C)			
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)			
(Average	Annual electricity	consumption (*2)	kWh/a	1120	1134	1250	1275	1398	2132			
Season)(*5)	SCOP (*4)			4.7	4.6	4.7	4.6	4.6	4.4			
		Energy efficiency class		A++	A++	A++	A++	A++	A+			
		Rated	kW	5.4	5.4	5.8	5.8	6.8	8.1			
	Capacity	Min-Max	kW	1.3-6.0	1.3-6.0	1.4-7.3	1.4-7.3	2.0-8.6	2.2-10.3			
	Total Input	Rated	kW	1.490	1.490	1.600	1.600	1.670	2.120			
Operatin	g Current (Max)		А	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	ent (Max)	А	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 Jnit	Air Volume (SLo-Lo-	Cooling	m³/min	5.4 - 6.5 - 7.7 - 9.3 - 11.4	5.4 - 6.5 - 7.7 - 9.3 - 11.4	6.0 - 7.2 - 8.4 - 10.0 - 12.6	6.0 - 7.2 - 8.4 - 10.0 - 12.6	9.4 - 11.0 - 13.2 - 16.0 - 18.9	9.6 - 11.5 - 13.2 - 15.3 - 1			
Jille	Mid-Hi-SHi <sup>(*3)</sup> (Dry/Wet))	Heating	m³/min	5.3 - 6.1 - 7.7 - 9.4 - 14.0	5.3 - 6.1 - 7.7 - 9.4 - 14.0	5.6 - 6.5 - 8.2 - 10.0 - 14.0	5.6 - 6.5 - 8.2 - 10.0 - 14.0	10.8- 13.4 - 15.4 - 17.4 - 20.3	10.2-11.5 - 13.2 - 15.3 - 1			
	Sound Level (SPL)	Cooling	dB(A)	21 - 29 - 34 - 38 - 42	21 - 29 - 34 - 38 - 42	28 - 33 - 36 - 40 - 44	28 - 33 - 36 - 40 - 44	29 - 37 - 41 - 45 - 48	30 - 37 - 41 - 45 - 49			
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	21 - 29 - 35 - 40 - 45	21 - 29 - 35 - 40 - 45	28 - 33 - 38 - 43 - 48	28 - 33 - 38 - 43 - 48	30 - 37 - 41 - 45 - 48	30 - 37 - 41 - 45 - 51			
	Sound Level (PWL)	Cooling	dB(A)	57	57	58	58	65	65			
	Dimensions	H*W*D	mm	550-800-285	550-800-285	714-800-285	714-800-285	714-800-285	880-840-330			
	Weight		kg	35	35	40	40	40	55			
	Air Volume	Cooling	m³/min	30.4	30.4	40.5	40.5	52.1	54.1			
Outdoor	All Volume	Heating	m³/min	32.7	32.7	40.5	40.5	52.1	47.9			
Jutaoor Jnit	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52	56	56			
	, ,	Heating	dB(A)	51	51	52	52	57	55			
	Sound Level (PWL)	Cooling	dB(A)	61	61	64	64	69	69			
	Operating Curre	ent (Max)	А	9.6	9.6	13.3	13.3	13.6	16.0			
	Breaker Size		А	10	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			
Ext. Piping	Max.Length	Out-In	m	20	20	20	20	30	30			
a	Max.Height	Out-In	m	12	12	12	12	15	15			
	eed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46			
Range (C	Outdoor)	Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24			

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming 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 6x82 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) 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) Please see page 51-52 for heating (warmer season) specifications.





## MSZ-E

ERIES

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



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

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







#### **Energy-efficient Operation**

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	Compatibility									
	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-quiet 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.

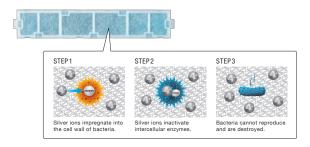
## Superior Exterior and Operating Design Concept

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.



#### Silver-ionized Air Purifier Filter

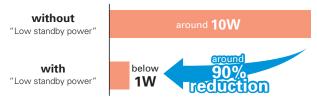
The high performance filter is attached as standard. Captures the bacteria, pollen and other allergens in the air and neutralises them.



#### Noise Level Human hearing limits Quiet passenger Subway car car interio Sound of Library interior (40km/h) rustling leaves (Extremely quiet) 80dB 60dB 40dB 10dB 19dB An in-company investigation

#### Low Standby Power

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



#### Outdoor Units for Cold Region

(25/35)

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



#### MSZ-E SERIES







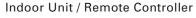


**Outdoor Unit** 

















reddot award 2015 winner





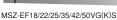
MUZ-EF25/35VG(H).42VG



MUZ-EF50VG









MSZ-EF18/22/25/35/42/50VG(K)B\*

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







































Туре				Inverter Heat 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 l	Jnit			for MXZ c	onnection	MUZ-EF25VG	MUZ-EF25VGH	MUZ-EF35VG	MUZ-EF35VGH	MUZ-EF42VG	MUZ-EF50VG		
Refrigerar	nt			R32 <sup>(1)</sup>									
Power	Source			Outdoor Power supply									
Supply	Outdoor (V / Ph	ase / Hz )		230/Single/50									
	Design load		kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0		
	Annual electricity	consumption (*2)	kWh/a	-	-	96	96	139	139	186	233		
	SEER (*4)			-	-	9.1	9.1	8.8	8.8	7.9	7.5		
Cooling		Energy efficiency class		-	-	A+++	A+++	A+++	A+++	A++	A++		
	Capacity	Rated	kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0		
	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		
	Total Input	Rated	kW	-	-	0.540	0.540	0.910	0.910	1.200	1.540		
	Design load		kW	-	-	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	4.2 (-10°C)		
	Declared	at reference design temperature	kW	-	-	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	4.2 (-10°C)		
	Capacity	at bivalent temperature	kW	-	-	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	4.2 (-10°C)		
		at operation limit temperature	kW	-	-	2.0 (-15°C)	1.6 (-20°C)	2.4 (-15°C)	1.7 (-20°C)	3.4 (-15°C)	3.5 (-15°C)		
Heating	Back up heating		kW	-	-	0.0 (-10°C)	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	-	-	713	727	882	900	1151	1304		
Season)(*5)	SCOP (*4)			-	-	4.7	4.6	4.6	4.5	4.6	4.5		
		Energy efficiency class		-	-	A++	A++	A++	A+	A++	A+		
	Capacity	Rated	kW	-	-	3.2	3.2	4.0	4.0	5.4	5.8		
	Capacity	Min-Max	kW	-	-	1.0-4.2	1.0-4.2	1.3-5.1	1.3-5.1	1.3-6.3	1.4-7.5		
	Total Input	Rated	kW	-	-	0.700	0.700	0.950	0.950	1.455	1.560		
Operating	g Current (Max)		Α	-	-	7.1	7.1	7.1	7.1	10.0	14		
	Input	Rated	kW	0.026	0.026	0.026	0.026	0.030	0.030	0.033	0.043		
	Operating Current (Max)		Α	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4		
	Dimensions	H*W*D	mm	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195	299-885-195		
Indoor	Weight		kg	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5		
Unit	Air Volume (SLo-Lo-	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			5.8 - 6.6 - 7.7 - 8.9 - 11.2			
	Mid-Hi-SHi <sup>(+3)</sup> (Dry/Wet))	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 - 12.7			6.4 - 7.2 - 9.0 - 11.1 - 14.6		
	Sound Level (SPL)	Cooling	dB(A)	19 - 23 - 29 - 36 - 42		19 - 23 - 29 - 36 - 42		21 - 24 - 30 - 36 - 42					
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)				21 - 24 - 29 - 37 - 45				30 - 33 - 37 - 43 - 49		
	Sound Level (PWL)	Cooling	dB(A)	60	60	60	60	60	60	60	60		
	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285	714-800-285		
	Weight	0 "	kg	-	-	31	31	34	34	35	40		
	Air Volume	Cooling	m³/min	-	-	27.8	27.8	34.3	34.3	32.0	40.2		
Outdoor		Heating	m³/min	-	-	29.8	29.8	32.7	32.7	32.7	40.2		
Unit	Sound Level (SPL)	Cooling	dB(A)	-	-	47	47	49	49	50	52		
	` ′	Heating	dB(A)	-	-	48	48	50	50	51	52		
		Cooling	dB(A)	-	-	58	58	62	62	62	65		
	Operating Current (Max) A		-	-	6.8	6.8	6.8	6.8	9.6	13.6			
	Breaker Size		Α	-	-	10	10	10	10	12	16		
Ext.	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		
Piping	Max.Length	Out-In	m	-	-	20	20	20	20	20	30		
	Max.Height	Out-In	m	-	-	12	12	12	12	12	15		
	eed Operating	Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46		
Range (C	Outdoor)	Heating	°C	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24		

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming 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 638 seasmelte the product yourself or product yourself and always ask a professional. The GWP of 182 is 675 in the IPCC 4th Assessment Report.

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

(\*3) SHI: Super High

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

(\*5) Please see page 51-52 for heating (warmer season) specifications.



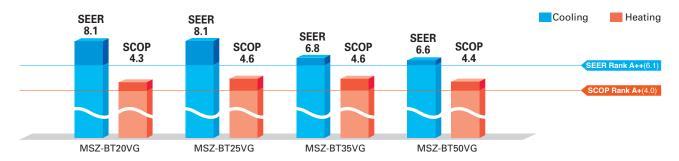
#### High Energy Efficiency for Entire Range of Series





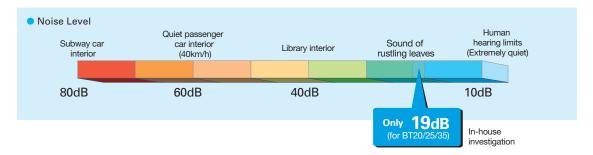


All models in the series, from the low-capacity 20 to the high-capacity 50, have achieved the "Rank A++" for SEER and size 25 and 35 have achieved the "Rank  $A^{++}$ " for SCOP as energy-savings rating. For home use, such as in bedrooms and living rooms, to light commercial use, such as in offices,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



#### **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.



#### Built-in Wi-Fi Interface

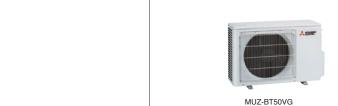
(MSZ-BT20/25/35/50VGK)



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

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

## Inverter PAM A++ SCOP A+ MSZ-BT SERIES **R32** Indoor Unit **Outdoor Unit**





Remote





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















MUZ-BT20VG







MUZ-BT25/35VG















lype				Inverter Heat Pump								
Indoor Un	it			MSZ-BT20VG(K)	MSZ-BT25VG(K)	MSZ-BT35VG(K)	MSZ-BT50VG(K)					
Outdoor (	Jnit			MUZ-BT20VG	MUZ-BT25VG	MUZ-BT35VG	MUZ-BT50VG					
Refrigerar	nt				F	R32 <sup>(*1)</sup>						
ower	Source			Outdoor Power supply								
upply	Outdoor (V/Ph	ase / Hz )		230V/Single/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					
ooling		Energy efficiency class		A++	A++	A++	A++					
Join.19		Rated	kW	2.0	2.5	3.5	5.0					
	Capacity	Min-Max	kW	0.5-2.9	0.5-3.0	0.9-3.5	1.3-5.0					
	Total Input	Rated	kW	0.450	0.700	1,240	2.050					
	Design load	nateu	kW	1.5 (-10°C)	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)					
	Design load	at reference decian temperature	_				3.8 (-10°C)					
	Declared	at reference design temperature at bivalent temperature	kW	1.5 (-10°C) 1.5 (-10°C)	1.9 (-10°C)	2.4 (-10°C) 2.4 (-10°C)	3.8 (-10°C)					
	Capacity		kW		1.9 (-10°C) 1.7 (-15°C)	2.4 (-10°C) 2.1 (-15°C)	3.8 (-10°C) 3.4 (-15°C)					
	Dardon barti	at operation limit temperature	kW	1.3 (-15°C)	1 /	. /	. ,					
eating	Back up heating			0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)					
rerage ason)(*5)			kWh/a	487	577	727	1209					
asonj	SCOP (*4)			4.3	4.6	4.6	4.4					
		Energy efficiency class		A <sup>+</sup>	A++	A++	A <sup>+</sup>					
	Capacity	Rated	kW	2.5	3.15	3.6	5.4					
		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					
perating	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	nt(Max)	A	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					
door nit	Air Volume (Lo-Mid-	Cooling	m³/min	4.2 - 5.2 - 6.8 - 8.7 - 10.9	4.2 - 5.2 - 6.8 - 8.7 - 10.9	4.2 - 5.2 - 6.8 - 8.7 - 13.2	6.3 - 7.6 - 9.0 - 11.0 - 13.2					
III.	Hi-SHi <sup>(*3)</sup> (Dry/Wet))	Heating	m³/min	4.2 - 5.0 - 6.8 - 9.0 - 11.9	4.2 - 5.0 - 6.8 - 9.0 - 11.9	4.2 - 5.0 - 6.8 - 9.0 - 11.9	6.0 - 7.8 - 9.9 - 11.9 - 14.1					
	Sound Level (SPL)	Cooling	dB(A)	19 - 22 - 30 - 37 - 43	19 - 22 - 30 - 37 - 43	19 - 22 - 31 - 38 - 46	29 - 33 - 36 - 40 - 46					
	(Lo-Mid-Hi-SHi(*3))	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	l.	kg	23	24	24	35					
		Cooling	m³/min	30.3	32.2	32.2	30.4					
	Air Volume	Heating	m³/min	30.3	32.2	34.6	32.7					
utdoor		Cooling	dB(A)	50	50	52	50					
nit	Sound Level (SPL)	Heating	dB(A)	50	50	52	51					
	Sound Level (PWL)		dB(A)	63	63	64	64					
	Operating Curre		A A	5.3	6.7	6.7	9.6					
	Breaker Size	iii (ividX)	A	10	10	10	9.0					
		1::-1/0	_		· ·							
xt.	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7					
iping	Max.Length	Out-In	m	20	20	20	20					
	Max.Height	Out-In	m	12	12	12	12					
	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46					
Range (O	utdoor)	Heating	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24					

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming 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 Gassaemble the product yourself or product yourself and always ask as professional. The GWP of 182 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".

(\*5) Please see page 51-52 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.



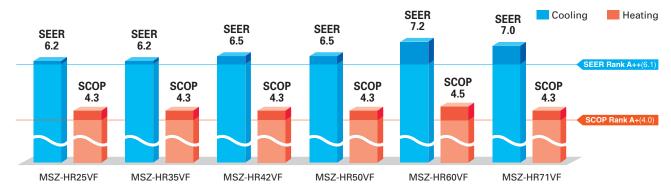
#### "Rank A++/A+" Energy Savings Achieved for Entire Range of Series







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.



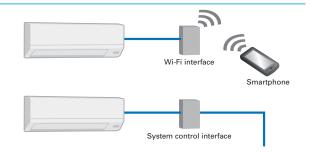
#### Wi-Fi and System Control

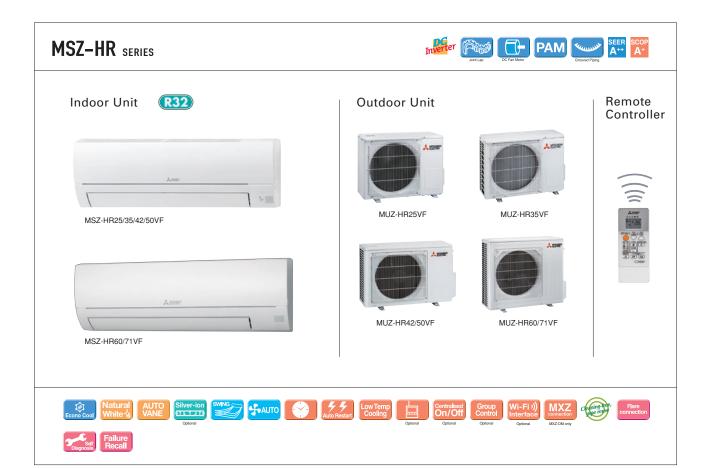
#### Wi-Fi Interface (Optional)

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 remotecontrol such as the PAR-40MAA is possible.
- •Centralised control is possible when connected to M-NET.
- \*Wi-Fi Interface and System Control Interface cannot be used simultaneously.





Туре						Inverter H	leat Pump					
Indoor Ur	nit			MSZ-HR25VF	MSZ-HR35VF	MSZ-HR42VF	MSZ-HR50VF	MSZ-HR60VF	MSZ-HR71VF			
Outdoor	Unit			MUZ-HR25VF	MUZ-HR35VF	MUZ-HR42VF	MUZ-HR50VF	MUZ-HR60VF	MUZ-HR71VF			
Refrigera	nt					R3	2 <sup>(*1)</sup>					
Power	Source			Outdoor Power supply								
Supply	Outdoor (V/Ph	ase / Hz )		230V/Single/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++			
	0	Rated	kW	2.5	3.4	4.2	5.0	6.1	7.1			
	Capacity	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)			
		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)			
	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)			
Heating	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			614	781	928	1224	1430	1755			
Season)(*5)	SCOP (4)			4.3	4.3	4.3	4.3	4.5	4.3			
		Energy efficiency class		A+	A+	A+	A+	A+	A+			
	0	Rated	kW	3.15	3.6	4.7	5.4	6.8	8.1			
	Capacity	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)		А	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)	Α	0.2	0.27	0.3	0.36	0.5	0.5			
	Dimensions	H*W*D	mm	280-838-228	280-838-228	280-838-228	280-838-228	305-923-262	305-923-262			
	Weight		kg	8.5	8.5	9	9	12.5	12.5			
Indoor Unit	Air Volume (Lo-Mid-	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			
Oilit	Hi-SHi <sup>(*3)</sup> (Dry/Wet))	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			
0.44-	All Volume	Heating	m³/min	30.3	32.2	32.7	32.7	48.3	48.3			
Outdoor Unit	Sound Level (SPL)	Cooling	dB(A)	50	51	50	50	53	53			
O.I.I.	Souria Level (SPL)	Heating	dB(A)	50	51	51	51	57	57			
	Sound Level (PWL)	Cooling	dB(A)	63	64	64	64	65	66			
	Operating Current (Max)		4.8	6.4	8.2	9.6	13.6	13.6				
	Breaker Size A		А	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			
· iping	Max.Height	Out-In	m	12	12	12	12	15	15			
	eed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46			
Range (C	Outdoor)	Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24			

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 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 638 seasmelte the product yourself or product yourself and always ask a professional. The GWP of 182 is 675 in the IPCC 4th Assessment Report.

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

(\*3) SHI: Super High

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

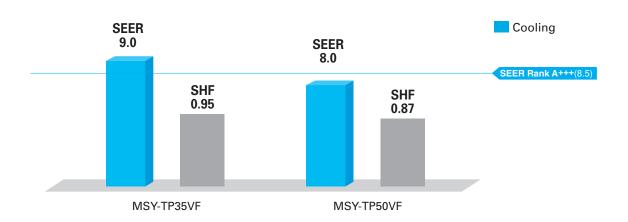
(\*5) Please see page 51-52 for heating (warmer season) specifications.





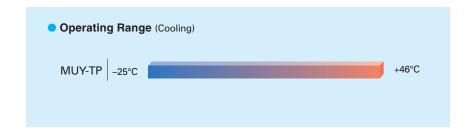
Cooling only model with high-perfomance provide high SHF in various environments thanks to wide operation range.

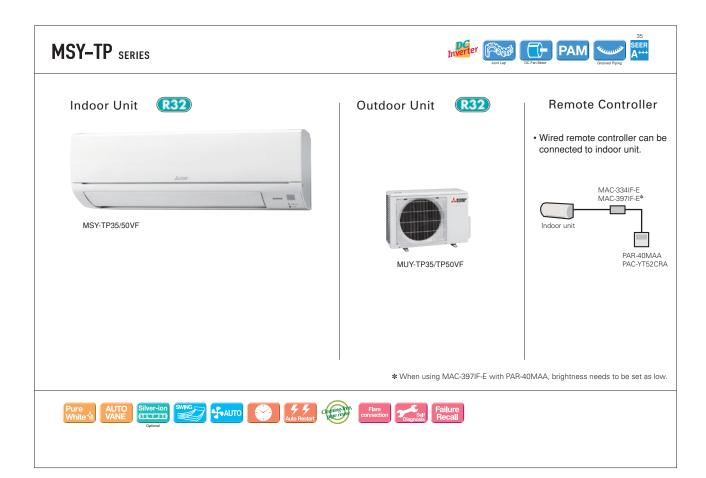
#### High Energy-Saving Performance with High SHF



#### 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.





Туре				Inverter	Heat Pump		
Indoor Un	it			MSY-TP35VF	MSY-TP50VF		
Outdoor U	Jnit			MUY-TP35VF	MUY-TP50VF		
Refrigerar	nt	·		R	32(*1)		
Power	Source			Indoor Po	ower supply		
Supply	Outdoor (V/Ph	ase / Hz )		230V / Si	ingle / 50Hz		
	Design load		kW	3.5	5.0		
	Annual electricity	consumption (*2)	kWh/a	136	218		
	SEER (*4)			9.0	8.0		
Cooling	Energy efficiency class			A <sup>+++</sup>	A <sup>++</sup>		
	Capacity	Rated	kW	3.5	5.0		
	Capacity	Min-Max	kW	1.5 - 4.0	1.5 - 5.7		
	Total Input	Rated	kW	0.760	1.450		
	Design load		kW	-	-		
	Declared	at reference design temperature		-	-		
	Declared Capacity	at bivalent temperature	kW	-	-		
		at operation limit temperature	kW	-	-		
Heating	Back up heating		kW	-	-		
(Average	Annual electricity	consumption (*2)	kWh/a	-	-		
Season)(*5)	SCOP (4)			-	-		
		Energy efficiency class		-	-		
	Capacity	Rated	kW	-	-		
		Min-Max	kW	-	-		
	Total Input	Rated	kW	-	-		
Operating	g Current (Max)		Α	9.6	9.6		
	Input Rated		kW	0.033	0.034		
	Operating Current (Max)		A	0.4	0.4		
	Dimensions H*W*D		mm	305-923-250	305-923-250		
	Weight		kg	12.5	12.5		
Indoor	Air Volume (Lo-Mid-	Cooling	m³/min	10.1 - 11.6 - 13.7 - 16.4	10.1 - 11.6 - 13.7 - 16.4		
Unit	Hi-SHi <sup>(*3)</sup> (Dry/Wet))	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	1	А	10	10		
	Dimensions	H*W*D	mm	550-800-285	550-800-285		
	Weight		kg	34	34		
	Air Volume	Cooling	m³/min	29.3	29.3		
Outdoor		Heating	m³/min	-	- 47		
Unit	Sound Level (SPL)	Cooling	dB(A)	45	47		
	. ,	Heating	dB(A)	-	-		
	Sound Level (PWL)   Cooling		dB(A)	58	61		
	Operating Current (Max)		Α	9.2	9.2		
Ext.	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52		
Piping	Max.Length	Out-In	m	20	20		
_	Max.Height	Out-In	m	12	12		
	ed Operating	Cooling	°C	-25 ~ +46	-25 ~ +46		
Range (O	utuoor)	Heating	°C	<u> </u>	-		

<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) SH: Super High

(\*4) SEER and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011.





## MSZ-S SERIES MSZ-G SERIES

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



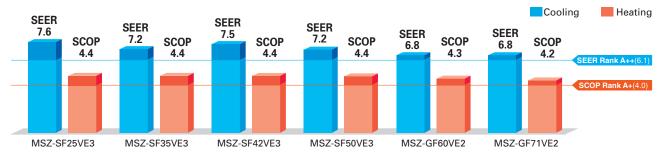
#### "Rank A++/A+" Energy Savings Achieved for Entire Range of Series







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

(MSZ-SF15/20VA)

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

#### Comparison with our previous model GE





#### Family Design

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

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

\*Size may vary.





# "Weekly Timer"



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

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

	M	on.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	
c.oo	ON	20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	
6:00				tion at wake-up time					
800									
10:00	C	)FF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C	
15:00			Automatio	ally turned off during v	vork hours		Midday is warmer,		
14:00			Automatic	ally turned on during v	VOIX HOURS		so the temperature is set lower		
15:00									
18:00	ON	20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	
20:00			Automatically turn	ns on, synchronized wi	th arrival at home		Automatically raises temperature setting to match time when outside-air temperature is low		
22:00					match time when outsit	de-air terriperature is low			
(during sleeping hours)	ON	18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	
			Automa	itically lowers tempera	ture at bedtime for ene	ergy-saving operation a	t night		

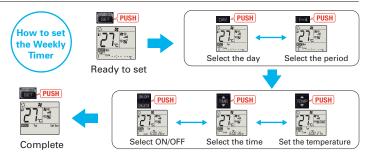
**Settings** 

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 -

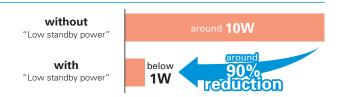




- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired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

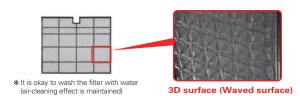
# Low Standby Power

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



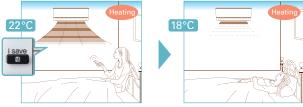
### Air Purifying Filter (MSZ-SF25/35/42/50, MSZ-GF60/71)

This filter generates stable antibacterial and deodourising effects. The size of the three-dimensional surface has been increased as well, enlarging the filter capture area. These features give the Air Purifying Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort vet 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.



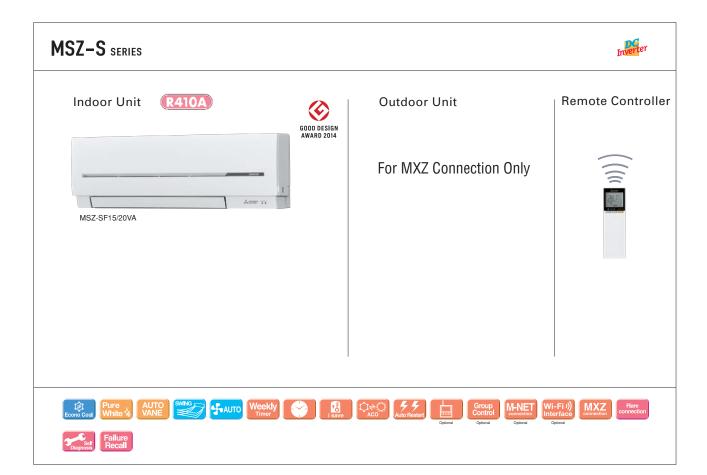
\* Temperature can be preset to 10°C when heating in the "i-save" mode.

# 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







Type Inverter Heat Pump												
Indoor Ur	nit			MSZ-SF15VA	MSZ-SF20VA	MSZ-SF25VE3	MSZ-SF25VE3	MSZ-SF35VE3	MSZ-SF35VE3			
Outdoor I	Jnit			for MXZ o	onnection	MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH			
Refrigera	nt					R41	OA <sup>(*1)</sup>					
Power	Source			Outdoor Power supply								
Supply	Outdoor (V / Ph	ase / Hz )		230/Single/50								
	Design load	•	kW	=	-	2.5	2.5	3.5	3.5			
	Annual electricity	consumption (*2)	kWh/a	=	-	116	116	171	171			
	SEER (*4)			-	-	7.6	7.6	7.2	7.2			
Cooling		Energy efficiency class		-	-	A++	A++	A++	A++			
		Rated	kW	-	-	2.5	2.5	3.5	3.5			
	Capacity	Min-Max	kW	-	-	0.9-3.4	0.9-3.4	1.1-3.8	1.1-3.8			
	Total Input	Rated	kW	-	-	0.600	0.600	1.080	1.080			
	Design load		kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)			
		at reference design temperature	kW	-	-	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	-	-	2.0(-15°C)	1.6(-20°C)	2.2(-15°C)	1.6(-20°C)			
Heating	Back up heating		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)			
(Average	Annual electricity		kWh/a	-	-	764	790	923	948			
Season)(*5)	SCOP (*4)			_	_	4.4	4.3	4.4	4.3			
	Energy efficiency class			-	-	A+	A+	A+	A+			
		Rated	kW	-	-	3.2	3.2	4.0	4.0			
	Capacity	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			
Operatin	g Current (Max)		A	-	-	8.4	8.4	8.5	8,5			
	Input	Rated	kW	0.017	0.019	0.024	0.024	0.027	0.027			
	Operating Curre	nt(Max)	A	0.17	0.19	0.2	0.2	0.3	0.3			
	Dimensions H*W*D		mm	250-760-168	250-760-168	299-798-195	299-798-195	299-798-195	299-798-195			
	Weight		kg	7.7	7.7	10	10	10	10			
Indoor	Air Volume (SLo-Lo-	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 - 9.1			
Unit	Mid-Hi-SHi <sup>(*3)</sup> (Dry/Wet))	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 - 11.0			
	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(*6) - 24 - 30 - 36 - 42	19(16) - 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(*6) - 24 - 34 - 39 - 45	19(*6) - 24 - 34 - 40 - 46	19(16) - 24 - 34 - 40 - 46			
	Sound Level (PWL)	Cooling	dB(A)	59	60	57	57	57	57			
	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285			
	Weight		kg	-	-	31	31	31	31			
		Cooling	m³/min	=	=	31.1	31.1	35.9	35.9			
	Air Volume	Heating	m³/min	=	=	30.7	30.7	35.9	35.9			
Outdoor		Cooling	dB(A)	=	-	47	47	49	49			
Unit	Sound Level (SPL)	Heating	dB(A)	=	-	48	48	50	50			
	Sound Level (PWL)		dB(A)	=	-	58	58	62	62			
	Operating Curre		Α	=	-	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			
Ext.	Max.Length	Out-In	m	=	=	20	20	20	20			
Piping	Max.Height	Out-In	m	=	-	12	12	12	12			
Guarante	ed Operating	Cooling	°C	=	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46			
Range (C		Heating	°C	=	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24			
(H) D (:					WP) would contribute less to al	-						

<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 tild 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 2086 in the IPCC 4th Assessment Report.

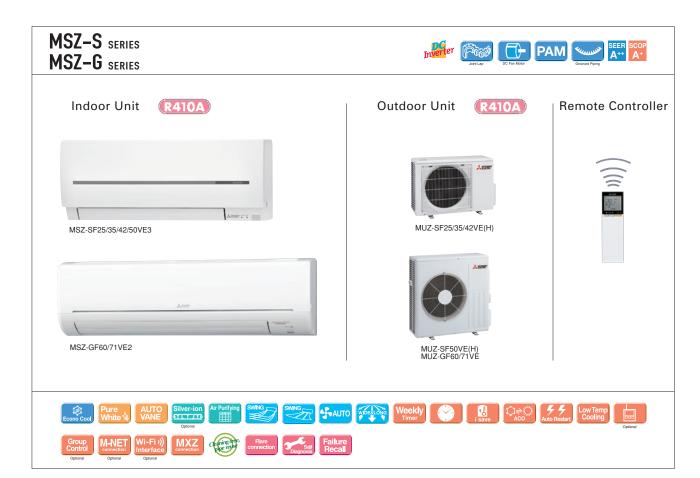
(2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

(3) 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".

(5) Please see page 51-52 for heating (warmer season) specifications.

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



Туре					Inverter Heat Pump										
Indoor Ur	nit			MSZ-SF42VE3	MSZ-SF42VE3	MSZ-SF50VE3	MSZ-SF50VE3	MSZ-GF60VE2	MSZ-GF71VE2						
Outdoor I	Jnit			MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH	MUZ-GF60VE	MUZ-GF71VE						
Refrigera	nt					R41	OA <sup>(*1)</sup>								
Power	Source					Outdoor Po	ower supply								
Supply	Outdoor (V/Ph	ase / Hz )				230/Si	ngle/50								
	Design load		kW	4.2	4.2	5.0	5.0	6.1	7.1						
	Annual electricity	consumption (*2)	kWh/a	196	196	196 246		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	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		kWh/a	1215	1242	1351	1380	1489	2204						
Season)(*5)	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						
Operatin	g Current (Max)		Α	9,5	9.5	12.3	12.3	14.5	16.6						
	Input	Rated	kW	0.027	0.027	0.035	0.035	0.062	0.058						
	Operating Curre	nt(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	Air Volume (SLo-Lo-	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						
Unit	Mid-Hi-SHi <sup>(*3)</sup> (Dry/Wet))	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>(*6)</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(*3))	Heating	dB(A)	26 <sup>(*6)</sup> - 31 - 36 - 42 - 47	26 <sup>(*6)</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						
	4: 1/ 1	Cooling	m³/min	35.2	35.2	44.6	44.6	49.2	50.1						
	Air Volume	Heating	m³/min	33.6	33.6	44.6	44.6	49.2	48.2						
Outdoor Unit	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52	55	55						
Ollit	Sound Level (SPL)	Heating	dB(A)	51	51	52	52	55	55						
	Sound Level (PWL)	Cooling	dB(A)	63	63	65	65	65	65						
	Operating Curre	ent (Max)	A	9.2	9.2	12	12	14	16.1						
	Breaker Size		Α	10	10	16	16	20	20						
_	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7	6.35/15.88	9.52/15.88						
Ext. Piping	Max.Length	Out-In	m	20	20	30	30	30	30						
ribing	Max.Height	Out-In	m	12	12	15	15	15	15						
Guarante	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46						
Range (C		Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24						
(*1) Refriger	ant lookooo oontributo	se to climate change Befrigerar	nt with low	er alobal warming notential (C	M/D) would contribute less to a	ohal warming than a refrigerant	with higher GWP, if leaked to t	he atmosphere. This appliance	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 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 Gasssemble the product yourself or and always ask a professional. The GWP of PA1(0A is 2088 in the IPCO 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 51-52 for heating (warmer season) specifications.

(\*\*5) For single use: only 28dB(A), For multi use (MXZ): 28dB(A).

(\*\*7) For single use: only 28dB(A), For multi use (MXZ): 30dB(A).







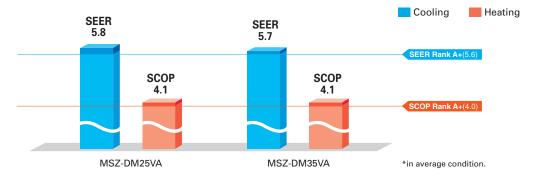
# Advanced Inverter Control -Efficient Operation All the Time Inverter





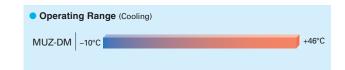


Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A+".



# Wider Cooling Operating Range

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



# Wi-Fi and System Control

# Wi-Fi Interface (Optional)

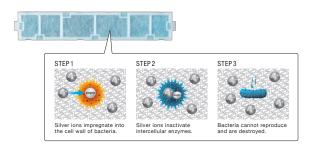
Optional interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.

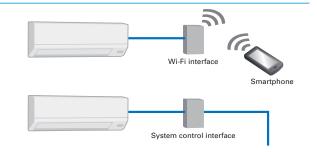
### System Control Interface (Optional)

- •Remote on/off operation is possible by input to the connector.
- •Depending on the interface used, connecting a wired remotecontrol such as the PAR-40MAA 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.

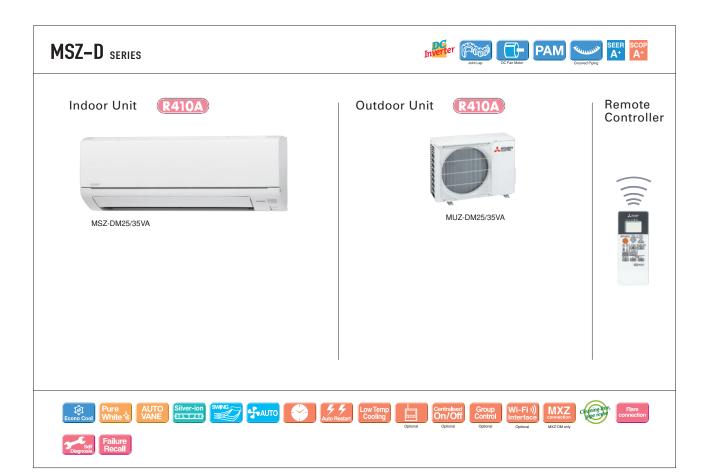




# **Compact Units**

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





Гуре				Inverter l	Heat Pump		
ndoor Ur	nit			MSZ-DM25VA	MSZ-DM35VA		
utdoor				MUZ-DM25VA	MUZ-DM35VA		
efrigera	nt				10A <sup>(*1)</sup>		
ower	Source			Indoor Po	ower supply		
upply	Outdoor (V / Ph	ase / Hz )		230V/Sir	ngle/50Hz		
	Design load		kW	2.5	3.1		
		ectricity consumption (*2)		149	190		
	SEER (*4)			5.8	5.7		
ooling		Energy efficiency class		A <sup>+</sup>	A <sup>+</sup>		
	Capacity	Rated	kW	2.5	3.15		
	Сараспу	Min-Max	kW	1.3 - 3.0	1.4 - 3.5		
	Total Input	Rated	kW	0.710	1.020		
	Design load		kW	1.9 (-10°C)	2.4 (-10°C)		
	Dardawad	at reference design temperature		1.9 (-10°C)	2.4 (-10°C)		
	Declared Capacity	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)		
L		at operation limit temperature	kW	1.9 (-10°C)	2.4 (-10°C)		
ating	Back up heating		kW	0.0 (-10°C)	0.0 (-10°C)		
erage	Annual electricity	consumption (*2)	kWh/a	647	809		
son)(*5)	SCOP (*4)			4.1	4.1		
	Energy efficiency class			A <sup>+</sup>	A <sup>+</sup>		
	Capacity	Rated	kW	3.15	3.6		
	Сараспу	Min-Max	kW	0.9 - 3.5	1.1 - 4.1		
	Total Input	Rated	kW	0.850	0.975		
eratin	g Current (Max)		A	5.8	6.5		
	Input	Rated	kW	0.020	0.024		
	Operating Current(Max)		A	0.3	0.3		
	Dimensions H*W*D		mm	290-799-232	290-799-232		
	Weight		kg	9	9		
loor it	Air Volume (SLo-Lo-	Cooling	m³/min	3.8 - 5.5 - 7.3 - 9.5	3.8 - 5.7 - 7.8 - 10.9		
	Mid-Hi-SHi <sup>(+3)</sup> (Dry/Wet))	Heating	m³/min	3.5 - 5.5 - 7.5 - 10.0	3.5 - 5.5 - 7.5 - 10.3		
	Sound Level (SPL)	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45		
	(SLo-Lo-Mid-Hi-SHi <sup>(*3)</sup> )	Heating	dB(A)	23 - 30 - 37 - 43	23 - 30 - 37 - 44		
	Sound Level (PWL)	Cooling	dB(A)	57	60		
	Dimensions	H*W*D	mm	538-699-249	538-699-249		
	Weight		kg	24	25		
	Air Volume	Cooling	m³/min	31.5	31.5		
	All Volume	Heating	m³/min	31.5	31.5		
ıtdoor iit	Sound Level (SPL)	Cooling	dB(A)	50	51		
		Heating	dB(A)	50	51		
	Sound Level (PWL)	Cooling	dB(A)	63	64		
	Operating Current (Max)		А	5.5	6.2		
	Breaker Size		А	10	10		
	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52		
xt. iping	Max.Length	Out-In	m	20	20		
build	Max.Height	Out-In	m	12	12		
uarante	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46		
anna (C	Outdoor)	Heating	°C	-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 Gasssemble the product yourself or product yourself and always ask a professional. The GWP of R41Oa is 2088 in the IPCO 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".

(5) Please see page 51-52 for heating (warmer season) specifications.



# Stylish Design with Flat Panel Front

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



# Advanced Inverter Control – Efficient Operation All the Time







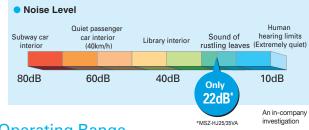




Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A" rating for 25/35 classes and "A+" for 50/60/71 classes.

# Silent Operation

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



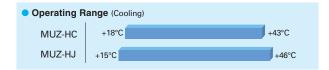
# Long Piping Length

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

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

# **Operating Range**

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



# **Compact Units**

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

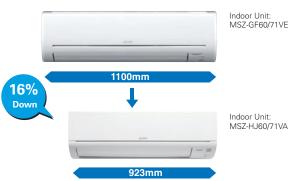
Indoor Unit: MSZ-HJ25/35/50VA

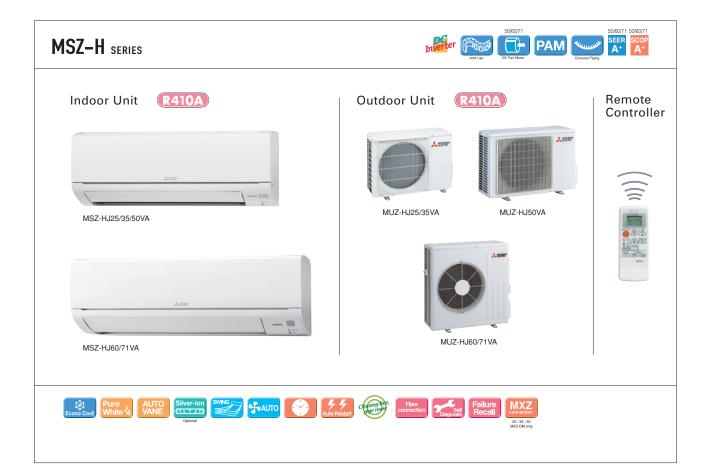
Only 799mm width

Only 699mm width

Outdoor Unit: MUZ-HJ25/35VA

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





Туре					Inverter Heat Pump			
Indoor Ur	nit			MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA	MSZ-HJ60VA	MSZ-HJ71VA
Outdoor I	Unit			MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA	MUZ-HJ60VA	MUZ-HJ71VA
Refrigera	nt					R410A <sup>(*1)</sup>		
Power	Source					Indoor Power supply		
Supply	Outdoor (V/Ph	ase / Hz )				230V/Single/50Hz		
	Design load		kW	2.5	3.1	5.0	6.1	7.1
	Annual electricity	electricity consumption (*2)		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+
	Capacity	Rated	kW	2.5	3.15	5.0	6.1	7.1
	Capacity	Min-Max	kW	1.3 - 3.0	1.4 - 3.5	1.3 - 5.0	1.7 - 7.1	1.8 - 7.1
	Total Input	Rated	kW	0.730	1.040	2.050	1.900	2.330
	Design load		kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
		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 Capacity	at bivalent temperature	kW	1.9 (-10°C)	2.4 (-10°C)	3.8 (-10°C)	4.6 (-10°C)	5.4 (-10°C)
	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	capacity	kW	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	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+
	Capacity	Rated	kW	3.15	3.6	5.4	6.8	8.1
	Capacity	Min-Max	kW	0.9 - 3.5	1.1 - 4.1	1.4 - 6.5	1.5 - 8.4	1.5 - 8.5
	Total Input	Rated	kW	0.870	0.995	1.480	1.970	2.440
Operatin	g Current (Max)		Α	5.8	6.5	9.8	12.5	12.5
	Input	Rated	kW	0.020	0.024	0.037	0.055	0.055
	Operating Current(Max)		Α	0.3	0.3	0.4	0.5	0.5
	Dimensions	H*W*D	mm	290-799-232	290-799-232	290-799-232	305-923-250	305-923-250
Indoor	Weight		kg	9	9	9	13	13
Unit	Air Volume (SLo-Lo-	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
	Mid-Hi-SHi <sup>(*3)</sup> (Dry/Wet))	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	7.11 70141110	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
	Sound Level (PWL)		dB(A)	63	64	64	65	66
	Operating Curre	nt (Max)	A	5.5	6.2	9.4	12.0	12.0
	Breaker Size		A	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 (C	outaoor)	Heating	*℃	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24

<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or Gasssemble the product yourself or product yourself and always ask a professional. The GWP of FA10A is 2088 in the IPCO 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".

(5) Please see page 51-52 for heating (warmer season) specifications.



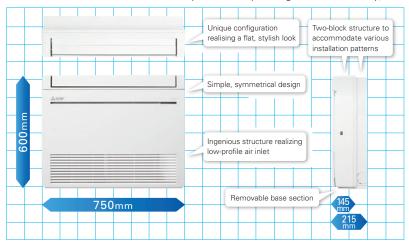
High Capacity, Energy Savings and a Design in Harmony with Living Spaces Raise the Value of Your Room to the Next Level.



# Simple, Flat Design

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

**R32** 





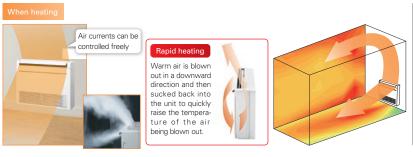
# **New Line-up**

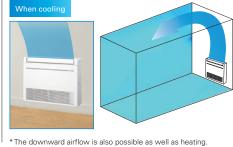
New models have been introduced to expand the line-up. The diverse selection enables the best solution for both customers and locations.

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

# Multi-flow Vane

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



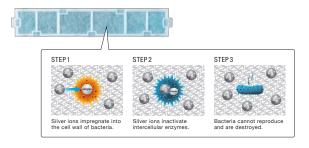


# Weekly Timer (Introduced in response to market demand)

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.

# Silver-ionized Air Purifier Filter

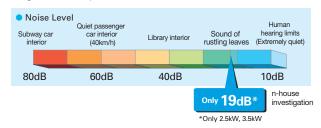
The high performance filter is attached as standard. Captures the bacteria, pollen and other allergens in the air and neutralises them.



# **Quiet Operation**

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

\*Single connection only.



# MFZ-KT SERIES









Remote Controller













Outdoor Unit

SUZ-M25/35VA





SUZ-M50VA

















\*optional























SUZ-M60VA

















MFZ-KT25/35/50/60VG











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 po	wer supply	
Supply	Outdoor(V/Phase/Hz)				230 / Sin	gle / 50	
	Design load		kW	2.5	3.5	5.0	6.1
	Annual electricity consump	otion (*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 consump	otion (*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)		А	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
Indoor	Weight		kg	14.5	14.5	14.5	15.0
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 - 15.0
	(SLo-Lo-Mid-Hi-SHi (*3))	Heating	m3/min	3.5 - 4.0 - 5.6 - 7.3 - 9.7	3.5 - 4.0 - 5.6 - 7.3 - 9.7	6.0 - 7.7 - 9.4 - 11.6 - 14.0	6.0 - 7.7 - 9.7 - 12.5 - 14.6
	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
Unit	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			10	10	16	16
Ext.	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88
Piping	Max.Length	Out-In	m	20	20	30	30
	Max.Height	Out-In	m	12	12	30	30
	ed Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor]		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 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 Gasssemble the product yourself and always ask a professional. The GWP of R41OA is 2088 in the IPCC 4th Assessment Report.

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

(\*3) SHz 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.



# Slim Design

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



# **Ceiling Mounted**

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



# Slim Body

The new units are designed with a slim body (only 185mm high), ensuring easy installation even when low ceiling cavities limit installation space. The need for ceiling cavity service space is also eliminated, further reducing the dimensions required for installation.



# Set Airflow According to Ceiling Height

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

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

# **Auto Vane Control**

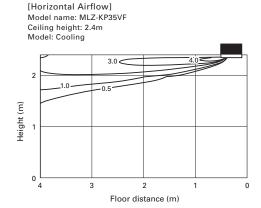
Outlet vanes can be moved left and right, and up and down using the remote controller. This improved airflow control feature solves the problem of drafts.

# Up and Down Left and Right

\*Only available when Econo Cool is set.

# **Horizontal Airflow**

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



**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)

	М	on.	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	s to high-power opera	tion at wake-up time		
8:00								
10:00								
15:00	C	)FF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
14:00			Automatic	ally turned off during w	ork hours		Midday is warmer, so the temperature	
17-00								,
15:00								
(8:00	ON	22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C
50:00			Automatically turn	ns on, synchronized wi	th arrival at home		Automatically raises ten	nperature setting to de-air temperature is low
55:00							That of the first	io dii tompolataro io iovi
(during sleeping hours)	ON	18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 10°C	ON 10°C
			Automa	tically lowers tempera	ture at bedtime for en	ergy-saving operation a	t night	

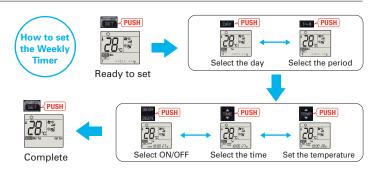
Settings

Pattern Settings: Input up to four settings for each day

**Settings:** •Start/Stop operation •Temperature setting \*The operation mode cannot be set.

# ■ Easy set-up using dedicated buttons





- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired patterns into the remote controller memory. Pushing the "CANCEL"
- button will end the set-up process without sending the operation patterns to the indoor unit.

  It takes a few seconds to transmit the Weekly Timer operation patterns to the indoor unit. Please continue to point the remote controller at the indoor unit until all data has been sent.

# Easy Installation

# **Industry leading Slim Body**

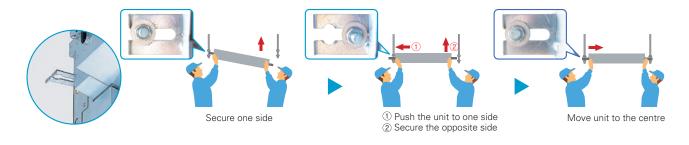
Inovative size which enables to fold the refrigerant piping above the unit



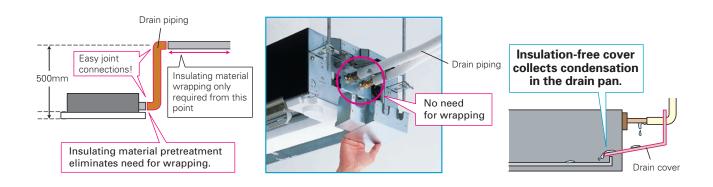
Dimension: 185(H)×1102(W)×360(D)mm

# Temporary hanging hook

Work efficiency has improved during installation.

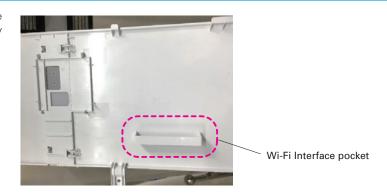


# **Drain Piping Supporters + Drain Cover**



# Wi-Fi Interface Installation (Optional)

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



# MLZ-KP SERIES



Remote Controller



# **Outdoor Unit**



SUZ-M25/35VA



MLZ-KP





A 1888 V S.s. 111111



\*optional









MLP-444W











SUZ-M50VA



48

8.5

6.35/9.52

-10~+24







49

6.35/12.7

30



























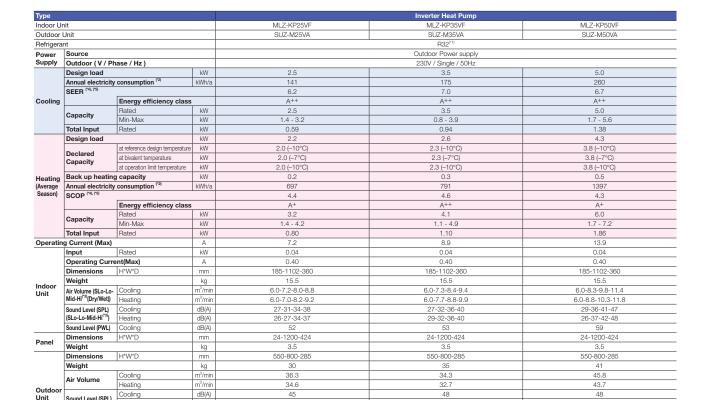












dB(A)

dB(A)

mm m

m °C

°C

Ext. Piping

Sound Level (SPL)

Diameter

Guaranteed Operating Range (Outdoor)

Max.Length

Max.Height

Sound Level (PWL) Cooling

Operating Current (Max) Breaker Size

Heating

Liquid/Gas

Out-In

Out-In

Cooling

Heating

46

59

6.8

6.35/9.52

-10~+46

-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 GROSS and the IPCO 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) SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No.206/2012.

# **Specification on Warmer/Colder Condition**

Туре							Inverter Heat Pump				
Indoor Ur	nit			MSZ-L	N25VG2	MSZ-LN35VG2		MSZ-L	N50VG2	MSZ-LN60VG2	
Outdoor I	Jnit			MUZ-LN25VG2	MUZ-LN25VGHZ2	MUZ-LN35VG2	MUZ-LN35VGHZ2	MUZ-LN50VG2	MUZ-LN50VGHZ	MUZ-LN60VG	
Refrigera	nt				R32 <sup>(5)</sup>						
	Design load				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	
	SEER	SEER			10.5	9.5	9.4	8.5	7.6	7.5	
	Energy efficiency class			A+++	A+++	A+++	A+++	A+++	A++	A++	
	Design load		kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)	3.3 (2°C)	
		at reference design temperature	kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)	3.3 (2°C)	
	Declared Capacity	at bivalent temperature	kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)	3.3 (2°C)	
Heating (Warmer	Capacity	at operation limit temperature	kW	2.5 (-15°C)	2.3 (-25°C)	3.2 (-15°C)	3.1 (-25°C)	4.2 (-15°C)	4.7 (-25°C)	6.0 (-15°C)	
Season)	Back up heating	capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0(2°C)	0.0 (2°C)	
,	Annual electricity	consumption (*2)	kWh/a	369	382	431	467	602	779	779	
	SCOP			6.4	6.6	6.5	6.5	5.8	5.9	5.9	
		Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	
	Design load		kW	-	4.7 (-22°C)	-	5.9 (-22°C)	-	8.8 (-22°C)	-	
		at reference design temperature	kW	_	2.6 (-22°C)	_	3.4 (-22°C)	-	5.1 (-22°C)	-	
	Declared Capacity	at bivalent temperature	kW	-	3.2 (-10°C)	_	4.0 (-10°C)	-	6.0 (-10°C)	-	
Heating	Capacity	at operation limit temperature	kW	-	2.3 (-25°C)	_	3.1 (-25°C)	-	4.7 (-25°C)	-	
(Colder Season)	Back up heating	capacity	kW	_	2.1 (-22°C)	_	2.5 (-22°C)	_	3.7 (-22°C)	_	
2230011)	Annual electricity	consumption (*2)	kWh/a	_	2425	_	3075	_	5340	_	
	SCOP			_	4.0	_	4.0	-	3.4	-	
		Energy efficiency class		_	A <sup>+</sup>	-	A <sup>+</sup>	-	A	-	

Туре					Inverter Heat Pump	
Indoor Ur	nit			MSZ-FT25VG	MSZ-FT35VG	MSZ-FT50VG
Outdoor I	Jnit			MUZ-FT25VGHZ	MUZ-FT35VGHZ	MUZ-FT50VGHZ
Refrigera	nt				R32 (*3)	
<u> </u>	Design load		kW	2.5	3.5	5.0
Cooling	Annual electricity	consumption (*2)	kWh/a	101	142	243
Cooling	SEER			8.6	8.6	7.2
		Energy efficiency class		A+++	A+++	A++
	Design load		kW	1.8 (2°C)	2.2 (2°C)	2.7 (2°C)
	Declared Capacity	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)	2.7 (2°C)
Heating (Warmer		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)
,	Annual electricity	consumption (*2)	kWh/a	432	527	684
	SCOP			5.8	5.8	5.5
		Energy efficiency class		A+++	A+++	A+++
	Design load		kW	4.7 (-22°C)	5.9 (-22°C)	7.4 (-22°C)
		at reference design temperature	kW	3.1 (-22°C)	3.7 (-22°C)	4.0 (-22°C)
	Declared Capacity	at bivalent temperature	kW	3.2 (-10°C)	4.0 (-10°C)	5.0 (-10°C)
Heating (Colder	Capacity	at operation limit temperature	kW	3.0 (-25°C)	3.4 (-25°C)	3.6 (-25°C)
Season)	Back up heating	capacity	kW	1.6 (-22°C)	2.2 (-22°C)	3.4 (-22°C)
	Annual electricity	consumption (*2)	kWh/a	2766	3453	4707
	SCOP			3.5	3.5	3.3
		Energy efficiency class		A	A	В

Туре									Inverter H	leat Pump				
Indoor Ur	nit			MSZ-AP20VG	MSZ-A	P25VG	MSZ-A	P35VG	MSZ-A	P42VG	MSZ-A	P50VG	MSZ-AP60VG(K)	MSZ-AP71VG(K)
Outdoor	Unit			MUZ-AP20VG	MUZ-AP25VG	MUZ-AP25VGH	MUZ-AP35VG	MUZ-AP35VGH	MUZ-AP42VG	MUZ-AP42VGH	MUZ-AP50VG	MUZ-AP50VGH	MUZ-AP60VG	MUZ-AP71VG
Refrigera	nt				R32 <sup>©</sup>									
	Design load kW			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		81	116	116	171	171	196	196	246	246	288	345	
	SEER		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++	
	Design load kW		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	at reference design temperature	kW	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)
	Capacity	at bivalent temperature	kW	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		at operation limit temperature	kW	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	capacity	kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity	consumption (*2)	kWh/a	350	337	337	923 / 418	417	507	507	563	563	627	891
	SCOP			5.2	5.4	5.4	5.4	5.4	5.8	5.8	5.7	5.7	5.5	5.8
		Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

Туре						Inverter H	leat Pump					
Indoor Ur	nit			MSZ-E	F25VG	MSZ-E	EF35VG	MSZ-EF42VG	MSZ-EF50VG			
Outdoor I	Jnit			MUZ-EF25VG	MUZ-EF25VGH	MUZ-EF35VG	MUZ-EF35VGH	MUZ-EF42VG	MUZ-EF50VG			
Refrigera	nt				R32 <sup>(3)</sup>							
	Design load kW			2.5	2.5	3.5	3.5	4.2	5.0			
Cooling	Annual electricity consumption (*2) kWh/a SEER		kWh/a	96	96	139	139	186	233			
0009			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	Capacity	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)			
(Warmer Season)	Back up heating capacity kW		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	311	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				R3	2 (*3)	
	Design load		2.0	2.5	3.5	5.0	
Cooling	Annual electricity consumption (*2) kW			86	108	180	265
0009	SEER			8.1	8.1	6.8	6.6
		Energy efficiency class		A++	A++	A++	A++
	Design load			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	at bivalent temperature	kW	0.9(2°C)	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
Heating	Сарасну	at operation limit temperature		1.3 (-15°C)	1.7 (-15°C)	2.1 (-15°C)	3.4 (-15°C)
(Warmer Season)	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
Coasonj	Annual electricity consumption (*2)		kWh/a	234	268	304	543
	SCOP (*4)			5.3	5.7	5.9	5.4
		Energy efficiency class		A+++	A+++	A+++	A+++

Туре						Inverter F	leat Pump				
Indoor Ur	r Unit rant  Design load Annual electricity consumption (**)  SEER  Energy efficiency class  Design load  Declared Capacity at bivalent temperature at bivalent temperature at possible to the properation of the properation			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 <sup>(3)</sup>							
	Design load		2.5	3.4	4.2	5.0	6.1	7.1			
Cooling	Annual electricity consumption (*2) kWh/a			141	191	226	269	296	355		
0009			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)		
		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 (Warmer	Сарасну	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 capacity kW		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)		
2220011)	Annual electricity	consumption (*2)	kWh/a	289	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+++		

T							lanca at a m 11	and Down			
Туре							Inverter H	<u> </u>			
Indoor U	nit			MSZ-S	F25VE3	MSZ-SF35VE3		MSZ-SF42VE3		MSZ-SF50VE3	
Outdoor	Unit			MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH	MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH
Refrigera	nt						R410	)A <sup>(*1)</sup>			
	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	
occg	SEER			7.6	7.6	7.2	7.2	7.5	7.5	7.2	7.2
		Energy efficiency class		A++	A++	A++	A++	A++	A++	A++	A++
	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)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
,	Annual electricity	consumption (*2)	kWh/a	337	337	923 / 418	417	507	507	563	563
	SCOP			5.4	5.4	5.4	5.4	5.8	5.8	5.7	5.7
		Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

Туре				Inverter H	eat Pump		
Indoor Ur	door Unit itidoor Unit frigerant  Design load  Annual electricity consumption (29)  SEER  Energy efficiency ci  Period at the free design temper at the period at the peri			MSZ-GF60VE2	MSZ-GF71VE2		
Outdoor I	Unit			MUZ-GF60VE	MUZ-GF71VE		
Refrigera	nt			R410A (*1)			
	Design load		kW	6.1	7.1		
Cooling	Annual electricit	y consumption (*2)	kWh/a	311	364		
0009	SEER			6.8	6.8		
		Energy efficiency class		A++	A++		
	Design load			2.5 (2°C)	3.7 (2°C)		
		At reference design temperature	kW	2.5 (2°C)	3.7 (2°C)		
		at bivalent temperature	kW	2.5 (2°C)	3.7 (2°C)		
Heating	Capacity	at operation limit temperature	kW	3.7 (-15°C)	5.4 (-15°C)		
(warmer Season)	Back up heatir	g capacity	kW	0.0 (2°C)	0.0 (2°C)		
0000011,	Annual electricit	y consumption (*2)	kWh/a	664	963		
	SCOP (*4)			5.3	5.4		
		Energy efficiency class		A+++	A+++		

_												
Туре							nverter Heat Pum					
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 (*)							
	Design load			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		
Cooling	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		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	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	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	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 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 try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

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

(3) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1550. This nemens that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.









# **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-M15FA (Multi split series connection only)

SLZ-M25FA

SLZ-M35FA

SLZ-M50FA

SLZ-M60FA

# **Panel**

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



# **Units without Remote Controller**

SEZ-M25DA

SEZ-M35DA

SEZ-M50DA

SEZ-M60DA

SEZ-M71DA

# **Units with Wireless Remote Controller**

SEZ-M25DAL

SEZ-M35DAL

SEZ-M50DAL

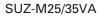
SEZ-M60DAL

SEZ-M71DAL



There is one outdoor unit for respective indoor units.







SUZ-M50VA





SUZ-M60/71VA

(R410A)



SUZ-KA25/35VA6

R410A



SUZ-KA50/60/71VA6

<sup>\*</sup> To confirm compatibility with the MXZ Series multi-type system, refer to the MXZ Series page.



R32
R410A

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

4-way air outlets good Design AWARD 2015

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

# **New lineup**

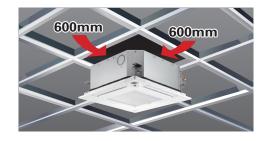
1.5kW has been introduced for multi connection. The diverse selection enables the best solution for both customer and location.

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

# Beautiful design

The straight-line form introduced has resulted in a beautiful square design. Its high affinity ensures the ability to blend in seamlessly with any interior. The indoor unit is an ideal match for office or store use.

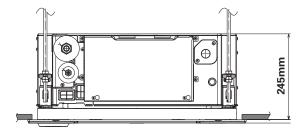
Of course, design matched 2×2 (600mm\*600mm) ceiling construction specifications.



# The height above ceiling of 245mm

The height above ceiling of 245mm enables fitting into narrow ceiling space. Installation is simple, even when the ceiling spaces are narrow to make the ceilings higher

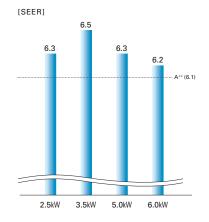
Of course, in addition to our products, replacing competitors' product is simplified too.

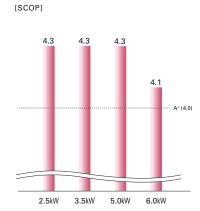


# **Energy-saving Performance\***

The energy-saving performance achieved  $\mathsf{A}^{++}$  in SEER and  $\mathsf{A}^{+}$  in SCOP.

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





# Quietness

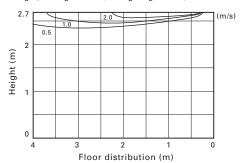
Low sound level has been realized by introduction of 3D turbo fan. New SLZ can give users quieter and move comfortable room condition.



# **Horizontal Airflow**

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

[Airflow distribution]\* 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

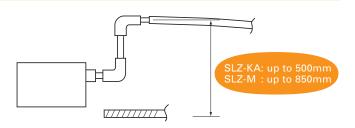
Installation is possible without removing the screws for control box simply loosen them. This eliminates the risk of losing screws.





# **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 air-conditioning power. When the occupancy rate is approximately 30%, air-conditioning power equivalent to 1°C during both cooling and heating operation is saved. The temperature is controlled according to the number of people.

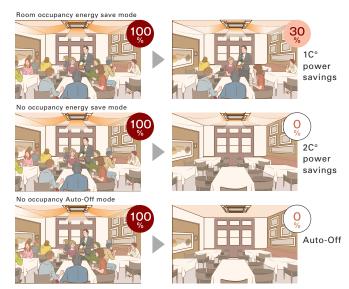
# No occupancy energy-saving mode

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

# No occupancy Auto-OFF mode\*

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

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



\*PAR-40MAA is required for each setting

# Detects people's position

# Direct/Indirect settings\*

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



\*PAR-40MAA or PAR-SL100A-E is required for each setting

# Seasonal airflow\*

### <When cooling>

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

### <When heating>

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



\*PAR-40MAA is required for each setting.

# Simultaneous Multi-system\*

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

\* Only for RA410A connection

Power Inverter Combination		SLZ-M35FA	SLZ-M50FA	SLZ-M60FA
PUZ-ZM71VHA		Twin	_	_
PUHZ-ZRP71VHA2	Distribution pipe	MSDD-50TR2-E MSDD-50TR-E		
PUZ-ZM100V(Y)KA		Triple	Twin	_
PUHZ-ZRP100V(Y)KA3	Distribution pipe	MSDT-111R3-E MSDT-111R-E	MSDD-50TR2-E MSDD-50TR-E	
PUZ-ZM125V(Y)KA		Quadruple	Triple	Twin
PUHZ-ZRP125V(Y)KA3	Distribution pipe	MSDF-1111R2-E MSDF-1111R-E	MSDT-111R3-E MSDT-111R-E	MSDD-50TR2-E2 MSDD-50TR-E
PUZ-ZM140V(Y)KA		Quadruple	Triple	_
PUHZ-ZRP140V(Y)KA3	Distribution pipe	MSDF-1111R2-E MSDF-1111R-E	MSDT-111R3-E MSDT-111R-E	_

# **SLZ-M** SERIES Indoor Unit















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

### **Panel**

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

# **Outdoor Unit**









# Remote Controller









Enclosed in SLP-2FALM/SLP-2FALME

\*optional

\*optional

\*optional



































Туре						Inverter Heat Pump		
Indoor Un	it			SLZ-M15FA	SLZ-M25FA	SLZ-M35FA	SLZ-M50FA	SLZ-M60FA
Outdoor l				for Multi connection	SUZ-M25VA	SUZ-M35VA	SUZ-M50VA	SUZ-M60VA
Refrigera	-			TOT WIGHT CONNECTION	302 WI20VA	R32*1	OOZ WIOOVA	302 W00 VA
Power	Source					Outdoor power supply		
Supply	Outdoor (V/Phase/H	-\				230 / Single / 50		
Cooling	Capacity	Rated	kW		2.5	3.5	4.6	5.7
Cooling	Capacity	Min - Max	kW	_	1.4 - 3.2	0.7 - 3.9	1.0 - 5.2	1.5 - 6.3
	Total Input	Rated	kW	_	0.65	1.09	1.35	1.67
	Design Load	Inated	kW		2.5	3.5		5.7
	Annual Electricity Co	noumntion*2	kWh/a		139	183	4.6 253	321
	SEER*3	onsumption	KVVII/a	-	6.3			
	SEER	F F#:-: Cl		-	6.3 A++	6.7 A++	6.3 A++	6.2 A++
		Energy Efficiency Class		-	***			
Heating (Average	Capacity	Rated	kW	-	3.2	4.0	5.0	6.4
Season)		Min - Max	kW	-	1.3 - 4.2	1.0 - 5.0	1.3 - 5.5	1.6 - 7.3
	Total Input	Rated	kW	-	0.88	1.07	1.56	2.13
	Design Load		kW	-	2.2	2.6	3.6	4.6
	Declared Capacity	at reference design temperature	kW	-	2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.1 (-10°C)
		at bivalent temperature	kW	-	2.0 (-7°C)	2.3 (-7°C)	3.2 (-7°C)	4.1 (-7°C)
		at operation limit temperature	kW	-	2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.1 (-10°C)
	Back Up Heating Car		kW	-	0.2	0.3	0.4	0.5
	Annual Electricity Co	onsumption*2	kWh/a	-	716	843	1191	1559
	SCOP*3			-	4.3	4.3	4.2	4.1
		Energy Efficiency Class		-	A+	A+	A+	A+
Operatin	g Current (max)		Α	-	7.0	8.7	13.7	15.1
Indoor	Input	Rated	kW	0.02	0.02	0.02	0.03	0.04
Unit	Operating Current (n		Α	0.17	0.20	0.24	0.32	0.43
	Dimensions <panel></panel>	$H \times W \times D$	mm	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>
	Weight <panel></panel>		kg	15 <3>	15 <3>	15 <3>	15 <3>	15 <3>
	Air Volume [Lo-Mid-H	li]	m³/min	6.0 - 6.5 - 7.0	6.5 - 7.5 - 8.5	6.5 - 8.0 - 9.5	7.0 - 9.0 - 11.5	7.5 - 11.5 - 13.0
	Sound Level (SPL) [L	o-Mid-Hi]	dB(A)	24 - 26 - 28	25 - 28 - 31	25 - 30 - 34	27 - 34 - 39	32 - 40 - 43
	Sound Level (PWL)		dB(A)	45	48	51	56	60
	Dimensions	H × W × D	mm		550 - 800 - 285	550 - 800 - 285	714 - 800 - 285	880 - 840 - 330
Unit	Weight		kg		30	35	41	54
	Air Volume	Cooling	m³/min	-	36.3	34.3	45.8	50.1
		Heating	m³/min	-	34.6	32.7	43.7	50.1
	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 (n	nax)	А	-	6.8	8.5	13.5	14.8
	Breaker Size		Α	-	10	10	20	20
Ext.	Diameter	Liquid / Gas	mm	-	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88
Piping	Max. Length	Out-In	m	-	20	20	30	30
	Max. Height	Out-In	m	-	12	12	30	30
Guarantee	ed Operating Range	Cooling	°C	-	-10~+46	-10~+46	-15~+46	-15~+46
[Outdoor]		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 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 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

# **SLZ-M** SERIES















### **Panel**

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller
SLP-2FA			
SLP-2FAL	✓		
SLP-2FAE		✓	
SLP-2FALE	✓	✓	
SLP-2FALM	✓		✓
SLP-2FALM	<b>E</b> ✓	✓	✓

# **Outdoor Unit**







SUZ-KA25/35VA6

SUZ-KA50/60VA6

# Remote Controller









Enclosed in SLP-2FALM/SLP-2FALME

\*optional

\*optional

\*optional







































	Inverter Heat Pump	
_		

Туре						Inverter Heat Pump		
Indoor Ur	nit			SLZ-M15FA	SLZ-M25FA	SLZ-M35FA	SLZ-M50FA	SLZ-M60FA
Outdoor I	Jnit			for Multi connection	SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6
Refrigera	nt					R410A*1		
Power	Source					Outdoor power supply		
Supply	Outdoor (V/Phase/H	lz)				230 / Single / 50		
Cooling	Capacity	Rated	kW	-	2.6	3.5	4.6	5.6
		Min - Max	kW	-	1.5 - 3.2	1.4 - 3.9	2.3 - 5.2	2.3 - 6.5
	Total Input	Rated	kW	-	0.684	0.972	1.394	1.767
	Design Load		kW	-	2.6	3.5	4.6	5.6
	Annual Electricity Co	onsumption*2	kWh/a	-	144	188	256	316
	SEER*3			-	6.3	6.5	6.3	6.2
		Energy Efficiency Class		-	A++	A++	A++	A++
Heating	Capacity	Rated	kW	-	3.2	4.0	5.0	6.4
(Average		Min - Max	kW	-	1.3 - 4.2	1.7 - 5.0	1.7 - 6.0	2.5 - 7.4
Season)	Total Input	Rated	kW	-	0.886	1.108	1.558	2.278
	Design Load		kW	-	2.2	2.6	3.6	4.6
	Declared Capacity	at reference design temperature	kW	-	2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.0 (-10°C)
		at bivalent temperature	kW	-	2.0 (-7°C)	2.3 (-7°C)	3.2 (-7°C)	4.0 (-7°C)
		at operation limit temperature	kW	-	2.0 (-10°C)	2.3 (-10°C)	3.2 (-10°C)	4.0 (-10°C)
	Back Up Heating Cap	pacity	kW	-	0.2	0.3	0.4	0.4
	Annual Electricity Co	onsumption*2	kWh/a	-	716	845	1172	1572
	SCOP*3			-	4.3	4.3	4.3	4.1
		Energy Efficiency Class		-	A+	A+	A+	A+
Operatin	g Current (max)		Α	-	7.2	8.4	12.3	14.4
Indoor	Input	Rated	kW	0.02	0.02	0.02	0.03	0.04
Unit	Operating Current (n	nax)	Α	0.17	0.20	0.24	0.32	0.43
	Dimensions <panel></panel>	$H \times W \times D$	mm	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>	245-570-570 <10-625-625>
	Weight <panel></panel>		kg	15 <3>	15 <3>	15 <3>	15 <3>	15 <3>
	Air Volume [Lo-Mid-H	fi)	m³/min	6.0 - 6.5 - 7.0	6.5 - 7.5 - 8.5	6.5 - 8.0 - 9.5	7.0 - 9.0 - 11.5	7.5 - 11.5 - 13.0
	Sound Level (SPL) [L	o-Mid-Hi]	dB(A)	24 - 26 - 28	25 - 28 - 31	25 - 30 - 34	27 - 34 - 39	32 - 40 - 43
	Sound Level (PWL)		dB(A)	45	48	51	56	60
Outdoor	Dimensions	$H \times W \times D$	mm	-	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330	880 - 840 - 330
Unit	Weight		kg	-	30	35	54	50
	Air Volume	Cooling	m³/min		32.6	36.3	44.6	40.9
		Heating	m³/min	-	34.7	34.8	44.6	49.2
	Sound Level (SPL)	Cooling	dB(A)	-	47	49	52	55
		Heating	dB(A)	-	48	50	52	55
	Sound Level (PWL)	Cooling	dB(A)	-	58	62	65	65
	Operating Current (n	nax)	Α	-	7.0	8.2	12.0	14.0
	Breaker Size		Α	-	10	10	20	20
Ext.	Diameter	Liquid / Gas	mm	-	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88
Piping	Max. Length	Out-In	m	-	20	20	30	30
	Max. Height	Out-In	m	=	12	12	30	30
Guarante	ed Operating Range	Cooling	°C	-	-10 ~ +46	-10 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor]								

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

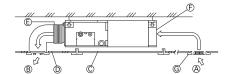




This concealed ceiling-mounted indoor unit series is compact, and fits easily into rooms with lowered ceilings. Highly reliable energy-saving performance makes it a best match choice for concealed unit installations.

# **Compact Ceiling-concealed Units**

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



- Air inlet
- Air outlet
- © Access door
  © Ceiling surface
  © Canvas duct
- Air filter
- © Inlet grille

# Selection of Fan Speeds and Static Pressure Levels

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

SEZ-M25-71DA(L) 5/15/35/50 Pa

Four Levels Available for All Models

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

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

# **Drain Pump (Optional)**

The PAC-KE07DM-E drain pump is now available as an option.

With the pump, a drain hose length of up to 550mm can be used, adding to increased installation possibilities.

# SEZ-M SERIES









**R32** 















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

# **Outdoor Unit**









Remote Controller









Enclosed in SEZ-M DAL

\*optional (for SEZ-M DA)

\*optional (for SEZ-M DA)

\*optional (for SEZ-M DA)





































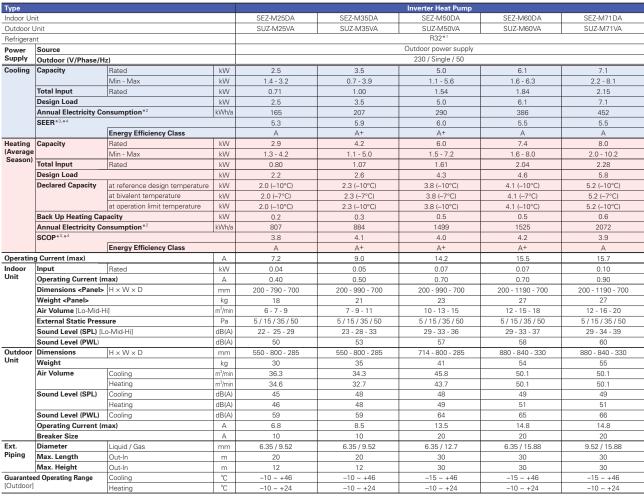












<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means 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 SEER/SCOP are measured at ESP 35Pa.

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

# **SEZ-M** SERIES















# Indoor Unit





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

# Outdoor Unit

# R410A



SUZ-KA25/35VA6



SUZ-KA50/60/71VA6

# Remote Controller







\*optional (for SEZ-M DA)



\*optional (for SEZ-M DA)



\*optional (for SEZ-M DA)































Туре						Inverter Heat Pump		
Indoor Ur	nit			SEZ-M25DA(L)	SEZ-M35DA(L)	SEZ-M50DA(L)	SEZ-M60DA(L)	SEZ-M71DA(L
Outdoor I				SUZ-KA25VA6	SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA
Refrigera						R410A*1		
ower	Source					Outdoor power supply		
Supply	Outdoor (V/Phase/H	lz)				230 / Single / 50		
Cooling	Capacity	Rated	kW	2.5	3.5	5.1	5.6	7.1
		Min - Max	kW	1.5 - 3.2	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.3
	Total Input	Rated	kW	0.730	1.010	1.580	1.740	2.210
	Design Load	riatou	kW	2.5	3.5	5.1	5.6	7.1
	Annual Electricity Co	onsumption*2	kWh/a	162	210	300	356	458
	SEER*3,*4			5.3	5.7	5.8	5.3	5.3
		Energy Efficiency Class		A	A+	A+	A	A
leating	Capacity	Rated	kW	2.9	4.2	6.4	7.4	8.1
Average		Min - Max	kW	1.3 - 4.5	1.7 - 5.0	1.7 - 7.2	2.5 - 8.0	2.6 - 10.4
Season)	Total Input	Rated	kW	0.803	1.130	1.800	2.200	2.268
	Design Load		kW	2.2	2.8	4.6	5.5	6.0
	Declared Capacity	at reference design temperature	kW	1.9 (-10°C)	2.5 (-10°C)	4.1 (-10°C)	4.5 (-10°C)	5.3 (-10°C)
		at bivalent temperature	kW	1.9 (-7°C)	2.5 (-7°C)	4.1 (-7°C)	4.8 (-7°C)	5.3 (-7°C)
		at operation limit temperature	kW	1.9 (-10°C)	2.5 (-10°C)	4.1 (-10°C)	4.5 (-10°C)	5.3 (-10°C)
	Back Up Heating Car		kW	0.3	0.3	0.5	1.0	0.7
	Annual Electricity Co	<u> </u>	kWh/a	808	979	1653	1878	2202
	SCOP*3.*4			3.8	4.0	3.9	4.1	3.8
		Energy Efficiency Class		A	Δ+	A	Δ+	A
Operatin	g Current (max)	3,	А	7.4	8.7	12.7	14.7	17.0
ndoor	Input	Rated	kW	0.040	0.050	0.070	0.070	0.100
Jnit	Operating Current (r		А	0.4	0.5	0.7	0.7	0.9
	Dimensions <panel></panel>		mm	200 - 790 - 700	200 - 990 - 700	200 - 990 - 700	200 - 1190 - 700	200 - 1190 - 7
	Weight <panel></panel>		kg	18	21	23	27	27
	Air Volume [Lo-Mid-h	Hil	m³/min	6 - 7 - 9	7 - 9 - 11	10 - 13 - 15	12 - 15 - 18	12 - 16 - 20
	External Static Press	sure	Pa	5 / 15 / 35 / 50	5 / 15 / 35 / 50	5 / 15 / 35 / 50	5 / 15 / 35 / 50	5/15/35/5
	Sound Level (SPL) [L		dB(A)	22 - 25 - 29	23 - 28 - 33	29 - 33 - 36	29 - 33 - 37	29 - 34 - 39
	Sound Level (PWL)	•	dB(A)	50	53	57	58	60
Outdoor		$H \times W \times D$	mm	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330	880 - 840 - 330	880 - 840 - 33
Jnit	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 (r	_ · ·	A	7.0	8.0	12.0	14.0	16.1
	Breaker Size	-	А	10	10	20	20	20
	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88
xt.	Max. Length	Out-In	m	20	20	30	30	30
		Out-In	l m l	12	I 12	1 30	30	30
Ext. Piping Guarante	Max. Height	Out-In Cooling	m °C	12 -10 ~ +46	12 -10 ~ +46	30 -15 ~ +46	30 -15 ~ +46	30 -15 ~ +46

<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.
\*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
\*3 SEER/SCOP are measured at ESP 35Pa.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.









# **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.

# Single System Simultaneous Multi-System Twin Allows simultaneous operation of two indoor units on one floor. Single Can cover a large-scale space or dispersed installation on the same floor.

# 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.









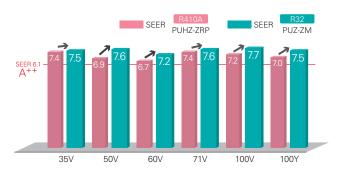
PUZ-ZM60/71VHA



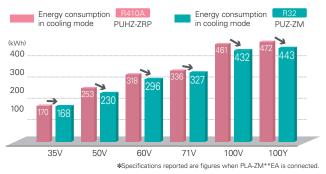
PUZ-ZM100/125/140V(Y)KA PUZ-ZM200/250YKA

# Industry-leading energy efficiency

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



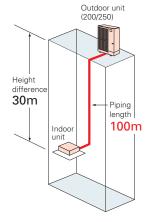
Introduction of new R32 refrigerant reduces energy consumption and realises energy savings.



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

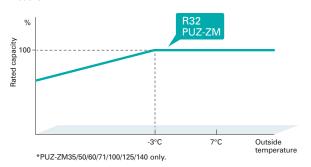
Longer piping length realised for 60, 71, 100, 125, 140, 200 and 250 classes, widely increasing installation flexibility.

	Piping	Length
	R410A PUHZ-ZRP	R32 PUZ-ZM
35/50	50m	50m
60/71	50m	55m
100/125/140	75m	100m
200/250	100m	100m



# 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.



# 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.

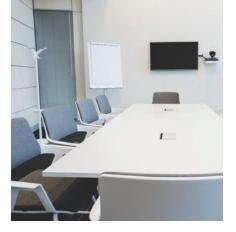




\*Rated noise level will be higher when equipped with this option

# Standard Inverter SERIES

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













SUZ-M35VA

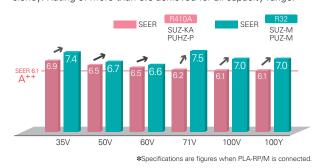
SUZ-M50VA

PUZ-M100/125/140V(Y)KA

PUZ-M200/250YKA

# Improved energy efficiency

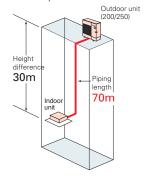
Introduction of new R32 refrigerant realises improved cooling efficiency. Rating of more than 6.6 achieved for all capacity range.



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

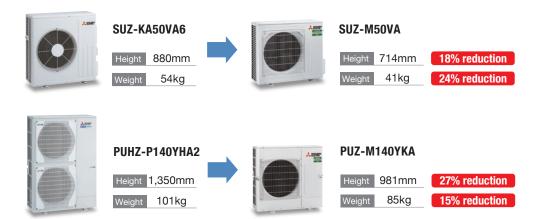
Longer piping length realised for 100, 125, 140, 200 and 250 classes, widely increasing installation flexibility.

	Max. Pipii	ng Length
	R410A SUZ-KA PUHZ-P	R32 SUZ-M PUZ-M
25/35	20m	20m
50/60/71	30m	30m
100	50m	55m
125/140	50m	65m
200/250	70m	70m



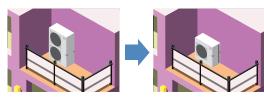
# Light weight and compact size

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

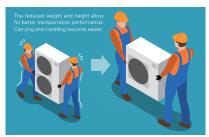


# Unobstructive, compact, and easy to hide from view

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



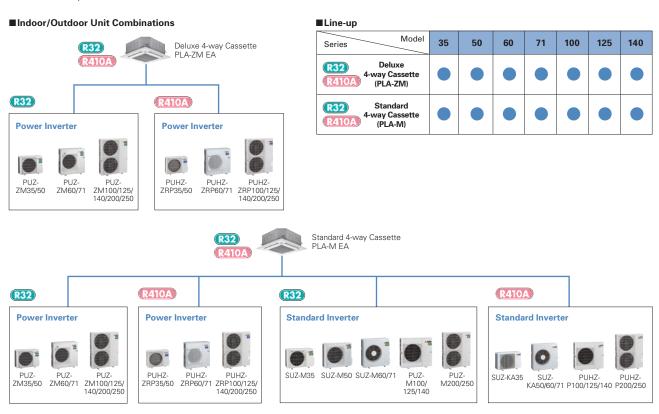


Transport efficiency improves thanks to its low height. The unit can even be transported by minivan.



# Deluxe 4-way Cassette Line-up

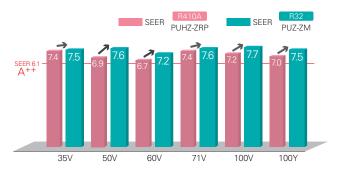
For users seeking even further energy savings, Mitsubishi Electric now offers deluxe units (PLA-ZM) to complete the line-up of models in this series, from 35-140. Compared to the standard models (PLA-RP), deluxe models provide additional energy savings, contributing to a significant reduction in electricity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

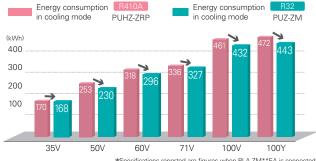


# Industry-leading energy efficiency

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.

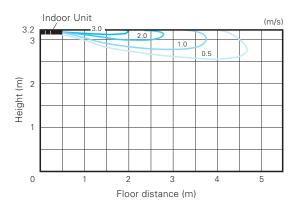




# Horizontal Airflow

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-ZM140EA Ceiling height: 3.2m Mode: Cooling

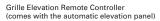




# Automatic Grille Lowering Function (PLP-6EAJ)

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







Wired Remote Controller



Wireless Remote Controller



# **Easy Installation**

### Electrical box wiring

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





■ New model (E Series)



# Increased space for plumbing work

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

■ Previous model (B Series)



■ New model (E Series)



# Temporary hanging hook

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





# No need to remove screws

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

■ Corner panel



■ Control box cover



# Lightweight decorative panel

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



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

# Detects number of people

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

# Detects people's position

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



Detects number of people



Detects people's position



1C°

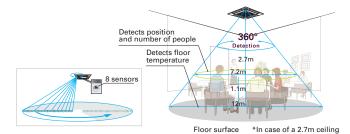
2C°

power

savings

power

savings



# Detects number of people

# Room occupancy energy-saving mode

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

# No occupancy energy-saving mode

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

# No occupancy Auto-OFF mode\*

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

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

# 



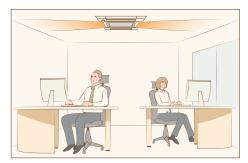


\*PAR-40MAA is required for each setting

# Detects people's position

# Direct/Indirect settings\*

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



\*PAR-40MAA or PAR-SL100A-E is required for each setting

# Seasonal airflow\*

# <When cooling>

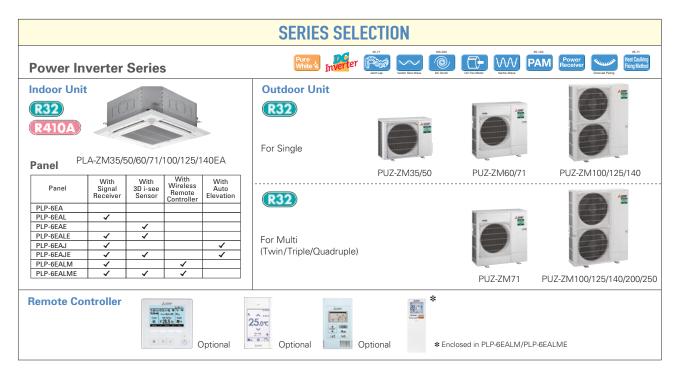
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping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

# <When heating>

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

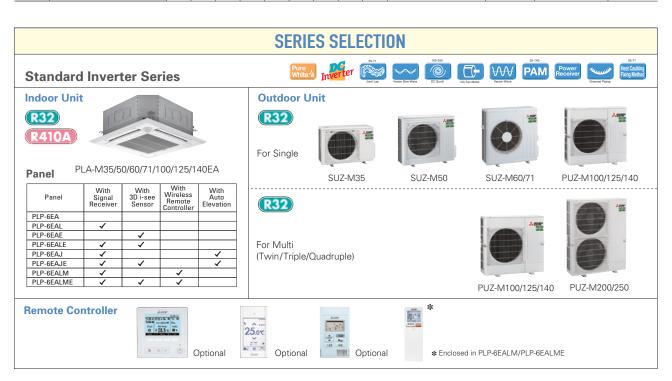


\*PAR-40MAA is required for each setting.



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

										Outd	oor Ur	nit Cap	acity									
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	Inverter (PUHZ-ZRP)	35x1	50x1	60x1	71x1	100x1	125x1	140×1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4	
	Distribution Pipe	_	_	_	_	_	_	-	-	-	N	ISDD-5	0TR2-	-E	MS 50W		MSE	DT-111	R3-E		SDF- 1R2-E	



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

										Outd	oor Ui	nit Cap	acity									
Indoor	Unit Combination	For Single									For Twin						F	For Triple			For Quadruple	
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250	
Standa	ard Inverter (SUZ & PUHZ-P)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4	
	Distribution Pipe	-	-	-	-	-	-	-	-	_	_	MSD	D-50T	R2-E		DD- /R2-E	MSE	DT-111	R3-E		SDF- IR2-E	























































T				-		•							
Туре								Inverter F	leat Pump				
Indoor Ur	nit			PLA- ZM35EA	PLA- ZM50EA	PLA- ZM60EA	PLA- ZM71EA	PLA-ZN	/100EA	PLA-ZN	/125EA	PLA-ZN	1140EA
Outdoor	Unit			PUZ- ZM35VKA	PUZ- ZM50VKA	PUZ- ZM60VHA	PUZ- ZM71VHA	PUZ- ZM100VKA	PUZ- ZM100YKA	PUZ- ZM125VKA	PUZ- ZM125YKA	PUZ- ZM140VKA	PUZ- ZM140YKA
Refrigera	nt					•	•		2*1	•	•	•	
Power	Source							Outdoor po					
Supply	Outdoor (V/Phase	/Hz)					VKA • VH		50, YKA:400 / T				
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
· ·		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.705	1.106	1.452	1.651	2.065	2.065	3.378	3.378	3.722	3.722
	EER			5.10	4.52	4.20	4.30	4.60	4.60	3.70	3.70	3.60	3.60
		EEL Rank		-	_	-	-	-	-	-	-	-	-
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	_
	Annual Electricity	Consumption*2	kWh/a	168	230	296	327	432	443	-	-	-	-
	SEER*4			7.5	7.6	7.2	7.6	7.7	7.5	-	-	-	-
		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
(Average		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
Season)	Total Input	Rated	kW	0.820	1.363	1.707	1.818	2.604	2.604	3.674	3.674	4.312	4.312
	COP			5.00	4.40	4.10	4.40	4.30	4.30	3.81	3.81	3.71	3.71
		EEL Rank		-	-	-	_		_	-	-	-	-
	Design Load		kW	2.5	3.8	4.4	4.7	7.8	7.8	-	-	-	-
	Declared Capacity	at reference design temperature	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
		at bivalent temperature	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (–10°C)	7.8 (–10°C)	-	-	-	-
		at operation limit temperature	kW	2.1 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.5 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	-	-	-
	Back Up Heating C	Capacity	kW	0 745	0	0	1370	2277	2277	-	-	-	-
	Annual Electricity SCOP*4	Consumption**	kWh/a		1083	1339				-	-	-	-
		Energy Efficiency Class		4.7 A++	4.9 A++	4.6 A++	4.8 A++	4.8 A++	4.8 A++	_		_	-
0	g Current (max)	Energy Emclency Class	ΙΑ	13.2	13.2	19.2	19.3	27.0	8.5	27.0	10.0	28.7	13.7
Indoor		Rated	kW	0.03	0.03	0.03	0.05	0.07	0.07	0.08	0.08	0.10	0.10
Unit	Operating Current		A	0.03	0.03	0.03	0.03	0.07	0.07	0.52	0.52	0.66	0.66
· · · · · ·	Dimensions <panel></panel>		mm		0.22		0.54	0.47		0 - 840 <40 - 9		0.00	0.00
	Weight <panel></panel>	IIIXWXD	kg	230 - 041	21 <5>	30 - 3302	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Miz	2-Mi1-Hil	m³/min	11-13-15-16		12-14-16-18						24-26-29-32	
	Sound Level (SPL)		dB(A)	26-28-29-31	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		dB(A)	51	54	54	57	61	61	62	62	65	65
Outdoor	Dimensions	H×W×D	mm	630 - 80			330 (+25)			1.338 - 1.05	0 - 330 (+40)		
Unit	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	49	49	51	51	52	52	52	52
	Sound Level (PWL)		dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current	(max)	Α	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		Α	16	16	25	25	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 /		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
Piping	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
	ed Operating Range		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor]		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 warning potential (GWP) would contribute less to global warning than a refrigerant with linibiper SWP, 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 warning 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.























































P	LA-Ms	ERIES
	STANDARD INV	ERTER

Silent
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Туре			Inverter Heat Pump											
Indoor Unit				PLA- M35EA	PLA- M50EA	PLA- M60EA	PLA- M71EA	PLA-M100EA		PLA-M125EA		PLA-M140EA		
Outdoor Unit			SUZ-	SUZ-	SUZ-	SUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-		
				M35VA	M50VA	M60VA	M71VA	M100VKA	M100YKA	M125VKA	M125YKA	M140VKA	M140YKA	
Refrigerant				R32*1										
Power	Source	Outdoor power supply												
Supply	ipply Outdoor (V/Phase/Hz)				VA • VKA:230 / Single / 50, YKA:400 / Three / 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	
0009	oupuoity	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	0.90	1.61	1.84	1.91	2.71	2.71	4.01	4.01	4.96	4.96	
	EER	Triatoa		4.00	3.40	3.30	3.70	3.50	3.50	3.01	3.01	2.70	2.70	
	EEL Rank			-	- 0.40	-	-	-	-	-	-	-	-	
	Design Load	12221101111	kW	3.6	5.5	6.1	7.1	9.5	9.5	12.1	12.1	13.4	13.4	
	Annual Electricity	Consumption*2	kWh/a	170	285	320	331	474	474	-	-	-	-	
	SEER*4  Energy Efficiency Class		7.4	6.7	6.6	7.5	7.0	7.0	_	_	_	_		
				A++	Δ++	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	
(Average	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	
Season)	Total Input	Rated	kW	0.97	1.73	1.84	2.21	3.01	3.01	3.63	3.63	4.39	4.39	
,	COP	Iriated	KVV	4.20	3.46	3.80	3.61	3.71	3.71	3.71	3.71	3.41	3.41	
	COI	EEL Rank		4.20	- 3.40	3.00	-	3.71	5.71	3.71	3.71		3.41	
	Design Load	EEL NAIIK	kW	2.6	4.3	4.6	5.8	8.0	8.0	8.5	8.5	9.4	9.4	
	Design Load	at reference design temperature						6.0 (-10°C)				9.4 (–10°C)	9.4 (–10°C)	
	Deciared Capacity		kW	2.3 (-10°C) 2.3 (-7°C)	3.8 (-10°C)	4.1 (-10°C)	5.2 (-10°C) 5.2 (-7°C)	7.0 (–10°C)	6.0 (-10°C) 7.0 (-7°C)	8.5 (-10°C) 8.5 (-10°C)	8.5 (-10°C) 8.5 (-10°C)	9.4 (-10°C)	9.4 (-10°C)	
		at bivalent temperature			3.8 (-7°C)	4.1 (-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)	6.0 (-15°C)	6.0 (-15°C)	7.0 (–15°C)	7.0 (–15°C)	
	Back Up Heating (			0.3	0.5	0.5	0.6	2.0	2.0	-	-	_	-	
	Annual Electricity SCOP*4	Consumption **	kWh/a		1456	1458	1796	2428	2428	-	-		-	
	SCOP**			4.7	4.1	4.4	4.5	4.6	4.6	-	-	_	-	
0	0	Energy Efficiency Class		A++	A+	A+	A+	A++	A++	- 07.0	-	-	- 12.2	
Indoor	ng Current (max)	In	A	8.7	13.7	15.0	15.1	20.5	12.0	27.2	12.2	30.7	12.2	
Unit	Input	Rated	kW	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.10	0.10	0.10	
Oiiit	Operating Current		A	0.20	0.22	0.24		0.46	0.46	0.66	0.66	0.66	0.66	
	Dimensions <panel></panel>	[H×W×D	mm		58 - 840 - 840			0.4 5		0 - 840 <40 - 95		00 5		
	Weight <panel></panel>	0.144.117	kg	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>	
	Air Volume [Lo-Mi		m³/min	11-13-15-16	12-14-16-18	12-14-16-18	14-17-19-21	19-23-26-29	19-23-26-29	21-25-28-31	21-25-28-31	24-26-29-32	24-26-29-32	
	Sound Level (SPL)		dB(A)		27-29-31-32								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		714-800-285	880-84		70	70		-330 (+40)		0.5	
Unit	Weight	1	kg	35	41	54	55	76	78	84	85	84	85	
	Air Volume	Cooling	m³/min	34.3	45.8	50.1	50.1	79.0	79.0	86.0	86.0	86.0	86.0	
		Heating	m³/min	32.7	43.7	50.1	50.1	79.0	79.0	92.0	92.0	92.0	92.0	
	Sound Level (SPL)	Cooling	dB(A)	48	48	49	49	51	51	54	54	55	55	
		Heating	dB(A)	48	49	51	51	54	54	56	56	57	57	
	Sound Level (PWL)		dB(A)	59	64	65	66	70	70	72	72	73	73	
	Operating Current	t (max)	Α	8.5	13.5	14.8	14.8	20.0	11.5	26.5	11.5	30.0	11.5	
	Breaker Size		Α	10	20	20	20	32	16	32	16	40	16	
Ext.	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	
Piping	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	
	ed Operating Range		°C	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	
[Outdoor] Heating °C		°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21		
*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere.										. This appliance				





























Sensor Control Control Optional Optional	AUTO VANE Fresh-air Intake	High-efficiency	Check! SWING	High Ceiling Ceiling	g J SAUTO		Auto Restart Low Temp Cooling
Silent S Ampere Limit Rotation Back-up	Group Control	M-NET COMPO	Wi-Fi i) Interface	Wiring Reuse Optional	Pump Down	Flare connection Setf Diagnosis	Failure Recall

Туре								Inverter H	eat Pump				
Indoor Ur	nit			PLA-	PLA-	PLA-	PLA-	DI A A A	10054	DI A A A	12554	DI A A A	140EA
				M35EA	M50EA	M60EA	M71EA	PLA-M	IUUEA	PLA-M	125EA	PLA-M	14UEA
Outdoor I	Unit			PUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-	PUZ-
				ZM35VKA	ZM50VKA	ZM60VHA	ZM71VHA	ZM100VKA	ZM100YKA	ZM125VKA	ZM125YKA	ZM140VKA	ZM140YKA
Refrigera	nt			LIVIOUVIU	LIVIOUVIOV	LIVIOUVIIIV	2.007.000	R3:		LIVIILOVIO	Liviizoniot	Zivii ioviot	ZIVII IOTIO
	Source							Outdoor po					
	Outdoor (V/Phase	/H <sub>7</sub> )					VKA • VH	A:230 / Single /		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
Cooling	Сарасіту	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	0.751	1.175	1.523	1.716	2.084	2.084	3.399	3.399	3.746	3.746
	EER	Inated	I KVV	4.79	4.25	4.00	4.14	4.56	4.56	3.68	3.68	3.58	3.58
		EEL Rank		-	4.25	4.00	-	4.50	4.50	-	- 3.00	-	-
	Design Load	EEL NAIIK	kW	3.6	5.0	6.1	7.1	9.5	9.5		_	_	_
	Annual Electricity	Concumption*2	kWh/a	172	234	299	332	435	446		_	_	_
	SEER*4	Consumption	KVVII/a	7.3	7.4	7.1	7.4	7.6	7.4		_	_	_
		Energy Efficiency Class		Λ++	Λ++	A++	A++	Λ++	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
(Average	ouputity	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
Season)	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	Indica		4.61	3.79	3.76	3.97	4.17	4.17	3.71	3.71	3.67	3.67
		EEL Rank		-	-	- 0.70	-	-	-	-	-	-	-
	Design Load		kW	2.5	3.8	4.4	4.7	7.8	7.8	_	_	_	_
		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)	_	_	-	_
	а	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 C		kW	0	0	0	0	0	0	_	-	_	_
	Annual Electricity	Consumption*2	kWh/a	797	1184	1420	1432	2521	2521	-	-	-	-
	SCOP*4			4.3	4.4	4.3	4.6	4.3	4.3	-	-	-	_
		<b>Energy Efficiency Class</b>		A+	A+	A+	A++	A+	A+	_	-	-	_
Operatin	g Current (max)		А	13.2	13.2	19.2	19.3	27.0	8.5	27.2	10.2	28.7	13.7
Indoor	Input	Rated	kW	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.10	0.10	0.10
Unit	Operating Current		А	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions <panel></panel>	$H \times W \times D$	mm		0 - 840 <40 - 95					0 - 840 <40 - 95			
	Weight <panel></panel>		kg	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2		m³/min	11-13-15-16	12-14-16-18	12-14-16-18		19-23-26-29				24-26-29-32	
	Sound Level (SPL)		dB(A)					31-34-37-40					
	Sound Level (PWL		dB(A)	51	54	54	56	61	61	65	65	65	65
	Dimensions	H × W × D	mm	630 - 80			- 330 (+25)				0 - 330 (+40)		
Unit	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
	0 11 1/5	Heating	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)	A	13.0	13.0	19.0	19.0	26.5	8.0 16	26.5	9.5 16	28.0 40	13.0
	Breaker Size	II: :1/0:	A	16	16	25	25	32		32		9.52 / 15.88	16 9.52 / 15.88
Ext. Piping	Diameter	Liquid / Gas Out-In	mm	6.35 / 50		9.52 / 15.88	9.52 / 15.88 55	9.52 / 15.88 100	9.52 / 15.88 100	9.52 / 15.88 100	9.52 / 15.88	100	100
riping	Max. Length		m		50	55	30						30
C	Max. Height	Out-In	m	30 -15 ~ +46	30	30	-15 ~ +46	30	30 -15 ~ +46	30 -15 ~ +46	30 -15 ~ +46	30 -15 ~ +46	-15 ~ +46
Guarante [Outdoor]	ed Operating Range	Cooling*3	°C		-15 ~ +46	-15 ~ +46		-15 ~ +46 -20 ~ +21					
[Outuo0]		Heating	J *C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21						-20 ~ +21

<sup>1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R32 is 675 in the IPCC 4th Assessment Report.

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

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

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



#### PLA-ZM/RP EA Indoor Unit Combinations Indoor unit combinations shown below are possible.

										Outd	Outdoor Unit Capacity											
Indoor	Unit Combination				Fo	or Sing	gle						For	Twin			Fo	or Trip	le	For Quadruple		
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250	
Power	Power Inverter (PUHZ-ZRP)		50x1	60x1	71x1	100x1	125x1	140×1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4	
	Distribution Pipe		-	-	-	-	-		-	-	MSDD-50TR-E MSDD-		50WR-E	MS	DT-111	R-E	MSDF-1	1111R-E				
Standa	rd Inverter (SUZ & PUHZ-P)	35x1	50x1	60x1	71x1	100x1	125x1	140×1	-	_	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4	
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	MSI	DD-50	TR-E	MSDD-	50WR-E	MS	DT-111	R-E	MSDF-1	1111R-E	

## PLA-



























ZM SERIES	Optional
INVERTER	Silent

























e l	Failure	

				Optional	Optional	Optional	Opti	onal	Optional				
Туре								Inverter H	leat Pump				
Indoor U	nit			PLA- ZM35EA	PLA- ZM50EA	PLA- ZM60EA	PLA- ZM71EA	PLA-ZN	/100EA	PLA-ZN	/125EA	PLA-ZN	/140EA
Outdoor	Unit			PUHZ- ZRP35VKA2	PUHZ- ZRP50VKA2	PUHZ- ZRP60VHA2	PUHZ- ZRP71VHA2	PUHZ- ZRP100VKA3	PUHZ- ZRP100YKA3	PUHZ- ZRP125VKA3	PUHZ- ZRP125YKA3	PUHZ- ZRP140VKA3	PUHZ- ZRP140YKA3
Refrigera	nt						1	R41	0A*1				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor (V/Phase	/Hz)					VKA • VH	A:230 / Single /		Three / 50			
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
0009	oupuoity	Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.78	1.33	1.66	1.79	2.20	2.20	3.84	3.84	4.36	4.36
	EER	110100		-	-	-	-	_		3.25	3.25	3.07	3.07
		EEL Rank		_	_	_	_	_	_	-	-	-	-
	Design Load		l kW	3.6	5.0	6.1	7.1	9.5	9.5	_	_	_	_
	Annual Electricity	Consumption*2	kWh/a	170	253	318	336	461	472	_	_	_	-
	SEER*4		1	7.4	6.9	6.7	7.4	7.2	7.0	-	-	-	-
		<b>Energy Efficiency Class</b>		A++	Δ++	Δ++	A++	A++	A++	_	_	_	-
Heating	Capacity	Rated	l kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
(Average	oupuoity	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
Season)	Total Input	Rated	kW	0.85	1.55	1.89	1.90	2.60	2.60	3.67	3.67	4.84	4.84
	COP	Triatoa	1 1000	-	-	-	-	-	-	3.81	3.81	3.30	3.30
	001	EEL Rank		_	_	_	_	_	_	-	-	-	-
	Design Load		l kW	2.5	3.8	4.4	4.7	7.8	7.8	_	_	_	_
		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)	_	_	_	_
	Dooiaroa oapaoity	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 C		kW	0	0	0	0	0	0	_	_	_	_
	Annual Electricity		kWh/a	714	1109	1337	1342	2229	2229	_	_	_	_
	SCOP*4	Consumption	[KVVII/G	4.9	4.8	4.6	4.9	4.9	4.9	_	_	_	-
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	_	_	_	-
Operatin	g Current (max)		ΙA	13.2	13.2	19.2	19.3	27.0	8.5	27.0	10.0	28.7	13.7
Indoor	Input	Rated	kW	0.03	0.03	0.03	0.05	0.07	0.07	0.08	0.08	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 <panel></panel>	IH×W×D	mm	258 - 84	0 - 840 <40 - 95	50 - 950>			298 - 84	0 - 840 <40 - 95	50 - 950>		
	Weight <panel></panel>		kg		21 <5>		24 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2	2-Mi1-Hi]	m³/min	11-13-15-16	12-14-16-18	12-14-16-18	17-19-21-23	19-22-25-28	19-22-25-28	21-24-26-29	21-24-26-29	24-26-29-32	24-26-29-32
	Sound Level (SPL)	[Lo-Mi2-Mi1-Hi]	dB(A)	26-28-29-31	27-29-31-32	27-29-31-32	28-30-33-36	31-34-37-40	31-34-37-40	33-36-39-41	33-36-39-41	36-39-42-44	36-39-42-44
	Sound Level (PWL	.)	dB(A)	51	54	54	57	61	61	62	62	65	65
	Dimensions	$H \times W \times D$	mm	630 - 80	9 - 300	943 - 950 -	- 330 (+30)			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)		dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current	(max)	А	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		Α	16	16	25	25	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
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
	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor		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 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.





























































Self	Failure
lagnosis	Recal

Type Indoor Unit							Inverter H	ter Heat Pump					
Indoor U	nit			PLA- M35EA	PLA- M50EA	PLA- M60EA	PLA- M71EA	PLA-M	100EA	PLA-M	1125EA	PLA-M	140EA
Outdoor				SUZ- KA35VA6	SUZ- KA50VA6	SUZ- KA60VA6	SUZ- KA71VA6	PUHZ- P100VKA	PUHZ- P100YKA	PUHZ- P125VKA	PUHZ- P125YKA	PUHZ- P140VKA	PUHZ- P140YKA
Refrigera	nt							R41	DA*1				
Power	Source							Outdoor po					
Supply	Outdoor (V/Phase	e/Hz)					VA • VKA	::230 / Single / §	50, YKA:400 / Th				
Cooling	Capacity	Rated	kW	3.6	5.5	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6
_		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	1.02	1.61	1.76	2.10	3.18	3.18	4.10	4.10	5.41	5.41
	EER			-	-	-	-	2.95	2.95	2.95	2.95	2.51	2.51
		EEL Rank		-	-	-	-	-	1	_	-	-	_
	Design Load		kW	3.6	5.5	5.7	7.1	9.4	9.4	-	-	-	-
	<b>Annual Electricity</b>	Consumption*2	kWh/a	181	295	307	400	538	538	-	-	-	_
	SEER*4			6.9	6.5	6.5	6.2	6.1	6.1	-	-	-	-
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	-	-	-	-
Heating	Capacity	Rated	kW	4.1	5.8	6.9	8.0	11.2	11.2	13.5	13.5	15.0	15.0
(Average		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
Season)	Total Input	Rated	kW	1.00	1.69	1.97	2.24	3.26	3.26	3.84	3.84	4.67	4.67
	COP			-	-	-	-	3.43	3.43	3.51	3.51	3.21	3.21
		EEL Rank		-	-	-	-		-	-	-	-	-
	Design Load		kW	2.6	4.3	4.6	5.8	8.0	8.0		-	-	_
	Declared Capacity	at reference design temperature	kW	2.3 (-10°C)	3.8 (-10°C)	4.0 (-10°C)	4.7 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	-	-	-	-
	. ,	at bivalent temperature	kW	2.3 (-7°C)	3.8 (-7°C)	4.1 (-7°C)	5.1 (-7°C)	7.0 (-7°C)	7.0 (-7°C)		-	-	_
		at operation limit temperature	kW	2.3 (-10°C)	3.8 (-10°C)	4.0 (-10°C)	4.7 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	-	-	-	-
	Back Up Heating (		kW	0.3	0.5	0.6	1.1	2.0	2.0		-	-	_
	Annual Electricity	Consumption*2	kWh/a	826	1505	1498	1888	2432	2432		-	-	_
	SCOP*4	F F(f) : 01		4.4	4.0	4.3	4.3	4.6	4.6		-	-	_
<u> </u>	0 (1/2)	Energy Efficiency Class	Ι Δ	A+ 8.4	A+ 12.2	A+ 14.2	A+ 16.4	A++	A++	-	-	-	-
Indoor	g Current (max)	In	kW		0.03	0.03	0.04	20.5 0.07	12.0 0.07	27.2 0.10	12.2 0.10	30.7 0.10	12.2 0.10
Unit	Input Operating Current	Rated	A	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.66	0.66	0.10
Oilit	Dimensions <panel></panel>		mm			<40 - 950 - 950:		0.40		0 - 840 <40 - 95		0.00	0.00
	Weight <panel></panel>	ILL X M X D	kg	19 <5>	19 < 5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi	2.Mi1.Hi1	m³/min			12-14-16-18		19-23-26-29	19-23-26-29	21-25-28-31	21-25-28-31	24-26-29-32	24-26-29-32
	Sound Level (SPL)		dB(A)					31-34-37-40	31-34-37-40	33-37-41-44		36-39-42-44	36-39-42-44
	Sound Level (PWL		dB(A)	51	54	54	56	61	61	65	65	65	65
Outdoor	Dimensions	H×W×D	mm	550 - 800 - 285		880 - 840 - 330			0.		50 - 330	00	- 00
Unit	Weight	THE WAR	kg	35	54	50	53	76	78	84	85	84	85
				36.3	44.6	40.9	50.1	79	79	86	86	86	86
	Air Volume	I Cooling	l m³/min										
	Air Volume	Cooling Heating	m³/min m³/min	34.8		49.2		79	79	92	92	92	92
	Air Volume Sound Level (SPL)	Cooling Heating Cooling	m³/min m³/min dB(A)		44.6 52	49.2 55	48.2 55		79 51	54	92 54	92 56	92 56
		Heating	m³/min	34.8	44.6	49.2	48.2	79					
		Heating Cooling Heating	m³/min dB(A)	34.8 49	44.6 52	49.2 55	48.2 55	79 51	51	54	54	56	56
	Sound Level (SPL)	Heating Cooling Heating Cooling	m³/min dB(A) dB(A)	34.8 49 50	44.6 52 52 65 12.0	49.2 55 55 65 14.0	48.2 55 55 69 16.1	79 51 54 70 20	51 54 70 11.5	54 56 72 26.5	54 56	56 57 75 30.0	56 57 75 11.5
	Sound Level (SPL) Sound Level (PWL)	Heating Cooling Heating Cooling	m³/min dB(A) dB(A) dB(A)	34.8 49 50 62 8.2 10	44.6 52 52 65	49.2 55 55 65	48.2 55 55 69 16.1 20	79 51 54 70	51 54 70 11.5 16	54 56 72 26.5 32	54 56 72 11.5 16	56 57 75	56 57 75 11.5
Ext.	Sound Level (SPL) Sound Level (PWL) Operating Current	Heating Cooling Heating Cooling	m³/min dB(A) dB(A) dB(A)	34.8 49 50 62 8.2	44.6 52 52 65 12.0	49.2 55 55 65 14.0	48.2 55 55 69 16.1	79 51 54 70 20	51 54 70 11.5	54 56 72 26.5	54 56 72 11.5	56 57 75 30.0	56 57 75 11.5
Ext. Piping	Sound Level (SPL) Sound Level (PWL) Operating Current Breaker Size	Heating Cooling Heating Cooling t (max)	m³/min dB(A) dB(A) dB(A) A	34.8 49 50 62 8.2 10 6.35 / 9.52 20	44.6 52 52 65 12.0 20 6.35 / 12.7 30	49.2 55 55 65 14.0 20 6.35 / 15.88 30	48.2 55 55 69 16.1 20 9.52 / 15.88 30	79 51 54 70 20 32 9.52 / 15.88 50	51 54 70 11.5 16 9.52 / 15.88 50	54 56 72 26.5 32 9.52 / 15.88 50	54 56 72 11.5 16 9.52 / 15.88 50	56 57 75 30.0 40 9.52 / 15.88 50	56 57 75 11.5 16 9.52 / 15.88 50
Piping	Sound Level (SPL) Sound Level (PWL) Operating Current Breaker Size Diameter Max. Length Max. Height	Heating Cooling Heating Cooling (Cooling Liquid / Gas Out-In Out-In	m³/min dB(A) dB(A) dB(A) A A mm m	34.8 49 50 62 8.2 10 6.35 / 9.52	44.6 52 52 65 12.0 20 6.35 / 12.7	49.2 55 55 65 14.0 20 6.35 / 15.88 30 30	48.2 55 55 69 16.1 20 9.52 / 15.88	79 51 54 70 20 32 9.52 / 15.88 50 30	51 54 70 11.5 16 9.52 / 15.88 50 30	54 56 72 26.5 32 9.52 / 15.88 50 30	54 56 72 11.5 16 9.52 / 15.88 50 30	56 57 75 30.0 40 9.52 / 15.88 50 30	56 57 75 11.5 16 9.52 / 15.88 50 30
Piping	Sound Level (SPL) Sound Level (PWL) Operating Current Breaker Size Diameter Max. Length Max. Height ed Operating Range	Heating Cooling Heating [Cooling t (max)  Liquid / Gas Out-In	m³/min dB(A) dB(A) dB(A) A A mm	34.8 49 50 62 8.2 10 6.35 / 9.52 20	44.6 52 52 65 12.0 20 6.35 / 12.7 30	49.2 55 55 65 14.0 20 6.35 / 15.88 30	48.2 55 55 69 16.1 20 9.52 / 15.88 30	79 51 54 70 20 32 9.52 / 15.88 50	51 54 70 11.5 16 9.52 / 15.88 50	54 56 72 26.5 32 9.52 / 15.88 50	54 56 72 11.5 16 9.52 / 15.88 50	56 57 75 30.0 40 9.52 / 15.88 50	56 57 75 11.5 16 9.52 / 15.88 50

<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.





























עוע וע	M arries	Ориона	60-140V/200/250			Optonal							
L LW-	M SERIES												
POWER		(6)	Ampere	Rotation	Group	P. M-NET	COMPO Wi-		Cleaning-free,	Viring Drair Reuse Lift U	Pump	Flare connection	Failure
PUWEK	NVERIER	Silent C	Limit	Back-up	Contro	Ol connection	Inter		pipe reust		Down	Diag	nosis
				Optional	Optional	Optional	Opti	onal	$\overline{}$	Optional			
Type								Inverter H	eat Pump				
Indoor Ur	nit			PLA-	PLA-	PLA-	PLA-						-
				M35EA	M50EA	M60EA	M71EA	PLA-M	1100EA	PLA-M	125EA	PLA-M	140EA
Outdoor	0.5			PUHZ-		PUHZ-	PUHZ-	DUULZ	DI III IZ	PUHZ-	DI III IZ	PUHZ-	DUUT
Outdoor	Unit				PUHZ-			PUHZ-	PUHZ-		PUHZ-		PUHZ- ZRP140YKA3
				ZRP35VKA2	ZRP50VKA2	ZRP60VHA2	ZRP/TVHA2			ZRP125VKA3	ZRP125YKA3	ZRP140VKA3	ZRP14UYKA3
Refrigera								R41					
	Source							Outdoor po					
Supply	Outdoor (V/Phase	/Hz)					VKA • VH	A: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
ŭ		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.83	1.42	1.75	1.87	2.23	2.23	3.87	3.87	4.39	4.39
	EER			-	-	-	-	-	-	3.23	3.23	3.05	3.05
		EEL Rank		-	-	-	-	-	-	-	-	-	-
	Design Load	•	kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	174	258	321	341	465	476	-	-	-	-
	SEER*4	•		7.2	6.7	6.6	7.2	7.1	6.9	-	-	-	-
		<b>Energy Efficiency Class</b>		A++	A++	A++	A++	A++	A++	-	-	-	-
Heating	Capacity	Rated	l kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
(Average		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
Season)	Total Input	Rated	kW	0.92	1.81	2.07	2.11	2.69	2.69	3.77	3.77	4.90	4.90
	COP	1		_	-	_	_	_	-	3.71	3.71	3.26	3.26
		EEL Rank		_	_	_	_	_	_	-	-	-	-
	Design Load	1	kW	2.5	3.8	4.4	4.7	7.8	7.8	_	_	_	_
		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 (		kW	0	0	0	0.0 ( 2.0 0)	0.0 ( 20 0)	0.0 ( 20 0)	_	_	_	_
	Annual Electricity		kWh/a	764	1212	1418	1402	2468	2468	_	_	_	_
	SCOP*4			4.5	4.3	4.3	4.6	4.4	4.4	_	_	_	_
		<b>Energy Efficiency Class</b>		A+	A+	A+	A++	A+	A+	_	_	_	_
Operation	g Current (max)		ΙA	13.2	13.2	19.2	19.3	27.0	8.5	27.2	10.2	28.7	13.7
Indoor	Input	Rated	kW	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.10	0.10	0.10
Unit	Operating Current		A	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66
	Dimensions <panel></panel>		mm		58 - 840 - 840 -					98 - 840 - 840			
	Weight <panel></panel>		ka	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi	2-Mi1-Hil	m³/min		12-14-16-18			19-23-26-29					24-26-29-32
	Sound Level (SPL)		dB(A)	26-28-29-31	27-29-31-32		28-30-32-34	31-34-37-40		33-37-41-44		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	630 - 80		943 - 950		- 0.			) - 330 (+40)		
Unit	Weight	IIIAWAB	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
	· Folunio	Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)		dB(A)	44	44	47	47	49	49	50	50	50	50
	Country Level (SFL)	Heating	dB(A)	46	46	48	48	51	51	52	52	52	52
	Sound Level (PWL)		dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current		A	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size	(IIIua)	T A	16	16	25	25	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88		9.52 / 15.88
-^-	Piuilletei	Liquid / Udo	1 1111111	0.00/14./	0.00/12./	0.02 / 10.00	0.02 / 10.00	0.02 / 10.00	0.02 / 10.00	0.02 / 10.00	0.02 / 10.00	0.02 / 10.00	0.02 / 10.00

<sup>|</sup> State | Diameter | Liquid | Gas | mm | 6.35 / 12.7 | 6.35 / 12.7 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88 | 9.52 / 15.88

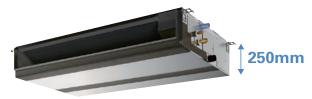




The thin, ceiling-concealed indoor units of this series are the perfect answer for the air conditioning needs of buildings with minimum ceiling installation space and wideranging external static pressure. Energy-saving efficiency has been improved, reducing electricity consumption and contributing to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

#### **Compact Indoor Units**

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



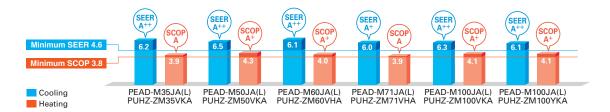
PEAD-M JA(L)

#### **External Static Pressure**

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

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

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



#### Drain Pump Option Available with All Models

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

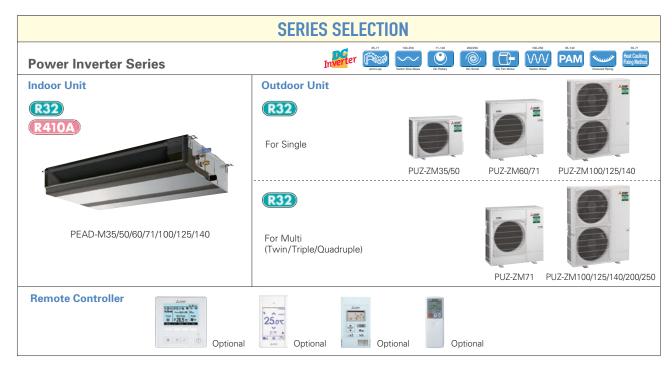


PEAD-M JA → Drain pump built-in



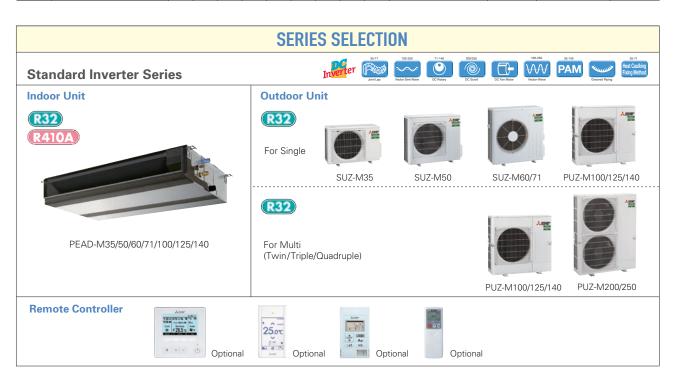
PEAD-M JAL  $\rightarrow$  No drain pump

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



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

										Outd	oor Uı	nit Cap	acity								
Indoor	Unit Combination	For Single									For Twin						Fo	or Trip	For Quadruple		
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power	Inverter (PUHZ-ZRP)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	N	ISDD-	50TR2	-E	MS 50W	DD- R2-E	MSE	OT-111	R3-E	MS 1111	DF- R2-E



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

		Outdoor Unit Capacity																			
Indoor	Unit Combination		For Single									For Twin					F	or Trip	For Quadruple		
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
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					-	-							SDF- IR2-E							

## PEAD-M SERIES







































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			Optional										
Туре							lı	verter Heat P	ump				
Indoor Ur	nit			PEAD- M35JA(L)	PEAD- M50JA(L)	PEAD- M60JA(L)	PEAD- M71JA(L)	PEAD-M	100JA(L)	PEAD-M	125JA(L)	PEAD-M	140JA(L)
Outdoor	Unit			PUZ- ZM35VKA	PUZ- ZM50VKA	PUZ- ZM60VHA	PUZ- ZM71VHA	PUZ- ZM100VKA	PUZ- ZM100YKA	PUZ- ZM125VKA	PUZ- ZM125YKA	PUZ- ZM140VKA	PUZ- ZM140YKA
Refrigera	nt							R3	2*1				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor (V/Phase	/Hz)					VKA • VH	A: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
cooming	Capacity	Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.3	6.2 - 15.3
	Total Input	Rated	kW	0.837(0.820)	1.201(1.187)	1.509(1.495)	1.858(1.844)	2.272(2.256)	2.272(2.256)	3.333(3.315)	3.333(3.315)	3.631(3.611)	3.631(3.611)
	EER*4	1		4.30(4.39)	4.16(4.21)	4.04(4.08)	3.82(3.85)	4.18(4.21)	4.18(4.21)	3.75(3.77)	3.75(3.77)	3.69(3.71)	3.69(3.71)
		EEL Rank		-	-	-	-	-	-	-	-	-	-
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	_
	Annual Electricity	Consumption*2	kWh/a	217(201)	282(268)	350(337)	428(414)	534(521)	543(532)	_	-	_	_
	SEER*4,*5			5.8(6.2)	6.2(6.5)	6.1(6.3)	5.8(6.0)	6.2(6.3)	6.1(6.2)	_	_	_	_
		<b>Energy Efficiency Class</b>		A+(A++)	A++(A++)	A++(A++)	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
(Average	,	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
Season)	Total Input	Rated	kW	0.917	1.312	1.616	1.932	2.598	2.598	3.349	3.349	3.970	3.970
	COP*4	1		4.47	4.57	4.33	4.14	4.31	4.31	4.18	4.18	4.03	4.03
		EEL Rank		_	-	-	-	_	_	_	-	_	_
	Design Load		kW	2.4	3.8	4.4	4.9	7.8	7.8	_	_	_	_
		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)	_	_	_	_
	Dooiaroa oapaoity	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 (		kW	0	0	0	0	0	0	_	_	_	_
	Annual Electricity		kWh/a	858	1237	1540	1751	2666	2666	_	-	-	_
	SCOP*4,*5			3.9	4.3	4.0	3.9	4.1	4.1	_	_	_	_
	000.	<b>Energy Efficiency Class</b>		A	A <sup>+</sup>	A <sup>+</sup>	A	Α+	A <sup>+</sup>	_	_	_	_
Operatin	g Current (max)	, , , , , , , , , , , , , , , , , , , ,	A	14.1	14.4	20.6	21.0	29.2	10.7	29.3	12.3	30.8	15.8
Indoor	Input [Cooling / He	ating   Rated	kW	0.09/0.07	0.11/0.09	0.12/0.10	0.17/0.15	0.25/0.23	0.25/0.23	0.36/0.34	0.36/0.34	0.39/0.37	0.39/0.37
Unit	Operating Current		А	1.07	1.39	1.62	1.97	2.65	2.65	2.76	2.76	2.78	2.78
	Dimensions <panel></panel>		mm	250-90			00-732			00-732			00-732
	Weight <panel></panel>	·	kg	26 (25)	27 (26)	30 (29)	30 (29)	39 (38)	39 (38)	40 (39)	40 (39)	44 (43)	44 (43)
	Air Volume [Lo-Mi	d-Hil	m³/min	10.0-12.0-14.0	12.0-14.5-17.0	14.5-18.0-21.0	17.5-21.0-25.0	24.0-29.0-34.0	24.0-29.0-34.0	29.5-35.5-42.0	29.5-35.5-42.0	32.0-39.0-46.0	32.0-39.0-46.0
	External Static Pre		Pa			•		35 / 50 / 70	/ 100 / 150			•	
	Sound Level (SPL)	[Lo-Mid-Hi]	dB(A)	23 - 27 - 30	26 - 31 - 35	25 - 29 - 33	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	33 - 36 - 40	34 - 38 - 43	34 - 38 - 43
	Sound Level (PWL	.)	dB(A)	54	59	55	58	62	62	66	66	67	67
	Dimensions	H×W×D	mm	630 - 80	9 - 300	943 - 950 -	330 (+25)			1338 - 1050	) - 330 (+40)	•	
Unit	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	49	49	51	51	52	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current	(max)	Α	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		Α	16	16	25	25	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
Piping	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
	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor]	<u> </u>	Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21
*4 D C :	4.1 1 4.2					L (OLA/D)		1.1.1.	0.00	. 20.12.1	214/D : C L L L L		T1 11

<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 linigher 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 872 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.































Туре













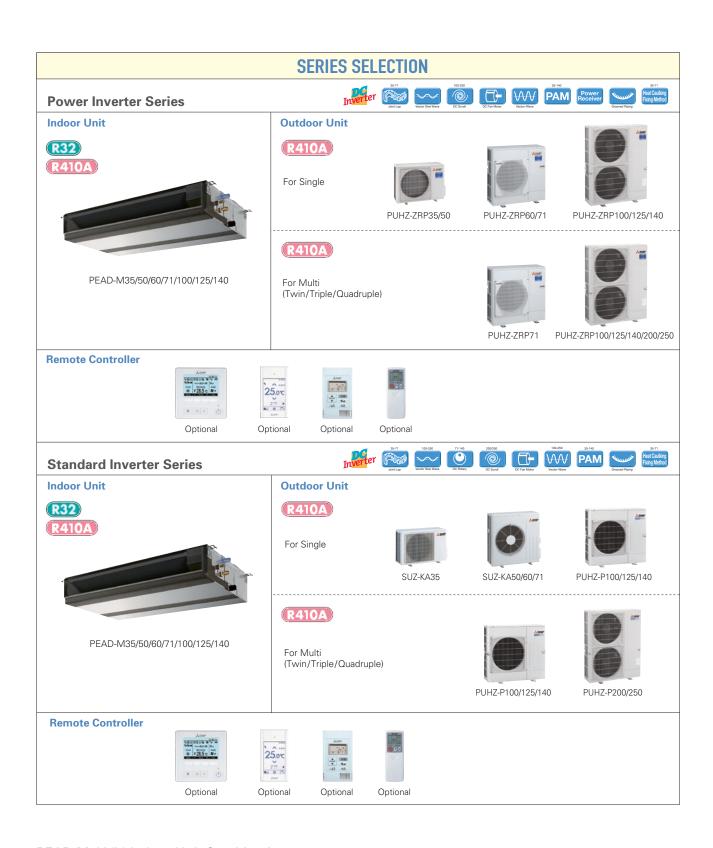






Indoor U	nit			PEAD- M35JA(L)	PEAD- M50JA(L)	PEAD- M60JA(L)	PEAD- M71JA(L)	PEAD-M	100JA(L)	PEAD-M	125JA(L)	PEAD-M	140JA(L)
Outdoor				SUZ- M35VA	SUZ- M50VA	SUZ- M60VA	SUZ- M71VA	PUZ- M100VKA	PUZ- M100YKA	PUZ- M125VKA	PUZ- M125YKA	PUZ- M140VKA	PUZ- ZM140YKA
Refrigera	nt								2*1				
Power	Source							Outdoor po					
Supply	Outdoor (V/Phase	/Hz)					VA • VKA	: 230 / Single / 5	50, YKA: 400 / T	hree / 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
occining	Capacity	Min - Max	kW	0.8 - 3.9	1.7 - 5.6	1.6 - 6.3	2.2 - 8.1	4.0 - 10.6	4.0 - 10.6	6.0 - 13.0	6.0 - 13.0	6.1 - 14.1	6.1 - 14.1
	Total Input	Rated	kW	0.92(0.90)	1.35(1.33)	1.69(1.67)	2.02(2.00)	2.87(2.85)	2.87(2.85)	4.01(3.99)	4.01(3.99)	4.76	4.76
	EER*4	Hateu	KVV	3.90(4.00)	3.70(3.75)	3.60(3.65)	3.50(3.55)	3.30(3.33)	3.30(3.33)	3.01(3.03)	3.01(3.03)	2.81	2.81
	LLIN	EEL Rank		0.00(4.00)	0.70(0.70)	-	-	0.00(0.00)	-	- 0.01(0.00)	-	-	-
	Design Load	LLL Halik	I kW	3.6	5.0	6.1	7.1	9.5	9.5	12.1	12.1	13.4	13.4
	Annual Electricity	Consumption*2	kWh/a	217(199)	287(271)	353(335)	428(411)	613(598)	613(598)	-	-	-	-
	SEER*4.*5	Consumption	Kvviija	5.8(6.3)	6.1(6.4)	6.0(6.3)	5.8(6.0)	5.4(5.5)	5.4(5.5)	_	_	_	_
	SEEN	Energy Efficiency Class		A+ (A++)	A++(A++)	A+(A++)	A+ (A+)	A (A)	A (A)	_			
Heating	Capacity	Rated	l kW	4.1	6.0	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0
(Average	Сараспу	Min - Max	kW	1.1 - 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
Season)	Total Input	Rated	kW	1.02	1.46	1.84	2.0 - 10.2	2.0 - 12.5	2.8-12.5	3.73	3.73	4.2 - 15.6	4.2 - 15.8
Ocuson,	COP*4	nated	KVV	4.00	4.10	3.80	3.71	3.80	3.80	3.61	3.61	3.61	3.61
		EEL Rank		4.00	4.10	3.00	3.71	3.60	3.00	3.01	3.01	3.01	3.01
		EEL Kank	kW	2.6	4.3	4.6	5.8	8.0	8.0	8.5	8.5	9.4	9.4
	Design Load	I . f . l	kW		4.3 3.8 (–10°C)	4.6 4.1(–10°C)	5.8 5.2(-10°C)	6.0(-10°C)	6.0(-10°C)	8.5(-10°C)	8.5(–10°C)	9.4 9.4(–10°C)	9.4(-10°C)
	Declared Capacity	at reference design temperature		2.3(-10°C)							8.5(-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)	8.5(-10°C)	8.5(-10°C)	9.4(-10°C)	9.4(-10°C)
-	at operation limit temperature kW  Back Up Heating Capacity kW		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)	6.0(-15°C)	6.0(-15°C)	7.0(-15°C)	7.0(-15°C)
				0.5	0.5	0.5	0.6	2.0	2.0	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	931	1430	1594	2080	2795	2795	-	-	-	-
	SCOP*4,*5	E E((: 0)		3.9	4.2	4.0	3.9	4.0	4.0	-	-	-	-
		Energy Efficiency Class		A	Α+	A+	A	Α+	Α+	-	-	-	-
	g Current (max)		A	9.6	14.9	16.4	16.8	22.7	14.2	29.3	14.3	32.8	14.3
Indoor Unit	Input [Cooling / He		kW					0.25(0.23)/0.23					
Unit	Operating Current		A	1.07	1.39	1.62	1.97	2.65	2.65	2.76	2.76	2.78	2.78
	Dimensions <panel></panel>	H × W × D	mm		00-732		00-732	00 (00)		00-732	10.000		00-732
	Weight <panel></panel>		kg	26 (25)	27 (26)	30 (29)	30 (29)	39 (38)	39 (38)	40 (39)	40 (39)	44 (43)	44 (43)
	Air Volume [Lo-Mid		m³/min	10.0-12.0-14.0	12.0-14.5-17.0	14.5-18.0-21.0	17.5-21.0-25.0	24.0-29.0-34.0		29.5-35.5-42.0	29.5-35.5-42.0	32.0-39.0-46.0	32.0-39.0-46.0
	External Static Pre		Pa		T 00 01 05				/ 100 / 150				
	Sound Level (SPL)		dB(A)	23 - 27 - 30	26 - 31 - 35	25 - 29 - 33	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	33 - 36 - 40	34 - 38 - 43	34 - 38 - 43
	Sound Level (PWL	)	dB(A)	54	59	55	58	62	62	66	66	67	67
Unit	Dimensions	H × W × D	mm		714 - 800 - 285		10 - 330	981 - 1050 - 330		981 - 1050			0.0
Unit	Weight	1	kg	35	41	54	55	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	34.3	45.8	50.1	50.1	79.0	79.0	86.0	86.0	86.0	86.0
		Heating	m³/min	32.7	43.7	50.1	50.1	79.0	79.0	92.0	92.0	92.0	92.0
	Sound Level (SPL)	Cooling	dB(A)	48	48	49	49	51	51	54	54	55	55
		Heating	dB(A)	48	49	51	51	54	54	56	56	57	57
	Sound Level (PWL)	Cooling	dB(A)	59	64	65	66	70	70	72	72	73	73
	Operating Current	(max)	A	8.5	13.5	14.8	14.8	20.0	11.5	26.5	11.5	30.0	11.5
	Breaker Size		A	16	20	20	20	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	
Piping	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
	ed Operating Range	Cooling*3	°C	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
[Outdoor	J	Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24	-10 ~ +24	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21	-15 ~ +21

Cooling\*3 Heating -15 ~ +46 -15 ~ +46 -15 ~ +46 -15 ~ +46 -15 ~ +46 -10 ~ +24 -10 ~ +24 -10 ~ +24 -15 ~ +21 -15 ~ +21 \*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 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 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.



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

										Outd	oor Ui	nit Cap	pacity								
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 Inverter (PUHZ-ZRP)		35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	-	-	-	-	MSDD-50TR-E MSDD-50WR-E		SDD-50TR-E MSDD-50WR-E MSD		DT-111	R-E	MSDF-	1111R-E			
Standa	Standard Inverter (PUHZ-P&SUZ)		50x1	60x1	71x1	100x1	125x1	140x1	-	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe		-	-	-	-	-	-	-	-	-	-	MSI	DD-50	ΓR-E	MSDD-	50WR-E	MS	DT-111	R-E	MSDF-	1111R-E

# PEAD-M SERIES







































			Optional										
Туре								verter Heat P	ump				
ndoor U	nit			PEAD- M35JA(L)	PEAD- M50JA(L)	PEAD- M60JA(L)	PEAD- M71JA(L)	PEAD-M	100JA(L)	PEAD-M	125JA(L)	PEAD-M	140JA(L)
Outdoor	Unit			PUHZ- ZRP35VKA2	PUHZ- ZRP50VKA2	PUHZ- ZRP60VHA2	PUHZ- ZRP71VHA2	PUHZ- ZRP100VKA3	PUHZ- ZRP100YKA3	PUHZ- ZRP125VKA3	PUHZ- ZRP125YKA3	PUHZ- ZRP140VKA3	PUHZ- ZRP140YK
efrigera	nt							R41					
ower	Source							Outdoor po	wer supply				
upply	Outdoor (V/Phase	e/Hz)					VKA • VH	A:230 / Single /	50, YKA:400 / "	Three / 50			
ooling	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.
	Total Input	Rated	kW	0.89 (0.87)	1.44 (1.42)	1.65 (1.63)	2.01 (1.99)	2.43 (2.41)	2.43 (2.41)	3.86 (3.83)	3.86 (3.83)	4.32 (4.29)	4.32 (4.2
	EER*4			_	-	-	-	-	-	3.24 (3.26)	3.24 (3.26)	3.10(3.12)	3.10(3.1
		EEL Rank		-	-	-	-	-	-	_	-	-	-
	Design Load	•	kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	221(205)	304(288)	355(340)	428(411)	554(543)	565(554)	-	-	-	_
	SEER*4,*5	•		5.7(6.1)	5.7(6.0)	6.0(6.2)	5.8(6.0)	6.0(6.1)	5.8(6.0)	-	_	-	-
		<b>Energy Efficiency Class</b>	;	A+(A++)	A+(A+)	A+(A++)	A+ (A+)	A+ (A++)	A+(A+)	-	-	-	-
eating	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
verage		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.
Season)	Total Input	Rated	kW	0.95	1.50	1.79	2.03	2.60	2.60	3.51	3.51	4.07	4.07
	COP*4			-	-	-	-	-	-	3.99	3.99	3.93	3.93
		EEL Rank		-	-	-	-	-	-	-	-	-	_
	Design Load		kW	2.4	3.8	4.4	4.9	7.8	7.8	-	-	-	_
	<b>Declared Capacity</b>	at reference design temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.9(-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
		at bivalent temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.9(-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	_
		at operation limit temperature	kW	2.2 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.7 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	-	-	-
	Back Up Heating (	Capacity	kW	0	0	0	0	0	0	-	-	-	-
	<b>Annual Electricity</b>	Consumption*2	kWh/a	839	1231	1513	1762	2627	2627	-	-	-	_
	SCOP*4,*5			4.0	4.3	4.1	3.9	4.2	4.2	-	-	-	-
		Energy Efficiency Class		Α+	A+	A+	A	A+	A+	-	-	-	-
	g Current (max)		Α	14.1	14.4	20.6	21.0	29.2	10.7	29.3	12.3	30.8	15.8
door	Input [Cooling / He		kW					0.25 (0.23)/0.23					
nit	Operating Current		A	1.07	1.39	1.62	1.97	2.65	2.65	2.76	2.76	2.78	2.78
	Dimensions <panel></panel>	H × W × D	mm		00-732		00-732			00-732			00-732
	Weight <panel></panel>		kg	26 (25)	27(26)	30(29)	30(29)	39(38)	39(38)	40(39)	40(39)	44(43)	44(43)
	Air Volume [Lo-Mi		m³/min	10.0-12.0-14.0	12.0-14.5-17.0	14.5-18.0-21.0	17.5-21.0-25.0	24.0-29.0-34.0		29.5-35.5-42.0	29.5-35.5-42.0	32.0-39.0-46.0	32.0-39.0-4
	External Static Pre		Pa						/ 100 / 150				
	Sound Level (SPL)		dB(A)	23 - 27 - 30	26 - 31 - 35	25 - 29 - 33	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	33 - 36 - 40	34 - 38 - 43	34 - 38 - 4
	Sound Level (PWL		dB(A)	54	59	55	58	62	62	66	66	67	67
utdoor nit	Dimensions	H × W × D	mm	630 - 80		943 - 950		110	100		330 (+40)	110	101
1111	Weight	10 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
	Council Coul	Heating	m³/min dB(A)	45 44	45 44	55 47	55	110	110 49	120	120 50	120 50	120 50
	Sound Level (SPL)	Cooling		44			47	49		50			
	C	Heating	dB(A)	46 65	46	48 67	48 67	51 69	51 69	52 70	52 70	52 70	52 70
	Sound Level (PWL)		dB(A)	13.0	65 13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Operating Current	L (IIIdX)	A	13.0	16	19.0	19.0	32	16	32	9.5	40	13.0
-4	Breaker Size Diameter	II::: / C	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.
xt. iping	Max. Length	Liquid / Gas Out-In	m	50	50	50	9.52 / 15.88	75	75	75	75	75	75
ping	Max. Length	Out-In	m	30	30	30	30	30	30	30	30	30	30
liaranto	ed Operating Range	Coolina*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +4
Dutdoor		Heating	°C	-15 ~ +46 -11 ~ +21	-15 ~ +46 -11 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +4 -20 ~ +2						

<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 ERCO2 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.

















































Indoor U	nit			PEAD- M35JA(L)	PEAD- M50JA(L)	PEAD- M60JA(L)	PEAD- M71JA(L)	PEAD-M	100JA(L)	PEAD-M	125JA(L)	PEAD-M	140JA(L)		
Outdoor				SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ- P100VKA	PUHZ- P100YKA	PUHZ- P125VKA	PUHZ- P125YKA	PUHZ- P140VKA	PUHZ- P140YKA		
Refrigera					R410A*1										
	Source							Outdoor po	wer supply						
Supply	Outdoor (V/Phase,	/Hz)		VA • VKA:230 / Single / 50, YKA:400 / Three / 50											
Cooling	Capacity	Rated	kW	3.6	4.9	5.7	7.1	9.4	9.4	12.1	12.1	13.6	13.6		
	,	Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1		
	Total Input	Rated	kW	1.050 (1.030)	1.480 (1.460)	1.670 (1.650)	2.080 (2.060)	2.98 (2.96)	2.98 (2.96)	4.15 (4.14)	4.15 (4.14)	5.21 (5.19)	5.21 (5.19)		
	EER*4			_	-	-	-	3.17	3.17	2.91 (2.92)	2.91 (2.92)	2.61 (2.62)	2.61 (2.62)		
		EEL Rank		-	-	-	-	-	-	_	_	_	_		
	Design Load		kW	3.6	4.9	5.7	7.1	9.4	9.4	-	-	-	-		
	Annual Electricity	Consumption*2	kWh/a	222 (210)	302 (290)	337 (325)	408 (396)	644 (627)	644 (627)	-	-	-	-		
	SEER*4,*5			5.6 (6.0)	5.6 (5.9)	5.9 (6.1)	6.1 (6.2)	5.1 (5.2)	5.1 (5.2)	-	-	-	-		
		Energy Efficiency Class		A+ (A+)	A+ (A+)	A+ (A++)	A++ (A++)	A (A)	A (A)	-	-	-	-		
Heating	Capacity	Rated	kW	4.1	5.9	7.0	8.0	11.2	11.2	13.5	13.5	15.0	15.0		
(Average		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		
Season)	Total Input	Rated	kW	1.110	1.620	1.930	2.040	2.94	2.94	3.73	3.73	4.27	4.27		
	COP*4			-	-	-	-	3.80	3.80	3.61	3.61	3.51	3.51		
		EEL Rank		-	-	-	-	-	-	_	-	-	_		
	Design Load		kW	2.8	4.4	4.5	6.0	8.0	8.0	-	-	-	-		
		at reference design temperature	kW	2.5 (-10°C)	3.9 (-10°C)	4.1 (-10°C)	5.3 (-10°C)	6.0 (-10°C)	6.0 (-10°C)	-	-	-	-		
		at bivalent temperature	kW	2.5 (-7°C)	3.9 (-7°C)	4.1 (-7°C)	5.3 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	-	-	-	-		
		at operation limit temperature	kW	2.5 (-10°C)	3.9 (-10°C)	4.1 (-10°C)	5.3 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	_	-	-	-		
	Back Up Heating C		kW	0.3	0.5	0.5	0.7	2.0	2.0	_	-	-	_		
	Annual Electricity		kWh/a	980	1466	1569	2153	2793	2793	-	-	-	_		
	SCOP*4.*5	001104111111111111111111111111111111111		4.0	4.2	4.0	3.9	4.0	4.0	_	_	_	_		
		<b>Energy Efficiency Class</b>		A <sup>+</sup>	A+	A <sup>+</sup>	A	A <sup>+</sup>	A <sup>+</sup>	_	-	-	_		
Operatin	g Current (max)	3,	A	9.3	13.4	15.6	18.1	22.7	14.2	29.3	14.3	32.8	14.3		
Indoor	Input (Cooling / Hea	ating Rated	kW	0.09(0.07) / 0.07		0.12(0.10) /0.10	0.17(0.15) / 0.15		0.25(0.23)/0.23		0.36(0.34)/0.34		0.39(0.37)/0.37		
Unit	Operating Current		Α	1.07	1.39	1.62	1.97	2.65	2.65	2.76	2.76	2.78	2.78		
	Dimensions <panel></panel>	H×W×D	mm	250-9	00-732	250-11	00-732		250-14	00-732		250-16	00-732		
	Weight <panel></panel>		ka	26 (25)	27 (26)	30 (29)	30 (29)	39 (38)	39 (38)	40 (39)	40 (39)	44 (43)	44 (43)		
	Air Volume [Lo-Mio	d-Hil	m³/min	10.0 - 12.0 - 14.0	12.0-14.5-17.0	14.5-18.0-21.0	17.5-21.0-25.0	24.0-29.0-34.0	24.0-29.0-34.0	29.5-35.5-42.0	29.5-35.5-42.0	32.0-39.0-46.0	32.0-39.0-46.0		
	<b>External Static Pre</b>	essure	Pa					50 / 70 / 100 /							
	Sound Level (SPL)	[Lo-Mid-Hi]	dB(A)	23 - 27 - 30	26 - 31 - 35	25 - 29 - 33	26 - 30 - 34	29 - 34 - 38	29 - 34 - 38	33 - 36 - 40	33 - 36 - 40	34 - 38 - 43	34 - 38 - 43		
	Sound Level (PWL	)	dB(A)	54	59	55	58	62	62	66	66	67	67		
Outdoor	Dimensions	IH×W×D	mm	550-800-285		880-840-330				981-10	50-330				
Unit	Weight	<u>'</u>	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		A	8.2	12.0	14.0	16.1	20.0	11.5	26.5	11.5	30.0	11.5		
	Breaker Size		Α	10	20	20	20	32	16	32	16	40	16		
Ext.	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88		
Piping	Max. Length	Out-In	m	20	30	30	30	50	50	50	50	50	50		

Out-In Out-In Cooling\*3 Heating -15 ~ +46 -15 ~ +21 \*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP; I 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 1976 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 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) No208/2012.

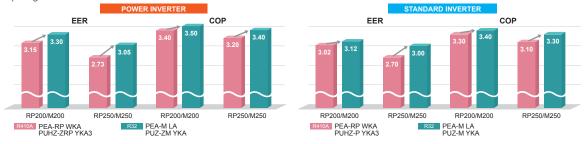


# PEA

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.

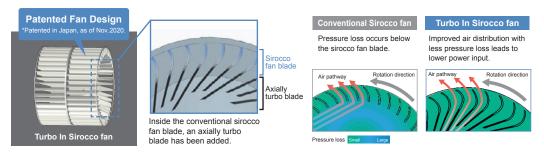
#### Improved Energy Efficiency

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



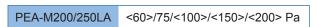
#### Low input with New Fan Design

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

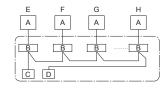
200Pa setting is newly added enabling total of five static pressure level. The ability to select additional static pressure enables long duct and more freedom in design.



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-40MAA Group Control

The PAR-40MAA remote controller can control up to 16 systems as a group, and is ideal for supporting the integrated management of building air conditioners.



- Indoor unit Main remote controller
- Main remote controller
  Subordinate remote controller
  Standard (Refrigerant address = 00)
  Refrigerant address = 01
  Refrigerant address = 02
  Refrigerant address = 15



PEA-M200/250LA

Power Inverter Series **R32**) PUZ-ZM200/250







Optional

**Remote Controller** 

Ontional



Optional

# POWER INVERTER

















































P	E/	<b>\</b> -	M	SERIES	

















, eng	Optional
, Self	Failure







₹	Ampere
ъ П	

Туре				Inverter	Heat Pump					
Indoor U	nit			PEA-M200LA	PEA-M250LA					
Outdoor	Unit			PUZ-ZM200YKA	PUZ-ZM250YKA					
Refrigera	ent			R	32*1					
Power	Source			Separate power supply						
Supply	Outdoor (V/Phas	e/Hz)		400 / Three / 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					
		EEL Rank		-	-					
Heating		Rated	kW	22.4	27.0					
(Average	9	Min - Max	kW	7.1 - 25.0	7.3 - 31.0					
Season)	Total Input	Rated	kW	6.400	7.941					
	COP			3.50	3.40					
		EEL Rank		-	-					
Operatir	Operating Current (max)			25.7	25.9					
Indoor	Input [Cooling / H	eating] Rated	kW	0.35 / 0.35	0.53 / 0.53					
Unit	Operating Currer	Operating Current (max)		3.1	3.4					
	Dimensions	HxWxD	mm	470 - 13	370 - 1120					
	Weight	Weight			87					
	Air Volume [Lo-N	Air Volume [Lo-Mid-Hi] m³/i		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 (SPL	.) [Lo-Mid-Hi]	dB(A)	35 - 40 - 43	38 - 43 - 47					
	Sound Level (PW	L)	dB(A)	63 - 64 - 64	67 - 67 - 68					
	Dimensions	H x W x D	mm	1338 - 105	0 - 330 (+40)					
Unit	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 (PWI	L) Cooling	dB(A)	77	77					
	Operating Currer	nt (max)	А	22.5	22.5					
	Breaker Size		А	32	32					
Ext.	Diameter	Liquid / Gas	mm	9.52 / 25.4	12.7 / 25.4					
Piping	Max. Length	Out-In	m	100	100					
	Max. Height	Out-In	m	30	30					
	eed Operating Range	Cooling*2	℃	-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.















































P	EA-	-M	SERIES	
	STANDA	RD IN	IVERTER	

	Vector Strie Ware	DO SCILII
M-NET connection	Wi-Fi ı)) Interface	Cleaning free,
Optional	Optional	Optional











SIANDA	RD INVERTER	Option		Diagnosis Recal						
Туре				Inverte	r Heat Pump					
Indoor Ur	nit			PEA-M200LA	PEA-M250LA					
Outdoor	Jnit			PUZ-M200YKA	PUZ-M250YKA					
Refrigera	nt			R32*1						
Power	Source			Separate power supply						
Supply	Outdoor (V/Phas	se/Hz)		400 /	Three / 50					
Cooling	Capacity	Rated	kW	19.0	22.0					
		Min - Max	kW	9.2 - 22.4	9.9 - 27.0					
	Total Input	Rated	kW	6.089	7.333					
	EER			3.12	3.00					
		EEL Rank		-	-					
Heating	Capacity	Rated	kW	22.4	27.0					
(Average		Min - Max	kW	6.8 - 25.0	7.3 - 31.0					
Season)	Total Input	Rated	kW	6.588	8.181					
	COP			3.40	3.30					
		EEL Rank		-	-					
Operatin	g Current (max)			25.7	25.9					
Indoor	Input [Cooling / H	leating] Rated	kW	0.35 / 0.35	0.53 / 0.53					
Unit	Operating Curre	nt (max)	А	3.1	3.4					
	Dimensions H x W x D mm			470 -	1370 - 1120					
			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		00) / (150) / (200)					
	Sound Level (SPI	L) [Lo-Mid-Hi]	dB(A)	35 - 40 - 43	38 - 43 - 47					
	Sound Level (PW	L)	dB(A)	63 - 64 - 64	67 - 67 - 68					
	Dimensions	H x W x D	mm	1338 - 10	050 - 330 (+40)					
Unit	Weight		kg	129	138					
	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 (PW	L) Cooling	dB(A)	78	77					
	Operating Curre	nt (max)	A	22.5	22.5					
	Breaker Size		A	32	32					
Ext.	Diameter	Liquid / Gas	mm	9.52 / 25.4	12.7 / 25.4					
Piping	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						

<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.

# PEA-M SERIES













































POWER I	NVERTER		Optional	Control	W-NET WI-F1 I) connection Unterface Optional Opt	ecall							
Type						Heat Pump							
Indoor Ur	it				PEA-M200LA	PEA-M250LA							
Outdoor l	Jnit				PUHZ-ZRP200YKA3	PUHZ-ZRP250YKA3							
Refrigera	nt				R41	0A*1							
Power	Source				Separate power supply								
Supply	Outdoor (V/Phas	e/Hz)			400 / Ti	nree / 50							
Cooling	Capacity	Rated		kW	19.0	22.0							
		Min - I	Vlax	kW	9.0 - 22.4	11.2 - 27.0							
	Total Input	Rated		kW	5.937	7.971							
	EER				3.20	2.76							
		EEL R	ank			-							
Heating	Capacity	Rated		kW	22.4	27.0							
(Average Season)		Min - I	Vlax	kW	9.5 -25.0	12.5 - 31.0							
Season)	Total Input	Rated		kW	6.530	8.181							
	COP				3.43	3.30							
		EEL R	ank		-	-							
Operatin	g Current (max)				22.2	24.4							
Indoor	Input [Cooling / H	eating]	Rated	kW	0.35 / 0.35	0.53 / 0.53							
Unit	Operating Currer	nt (max)		А	3.1	3.4							
	Dimensions		HxWxD	mm	470 - 1370 - 1120								
	Weight			kg	8	37							
	Air Volume [Lo-N	1id-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		0) / (150) / (200)							
	Sound Level (SPL		d-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 - 1050	0 - 330 (+40)							
Unit	Weight			kg	1	35							
	Air Volume		Cooling	m³/min	1.	40							
			Heating	m³/min	1.	40							
	Sound Level (SPL	_)	Cooling	dB(A)	5	59							
			Heating	dB(A)	6	32							
	Sound Level (PWL	_)	Cooling	dB(A)	7	77							
	Operating Currer	nt (max)		А	19.0	21.0							
	Breaker Size			А		32							
Ext.	Diameter		Liquid / Gas	mm	9.52 / 25.4	12.7 / 25.4							
Piping	Max. Length		Out-In	m	1	00							

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

\*2 Optional air protection guide is required where ambient temperature is lower than -5°C.



Max. Height

**Guaranteed Operating Range** 

Out-In

Cooling\*2

Heating





m

°C













30

-15 ~ +46

-20 ~ +21































	Group Control	
_/		



M-NET connection	W
Optional	-













	Failure
elf	
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STANDAR	RD INVERTER		IV-NE I connection Optional	nterface	Connection Plane Connection Plane Connection	
Туре					Inverter h	leat Pump
Indoor Ur	nit				PEA-M200LA	PEA-M250LA
Outdoor I	Jnit				PUHZ-P200YKA3	PUHZ-P250YKA3
Refrigera	nt				R41	0A*1
Power	Source				Separate po	ower supply
Supply	Outdoor (V/Phas	se/Hz)			400 / Tr	nree / 50
Cooling	Capacity	Rated		kW	19.0	22.0
		Min - Ma	ix	kW	9.0 - 22.4	11.2 - 27.0
	Total Input	Rated		kW	6.188	8.058
	EER				3.07	2.73
		EEL Ran	k		-	-
Heating	Capacity	Rated		kW	22.4	27.0
(Average		Min - Ma	IX	kW	9.5 - 25.0	12.5 - 31.0
Season)	Total Input	Rated		kW	6.706	8.437
	COP				3.34	3.20
		EEL Ran	k		-	-
Operatin	g Current (max)				22.2	24.4
Indoor	Input [Cooling / H	eating] R	ated	kW	0.35 / 0.35	0.53 / 0.53
Unit	Operating Currer	nt (max)		А	3.1	3.4
	Dimensions H x W x D mm				470 - 13	70 - 1120
	Weight			kg	3	37
	Air Volume [Lo-N	1id-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 / (100	)) / (150) / (200)
	Sound Level (SPL	_) [Lo-Mid-F	li]	dB(A)	35 - 40 - 43	38 - 43 - 47
	Sound Level (PW	L)		dB(A)	63 - 64 - 64	67 - 67 - 68
	Dimensions	Н	x W x D	mm	1338 - 1050	) - 330 (+40)
Unit	Weight			kg	127	135
	Air Volume	С	ooling	m³/min	140	140
		Н	eating	m³/min	140	140
	Sound Level (SPL	_) C	ooling	dB(A)	58	59
		Н	eating	dB(A)	60	62
	Sound Level (PWL	L) C	ooling	dB(A)	78	77
	Operating Currer	nt (max)		А	19.0	21.0
	Breaker Size			А	32	32
Ext.	Diameter	Li	iquid / Gas	mm	9.52 / 25.4	12.7 / 25.4
Piping	Max. Length	0	ut-In	m	70	70
	Max. Height		ut-In	m	30	30
	ed Operating Range	C	ooling* <sup>2</sup>	°C	-15 ~ +46	-15 ~ +46
[Outdoor]		Н	eating	°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 CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
\*2 Optional air protection guide is required where ambient temperature is lower than -5°C.





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)

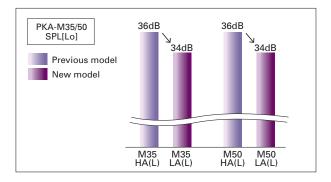
A sharp and simple form that combines beauty and function. The simple square design harmonizes beautifully with the straight lines created by the intersection of the walls, floor and ceiling of the space, leading to a better quality of space. Also adopted a new white body color. It will make your life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





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

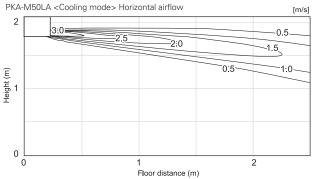
Highly efficient indoor unit heat exchangers and and newly designed power inverters (PUHZ-ZM) contribute to an amazing reduction in electricity consumption throughout a year, and have resulted in models in the full-capacity range attaining the rank A, A+ and A++ energy savings rating.



#### 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.

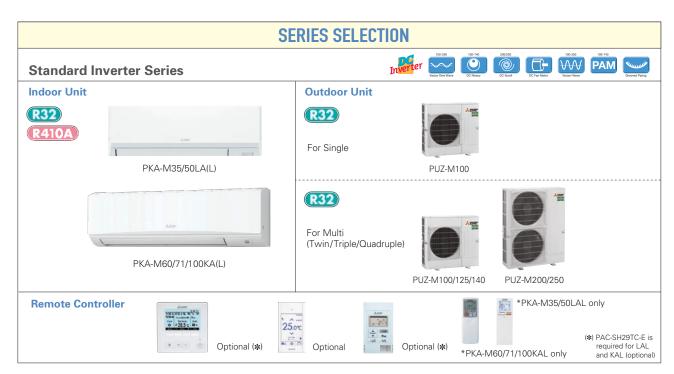
### Airflow distributions





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

				Outdoor Unit Capacity																	
Indoor Unit Combination		For Single										For Twin					For Triple			For Quadruple	
			50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)		35x1	50x1	60x1	71x1	100x1	-	-	-	-	35x2	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
Distribution Pipe		-	-	-	-	-	-	-	-	-	MSDD-50TR2-E MSDD- 50WR2-E		-	MSDT-111R3-E				DF- R2-E			



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

		Outdoor Unit Capacity																			
Indoor Unit Combination		For Single										For Twin					For Triple			For Quadruple	
			50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	rd Inverter (PUHZ-P)	-	-	-	-	100×1	-	-	-	-	-	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	-	-	-	-	-	-	-	-	-	-	MSD	D-50T	R2-E	MSDD- 50WR2-E	-	MSE	)T-111	R3-E	MS 1111	DF- R2-E	

# PKA-M SERIES







































ype						Inverter H	leat Pump		
door Ur	nit			PKA-M35LA(L)	PKA-M50LA(L)	PKA-M60KA(L)	PKA-M71KA(L)	PKA-M1	00KA(L)
ıtdoor l	Unit			PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHA	PUZ-ZM100VKA	PUZ-ZM100YK
frigera							2*1		
	Source						ower supply		
	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
Joining		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	0.850	1.230	1.560	1.863	2.405	2.405
	EER			4.20	3.71	3.91	3.81	3.95	3.95
		EEL Rank		-	-	-	_	-	-
	Design Load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual Electricity	Consumption*2	kWh/a	194	244	313	364	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++
	Capacity	Rated	kW	4.1	5.0	7.0	8.0	11.2	11.2
/erage		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
	Total Input	Rated	kW	1.040	1.340	1.732	2.116	3.102	3.102
	COP			3.94	3.72	4.04	3.78	3.61	3.61
		EEL Rank		-	-		-	-	7.8
	Design Load	La Company	kW	2.4	3.3 3.3 (–10°C)	4.4 4.4 (–10°C)	4.7 4.7 (–10°C)	7.8 7.8 (–10°C)	
	Declared Capacity	at reference design temperature at bivalent temperature	kW	2.4 (-10°C)	3.3 (-10°C) 3.3 (-10°C)	4.4 (-10°C) 4.4 (-10°C)	4.7 (-10°C) 4.7 (-10°C)	7.8 (=10°C) 7.8 (=10°C)	7.8 (-10°C)
			kW kW	2.4 (-10°C) 2.2 (-11°C)	3.2 (–11°C)	4.4 (-10°C) 2.8 (-20°C)	3.5 (–20°C)	5.8 (–20°C)	7.8 (-10°C) 5.8 (-20°C)
	Back Up Heating C	at operation limit temperature	kW	0	3.2 (-11°C)	0	0	0	0.0 (-20 C)
	Annual Electricity		kWh/a	829	1074	1460	1523	2472	2472
	SCOP*4	Consumption	KVVII/a	4.0	4.3	4.2	4.3	4.4	4.4
		Energy Efficiency Class		A+	A+	A+	A+	Δ+	A+
eratin	g Current (max)	znorgy zmolonoy olaco	Α	13.4	13.4	19.4	19.4	27.1	8.6
	Input	Rated	kW	0.04 / 0.03	0.04 / 0.03	0.06 / 0.05	0.06 / 0.05	0.08 / 0.07	0.08 / 0.07
	Operating Current		Α	0.35	0.35	0.43	0.43	0.57	0.57
	Dimensions <panel></panel>		mm	299 - 89			365 - 11	70 - 295	
	Weight <panel></panel>		kg	12.6	12.6	21	21	21	21
	Air Volume [Lo-Mi2		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 (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
	Dimensions	H × W × D	mm	630 - 80			- 330 (+25)		- 330 (+40)
iit	Weight		kg	46	46	70	70	116	123
	Air Volume	Cooling	m³/min	45	45	55	55	110	110
		Heating	m³/min	45	45	55	55	110	110
	Sound Level (SPL)		dB(A)	44	44	47	47	49	49
	0 11 1/5::"	Heating	dB(A)	46	46	49 67	49 67	51 69	51 69
	Sound Level (PWL)		dB(A)	65 13.0	65 13.0	19.0	19.0	26.5	8.0
	Operating Current Breaker Size	(max)	A	13.0		19.0	19.0	26.5	8.0
		Liquid / Gas	mm	6.35 / 12.7	16 6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Diameter Max. Length	Out-In	mm m	50	50	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Height	Out-In	m	30	30	30	30	30	30
	ed Operating Range		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
		I COOM IN	°C	-11 ~ +21	-15 ~ +46 -11 ~ +21	-15 ~ +40 -20 ~ +21	-15 ~ +46 -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.













































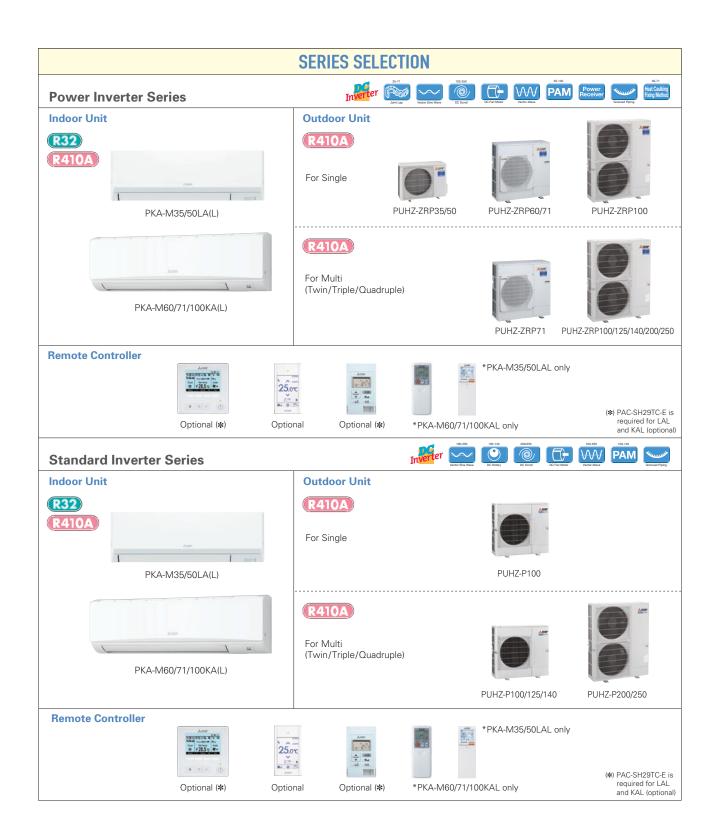




ı	Failure
ш	Recal

Туре				Inverter H	leat Pump
Indoor Ur	nit				100KA(L)
Outdoor				PUZ-M100VKA	PUZ-M100YKA
Refrigera					12*1
	Source				ower supply
	Outdoor (V/Phase	/H <sub>2</sub> )		230 / Single / 50	400 / Three /50
	Capacity	Rated	kW	9.5	9.5
Cooling	Сарасіту	Min - Max	kW	4.0 - 10.6	9.5 4.0 - 10.6
	Total Input	Rated	kW	2.94	2.94
	EER	Inated	KVV	3.23	3.23
		EEL Rank		5.25 -	5.25
	Design Load	EEL NAIIK	kW	9.5	9.5
	Annual Electricity	Concumption *2	kWh/a	5.5	5.5
	SEER*4	Consumption	[KVVII/a	5.8	5.8
		Energy Efficiency Class		A <sup>+</sup>	A+
Heating	Capacity	Rated	l kW	11.2	11.2
(Average	Сарасну	Min - Max	kW	2.8 - 12.5	2.8 - 12.5
Season)		Rated	kW	3.28	3.28
,	COP	Inated	I KVV	3.41	3.41
		EEL Rank		-	-
	Design Load	LLL Halik	kW	8.0	8.0
		at reference design temperature	kW	6.0 (-10°C)	6.0 (–10°C)
	Deciared oupdoing	at bivalent temperature	kW	7.0 (–7°C)	7.0 (-7°C)
		at operation limit temperature	kW	4.5 (-15°C)	4.5 (-15°C)
	Back Up Heating C		kW	2.0	2.0
	Annual Electricity	Consumption*2	kWh/a	2797	2797
	SCOP*4			4.0	4.0
		<b>Energy Efficiency Class</b>		A+	A+
Operatin	g Current (max)		Α	20.6	12.1
Indoor		Rated	kW	0.08	0.08
Unit	Operating Current		А	0.57	0.57
	Dimensions <panel></panel>	$H \times W \times D$	mm	365 - 1170 - 295	365 - 1170 - 295
	Weight <panel></panel>		kg	21	21
	Air Volume [Lo-Mid		m³/min	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL)		dB(A)	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL		dB(A)	65	65
		$H \times W \times D$	mm	981 - 1050 - 330 (+40)	981 - 1050 - 330 (+40)
Unit	Weight		kg	76	78
	Air Volume	Cooling	m³/min	79.0	79.0
		Heating	m³/min	79.0	79.0
	Sound Level (SPL)		dB(A)	51	51
		Heating	dB(A)	54	54
	Sound Level (PWL)		dB(A)	70	70
	Operating Current	(max)	Α	20.0	11.5
	Breaker Size		Α	32	16
Ext.	Diameter	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
Guarante	ed Operating Range	Cooling*3	°C	−15 ~ ±46	-15 ~ +46

Guaranteed Operating Range | Cooling\*3 | °C | -15 - +21 | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | | -15 - +21 | |



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

		Outdoor Unit Capacity																			
Indoor	Indoor Unit Combination		For Single										For Twin					or Trip	For Quadruple		
			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	60×1	71x1	100x1	-	-	-	-	35x2	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe		-	-	-	-	_	-	-	-	MSDD-50TR-E		MSDD- 50WR-E	-	MS	DT-111	IR-E	MSDF-1	1111R-E		
Standa	Standard Inverter (PUHZ-P)		-	-	-	100x1	-	-	-	-	-	50x2	60x2	71x2	100x2	-	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe		-	-	-	-	_	-	-	-	-	MSI	DD-50	ΓR-E	MSDD- 50WR-E	-	MS	DT-111	IR-E	MSDF-1	1111R-E

# PKA-M SERIES









































Туре						Inverter F	leat Pump		
ndoor U	nit			PKA-M35LA(L)	PKA-M50LA(L)	PKA-M60KA(L)	PKA-M71KA(L)	PKA-M1	00KA(L)
utdoor	Unit			PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA
efrigera							0A*1		
ower	Source						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
ooming	oupucity	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	1.60	1.80	2.40	2.40
	EER	Trated	1000	3.80	3.23	3.81	3.94	3.96	3.96
		EEL Rank		_	_	=	_	_	-
	Design Load		kW	3.6	4.6	6.1	7.1	9.5	9.5
	Annual Electricity	Consumption*2	kWh/a	206	263	324	368	522	533
	SEER*4			6.1	6.1	6.5	6.7	6.3	6.2
		<b>Energy Efficiency Class</b>		A++	A++	A++	A++	Δ++	A++
eating	Capacity	Rated	kW	4.1	5.0	7.0	8.0	11.2	11.2
verage		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
eason)	Total Input	Rated	kW	1.070	1.501	1.96	2.19	3.04	3.04
	COP			3.83	3.33	3.57	3.65	3.68	3.68
		EEL Rank		_	_	-	-	_	-
	Design Load		kW	2.4	3.3	4.4	4.7	7.8	7.8
		at reference design temperature		2.4 (-10°C)	3.3 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)
	,	at bivalent temperature	kW	2.4 (-10°C)	3.3 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)
		at operation limit temperature	kW	2.2 (-11°C)	3.2 (-11°C)	2.8 (-20°C)	3.5 (-20°C)	5.8 (-20°C)	5.8 (-20°C)
	Back Up Heating (	Capacity	kW	0	0	0	0	0	0
	Annual Electricity	Consumption*2	kWh/a	841	1126	1473	1532	2608	2608
	SCOP*4			3.9	4.1	4.2	4.3	4.1	4.1
		Energy Efficiency Class	3	A	A <sup>+</sup>	Α+	A+	A+	A+
peratii	ng Current (max)		A	13.4	13.4	19.4	19.4	27.1	8.6
door	Input [Cooling / He		kW	0.04 / 0.03	0.04 / 0.03	0.06	0.06	0.08	0.08
nit	<b>Operating Current</b>		A	0.35	0.35	0.43	0.43	0.57	0.57
	Dimensions <panel></panel>	$H \times W \times D$	mm	299 - 89			365 - 11		
	Weight <panel></panel>		kg	12.6	12.6	21	21	21	21
	Air Volume [Lo-Mi		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 (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
	Dimensions	$H \times W \times D$	mm		9 - 300		- 330 (+30)		) - 330 (+40)
nit	Weight		kg	43	46	70	70	116	123
	Air Volume	Cooling	m³/min	45	45	55	55	110	110
		Heating	m³/min	45	45	55	55	110	110
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49
		Heating	dB(A)	46	46	48	48	51	51
	Sound Level (PWL)		dB(A)	65	65	67	67	69	69
	Operating Current	(max)	A	13.0	13.0	19.0	19.0	26.5	8.0
_	Breaker Size	1	Α	16	16	25	25	32	16
ĸt.	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
ping	Max. Length	Out-In	m	50	50	50	50	75	75
	Max. Height	Out-In	m	30	30	30	30	30	30
uarante	eed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Dutdoor	1	Heating	°C	-11 ~ +21	-11 ~ +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.

















































			$\sim$	Optional Optional	
Type				Inverter H	leat Pump
Indoor Ur	nit			PKA-M1	00KA(L)
Outdoor				PUHZ-P100VKA	PUHZ-P100YKA
Refrigera					0A*1
Power	Source				ower supply
Supply	Outdoor (V/Phase	/Hz)		230 / Single / 50	400 / Three / 50
Cooling	Capacity	Rated	kW	9.4	9.4
_		Min - Max	kW	3.7 - 10.6	3.7 - 10.6
	Total Input	Rated	kW	3.12	3.12
	EER			3.01	3.01
		EEL Rank		<u></u>	-
	Design Load		kW	9.4	9.4
	Annual Electricity SEER*4	Consumption*2	kWh/a	586	586
		Energy Efficiency Class		5.6 A+	5.6 A+
11		Rated	kW	11.2	11.2
(Average	Capacity	Min - Max	kW	2.8 - 12.5	2.8 - 12.5
	Total Input	Rated	kW	3.48	3.48
0000011,	COP	nateu	NVV.	3.21	3.40
		EEL Rank		J.21 _	5.21
	Design Load	LLL HUIK	kW	8.0	8.0
		at reference design temperature	kW	6.0 (-10°C)	6.0 (-10°C)
	Dooial ou oupdoity	at bivalent temperature	kW	7.0 (-7°C)	7.0 (–7°C)
		at operation limit temperature	kW	4.5 (-15°C)	4.5 (-15°C)
	Back Up Heating C	apacity	kW	2.0	2.0
	Annual Electricity	Consumption*2	kWh/a	2795	2795
	SCOP*4			4.0	4.0
		<b>Energy Efficiency Class</b>		Α+	A+
	g Current (max)		А	20.6	12.1
	Input	Rated	kW	0.08	0.08
Unit	Operating Current		A	0.57	0.57
	Dimensions <panel></panel>	H × W × D	mm		170 - 295 21
	Weight <panel> Air Volume [Lo-Mid</panel>	1.1.121	kg m³/min	20 - 23 - 26	20 - 23 - 26
	Sound Level (SPL)	I o Mid Hil	dB(A)	41 - 45 - 49	41 - 45 - 49
	Sound Level (PWL		dB(A)	65	65
Outdoor	Dimensions	H × W × D	mm		050 - 330
	Weight	111 × 11 × 12	kg	76	78
	Air Volume	Coolina	m³/min	79	79
		Heating	m³/min	79	79
	Sound Level (SPL)	Cooling	dB(A)	51	51
		Heating	dB(A)	54	54
	Sound Level (PWL)		dB(A)	70	70
	<b>Operating Current</b>	(max)	А	20.0	11.5
	Breaker Size		Α	32	16
Ext.	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50
	Max. Height	Out-In	m	30	30
	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46
[Outdoor	J	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 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.





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.



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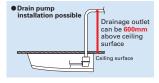
#### ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A, A+ and A++

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.



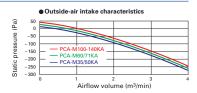
#### Optional Drain Pump for Full-capacity Models

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

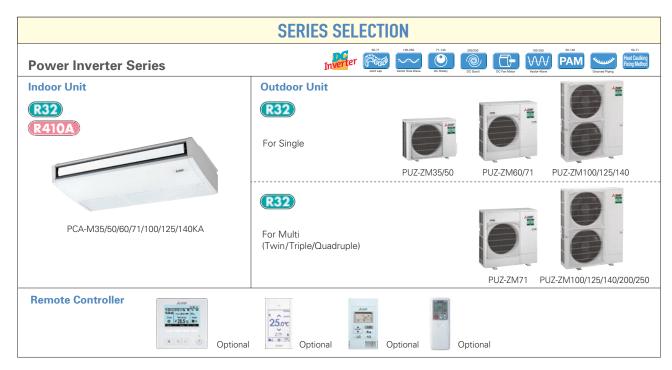
In addition to the conventional 4-speed setting, units are now equipped with an automatic air-speed adjustment mode. This setting automatically adjusts the air-speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool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

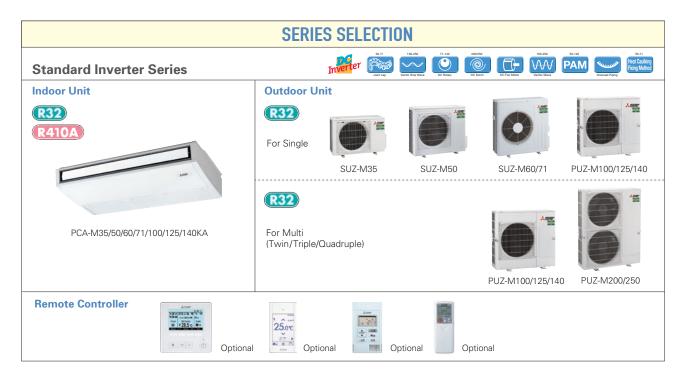
Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match room height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.

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



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

										Outd	oor Ur	nit Cap	acity								
Indoor	Indoor Unit Combination		For Single									For Twin						or Trip	For Quadruple		
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power	Power Inverter (PUHZ-ZRP)		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- IR2-E



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

										Outd	oor U	nit Cap	acity								
Indoor	Indoor Unit Combination				Fo	or Sing	gle						For	Twin			F	or Trip	le	For Qua	adruple
				60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standa	Standard Inverter (PUHZ-P&SUZ)			60x1	71x1	100x1	125x1	140x1		-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe	-	-	-	-	-	_	-	-	-	_	MSD	D-50T	R2-E	MSI 50W	DD- R2-E	MSE	DT-111	R3-E	MSI 1111	DF- R2-E

# PCA-M KA SERIES





















































7	Failure	1	

			Optional	Optional	Optional	Optional			Optional	Optional			
Туре								Inverter H	eat Pump				
Indoor U	nit			PCA- M35KA	PCA- M50KA	PCA- M60KA	PCA- M71KA	PCA-M	1100KA	PCA-M	1125KA	PCA-M	1140KA
Dutdoor	Unit			PUZ- ZM35VKA	PUZ- ZM50VKA	PUZ- ZM60VHA	PUZ- ZM71VHA	PUZ- ZM100VKA	PUZ- ZM100YKA	PUZ- ZM125VKA	PUZ- ZM125YKA	PUZ- ZM140VKA	PUZ- ZM140YK
Refrigera	int							R3	2*1				
ower	Source								wer supply				
Supply	Outdoor (V/Phase	/Hz)					VKA • VH	A:230 / Single /	50, YKA:400 / 1	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.
	Total Input	Rated	kW	0.829	1.250	1.521	1.829	2.317	2.317	3.846	3.846	3.941	3.941
	EER			4.34	4.00	4.01	3.88	4.10	4.10	3.25	3.25	3.40	3.40
		EEL Rank		-	-	-	-	-	-	-	-	-	_
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	_
	Annual Electricity	Consumption*2	kWh/a	197	260	328	371	513	523	-	-	-	_
	SEER*4			6.4	6.7	6.5	6.7	6.4	6.3	-	-	-	_
		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
Average		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.
Season)	Total Input	Rated	kW	1.019	1.361	1.745	2.156	3.018	3.018	3.954	3.954	4.432	4.432
	COP			4.02	4.04	4.01	3.71	3.71	3.71	3.54	3.54	3.61	3.61
		EEL Rank						-	-	-	-	-	_
	Design Load		kW	2.4	3.8	4.4	4.7	7.8	7.8	-	-	-	-
	Declared Capacity	at reference design temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (–10°C)	7.8 (–10°C)	-	-	-	-
		at bivalent temperature	kW	2.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (–10°C)	7.8 (–10°C)	-	-	-	-
	D. I. II. II. (* 6	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 C		kW	0	0	0 1499	0 1563	0 2539	0 2539	_	-	-	-
	Annual Electricity SCOP*4	Consumption**	kWh/a	839 4.0	1265 4.2	4.1	4.2	4.3	4.3	_	-	_	
		Energy Efficiency Class		4.0 A+	4.2 A+	4.1 A+	4.2 A+	4.3 A+	4.3 A+		_		
Operation	g Current (max)	Lifergy Lifficiency class	I A	13.3	13.4	19.4	19.4	27.2	8.7	27.3	10.3	28.9	13.9
ndoor	Input	Rated	kW	0.04	0.05	0.06	0.06	0.09	0.09	0.11	0.11	0.14	0.14
Unit	Operating Current		A	0.29	0.03	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions <panel></panel>		mm		30 - 680		80 - 680	0.00	0.00		0.70	0.00	0.50
	Weight <panel></panel>		ka	25	26	32	32	37	37	38	38	40	40
	Air Volume [Lo-Mi2	P-Mi1-Hil	m³/min					22-24-26-28					24-26-29
	Sound Level (SPL)		dB(A)		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
	Sound Level (PWL		dB(A)	60	60	60	62	63	63	65	65	68	68
	Dimensions	$H \times W \times D$	mm	630 - 80	09 - 300	943 - 950	- 330 (+25)			1338 - 1050	330 (+40)		
Jnit	Weight		kg	46	46	70	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	45	45	55	55	110	110	120	120	120	120
		Heating	m³/min	45	45	55	55	110	110	120	120	120	120
	Sound Level (SPL)	Cooling	dB(A)	44	44	47	47	49	49	50	50	50	50
		Heating	dB(A)	46	46	49	49	51	51	52	52	52	52
	Sound Level (PWL)		dB(A)	65	65	67	67	69	69	70	70	70	70
	Operating Current	(max)	Α	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Breaker Size		А	16	16	25	25	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.
Piping	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
	ed Operating Range	Cooling*3	°C	-15 ~ +46 -11 ~ +21	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +4
[Outdoor		Heating	°C		-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +2

<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 linipher 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.































































PCA-M	<b>KA</b> SERIES
STANDARD IN	VERTER























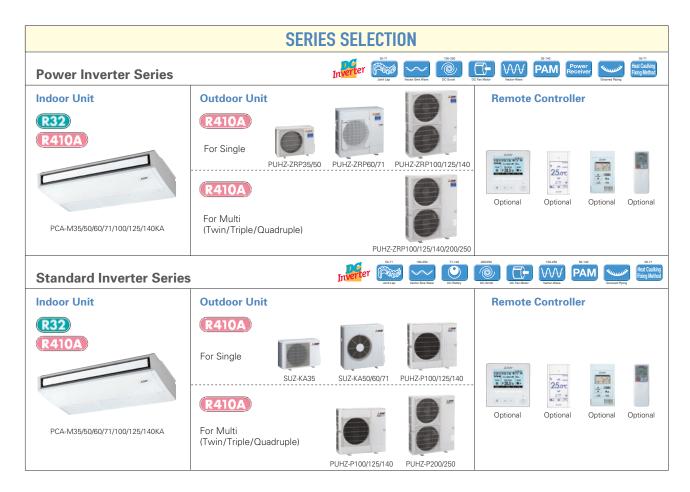






ì	Follows	1
П	<u>Failure</u>	ı

			Optional	Optional	Optional	Optional			Optional	Optional			
Туре								Inverter H	eat Pump				
Indoor U	nit			PCA- M35KA	PCA- M50KA	PCA- M60KA	PCA- M71KA	PCA-N	1100KA	PCA-N	1125KA	PCA-M	140KA
Outdoor	Unit			SUZ- M35VA	SUZ- M50VA	SUZ- M60VA	SUZ- M71VA	PUZ- M100VKA	PUZ- M100YKA	PUZ- M125VKA	PUZ- M125YKA	PUZ- M140VKA	PUZ- M140YKA
Refrigera	nt							R3	2*1				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor (V/Phase	·/Hz)					VA • VKA	4:230 / Single / !	50, YKA:400 / TI	hree / 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
	' '	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	0.90	1.51	1.64	1.97	2.94	2.94	4.01	4.01	5.36	5.36
	EER			4.00	3.30	3.70	3.60	3.23	3.23	3.01	3.01	2.50	2.50
		EEL Rank		-	-	-	-	-	-	-	-	-	-
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	12.1	12.1	13.4	13.4
	Annual Electricity	Consumption*2	kWh/a	198	291	333	381	552	552	-	-	-	-
	SEER*4	F F(f)		6.3	6.0	6.4	6.5	6.0	6.0	-	-	-	-
	0 '	Energy Efficiency Class	kW	A++	A+ 6.0	A++ 7.0	A++	A+ 11.2	A+	13.5	-	- 15.0	- 15.0
(Average	Capacity	Rated		4.1 1.0 - 5.0	1.5 - 7.2	1.6 - 8.0	8.0		11.2	4.1 - 15.0	13.5		
(Average Season)	Total Input	Min - Max Rated	kW	1.0 - 5.0	1.5 - 7.2	1.6 - 8.0	2.0 - 10.2 2.21	2.8 - 12.5 3.28	2.8 - 12.5 3.28	3.95	4.1 - 15.0 3.95	4.2 - 15.8 4.28	4.2 - 15.8 4.28
Jeason)	COP	nated	KVV	4.00	3.71	4.00	3.61	3.28	3.28	3.95	3.95	3.50	3.50
	COP	EEL Rank		4.00	3./1	4.00	3.01	3.41	- 3.41	3.41	3.41	3.50	3.50
	Design Load	EEL RANK	kW	2.6	4.3	4.6	5.8	8.0	8.0	8.5	8.5	9.4	9.4
		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)	8.5 (-10°C)	8.5 (–10°C)	9.4 (–10°C)	9.4 (–10°C)
	Deciared Capacity	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)	8.5 (-10°C)	8.5 (-10°C)	9.4 (-10°C)	9.4 (-10°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)	6.0 (-15°C)	6.0 (-15°C)	7.0 (–15°C)	7.0 (–15°C)
	Back Up Heating (	Canacity	kW	0.3	0.5	0.5	0.6	2.0	2.0	-	- 0.0 ( 10 0)	-	-
	Annual Electricity	Consumption*2	kWh/a	909	1456	1555	1971	2719	2719	_	_	_	_
	SCOP*4			4.0	4.1	4.1	4.1	4.1	4.1	-	-	-	-
		<b>Energy Efficiency Class</b>		A+	A+	A+	A+	A <sup>+</sup>	A <sup>+</sup>	-	-	-	-
Operatin	g Current (max)		Α	8.8	13.9	15.2	15.2	20.7	12.2	27.3	12.3	30.9	12.4
Indoor	Input	Rated	kW	0.04	0.05	0.06	0.06	0.09	0.09	0.11	0.11	0.14	0.14
Unit	Operating Current		Α	0.29	0.37	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions <panel></panel>	$H \times W \times D$	mm	230 - 96		230 - 12					600 - 680		
	Weight <panel></panel>		kg	25	26	32	32	37	37	38	38	40	40
	Air Volume [Lo-Mi		m³/min								23-25-27-29		
	Sound Level (SPL)		dB(A) dB(A)		60	60	62	63	63	65	39-41-43-45	68	68
Outdoor	Sound Level (PWL Dimensions	H × W × D	mm	60 550 - 800 - 285				63	03		65 - 330 (+40)	08	08
Unit	Weight	H X VV X D	kg	35	41	54 54	10 - 330 55	76	78	981 - 1050	85	84	85
Oiiit	Air Volume	Cooling	m³/min	34.3	45.8	50.1	50.1	79.0	79.0	86.0	86.0	86.0	86.0
	All volume	Heating	m³/min	32.7	43.7	50.1	50.1	79.0	79.0	92.0	92.0	92.0	92.0
	Sound Level (SPL)	Cooling	dB(A)	48	48	49	49	51	51	54	54	55	55
	Country Level (OF L)	Heating	dB(A)	48	49	51	51	54	54	56	56	57	57
	Sound Level (PWL)		dB(A)	59	64	65	66	70	70	72	72	73	73
	Operating Current		A	8.5	13.5	14.8	14.8	20.0	11.5	26.5	11.5	30.0	11.5
	Breaker Size		Α	10	20	20	20	32	16	32	16	40	16
Ext.	Diameter	Liquid / Gas	mm	6.35 / 9.52	6.35 / 12.7	6.35 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
Piping	Max. Length	Out-In	m	20	30	30	30	50	55	65	65	65	65
	Max. Height	Out-In	m	12	30	30	30	30	30	30	30	30	30
Guarante	ed Operating Range	Cooling*3	°C	-10 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46



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

				Outdoor Unit Capacity																	
Indoor Unit Combination		For Single												Twin			F	or Trip	For Quadruple		
		35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power	Power Inverter (PUHZ-ZRP)			60x1	71x1	100x1	125x1	140x1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe			-	-	-	-	-	-	_	-	MSE	D-50	ΓR-E	MSDD-	50WR-E	MS	DT-11	1R-E	MSDF-1	1111R-E
Standa	Standard Inverter (PUHZ-P&SUZ)		50x1	60x1	71x1	100x1	125x1	140x1	_	_	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
	Distribution Pipe		_	_	_	_	_	_	_	_	-	MSI	DD-50	TR-E	MSDD-	50WR-E	MS	DT-11	1R-E	MSDF-1	1111R-E

## PCA-M KA SERIES

























Demand Control White Want Vane Franchistas High-efficiency Long Life Check! SWING Ceiling J Couling Colling Check SWING Colling J Check SWING Colling J Check SWING Colling J Check SWING Rotation Back-up Group Control Control Connection W-NET Control Connection Co

			Optional	Optional	Optional	Optional			Optional	Optional			
Туре								Inverter H	eat Pump				
Indoor Ur	nit			PCA- M35KA	PCA- M50KA	PCA- M60KA	PCA- M71KA	PCA-N	1100KA	PCA-W	1125KA	PCA-IV	1140KA
Outdoor	Unit			PUHZ- ZRP35VKA2	PUHZ- ZRP50VKA2	PUHZ- ZRP60VHA2	PUHZ- ZRP71VHA2	PUHZ- ZRP100VKA3	PUHZ- ZRP100YKA3	PUHZ- ZRP125VKA3	PUHZ- ZRP125YKA3	PUHZ- ZRP140VKA3	PUHZ- ZRP140YKA3
Refrigera	nt							R41	0A*1				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor (V/Phase	/Hz)					VKA • VH	A:230 / Single /	50, YKA:400 /	Three / 50			
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.7	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	0.86	1.34	1.66	1.82	2.42	2.42	3.98	3.98	3.95	3.95
	EER	•		4.19	3.73	3.67	3.90	3.93	3.93	3.14	3.14	3.39	3.39
		EEL Rank		-	-	-	-	-	-	-	-	-	-
	Design Load		kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	202	283	340	367	542	553	-	-	-	-
	SEER*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
(Average		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
Season)	Total Input	Rated	kW	1.02	1.45	1.93	2.20	3.04	3.04	3.80	3.80	4.57	4.57
	COP			4.02	3.79	3.63	3.64	3.68	3.68	3.68	3.68	3.50	3.50
		EEL Rank		-	-	-	-	7.8	7.8	-	-	-	-
	Design Load	La tanana ta	kW	2.4	3.8	4.4	4.7 4.7 (-10°C)	7.8 (–10°C)	7.8 (–10°C)	-	-	-	-
	Declared Capacity	at reference design temperature	kW	2.4 (-10°C) 2.4 (-10°C)	3.8 (-10°C) 3.8 (-10°C)	4.4 (-10°C) 4.4 (-10°C)	4.7 (-10°C) 4.7 (-10°C)	7.8 (=10°C) 7.8 (=10°C)	7.8 (=10°C) 7.8 (=10°C)	-	-	-	-
		at bivalent temperature	kW			2.8 (-20°C)	4.7 (=10°C) 3.5 (=20°C)	7.8 (=10°C) 5.8 (=20°C)	7.8 (-10°C) 5.8 (-20°C)	_	-	-	_
	Back Up Heating C	at operation limit temperature	kW	2.2 (-11°C) 0	3.7 (–11°C) 0	0	0	0	0				
	Annual Electricity		kWh/a	815	1257	1458	1519	2837	2837	_	_	_	
	SCOP*4	Consumption	KVVII/a	4.1	4.2	4.3	4.3	3.9	3.9	_		_	
		Energy Efficiency Class		A+	A+	A+	A+	A	A	_	_	_	_
Operation	g Current (max)	znorgy zmoroncy oraco	I A	13.3	13.4	19.4	19.4	27.2	8.7	27.3	10.3	28.9	13.9
Indoor		Rated	kW	0.04	0.05	0.06	0.06	0.09	0.09	0.11	0.11	0.14	0.14
Unit	Operating Current		Α	0.29	0.37	0.39	0.42	0.65	0.65	0.76	0.76	0.90	0.90
	Dimensions <panel></panel>		mm	230 - 96			80 - 680			230 - 16	600 - 680		
	Weight <panel></panel>		kg	25	26	32	32	37	37	38	38	40	40
	Air Volume [Lo-Mi2	2-Mi1-Hi]	m³/min	10-11-12-14	10-11-13-15	15-16-17-19	16-17-18-20	22-24-26-28	22-24-26-28	23-25-27-29	23-25-27-29	24-26-29-32	24-26-29-32
	Sound Level (SPL)		dB(A)	31-33-36-39						39-41-43-45			
	Sound Level (PWL		dB(A)	60	60	60	62	63	63	65	65	68	68
		H × W × D	mm	630 - 80		943 - 950					) - 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)		dB(A)	44	44	47	47	49	49	50	50	50	50
	0 11 1/5:27	Heating	dB(A)	46	46	48	48	51	51	52	52	52	52
	Sound Level (PWL)		dB(A)	65 13.0	65 13.0	67 19.0	67 19.0	69 26.5	69 8.0	70 26.5	70 9.5	70 28.0	70 13.0
	Operating Current Breaker Size	(max)	A	13.0	13.0	19.0	25	32	16	26.5 32	9.5	28.0 40	13.0
Ext.	Diameter	Liquid / Gas	mm	6.35 / 12.7	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	m	50	50	50	50	75	75	75	75	75	75
. ibiiig	Max. Height	Out-In	m	30	30	30	30	30	30	30	30	30	30
Guarante	ed Operating Range		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Outdoor		Heating	°Č	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21
, 5010001		I reading		11 ~ TZ1	11~ +21	20 121	20 121	20 121	20 121	-20 ~ TZ1	-20 ~ +21	-20 ~ TZ1	20 121

<sup>|</sup> Heftingerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with line word warming potential (GWP) would contribute to so global warming than a refrigerant with line warming than a refrigerant with the refrigerant with lower global warming 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 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 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.































































PCA	-M	KA	SERIES
STANI	DARD IN	/ERTER	





























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Indoor U	nit			PCA-M35KA	PCA-M50KA	PCA-M60KA	PCA-M71KA	PCA-N	1100KA	PCA-N	1125KA	PCA-M	1140KA
Outdoor	Unit			SUZ-KA35VA6	SUZ-KA50VA6	SUZ-KA60VA6	SUZ-KA71VA6	PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigera	int							R41	0A*1				
Power	Source							Outdoor po	wer supply				
Supply	Outdoor (V/Phase	/Hz)					VA • VKA	\:230 / Single / !	50, YKA:400 / TI	rree / 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
oconing		Min - Max	kW	1.4 - 3.9	2.3 - 5.6	2.3 - 6.3	2.8 - 8.1	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 14.1	5.8 - 14.1
	Total Input	Rated	kW	1.050	1.550	1.720	2.060	3.05	3.05	4.24	4.24	5.62	5.62
	EER			3.43	3.23	3.31	3.45	3.08	3.08	2.85	2.85	2.41	2.41
		EEL Rank		-	-	-	-	-	-	-	-	-	-
	Design Load		kW	3.6	5.0	5.7	7.1	9.4	9.4	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	209	296	325	409	586	586	-	-	-	-
	SEER*4	•		6.0	5.8	6.1	6.0	5.6	5.6	-	-	-	-
		<b>Energy Efficiency Class</b>		A <sup>+</sup>	A <sup>+</sup>	A++	A+	A <sup>+</sup>	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
(Average		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
Season)		Rated	kW	1.050	1.520	1.910	2.180	3.37	3.37	4.06	4.06	4.47	4.47
	COP			3.90	3.62	3.61	3.62	3.32	3.32	3.32	3.32	3.35	3.35
		EEL Rank		-	-	-	-	-	-	-	-	-	-
	Design Load		kW	2.6	4.0	4.8	5.8	8.0	8.0	-	-	-	-
		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)	-	-	-	-
			kW	2.3 (-7°C)	3.6 (-7°C)	4.3 (-7°C)	5.2 (-7°C)	7.0 (-7°C)	7.0 (-7°C)	-	-	-	-
	at operation limit temperature		kW	2.3 (-10°C)	3.6 (-10°C)	4.0 (-10°C)	5.2 (-10°C)	4.5 (-15°C)	4.5 (-15°C)	-	-	-	-
	Back Up Heating Capacity		kW	0.3	0.4	0.8	0.6	2.0	2.0	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	887	1398	1678	2028	2726	2726	-	-	-	-
	SCOP*4			4.1	4.0	4.0	4.3	4.1	4.1	-	-	-	_
		Energy Efficiency Class		A+	A+	Α+	A+	A+	A+	-	-		
	ng Current (max)		A	8.5 0.04	12.4	14.4	16.5	20.7	12.2	27.3	12.3	30.9	12.4
Indoor Unit		Rated	kW	0.04	0.05 0.37	0.06 0.39	0.06 0.42	0.09 0.65	0.09 0.65	0.11 0.76	0.11	0.14 0.90	0.14
Oiiit	Operating Current Dimensions <panel></panel>		Α		60-680	230-12		0.05	0.05		0.76 600-680	0.90	0.90
	Weight <panel></panel>	IH X W X D	mm kg	25	26	32	32	37	37	38	38	40	I 40
	Air Volume [Lo-Mi2	NA:4 11:1	m³/min	10-11-12-14								24-26-29-32	
	Sound Level (SPL)											41-43-45-48	
	Sound Level (PWL)		dB(A)	60	60	60	62	63	63	65	65	68	68
Outdoor		H × W × D	mm	550 - 800 - 285	- 00	880 - 840 - 330		- 00			50 - 330	- 00	
Unit	Weight	III A VV A D	kg	35	54	50	53	76	78	84	85	84	85
	Air Volume	Cooling	m³/min	36.3	44.6	40.9	50.1	79	79	86	86	86	86
	All Volume		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
	Oddina Ecver (Of E)	Heating	dB(A)	50	52	55	55	54	54	56	56	57	57
	Sound Level (PWL)		dB(A)	62	65	65	69	70	70	72	72	75	75
	Operating Current		A	8.2	12.0	14.0	16.1	20.0	11.5	26.5	11.5	30.0	11.5
	Breaker Size		A	10	20	20	20	32	16	32	16	40	16
Ext.		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
Piping	Max. Length	Out-In	m	20	30	30	30	50	50	50	50	50	50
. •		Out-In	m	12	30	30	30	30	30	30	30	30	30
Guarante	ed Operating Range		۰٫	_10 ~	_15 ~ ±46	_15 ~ ±46		_15 ~ ±46	_15 ~ ±46	_15 ~ ±46	_15 ~	_15 ~ ±46	-15 +46

<sup>|</sup> Max. Height | Max. Height |



#### 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

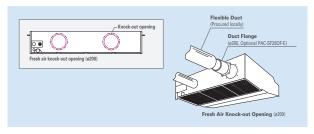
#### Easy Maintenance -Even for Cleaning the Fan

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.

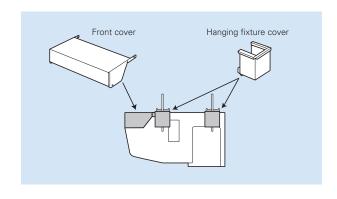


Notes: 1) A fresh-air duct flange is required (sold separately)

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.





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

										Outd	oor Ui	nit Cap	acity					200 250 - 71x3 MSDT-			
Indoor	Unit Combination				Fc	r Sing	le						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
Power	Inverter (PUZ-ZM)	-	-	-	71x1	-	-	-	-	-	-	-	-	71x2	-	-	-	-	71x3	-	_
	Distribution Pipe	-	-	-	-	-	-	-	-	-	-	-	-	MSDD- 50TR2-E	-	-	-	-	MSDT- 111R3-E	-	-



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

										Outd	oor Ui	nit Cap	acity								
Indoor	Unit Combination				Fo	r Sing	le						For	Гwin			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
Power	Inverter (PUHZ-ZRP)	_	-	-	71x1	-	-	-	-	-	-	-	-	71x2	-	-	-	-	71x3	-	-
	Distribution Pipe	_	_	_	_	_	-	_	_		_	_	_	MSDD-50TR-E	-	_	-	_	MSDT-111R-E	_	-

# PCA-M HA SERIES





























		Optional			
Туре					leat Pump
Indoor Ur	nit				И71HA
Outdoor				PUHZ-ZRP71VHA2	PUZ-ZM71VHA
Refrigera	nt			R410A DX*1	R32 DX*1
Power	Source			Outdoor p	ower supply
Supply	Outdoor (V/Phase	/Hz)		230 / Si	ingle / 50
Cooling	Capacity	Rated	kW	7.1	7.1
		Min - Max	kW	3.3 - 8.1	3.3 - 8.1
	Total Input	Rated	kW	2.17	2.02
	EER			=	-
		EEL Rank		=	-
	Design Load		kW	7.1	7.1
	<b>Annual Electricity</b>	Consumption*2	kWh/a	447	444
	SEER*4			5.6	5.6
		Energy Efficiency Class		A+	A+
Heating	Capacity	Rated	kW	7.6	7.6
(Average		Min - Max	kW	3.5 - 10.2	3.5 - 10.2
Season)	Total Input	Rated	kW	2.35	2.17
	COP			=	-
	D. C. L. L.	EEL Rank	1347	-	-
	Design Load	I	kW kW	4.7	4.7
	Declared Capacity	at reference design temperature	kW	4.7 4.7	4.7
		at bivalent temperature at operation limit temperature	kW	3.5	3.7
	Back Up Heating (		kW	0.0	0.0
	Annual Electricity		kWh/a	1751	1673
	SCOP*4	Consumption	KVVII/a	3.8	3.9
		<b>Energy Efficiency Class</b>		A	A A
Operatin	g Current (max)		A		9.4
ndoor	Input	Rated	kW		.10
Jnit	Operating Current	(max)	А	0	.43
	Dimensions <panel></panel>	H×W×D	mm	280 - 11	136 - 650
	Weight <panel></panel>		kg		42
	Air Volume [Lo-Hi]		m³/min		- 18
	Sound Level (SPL)		dB(A)		- 39
	Sound Level (PWL		dB(A)		57
	Dimensions	H×W×D	mm	943 - 950 - 330 (+30)	943 - 950 - 330 (+25)
Unit	Weight		kg	70	70
	Air Volume	Cooling	m³/min	55.0	55.0
		Heating	m³/min	55.0	55.0
	Sound Level (SPL)		dB(A)	47	47
		Heating	dB(A)	48	49
	Sound Level (PWL)		dB(A)	67	67
	Operating Current	(max)	A	19.0	19.0 25
Ext.	Breaker Size	Liquid / Gas		25	9.52 / 15.88
	Diameter Max. Length	Out-In	mm m	9.52 / 15.88 50	9.52 / 15.88
	Max. Length	Out-In	m	30	30
	ed Operating Range		°C	-15 ~ +46	-15 ~ +46
Outdoor		Heating	°C	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21
	,	Tricating		, 20 7 TZ I	1 20 ~ TZ1

I needing Contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP) file 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.































































PCA-M	<b>HA</b> SERIES
POWER INVER	TER .

Guaranteed Operating Range [Outdoor]















Indoor Un	iit			PCA-M71HA
Outdoor l	Jnit			PUHZ-ZRP71VHA2
Refrigerar				R410A* <sup>1</sup>
	Source			Outdoor power supply
	Outdoor (V/Phase	/Hz)		230 / Single / 50
Cooling		Rated	kW	71
Cooling	Capacity	Min - Max	kW	3.3-8.1
	Total Input	Rated	kW	3.5 ° 6.1 2.17
	EER	nated	KVV	2.11
		EEL Rank		
		ЕЕС Напк	kW	
	Design Load	• *2		
	Annual Electricity	Consumption*2	kWh/a	447
	SEER*4			5.6
		Energy Efficiency Class		A+
Heating	Capacity	Rated	kW	7.6
(Average Season)		Min - Max	kW	3.5 - 10.2
	Total Input	Rated	kW	2.35
	COP			<del>-</del>
		EEL Rank		
	Design Load		kW	4.7
	<b>Declared Capacity</b>	at reference design temperature	kW	4.7 (–10°C)
		at bivalent temperature	kW	4.7 (-10°C)
		at operation limit temperature	kW	3.5 (–20°C)
	Back Up Heating C		kW	0
	Annual Electricity	Consumption*2	kWh/a	1751
	SCOP*4	•		3.8
		Energy Efficiency Class		A
Operatin	g Current (max)		А	19.4
	Input	Rated	kW	0.09
Unit	Operating Current	(max)	А	0.43
	Dimensions <panel></panel>		mm	280 - 1136 - 650
	Weight <panel></panel>		kg	41
	Air Volume [Lo-Hi]		m³/min	17 - 19
	Sound Level (SPL)	[Lo-Hi]	dB(A)	34 - 38
	Sound Level (PWL	)	dB(A)	56
	Dimensions	H×W×D	mm	943 - 950 - 330 (+30)
	Weight		kg	70
	Air Volume	Cooling	m³/min	55.0
	All volulle	Heating	m³/min	55.0 55.0
	Sound Level (SPL)	Cooling	dB(A)	47
	Country Level (Of L)	Heating	dB(A)	48
	Sound Level (PWL)		dB(A)	+0 67
	Operating Current		A A	19.0
	Breaker Size	(IIIaA)	A	19.0
	Diameter	Liquid / Gas		29 9.52 / 15.88
			mm	
riping	Max. Length	Out-In	m	50

<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.



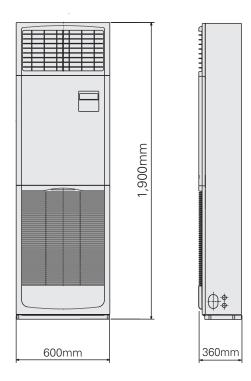
Installation of this floor-standing series is easy and quick. An excellent choice when there is a sudden need for an air conditioner to be installed.



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

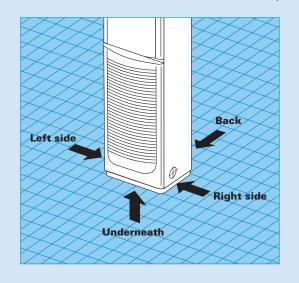
The floor-standing indoor unit is mounted on the floor, enabling quick installation. Its compact body requires only minimal space.

#### PSA-RP71KA



## 4-way pipe work connections enable greater freedom in installation

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



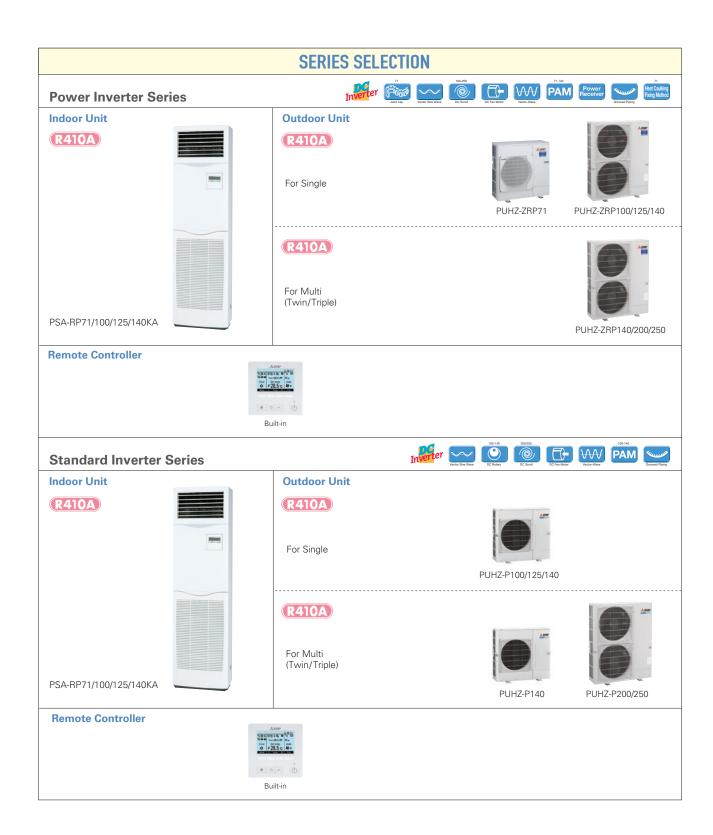
#### **Built-in Remote Controller**

Equipped with PAR-40MAA, the latest wired remote controller. Offering excellent readability and a diverse range of functions, the remote controller increases user-friendliness and boosts user satisfaction.

#### Main Functions

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





#### PSZ-RP KA Indoor Unit Combinations Indoor unit combinations shown below are possible.

1 02 1	ii io cinador onic	30111	Diric	11101	113		G C				20.	011 0.1	pooc								
										Outd	oor Uı	nit Cap	pacity								
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
Power	Inverter (PUHZ-ZRP)	-	-	_	71x1	100x1	125x1	140x1		_	-	-	_	71x2	100x2	125x2	-	-	71x3	-	-
	Distribution Pipe	-	-	_	-	-	_	-	-	-	-	-	_	MSDD-50TR-E	MSDD-	50WR-E	ı	-	MSDT-111R-E	-	-
Standa	ard Inverter (PUHZ-P)	-	-	-	-	100x1	125x1	140x1	_	_	-	-	_	71x2	100x2	125x2	-	-	71x3	-	_
	Distribution Pipe	-	-	-	-	-	_	-	_	_	-	-	-	MSDD-50TR-E	MSDD-	50WR-E	-	-	MSDT-111R-E	-	-







































Туре							Inverter Heat Pump			
ndoor U	nit			PSA-RP71KA	PSA-RF	100KA	PSA-RF	P125KA	PSA-RF	P140KA
utdoor	Unit			PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP140VKA3	PUHZ-ZRP140YK
efrigera	nt						R410A*1			
ower	Source						Outdoor power supply	/		
upply	Outdoor (V/Phase	e/Hz)					0 / Single / 50, YKA:40			
ooling	Capacity	Rated	kW	7.1	9.5	9.5	12.5	12.5	13.4	13.4
ooming	Capacity	Min - Max	kW	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0
	Total Input	Rated	kW	1.89	2.50	2.50	4.09	4.09	4.06	4.06
eating C verage eason) TC C	EER			-	-	_	3.06	3.06	3.30	3.30
		EEL Rank		-	-	-	-	-	-	-
	Design Load		kW	7.1	9.5	9.5	-	-	-	-
	Annual Electricity	Consumption*2	kWh/a	396	595	606	-	-	-	-
	SEER*4			6.3	5.6	5.5	-	-	-	-
		<b>Energy Efficiency Class</b>		A++	A+	A	-	_	-	-
eating	Capacity	Rated	kW	7.6	11.2	11.2	14.0	14.0	16.0	16.0
verage		Min - Max	kW	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0
ason)	Total Input	Rated	kW	2.21	3.08	3.08	4.24	4.24	4.79	4.79
	COP			-	-	-	3.30	3.30	3.34	3.34
		EEL Rank		-	-	-	-	-	-	-
	Design Load		kW	4.7	7.8	7.8	-	-	-	-
	<b>Declared Capacity</b>	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 (		kW	0	0	0	_	-	_	-
	<b>Annual Electricity</b>	Consumption*2	kWh/a	1666	2761	2761	-	-	-	-
	SCOP*4			4.0	4.0	4.0	_	_	-	-
		Energy Efficiency Class		Α+	A <sup>+</sup>	A+	-	-	-	-
	g Current (max)		Α	19.4	27.2	8.7	27.2	10.2	28.7	13.7
door	Input	Rated	kW	0.06	0.11	0.11	0.11	0.11	0.11	0.11
nit	Operating Current		Α	0.4	0.71	0.71	0.73	0.73	0.73	0.73
	Dimensions <panel></panel>	[H×W×D	mm				1900 - 600 - 360			
	Weight <panel></panel>		kg	46	46	46	46	46	48	48
	Air Volume [Lo-Mi		m³/min	20 - 22 - 24	25 - 28 - 30	25 - 28 - 30	25 - 28 - 31	25 - 28 - 31	25 - 28 - 31	25 - 28 - 31
	Sound Level (SPL)		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
	Dimensions	H × W × D	mm	943-950-330(+30)	110	100		0-330(+40)	110	101
nit	Weight	Io :	kg	70	116	123	116	125	118	131
	Air Volume	Cooling	m³/min	55.0	110.0	110.0	120.0	120.0	120.0	120.0 120.0
	Council Coul	Heating	m³/min	55.0	110.0	110.0	120.0	120.0	120.0	
	Sound Level (SPL)		dB(A)	47	49	49	50 52	50	50 52	50 52
	Council I awal (DM)	Heating	dB(A)	48 67	51 69	51 69	70	52 70	70	70
	Sound Level (PWL)			19.0	26.5	8.0	26.5	9.5	28.0	13.0
	Operating Current Breaker Size	(max)	A	25	26.5 32	8.0 16	26.5 32	9.5	40	16
		Liquid / Coo							9.52 / 15.88	9.52 / 15.88
ct. ping	Diameter	Liquid / Gas Out-In	mm m	9.52 / 15.88 50	9.52 / 15.88 75	9.52 / 15.88 75	9.52 / 15.88 75	9.52 / 15.88 75	75	75
Parg	Max. Length Max. Height	Out-In	_	30	30	30	30	30	30	30
	ed Operating Range		°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
<b>uarante</b> Dutdoor			°C	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21	-15 ~ +46 -20 ~ +21			
utuooi	1	Heating	ı .C	-∠U ~ +∠ I	-ZU ~ +Z I	-ZU ~ +Z I	_∠U ~ +∠ I	-ZU ~ +Z I	ZU ~ +Z I	∠∪ ~ +∠ l

contains a refricerant fluid with a GWP equal to 1975. This means that if 1 kg of this refricerant 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.













PSA-RP100KA







PSA-RP125KA









PSA-RP140KA





Indoor Unit













Outdoor	Unit			PUHZ-P100VKA	PUHZ-P100YKA	PUHZ-P125VKA	PUHZ-P125YKA	PUHZ-P140VKA	PUHZ-P140YKA
Refrigera	int					R41	0A*1		
Power	Source					Outdoor po	ower 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
	' '	Min - Max	kW	3.7 - 10.6	3.7 - 10.6	5.6 - 13.0	5.6 - 13.0	5.8 - 13.7	5.8 - 13.7
	Total Input	Rated	kW	3.12	3.12	5.02	5.02	6.38	6.38
	EER			3.01	3.01	2.41	2.41	13.6 5.8 - 13.7 6.38 2.13	2.13
		EEL Rank		-	-	-	-	13.6 5.8 - 13.7 6.38 2.13 15.0 4.9 - 15.8 4.82 3.11	-
	Design Load		kW	9.4	9.4	-	-	-	-
	<b>Annual Electricity</b>	Consumption*2	kWh/a	644	644	-	-	-	_
	Source Outdoor (V/Phase/Hz) Capacity Sate Min-1 Total Input Rated EER Design Load Annual Electricity Consus SEER*4  Cop Capacity Rated Min-1 Total Input Rated COP EEL R Design Load Declared Capacity Asted Annual Electricity Consus SEER*4  Total Input Rated COP EEL R Design Load Declared Capacity Asted Asted Asted Asted Asted Asted Asted Operating Capacity Asted Annual Electricity Consus SCOP*4  Energ Current (max) Input Rated Operating Current (max) Input Rated Operating Current (max) Dimensions <panels (max)="" (pwl)="" <panels="" air="" breaker="" coolin="" current="" diameter="" dimensions="" h="" h<="" heatir="" height="" length="" level="" liquid="" lo-mid-hi]="" max.="" operating="" out-in="" size="" sound="" th="" volume="" w="" weight="" ×=""><th>•</th><th></th><th>5.1</th><th>5.1</th><th>-</th><th>-</th><th>-</th><th>_</th></panels>	•		5.1	5.1	-	-	-	_
		<b>Energy Efficiency Class</b>		A	A	-	-		-
Heating	Capacity		kW	11.2	11.2	13.5	13.5		15.0
(Average		Min - Max	kW	2.8 - 12.5	2.8 - 12.5	4.8 - 15.0	4.8 - 15.0		4.9 - 15.8
Season)		Rated	kW	3.28	3.28	4.80	4.80		4.82
	COP			3.41	3.41	2.81	2.81	3.11	3.11
		EEL Rank		-	-	-	-	-	-
			kW	8.0	8.0	_	_	_	_
	<b>Declared Capacity</b>			6.0 (-10°C)	6.0 (-10°C)	-	_	-	-
		at bivalent temperature	kW	7.0 (-7°C)	7.0 (-7°C)	-	-	-	-
		at operation limit temperature	kW	4.5 (-15°C)	4.5 (-15°C)	_	_	_	_
			kW	2.0	2.0	-	_	-	-
	Annual Electricity	Consumption*2	kWh/a	2794	2794	_	_	_	_
	SCOP*4			4.0	4.0	_	_		_
	L	<b>Energy Efficiency Class</b>		Α+	A+		-		-
			Α	20.7	12.2	27.2	12.2		12.2
Indoor			kW	0.11	0.11	0.11	0.11		0.11
Unit			A	0.71	0.71	0.73	0.73	0.73	0.73
		[H×W×D	mm				00 - 360		
			kg	46	46	46	46		48
			m³/min	25 - 28 - 30	25 - 28 - 30	25 - 28 - 31	25 - 28 - 31		25 - 28 - 31
			dB(A)	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51	45 - 49 - 51		45 - 49 - 51 66
0.11		.)	dB(A)	65 981 - 10	65	66	66 50 - 330		
Unit		IH × W × D	mm			84	85		50 - 330
UIIIL		C :	kg m³/min	76 79	78 79	86	86		86
	Air volume		m³/min m³/min	79 79	79	92	92		92
	0 11 1/001)		dB(A)	51	51	54	54		56
	Sound Level (SPL)		dB(A)	54	54	56	56		57
	Carrad Larrad (DVA/L)		dB(A)	70	70	72	72		75
			A A	20.0	11.5	26.5	11.5		11.5
		(IIIax)	A	32	16	32	16		16
Ext.		Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88		9.52 / 15.88
			m	50	50	9.52 / 15.88	50		9.52 / 15.88
. ibiiig			m	30	30	30	30	30	30
Guaranto		Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46
Outdoor		Heating	°C	-15 ~ +46 -15 ~ +21	-15 ~ +46 -15 ~ +21	-15 ~ +40 -15 ~ +21	-15 ~ +46 -15 ~ +21	-15 ~ +40 -15 ~ +21	-15 ~ +40 -15 ~ +21
LOGITATION	j	I HEALING	0	-10 ~ +Z1	- I U ~ + Z I	-IJ ~ +Z	-10 ~ +Z	-10 ~ +Z	

mm m °C °C Heating -15 ~ +21 \*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP; if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of 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.

<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 Optional air protection guide is required where ambient temperature is lower than –5" (As the protection guide is required where ambient temperature) where the many of the protection guide is required where arbitrate temperature is lower than –5" (As the protection guide is required where arbitrate arbitrates are provided by the protection guide is required and the protection guide is required by the protection guide is required by the protection guide is required by the protection guide is the protection guide is required by the protection guide is required



# MULT SPLISSERIES







### **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 Indoor Units Refer to the "Indoor Unit Compatibility Table" to check if the indoor units selected can be used with the outdoor unit selected. (Indoor units not listed in the table cannot be used.) Check Indoor Unit Capacity Combination Refer to the "Combination Table" to check if the capacity combination of the indoor unit selected is connectable. (Combinations not listed cannot be connected.) If the desired combination cannot be found, please change either the indoor or outdoor unit to match one of the combinations shown in the tables.

# MXZ SERIES

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





Q-port MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF(H)3



3-port 4-port MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3



4-port 5-port MXZ-4F83VF MXZ-5F102VF



R32

6-port MXZ-6F122VF



#### 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.

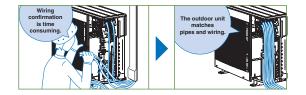
#### Support Functions -

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

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

\* Function cannot be used when the outdoor temperature is below 0°C.

The correction process requires 10–20 minutes to complete and must be conducted with the unit set to the "Cooling" mode.



#### **Operation Lock**

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













Type (Inv	erter Multi - Split He	at Pump)			Up to 2 in	door Units		Up to 3 in	door Units	Up	to 4 Indoor U	nits	Up to 5 Indoor Units
Indoor Ur	nit								lease refer to 1				
Outdoor I	Jnit			MXZ-2F33VF3	MXZ-2F42VF3	MXZ-2F53VF3	MXZ-2F53VFH3	MXZ-3F54VF3	MXZ-3F68VF3	MXZ-4F72VF3	MXZ-4F80VF3	MXZ-4F83VF3	MXZ-5F102VF
Refrigera	nt								R32*1				
Power	Source							Out	door power su	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 (	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		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	nce design temperature	kW	2.2	2.7	2.7	2.7	4.2	5.7	5.6	5.6	5.8	5.9
	Capacity at bivaler	nt temperature	kW	2.4	2.9	2.9	2.9	4.7	6.4	6.2	6.2	6.2	6.4
	at operat	tion 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 (	Class*3	Α+	A++	A++	A+	A++	A+	A+	Α+	A++	A++
Operatin	g Current (max)		Α	10.0	12.2	12.2	12.2	18.0	18.0	18.0	18.0	21.4	21.4
Outdoor	Dimensions	H × W × D	mm		550 - 8	00 (+69) - 285	(+59.5)	710 -	840 (+30) - 330	(+66)		796 - 9	50 - 330
Unit	Weight	1	kg	33	37	37	38	58	58	59	59	62	62
	Air Volume	Cooling	m³/min	31.5	28.4	32.7	32.7	31	35.4	35.4	40.3	57	63
		Heating	m³/min	32.3	33.5	34.7	34.7	31	39.6	42.7	44.1	62	75
	Sound Level (SPL)	Cooling	dB(A)	49	44	46	46	46	48	48	50	49	52
		Heating	dB(A)	50	50	51	51	50	53	54	55	51	56
	Sound Level (PWL)	Cooling	dB(A)	60	59	61	61	60	63	63	65	61	65
	Operating Current	Cooling	Α	4.3 - 4.1 - 3.9	4.9 - 4.7 - 4.5	6.5 - 6.2 - 6.0	6.5 - 6.2 - 6.0	6.0 - 5.7 - 5.5	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	Α	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		10.5 - 10.0 - 9.6
	Breaker Size	, J	Α	15	15	15	15	25	25	25	25	25	25
Ext.	Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3	6.35 × 3 / 9.52 × 3	6.35 ×	4 / 12.7 × 1 + 9	.52 × 3	6.35x5/12.7x1+9.52x4
Piping	Total Piping Length	(max)	m	20	30	30	30	50	60	60	60	70	80
	Each Indoor Unit Pig	· · ·	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
Guarante	Guaranteed Operating Range Cooling °C				-10 ~ +46		-10 ~ +46				- +46		
[Outdoor]			-15 ~ +24		-20 ~ +24				~ +24				
			10 124		20 124			137					

Type (Inv	verter Multi - Split He	at Pump)		Up to 6 Indoor Units
Indoor Ur	<u> </u>			Please refer to (*4)
Outdoor	Unit			MXZ-6F122VF
Refrigera	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
Operatin	g Current (max)		Α	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
	<b>Total Piping Length</b>	(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

# MXZ SERIES

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





R410A 2-port

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



(R410A)

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



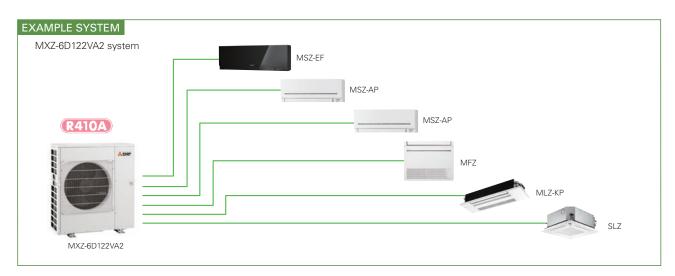
(R410A)

4-port 5-port MXZ-4E83VA MXZ-5E102VA



**R410A** 

6-port MXZ-6D122VA2



#### 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.

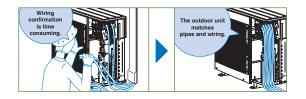
The correction process requires 10–20 minutes to complete and must be conducted with the unit set to the "Cooling" mode.

#### 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 Multi - Split H	leat Pump)			Up to 2 Inc	door Units		Up to 3 In	door Units	Up to 4 In	door Units	Up to 5 Indoor Units
Indoor Ur	<u> </u>	р,					F	Please refer to (*				
Outdoor I	Jnit			N: MXZ-2D33VA	N: MXZ-2D42VA2	N: MXZ-2D53VA2	N: MXZ-2D53VAH2	N: MXZ-3E54VA	N: MXZ-3E68VA	N: MXZ-4E72VA	MXZ-4E83VA	MXZ-5E102VA
Refrigera	nt							R410A*1				
Power	Source						Ou	ıtdoor power sup	pply			
Supply	Outdoor (V/Phase	/Hz)					220 -	230 - 240V / Sing	gle / 50			
Cooling	Capacity	Rated	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
		Min - Max	kW	1.1 - 3.8	1.1 - 4.4	1.1 - 5.6	1.1 - 5.6	2.9 - 6.8	2.9 - 8.4	3.7 - 8.8	3.7 - 9.2	3.9 - 11.0
	Input (Indoor+Outdoo	or) Rated	kW	0.90	1.00	1.54	1.54	1.35	2.19	2.25	2.44	3.15
	Design Load		kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
	Annual Electricity	Consumption*2	kWh/a	211	216	262	262	295	425	443	460	537
	SEER*4.*7			5.5	6.8	7.1	7.1	6.4	5.6	5.7	6.3	6.6
		Energy Efficiency (	Class*4	А	A++	A++	A++	A++	A+	A+	A++	A++
Heating	Capacity	Rated	kW	4.0	4.5	6.4	6.4	7.0	8.6	8.6	9.3	10.5
(Average		Min - Max	kW	1.0 - 4.1	1.0 - 4.8	1.0 - 7.0	1.0 - 7.0	2.6 - 9.0	2.6 - 10.6	3.4 - 10.7	3.4 - 11.6	4.1 - 14.0
Season)	Input (Indoor+Outdoo	or) Rated	kW	0.96	0.93	1.70	1.70	1.59	2.38	2.28	2.00	2.34
	Design Load		kW	2.7	3.2	4.5	4.5	5.0	6.8	7.0	8.7	8.9
	Declared at referen	ice design temperature	kW	2.1	2.7	3.7	3.6	4.0	5.4	5.6	7.1	7.3
	Capacity at bivalen	t temperature	kW	2.4	3.0	4.0	4.0	4.49	6.0	6.2	7.8	7.9
	at operati	on limit temperature	kW	1.7	2.3	3.3	3.0	3.17	4.4	4.7	6.0	6.3
	Back Up Heating (	Capacity	kW	0.6	0.5	0.8	0.9	1.0	1.4	1.4	1.6	1.6
	Annual Electricity	Consumption*2	kWh/a	926	1065	1507	1546	1751	2466	2516	2889	2958
	SCOP*4.*7			4.1	4.2	4.2	4.1	4.0	3.9	3.9	4.2	4.2
		Energy Efficiency (	Class*4	A+	Α+	A+	A+	A+	А	А	A+	A+
Мах. Ор	erating Current (Ind	oor+Outdoor)	Α	10.0	12.2	12.2	12.2	18.0	18.0	18.0	21.4	21.4
Outdoor	Dimensions	$H \times W \times D$	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 Volume	Cooling	m³/min	32.9	27.7	32.9	32.9	42.1	42.1	42.1	55.6	65.1
		Heating	m³/min	33.7	33.3	33.3	33.3	43.0	43.0	43.0	55.6	68.0
	Sound Level (SPL)	Cooling	dB(A)	49	46	50	50	50	50	50	49	52
		Heating	dB(A)	50	51	53	53	53	53	53	51	56
	Sound Level (PWL	.) Cooling	dB(A)	63	60	64	64	64	64	64	61	65
	Breaker Size		Α	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 Piping Lengt	h (max)	m	20	30	30	30	50	60	60	70	80
	Each Indoor Unit I	Piping Length (max)	m	15	20	20	20	25	25	25	25	25
	Max. Height		m	10	15 (10)*3	15 (10)* <sup>3</sup>	15 (10)*3	15 (10)*3	15 (10)*3	15 (10)* <sup>3</sup>	15 (10)* <sup>3</sup>	15 (10)*3
	Chargeless Length		m	20	20	20	20	40	40	40	25	0
	ed Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
[Outdoor]		Heating	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24

N: Please refer to the NOTE below.

T //	THE RESERVE ASSESSED.				
Type (Inverter Multi - Split Heat Pump)		Up to 6 Indoor Units			
Indoor Unit				Please refer to (*5)	
Outdoor I				MXZ-6D122VA2	
Refrigera				R410A*1	
Power	Source			Outdoor power supply	
Supply	Outdoor (V/Phase/Hz)			220 - 230 - 240V / Single / 50	
Cooling	Capacity	Rated	kW	12.2	
		Min - Max	kW	3.5 - 13.5	
	Input*5	Rated	kW	3.66	
	EER*6			3.33	
				A	
Heating	Capacity	Rated	kW	14.0	
		Min - Max	kW	3.5 - 16.5	
	Input*5	Rated	kW	3.31	
	COP*6		·	4.23	
				A	
Operatin	g Current (max)*5		А	26.8	
Outdoor	Dimensions	$H \times W \times D$	mm	1048-950-330	
Unit	Weight		kg	88	
	Air Volume	Cooling	m³/min	63.0	
		Heating	m³/min	77.0	
	Sound Level (SPL)	Cooling	dB(A)	55	
		Heating	dB(A)	57	
	Sound Level (PWL)	Cooling	dB(A)	70	
	Breaker Size		А	32	
Ext.	Diameter	Liquid	mm	6.35×6	
Piping		Gas	mm	12.7 × 1 + 9.52 × 5	
	Total Piping Length (max)		m	80	
	Each Indoor Unit Piping Length (max)		m	25	
	Max. Height		m	15 (10)* <sup>3</sup>	
	Chargeless Length		m	30	
Guarante	ed Operating Range	Cooling	°C	-10 ~ +46	
[Outdoor]		Heating	°C	-15 ~ +24	

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

#### MXZ-2D33VA

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

#### MX7-2D42VA2 MX7-2D53VA2 MX7-2D53VAH2

No. of Pipe		ngth (L)	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

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

No. of	Pipe lei	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

# MXZ-HA SERIES

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





#### Stylish Design with Flat Panel Front

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



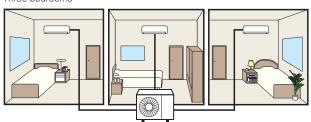
#### Easy to create various combinations

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

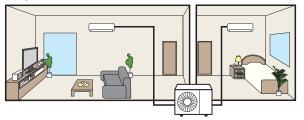
#### Two bedrooms



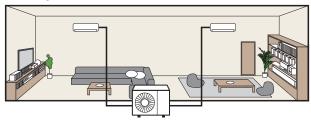




Living room and one bedroom



Wide living room















Type (Inv	erter Multi - Split H	eat Pump)		Up to 2 Inc	loor Units	Up to 3 Indoor Units		
ndoor Ur	it				Please refer to (*4)			
utdoor l	Jnit			MXZ-2HA40VF	MXZ-2HA50VF	MXZ-3HA50VF		
Refrigerant				R32*1				
ower	Source			Outdoor power supply				
upply	Outdoor (V/Phase	/Hz)		220-230-240 / Single / 50				
ooling	Capacity	Rated	kW	4.0	5.0	5.0		
	Input*4	Rated	kW	1.05	1.52	1.26		
	EER*4	'		3.81	3.29	3.97		
		EEL Rank*4		A	A	A		
	Design Load		kW	4.0	5.0	5.0		
	Annual Electricit	y 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	Input	Rated	kW	0.91	1.54	1.30		
eason)	COP*4			4.73	3.90	4.62		
		EEL Rank*4		A	A	A		
	Design Load		kW	3.2	3.2	4.0		
		ence design temperature	kW	2.4	2.4	3.0		
		ent temperature	kW	2.9	2.9	3.6		
	at oper	ation limit temperature	kW	2.1	2.1	2.6		
	Back Up Heating		kW	0.8	0.8	1.0		
		Annual Electricity Consumption*2		1043	1043	1394		
	SCOP*4,*5		kWh/a	4.30	4.30	4.02		
			Class*4	A+	A <sup>+</sup>	A+		
peratin	Current (max)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Α	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		dB(A)	59	64	61		
	Operating Current		A	4.9	6.8	5.6		
		Heating	А	4.6	6.9	5.8		
	Breaker Size		А	15	15	25		
rt.	Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3		
ping	Total Piping Lengt		m	30	30	50		
		Each Indoor Unit Piping Length (max)		20	20	25		
	Max. Height	, J . J (	m m	15 (10)*³	15 (10)*3	15 (10)*3		
	Chargeless Length		m	30	30	40		
	Chargeless Length							
uarante	chargeless Length d Operating Range	Cooling	°℃		-10 ~ +46			

<sup>\*\*</sup>I Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

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

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

\*3 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.

MX2-14A0VF MSZ-HR25VF + MSZ-HR25VF

MX2-2HA60VF MSZ-HR25VF + MSZ-HR25VF

MX2-3HA50VF MSZ-HR25VF + MSZ-HR25VF + MSZ-HR25VF

MX2-3HA50VF MSZ-HR25VF + MSZ-HR25VF + MSZ-HR25VF

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

# MXZ-DM SERIES

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





# Stylish Design with Flat Panel Front

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



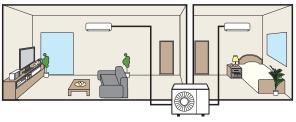
# Easy to create various combinations

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

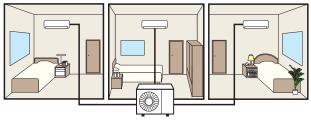
# Two bedrooms



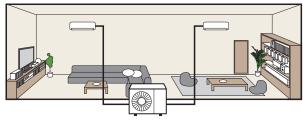


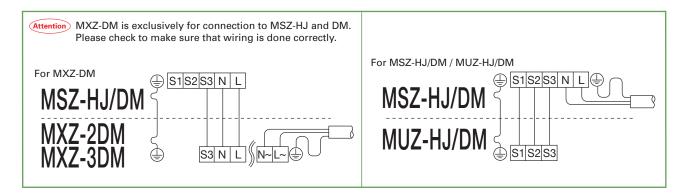


# Three bedrooms



# Wide living room

















Type (lp)	rerter Multi - Split He	at Pump)		Up to 2 Indoor Units	Up to 3 Indoor Units			
Indoor Ur	•	ac r amp;		· · · · · · · · · · · · · · · · · · ·	fer to (*4)			
Outdoor				MXZ-2DM40VA	MXZ-3DM50VA			
	Refrigerant			·	0A*1			
Power	Source			Outdoor power supply				
Supply	Outdoor (V/Phase/H	(z)	230 / Single / 50					
Cooling	Capacity	Rated	kW	4.0	5.0			
Cooling	Input*4	Rated	kW	1.05	1.13			
	EER*4	Inated	NVV.	3.81	4.42			
	LLII	EEL Rank*4		A	A.42			
	Design Load	LLL Hullk	kW	4.0	5.0			
	Annual Electricity	Consumption*2	kWh/a	226	283			
	SEER*4.*5	Consumption	KVVIIJU	6.1	6.1			
	OLLIN	Energy Efficiency C	lace*4	A++	A++			
Heating	Capacity	Rated	kW	4.3	6.0			
(Average		Rated	kW	1.16	1.31			
Season)	COP*4	Hatea	KVV	3.71	4.58			
	00.	EEL Rank*4		A.	A			
	Design Load			3.2	4.0			
	Declared at reference design temperature		kW	2.73	3.34			
	Capacity at bivalent temperature		kW	3.01	3.73			
	at operation limit temperature		kW	2.27	2.70			
	Back Up Heating Capacity		kW	0.47	0.66			
	Annual Electricity		kWh/a	1105	1455			
	SCOP*4,*5		KTTIJU	4.0	3.8			
		Energy Efficiency C	class*4	A <sup>+</sup>	A			
Operatin	g Current (max)		А	12.2	18.0			
	Dimensions	H × W × D	mm	550 - 800 (+69) - 285 (+59.5)	710 - 840 (+30) - 330 (+66)			
Unit	Weight	1	kg	32	57			
	Air Volume	Cooling	m³/min	29.2	37.5			
		Heating	m³/min	31.9	39.6			
	Sound Level (SPL)	Cooling	dB(A)	48	50			
		Heating	dB(A)	52	53			
	Sound Level (PWL)	Cooling	dB(A)	63	64			
	Operating Current	Cooling	Α	5.1	5.0			
	_	Heating	Α	5.6	5.8			
	Breaker Size		А	15	25			
Ext.	Port Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35 × 3 / 9.52 × 3			
Piping	Total Piping Length	(max)	m	30	50			
	Each Indoor Unit Pip	oing Length (max)	m	20	25			
	Max. Height		m	15 (10)*3	15 (10)* <sup>3</sup>			
	Chargeless Length		m	20	40			
	ed Operating Range	Cooling	°C	-10 ·	+46			
[Outdoor]		Heating	°C	-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 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

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

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

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

MXZ-2DM40VA MSZ-DM25VA + MSZ-DM25VA + MSZ-DM25VA

MXZ-3DM50VA MSZ-DM25VA + MSZ-DM25VA + MSZ-DM25VA

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

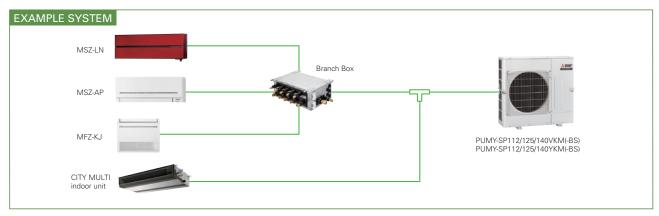
# PUMY-SP SERIES

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



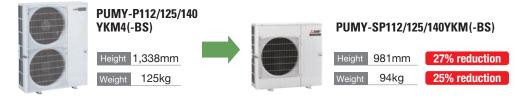
R410A

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



# Light weight and compact size

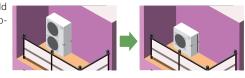
Compact design fits into narrow outdoor unit space of condominiums and offices. Light weight design facilitates easy installation and transportation.



# Unobstructive, compact, and easy to hide from view

Conventional 2-fan type outdoor units may spoil the view. Due to its compact size, the new outdoor fan unit can be installed in loca-

tions that would have been inappropriate.



# Easy installation and transportation

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

could not before.



# Industry's top energy efficiency\*

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

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



# 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.

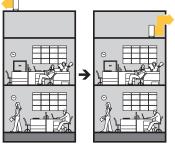
- \*Capacity reduction differs by mode setting.
- \*PAC-SC36NA-E is required to activate Super Silent mode

# 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.



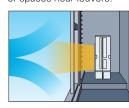
The installation location is flexible

thanks to its 30Pa static pressure.

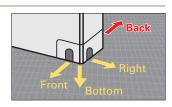
You can install it in locations that you

An external static pressure of 30Pa

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



\*Noise level will increase when using this function.



















Model			PUMY-SP112VKM(-BS)	PUMY-SP125VKM(-BS)	PUMY-SP140VKM(-BS)	PUMY-SP112YKM(-BS)	PUMY-SP125YKM(-BS)	PUMY-SP140YKM(-BS)	
Power Source			1-phase	220 - 230 - 240V 50Hz / 2	20V 60Hz	3-phase 3	80 - 400 - 415V 50Hz / 3	80V 60Hz	
Cooling Capacity	*1	kW	12.5	14.0	15.5	12.5	14.0	15.5	
(nominal)	Power Input	kW	3.10	3.84	4.70	3.10	3.84	4.70	
	Current Input	Α	14.38 - 13.75 - 13.18 / 14.38	17.81 - 17.04 - 16.33 / 17.81	21.80 - 20.85 - 19.88 / 21.80	4.96 - 4.71 - 4.54 / 4.96	6.14 - 5.83 - 5.62 / 6.14	7.52 - 7.14 - 6.88 / 7.52	
	EER	kW/kW	4.03	3.65	3.30	4.03	3.65	3.30	
Temp. Range	Indoor Temp.	W.B.	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	15.0 - +24.0°C	
of Cooling*4	Outdoor 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	
Heating Capacity	*2	kW	14.0	16.0	16.5	14.0	16.0	16.5	
(nominal)	Power Input	kW	3.17	3.90	4.02	3.17	3.90	4.02	
	Current Input	А	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 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	
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	
Indoor Unit	Total Capacity			50	to 130% of outdoor unit	capacity			
Connectable	Model / Quantity	City Multi	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	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 Box	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	
	2 units	Branch Box	15 - 100 / 7 or 8*7	15 - 100 / 8	15 - 100 / 8	15 - 100 / 7 or 8*7	15 - 100 / 8	15 - 100 / 8	
Sound Pressure Le (Cooling / Heating		dB <a></a>	52 / 54	53 / 56	54 / 56	52 / 54	53 / 56	54 / 56	
Sound Power Leve	(Cooling) dB <a></a>		72	73	74	72	73	74	
Refrigerant Piping	Liquid Pipe	mm			9.52	Flare			
Diameter	Gas Pipe	mm			15.88	R Flare			
Fan	Type × Quantity				Propeller	Fan × 1			
	Air Flow Rate	m³/min	77	83	83	77	83	83	
		L/s	1,283	1,383	1,383	1,283	1,383	1,383	
		cfm	2,719	2,931	2,931	2,719	2,931	2,931	
	Motor Output	kW			0.:	20			
	External Static Press.	Pa	0 Pa / 30 Pa*8						
Compressor	Type × Quantity				Twin rotary herme	ic compressor x 1			
	Starting Method				Inve	rter			
	Motor Output	kW	3.1	3.5	3.7	3.1	3.5	3.7	
External Dimensions (H × W × D) mm				981×1,050	×330 (+40)				
Net Weight kg (lbs)			93 (205)*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> Equivalent	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> Equivalent	t	18.79	18.79	18.79	18.79	18.79	18.79	

### \*1,\*2 Nominal conditions

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

<sup>\*3 10</sup> to 52°C; incase of connecting PKFY-P15/P20/P25VBM, PFFY-P20/P25/P32VKM, PFFY-P20/P25/P32VLE(R)M indoor unit and M series indoor unit with connection kit and M series, S series, and P series type indoor unit with branch box.

\*4 Up to 11 units when connecting via 2 branch boxes.

\*5 94 (207), for PUMY-SP112/125/140VKM-BS

\*6 95 (209), for PUMY-SP112/125/140YKM-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.

Туре				Branch Box		
Model Name	•			PAC-MK54BC	PAC-MK34BC	
Connectable	Number of Indoo	or Units		Maximum 5 Maximum 3		
Power Supp	ly (from outdoor	unit)		~ / N, 220 / 230 / 240 V, 50 I	Hz, ~ / N, 220 / 230 V, 60 Hz	
Input			kW	0.0	103	
Running Cur	rent		А	0.05 (Max. 6)		
Dimensions		$H \times W \times D$	mm	170 × 450 × 280		
Weight			kg	7.4	6.7	
Piping	Branch	Liquid	mm	ø6.35 × 5	ø6.35 × 3	
Connection (Flare)	[Indoor Side]	Gas	mm	ø9.52 × 4, ø12.7 × 1	ø9.52 × 3	
	Main	Liquid	mm	ø9.52		
	[Outdoor Side]	Gas	mm	ø15	i.88	

<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.)

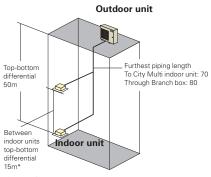
# <Branch box compatible table>

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	✓	✓	✓	✓

<sup>\*</sup>ecodan is NG

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

	<u> </u>		
Refrigerant Piping Lengths	Maximum meters	Vertical differentials between units	Maximum meters
Total length		Indoor/outdoor (outdoor higher)	. 50
Maximum allowable length	To City Multi indoor	Indoor/outdoor (outdoor lower)	. 30
	unit: 70	Indoor/indoor	·· 15*
	Through Branch box: 80		



\*In case of branch box connection: 12m

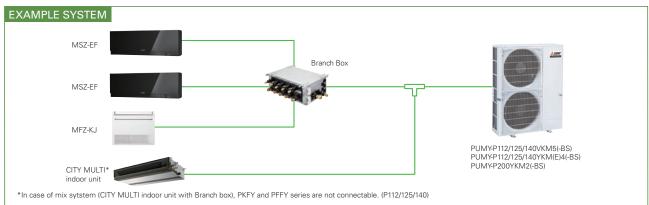
# PUMY-P SERIES

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



# **R410A**

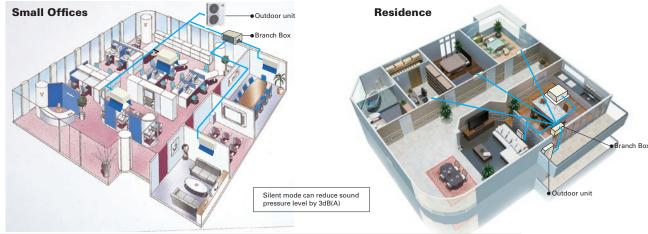
PUMY-P112/125/140VKM5(-BS) PUMY-P112/125/140YKM(E)4(-BS) PUMY-P200YKM2(-BS)



# 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 effectively.

With a wide range of indoor unit line-up in connection with a flexible piping system, PUMY series can be configured for all applications. Up to 12 indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.



			Maximum 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	55	30	55		
	Vertical Differentials	Indoor/Outdoor (Outdoor higher)	50	50		50		
	Between Units	Indoor/Outdoor(Outdoor Lower)	40*2	40	4	10		
		Indoor/Indoor	15*3	15*3	15*3			
P200	Refrigerant Piping Length	Total Length	150	150	1	50		
		Maximum Allowable Length	80 (90 equivalent)	80	80 (90 equivalent)	80		
		Farthest Indoor From First Branch	30	55	30 55			
	Vertical Differentials	Indoor/Outdoor (Outdoor higher)	50	50		50		
	Between Units	Indoor/Outdoor (Outdoor Lower)	40	40		10		
		Indoor/Indoor	15*3	15*3	15*3			

<sup>\*1</sup> Include system with connection kit \*2 In case of including PKFY or PFFY,

# 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.
- st Noise level will increase when using this function.



height between units is 30m.
\*3 In case of branch box connection: 12m















Model			PUMY-P112VKM5(-BS)	PUMY-P125VKM5(-BS)	PUMY-P140VKM5(-BS)	PUMY-P112YKM4(-BS)	PUMY-P125YKM4(-BS)	PUMY-P140YKM4(-BS)	PUMY-P200YKM2(-BS)
Power Source				ase 220 - 230 - 240V			3-phase 380 - 400		
Cooling Capacity		*1 kW	12.5	14.0	15.5	12.5	14.0	15.5	22.4
(nominal)	Power Input	kW	2.79	3.46	4.52	2.79	3.46	4.52	6.05
	Current Input	A	12.87 - 12.32 - 11.80	15.97 - 15.27 - 14.64	20.86 - 19.95 - 19.12	4.99 - 4.74 - 4.57	5.84 - 5.55 - 5.35	7.23 - 6.87 - 6.62	9.88 - 9.39 - 9.05
	EER	kW/kW	4.48	4.05	3.43	4.48	4.05	3.43	3.70
Temp. Range	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
of Cooling	Outdoor Temp.*	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
Heating Capacity		*2 kW	14.0	16.0	18.0	14.0	16.0	18.0	25.0
(nominal)	Power Input	kW	3.04	3.74	4.47	3.04	3.74	4.47	5.84
	Current Input	A	14.03 - 13.42 - 12.86	17.26 - 16.51 - 15.82	20.63 - 19.73 - 18.91	5.43 - 5.16 - 4.98	6.31 - 6.00 - 5.78	7.15 - 6.79 - 6.55	9.54 - 9.06 - 8.74
	COP	kW/kW	4.61	4.28	4.03	4.61	4.28	4.03	4.28
Temp. Range	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
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
Indoor Unit	Total Capacity				50 to 130% of out	tdoor unit capacity			
Connectable	Model / Quantit	City Multi	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12	10 - 200 / 12
		Branch Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
	Mixed Bran	ch City Multi	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5	10 - 200 / 5
	System 1 unit Branch Box	t Branch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5
		h City Multi	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3	10 - 200 / 3
	2 uni	ts Branch Box	15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8	15 - 100 / 7 or 8*4	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
Sound Pressure Le (measured in anec		dB <a></a>	49 / 51	50 / 52	51 / 53	49 / 51	50 / 52	51 / 53	56 / 61
Refrigerant Piping	Liquid Pipe	mm		9.52 Flare					9.52*6 Flare
Diameter	Gas Pipe	mm			15.88	Flare			19.1 Flare
Fan	Type × Quantity				Propeller	r Fan × 2			
	Air Flow Rate	m³/min			11	10			139
		L/s			1,8	383			2,316
		cfm			3,8	384			4,908
	Motor Output	kW		0.074 + 0.074					0.20 + 0.20
Compressor	Type × Quantity				Scroll hermetic	compressor x 1			
	Starting Method	ı			Inve	erter			
	Motor Output	kW	2.9	3.5	3.9	2.9	3.5	3.9	5.3
External Dimension	ns (H ×W × D)	mm			1,338×1,050	0×330 (+40)			
Weight		kg		123			125		141

\*1,\*2 Nominal conditions

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

\*3 10 to 52°C D.B.: When connecting PKFYP15/20/25VBM, PFFYP20/25/32VKM and PFFYP20/25/32VLE(R)M, PEFYP-VMA3, M, S and P series indoor unit.

\*4 When connecting 7 indoor units via branch box, connectable City Multi indoor units are 3; connecting 8 indoor units via branch box, connectable indoor units are 2.

\*5 At least 2 indoor units must be connected when using branch box.

\*6 Liquid pipe diameter: 12.7mm when piping length is more than 60m.

Model				PUMY-P112YKME4(-BS)	PUMY-P125YKME4(-BS)	PUMY-P140YKME4(-BS)			
Power Source					3-phase 380 - 400 - 415V 50Hz				
Cooling Capacity		*1 kW	1	12.5	14.0	15.5			
nominal)	Power Input	t kW	1	2.79	3.46	4.52			
	Current Inpu	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.E	В.		15 to 24°C				
f Cooling	Outdoor Ten	<b>mp.</b> *3 D.B	3.		−5 to 52°C				
eating Capacity		*2 kW	1	14.0	16.0	18.0			
ominal)	Power Input	t kW	1	3.04	3.74	4.47			
	Current Input A			5.43 / 5.16 / 4.98	6.31 / 6.00 / 5.78	7.15 / 6.79 / 6.55			
	COP	kW	//kW	4.61	4.28	4.03			
mp. Range	IndoorTemp. D.B.				15 to 27°C				
Heating	Outdoor Ten	mp. W.E	В.	-20 to 15°C					
door Unit	Total Capaci	ity		50 to 130% of outdoor unit capacity					
Connectable	Model / Qua	antity City	y Multi	10 - 140 / 9	10 - 140 / 10	10 - 140 / 12			
		Bra	anch Box*5	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8			
	IVIIACU	Branch City	y Multi	10 - 140 / 5	10 - 140 / 5	10 - 140 / 5			
	System 1	1 unit Bra	anch Box	15 - 100 / 5	15 - 100 / 5	15 - 100 / 5			
		Branch City	y Multi	10 - 140 / 3 or 2*4	10 - 140 / 3	10 - 140 / 3			
		2 units Bra	anch Box	15 - 100 / 7 or 8* <sup>4</sup>	15 - 100 / 8	15 - 100 / 8			
ound Pressure Lo neasured in aneo		dB	<a></a>	49 / 51	50 / 52	51 / 53			
frigerant Piping	Liquid Pipe	mm	n		9.52 Flare				
ameter	Gas Pipe	mm	n		15.88 Flare				
n	Type × Quai	ntity			Propeller Fan x 2	Propeller Fan × 2			
	Air Flow Ra	nte m <sup>3</sup> /	/min		110				
		L/s	;		1,833				
		cfm	n		3,884				
	Motor Outp	out kW	1	0.074 + 0.074					
mpressor	Type × Quai	ntity			Scroll hermetic compressor × 1				
	Starting Method				Inverter				
	Motor Outp	out kW	/	2.9	3.5	3.9			
xternal Dimensio	ns (H ×W × D	)) mm	n	1,338×1,050×330 (+40)					
/eight		kg			136				

\*1,\*2 Nominal conditions

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

\*3 10 to 52°C D.B.: When connecting PKFYP15/20/25VBM, PFFYP20/25/32VKM and PFFYP20/25/32VLE(R)M, PEFYP-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.

Туре				Branc	h Box
Model Name	•			PAC-MK54BC	PAC-MK34BC
Connectable	Number of Indoo	or Units		Maximum 5	Maximum 3
Power Supp	ly (from outdoor i	ınit)		~ / N, 220 / 230 / 240 V, 50 I	Hz, ~ / N, 220 / 230 V, 60 Hz
Input			kW	0.0	03
Running Cur	rent		А	0.05 (N	Лах. 6)
Dimensions		$H \times W \times D$	mm	170 × 45	50 × 280
Weight			kg	7.4	6.7
Piping	Branch	Liquid	mm	ø6.35 × 5	ø6.35 × 3
Connection	[Indoor Side]	Gas	mm	ø9.52 × 4, ø12.7 × 1	ø9.52 × 3
(Flare)	Main	Liquid	mm	ø9.	52
	[Outdoor Side]	Gas	mm	ø15	i.88

<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 with outdoor/indoor unit. If 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 
Possible combinations of outdoor units and indoor units are shown below.

			MXZ-*3	MXZ-*3		MXZ-*3		MXZ-*3	MXZ-*3		MXZ-*3	MXZ-*3	MXZ-*3			MXZ-*3	
oor Unit			2F33VF3			2F53VFHZ				4F80VF3	4F83VF	4F83VFHZ	5F102VF	6F122VF		2HA50VF	
series	Wall- Mounted	MSZ-LN18VG(W)(V)(R)(B)					•										
	Mounted	MSZ-LN25VG(W)(V)(R)(B)					•	•	•	•							L
		MSZ-LN35VG(W)(V)(R)(B)															
		MSZ-LN50VG(W)(V)(R)(B)															
		MSZ-LN18VG2(W)(V)(R)(B)				•						•	•	•			
		MSZ-LN25VG2(W)(V)(R)(B)	•	•	•	•	•	•	•	•	•	•	•	•			
		MSZ-LN35VG2(W)(V)(R)(B)										•					L
		MSZ-LN50VG2(W)(V)(R)(B)					•		•	•	•	•	•	•			
		MSZ-FT25VG															
		MSZ-FT35VG															L
		MSZ-FT50VG															L
		MSZ-AP15VG	•	•	•		•			•	•	•	•	•			
		MSZ-AP20VG								•		•					
		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													•	•	
		MSZ-HR35VF														•	
		MSZ-HR42VF														•	
		MSZ-HR50VF															
		MSZ-HR60VF															
		MSZ-HR71VF															
	Floor- Standing	MFZ-KT25VG	•	•	•	•	•	•	•	•	•	•	•	•			
	-	MFZ-KT35VG								•							
	1 111011	MFZ-KT50VG					•	•	•	•	•	•	_	•			
	1-way Cassette	MLZ-KP25VF		•	•	•	•		•	•	•	•	•	•			
		MLZ-KP35VF		•	•	•	•	•	•		•						
	0.0	MLZ-KP50VF					•			•	•	•	•	•			
eries	2×2 Cassette	SLZ-M15FA	•	•	•	•	•	•	•	•	•	•	•	•			
		SLZ-M25FA		•	•	•	•	•	•	•	•	•	•	•			H
		SLZ-M35FA		•	•	•	•	•	•	•	•	•	•	•			
	Cailing	SLZ-M50FA SEZ-M25DA*2	-	-			•	•		•	•	•	•	•			
	Ceiling- Concealed	SEZ-M25DA <sup>2</sup> SEZ-M25DAL <sup>*2</sup>	•	•	•	•	•	•	•		•	•					
				•	•	•	•	•	•	•	•	•	•	•			
		SEZ-M35DA		•	•	•	•	•	•	•	•	•	•	•			H
		SEZ-M35DAL				•	•				•	•	•				
		SEZ-M50DA SEZ-M50DAL					•	•	•	•	•	•	•	•			
									•	•				•			H
		SEZ-M60DA						•	•		_	_	_				
		SEZ-M60DAL								•	•	•	•	•			
		SEZ-M71DA									•	•	•	•			
orica	Coilina	SEZ-M71DAL															
eries	Ceiling- Suspended	PCA-M50KA					•	•	•	•							
		PCA-M60KA															
		PCA-M71KA															
	Ceiling-	PEAD-M50JA					●*1	●*1	●*1	•							
					1		*1	<b>*</b> 1	■*1						1		
	Concealed	PEAD-M50JAL															
		PEAD-M60JA															

<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.

# ■ MXZ Series R410A

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

	_		MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3	MXZ-*3		MXZ-*3	MXZ-*3	MXZ-*3		MXZ-*3	
oor Unit	147 11	MOZ I NI O (O (D) (D)	2D33VA	2D42VA2	2D53VA(H)2	2E53VAHZ	3E54VA	3E68VA	4E72VA	4E83VA	4E83VAHZ	5E102VA	6D122VA2	2DM40VA	3DM5
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-AP35VG *7													
		MSZ-AP42VG * 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	*4	•	•		•	•		
		MFZ-KJ50VE2					*4	*4							
	1-way	MLZ-KP25VF	•	•	•	•	•	•	•		•		•		
	Cassette	MLZ-KP35VF	_	•	•	•				•	_	•			
		MLZ-KP50VF					•	•	•	•		•	•		
orioo	2×2	SLZ-M15FA					•	•	•	•	•	•	•		
eries	Cassette	SLZ-MT5FA SLZ-M25FA													
	Guocotto		•	•	•	•	•	•	•	•	•	•	•		
		SLZ-M35FA		•	•	•			•			•	•		
		SLZ-M50FA	_	_	_	_			•			•	•		
	Ceiling- Concealed	SEZ-M25DA*2		•	•	•			•			•	•		
	Concealed	SEZ-M25DAL*2	•	•	•	•	•	•	•	•	•	•	•		
		SEZ-M35DA			•			•				•	•		
		SEZ-M35DAL		•	•	•	•	•	•	•	•	•	•		
		SEZ-M50DA						•				•			
		SEZ-M50DAL					•	•	•	•	•	•	•		
		SEZ-M60DA						•	•	•	•	•	•		
		SEZ-M60DAL						•	•	•	•	•	•		
		SEZ-M71DA								•		•	•		
		SEZ-M71DAL								•		•	•		
eries	4-way	PLA-M50EA							•			•	•		
	Cassette	PLA-M60EA						•	•	•	<b>●</b> *6	•	•		
		PLA-M71EA									<b>*</b> 6	•	•		
	Ceiling-	PCA-M50KA					•	•	•		<b>*</b> 6	•	•		
	Suspended	PCA-M60KA						•		•	<b>*</b> 6	•	•		
		PCA-M71KA								•	<b>*</b> 6	•	•		
	Ceiling-	PEAD-M50JA					*1	<b>●</b> *1	●*1	●*1	*1*6	●*1	<b>*</b> 1		
	Concealed	PEAD-M50JAL					<b>*</b> 1	<b>0</b> *1	<b>•</b> *1	<b>*</b> 1	*1*6	<b>0</b> *1	• 1		
		PEAD-M60JA								•*1	*1*6	<b>0</b> *1	*1		
		PEAD-M60JAL								•*1	*1*6	•1	0*1		
		PEAD-M71JA								0*1	*1*6	0*1	*1		
											_	_			
										-	- 10	-	-		
SEZ-KD2 MXZ outd	5 cannot be cloor units are	PEAD-M71JAL  of indoor units: 3A or less. onnected with MXZ-2D(E)/3I not designed to operate with IFZ-KJ Series indoor unit, ac	a single ind	door unit wi	th one-to-or	ne piping wo	ork. Please	install at lea	ast two indo		●*1*6 pacity ratio		<b>●</b> *1		

# **■ PUMY-SP Series**

Branch Box Connection Compatibility Table

0	T	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		<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>●</b> *1			
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>●</b> *1	<b>●</b> *1	<b>●</b> *1	<b>●</b> *1
	Ceiling-Concealed	PEAD-M•JA(L)								<b>●</b> *1	<b>●</b> *1	<b>•</b> *1	<b>●</b> *1

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

## LEV Kit Connection Compatibility Table

Series	1/11/7	Model Name					Сар	acity				
Series	I/U Type	Woder 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>•</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>•</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	Turno	Model Name							Cap	acity						
Selles	Туре	woder name	P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY	1-way cassette	PMFY-P•VBM-E			•	•	•	•								
MULTI series	2-way cassette	PLFY-P•VLMD-E			•	•	•	•	•	•		•	•	•		
361163	4-way cassette	PLFY-M•VEM-E			•		•	•	•	•		•	•	•		
		PLFY-EP•VEM-E *3							•	•		•				
		PLFY-P•VFM-E			•	•	•	•	•							
	Ceiling-concealed	PEFY-P•VMR-E-L/R			•	•	•									
		PEFY-P•VMS1(L)-E				•			•	•						
		PEFY-M•VMA(L)-A *2			•	•	•	•	•	•	•	•	•	•	•	
		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								GUF-50/1	00RD(H)4						

<sup>\*1</sup> Authorized connectable indoor units are as follows:
PUMY-SP112: PEFY-P25x2+P32x2, PUMY-SP125: PEFY-P25x1+P32x3, PUMY-SP140: PEFY-P32x2+P40x2
\*2 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)
\*3 PLFY-EP can not connect more than 3 units
\*4 Connectable outdoor units are PUMY-SP112/125/140V(Y)KMR2(-BS). TH only.

# **■ PUMY-P Series**

Branch Box Connection Compatibility Table

Series	T	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

			. ,										
I	Series	I/II Turno	Model Name					Сар	acity				
l	Series	I/U Type	Model Name	15	18	20	22	25	35	42	50	60	71
ı	M series	Wall-Mounted	MSZ-LN•VG2					•	•		•		
١			MSZ-AP•VG(K)	<b>•</b> *1		<b>●</b> *1							
١			MSZ-FH•VE2					•					
ı			MSZ-EF•VG(K)				•	•		•			
ı			MSZ-SF•VA	•		•							
١			MSZ-SF•VE3					•					
ı		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	Tumo	Model Name							Cap	acity						
Series	Type	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	Typo	Model Name							Cap	acity						
Series	Type 1-way cassette	woder name	P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY	2-way cassette	PMFY-P•VBM-E			•	•		•								
MULTI series	4-way cassette	PLFY-P•VLMD-E			•	•		•	•			•				
Series		PLFY-M•VEM-E			•	•	•	•	•	•		•	•	•		
		PLFY-EP•VEM-E *4														
	Ceiling-concealed	PLFY-P•VFM-E		•	•	•	•	•	•							
		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								GUF-50/1	00RD(H)4						

<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 connection is not allowed inside EU countries.
PWFY can not connect to PUMY-P200YKM2.
3 Do not connect Losnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)
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.

# POWERFUL HEATING





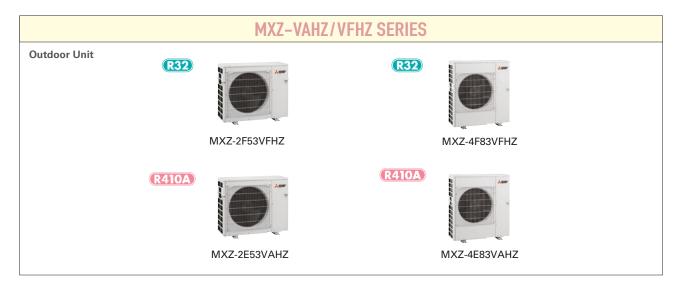


# **SELECTION**

Choose the series that best matches the building layout.







# LIVING R32 R410A Single / MXZ, PUMY PUMY SERIES

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

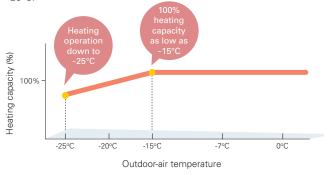




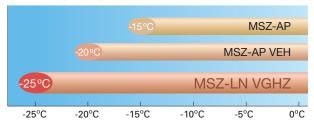
MSZ-LN25/35/50VG2(W)(V)(R)(B)

# **Unparalleled Heating Performance**

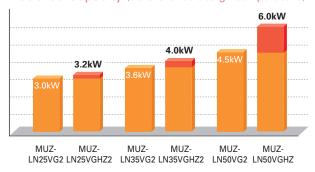
LN Series outdoor units are equipped with a high-output compressor that provides enhanced heating performance under low outdoor temperatures. The heating operation range is extended down to  $-25^{\circ}\mathrm{C}$ 



# **Operating Range**



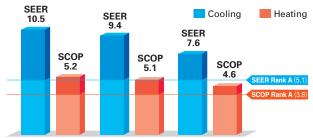
# Declared Capacity (at reference design temperature)



# 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.



MUZ-LN25VGHZ2 MUZ-LN35VGHZ2 MUZ-LN50VGHZ

# Freeze-prevention Heater Equipped as Standard

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

# Operation Guaranteed at Outside Temperature of –25°C





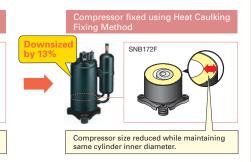
Without Freeze-prevention heater

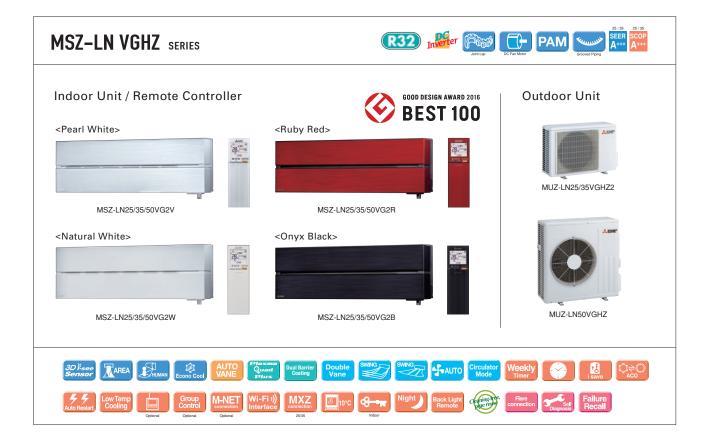
With Freeze-prevention heater

# 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.







Туре						Inverter Heat Pump	
ndoor Unit					MSZ-LN25VG2(W)(V)(R)(B)	MSZ-LN35VG2(W)(V)(R)(B)	MSZ-LN50VG2(W)(V)(R)(B)
Outdoor U	nit				MUZ-LN25VGHZ2	MUZ-LN35VGHZ2	MUZ-LN50VGHZ
Refrigerant						R32 (*1)	
ower	Source					Outdoor Power supply	
Supply	Outdoor (V/Phase/H	z)				230/Single/50	
Cooling	Design Load			kW	2.5	3.5	5.0
	Annual Electricity Co	nsumpti	on (*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 - Ma	ЭX	kW	0.8 - 3.5	0.8 - 4.0	1.4 - 5.8
	Total Input	Rated		kW	0.485	0.820	1.380
	Design Load			kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)
Average Season)(+5)	Declared Capacity		nce design temperature	kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)
Justij "		at bivale	nt temperature	kW	3.2 (-10°C)	4.0 (-10°C)	6.0 (-10°C)
			tion 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	nsumpti	on <sup>(*2)</sup>	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 - Ma	ax .	kW	0.8 - 6.3	0.9 - 6.6	1.8 - 8.7
	Total Input	Rated		kW	0.600	0.820	1.480
	Current (max)			Α	9.9	10.5	15.2
	nput		Rated	kW	0.027	0.027	0.034
-	Operating Current (n			Α	0.3	0.3	0.4
Į.	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
L	SLo-Lo-Mid-Hi-SHi (*3)(C	ry/Wet))	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
L	SLo-Lo-Mid-Hi-SHi <sup>(*3</sup>	7	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
	Dimensions		$H \times W \times D$	mm	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330
-	Weight			kg	35	36	55
-	Air Volume		Cooling	m³/min	31.4	33.8	48.8
L			Heating	m³/min	27.4	27.4	51.3
:	Sound Level (SPL)		Cooling	dB(A)	46	49	51
L			Heating	dB(A)	49	50	54
	Sound Level (PWL)		Cooling	dB(A)	60	61	64
-	Operating Current (n	nax)		Α	9.6	10.2	14.8
	Breaker Size		·	Α	10	12	16
	Diameter		Liquid / Gas	mm	6.35/9.52	6.35/9.52	6.35/9.52
-	Max. Length		Out-In	m	20	20	30
	Max. Height		Out-In	m	12	12	15
	l Operating Range		Cooling	°C	−10 ~ +46	-10 ~ +46	-10 ~ +46
[Outdoor]			Heating	°C	-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 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) 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 51-52 for heating (warmer season/colder season) specifications.

# FTVGHZ 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 location.



MSZ-FT25/35/50VG(K)

# Built-in Wi-Fi

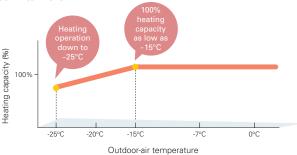
(MSZ-FT25/35/50VGK)

Powerful

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

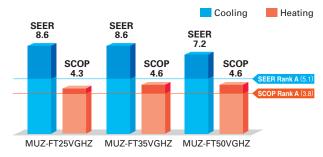
Mitsubishi Electric's powerful compressor and highly cold-resistant parts enable the heat pump to provide 100% or more heating capacity even at  $-15^{\circ}$ C, and also the heating operation is guaranteed down to  $-25^{\circ}$ C.



# 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)

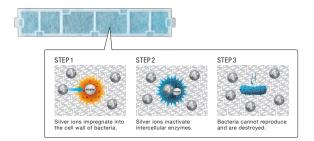
# **Compact Design**

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



# 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.



# 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

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

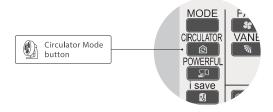




Image is for illustration purposes.

# MSZ-FT SERIES



















MSZ-FT25/35/50VG(K)

## **Outdoor Unit**



MUZ-FT25VGHZ



MUZ-FT35/50VGHZ



Remote Controller

































































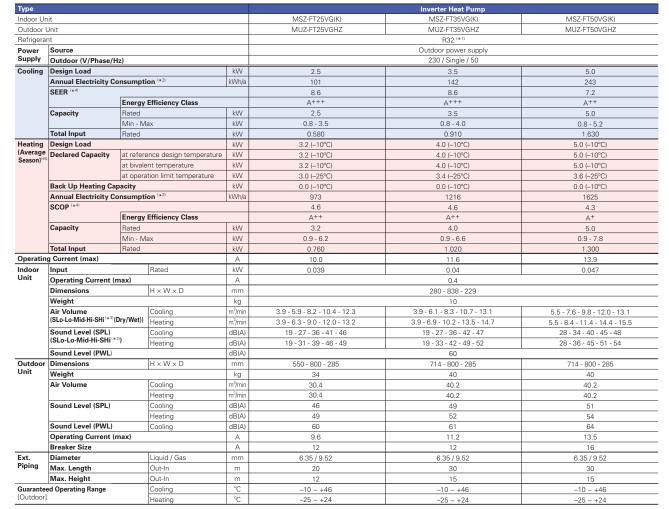












<sup>(\*1)</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This 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 R4101a is 2088 in the IPCC 4th Assessment Report.

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

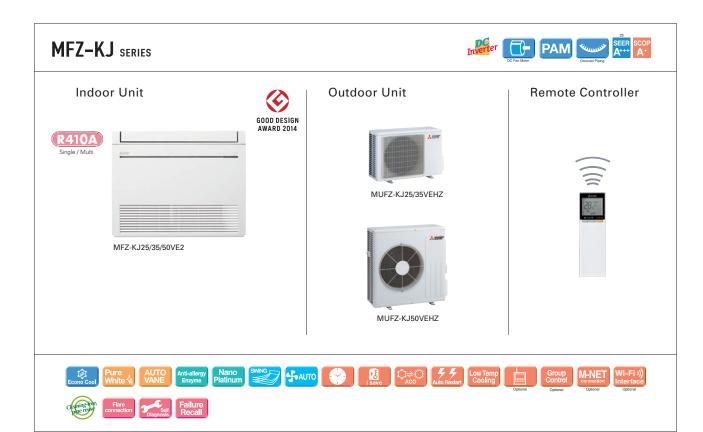
(\*3) SHI: Super High

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

(\*5) Please see page 51-52 for heating (warmer season) specifications.







Туре						Inverter Heat Pump	
Indoor Un	iit				MFZ-KJ25VE2	MFZ-KJ35VE2	MFZ-KJ50VE2
Outdoor l					MUFZ-KJ25VEHZ	MUFZ-KJ35VEHZ	MUFZ-KJ50VEHZ
Refrigerar	nt					R410A (*1)	
Power	Source					Outdoor power supply	
Supply	Outdoor (V/Phase/H	z)				230 / Single / 50	
Cooling	Design Load			kW	2.5	3.5	5.0
	Annual Electricity Co	nsumpti	on (*2)	kWh/a	102	150	266
	SEER (*4)				8.5	8.1	6.5
		Energy	Efficiency Class		A+++	A++	A++
	Capacity	Rated		kW	2.5	3.5	5.0
		Min - Ma	ЭX	kW	0.5 - 3.4	0.5 - 3.7	1.6 - 5.7
	Total Input	Rated		kW	0.540	0.940	1.410
leating	Design Load			kW	3.5	3.6	4.5
Average Season)	Declared Capacity	at refere	nce design temperature	kW	3.5	3.6	4.5
oeason)		at bivale	nt temperature	kW	3.5	3.6	4.5
		at opera	tion limit temperature	kW	1.6	2.3	3.3
	Back Up Heating Cap			kW	0.0	0.0	0.0
	Annual Electricity Co	nsumpti	on <sup>(*2)</sup>	kWh/a	1104	1158	1467
	SCOP (*4)				4.4	4.3	4.2
		Energy	Efficiency Class		A+	A+	A+
	Capacity	Rated		kW	3.4	4.3	6.0
		Min - Ma	ЭX	kW	1.2 - 5.1	1.2 - 5.8	2.2 - 8.4
	Total Input	Rated		kW	0.770	1.100	1.610
peratin	g Current (max)			Α	4.42	3.91	3.73
ndoor	Input		Rated	kW	0.016	0.016	0.038
Jnit	Operating Current (n	nax)		Α	0.17	0.17	0.34
	Dimensions		$H \times W \times D$	mm		600 - 750 - 215	
	Weight			kg	15	15	15
	Air Volume		Cooling	m³/min	3.9 - 4.9 - 5.9 - 7.1 - 8.2	3.9 - 4.9 - 5.9 - 7.1 - 8.2	5.6 - 6.7 - 8.0 - 9.3 - 10.6
	(SLo-Lo-Mid-Hi-SHi (*3) ([	Ory/Wet))	Heating	m³/min	3.9 - 5.1 - 6.2 - 7.7 - 9.7	3.9 - 5.1 - 6.2 - 7.7 - 9.7	6.0 - 7.4 - 9.4 - 11.6 - 14.0
	Sound Level (SPL)		Cooling	dB(A)	20 - 25 - 30 - 35 - 39	20 - 25 - 30 - 35 - 39	27 - 31 - 35 - 39 - 44
	(SLo-Lo-Mid-Hi-SHi (*3	")	Heating	dB(A)	19 - 25 - 30 - 35 - 41	19 - 25 - 30 - 35 - 41	29 - 35 - 40 - 45 - 50
	Sound Level (PWL)			dB(A)	49	50	56
Outdoor			$H \times W \times D$	mm	550 - 80		880 - 840 - 330
Jnit	Weight			kg	37	37	55
	Air Volume		Cooling	m³/min	31.3	31.3	45.8
			Heating	m³/min	33.6	33.6	45.8
	Sound Level (SPL)		Cooling	dB(A)	46	47	49
			Heating	dB(A)	51	51	51
	Sound Level (PWL)		Cooling	dB(A)	59	60	63
	Operating Current (n	nax)		Α	9.2	10	13.6
	Breaker Size			Α	10	12	16
xt.	Diameter		Liquid / Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
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

<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 pendio of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R410A is 2088 in the IPCC 4th Assessment Report.

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

(\*3) SHI: Super High

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

# **ZUBADAN** SERIES

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

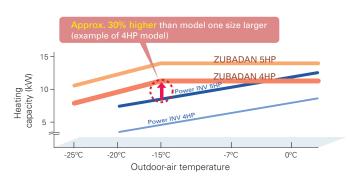


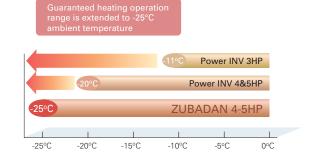
\* Units in photo are Japanese models.

European model specifications are different.

# Improved Heating Performance

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

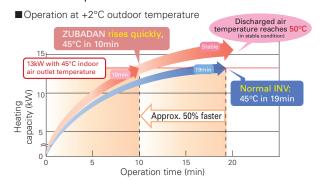


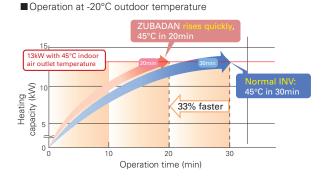


# **Enhanced Comfort**

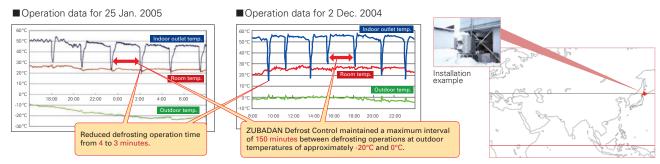
The Flash Injection circuit improves start-up and recover from the defrosting operation. A newly introduced defrost operation control also improves defrost frequency. These features enable the temperature to reach the set temperature more quickly, and contribute to maintaining it at the desired setting.

# Quick Start-up





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



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

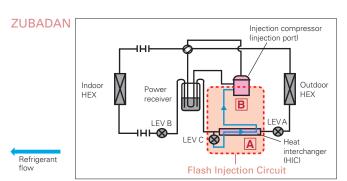


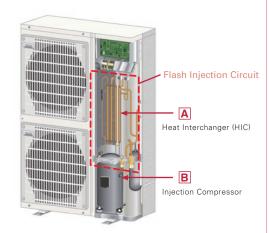
Powerful heating yet annually high energy efficiency in both cooling and heating, achieving rank A and A+.



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

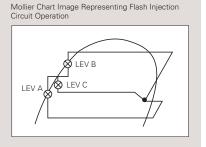
# ■Flash Injection Circuit





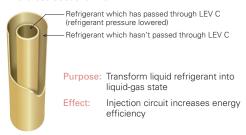
The ZUBADAN Series is equipped with Mitsubishi Electric's original Flash Injection Circuit, which is comprised of a bypass circuit and heat interchanger (HIC). The HIC transforms rerouted liquid refrigerant into a gas-liquid state to lower compression load. This process ensures excellent heating performance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



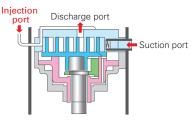
# A Heat Interchanger (HIC)

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.

## B Injection Compressor



Purpose: To increase the volume of refrigerant being circulated

Effect:

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

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

# **PLZ-SHW** SERIES





















## **Panel**

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6FALME	1	1	1	

# **Outdoor Unit**

# (R410A)



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

# Remote Controller



PLP-6EALM/PLP-6EALME









\*optional





























































Гуре					Inverter Heat Pump	
ndoor Ur	nit			PLA-Z	ZM100EA	PLA-ZM125EA
Outdoor I	Jnit			PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
Refrigera	nt				R410A*1	
ower	Source				Outdoor power supply	
Supply	Outdoor (V/Phase/H	lz)		230 / 1 / 50	400 / 3 / 50	400 / 3 / 50
Cooling	Capacity	Rated	kW	10.0	10.0	12.5
	' '	Min - Max	kW	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0
	Total Input	Rated	kW	2.857	2.857	5.000
	EER	1.11111		-	_	2.50
		EEL Rank		_	_	
	Design Load		kW	10.0	10.0	
	Annual Electricity Co	nnsumption*2	kWh/a	633	633	
	SEER*4	onsumption .	KVVII/a	5.5	5.5	
	OLLIT	Energy Efficiency Class		5.5 A	5.5 A	
eating	Capacity	Rated	kW	11.2	11.2	14.0
leating Average		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
Geason)	Total Input	Rated	kW	4.5 - 14.0 2.667	4.5 - 14.0 2.667	5.0 - 16.0 4.000
		nated	KVV			
	СОР	EEL D			-	3.50
	B. C. L. L.	EEL Rank		-	-	-
	Design Load	1	kW	12.7	12.7	
	Declared Capacity	at reference design temperature	kW	11.2 (-10°C)	11.2 (-10°C)	
		at bivalent temperature	kW	11.2 (-7°C)	11.2 (-7°C)	
		at operation limit temperature	kW	9.3 (-25°C)	9.3 (-25°C)	-
	Back Up Heating Ca	• •	kW	1.5	1.5	_
	Annual Electricity Co	onsumption*2	kWh/a	4420	4420	
	SCOP*4			4.0	4.0	
		Energy Efficiency Class		A+	A+	
peratin	g Current (max)		Α	35.5	13.5	13.5
ndoor	Input	Rated	kW	0.07	0.07	0.08
nit	Operating Current (r	nax)	Α	0.47	0.47	0.52
	Dimensions <panel></panel>	H × W × D	mm		298-840-840 <40-950-950>	
	Weight <panel></panel>		kg	26 <5>	26 <5>	26 <5>
	Air Volume [Lo-Mi2-N	/li1-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
utdoor	Dimensions	$H \times W \times D$	mm		1350 - 950 - 330 (+30)	
Jnit	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		A	35	13	13
	Breaker Size	,	A	40	16	16
	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88
vt		Out-In	m	75	75	75
ext. Piping		Out-III	1111	70		
	Max. Length	Out-In	m	20	30	20
Piping	Max. Length Max. Height ed Operating Range	Out-In Cooling* <sup>3</sup>	m °C	30 -15 ~ +46	30 -15 ~ +46	30 -15 ~ +46

<sup>\*1</sup> Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 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 based on standard test results.
\*3 Optional air protection guide is required where ambient temperature is lower than -5°C.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

# **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	✓	<b>✓</b>		
PLP-6EAJ	✓			✓
PLP-6EAJE	<b>✓</b>	<b>\</b>		✓
PLP-6EALM	<b>✓</b>		✓	
PLP-6EALME	✓	<b>~</b>	✓	

# **Outdoor Unit**

# (R410A)



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

# Remote Controller







\*optional

































































































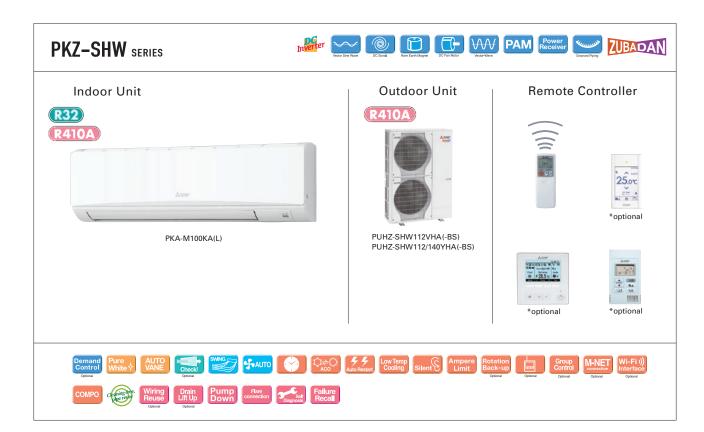
уре					Inverter Heat Pump	
ndoor Ur	it			PLA-	M100EA	PLA-M125EA
Outdoor (	Jnit			PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW140YHA
efrigera	nt				R410A*1	
ower	Source				Outdoor power supply	
upply	Outdoor (V/Phase/H	z)		230 / 1 / 50	400 / 3 / 50	400 / 3 / 50
ooling	Capacity	Rated	kW	10.0	10.0	12.5
		Min - 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	EER			=	-	2.50
		EEL Rank		-	-	-
	Design Load		kW	10.0	10.0	-
	Annual Electricity Co	onsumption*2	kWh/a	661	661	-
	SEER*4			5.3	5.3	-
		Energy Efficiency Class		A	A	-
eating	Capacity	Rated	kW	11.2	11.2	14.0
verage		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0
Season) Total Input		Rated	kW	2.793	2.793	4.000
				-	-	3.50
Design Load Declared Capacity	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 Cap	pacity	kW	1.5	1.5	_
	Annual Electricity Co	onsumption*2	kWh/a	4445	4445	_
	SCOP*4			4.0	4.0	_
		Energy Efficiency Class		A+	A+	-
peratin	g Current (max)		А	35.5	13.5	13.7
door	Input	Rated	kW	0.07	0.07	0.08
nit	Operating Current (n	nax)	Α	0.46	0.46	0.66
	Dimensions <panel></panel>	$H \times W \times D$	mm		298-840-840 <40-950-950>	
	Weight <panel></panel>		kg	24 <5>	24 <5>	26 <5>
	Air Volume [Lo-Mi2-N	/li1-Hi]	m³/min	19 - 23 - 26 - 29	19 - 23 - 26 - 29	21 - 25 - 28 - 31
	Sound Level (SPL) [L	o-Mi2-Mi1-Hi]	dB(A)	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 37 - 41 - 44
	Sound Level (PWL)		dB(A)	61	61	65
utdoor	Dimensions	$H \times W \times D$	mm		1350 - 950 - 330 (+30)	
nit	Weight		kg	120	134	134
	Air Volume	Cooling	m³/min	100	100	100
		Heating	m³/min	100	100	100
	Sound Level (SPL)	Cooling	dB(A)	51	51	51
		Heating	dB(A)	52	52	52
	Sound Level (PWL)	Cooling	dB(A)	69	69	69
	Operating Current (n	nax)	А	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
uarante	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46
Outdoor]		Heating	°C	-25 ~ +21	-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 based on standard test results.
\*3 Optional air protection guide is required where ambient temperature is lower than –5°C.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.



Туре				Inverter H	eat Pump			
Indoor Un	it			PEAD-M	100JA(L)			
Outdoor l	Jnit			PUHZ-SHW112VHA(-BS)	PUHZ-SHW112YHA(-BS)			
Refrigerar	nt			R410	DA*1			
Power				Outdoor power supply				
Supply	Outdoor (V/Phase/H	z)		VHA:230 / Single / 50,	YHA:400 / Three / 50			
Cooling	Capacity	Rated	kW	10.0	10.0			
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4			
	Total Input	Rated	kW	2.924 (2.904)	2.924 (2.904)			
	EER			-	-			
		EEL Rank		-	-			
	Design Load		kW	10.0	10.0			
	Annual Electricity Co	nsumption*2	kWh/a	729 (714)	729 (714)			
	SEER*4			4.8 (4.9)	4.8 (4.9)			
		Energy Efficiency Class		В	В			
eating	Capacity	Rated	kW	11.2	11.2			
Average Season)		Min - Max	kW	4.5 - 14.0	4.5 - 14.0			
edSUII)	Total Input	Rated	kW	3.103	3.103			
	COP EEL Rank			-	-			
				-	-			
Design Load			kW	12.7	12.7			
	Declared Capacity	at reference design temperature	kW	11.2	11.2			
		at bivalent temperature	kW	11.2	11.2			
		at operation limit temperature	kW	9.4	9.4			
	Back Up Heating Cap	pacity	kW	1.5	1.5			
	Annual Electricity Co	nsumption*2	kWh/a	4664	4664			
	SCOP*4			3.8	3.8			
		Energy Efficiency Class		A	A			
peratin	g Current (max)		Α	37.7	15.7			
door	Input [Cooling / Heating	ng] Rated	kW	0.25 (0.23) / 0.23	0.25 (0.23) / 0.23			
nit	Operating Current (n	nax)	Α	2.65	2.65			
	Dimensions	$H \times W \times D$	mm	250 - 1400 - 732	250 - 1400 - 732			
	Weight		kg	41 (40)	41 (40)			
	Air Volume [Lo-Mid-H	li]	m³/min	24.0 - 29.0 - 34.0	24.0 - 29.0 - 34.0			
	External Static Press	ure	Pa	35 / 50 / 70 / 100 / 150	35 / 50 / 70 / 100 / 150			
	Sound Level (SPL) [L	o-Mid-Hi]	dB(A)	29 - 34 - 38	29 - 34 - 38			
	Sound Level (PWL)		dB(A)	61	61			
	Dimensions	H × W × D	mm	1350 - 950 - 330 (+30)	1350 - 950 - 330 (+30)			
nit	Weight		kg	120	134			
	Air Volume	Cooling	m³/min	100.0	100.0			
		Heating	m³/min	100.0	100.0			
	Sound Level (SPL)	Cooling	dB(A)	51	51			
		Heating	dB(A)	52	52			
	Sound Level (PWL)	Cooling	dB(A)	69	69			
	Operating Current (n	nax)	А	35.0	13.0			
	Breaker Size		Α	40	16			
ĸt.	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88			
iping	Max. Length	Out-In	m	75	75			
	Max. Height	Out-In	m	30	30			
	ed Operating Range	Cooling*3	°C	-15 ~ +46	-15 ~ +46			
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 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.



Туре			_	Inverter H	oot Dumm			
Iype Indoor Ur	nit .			Inverter H PKA-M1	·			
Outdoor				PUHZ-SHW112VHA(-BS)	PUHZ-SHW112YHA(-BS)			
Refrigera				R410				
Power	Source							
Supply	Outdoor (V/Phase/Hz)			Outdoor power supply  VHA:230 / Single / 50, YHA:400 / Three / 50				
Cooling	Capacity	Rated	kW	10.0	10.0			
cooming	Jupatity	Min - Max	kW	4.9 - 11.4	4.9 - 11.4			
	Total Input	Rated	kW	2.924	2.924			
	Design Load	1.1111	kW	10.0	10.0			
	Annual Electricity Co	onsumption*2	kWh/a	673	673			
	SEER*4			5.2	5.2			
		Energy Efficiency Class		A	A			
Heating	Capacity	Rated	kW	11.2	11.2			
(Average		Min - Max	kW	4.5 - 14.0	4.5 - 14.0			
Season)	Total Input	Rated	kW	3.103	3.103			
	Design Load		kW	12.7	12.7			
	Declared Capacity	at reference design temperature	kW	11.2	11.2			
	Deciared Supacity	at bivalent temperature	kW	11.2	11.2			
		at operation limit temperature	kW	9.4	9.4			
	Back Up Heating Cap		kW	1.5	1.5			
	Annual Electricity Co		kWh/a	4664	4664			
	SCOP*4			3.8	3.8			
		Energy Efficiency Class		A	A			
Operatin	g Current (max)		А	35.6	13.6			
Indoor	Input	Rated	kW	0.08	0.08			
Unit	Operating Current (n	nax)	А	0.57	0.57			
	Dimensions <panel></panel>	H × W × D	mm	365 - 11	70 - 295			
	Weight <panel></panel>	1	kg	21	21			
	Air Volume [Lo-Mid-H	Hi]	m³/min	20 - 23 - 26	20 - 23 - 26			
	Sound Level (SPL) [L	o-Mid-Hi]	dB(A)	41 - 45 - 49	41 - 45 - 49			
	Sound Level (PWL)		dB(A)	65	65			
Outdoor	Dimensions	$H \times W \times D$	mm	1350 - 950	- 330 (+30)			
Unit	Weight	,	kg	120	134			
	Air Volume	Cooling	m³/min	100.0	100.0			
		Heating	m³/min	100.0	100.0			
	Sound Level (SPL)	Cooling	dB(A)	51	51			
		Heating	dB(A)	52	52			
	Sound Level (PWL)	Cooling	dB(A)	69	69			
	Operating Current (n	nax)	Α	35.0	13.0			
	Breaker Size		Α	40	16			
Ext.	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88			
Piping	Max. Length	Out-In	m	75	75			
	Max. Height	Out-In	m	30	30			
	ed Operating Range	Cooling*3	°C	−15 ~ +46	−15 ~ +46			
[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 CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
\*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
\*3 Optional air protection guide is required where ambient temperature is lower than –5°C.
\*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.

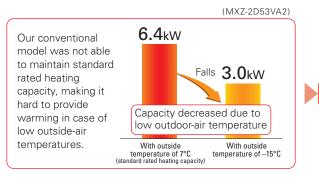
# MXZ-VAHZ SERIES

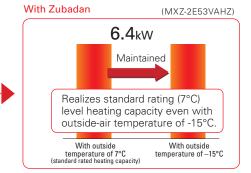
New hyper-heating MXZ allows you to create an oasis of comfort throughout your home and office in the rooms you use most, any time of the year.



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

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





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

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

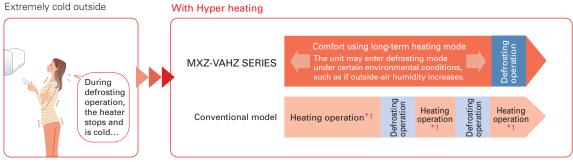
# Freeze-prevention heater standard equipment

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



# Continuous heating for long periods

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

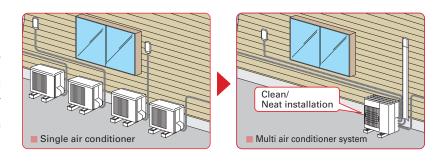


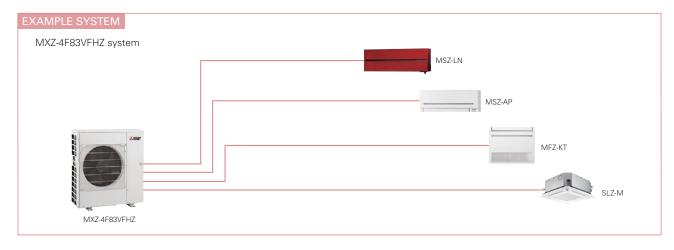
<sup>\*1:</sup> Conventional model performs continuous heating approximately 30min up to a maximum of 90min.

# One outdoor unit supports multiple indoor units.

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

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





# Freedom of combinations in cold region greatly enhanced

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





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

# MXZ-VAHZ SERIES















MXZ-2F53VFHZ



MXZ-4F83VFHZ





MXZ-4E83VAHZ



MXZ-2E53VAHZ

Туре					Inverter H	eat Pump	
Indoor Un	it				Please re	fer to*4 *5	
Outdoor U	Jnit			MXZ-2F53VFHZ	MXZ-4F83VFHZ	MXZ-2E53VAHZ	MXZ-4E83VAHZ
Refrigerar	nt			R3		R4	10A*1
ower	Source				Outdoor po	wer supply	
Supply	Outdoor (V/Phase/H	lz)			220 - 230 - 240	OV / Single / 50	
Cooling	Capacity	Rated	kW	5.3	8.3	5.3	8.3
		Min - Max	kW	1.1 - 6.0	3.5 - 9.2	1.1 - 6.0	3.5 - 9.2
	Total Input	Rated	kW	1.29	1.90	1.29	2.25
	Design Load		kW	5.3	8.3	5.3	8.3
	Annual Electricity Co	onsumption*2	kWh/a	274	398	282	447
	SEER*4,*7			6.8	7.3	6.5	6.5
		Energy Efficiency Class*4		A++	A++	A++	A++
	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 Ca	pacity	kW	0.0	0.0	0.0	1.1
	Annual Electricity Co	onsumption*2	kWh/a	2172	3286	2165	3446
	SCOP*7	SCOP*7		4.1	4.3	4.1	4.1
		Energy Efficiency Class*4		A+	A+	A <sup>+</sup>	A <sup>+</sup>
lax. Ope	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
nit	Weight		kg	61	86	61	87
	Air Volume	Cooling	m³/min	43	63	47.0	63.0
		Heating	m³/min	41	77	47.0	77.0
	Sound Level (SPL)	Cooling	dB(A)	45	55	45	53
		Heating	dB(A)	47	57	47	57
	Sound Level (PWL)	Cooling	dB(A)	55	66	55	66
	Breaker Size		Α	16	30	16	30
xt.	Diameter	Liquid / Gas	mm	6.35 × 2 / 9.52 × 2	6.35×4/12.7×1+9.52×3	6.35 × 2 / 9.52 × 2	6.35×4/12.7×1+9.52×
iping	Total Piping Length	(max)	m	30	70	30	70
	Each Indoor Unit Pip	oing Length (max)	m	20	25	20	25
	Max. Height		m	15	15	15 (10) *3	15 (10) *3
	Chargeless Length		m	30	70	20	25
	d Operating Range	Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
Outdoor]		Heating	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +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 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 CO2, over a period of 100 years. Never try to interfere with the refrigerant clicuit yourself or disassemble the product yourself and always ask a professional.

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

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

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

MX2-2F53VFHZ MS2-LN18WG2 + MS2-LN3SVG2 + MS2-LN25VG2 + MS2-LN25VG2 + MS2-LN3SVG2 + MS2-LN3SVG2

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

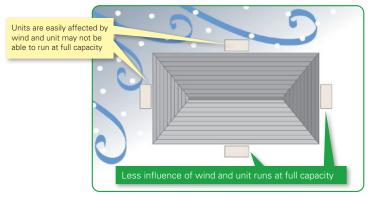
Wind and snow can significantly reduce capacity.

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.

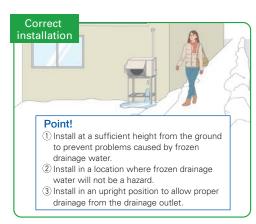


# 2

# Measures for Drainage of Water

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

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

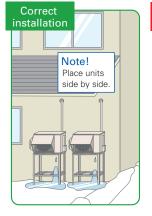


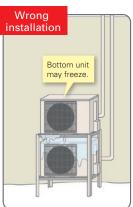




# Case 2: Multiple units are installed

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





# Unit is installed on the ground

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

[RAC/PAC/MXZ]



### Point!

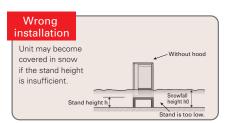
- ①Install at a position/height to prevent the unit being buried in snow\*1 and the adverse effects of frozen drainage water.\*2
- ②Install so as to avoid the effects of snow or snowdrift.
- 3 Install so as to avoid the damage from falling snow or icicles.
  - \*1 Install at a height above the highest snowfall depth.
    \*2 Even for correct installations, dripping drainage water may form an icicle which needs to be cleared away regularly to prevent a blocked drainage outlet.





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

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



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

# **A** CAUTION

# About disposal of drainage water

When the unit is installed in cold or snowy regions:

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



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

\* In the case that fitting a drain socket is absolutely necessary, steps must be taken so that the drainage water does not freeze.

For more information, please consult Mitsubishi Electric or one of its dealers/resellers.

Arrangement for snow protection hood

[RAC/PAC/MXZ]

Separately sold parts are available for some models.

Please consult Mitsubishi Electric or one of its dealers/resellers at the time of purchase for details.

# **NEW ECODESIGN DIRECTIVE**

# WHAT IS THE ErP DIRECTIVE?

The Ecodesign Directive for Energy-related Products (ErP Directive) establishes a framework to set mandatory standards for ErPs sold in the European Union (EU). The ErP directive introduces new energy-efficiency ratings across various product categories and affects how products such as computers, vacuum cleaners, boilers and even windows are classified in terms of environmental performance.

Regulations that apply to air conditioning systems of rated capacity up to 12kW came into effect as of January 1, 2013. Based the use of future-orientated technologies, Mitsubishi Electric is one step ahead of these changes, with our air conditioning systems already achieving compliance with these new regulations.

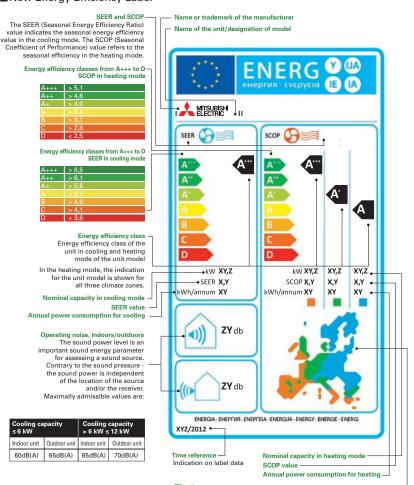
# **NEW ENERGY LABEL AND MEASUREMENTS**

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

Revisions to the measurement points and calculations of the seasonal energy efficiency ratio (SEER) and seasonal coefficient of performance (SCOP) has resulted in changes to how air conditioning systems are classified into energy-efficiency classes.

Specifically, for cooling mode, air conditioning systems must achieve at least class B. For heating mode, air conditioning systems must achieve at least a SCOP value of 3.8.

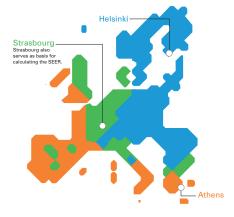
# ■New Energy Efficiency Label



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

### ■Climate Zones for Heating Mode

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



	Temperat	ure conditions			
Partial	Outdoors	Outdoors			
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		

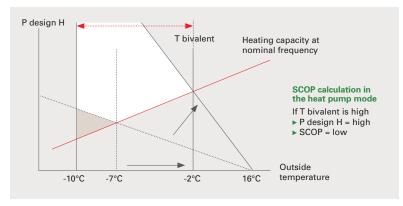
Moderate (	Strasbourg)		
	Temperat	ure conditions	
Partial	Outdoors		Indoors
load	DB	WB	DB
88%	-7°C	-8°C	20°C
54%	2°C	1°C	20°C
35%	7°C	6°C	20°C
15%	12°C	11°C	20°C

old (Helsir	ıki)		
	Tempera	ture conditions	
Partial	Outdoors		Indoors
oad	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.

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

# INVERTERS — HOW THEY WORK

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

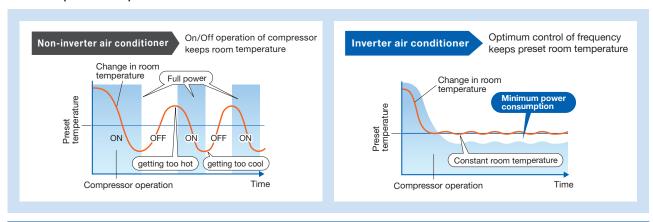
# **ECONOMIC OPERATION**

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

# TRUE COMFORT

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

### ■ Inverter operation comparison



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

# Point 1 Quick & Powerful

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

# Point 2 Room Temperature Maintained

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

# **KEY TECHNOLOGIES**

# Our Rotary Compressor

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

# Our Scroll Compressor

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

# MORE ADVANTAGES WITH MITSUBISHI ELECTRIC



# Joint Lap DC Motor

Mitsubishi Electric has developed a unique motor, called the "Poki-Poki Motor" in Japan, which is manufactured using a joint lapping technique. This innovative motor operates based on a 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.

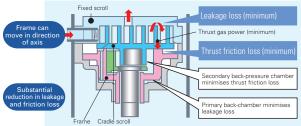




# Highly Efficient DC Scroll Compressor

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

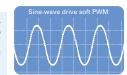
A highly efficient DC motor drives the fan of the outdoor unit. Efficiency is much higher than an equivalent AC motor.

# WW Vector-Wave Eco Inverter

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

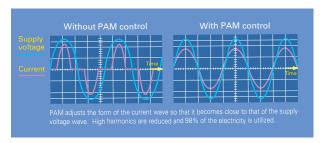
### Smooth wave pattern

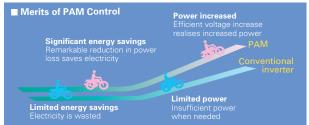
Inverter size has been reduced using insertmolding, where the circuit pattern is molded into the synthetic resin. To ensure quiet operation, soft PWM control is used to prevent the metallic whine associated with conventional inverters.



# PAM PAM (Pulse Amplitude Modulation)

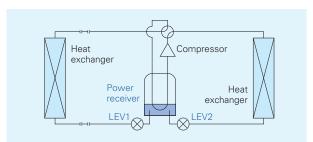
PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.





# Power Receiver and Twin LEV Control

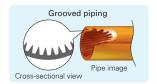
Mitsubishi Electric has developed a power receiver and twin linear expansion valves (LEVs) circuit that optimise compressor performance. This technology ensures optimum control in response to operating waveform and outdoor temperature. Operating efficiency has been enhanced by tailoring the system to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





# **Grooved Piping**

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

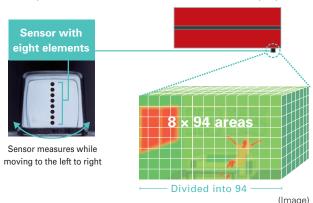


# **COMFORT**

# 3D i-see Sensor

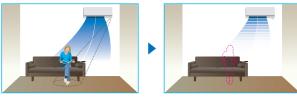
# 3D F-see Sensor for M SERIES

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.



# 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 vaert airflow and prevent body temperature from becoming excessively cooled.



Even Airflow \*LN Series only Normal swing mode



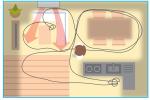
The airflow is distributed equally throughout the room, even to spaces where there is no

### **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



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

# No occupany Auto-OFF mode \*LN Series only

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





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

# Detects number of people

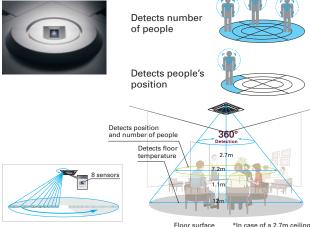
The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently. Additionally, when the area is continuously unoccupied, the system switches to a more enhanced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

# Detects people's position

Once a person is detected, the angle of the vane is automatically adjusted. Each vane can be independently 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.



In case of a 2.7m ceiling

#### Detects number of people

#### Room occupancy energy-saving mode

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

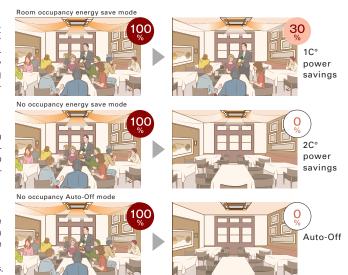
#### No occupancy energy-saving mode

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.



\*PAR-40MAA is required for each setting

#### Detects people's position

#### Direct/Indirect settings\*

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



\*PAR-40MAA or PAR-SL100A-E is required for each setting.

#### Seasonal airflow\*

#### When cooling

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

#### When heating

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

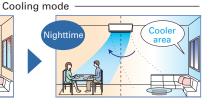


\*PAR-40MAA is required for each setting

## 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.

# Daytime Warmer area



# 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



#### Demand Function (Onsite Adjustment)

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

[Example: Power Inverter Series]

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

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

**≯**PUHZ outdoor only

#### Temperature distribution (°C) 16 18 20 22 24 26

#### **AIR QUALITY**



#### Plasma Quad Plus

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



#### Plasma Quad

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



#### **Dual Barrier Coating**

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



#### Fresh-air Intake

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



#### High-efficiency Filter

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



#### Air Purifying Filter

The filter has a large capture area and 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.

#### **AIR DISTRIBUTION**

#### Double Vane

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

## Horizontal Vane

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

## Vertical Vane

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

#### High Ceiling Mode

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

#### Low Ceiling Mode

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

#### **₩**Auto Fan Speed Mode

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

#### Circulator Mode

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

# **CONVENIENCE**

#### **CONVENIENCE**

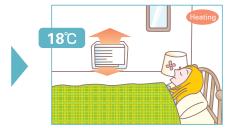


#### "i save" Mode

"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

#### Ç<del>i</del>⋛Ö ACO

#### Auto Changeover

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



#### Low-temperature Cooling

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



#### Ampere Limit Adjustment

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

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



#### 🗖 Operation Lock (Indoor unit)

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



#### Operation Lock (Outdoor unit)

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



#### Auto Restart

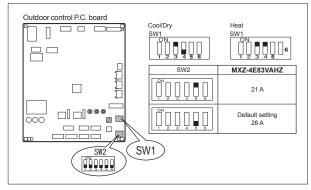
Especially useful at the time of power outages, the unit turns back on automatically when power is restored.



#### 10°C Heating

During heating operation, the temperature can be set in 1°C increments down to  $10^{\circ}$ C.

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



## Night Mode

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

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

## Low-noise Operation (Outdoor Unit)

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



#### On/Off Operation Timer

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

## **Built-in Weekly Timer Function**

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

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

	Mon.		Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
5.00	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	s to high-power opera	tion at wake-up time		
8:00 (0:00	OFF		OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00 14:00			Automatic	Midday is warmer, so the temperature is set lower				
15:00								
18:00	ON 22°	°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C
20:00 20:00			Automatically turn	Automatically raises tem match time when outsid	nperature setting to le-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	tically lowers tempera	ture at bedtime for ene	ergy-saving operation a	t night	

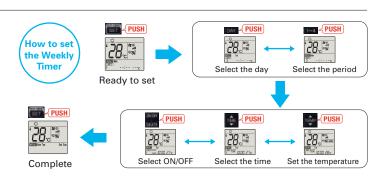
**Settings** 

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 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.

## **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.

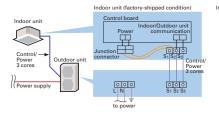
#### Wiring Reuse of Existing Wiring

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

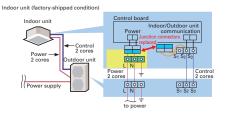
The wiring method has been improved, making it possible to use methods different from that utilized for control and power supply. Units are compatible with the dual harness control line/power line method and the separate power supply method. Using a power supply terminal kit, wire can be efficiently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

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

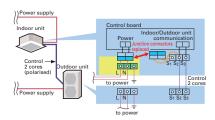
#### Single Harness Control/Power Line Method (Current method)



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



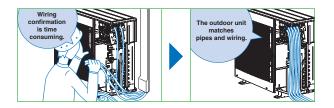
#### Separate Power Supply Method



#### Wiring/Piping Correction Function\*

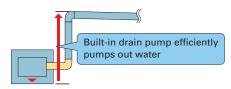
The push of a single button is all that is required to confirm that piping and wiring are properly connected. Corrections are made automatically if a wiring error is detected, eliminating the need for complicated wiring confirmation work when expanding the number of rooms served

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



#### **Drain Pump**

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





Flare connection to cooling pipe work is possible.

## Pump Down Switch

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

#### Outdoor unit control circuit board





operation automatically. (Valve in refrigerant circuit is opened/closed.)

## **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-40MAA/PAC-YT52CRA/PAC-CT01MAA

Units are compatible for use with the PAR-40MAA, PAC-YT52CRA or PAC-CT01MAA remote controller, which has a variety of management



#### System Group Control

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



#### M-NET Connection

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

#### COMPO (Simultaneous Multi-unit Operation)

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



#### **MXZ** Connection

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



#### MELCloud (Wi-Fi interface)

#### MELCloud for fast, easy remote control and monitoring

MELCloud is a Cloud-based solution for controlling air-conditioner either locally or remotely by computer, tablet or smartphone via the Internet. Setting up and remotely operating via MELCloud is simple and straight forward. All you need is wireless computer connectivity in your home or the building where the air-conditioner is installed and an Internet connection on your mobile or fixed terminal. To set up the system, the router and the Wi-Fi interface must be paired, and this is done simply and quickly using the WPS button found on all mainstream routers.

You can control and check air-conditioner via MELCloud from virtually anywhere an Internet connection is available.

That means, thanks to MELCloud, you can use much more easily and conveniently.

#### Key control and monitoring features

- Turn system on/off
- See status of operating & adjust set point
- 6 Live weather feed from your location Schedule timer - Set 7 day weekly schedule Error status
- Energy Consumption Monitoring











MELCloud uses the MAC-567IF-E interface

#### Connecting the Wi-Fi interface

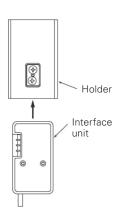
The new Wi-Fi interface MAC-567IF-E can be mounted on the wall or on the outer side of the indoor unit. For LN Series, there is a built-in Wi-Fi interface inside the indoor unit.

#### 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 holder.

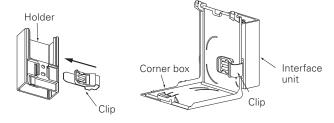


<sup>\*</sup>When mounting on the right side of the unit



#### 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.









Bottom right



Left side



Bottom left

# **CONTROL TECHNOLOGIES**

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



#### Easy To Read & Easy To Use

#### Inverted display screen

The screen background color can be set to black to suit the atmosphere of the installation location.



#### Full Dot Liquid-crystal Display Adopted

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

#### Display Example [Operation Mode]

Full Dot LCD



#### Multi-language Display



## Control panel operation in fourteen different languages

Choose the desired language, among the following languages.

English	Spanish	Italian	Turkish
French	Greek	Portuguese	Swedish
German	Russian	Polish	Czech
Hangarian	Dutch		

#### Temperature Control

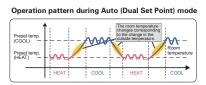


#### Two preset temperatures

When the operation mode is set to the Auto (Dual Set Point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will

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





<sup>\*</sup>Please refer to the function list on pages 193-200 for the combination of the available units.

#### **Energy-efficient Control**

#### **Operation Control Functions**



#### Precise control of power consumption

The amount of power consumed in each time period is managed so that the demand value is not exceeded. The demand control function can be set to start and finish in 5-minute units.

Additionally, the level can be adjusted to 0, 50, 60, 70, 80 or 90% of maximum capacity, and up to 4 patterns can be set per day. Airconditioning operation is automatically controlled to ensure that electricity in excess of the contracted volume is not consumed.

#### ■Setting pattern example

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

# Auto-return

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

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

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

#### Auto-off Timer

## Turns heating/cooling off automatically after preset time elapses

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

Recommended for Meeting room Changing room

#### Night Setback

## Keep desired room temperatures automatically

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

#### Operation Lock

## Fixed temperature setting promotes energy savings

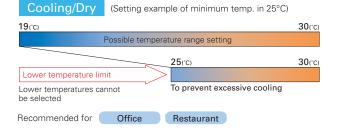
In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous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

Recommended for Office School Public hall
Hospital Computer server facility

#### Temperature Range Restriction

# 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



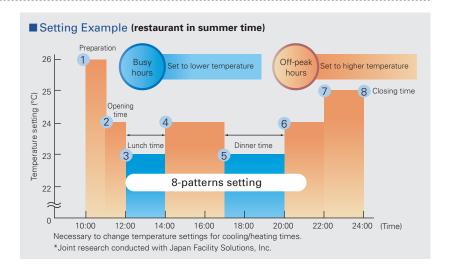
#### Weekly Timer

#### 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 in use



# **CONTROL TECHNOLOGIES**

#### 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)

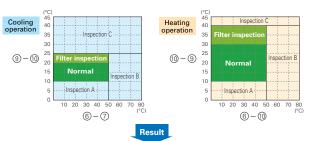
	Compressor	6	OU TH4 temp. (°C)	
1	COMP. current (A)	OU TH6 temp. (°C)		
2	COMP. run time (Hr)	OU TH7 temp. (°C)		
3	COMP. ON/OFF (times)	Indoor Unit		
4	COMP. frequency (Hz)	(9) IU air temp. (°C)		
	Outdoor Unit		IU HEX temp. (°C)	
(5)			IU filter operating time* (Hr)	

<sup>\*</sup>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.

		ltem
Cooling	oling	(⑥ OU TH4 temp.) – (⑦ OU TH6 temp.)
Cooling		(⑨ IU air temp.) – (⑩ IU HEX temp.)
Harden o	Temp. difference	(⑥ OU TH4 temp.) – (⑩ IU HEX temp.)
Heating	(1 IU HEX temp.) – (9 IU air temp.)	



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

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

  \* The above graphs are based on trial data. Results may vary depending on installation/temperature
- The above graphs are based on trial data. Results may vary depending on installation/temperature conditions.
   Stable operation may not be possible under the following temperature conditions:

   In cooling mode when the outdoor induction temperature is over 40°C or the indoor induction temperature is below 23°C.
   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.



#### 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.



#### 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.



#### Password for initial settings

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

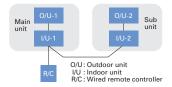
#### Rotation\*, Back-up\* and 2nd Stage Cut-in Functions\* (PAR-40MAA)

#### (1) Rotation and Back-up Functions

#### **Function Outline**

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

#### System Image



#### (2) 2nd Stage Cut-in Function

#### **Function Outline**

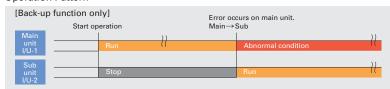
- Number of units operating is based on room temperature and predetermined settings.
- When room temperature rises above the desired setting, the standby unit starts (2-unit operation).
- When the room temperature falls 4°C below the predetermined setting, the standby unit stops (1unit operation).

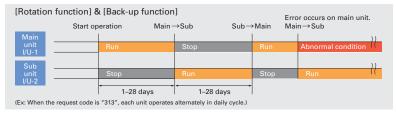
#### System Constraint

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

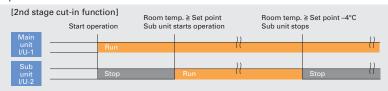
\*PUZ/PUHZ only

#### Operation Pattern





#### Operation Pattern





#### **Backlit LCD**

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

#### Flat Back

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

#### Vane Angle Setting

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

# Pressing the 📆 button will switch the vane direction.



# Flat back 120mm (4-23/32 in 14-23/32 in 14-5mm (9/16 in)

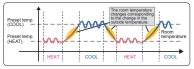
MITSUBISH ELECTRIC

#### **Dual Set Point**

#### Two preset temperatures

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

#### Operation pattern during Auto (Dual Set Point) mode



- \*Please refer to the function list on pages 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.

# **CONTROL TECHNOLOGIES**

**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



# 3.5 inch/HVGA Full Color LCD



**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 screen.



#### 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 onlyavailable 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 to the room.





#### 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.

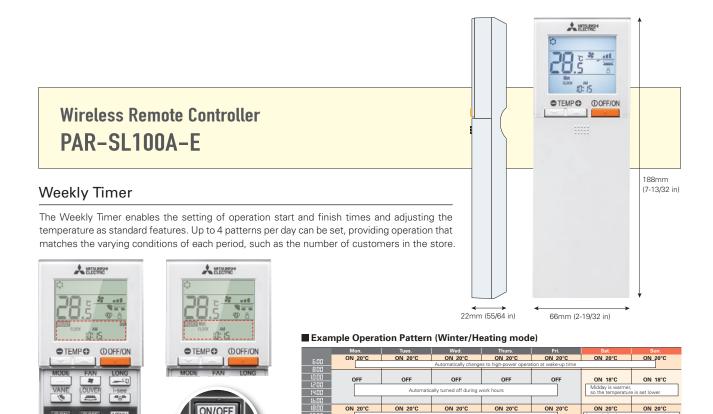


#### Multilingual support

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



# **CONTROL TECHNOLOGIES**



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

#### Backlight

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

**NEEKLY** @

FDIT

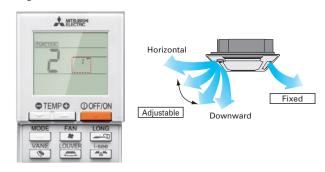




#### Individual Vane Settings

ON 18°C

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



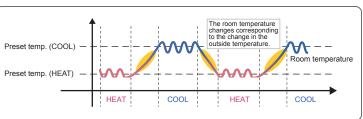
#### **Dual Set Point**

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





#### Operation pattern during Auto (Dual Set Point) mode



\* Only available for compatible models.

#### Battery Replacement Sign



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

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

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





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





\*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> š
Mode	MODE	Cool Dry Heat Fan Auto Dual set point  *Dual Set Point function not operational first use.
Fan speed	FAN	4-Speed Auto
Vane angle	VANE 🧖	5-step Swing Auto
3D i-see Sensor	i-see	Direct Indirect
Send sign		*
Battery replacement sign		
Function setting		[FUNCTION]
Test run		TEST
Self check		(CHECK)
Not available		N/A

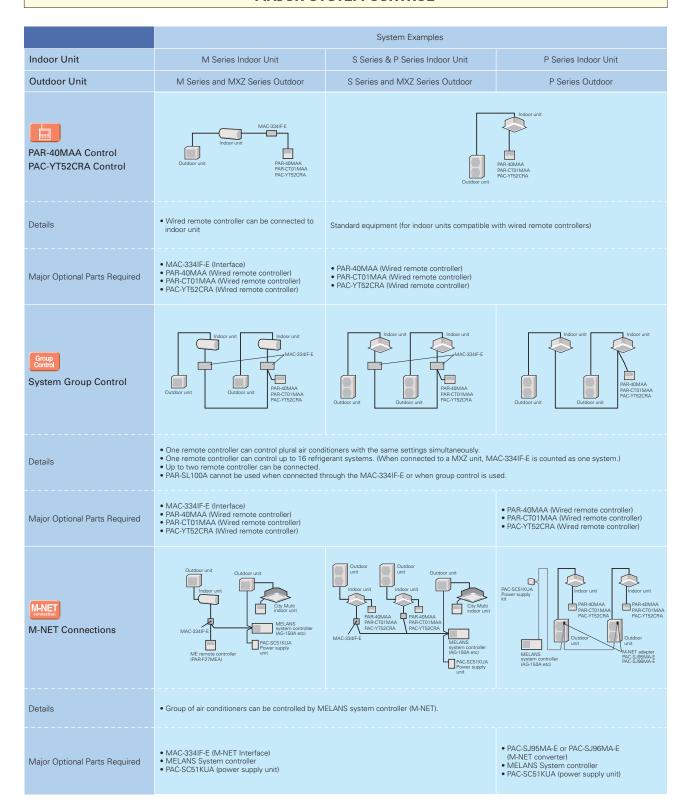
<sup>\*</sup>This remote controller is only compatible with the following models: SLZ-M15/25/35/50/60FA, PLFY-P15/20/25/32/40/50VFM-E1, PLA-ZM/RP35/50/60/71/100/125/140EA, PLFY-P20/25/32/40/50/63/80/100/125VEM-E

<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

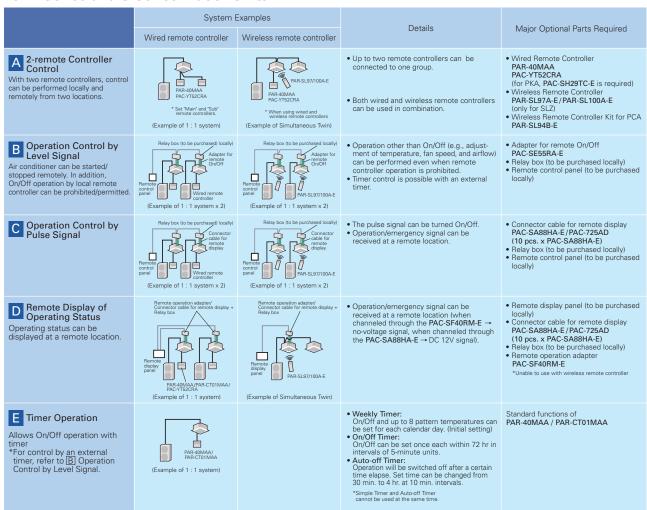


#### **OTHERS**

#### 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,  [ ] and [ ] can be used in combination)	MAC-334IF-E Switch  Goutdoor unit Switch  Gutdoor unit Switch	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.  [ ] and [ ] can be used in combination)	MAC-334IF-E Power supply Indoor unit Resustance LED  Outdoor unit Supply  Outdoor unit Supply  Outdoor unit Supply  Remote monitor 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.	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



# **FUNCTION LIST (1)**

Category	Icon				M SERIES				
	Indoor unit	MSZ-LN18/25/35/ 50/60VG2 (W)(V)(R)(B)	MSZ-FT25/35/50VG	MSZ-AP15/20VG	MSZ-AP25/35/42/ 50/60/71VG	MSZ-EF18/22/25/35/ 42/50VG(W)(B)(S)	MSZ-BT20/25/35/50VG	MSZ-HR25/35/ 42/50/60/71VF	
	Outdoor unit	MUZ-LN	MUZ-FT	MU	Z-AP	MUZ-EF	MUZ-BT	MUZ-HR	
echnology	DC Inverter	•	•	•	•	•	•	•	
	Joint Lap DC Motor	•	•	•	•	•	•	•	
	Reluctance DC Rotary Compressor								
	Heating Caulking (Compressor)	•	•	•	•	•	•	•	
	DC Fan Motor	•	•	•	•	•	•		П
	PAM (Pulse Amplitude Modulation)	•	•	•	•	•	•	•	
	Power Receiver and Twin LEV Control								T
	Grooved Piping	•	•	•	•	•	•	•	
i-see Sensor	Felt Temperature Control (3D i-see Sensor)							-	т
	AREA Temperature Monitor	•							
Energy	Econo Cool Energy-saving Feature		•	•	•	•	•	•	т
Saving	Standby Power Consumption Cut	•	•	•	•	•	•		
Air Quality	Plasma Quad Plus	•							
	Plasma Quad								
	Dual Barrier Coating	•							
	Silver-ionized Air Purifier Filter	Opt	•		Opt	•	Opt	Opt	
	Air Purifying Filter	Орг	•		Ф	•	Ф	Орг	$\vdash$
Air	Double Vane	•							$\vdash$
Distribution	Horizontal Vane	•	•	•	•	•	•	•	-
	Vertical Vane	•	•	•	•				$\vdash$
	High Ceiling Mode								┢
	Auto Fan Speed Mode	•	•	•	•	•	•	•	$\vdash$
	Circulator Mode					•			-
Convenience		•	•						$\vdash$
Convenience	On/off Operation Timer	•	•	•	•	•	•	•	
	"i save" Mode	•	•	•	•	•	•	•	$\vdash$
	Auto Changeover	•	•	•	•	•	•	•*1	┡
	Auto Restart	•	•	•	•	•	•	•	$\vdash$
2	Low-temperature Cooling	•	•	•	•	•	•	•	
	10°C Heating	•	•	•	•		•	•	_
	Low-noise Operation (Outdoor Unit)								_
	Night Mode	•	•	•	•		•		<u> </u>
	Ampere Limit Adjustment								
	Operation Lock (Indoor)	•	•	•	•		•	•	╙
	Operation Lock (Outdoor)								
	Built-in Weekly Timer Function	•	•	•	•	•			┖
System Control	PAR-40MAA Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	PAR-CT01MAA Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	PAC-YT52CRA Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	Centralised On/Off Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	System Group Control *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	M-NET Connection *3	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	Wi-Fi Interface	•	Opt	Opt	Opt	Opt	Opt	Opt	
	Energy Consumption Monitoring through MELCloud								
Installation	Cleaning-free Pipe Reuse	•	•	•	•	•	•	•	
	Wiring/Piping Correction Function								
	Drain Pump								
	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.

12 For the possible connectivity of MXZ outdoor units and indoor units, please refer to the list on pages 115-116 for details.

13 Please refer to "System Control" on pages for details.

14 When connected to MXZ outdoor units, the outdoor operating sound will not change.

		I		M si	ERIES				
MSZ-FH25/35/ 50VE2	MSZ-SF25/35/ 42/50VE3	MSZ-GF60/71VE2	MSZ-WN25/35VA	MSZ-DM25/35VA	MSZ-HJ25/35/50VA	MSZ-HJ60/71VA	MFZ-KJ25/35/50VE2	MFZ-KT25/35/ 50/60VG	MLZ-KP25/35/50VF
MUZ-FH	MUZ-SF	MUZ-GF	MUZ-WN	MUZ-DM	MUZ-HJ	MUZ-HJ	MUFZ-KJ	SUZ-M	SUZ-M
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
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•	Opt	Opt					•	•	Opt
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•	•	•					•	•	•
•	•	•					●*1	●*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	Opt	Opt
Opt	Opt	Opt		Opt			Opt	Opt	Opt
Opt	Opt	Opt		Opt			Opt	Opt	Opt
Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt
•	•	•	•	•	•	•	•	•	•
									•
									•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
					The figures listed.	in the table are "only w	hen combined with an ou	itdoor unit with the app	ropriate capacity range".

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

# **FUNCTION LIST (2)**

ategory	Icon			S sı	ERIES		
	Log Indoor unit  Outdoor unit		SLZ-M15/25	35/50/60FA *4		SEZ-M25/35	/50/60/71DA(L)
	Outdoor unit	SUZ-M	SUZ-KA	PUZ-ZM	PUHZ-ZRP	SUZ-M	SUZ-KA
chnology	DC Inverter	•	•	•	•	•	•
	Joint Lap DC Motor	•	•			•	•
	Magnetic Flux Vector Sine Wave Drive			•	•		
	Reluctance DC Rotary Compressor	•	•			•	•
	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			•	•		
	Grooved Piping	•	•	•	•	•	•
i-see Sensor	Felt Temperature Control (3D i-see Sensor)	Opt	Opt	Opt	Opt		
	AREA Temperature Monitor	Opt	Opt	Opt	Opt		
Energy Saving	Demand Function	100	191	0.7	100		
Attractive	Pure White	•	•	•	•		
	Auto Vane	•	•	•	•		
Air Quality	Fresh-air Intake	•	•	•	•		
	High-efficiency Filter						
	Oil Mist Filter						
	Long-life Filter	•	•	•	•		
	Filter Check Signal	•	•	•	•		
Air							
Distribution	Horizontal Vane	•	•	•	•		
	Vertical Vane						
	High Ceiling Mode	•	•	•	•		
	Low Ceiling Mode	_	_	_	-	_	
	Auto Fan Speed Mode	•	•	•	•	•	•
Convenience	On/off Operation Timer	•	•	•	•	•	•
	Auto Changeover	•	•	•	•	•	•
	Auto Restart	•	•	•	•	•	•
	Low-temperature Cooling	•	•	•	•	•	•
2	Low-noise Operation (Outdoor Unit)			•	•		
	Ampere Limit Adjustment			60-140V	60-140V		
•	Operation Lock						
	Rotation, Back-up and 2nd Stage Cut-in Functions			•	•		
	Dual Set Point *3			•	•		
System Control	PAR-40MAA Control *1	Opt	Opt	Opt	Opt	Opt	Opt
CONTRIO	PAR-CT01MAA Control *1	Opt	Opt	Opt	Opt	Opt	Opt
	PAC-YT52CRA Control *1	Opt	Opt	Opt	Opt	Opt	Opt
	Centraliesd On/Off Control *1	Opt	Opt	Opt	Opt	Opt	Opt
	System Group Control *1	Opt	Opt	Opt	Opt	Opt	Opt
	M-NET Connection *1	Opt	Opt			Opt	Opt
	COMPO *2			71-140	71-140		
	Energy Consumption Monitoring through MELCloud						
Installation	Cleaning-free Pipe Reuse	•	•	•	•	•	•
	Reuse of Existing Wiring						
	Wiring/Piping Correction Function						
	Drain Pump	•	•	•	•	Opt	Opt
	Pump Down Switch	_				100	
	Flare Connection	•	•	•	•	•	•
Maintenance	Self-Diagnosis Function (Check Code Display)	•	•	•	•	•	•
		_	_	_	_		_

<sup>\*1</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-40MAA, PAC-YT52CRA, PAR-SL100A-E.
\*4 SLZ-M15 can be connected with R32 MXZ only.

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

Category		Icon							P se	RIES				
			nation	Indoor unit	PLA-ZM35	5/50/60/71/100/	125/140EA			PLA-M35/	/50/60/71/100/1	125/140EA		
			Combination	Outdoor unit	PUHZ-SHW	PUZ-ZM	PUHZ-ZRP	PUHZ-SHW	PUZ-ZM	PUHZ-ZRP	SUZ-M	SUZ-KA	PUZ-M	PUHZ-P
Technology	y	DC Inverter			•	•	•	•	•	•	•	•	•	•
		Joint Lap DC M	lotor			35-71	35-71		35-71	35-71	•	•	100	100
		Magnetic Flux Ve	ector :	Sine Wave Drive	•	•	•	•	•	•			•	•
		Reluctance DC R	Rotary	Compressor		35-71	35-71		35-71	35-71	•	•	100-140	100-140
		Highly Efficient D	C Sc	roll Compressor	•	100-250	100-250	•	100-250	100-250			200-250	200-250
		Heating Caulkin	ng (C	Compressor)		35-71	35-71		35-71	35-71	•	•	100	100
		DC Fan Motor			•	•	•	•	•	•	•	•	•	•
		Vector-Wave Ed	co In	verter	•	•	•	•	•	•			•	•
		PAM (Pulse Am			•	35-140	35-140	•	35-140	35-140	•	•	100-140V	100-140V
		Power Receiver a	_		•	35-250	35-140		35-250	35-140			100-250	100-140
		Grooved Piping		WIII EEV CONGO	•	33-230	33-140	•	03-230	33-140	•	•	100-230	100-140
i-see S	Soncor			ol (3D i-see Sensor)										
1-566.3	5611501				Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
-	· Cerri	AREA Temperat		IVIONITOF	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
l —		Demand Function	on		Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
Attracti	tive	Pure White			•	•	•	•	•	•	•	•	•	•
		Auto Vane			•	•	•	•	•	•	•	•	•	•
Air Qua	ality	Fresh-air Intake	)		•	•	•	•	•	•	•	•	•	•
		High-efficiency	Filte	r	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Oil Mist Filter												
		Long-life Filter			•	•	•	•	•	•	•	•	•	•
		Filter Check Sig	gnal		•	•	•	•	•	•	•	•	•	•
Air		Horizontal Vane	9		•	•	•	•	•	•	•	•	•	•
Distribu	ution	Vertical Vane												
		High Ceiling Mo	ode		•	•	•	•	•	•	•	•	•	•
		Low Ceiling Mo	de		•	•	•	•	•	•	•	•	•	•
		Auto Fan Speed		nde	•	•	•	•	•	•	•	•	•	•
Conveni	nience	On/off Operation			•	•	•	•	•	•	•	•	•	•
		Auto Changeov			•	•	•	•	•	•	•	•	•	•
		Auto Changeov Auto Restart	CI		•	•	•	•	•	•	•	•	•	•
			0											
		Low-temperatur			•	•	•	•	•	•	•	•	•	•
Functions		Low-noise Oper		· · · · · · · · · · · · · · · · · · ·	•	60-140V	60-140V	•	60-140V	60-140V			•	•
innct		Ampere Limit A	-	tment	112/140	60-140V 200/250	200/250	112/140	60-140V 200/250	60-140V 200/250				
"		Operation Lock												
		Rotation, Back-up and	d 2nd	Stage Cut-in Functions	•	•	•	•	•	•			•	•
		Dual Set Point *	*4			•	•		•	•			•	•
System Contro		PAR-40MAA Co	ontro	l *1	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Contro	,,	PAR-CT01MAA	Cor	ntrol *1	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		PAC-YT52CRA	Con	itrol *1	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Centraliesd On/	Off (	Control *1	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		System Group (	Cont	rol *1	•	•	•	•	•	•	Opt	Opt	•	•
		M-NET Connec	tion	*1	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		COMPO *2			•	71-250	71-250	•	71-250	71-250			•	•
		Energy Consumption	Monito	oring through MELCloud										
Installa	ation	Cleaning-free P			•	•	•	•	•	•	•	•	•	•
		Reuse of Existin			Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt
		Wiring/Piping C	_		Op.	Sp.	25,	250	Op.	Sp.			- Pr	Jp.
		Drain Pump	20		<b>●</b> *3	<b>●</b> *3	<b>●</b> *3	<b>●</b> *3	<b>●</b> *3	<b>●</b> *3	<b>●</b> *3	•*3	<b>*</b> 3	<b>●</b> *3
		Pump Down Sw	vitch		•	•	•	•	•	9			•	•
											-			
		Flare Connection		Shook Code Dississ	•	•	•	•	•	•	•	•	•	•
Mainter	nance	Self-Diagnosis Funct			•	•	•	•	•	•	•	•	•	•
		Failure Recall F	-unct	tion	•	•	•	•	•	•	•	•	•	•

<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-40MAA, PAC-YT52CRA, PAR-SL100A-E.

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

# **FUNCTION LIST (2)**

Category	Icon								P SERIES							
,		Indoor unit		PEAD	-M35/50/60/7	1/100/125/14	0JA(L)		PEAD- M35/50/60/ 71/JA(L)		PEA-M	200/250LA		PKA-M35	5/50LA(L)	
	Combination	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	
Technology	DC Inverter		•	•	•	•	•	•	•	•	•	•	•	•	•	
	Joint Lap DC Motor			35-71	35-71	100	100	•	•					35-71	35-71	
	Magnetic Flux Vector Si	ine Wave Drive	•	•	•	•	•			•	•	•	•	•	•	
	Reluctance DC Rotary C			35-71	35-71	100-140	100-140	•	•					35-71	35-71	
	Highly Efficient DC Scro		•	100-250	100-250	200/250	200/250			•	•	•	•	100-200	100-200	
	Heating Caulking (Co			35-71	35-71	100	100	•	•					35-71	35-71	
	DC Fan Motor	F /	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Vector-Wave Eco Inve	erter	•	•	•	•	•			•	•	•	•	•	•	
	PAM (Pulse Amplitude		•					•	•							
	Power Receiver and Twi			35-140	35-140	100-140V	100-140V							35-140	35-140	
		III LEV CONTION	•	35-250	35-140	100-250	100-140			•		•		35-200	35-140	
0	Grooved Piping	(OD : O)	•	•	•	•	•	•	•	•	•	•	•	•	•	
i-see Sensor	Felt Temperature Control (															
	AREA Temperature M	Ionitor														
	Demand Function		Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt	Opt	Opt	
Attractive	Pure White													•	•	
	Auto Vane													•	•	
Air Quality	Fresh-air Intake															
	High-efficiency Filter															
	Oil Mist Filter															
	Long-life Filter		•	•	•	•	•	•	•	Opt	Opt	Opt	Opt			
	Filter Check Signal		•	•	•	•	•	•	•	•	•	•	•	Opt	Opt	
Air	Horizontal Vane													•	•	
Distribution	Vertical Vane															
	High Ceiling Mode															
	Low Ceiling Mode															
	Auto Fan Speed Mode	e	•	•	•	•	•	•	•	•	•	•	•	•	•	
Convenience	On/off Operation Time	er	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Auto Changeover		•	•	•	•	•	•	•	•	•	•	•	•	•	
	Auto Restart		•	•	•	•	•	•	•	•	•	•	•	•	•	
	Low-temperature Coo	oling	•	•	•	•	•	•	•	•	•	•	•	•	•	
σ	Low-noise Operation (		•	•	•	•	•			•	•	•	•	•	•	
Functions	Ampere Limit Adjustm		112/140	60-140V	60-140V						•			71-140V	71-140V	
Ţ.	Operation Lock		112/140	200/250	200/250									200	200	
	Rotation, Back-up and 2nd St	tage Cut-in Functions	•	•	•	•	•			•		•		•	•	
	Dual Set Point *4	tage out in ranctions		•	•	•	•			•	•	•	•	•	•	
Custom	PAR-40MAA Control *	*1	0.1					0.1	0.1							
System Control			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	PAR-CT01MAA Contr		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	PAC-YT52CRA Contro		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	Centraliesd On/Off Co		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		Opt		Opt	Opt	
	System Group Contro		•	•	•	•	•	Opt	Opt	•	•	•	•	Opt	Opt	
	M-NET Connection *1	ı	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	
	COMPO *2		•	71-250	71-250	•	•			•		•		71-200	71-200	
	Energy Consumption Monitoring	ing through MELCloud														
Installation	Cleaning-free Pipe Re	euse	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Reuse of Existing Wir	ring	Opt	Opt	Opt	Opt	Opt							Opt	Opt	
	Wiring/Piping Correcti	ion Function														
	Drain Pump		●*3	<b>•</b> *3	●*3	●*3	●*3	●*3	●*3	Opt	Opt	Opt	Opt	Opt	Opt	
	Pump Down Switch		•	•	•	•	•			•	•	•	•	•	•	
	Flare Connection		•	•	•	•	•	•	•	•	•	•	•	•	•	
Maintenance	Self-Diagnosis Function (Che	eck Code Display)	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Failure Recall Function	on	•	•	•	•	•	•	•	•	•	•	•	•	•	
						_		_	_	_	_	_	_			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-40MAA, PAC-YT52CRA, PAR-SL100A-E.

									P SERIES							
PKA-M3	5/50LA(L)		PKA	-M60/71/100h	(A(L)			PCA		71/100/125/14	l0KA		PCA-N	M71HA	RP71	6A- /100/ 40KA
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	PUHZ -P
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100	100		60/71	60/71	100	100	35-71	35-71	100	100	•	•	71	71	71	100
•	•	•	•	•	•	•	•	•	•	•			•	•	•	•
•	100-140		60/71	60/71	100-140	100-140	35-71	35-71	100-140	100-140	•	•	71	71	71	100-140
	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
			60/71	60/71	100	100	35-71	35-71	100	100	•	•	71	71	71	100
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•			•	•	•	•
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	100-140V
100-140	100-140	•	60-250	60-140	100-250	100-140	35-250	35-140	100-250	100-140			71-250	71-140	71-140	100-140
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt
•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
•	•	•	•	•	•	•	•	•	•	•	•	•				
							•	•	•	•	•	•	•	•		
							Opt	Opt	Opt	Opt	Opt	Opt				
													•	•		
							•	•	•	•	•	•			•	•
Opt	Opt	Opt	Opt	Opt	Opt	Opt	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•				
															•	•
							•	•	•	•	•	•				
							•	•	•	•	•	•				
•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•			•	•	•	•
		112/140	60-140V 200/250	60-140V 200/250			60-140V 200/250	60-140V 200/250						71-140V 200/250	71-140V 200/250	
•	•	•	•	•	•	•	•	•	•	•			•	•		
•	•		•	•	•	•	•	•	•	•						
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Opt	Opt	Opt	Opt	Opt	Opt	Opt	•	•	•	•	Opt	Opt	•	•	Opt	Opt
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
•	•	•	71-250	71-250	•	•	71-250	71-250	•	•			71-250	71-250	71-250	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt			Opt	Opt	Opt	Opt
- 1	- 10-1	- 10.5	- 6.7	- 10.0	- 6.7		- 10.7	- 1-1	- 6.7	- 6.7			- 11-1	- 11-7		
Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt				
•	•	•	•	•	•	•	•	•	•	•	4	6.5	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	-											ted, the featur				

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)**

ategory	Icon							MXZ s	SERIES						
,	Series			Std			Lo-			2i	Lo-	-std		Std	
	301100			MXZ-VA(2)				Z-VA		Z-VA		Z-VF		MXZ-VF3	
	Outdoor unit	2D	3E	4E	5E	6D	2DM	3DM	2E	4E	2HA	ЗНА	2F	3F	4F
nnology	DC Inverter	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Joiint Lap DC Motor	•	•	•	•		•	•	•		•	•	•	•	•
	Magnetic Flux Vector Sine Wave Drive														
	Reluctance DC Rotary Comperssor			83	•	•									
	Highly Efficient DC Scroll Compressor			00											
	Heating Caulking (Compressor)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	DC Fan Motor	•	•	•	•	•	•	•		•	•			•	•
	Vector-Wave Eco Inverter			•	•	•	_	_	•		_	•	•	•	•
	PAM (Pulse Amplitude Modulation)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Power Receiver and Twin LEV Control		•	72				•				•		•	•
T .	Grooved Piping	•	•	•	•	•	•	•	•	•	•	•	•	•	•
i-see Sensor	Felt Temperature Control (3D i-see)														
	AREA Temperature Monitor														
Energy Saving	Demand Function														
Attractive	Pure White														
	Auto Vane														
Air Quality	Fresh-air Intake														
	High-efficiency Filter														
	Oil Mist Filter														
	Filter Check Signal														
Air	Horizontal Vane														
Distribution	Vertical vane														
	High Ceiling Mode														
	Auto Fan Speed Mode														
Convenience	On/off Operation Timer														
	Auto Changeover	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Auto Restart	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Low- temperature Cooling	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	10°C Heating	<b>*</b> 1	•*1	•*1	*1	•*1			•*1	•*1			•1	<b>0</b> *1	•*1
	Low-noise Operation (Outdoor)	•					•	•			•	•		•	•
	Night Mode														
	Ampere Linit Adjustment			83	•	•			•	•					
	Operation Lock (Indoor)														
	Operation Lock (Outdoor)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Built-in Weekly Timer Function														
	Rotation, Back-up abd 2nd Stage Cut-in Functions														
	Dual Set Point														
	PAR-40MAA Control	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
System								Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
Control	PAR-CT01MAA Cotrol	Opt	Opt	Opt	Opt	Opt	Opt	Орі							Opt
Control		Opt Opt	Opt Opt	Opt	Opt Opt	Opt Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Op.
Control	PAR-CT01MAA Cotrol								Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt	Opt	Opt
Control	PAR-CT01MAA Cotrol PAC-YT52CRA Control	Opt	Opt	Opt	Opt	Opt	Opt	Opt							
System Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control	Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
System Control	PAR-CT01MAA Cotrol PAC-YT52CRA Control Centralised On/off Control System Group 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
System Control	PAR-CT01MAA Cotrol PAC-YT52CRA Control Centralised On/off Control System Group Control M-NET Connection	Opt Opt	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 Control	PAR-CT01MAA Cotrol PAC-YT52CRA Control Centralised On/off Control System Group Control M-NET Connection Wi-Fi Interface	Opt Opt	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 Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud	Opt Opt	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 Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt Opt Opt (83)	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt  Opt	Opt Opt Opt  **2	Opt Opt Opt	Opt Opt Opt
Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection  Cleaning-free Pipe Reuse	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt Opt Opt (83)	Opt Opt Opt Opt	Opt Opt 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 Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection  Cleaning-free Pipe Reuse  Reuse of Existing Wiring	Opt Opt Opt Opt	Opt Opt Opt Opt Opt	Opt Opt Opt Opt Opt (83)	Opt Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt  **2  **3	Opt Opt  **2  **3	Opt	Opt Opt  **2  **3	Opt Opt
Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection  Cleaning-free Pipe Reuse  Reuse of Existing Wiring  Wiring/Piping Correction Function	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt Opt Opt (83)	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt Opt	Opt Opt  Opt	Opt Opt Opt  **2	Opt Opt Opt	Opt Opt Opt
Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection  Cleaning-free Pipe Reuse  Reuse of Existing Wiring  Wiring/Piping Correction Function  Drain Pump	Opt Opt Opt Opt	Opt	Opt Opt Opt Opt (83)	Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt  Opt	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt  **2  **3	Opt Opt	Opt	Opt Opt	Opt Opt  0'2 0'3
Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface  Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection  Cleaning-free Pipe Reuse  Reuse of Existing Wiring  Wiring/Piping Correction Function  Drain Pump  Pump Down Switch	Opt Opt Opt Opt	Opt	Opt Opt Opt Opt (83)  ••2	Opt Opt Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt Opt Opt	Opt Opt Opt	Opt Opt Opt  Ott	Opt Opt Opt Opt Opt	Opt Opt Opt Opt	Opt	Opt Opt Opt  ••2 ••3	Opt Opt	Opt	Opt Opt
Control	PAR-CT01MAA Cotrol  PAC-YT52CRA Control  Centralised On/off Control  System Group Control  M-NET Connection  Wi-Fi Interface Energy/Consumption Monitaring trouth MEL Cloud  COMPO  MXZ Connection  Cleaning-free Pipe Reuse Reuse of Existing Wiring  Wiring/Piping Correction Function  Drain Pump  Pump Down Switch  Flare Connection	Opt Opt Opt Opt	Opt	Opt Opt Opt Opt (83)	Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt Opt  Opt	Opt Opt Opt Opt	Opt Opt Opt Opt	Opt Opt  **2  **3	Opt Opt	Opt	Opt Opt	Opt Opt  0'2 0'3

<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.

			MXZ SERIES		
		Std		Hyper H	
		MXZ-VF		MXZ-	
	4F	5F	6F	2F	4F
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	●*1	●*1	●*1	<b>●</b> *1	●*1
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	•*3	<b>•</b> *3	•*3	•*3	<b>•</b> *3
	•	•	•	•	•
	l				
l	The figures	s listed in the	table are "o	nlv when co	mbined with

<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	Part Name	Description
Deodorising Filter Captures small foul-smelling substances in the air.	Deodorising filter	Drain Pump Pumps drain water to a point higher than that where the unit is installed.	"for ceiling-suspended units
Air-cleaning Filter Removes fine dust particles from the air by means of static electricity.	Air-cleaning filter	Decorative Cover  To be attached to the upper section of ceiling- suspended models for professional kitchen use. Helps prevent dust accumulation.	Decorative cover
Silver-ionized Air Purifier Filter Captures the bacteria, pollen and other allergens in the air and neutralises them.	Silver-ionized Air Purifier Filter	MA & Contact Terminal Interface Interface for connecting with the PAR-40MAA remote controller and PAC-YT52CRA, and to relay operation signals.	MA & contact terminal interface
Oil Mist Filter Element Filter element (12 pieces) that blocks the oil mist for ceiling-suspended models used in professional kitchens.	Filter frame Filter delement	System Control Interface Interface to connect with M-NET controllers.	System control interface Indoor unit
High-efficiency Filter Element Element for high-efficiency filter. Removes fine dust particles from the air.	Plug (or directing airflow)  High-efficiency filter element  *For 4-way cassette units (PLA)	Wi-Fi Interface Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.	W/Fi interface  Indoor unit  Smartphone
3D i-see Sensor Corner Panel for SLZ Corner panel holding the 3D i-see Sensor.	i-see Sensor comer panel	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
3D i-see Sensor Corner Panel for PLA Corner panel holding the 3D i-see Sensor.	i-see Sensor comer panel	Power Supply Terminal Kit Terminal bed to change the power supply from outdoor power supply to separate indoor/ outdoor power supplies.	
Shutter Plate Plate for blocking an air outlet of the 4-way cassette (PLA) indoor unit.	Shutter Plate	Wired Remote Controller Advanced deluxe remote controller with full-dot liquid-crystal display and backlight. Equipped with convenient functions like night-setback.	Acc.
Multi-functional Casement Casement for fresh-air intake and attaching the high-efficiency filter element (optional).	Indoor unit body Multi-functional casement	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
Fresh-air Intake Duct Flange Flange attachment for adding a duct to take in fresh air from outside.	*For 4-way cassette units (PLA)	Simple Wired Remote Controller Remote controller with liquid-crystal display, and backlight function for operation in dark location.	
Space Panel Decorative cover for the installation when the ceiling height is low.	Space Panel Panel	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.	

Part Name	Description
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 Indoor unit Distribution pipe Outdoor units
<b>Joint Pipe</b> Part for connecting refrigerant pipes of different diametres.	Joint pipe Onsite pipe Indoor unit Outdoor unit
Liquid Refrigerant Dryer Removes water and minute particles from refrigerant pipes.	
Branch Box Outer Cover Casement for branch boxes.	Complete view  Branch box outer cover

Part Name	Description
Air Discharge Guide Changes the direction of air being exhausted from the outdoor unit.	
Air Protection Guide Protects the outdoor unit from the wind.	
<b>Drain Socket</b> A set of caps to cover unnecessary holes at the bottom of the outdoor unit, and a socket to guide drain water to the local drain pipe.	Cap
Centralised Drain Pan Catches drain water generated by the outdoor unit.	Outdoor unit Centralised drain pan Base (local construction)
M-NET Converter  Used to connect P Series A-control models to M-NET controllers.	Group remode controller  Converter  Converter  Foat racely on for bressett costs
Control/Service Tool  Monitoring tool to display operation and self- diagnosis data.	Control/service tool
Step Interface Interface for adjusting the capacity of inverter- equipped outdoor units.	Case interior Installed in case
High-static Fan Motor Static pressure enhanced up to +30pa.	

## Optional Parts List <Indoor>

Option				Fi	ter				Systom	MA &					Wired Rem	note Controll	er	
			Silver- Air Puri	ionized		Deodo Filt		Softdry cloth	System Control Interface	Contract	Wi-Fi Interface	Conn Ca	ector ble		Controlle	r		troller lder
Indoor Unit		MAC- 2360 FT	MAC- 2370 FT	MAC- 2380 FT	MAC- 2390 FT	MAC- 3000 FT-E	MAC- 3010 FT-E	MAC- 1001 CL-E	MAC- 334IF-E	MAC- 397IF-E	MAC- 567IF-E	MAC- 1702RA-E	MAC- 1710RA-E	PAR- 40MAA	PAR- CT01MAA	PAC- YT52CRA	MAC- 1200RC-E	MAC- 1300RC-E
Wall -	MSZ-LN18VG2(W)(V)(R)(B)				•		•	•	•	•		•	•	<b>●</b> *1	<b>●</b> *1	<b>0</b> "1		•*2
mounted	MSZ-LN25VG2(W)(V)(R)(B)				•		•	•	•			•	•	<b>●</b> *1	<b>●*1</b>	<b>6</b> "1		•*2
	MSZ-LN35VG2(W)(V)(R)(B)				•		•	•	•	•		•	•	0"1	●*1	<b>0</b> "1		*2
	MSZ-LN50VG2(W)(V)(R)(B)	-			•		•	•	•	•		•	•	●"I	●*1	●"I		•*2
	MSZ-LN60VG2(W)(V)(R)(B) MSZ-FT25VG				•		•	•	•	•	*3	•	•	●*1 ●*1	•*1 •*1	●*1 ●*1		
	MSZ-FT35VG		•						•	•	-3	•	•	11	011	•1		•
	MSZ-FT50VG		•						•	•	-3	•	•	0"1	0"1	0"1		•
	MSZ-AP15VG								•	•	<b>6</b> *3	•		<b>1</b> 1	*1	<b>0</b> *1		
	MSZ-AP20VG								•	•	<b>6</b> *3	•	•	<b>1</b> 1	<b>●</b> *1	<b>0</b> "1		•
	MSZ-AP25VG		•						•	•	•	•	•	<b>0</b> *1	<b>●</b> *1	<b>0</b> *1		•
	MSZ-AP35VG									•	•	•	•	<b>0</b> *1	<b>●*1</b>	<b>0</b> *1		•
	MSZ-AP42VG		•						•	•	•	•	•	●*1	<b>●</b> *1	●*1		•
	MSZ-AP50VG		•						•	•	•	•	•	●*1	●*1	●"I		•
	MSZ-AP60VG MSZ-AP71VG	•							•	•	•	•	•	●*1 ●*1	<b>1</b>	•1		•
	MSZ-AP71VG MSZ-EF18VG(W)(B)(S)	_	•					•	•	•	-3	•	•	<b>0</b> 11	011	011		•
	MSZ-EF22VG(W)(B)(S)										-3			0"1	*1	0"1		
	MSZ-EF25VG(W)(B)(S)		•					•	•	•	●,3	•		<b>1</b> 1	*1	<b>0</b> *1		•
	MSZ-EF35VG(W)(B)(S)		•					•	•	•	●,3	•	•	<b>●</b> "1	<b>•</b> *1	<b>0</b> "1		•
	MSZ-EF42VG(W)(B)(S)										<b>6</b> *3	•	•	<b>1</b> 1	<b>1</b>	<b>0</b> *1		
	MSZ-EF50VG(W)(B)(S)		•					•	•	•	●,3	•	•	●"1	●*1	●*1		•
	MSZ-BT20VG		•						•	•	●,3	•	•	<b>●</b> *1	<b>●</b> *1	<b>•</b> *1		
	MSZ-BT25VG		•								●,3	•		<b>1</b> 1	<b>•</b> *1	<b>0</b> *1		
	MSZ-BT35VG		•						•	•	●*3	•	•	●*1	@*1	●*1		
	MSZ-BT50VG MSZ-HR25VF		•						•	•	*3	•	•	*1	-1	<b>0</b> 11	•	
	MSZ-HR35VF		•						•	•	•	•	•	•	•	•	•	
	MSZ-HR42VF		•						•	•	•	•	•	•	•	•		
	MSZ-HR50VF		•						•	•		•	•	•	•	•	•	
<u> </u>	MSZ-HR60VF		•						•	•	•	•	•	<b>1</b>	<b>•</b> *1	<b>0</b> *1	•	
SERIES	MSZ-HR71VF		•						•	•	•	•	•	<b>●</b> *1	<b>0</b> *1	<b>0</b> *1	•	
- S	MSY-TP35VF		•						•	•	•	•	•	•	•	•		
Σ	MSY-TP50VF		•						•	•	•	•	•	•	•	•		
	MSZ-FH25VE2 MSZ-FH35VE2			•		•			•	•	•	•	•	●*1 ●*1	•*1 •*1	●*1 ●*1		•
	MSZ-FH35VE2 MSZ-FH50VE2			•		•			•	•	•	•	•	011	011	011		•
	MSZ-SF15VA			_		_			•	•	•			<b>0</b> 11	-11	011		•
	MSZ-SF20VA													<b>1</b>	*1	-1		
	MSZ-SF25VE3		•						•	•	•			<b>1</b> 1	<b>1</b> 1	<b>0</b> *1		•
	MSZ-SF35VE3		•						•	•	•			<b>0</b> *1	<b>©</b> *1	<b>0</b> "1		•
	MSZ-SF42VE3		•						•	•	•			<b>1</b> 1	<b>•</b> *1	<b>0</b> *1		•
	MSZ-SF50VE3		•						•	•	•			<b>1</b> 1	*1	<b>1</b>		•
	MSZ-GF60VE2	•							•	•	•			●*1	@*1	●*1		•
	MSZ-GF71VE2	•	•						•	•	•	-	-	*1	*1	011		•
	MSZ-WN25VA MSZ-WN35VA	$\vdash$	•						•	•	•	•	•	•	•	•	<u> </u>	•
	MSZ-DM25VA		•											11	*1	-1	•	
	MSZ-DM35VA		•						•	•	•	•	•	<b>1</b> 1	*1	0"1	•	
	MSZ-HJ25VA		•									•	•				•	
	MSZ-HJ35VA											•	•				•	
	MSZ-HJ50VA		•									•	•				•	
	MSZ-HJ60VA		•									•	•				•	
E/	MSZ-HJ71VA		•						-	-	-	•	•	@**I	@*1	@**I	•	
Floor- standing	MFZ-KJ25VE2 MFZ-KJ35VE2		•						•	•	•	•	•	●*1 ●*1	●*1 ●*1	●*1 ●*1		•
Starioning	MFZ-KJ50VE2		•									•		011	011	0*1		
	MFZ-KT25VG		•						•	•	•	•	•	011	*1	011		•
	MFZ-KT35VG		•						•	•	•	•	•	<b>1</b> 1	<b>0</b> *1	0"1		•
	MFZ-KT50VG		•						•	•	•	•		<b>1</b>	<b>•</b> *1	011		
	MFZ-KT60VG		•						•	•	•	•	•	<b>1</b> 1	<b>●</b> *1	<b>●</b> *1		•
1-way	MLZ-KP25VF		•						•	•	•	•	•	<b>1</b> 1	<b>●</b> *1	<b>0</b> *1		•
cassette	MLZ-KP35VF		•						•	•	•	•	•	<b>●</b> *1	<b>6</b> *1	<b>0</b> *1		•
	MLZ-KP50VF		•						•	•		•	•	<b>●</b> *1	<b>●</b> *1	●*1		•

<sup>\*1</sup> MAC-394IF-E or MAC-397IF-E is required. When using MAC-397IF-E with PAR-40MAA, brightness needs to be set as low.
\*2 Available only for LN18/25/35/50/60VG2W.
\*3 Outside attachment only.

## Optional Parts List <Indoor>

	Option		_				Filter	_						i-see		_ Multi-	Fre	sh-air								
	'	Oil Mist Filter Element	Life	F	High-eff Filter E	fficiency Element	y .t		1	Filter Bo	юх		Cor	ensor orner anel	Shutter Plate	functional	Intake	e Duct ange	Space Panel			Dra	rain Pui	mp		
ndoor Unit		PAC- SG38 KF-E		SH59	SH88	SH89	PAC- SH90 KF-E	KE92	KE93	3 KE94	KE95	KE250	SF1	SE1	SJ37	SJ41	PAC- SH65 OF-E	SF28	SJ65	SH94	4 SK01	SJ92	SJ93	PAC- SJ94 DM-E	KE07	7 KE06
4-way	SLZ-M15FA												•													
cassette	SLZ-M25FA												•													
	SLZ-M35FA												•													
	SLZ-M50FA									$\Box$	┌ '		•													
	SLZ-M60FA	Ι'		'	'	Γ_'				<u> </u>	<u> </u>		•	Ĺ,										'		$\Box$
Ceiling -	SEZ-M25DA(L)																								•	
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	SEZ-M60DA(L)																								•	
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4-way	PLA-ZM35EA	<u> </u>	Ι	•	<u> </u>	Ţ'	Ļ'	Ţ.,		<u> </u>	<u> </u>		Ţ'		•	•	•	1	•	<u> </u>		$\perp$	$\perp$	'	$\perp$	$\perp$
Cassette	PLA-ZM50EA	<u> </u>	<u> </u>	•	Щ'	<del></del> '	<u> </u>	<del></del> '	<del></del>	<u>↓</u> ′	<u></u> '	<u> </u>	<del></del> '		0	•	•	<del></del>	•	<u> </u>	<u> </u>			<u></u> '		
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	PLA-ZM100EA	<del>_</del>	<u> </u>	0	<u> </u>	<del></del> '	<u></u>	<u> </u>	_	<u></u> '	<u></u> '	<u> </u>	<del></del> '	0	0	•	•	<del></del>	•	<u> </u>	_	1		<u> </u>	_	_
	PLA-ZM125EA	4		0			4			4	4		4	0	0	•	•		0						4	4
	PLA-ZM140EA	<del></del> '	<del></del> '	•	<u> </u>	<del></del> '	<del>_</del>	<del></del>	<del></del>	<del></del> '	<del></del> '	↓	4'	0		•	•	<del></del>	•	<del> </del>	<u> </u>	1	<del></del>	<u> </u>		$\perp$
	PLA-M35EA	<u> </u>	<u> </u>	•	<u> </u>	Ψ.	<u> </u>	1		<u></u> '	<del>   </del>		<del>_</del> '		0	•	•	1	0	<u> </u>			_	<u> </u>	1	$\bot$
	PLA-M50EA	4		0			4			4	4		4	0	0	•	•		0						4	
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	PLA-M71EA	<b></b> '	<u> </u>		<u> </u>	<del></del> '	<u> </u>	1		<u></u>	4		<del></del> '			•	•	1	0	<u> </u>			_	<u> </u>	_	$\bot$
	PLA-M100EA	4		0			4			4	4		4	0	0	•	•		0						4	
	PLA-M125EA	<del></del> '	<del></del>	•	<u>+'</u>	<del></del>	<b></b> '	+	+	<del></del> '	+'		<del></del> '	•	•	•	•	+	•	<del> </del>	<del></del>	₩	₩	<u>+</u> '	+-	+
0 11	PLA-M140EA	<del>_</del>	<u> </u>	•	<u> </u>	<u> </u>	<u> </u>	-	4	4	-	₩	<del></del> '	•	•	•	•	-	•	<del></del> '	_	_	<del></del>	<u> </u>	_	₩
Ceiling -	PEAD-M35JA(L)	4					-	•		4	4		4	4			4								4	4
conceald	PEAD-M50JA(L)	+'	+	<del></del> '	<del> </del>	+	+	•	1	+	+'		<del></del> '	+	+'	+'	+'	+	+	<del> </del>	+	+	₩	<del>  '</del>	+-	+-
	PEAD-M60JA(L)	4'	<del></del> '	<u> </u>	<u> </u>	<del></del>	<del></del> '	-		1	4	$\vdash$	4	4	<u> </u>	4	4	4	_	<u> </u>		4	$\vdash$	<u> </u>	4	4
	PEAD M100 IA(L)	4				-	-	-	•		-		4-	-		-	4	4	4	4					-	+
	PEAD-M100JA(L)	+	+	+'	+'	+	+	+	+	•	+		+'	+	+'	+'	+'	+	+	+	+	+	+	+'	+-	+
	PEAD-M125JA(L) PEAD-M140JA(L)	4'	<del></del>	<del>-</del>	<u> </u>	<del>-</del>	<b>—</b>	<del>-</del>	$\vdash$			₩	+-	4	<u> </u>	<b>_</b>	<del></del>	+	₩	₩,	<b>—</b>	$\leftarrow$	$\vdash$	<u>+-</u> '	+	4
	PEAD-M140JA(L) PEA-M200LA	4		-	-	-	-	-		+-	-		4	-	4	-	-	-	4	-		-	-	4	-	
	PEA-M200LA PEA-M250LA	+'	•	+-	+-	+	+	+	+-	+-	+-	•	+'	+	+-	+	+	+	+	+	+	+-	+-	+	+-	-
Wall -	PKA-M250LA PKA-M35LA(L)	4	-	<del></del>	$\vdash$	-	+-					1	+	1	+-	$\vdash$	-					$\leftarrow$	$\vdash$	+	+	+
mounted	PKA-M35LA(L) PKA-M50LA(L)	4				-	-	-		-			1					-		-	•				-	
	PKA-M60KA(L)	+	+	+-	+-	+	+	+	+-	+-	+-	+	+-	+	+-	+	+	+	+	•	+-	+-	+	+	+-	+
	PKA-M71KA(L)											$\vdash$	+													
	PKA-M100KA(L)	1								_			+						_	•						
Ceiling -	PCA-M35KA	+-	+-	+-	•	+	+-	+-	+-	+-	$\vdash$	+-	+-	+-	+-	+-	+	+	+	+	+-	•	+-	+-	+-	+
suspended			+										+									•				
	PCA-M60KA	1				•				-																
	PCA-M71KA	+-	+-	+-	+-	•	$\vdash$	$\vdash$	+-	+	$\vdash$	+	+-	_	+-	+	+	_	+	+-	+-	+	•	+	+-	+
	PCA-M100KA																									
	PCA-M125KA						•																•			
	PCA-M140KA	+-	+-	+-	+-	+	•	-	+-	+-	$\vdash$	+	+-	_	+-	+-		_	+	+-	+-	+	•	+-	+-	+
	PCA-M71HA		+				1																1			
Floor -	PSA-RP71KA	1	_							_			+-						_							
standing	PSA-RP100KA	+-	+-	+-	+-	+	+		+-	+-	$\vdash$	+	+-	+	+-	+-	+-	+	+	+-	+-	+	+-	+-	+-	+
- T	PSA-RP125KA		+	+-											+	+										+
				4		4							4		4					4	4	-	4	4	1	4

<sup>\*1</sup> P Series indoor units can be used in combination with SUZ or MXZ outdoor units.
\*2 Unable to use with wireless remote controller.
\*3 PAC-SH29TC-E is required for wireless model.
\*4 Group control cannot be used.

				MAG							Wir	ed Remo	ote Conti	roller		Wirele	ess Re	mote C				Connecte		
	Deco Co		System Control Interface	MA & Contact Terminal Interface	Wi-Fi Interface		Pov Te	ver Su rmina	ipply I Kit			Controlle		Terminal Block kit for PKA		gnal nder		Signal Receive		Controller Kit (Sender & Receiver)	Remote Sensor	Remote On/Off Adapter	Remote Operation Adapter	Connector Cable for Remote Display
	PAC- SF81 KC-E	PAC- SF82 KC-E	MAC- 334IF-E	MAC- 397IF-E	MAC- 567IF-E	PAC- SK38 HR-E	PAC- SG94 HR-E	PAC- SG96 HR-E	PAC- SG97 HR-E	PAC- SJ39 HR-E	PAR- 40MAA	PAR- CT01MAA	PAC- YT52CRA	PAC- SH29TC-E	PAR- SL97 A-E	PAR- SL100 A-E	PAR- SA9C A-E	PAR- SF9 FA	PAR- SE9 FA-E	PAR- SL94 B-E	PAC- SE41 TS-E	PAC- SE55 RA-E	PAC- SF40 RM-E	PAC- SA88 HA-E
			•	•	•							•	•		•	●*4		•			•	•	•*2	•
			•	•	•							•	•		•	●*4		•			•	•	•*2	•
					•											•*4							<b>•</b> *2	
			•	•	•						•	•	•		•	●*4		•			•	•	*2	•
			•	•	•						DA	DA	DA		•	●*4	•	•			•	•	•*2 •*2	•
			•	•	•						DA	DA	DA		•		•				•	•	• 2	•
			•	•	•						DA	DA	DA		•		•				•	•	• *2	
			•	•	•						DA	DA	DA		•		•				•	•	•*2	•
			•	•	•						DA	DA	DA		•		•				•	•	•*2	•
			<b>●</b> *1	●"1	•					•	•	•	•		•	●*4			•		•	•	•*2	
			<b>●</b> *1	<b>6</b> "1	•					•	•	•	•		•	●*4			•		•	•	•*2	•
			●*1	<b>•</b> *1	•					•		•	•			●*4						•	<b>•</b> *2	•
			●*1	<b>0</b> "1	•					•	•	•	•		•	<b>●</b> *4			•		•	•	•*2	•
			@*1	●"1	•					•	•	•	•		•	●*4			•			0	•*2	
			●*1 ●*1	●"1	•					•	•	•	•		•	●*4 ●*4			•		•	•	•*2 •*2	•
			0"1	<b>9</b> "1	•					•	•	•	•		•	0*4			•		•	•	0.5	•
			011	011	•					•	•	•	•		•	0*4			•			•	*2	
			011	<b>0</b> 11	•					•	•	•	•		•	<b>6</b> *4			•		•	•	*2	•
			<b>O</b> 11	<b>0</b> "1						•	•	•	•		•	<b>6</b> *4			•		•	•	•*2	
			<b>0</b> *1	<b>1</b>	•					•	•	•	•		•	<b>•</b> *4			•		•	•	•*2	
			•	•	•					•	•		•		•	●*4			•		•	•	•*2	•
				•	•					•	•		•		•	●*4			•				•*2	
			<b>1</b> 1	<b>1</b>					•								•				•	•	<b>0</b> *2	
			<b>●</b> *1	<b>●</b> *1	•				•			•			•		•					•	<b>*</b> 2	
			<b>●</b> *1	<b>●</b> *1	•				•		•	•	•		•		•				•	•	<b>*</b> 2	•
			<b>1</b>	<b>0</b> *1	•				•		•		•		•		•						<b>•</b> *2	
_			@*1	<b>●</b> "1	•				•		•	•	•		•		•				•	•	•*2	•
			●*1 ●*1	@*1	•				•		•	•	•		•		•				•	•	•*2 •*2	•
			<b>0</b> *1	*1 *1	•						•	•	•		•						•	•	• 2	•
-			<b>0</b> *1	<b>0</b> *1	•						•	•	•		•		•				•	•	•*2	
			<b>1</b> 1	011							0.3	0.3	• '3		•	•					•	•	-3	
			<b>●</b> *1	<b>1</b> 1	•						●,3	●,3	●,3	•	•	•					•	•	•*2	•
			<b>1</b>	<b>©</b> *1	•		•				●,3	●*3	●*3	•	•						•	•		
			<b>●</b> *1	<b>0</b> *1	•		•				●,3	●,3	●*3	•							•	•		
			<b>●</b> *1	●*1	•		•				●,3	●,3	●,3	•	•						•	•		•
			<b>●</b> *1	<b>●</b> *1	•			•				•	•		•					•	•	•	•*2	•
			<b>●</b> *1	<b>1</b>	•			•			•	•	•		•					•	•	•	<b>•</b> *2	
			●*1 ●*1	<b>●</b> "1	•	1		•			•	•	•		•					•	•	•	*2	•
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# Optional Parts List <Outdoor>

Column   C	_		Option			Distribut	ion Pipe						Joint	Pipe				Liquid I	Refrigera	ant Dryer	
District			Ориоп		T. J.			F: 6					Unit	Unit							
MICHANICA   MESCA										>	>	>	>	>	>	>	>	pipe	pipe	pipe	
March   Marc												Pipe ø19.05		Pipe ø9.52	Pipe ø12.7	9.52 Ø9.52	Ø15.88	ø6.35	ø9.52	ø12.7	
March   Marc				MSDD-	MSDD-	MSDT-	MSDT-	MSDF-	MSDF-			PAC-	PAC-	PAC-	Flare	MΔC	· ΙΜΔΟ.				
March   Marc	Ou	tdoor Unit								SG72 RJ-E	SG73 RJ-E	SG75 RJ-E	SG76	493 pi	A454	A455	A456	SG81 DR-E	SG82 DR-E	SG85 DR-E	
MUZ-ASPORT		L Series											I IU-E	Е	UF-E	UF-E	OF-E				
MCC LOSSING MCC LO																					
### MUZI ASSOCIATE ### MUZI ASSOCIATE ### MUZI ASSOCIATE ### MUZI FISSOCIATE ### MUZI FISSOCIATE ### MUZI FISSOCIATE ### MUZI FISSOCIATE ### MUZI APPSYCIA #																					
## 75 Sures ## 100 C																					
### Seese   MUZ PERSONAL																					
A Company   MUZ APERVOR		FT Series	MUZ-FT25VGHZ																		
M. APSING M. APS																					
MAX APPSWG		A Series	MUZ-AP15VG																		
MAX APPSYCHE   MAX																				_	
MUZ-APSYCH  MUZ-AP			MUZ-AP25VGH																		
MUZ-APEVIGH  MUZ-A																					
MIZ-APPOYCH MIZ-AP																					
MUZ-APSOVER																					
B   Series			MUZ-AP50VGH																		
### MUZ EFEYOO ### ### ### ### ### ### ### ### ###																					
MUZE PSWGH		E Series																		-	$\vdash$
MUZETROVO MUZETR			MUZ-EF25VGH																		
### MUZE PERVIVO ### MU																				<del></del>	$\vdash$
## Saries   MUZ-978VG			MUZ-EF42VG																		
MUZ-173VIG MUZ-173VIG MUZ-174VIG MUZ-174VIG MUZ-174VIF		BT Series																		-	
## RR Barties   MUZ-HR3SVF		Di Conco	MUZ-BT25VG																		
### ### ### ### ######################																					<u> </u>
MUZ-HRSUFF MUZ-SFSUFF MUZ-MRSUFF		HR Series																			
MUZ-FR00VF	ES																				
MUZ-FR00VF	E																				
F Series	S																				
F Series		TP Series																			
MUZ-PH3SVE MUZ-PH3SVA			MUY-TP50VF																		
MUZ-HISSVERZ MUZ-HISOVERZ MUZ-HISOVERZ MUZ-SESVE MUZ-SESVEH MUZ-MSSVA MSZ-MSSVA MSZ-MSSVAB MSZ		F Series																			
MUZFHSOVE			MUZ-FH35VE																		
MUZ-SF28VE																					
MUZ.SF28VEH			MUZ-FH50VEHZ																		
MUZ-SF35VE		S Series																			
MUZ-SF42VE																					
MUZ-SF42VEH																					
MUZ-SF50VE			MUZ-SF42VEH																		
MUZ-GF71VE			MUZ-SF50VE																		
W Series   MUZ-WN35VA		G Series																			
MUZ-WN35VA		W Sories																			
H Series   MUZ-HJ25VA		vv Series																			
H Series		D Series																			
MUZ-HJ30VA		H Series																			
MUZ-HJ60VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-HJ17VA   MUZ-KJ25VE   MUZ-KJ25VEHZ   MUZ-KJ25VEHZ   MUZ-KJ35VE			MUZ-HJ35VA																		
MUZ-HJ71VA																					
MUFZ-KJ25VEHZ			MUZ-HJ71VA																		
MUFZ-KJ35VE																					
MUFZ-KJ50VE			MUFZ-KJ35VE																		
MUFZ-KJ50VEHZ																					
SUZ-M35VA   SUZ-M35VA   SUZ-M35VA   SUZ-M35VA   SUZ-M50VA   SUZ-M50VA   SUZ-M50VA   SUZ-M50VA   SUZ-M71VA   SUZ-M71VA   SUZ-K425VA6   SUZ-K4			MUFZ-KJ50VEHZ																		
SUZ-M50VA   SUZ-M60VA   SUZ-M60VA   SUZ-M60VA   SUZ-M71VA   SUZ-M60VA   SUZ-M60VA   SUZ-M60VA   SUZ-M60VA   SUZ-M60VA   SUZ-K625VA6   SUZ-K625VA6   SUZ-K660VA6   SUZ-K6																					
SUZ-M60VA	(R3	32)														-				-	$\vdash$
P SERIES (R410A)         SUZ-KA25VA6         Image: SUZ-KA35VA6 image: SUZ-KA35VA6 image: SUZ-KA36VA6 image: SUZ-KA50VA6 image: SUZ-KA60VA6 im			SUZ-M60VA																		
SUZ-KA35VA6	Р	SERIES		-													<del>                                     </del>			_	$\vdash$
SUZ-KA60VA6			SUZ-KA35VA6													•					
				-																+	$\vdash$
SUZ-KA71VA6			SUZ-KA71VA6																		

Air Outlet Guide					Air Pro	otection	Guide	Dra	ain Soc	ket	p	Freeze- reventio Heater Drain P	n	Centra	ılized Dra	ain Pan	M-NET Adapter	M-N Conv		Control/ Service Tool	Step Interface 1 PC board w/attach- ment kit	Insul fo Accun	ation or nulator	High Static Fan Motor			
MAC- 881 SG	MAC- 882 SG	856	MAC- 886 SG-E	883	SJ07	SG59	PAC- SH96 SG-E	PAC- SJ06 AG-E	SH63	SH95	PAC- SJ08 DS-E	SG60	SG61	MAC- 643 BH-E	MAC- 644 BH-E	MAC- 646 BH-E	PAC- SG63 DP-E	PAC- SG64 DP-E	PAC- SH97 DP-E	PAC- IF01 MNT-E	PAC- SJ96 MA-E	PAC- SJ95 MA-E	PAC- SK52ST	PAC- IF012 B-E	MAC- 892 INS-E	MAC- 893 INS-E	PAC- SJ71 FM-E
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# Optional Parts List <Outdoor>

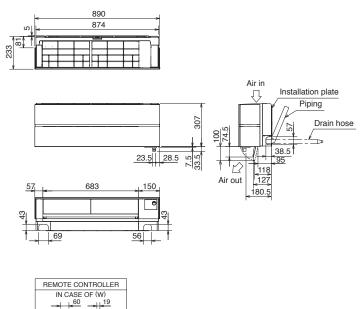
	Option			Di	istribut	ion Pip	е			Bra	nch Pip	oe/Hea	der (Jo	oint)					Joint	_	10-9	10-9	11-5	11-2	Liquid F	Refrigera	nt Dryer	Γ
			For	Twin		For 7	Triple	F	or		ase sing	Branch			Unit	ø6.35	Unit @	9.52	Unit ø15.88	Unit ø9.52			ø12.7		For	For	For	
				:50)			33:33)	Quad (25:25	druple :25:25)	2-br	anch xes	Pipe	Hea	ader	Pipe		Pipe s		> Pipe	Pipe	> Pipe	Pipe		Pipe	pipe ø6.35	pipe ø9.52	pipe ø12.7	,
		-								Flare	Brazing	CMY-	CMY-	CMY-	PAC-	PAC-	PAC-	PAC-	PAC-	ø15.88		Flare			PAC-	PAC-	PAC-	-
utdoor Unit		MSDD- 50TR-E	MSDD- 50TR2-E					MSDF- 1111R-E		MSDD-		Y62-	Y64- G-E	Y68- G-E	SG72	SG87		SG88	SG75	SG76	493	A454	MAC- A455	A456	SG81		SG85	
Power	PUZ-ZM35VKA									00711112	005112					•				RJ-E	PI	JP-E	JP-E	JP-E	•			t
Inverter (R32)	PUZ-ZM50VKA PUZ-ZM60VHA															•									•			Ŧ
(1.02)	PUZ-ZM60VHA PUZ-ZM71VHA																	•								0		╀
	PUZ-ZM100VKA	_	•				•											•								•		t
	PUZ-ZM100YKA		•				•																					t
	PUZ-ZM125VKA		•				•		•									•								•		Γ
	PUZ-ZM125YKA	_	•				•		•									•								•		Ļ
	PUZ-ZM140VKA PUZ-ZM140YKA	-	•				•		•									•								•		╀
	PUZ-ZM200YKA		•		•		•		•									•								•		+
	PUZ-ZM250YKA				•		•		•																			t
Power	PUHZ-ZRP35VKA2														•										•			Ι
Inverter	PUHZ-ZRP50VKA2														•				_						•	_		╀
(R410A)	PUHZ-ZRP60VHA2 PUHZ-ZRP71VHA2																•		•							•		+
	PUHZ-ZRP100VKA3	•				•											•		•							•		+
	PUHZ-ZRP100YKA3	•				•											•		•							•		t
	PUHZ-ZRP125VKA3					•		•									•		•							•		Т
	PUHZ-ZRP125YKA3	•				•		•									•		•							•		Ĺ
	PUHZ-ZRP140VKA3	•				•		•									•		•							•		+
	PUHZ-ZRP140YKA3 PUHZ-ZRP200YKA3	•		•		•		•									•		•							•		+
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Standard	PUZ-M100VKA		•																							•		I
Inverter	PUZ-M125VKA		•																							•		I
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	PUZ-M250YKA				•		•		•																		•	┺
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	MXZ-2F53VF(H)3																					•						Γ
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	MXZ-3F54VF3 MXZ-3F68VF3																			•	•	•						╀
	MXZ-4F72VF3	1																		•	•	•	•	•				$^{+}$
	MXZ-4F80VF3																					•	•					T
	MXZ-4F83VF																			•	•	•	•	•				
	MXZ-4F83VFHZ																			•	•	•	•	•				╄
	MXZ-5F102VF MXZ-6F122VF																				•	•	•	•				╫
	MXZ-2HA40VF	t																						_				+
	MXZ-2HA50VF																											I
	MXZ-3HA50VF	$\perp$																										Ļ
XZ SERIES	MXZ-2D33VA MXZ-2D42VA2																											+
(410A)	MXZ-2D42VA2 MXZ-2D53VA(H)2																					•						f
	MXZ-2E53VAHZ																					•						+
	MXZ-3E54VA																					•						
	MXZ-3E68VA	_																		•	•	•						Ļ
	MXZ-4E72VA MXZ-4E83VA																			•	•	•	0	0				+
	MXZ-4E83VA MXZ-4E83VAHZ																				•	•	•					f
	MXZ-5E102VA																			•	•	•	•	•				t
	MXZ-6D122VA2																			•	•	•	•					
	MXZ-2DM40VA																											₽
11.07.0	MXZ-3DM50VA PUMY-SP112VKM(-BS)									•			•									•						╁
UMY Series R410A)	PUMY-SP112YKM(-BS)										•	•	•	•														t
,	PUMY-SP125VKM(-BS)	L						L		•	•	•	•	•											L			T
	PUMY-SP125YKM(-BS)									•	•	•	•	•														1
	PUMY-SP140VKM(-BS)	1								•	•	•	•	•														1
	PUMY-SP140YKM(-BS) PUMY-P112VKM5(-BS)									0	0	0	0	0														+
	PUMY-P112VKM5(-BS) PUMY-P112YKM(E)4(-BS)										•	•	•	•														f
	PUMY-P125VKM5(-BS)									•	•	•	•	•			•		•									$\dagger$
	PUMY-P125YKM(E)4(-BS)									•	•	•	•	•			•		•									
	PUMY-P140VKM5(-BS)									•	•	•	•	•			•		•									$\perp$
	PUMY-P140YKM(E)4(-BS)									•	0	0	0	0			0		•									$\vdash$
POWERFUL	PUMY-P200YKM2(-BS) PUHZ-SHW112VHA											-		-														+
			1	<u> </u>	<b>†</b>		<b>—</b>	<u> </u>	<del>                                     </del>	<b>†</b>	_	<del>                                     </del>		<u> </u>	<b>—</b>		<u> </u>						_		<b>—</b>	•		+
HEATING	PUHZ-SHW112YHA				1					1							1									_		1

	Branch Box	Reactor Box	Different Diameter Joint											
	Outer Cover	neactor box	ø9.52>ø12.7	ø12.7>ø9.52	ø12.7>ø15.88	ø6.35>ø9.52	ø9.52>ø15.88							
	PAC- AK350CVR-E	PAC- RB01BC	MAC- A454JP	MAC- A455JP	MAC- A456JP	PAC- 493PI	PAC- SG76RJ-E							
PAC-MK34BC (Flare)	•	•	•	•	•	•	•							
PAC-MK54BC (Flare)	•	•	•	•	•	•	•							

Air Outlet Guide		A	Air Out	let Guid	de		Air Pro	otection	ı Guide	Dra	ain Soc	ket		Freeze	e-preve for Dra					entraliz rain Pa		M-NET Adapter	M-N Conv		Control/ Service Tool	1 PC	face board tach-	Insu fo Accur	lation or mlator	Con- nection Kit	High Static Fan Motor
MAC- MAC- 881 882 SG SG	856	MAC- 886 SG-E	883	PAC-SJ07 SG-E	SG59	SH96	SJ06	SH63	SH95	SJ08	PAC- SG60 DS-E	SG61	643	644	645	646	PAC- SJ10 BH-E	SJ20	SG63	PAC-SG64 DP-E	SH97	PAC- IF01 MNT-E	PAC-SJ96 MA-E	PAC-SJ95 MA-E	PAC-SK52 ST	PAC-IF012 B-E	IF013	892	MAC- 893 INS-E	PAC-LV11 M-J	PAC-SJ71 FM-E
						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						0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0 0 0 0
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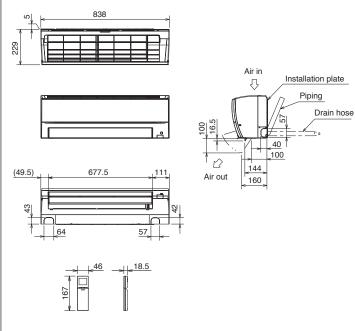
# $$\label{eq:msz-ln25vg2} \begin{split} & \text{MSZ-LN25vG2(W)(V)(R)(B)} & \text{MSZ-LN35vG2(W)(V)(R)(B)} \\ & \text{MSZ-LN50vG2(W)(V)(R)(B)} & \text{MSZ-LN60vG2(W)(V)(R)(B)} \end{split}$$

#### **INDOOR UNIT**



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

#### **INDOOR UNIT**



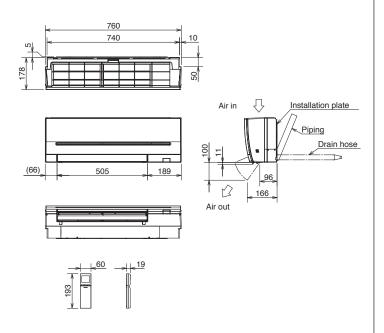
#### MSZ-AP15VG MSZ-AP20VG

IN CASE OF (V)(R)(B)

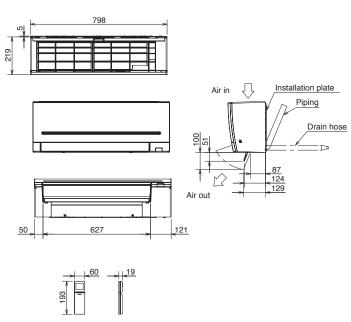
#### INDOOR UNIT

193

193

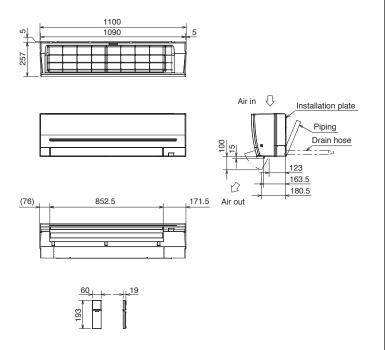


MSZ-AP25VG MSZ-AP35VG MSZ-AP42VG MSZ-AP50VG MSZ-AP25VGK MSZ-AP35VGK MSZ-AP42VGK MSZ-AP50VGK



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

#### **INDOOR UNIT**



 MSZ-EF18VG(W)(B)(S)
 MSZ-EF22VG(W)(B)(S)

 MSZ-EF25VG(W)(B)(S)
 MSZ-EF35VG(W)(B)(S)

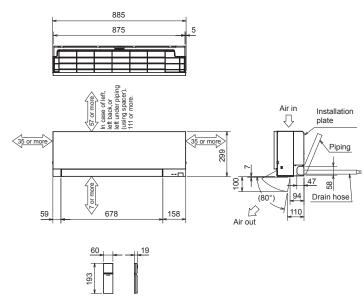
 MSZ-EF42VG(W)(B)(S)
 MSZ-EF50VG(W)(B)(S)

 MSZ-EF18VGK(W)(B)(S)
 MSZ-EF22VGK(W)(B)(S)

 MSZ-EF25VGK(W)(B)(S)
 MSZ-EF35VGK(W)(B)(S)

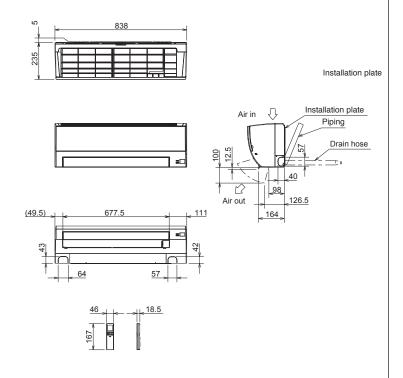
 MSZ-EF42VGK(W)(B)(S)
 MSZ-EF50VGK(W)(B)(S)

#### INDOOR UNIT



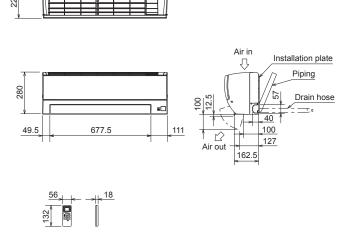
# MSZ-BT20VG MSZ-BT25VG MSZ-BT35VG MSZ-BT50VG MSZ-BT20VGK MSZ-BT25VGK MSZ-BT35VGK MSZ-BT50VGK

#### INDOOR UNIT



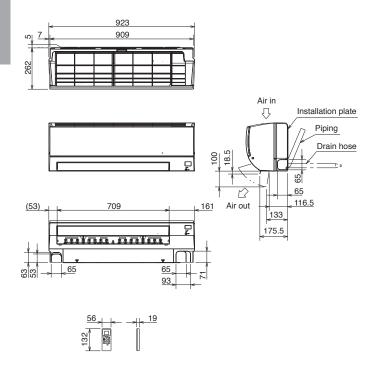
# MSZ-HR25VF MSZ-HR35VF MSZ-HR42VF MSZ-HR50VF

838



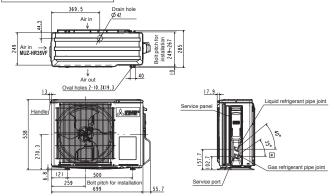
#### MSZ-HR60VF MSZ-HR71VF

#### INDOOR UNIT



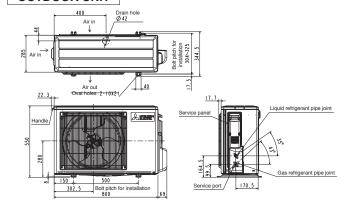
#### MUZ-HR25VF MUZ-HR35VF MUZ-BT20VG MUZ-BT25VG MUZ-BT35VG

#### **OUTDOOR UNIT**



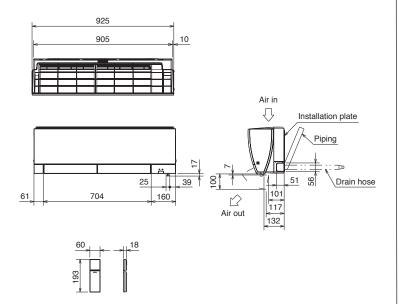
#### MUZ-HR42VF MUZ-HR50VF

#### OUTDOOR UNIT



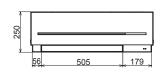
#### MSZ-FH25VE2 MSZ-FH35VE2 MSZ-FH50VE2

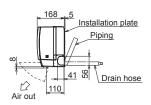
#### **INDOOR UNIT**



#### MSZ-SF15VA MSZ-SF20VA









Installation plate

Piping

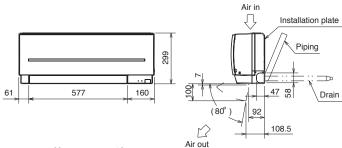
Drain hose

160

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

#### INDOOR UNIT

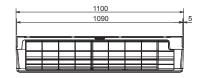


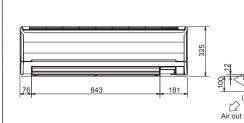




#### MSZ-GF60VE2 MSZ-GF71VE2

#### INDOOR UNIT

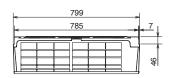


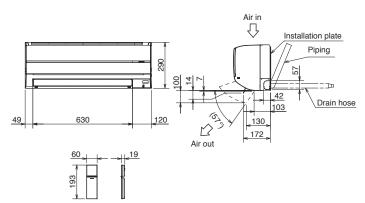




#### MSZ-WN25VA MSZ-WN35VA

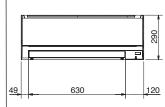
#### INDOOR UNIT



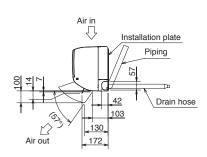


#### MSZ-DM25VA MSZ-DM35VA

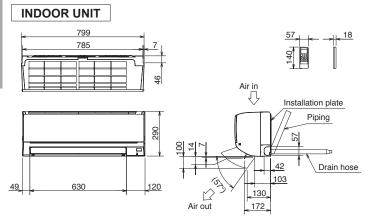




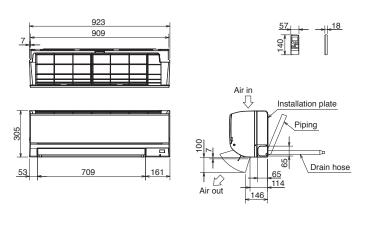




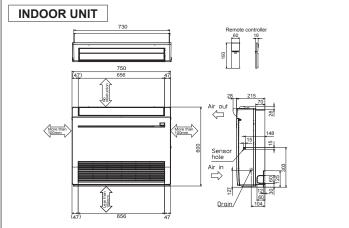
#### MSZ-HJ25VA MSZ-HJ35VA MSZ-HJ50VA



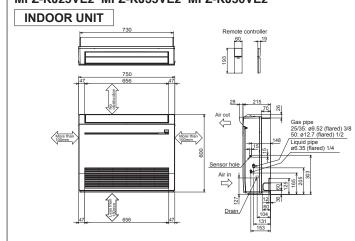
#### MSZ-HJ60VA MSZ-HJ71VA MSY-TP35VF MSY-TP50VF



#### MFZ-KT25VG MFZ-KT35VG MFZ-KT50VG MFZ-KT60VG



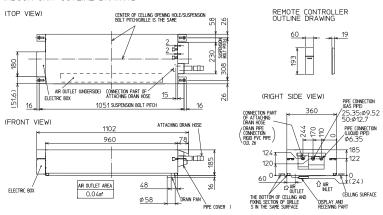
#### MFZ-KJ25VE2 MFZ-KJ35VE2 MFZ-KJ50VE2



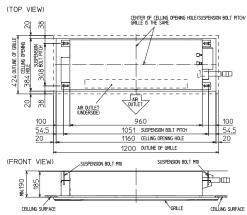
#### MLZ-KP25VF MLZ-KP35VF MLZ-KP50VF

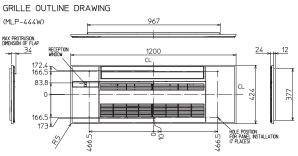
#### INDOOR UNIT



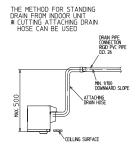


#### INDOOR UNIT DETAIL VIEW





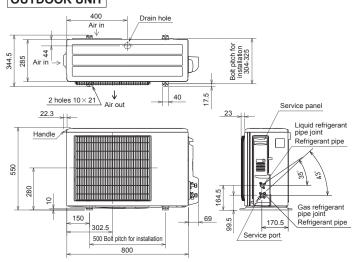
		KP25/35VF	KP50VF
EXTENSION	LIQUID PIPE O.D.	Ø6	.35
PIPE GAS PIPE O.D.		ø9.52	ø12.7
CONNECTIONS	LIQUID PIPE	FLARED CO Ø6	
OF PIPE	GAS PIPE	FLARED CONNECTION Ø9.52	FLARED CONNECTION Ø12.7
DRAIN HOSE		HEAT INSULATER O.D. CONNECT Ø32 Ø2	
DRAIN PIPE CO	ONNECTION	RIGID PVC PIPE	O.D. 26



**MUZ-AP71VG** 

**MUZ-LN25VGHZ** MUZ-LN25VG **MUZ-LN35VG MUZ-LN35VGHZ MUZ-AP20VG MUZ-AP25VG MUZ-AP25VGH MUZ-AP35VGH MUZ-AP35VG 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-EF35VGH MUZ-EF35VG MUZ-EF42VG MUY-TP35VF MUZ-SF35VE MUZ-SF42VEH MUZ-SF25VE MUZ-SF25VEH MUZ-SF35VEH MUZ-SF42VE MUZ-HJ50VA MUFZ-KJ25VE MUFZ-KJ35VE** 

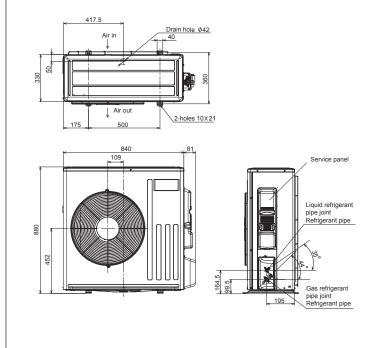
MUFZ-KJ25VEHZ MUFZ-KJ35VEHZ
OUTDOOR UNIT



**MUZ-BT50VG** 

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

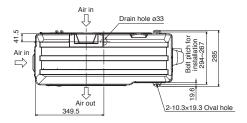
**OUTDOOR UNIT** 

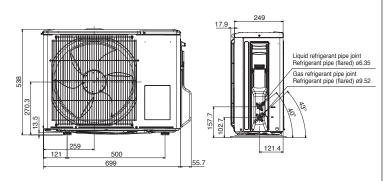


**MUZ-AP60VG** 

MUZ-WN25VA MUZ-WN35VA MUZ-HR25VF MUZ-BT20VG MUZ-DM25VA MUZ-DM35VA MUZ-HR35VF MUZ-BT25VG MUZ-BT35VG MUZ-BT35VG

**OUTDOOR UNIT** 





MUZ-LN50VG MUZ-FT35/50VGHZ MUZ-AP50VG MUZ-AP50VGH MUZ-EF50VG MUZ-HR60VF MUZ-HR71VF

OUTDOOR UNIT

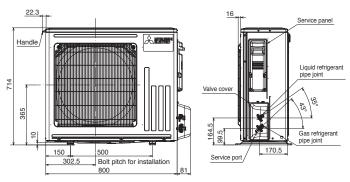
400

Air in

Drain hole ø42

Air out

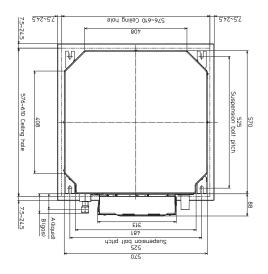
Oval holes 2-10×21



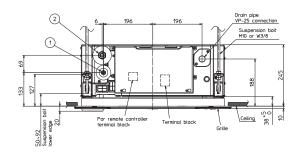
**S** SERIES - Unit: mm

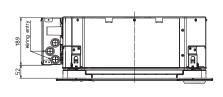
#### SLZ-M15FA SLZ-M25FA SLZ-M35FA SLZ-M50FA SLZ-M60FA

#### **INDOOR UNIT**

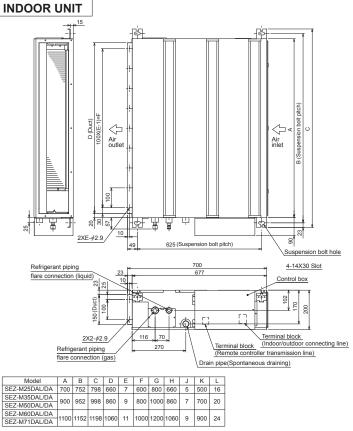


Models	① Refrigerent pipe (liquid)	② Refrigerent pipe (gas)	Α	В
SLZ-M15FA SLZ-M25FA SLZ-M35FA			63mm	72mm
SLZ-M50FA		φ 12.7mm flared connection 1/2F	63mm	78mm
SLZ-M60FA		\$\phi\$ 15.88mm flared connection 5/8F	63mm	78mm





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



- Notes:

  1. Use M10 bolts for suspension (purchase locally).

  2. Keep service space for maintenance at the bottom.

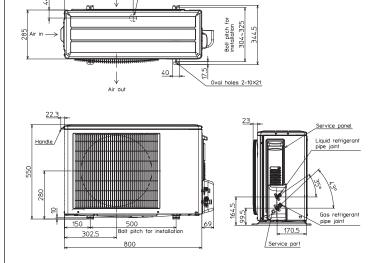
  3. This chart is based on the SEZ-M500AL/DA, which has three fans.

  SEZ-M25, 35DAL/DA has two fans, and SEZ-M60, 71DAL/DA has four fans.

  4. If an inlet duct is used, remove the air filter supplied with the unit, and install a locally purchased filter on the suction side.

#### SUZ-M25VA SUZ-M35VA

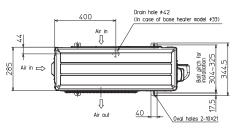
#### **OUTDOOR UNIT**

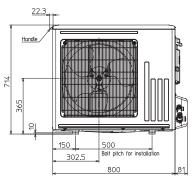


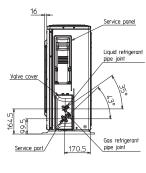
Drain hole #42 (In case of Heater models #33)

#### SUZ-M50VA

#### **OUTDOOR UNIT**

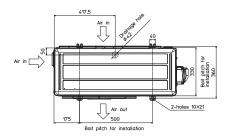


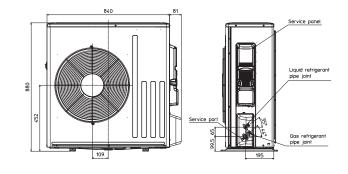




#### SUZ-M60VA SUZ-M71VA

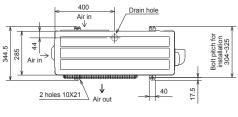
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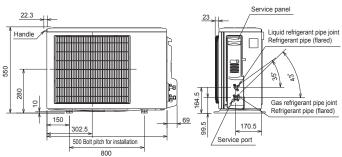




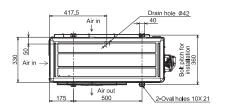
#### SUZ-KA25VA6 SUZ-KA35VA6

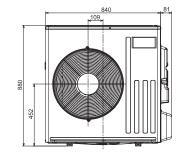
#### INDOOR UNIT

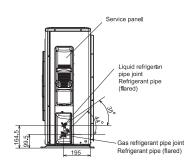




#### SUZ-KA50VA6 SUZ-KA60VA6 SUZ-KA71VA6

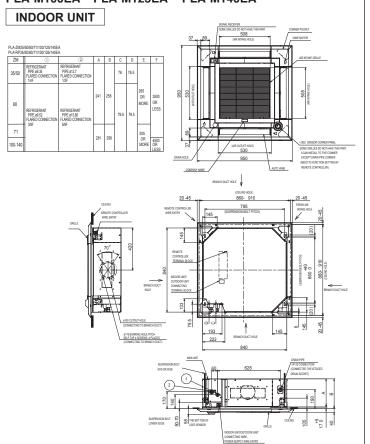




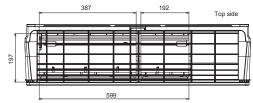


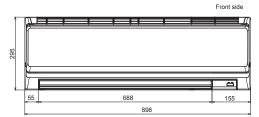
P SERIES Unit: mm

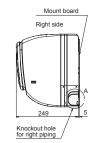
PLA-ZM35EA PLA-ZM50EA PLA-ZM60EA PLA-ZM71EA PLA-ZM100EA PLA-ZM125EA PLA-M60EA PLA-M71EA PLA-M100EA PLA-M125EA PLA-M140EA



# PKA-M35HA(L) PKA-M50HA(L) INDOOR UNIT

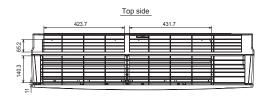


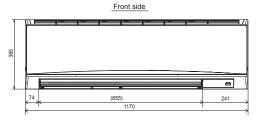


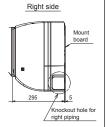


#### PKA-M60KA(L) PKA-M71KA(L) PKA-M100KA(L)

#### INDOOR UNIT

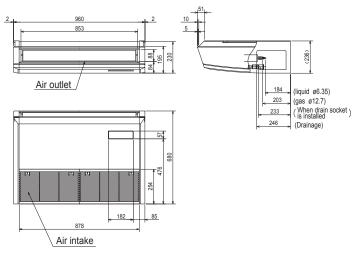






#### PCA-M35KA PCA-M50KA

#### INDOOR UNIT

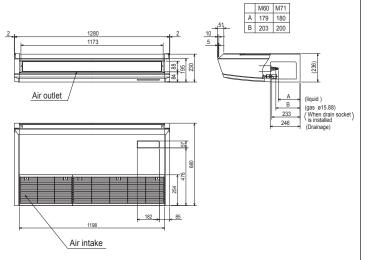


#### NOTES.

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

#### PCA-M60KA PCA-M71KA

#### INDOOR UNIT



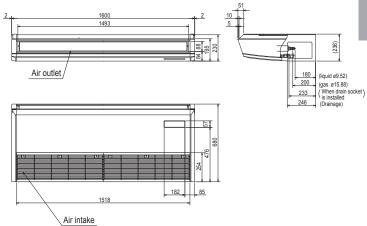
#### NOTES.

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

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

#### PCA-M100KA PCA-M125KA PCA-M140KA

#### INDOOR UNIT

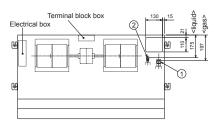


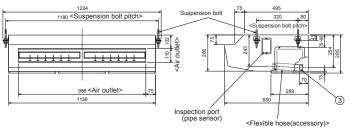
#### NOTES.

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

#### PCA-M71HA

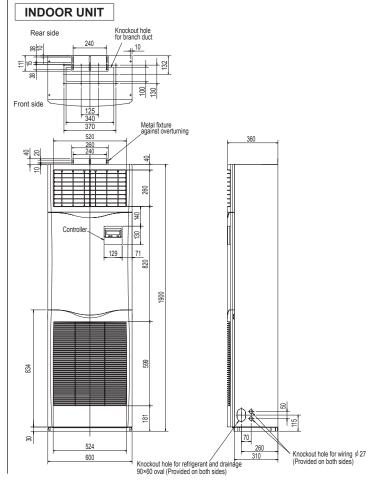
#### **INDOOR UNIT**





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

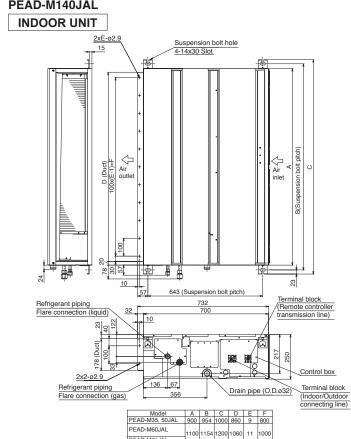
#### PSA-RP71KA PSA-RP100KA PSA-RP125KA PSA-RP140KA



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

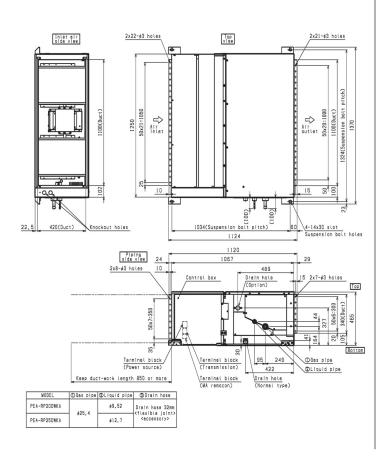
#### **INDOOR UNIT** Suspension bolt hole 4-14x30 Slot A B(Suspension bolt pitch) Air outlet 22 83 ₩ 10 83 28 643 (Suspension bolt pitch) Terminal block (Remote controller transmission line) Drain pipe Drain pump Control box 2x2-ø2.9 Drain pipe (O.D.ø32) (Spontaneous draining) Refrigerant piping Flare connection (gas) connecting line) A B C D E F G 900 954 1000 860 9 800 858 Model PEAD-M35, 50JA PEAD-M60JA 1100 1154 1200 1060 11 1000 1058 PEAD-M71JA PEAD-M100, 125JA 1400 1454 1500 1360 14 PEAD-M140JA 1600 1654 1700 1560 16

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



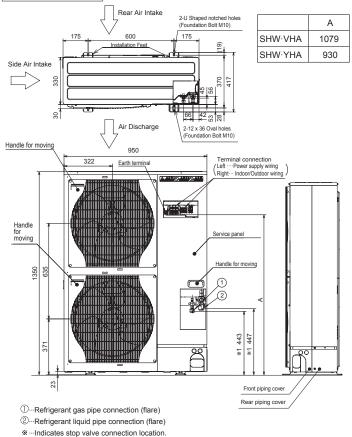
1100 1154 1200 1060 11 1000 PEAD-M71JAL PEAD-M100, 125JAL 1400 1454 1500 1360 14 1300 PEAD-M140JAL 1600 1654 1700 1560 16 1500

#### PEA-RP200WKA PEA-RP250WKA

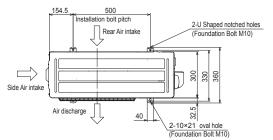


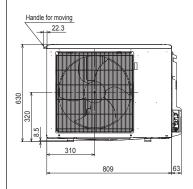
# PUHZ-SHW112VHA PUHZ-SHW112YHA PUHZ-SHW140YHA

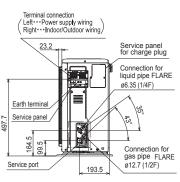
#### **OUTDOOR UNIT**



# PUZ-ZM35VKA PUZ-ZM50VKA OUTDOOR UNIT

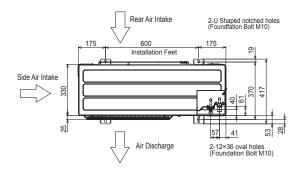




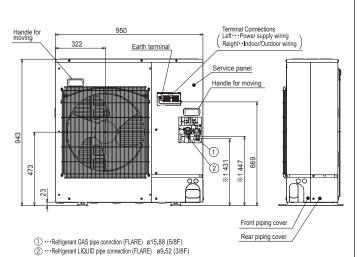


# PUZ-ZM60VHA PUZ-ZM71VHA

#### **OUTDOOR UNIT**

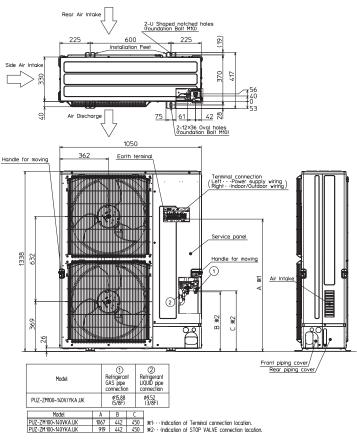


¾ 1 · · · Indication of STOP VALVE connection location.



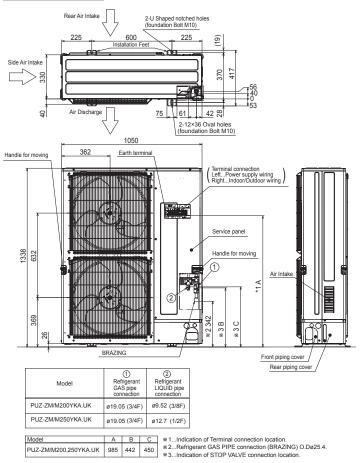
#### PUZ-ZM100VKA PUZ-ZM125VKA PUZ-ZM140VKA PUZ-ZM100YKA PUZ-ZM125YKA PUZ-ZM140YKA

#### **OUTDOOR UNIT**



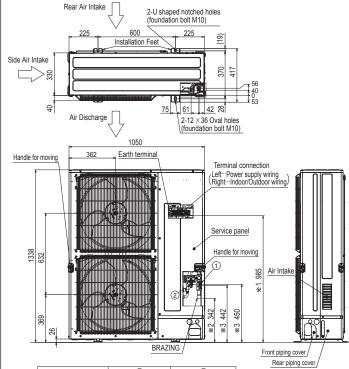
#### PUZ-ZM200YKA PUHZ-ZM250YKA

#### **OUTDOOR UNIT**



#### PUHZ-ZRP200YKA3 PUHZ-ZRP250YKA3

#### **OUTDOOR UNIT**



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

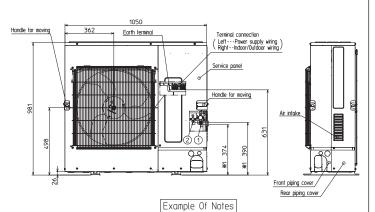
- \*1...Indication of Terminal connection location
- \*2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4. \*3···Indication of STOP VALVE connection location.

#### PUZ-M100VKA PUZ-M100YKA PUZ-M125VKA PUZ-M125YKA PUZ-M140VKA PUZ-M140YKA

#### **OUTDOOR UNIT**

PUZ-ZM/M200,250YKA.UK

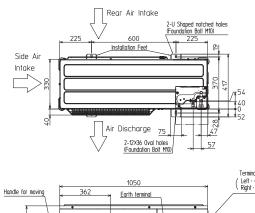
#### Rear Air Intake 2-U Shaped notched holes (Foundation Bolt M10) 600 Installation Feet Side Air Intake Air Discharge 75 2-12×36 Oval holes (Foundation Bolt M10) 57

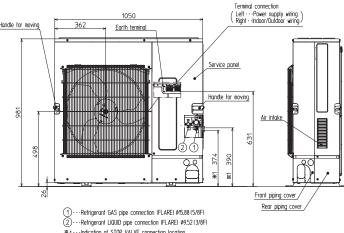


# ...Refrigerant GAS pipe connection (FLARE) Ø15.88 (5/8F) ...Refrigerant LIOUID pipe connection (FLARE) Ø9.52 (3/8F) \*1...Indication of STOP VALVE connection location.

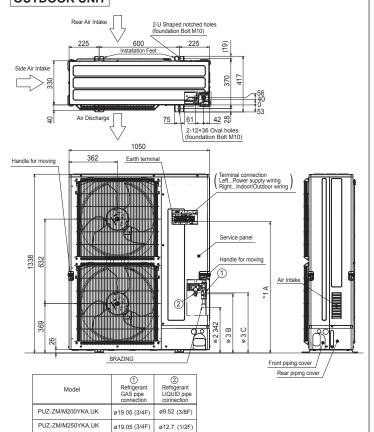
#### PUHZ-P100VKA PUHZ-P100YKA PUHZ-P125VKA PUHZ-P125YKA PUHZ-P140VKA PUHZ-P140YKA

#### **OUTDOOR UNIT**





#### PUZ-M200YKA PUZ-M250YKA **OUTDOOR UNIT**



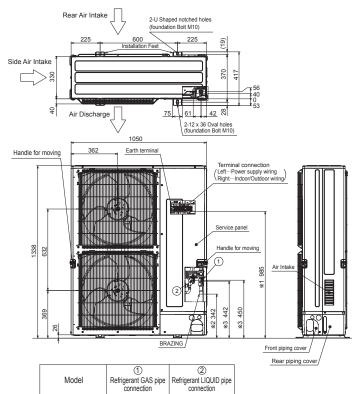
A B C \*1...Indication of Terminal connection location.

985 442 450 \*2...Refrigerant GAS PIPE connection (BRAZING) O.Dø25.4.

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

#### PUHZ-P200YKA3 PUHZ-P250YKA3

#### **OUTDOOR UNIT**



ø9.52 (3/8F)

ø12.7 (1/2F)

PUHZ-P200YKA3

PUHZ-P250YKA3

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

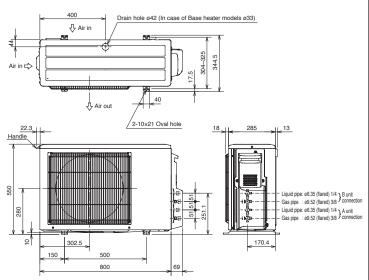
ø19.05 (3/4F)

ø19.05 (3/4F)

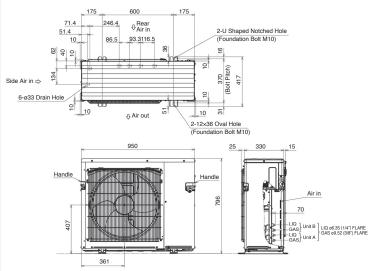
- Unit: mm

MXZ-2D33VA MXZ-2D42VA2 MXZ-2D53VA2 MXZ-2D53VAH2 MXZ-2DM40VA MXZ-2HA40VF MXZ-2HA50VF MXZ-2F33VF3 MXZ-2F53VFH3

#### **OUTDOOR UNIT**

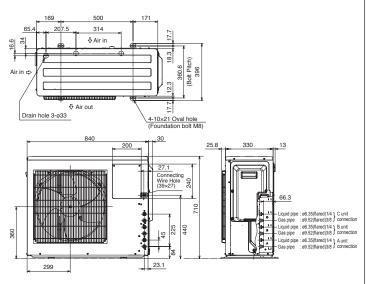


# MXZ-2E53VAHZ MXZ-2F53VFHZ OUTDOOR UNIT



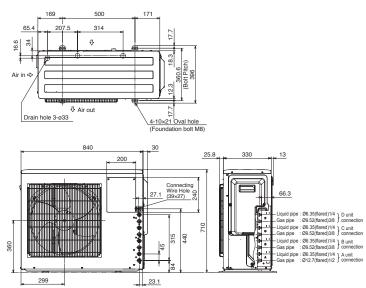
MXZ-3E54VA MXZ-3E68VA MXZ-3DM50VA MXZ-3HA50VF MXZ-3F54VF3 MXZ-3F68VF3

#### **OUTDOOR UNIT**

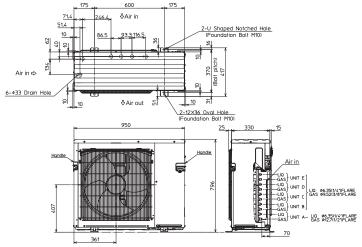


#### MXZ-4E72VA MXZ-4F72VF3 MXZ-4F80VF3

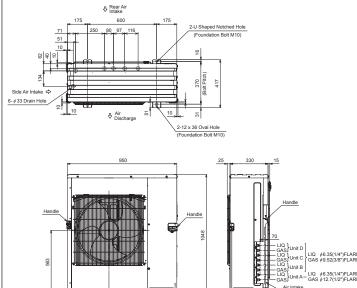
#### **OUTDOOR UNIT**



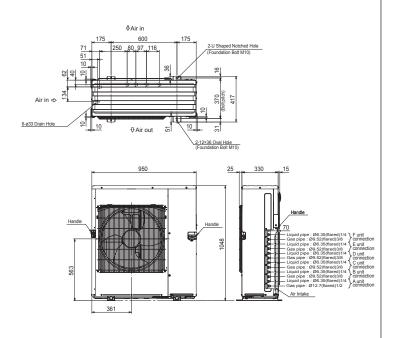
# MXZ-4E83VA MXZ-5E102VA MXZ-4F83VF MXZ-5F102VF OUTDOOR UNIT



# MXZ-4E83VAHZ MXZ-4F83VFHZ OUTDOOR UNIT

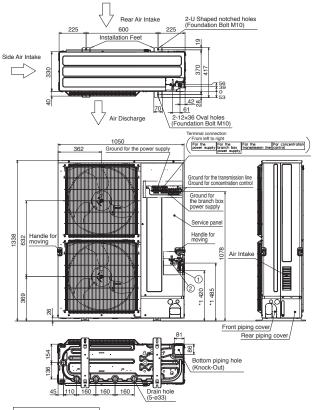


# MXZ-6D122VA2 MXZ-6F122VF OUTDOOR UNIT



#### PUMY-P112/125/140VKM5(-BS)

#### **OUTDOOR UNIT**

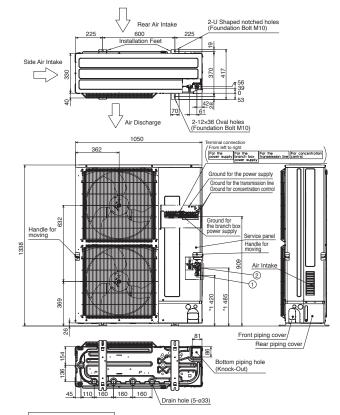


#### Example of Notes

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

#### **OUTDOOR UNIT**



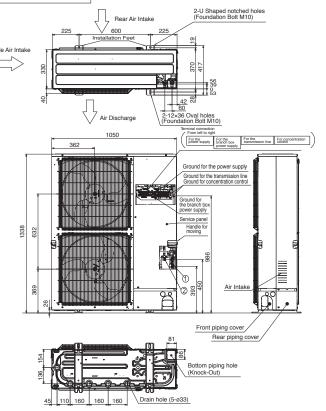
Unit: mm

#### 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-P200YKM2(-BS)

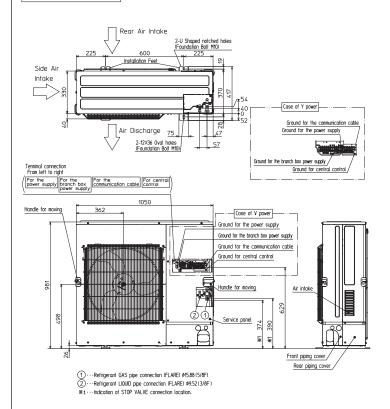
#### **OUTDOOR UNIT**



#### Example of Notes

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

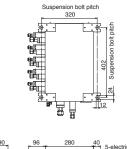
#### **OUTDOOR UNIT**

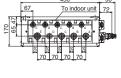


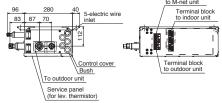
#### PAC-MK54BC

Suspension bolt: W3/W8 (M10)

#### Branch box







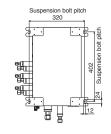
Suspension bolt : W3/8(M10) Refrigerant pipe flared connection

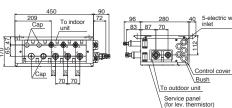
	Α	В	С	D	E	To outdoor unit
Liquid pipe	1/4F	1/4F	1/4F	1/4F	1/4F	3/8F
Gas pipe	3/8F	3/8F	3/8F	3/8F	1/2F	5/8F

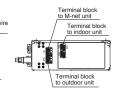
#### PAC-MK34BC

Suspension bolt: W3/W8 (M10)

#### Branch box







Suspension bolt : W3/8(M10)

Refrigerant pipe flared connection

	Α	В	С			To outdoor unit		
Liquid pipe	1/4F	1/4F	1/4F			3/8F		
Gas pipe	3/8F	3/8F	3/8F			5/8F		

# Piping Installation

# M SERIES

#### Single type

Series	Class	Maximum Piping Length (m)	Maximum Height Difference (m)	Maximum Number of Bends
Selles	<outdoor unit=""></outdoor>	Total length (A)	Outdoor unit - Indoor unit (H)	Total number
MSZ-L	25 / 35	20	12	10
	50	20	12	10
	60	30	15	10
MSZ-FT	25	20	12	10
	35 / 50	30	15	10
MSZ-A	15 / 25 / 35 / 42 / 50	20	12	10
	60 / 71	30	15	10
MSZ-EF	25 / 35 / 42	20	12	10
	50	30	15	10
MSZ-BT	20 / 25 / 35 / 50	20	12	10
MSZ-HR	25 / 35 / 42 / 50	20	12	10
	60 / 71	30	15	10
MSY-TP	35 / 50	20	12	10
MSZ-F MFZ	25 / 35	20	12	10
WIFZ	50	30	15	10
MSZ-S	25 / 35 / 42	20	12	10
	50 / 60	30	15	10
MSZ-G	60 / 71	30	15	
MSZ-W MSZ-D	25 / 35	20	12	10
MSZ-HJ	25 / 35 / 50	20	12	10
	60 / 71	30	15	10

#### S SERIES & P SERIES

#### Single type

Series	Class	Maximum Piping Length (m)	Maximum Height Difference (m)	Maximum Number of Bends
Series	<outdoor unit=""></outdoor>	Total length (A)	Outdoor unit - Indoor unit (H)	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	30	15
Power Inverter (PUZ-ZM)	35 / 50	50	30	15
	60 / 71	55	30	15
	100 / 125 / 140	100	30	15
Power Inverter (PUHZ-ZRP)	35 / 50 / 60 / 71	50	30	15
	100 / 125 / 140	75	30	15
	200 / 250	100	30	15
Standard Inverter (PUZ-M & SUZ-M)	25 / 35	20	12	10
	50 / 60 / 71	30	30	10
	100	55	30	45
	125 / 140	65	30	15
Standard Inverter (PUHZ-P & SUZ-KA)	25 / 35	20	12	10
	50 / 60 / 71	30	30	10
	100 / 125 / 140	50	30	15
	200 / 250	70	30	15

#### Twin type

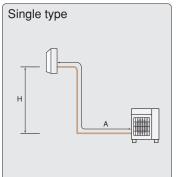
		Ma	ximum Piping Length	(m)	Maximum Heigh	nt Difference (m)	Maximum Number of Bends
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C	Pipe length difference from distribution pipe   B-C	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	8	20	30	1	15
Power Inverter (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

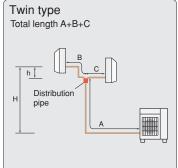
#### Triple type

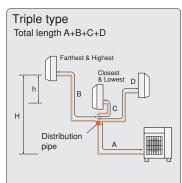
		Ma	ximum Piping Length	(m)	Maximum Heigh	Maximum Number of Bends	
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C+D	Pipe length difference from distribution pipe  B-C	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
Power Inverter (PUZ-ZM)	140	100	8	20	30	1	15
	200 / 250						
Power Inverter (PUHZ-ZRP)	140	75	8	20	30	1	15
	200 / 250	100	8	30	30	1	15
Standard Inverter (PUZ-M)	140	65	8	20	30	1	15
	200 / 250						
Standard Inverter (PUHZ-P)	140	50	8	20	30	1	15
	200 / 250	70	8	28	30	1	15

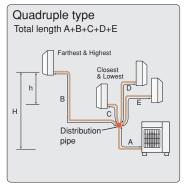
#### Quadruple type

		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  B-C	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

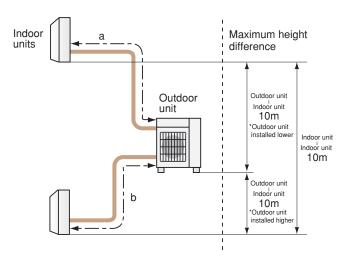
#### MXZ-2D33VA, MXZ-2F33VF3

Maximum Pipir	ng 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.

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



#### MXZ-2D42VA2, MXZ-2F42VF3

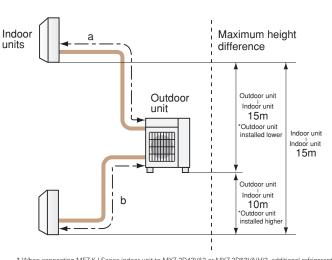
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

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



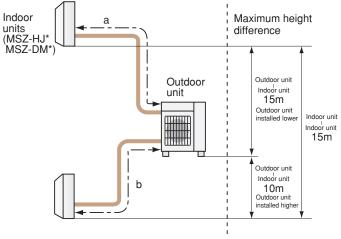
\* When connecting MFZ-KJ Series indoor unit to MXZ-2D42VA2 or MXZ-2D53VA(H)2, additional refrigerant is required. For details, please contact Mitsubishi Electric.

#### **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

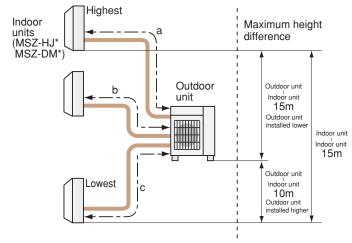


\*Only MSZ-HJ and DM model is connectable.

#### MXZ-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-4E72VA, MXZ-4F72VF3

Maximum Dining Longth	
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d)	25m
Total length (a+b+c+d)	60m

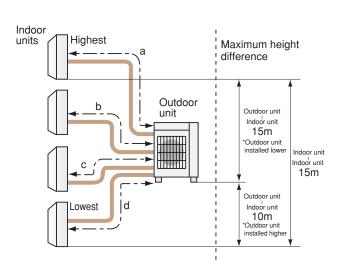
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d)	25
Total number (a+b+c+d)	60

<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

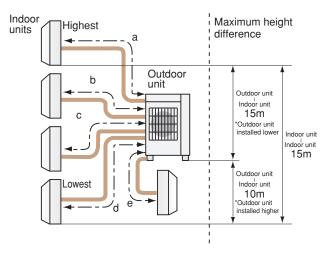
Maximum Number of Bends			
Outdoor unit - Indoor unit (a,b,c,d) 25			
Total number (a+b+c+d)	70		



#### 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	

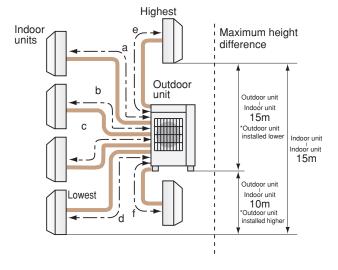
Maximum Number of Bends		
Outdoor unit - Indoor unit (a,b,c,d,e) 25		
Total number (a+b+c+d+e) 80		



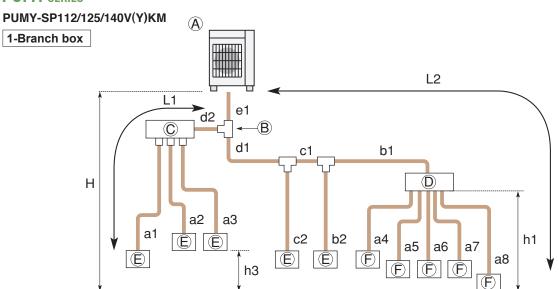
#### MXZ-6D122VA2, MXZ-6F122VF

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		



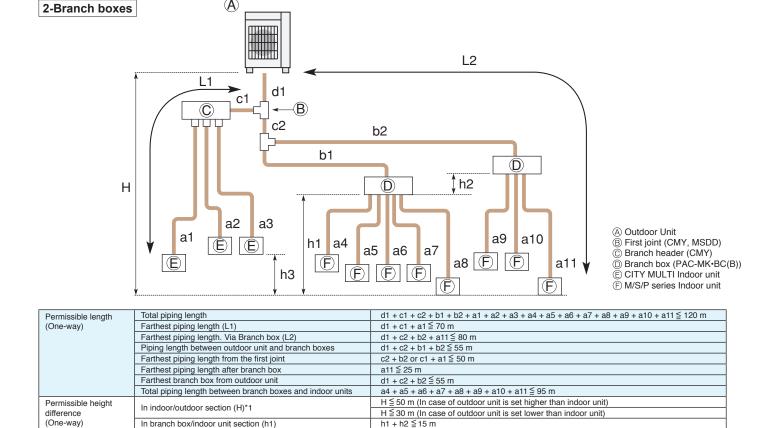
#### **PUMY** SERIES



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

Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 120 m
(One-way)	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 70 m
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 50 m
	Piping length between outdoor unit and branch box	e1 + d1 + c1 + b1 ≦ 55 m
	Farthest piping length from the first joint	d1 + c1 + b1 or d1 + c1 + b2 ≤ 50 m
	Farthest piping length after branch box	a8 ≦ 25 m
	Total piping length between branch boxes and indoor units	a4 + a5 + a6 + a7 + a8 ≦ 95 m
Permissible height	In indeed outdoor costion (LI)*1	H ≤ 50 m (In case of outdoor unit is set higher than indoor unit)
difference (One-way)	In indoor/outdoor section (H)*1	H ≦ 30 m (In case of outdoor unit is set lower than indoor unit)
	In branch box/indoor unit section (h1)	h1 ≦ 15 m
	In each indoor unit (h3)	h3≦12 m
Number of bends		le1 + d2 + a1l, le1 + d2 + a2l, le1 + d2 + a3l, le1 + d1 + c2l, le1 + d1 + c1 + b2l, le1 + d1 + c1 + b1 + a4l, le1 + d1 + c1 + b1 + a5l, le1 + d1 + c1 + b1 + a6l, le1 + d1 + c1 + b1 + a7l, le1 + d1 + c1 + b1 + a8l ≤ 15

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



h2 ≦ 15 m

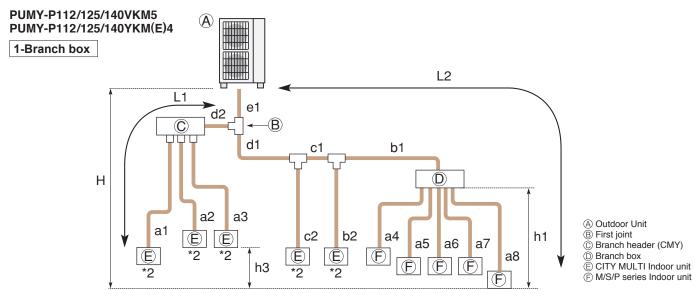
h3 ≦ 12 m

 $\begin{aligned} &|d1+c1+a11,|d1+c1+a2|,|d1+c1+a3|,|d1+c2+b1+a4|,|d1+c2+b1+a5|,\\ &|d1+c2+b1+a6|,|d1+c2+b1+a7|,|d1+c2+b1+a8|,|d1+c2+b2+a9|,\\ &|d1+c2+b2+a10|,|d1+c2+b2+a11|\leqq 15\end{aligned}$ 

In each branch unit (h2) In each indoor unit (h3)

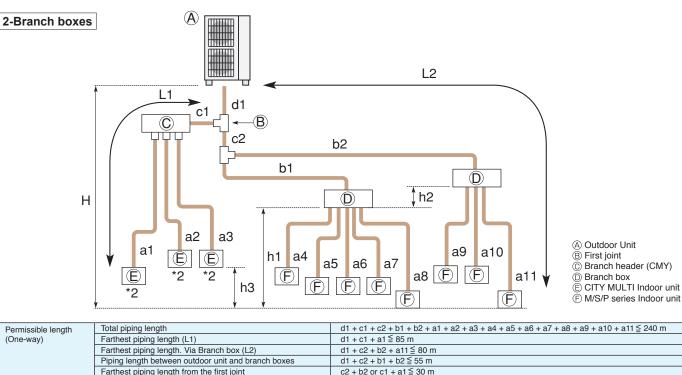
Number of bends

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



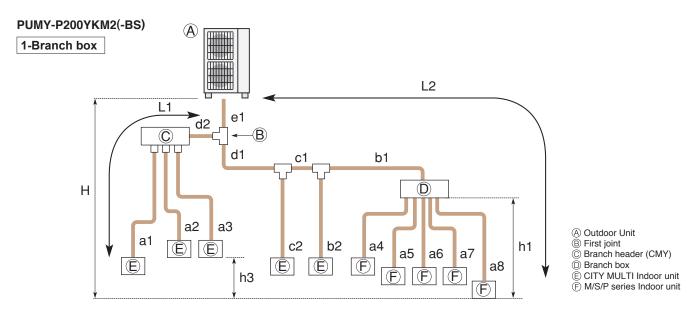
Permissible length	Total piping length	e1 + d1 + d2 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 ≦ 300 m	
(One-way)	Farthest piping length (L1)	e1 + d2 + a1 or e1 + d1 + c1 + b2 ≦ 85 m	
	Farthest piping length. Via Branch box (L2)	e1 + d1 + c1 + b1 + a8 ≦ 80 m	
	Piping length between outdoor 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	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	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.
  \*2: PKFY and PFFY Series cannot be connected.



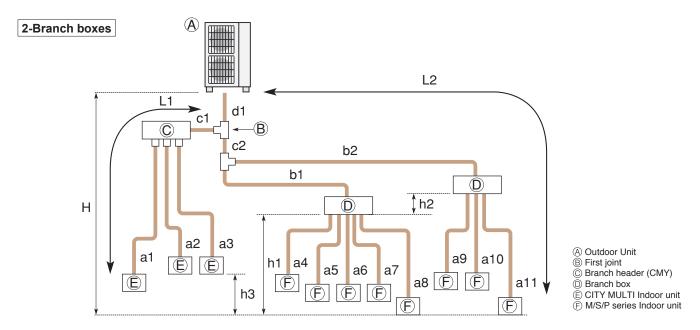
Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 240 \text{ m}$
(One-way)	Farthest piping length (L1)	d1 + c1 + a1 ≦ 85 m
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≦ 80 m
	Piping length between outdoor unit and branch boxes	d1 + c2 + b1 + b2 ≦ 55 m
	Farthest piping length from the first joint	c2 + b2 or c1 + a1 ≤ 30 m
	Farthest piping length after branch box	a11 ≦ 25 m
	Farthest branch box from outdoor unit	d1 + c2 + b2 ≦ 55 m
Total piping length between branch boxes and indoor units		a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 95 m
Permissible height	In indoor/outdoor section (H)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
difference	In Indoor/outdoor section (n) 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		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$

<sup>\*1:</sup> Branch box should be placed within the level between the outdoor unit and indoor units.
\*2: PKFY and PFFY Series cannot be connected.



Permissible length	Total piping length	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)	III IIIdooi/odidooi Sectioii (FI) 1	H ≤ 40 m (In case of outdoor unit is set lower than indoor unit)
	In branch box/indoor unit section (h1)	h1 ≦ 15 m
	In each indoor unit (h3)	h3≦12 m
Number of bends		le1 + d2 + a1l, le1 + d2 + a2l, le1 + d2 + a3l, le1 + d1 + c2l, le1 + d1 + c1 + b2l, le1 + d1 + c1 + b1 + a4l, le1 + d1 + c1 + b1 + a5l, le1 + d1 + c1 + b1 + a6l, le1 + d1 + c1 + b1 + a7l, le1 + d1 + c1 + b1 + a8l ≤ 15

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



Permissible length	Total piping length	$d1 + c1 + c2 + b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 \le 150 \text{ m}$
(One-way)	Farthest piping length (L1)	d1 + c1 + a1 ≦ 80 m
	Farthest piping length. Via Branch box (L2)	d1 + c2 + b2 + a11 ≦ 80 m
Piping length between outdoor unit and branch boxes		d1 + c2 + b1 + b2 ≦ 55 m
	Farthest piping length from the first joint	c2 + b2 or c1 + a1 ≦ 30 m
	Farthest piping length after branch box	a11 ≦ 25 m
	Farthest branch box from outdoor unit	d1 + c2 + b2 ≦ 55 m
Total piping length between branch boxes and indoor units		a4 + a5 + a6 + a7 + a8 + a9 + a10 + a11 ≦ 95 m
Permissible height	In indoor/outdoor section (H)*1	H ≦ 50 m (In case of outdoor unit is set higher than indoor unit)
difference	In indoor/outdoor section (n) 1	H ≤ 40 m (In case of outdoor unit is set lower than indoor unit)
(One-way)	In branch box/indoor unit section (h1)	h1 + h2 ≦ 15 m
	In each branch unit (h2)	h2 ≦ 15 m
	In each indoor unit (h3)	h3 ≦ 12 m
Number of bends		ld1 + c1 + a1l, ld1 + c1 + a2l, ld1 + c1 + a3l, ld1 + c2 + b1 + a4l, ld1 + c2 + b1 + a5l,
		ld1 + c2 + b1 + a6l, ld1 + c2 + b1 + a7l, ld1 + c2 + b1 + a8l, ld1 + c2 + b2 + a9l,
		$ d1 + c2 + b2 + a10 $ , $ d1 + c2 + b2 + a11  \le 15$

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

#### **Explanation of Terminology**

#### Maximum piping length:

This is the maximum allowable length of the refrigerant piping. The amount of refrigerant pipe used cannot be longer than the length specified.

#### Total length:

The maximum allowable combined length of all the refrigerant piping between the outdoor unit and indoor unit(s).

#### **Outdoor Unit - Indoor Unit:**

The maximum allowable length of the refrigerant piping between the outdoor unit and indoor units installed when multiple units are connected to a single outdoor unit. This distance limitation refers to the maximum length between the outdoor unit and the farthest indoor unit.

#### Pipe length difference from distribution pipe:

The maximum allowable difference in refrigerant piping length from the distribution pipe to the farthest indoor unit and from the distribution pipe to the closest indoor unit when multiple indoor units are connected to a single outdoor unit using a distribution pipe.

#### Indoor Unit - Distribution Pipe:

The maximum allowable length of the refrigerant piping between indoor units and the distribution pipe when multiple indoor units are connected to a single outdoor unit.

#### Maximum height difference:

This is the maximum allowable height difference. It is necessary to install the air conditioning system so that the height distance is no more than the difference specified. (Specified differences may vary if the outdoor unit is installed higher or lower than the indoor units).

#### **Outdoor unit - Indoor unit:**

The maximum allowable difference in height between the outdoor unit and indoor units when installed (when multiple indoor units are connected to a single outdoor unit, this distance limitation refers to the maximum height difference between the outdoor unit and an indoor unit).

#### Indoor unit - Indoor unit

The maximum allowable difference between the heights of indoor units when multiple indoor units are connected to a single outdoor unit.

#### Maximum number of bends:

This is the maximum allowable number of bends in the refrigerant piping. The total number of bends in the refrigerant piping used cannot exceed the number specified.

#### Total number:

The maximum allowable number of bends for all refrigerant piping between the outdoor unit and indoor units.

#### **Outdoor unit - Indoor unit:**

The maximum allowable number of bends between the outdoor unit and each indoor unit when multiple indoor units are connected to a single outdoor unit.

### Conditions for specifications

Temperature conditions are based on JIS B8616.

Cooling	Indoor	27°C DB, 19°C WB
Cooming	Outdoor	35°C DB, 24°C WB
Heating	Indoor	20°C DB
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.

"V"= 230V / Single phase / 50Hz , "Y"= 400V / Three phase / 50Hz

#### How to read a model name

#### 1) M & S Series

,	
M	M: M Series S: S Series
	"S"= Wall-mounted , "F"= Compact floor-standing , "E"= Compact ceiling-concealed ,
S	"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

P	P Series
U	"K"= Wall-mounted , "S"= Floor-standing , "L"= 4-way cassette , "E"= Ceiling-concealed ,
	"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)

3/	$\mathbf{N}$	<b>Y7</b>	Carias

Generation
"A"= A control

3) IVIAZ S	Series
M	M Series
Х	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

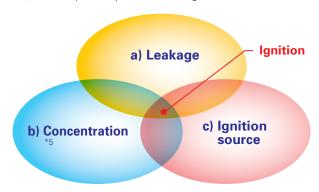
		Refrig	erant		charged Jantity		k. added Jantity
	Model Name		GWP	Weight [kg]	CO <sub>2</sub> equivalent	Weight [kg]	CO <sub>2</sub> equivaler
	MUZ-LN25VG	R32	675	1.00	[t] 0.68	0.26	(t) 0.18
	MUZ-LN25VG2	R32	675	0.8	0.54	0.20	0.135
	MUZ-LN35VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN35VG2	R32	675	0.85	0.57	0.20	0.14
	MUZ-LN50VG	R32	675	1.25	0.85	0.26	0.18
	MUZ-LN50VG2	R32	675	1.25	0.85	0.10	0.07
	MUZ-LN60VG	R32	675	1.45	0.98	0.46	0.32
	MUZ-LN25VGHZ	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN35VGHZ	R32	675	1.00	0.68	0.26	0.18
	MUZ-LN50VGHZ	R32	675	1.45	0.98	0.46	0.32
	MUZ-FT25VGHZ	R32	675	0.85	0.58	0.25	0.17
	MUZ-FT35VGHZ	R32	675	0.95	0.65	0.45	0.31
	MUZ-FT50VGHZ	R32	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	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP42VG	R32	675	0.70	0.47	0.26	0.18
	MUZ-AP50VG	R32	675	1.00	0.68	0.26	0.18
	MUZ-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	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP35VGH	R32	675	0.55	0.37	0.26	0.18
	MUZ-AP42VGH	R32	675	0.70	0.47	0.26	0.18
	MUZ-AP50VGH	R32	675	1.00	0.68	0.26	0.18
	MUZ-EF25VG(H)	R32	675	0.62	0.42	0.26	0.18
	MUZ-EF35VG(H)	R32	675	0.74	0.50	0.26	0.18
	MUZ-EF42VG	R32	675	0.74	0.50	0.26	0.18
	MUZ-EF50VG	R32	675	1.05	0.71	0.46	0.32
	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	R32	675	0.50	0.34	0.26	0.18
	MUZ-BT50VG	R32	675	0.70	0.47	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	R32	675	0.70	0.47	0.26	0.18
	MUZ-HR50VF	R32	675	0.80	0.54	0.26	0.18
	MUZ-HR60VF	R32	675	1.05	0.71	0.46	0.32
	MUZ-HR71VF	R32	675	1.05	0.71	0.46	0.32
	MUY-TP35VF	R410A	2088	0.85	0.57	0.13	0.09
	MUY-TP50VF	R410A	2088	0.85	0.57	0.13	0.09
	MUZ-FH25VE	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH35VE	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH50VE	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-FH25VEHZ	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH35VEHZ	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-FH50VEHZ	R410A	2088	1.55	3.24	0.46	0.97
M-Series	MUZ-SF25VE(H)	R410A	2088	0.70	1.47	0.39	0.82
001100	MUZ-SF35VE(H)	R410A	2088	0.80	1.68	0.39	0.82
	MUZ-SF42VE(H)	R410A	2088	1.15	2.41	0.39	0.82
	MUZ-SF50VE(H)	R410A	2088	1.55	3.24	0.46	0.97
	MUZ-GF60VE	R410A	2088	1.55	3.24	0.40	0.84
	MUZ-GF71VE	R410A	2088	1.90	3.97	1.10	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	R410A	2088	0.72	1.51	0.26	0.55
	MUZ-HJ25VA	R410A	2088	0.70	1.47	0.26	0.55
	MUZ-HJ35VA	R410A	2088	0.72	1.51	0.26	0.55
	MUZ-HJ50VA	R410A	2088	1.15	2.41	0.26	0.55
	MUZ-HJ60VA	R410A	2088	1.80	3.76	0.46	0.97
	MUZ-HJ71VA	R410A	2088	1.80	3.76	0.46	0.97
	MUFZ-KJ25VE	R410A	2088	1,1	2.30	0.39	0.82
	MUFZ-KJ35VE	R410A	2088	1,1	2.30	0.39	0.82
	MUFZ-KJ50VE	R410A	2088	1.50	3.14	0.46	0.97
	MUFZ-KJ25VEHZ	R410A	2088	1,1	2.30	0.39	0.82
	MUFZ-KJ35VEHZ	R410A	2088	1,1	2.30	0.39	0.82
	MUFZ-KJ50VEHZ	R410A	2088	1.50	3.14	0.46	0.97
	MXZ-2D33VA	R410A	2088	1.15	2.72	0.0	0.00
	MXZ-2D42VA2	R410A	2088	1.3	2.72	0.2	0.42
	MXZ-2D53VA(H)2	R410A	2088	1.3	2.72	0.2	0.42
	MXZ-3E54VA	R410A	2088	2.7	5.64	0.2	0.42
	MXZ-3E68VA	R410A	2088	2.7	5.64	0.4	0.84
	MXZ-4E72VA	R410A	2088	2.7	5.64	0.4	0.84
	MXZ-4E83VA	R410A	2088	2.99	6.25	0.9	1.88
	MXZ-5E102VA	R410A	2088	2.99	6.25	1.6	3.35
	MXZ-6D122VA	R410A	2088	4.0	8.36	1.0	2.09
	MXZ-2F33VF3	R32	675	0.8	0.54	0.8	0.54
	MXZ-2F42VF3	R32	675	1.0	0.675	1.0	0.675
	MXZ-2F53VF(H)3	R32	675	1.0	0.675	1.0	0.675
	MXZ-3F54VF3	R32	675	2.4	1.62	2.4	1.62
	MXZ-3F68VF3	R32	675	2.4	1.62	2.4	1.62
	MXZ-4F72VF3	R32	675	2.4	1.62	2.4	1.62
	MXZ-4F80VF3	R32	675	2.4	1.62	2.4	1.62
	MXZ-4F83VF	R32	675	2.4	1.62	2.4	1.62
	MXZ-5F102VF	R32	675	2.4	1.62	2.4	1.62
	MXZ-6F122VF	R32	675	2.4	1.62	2.4	1.62
	MXZ-2F53VFHZ	R32	675	2.4	1.62	2.4	1.62
	MXZ-4F83VFHZ	R32	675	2.4	1.62	2.4	1.62
	MXZ-2E53VAHZ	R410A	2088	2.0	4.18	0.2	0.42
	MXZ-4E83VAHZ	R410A	2088	3.9	8.15	0.9	1.88
	MXZ-2DM40VA	R410A	2088	0.95	1.99	0.2	0.42
	MXZ-3DM50VA	R410A	2088	2.7	5.64	0.2	0.42
	MXZ-2HA40VF	R32	675	0.9	0.61	0.9	0.61
	MXZ-2HA50VF	R32	675	0.9	0.61	0.9	0.61

		Refrige	erant	Pre-charged quantity		Max. added guantity	
	Model Name			Weight	CO <sub>2</sub>	Weight	CO <sub>2</sub>
			GWP	[kg]	equivalent [t]	[kg]	equivalent [t]
	SUZ-M25VA	R32	675	0.65	0.44	0.91	0.61
	SUZ-M35VA	R33	675	0.90	0.61	1.16	0.78
	SUZ-M50VA	R34	675	1.20	0.81	1.66	1.12
	SUZ-M60VA SUZ-M71VA	R35 R36	675 675	1.25 1.45	0.84	1.71 2.37	1.15 1.60
S-Series	SUZ-KA25VA6	R410A	2088	0.80	1.68	0.39	0.82
	SUZ-KA35VA6	R410A	2088	1.15	2.41	0.39	0.82
	SUZ-KA50VA6	R410A	2088	1.60	3.35	0.46	0.97
	SUZ-KA60VA6	R410A	2088	1.60	3.35	0.46	0.97
	SUZ-KA71VA6	R410A	2088	1.80	3.76	1.265	2.65
	PUZ-ZM35VKA PUZ-ZM50VKA	R32 R32	675 675	2.0	1.35	0.3	0.20
	PUZ-ZM60VHA	R32	675	2.8	1.89	0.8	0.54
	PUZ-ZM71VHA	R32	675	2.8	1.89	0.8	0.54
	PUZ-ZM100VKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM100YKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM125VKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM125YKA PUZ-ZM140VKA	R32 R32	675 675	4.0	2.70 2.70	2.8	1.89
	PUZ-ZM140YKA	R32	675	4.0	2.70	2.8	1.89
	PUZ-ZM200YKA	R32	675	6.3	4.25	9.2	6.21
	PUZ-ZM250YKA	R32	675	6.8	4.59	9.2	6.21
	PUHZ-ZRP35VKA2	R410A	2088	2.2	4.60	0.4	0.84
	PUHZ-ZRP50VKA2	R410A	2088	2.4	5.02	1.2	0.84
	PUHZ-ZRP60VHA2 PUHZ-ZRP71VHA2	R410A R410A	2088	3.5	7.31 7.31	1.2	2.51
	PUHZ-ZRP100VKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP100YKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP125VKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP125YKA3	R410A	2088	5.0	10.44	2.4	5.02
	PUHZ-ZRP140VKA3 PUHZ-ZRP140YKA3	R410A R410A	2088	5.0	10.44	2.4	5.02 5.02
P-Series	PUHZ-ZRP200YKA3	R410A	2088	7.1	14.83	3.6	7.52
	PUHZ-ZRP250YKA3	R410A	2088	7.7	16.08	4.8	10.03
	PUZ-M100VKA	R32	675	3.1	2.09	4.1	2.77
	PUZ-M100YKA	R32	675	3.1	2.09	4.1	2.77
	PUZ-M125VKA	R32	675	3.6	2.43	5.0	3.38
	PUZ-M125YKA PUZ-M140VKA	R32 R32	675 675	3.6	2.43	5.0	3.38
	PUZ-M140YKA	R32	675	3.6	2.43	5.0	3.38
	PUZ-M200YKA	R32	675	5.6	3.78	7.2	4.86
	PUZ-M250YKA	R32	675	6.8	4.59	9.2	6.21
	PUHZ-P100VKA	R410A	2088	3.3	6.89	1.2	2.51
	PUHZ-P100YKA PUHZ-P125VKA	R410A R410A	2088	3.3	6.89 7.93	1.2	2.51
	PUHZ-P125YKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P140VKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P140YKA	R410A	2088	3.8	7.93	1.2	2.51
	PUHZ-P200YKA3	R410A	2088	6.5	13.58	3.6	7.52
	PUHZ-P250YKA3	R410A	2088	7.7	16.08	4.8	10.03
	PUHZ-SHW112VHA	R410A	2088	5.5 5.5	11.49 11.49	2.4	5.02 5.02
	PUHZ-SHW112YHA PUHZ-SHW140VHA	R410A R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-SHW140YHA	R410A	2088	5.5	11.49	2.4	5.02
	PUHZ-FRP71VHA	R410A	2088	3.8	7.94	1.8	3.76
	PUMY-SP112VKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP112YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP125VKM(-BS) PUMY-SP125YKM(-BS)	R410A R410A	2088	3.5	7.31 7.31	9.0	18.79 18.79
	PUMY-SP125YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
	PUMY-SP140YKM(-BS)	R410A	2088	3.5	7.31	9.0	18.79
PUMY	PUMY-P112VKM5(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P125VKM5(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P140VKM5(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P112YKM(E)4(-BS) PUMY-P125YKM(E)4(-BS)	R410A R410A	2088	4.8 4.8	10.02 10.02	13.8	28.81 28.81
	PUMY-P125YKM(E)4(-BS)	R410A	2088	4.8	10.02	13.8	28.81
	PUMY-P200YKM2 (-BS)	R410A	2088	7.3	15.24	13.1	27.35

# 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)

<sup>\*1</sup> IPCC 4th assessment report.

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

#### a) Do not leak refrigerant.

<Installation> ·Vacuum drying should be done. Air purging is prohibited.

·Follow "4. Installation Points of Refrigerant Piping Work".

<Repair/Relocation/Removal> ·Pump down or recovering refrigerant should be done.

#### b) Prevent concentration.

·Ventilate during installation and servicing, such as open the door or window and use a fan.

·Follow "2. Installation Restrictions".

#### c) Keep ignition source away from the unit.

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

Note

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

<sup>\*2</sup> LFL : Lower flammable limit

<sup>\*3</sup> UFL: Upper flammable limit

<sup>\*4</sup> ISO 817:2014

<sup>\*5</sup> R32 consistency is higher than LFL\*1 and lower than UFL\*2.

#### 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 Series M[kg]

0.7

8.0

0.9

1.0

1.2

1.3

1.4

1.5

1.6

1.7 1.8 1.9

2.0

<p< th=""><th>Ser</th><th>ies&gt;</th></p<>	Ser	ies>

ies>	<p series=""></p>				
Amin[m²]	M[kg]	Amin[m²]			
1.7	1.0	4			
2.0	1.5	6			
2.2	2.0	8			
2.5	2.5	10			
2.7	3.0	12			
3.0	3.5	14			
3.2	4.0	16			
3.4	4.5	20			
3.7	5.0	24			
3.9	5.5	29			
4.2	6.0	35			
4.4	6.5	41			
4.6	7.0	47			
4.9	7.5	54			

<Only for MFZ-KT>

Amin[m²]

3.75 3.95

4.15

4.34

4.54 4.74

<ivixz< th=""><th>Series</th></ivixz<>	Series

M[kg]	Amin[m²]	M[kg]	
1.0	3	1.00	
1.5	4.5	1.50	
2.0	6	1.80	
2.5	7.5	1.84	
3.0	9	1.90	
3.5	12	2.00	
4.0	15.5	2.10	
4.5	20	2.20	
5.0	24	2.30	
5.5	29	2.40	ĺ

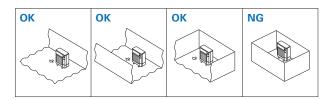
3.5	12	2.00
4.0	15.5	2.10
4.5	20	2.20
5.0	24	2.30
5.5	29	2.40
6.0	35	
6.5	41	
7.0	47	

54

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

#### 2) Outdoor Units

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



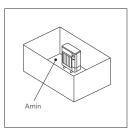
If you unavoidably install a unit in a space where all four sides are blocked or there are depressions, confirm that one of these situations (A, B or C) is satisfied.

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

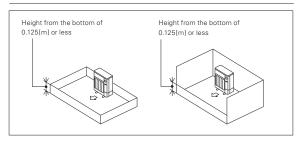
Install in a space with an installation area of Amin\* or more, corresponding to refrigerant quantity M. (M = factory-charged refrigerant + locally added refrigerant)

\* Refer to table and drawings below

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



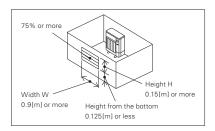
#### B Install in a space with a depression height of ≤0.125[m].



#### 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)

# OSSNAY SYSTEM







#### **LOSSNAY LINEUP**

Applica	ation	Model	Airflow 50		150 CMH	250 CMH	350 CMH	500 CMH	650 CMH	800 CMH	1000 CMH	1500 CMH	2000 CMH	2500 CMH
2 0		LGH-RVX Series			•	•	•	•	•	•	•	•	•	
	þé	LGH-RVXT Series										•	•	•
entilatic	Concealed	GUF Series						•			•			
Centralized Ventilation	Ceiling C	GUG Series (Dx-coil unit for Lossnay LGH-RVX/RVXT Series)						•	•	•	•	•	•	•
Centr		VL-220CZGV-E				•								
	Vertical Type	VL-CZPVU Series				•	•							
Decentralized Ventilation Wall Mounted	ounted	VL-100(E)U5-E		•										
	Wall Mour Type	VL-50(E)S <sub>2</sub> -E VL-50SR <sub>2</sub> -E												

#### 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.

#### **GUF** Series

Heat recovery units with a heating and cooling system that uses the City Multi outdoor unit as a heat source.

#### **Dx-coil unit (GUG Series)**

Temperature control equipment that works with Lossnay units and Mr. Slim outdoor units.

#### **VL-CZPVU Series**

Vertical type for residential use centralized ventilation with sensible heat exchange.

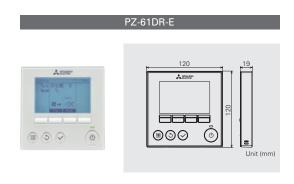
#### VL-220CZGV-E

Centralized ventilation with sensible heat exchange, for residential use.

#### VL-100(E)U5-E, VL-50(E)S2-E, VL-50SR2-E

Wall-mounted models. Particularly suitable for houses and small offices.

#### REMOTE CONTROLLER



# PZ-43SMF-E To a series of the control of the contr

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

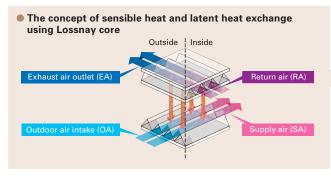
# LOSSNAY

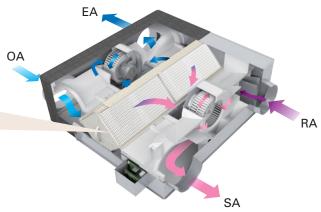
Lossnay ventilation systems are renowned industry-wide for their efficiency. They offer environment-friendly energy recovery and humidity control, and enable air conditioning systems to simultaneously provide optimum room comfort and energy savings.



# Indoor Air Quality Inside a Building is Optimized Through Temperature and Humidity Exchange by Lossnay

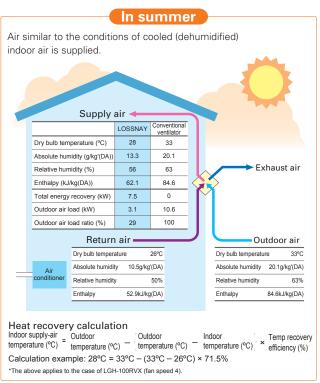
Lossnay is a total heat exchange ventilation system that uses paper characteristics to perform temperature (sensible heat) and humidity (latent heat) exchange.

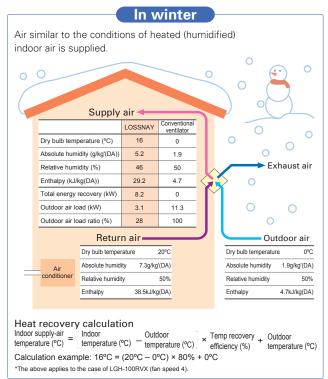




#### What Can Be Improved by Introducing Lossnay?

#### Ventilation with maximized comfort





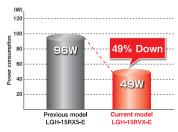
#### Commercial Use Lossnay

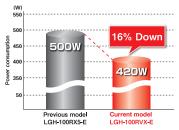
#### LGH-RVX Series (Standard model)

# Power consumption reduced further with the introduction of a DC motor

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

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





#### Improved airflow range

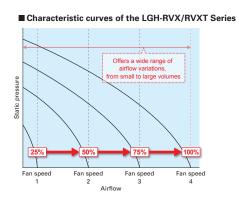
#### Wide airflow range

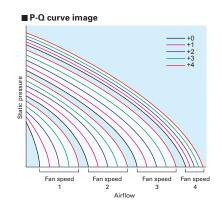
Each fan speed has a range setting of 25, 50, 75 and 100%, allowing much finer airflow control. When used in combination with the CO<sub>2</sub> sensor or timer function, airflow can be controlled according to conditions that realize better performance and reduce power consumption.

#### Fan speed adjustment function

The default fan speed value can be adjusted slightly. Use the PZ-61DR-E remote controller to reset the speed.

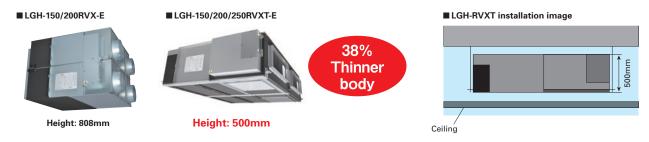
- 1) Considering the total hours of Lossnay operation (filter clogging), fan power can be adjusted automatically after a given period of time.
- 2) After the unit is installed, fine adjustments can be made if the airflow is slightly lower than the desired airflow.





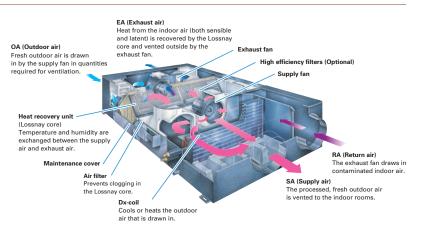
#### LGH-RVXT Series (Thin body type)

The LGH-RVXT series has a large airflow of 1500 - 2500 CMH but a thin body of approximately 500mm. Therefore, installing the unit in the ceiling is easy.



#### GUF Series (Lossnay with Dx-coil unit)

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



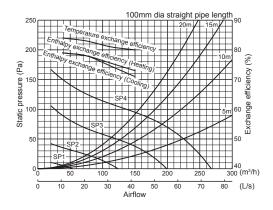
#### Commercial Use Lossnay Specifications

#### **RVX Series**

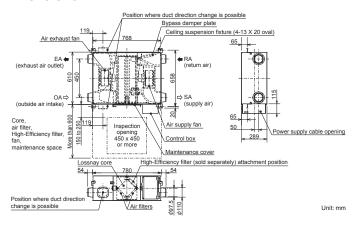
#### LGH-15RVX-E

Electrical power supply			220-240V/50Hz, 220V/60Hz								
Ventilation mode		Heat recovery mode Bypass mode						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	(m <sup>3</sup> /h)	150	113	75	38	150	113	75	38		
AITTIOW	(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	-	-	-	-		
Enthalpy exchange eniciency (%)	Cooling	71	74.5	78	79	-	-	-	-		
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		28	24	19	17	29	24	19	18		
Weight (kg)		20									
Specific energy consumption class			A								

#### **Characteristic Curves**



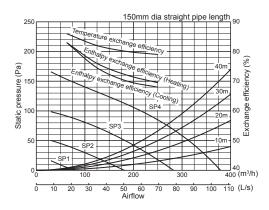
#### **Dimensions**



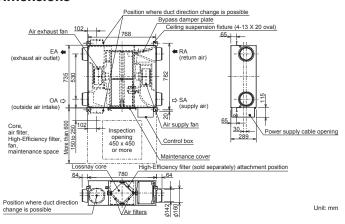
#### LGH-25RVX-E

EGIT EGIT V. E											
Electrical power supply			220-240V/50Hz, 220V/60Hz								
Ventilation mode			Heat recovery mode Bypass mode								
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1		
Running current (A)		0.48	0.28	0.16	0.10	0.48	0.29	0.16	0.11		
Input power (W)			33	16	7.5	63	35	17	9		
Airflow	(m <sup>3</sup> /h)	250	188	125	63	250	188	125	63		
Airiow	(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	-	-	-	-		
Entitlatiby exchange efficiency (%)	Cooling	68	70	74.5	83	-	-	-	-		
Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		27	22	20	17	27.5	23	20	17		
Weight (kg)		23									
Specific energy consumption class			A								

#### **Characteristic Curves**



#### **Dimensions**



<sup>\*</sup>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.

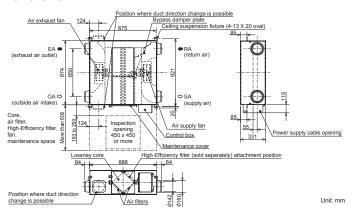
## LGH-35RVX-E

Electrical power supply				2	20-240V/50H	tz, 220V/60H	-lz		
Ventilation mode	Ventilation mode Heat recovery mode Bypass mo				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	(m <sup>3</sup> /h)	350	263	175	88	350	263	175	88
	(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	-	-	-	-
Littralpy exchange efficiency (76)	Cooling	71	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)			30						

## **Characteristic Curves**

# Static pressure (I 180 (L/s)

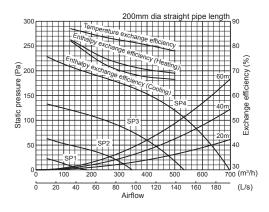
## **Dimensions**

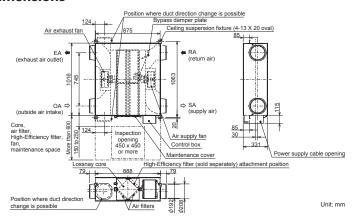


## LGH-50RVX-E

Electrical power supply				2:	220-240V/50Hz, 220V/60Hz				
Ventilation mode		Heat recovery mode Bypass mode							
Fan speed		SP4	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	(m <sup>3</sup> /h)	500	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	-	-	-	-
Littialpy exchange efficiency (%)	Cooling	66.5	68	72.5	82	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	34	28	19	18	35	29	20	18
Weight (kg)		33							

## **Characteristic Curves**





- 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.

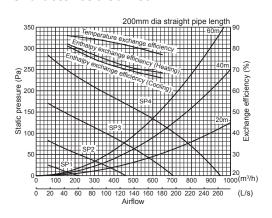
  \*For specifications at other frequencies, contact your dealer.

## Commercial Use Lossnay Specifications

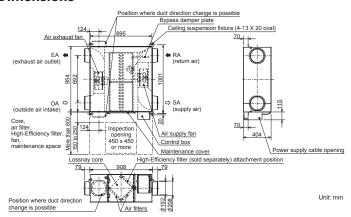
## LGH-65RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode				Bypass mode			
Fan speed		SP4	SP3	SP2	SP1	SP4	SP4 SP3 SP2 SF		
Running current (A)		1.65	0.90	0.39	0.15	1.72	0.86	0.38	0.16
Input power (W)		252	131	49	15	262	131	47	17
Airflow	(m <sup>3</sup> /h)	650	488	325	163	650	488	325	163
Airiow	(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	-	-	-	-
Entirally exchange eniciency (70)	Cooling	66	69.5	74	81	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	34.5	29	22	18	35.5	29	22	18
Weight (kg)		38							

#### **Characteristic Curves**



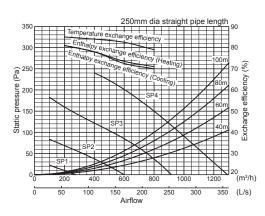
## **Dimensions**

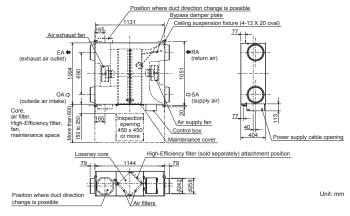


## LGH-80RVX-E

Electrical power supply				2:	20-240V/50H	Hz, 220V/60H	Ηz		
Ventilation mode		Heat recovery mode Bypass mode							
Fan speed		SP4         SP3         SP2         SP1         SP4         SP3         SP2			SP1				
Running current (A)		1.82	0.83	0.36	0.15	1.97	0.86	0.40	0.15
Input power (W)		335	151	60	18	340	151	64	20
Airflow	(m <sup>3</sup> /h)	800	600	400	200	800	600	400	200
Airnow	(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	-	-	-	-
Littilalpy exchange efficiency (%)	Cooling	70	72.5	78	81	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	nber) 34.5 30 23 18 36 30 23			18				
Weight (kg)		48							

#### **Characteristic Curves**





<sup>\*</sup>The running current, the input power, the efficiency and the noise are based on the rated airflow, 230V/50Hz, and 220V/60Hz.

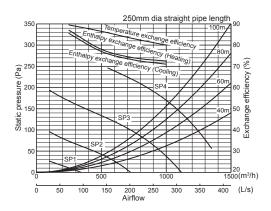
\*Figures in the chart is measured according to Japan Industrial Standard (JIS B 8628). Characteristic Curves are measured by chamber method.

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

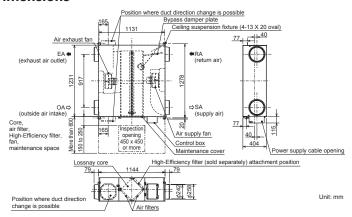
#### LGH-100RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		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	-	-	-	-
Littrapy 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**



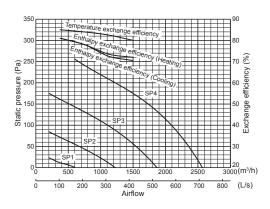
## **Dimensions**

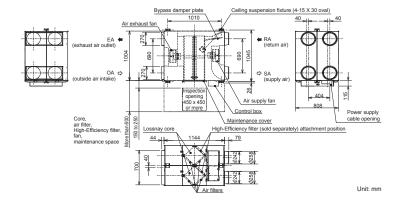


## LGH-150RVX-E

Electrical power supply				2:	20-240V/50H	tz, 220V/60H	Hz		
Ventilation 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
Aimov	(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 enrolency (%)	Cooling	70.5	72.5	78	81	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	of the unit in an anechoic chamber) 39 32 24 18 40.5 33 26			18				
Weight (kg)		98							

## **Characteristic Curves**





<sup>■</sup> 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.

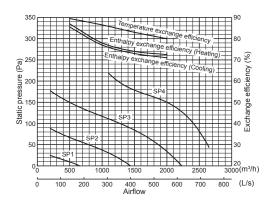
\*For specifications at other frequencies, contact your dealer.

## Commercial Use Lossnay Specifications

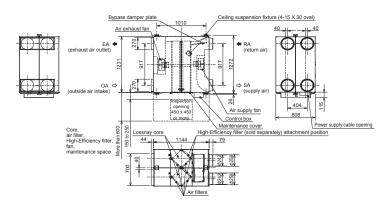
## LGH-200RVX-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode Bypass mode							
Fan speed		SP4         SP3         SP2         SP1         SP4         SP3         SP2				SP1			
Running current (A)		4.88	2.20	0.88	0.33	4.54	2.06	0.87	0.35
Input power (W)		850	400	153	42	853	372	150	49
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)		150	84	38	10	150	84	38	10
Temperature exchange efficiency (	%)	80	83	86.5	89.5	-	-	-	-
Enthalpy exchange efficiency (%)	Heating	72.5	74	78	87	-	-	-	-
Littialpy exchange efficiency (%)	Cooling	71	73	77	85.5	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	40	36	28	18	41	36	27	19
Weight (kg)									

## **Characteristic Curves**



## **Dimensions**



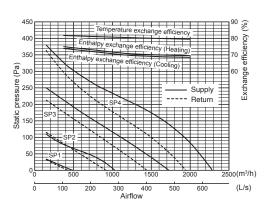
Unit: mm

## **RVXT Series**

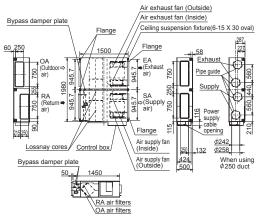
#### LGH-150RVXT-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
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	8 625 334 134			37
Airflow	(m <sup>3</sup> /h)	1500	1125	750	375	1500	1125	750	375
All llow	(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	-	-	-	-
Littialpy exchange efficiency (70)	Cooling	69	70	72	74	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	c chamber) 39.5 35.5 29.5 22 39 33 26.5			26.5	20.5			
Weight (kg)									

#### **Characteristic Curves**



#### **Dimensions**



<sup>\*</sup>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.

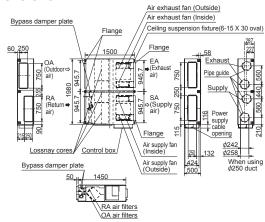
#### LGH-200RVXT-E

Electrical power supply		220-240V/50Hz, 220V/60Hz							
Ventilation mode		Heat recovery mode Bypass mode							
Fan 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
All How	(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 (70)	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**

## Temperature exchange efficiency Enthalpy exchange efficiency (Heating) Enthalpy exchange efficiency (Cooling) Supply Sp4 Sp4 Sp4 9 % % % Exchange efficiency (%) 250 200 3000(m³/h) 800 (L/s) 200

#### **Dimensions**

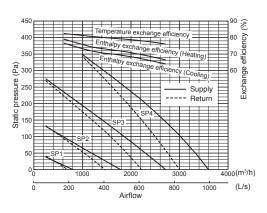


Unit: mm

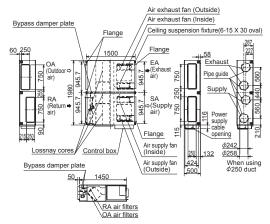
#### LGH-250RVXT-E

EGII EGGII VALLE									
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)		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 6			69
Airflow	(m <sup>3</sup> /h)	2500	1875	1250	625	2500	1875	1250	625
	(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	-	-	-	-
Enthalpy exchange eniciency (%)	Cooling	65.5	69	71.5	76.5	-	-	-	-
Noise (dB) (Measured at 1.5m under	the center of the unit in an anechoic chamber)	43	39	32	24	44	38.5	31	22.5
Weight (kg)		198							

#### **Characteristic Curves**



#### **Dimensions**



<sup>■</sup>For LGH-RVX and LGH-RVXT series

<sup>\*</sup>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.

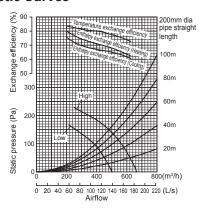
## Commercial Use Lossnay Specifications

## **GUF Series**

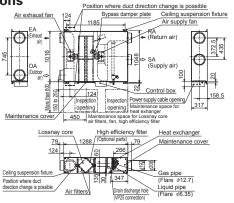
#### GUF-50RD4

Electrical power supply				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		(m <sup>3</sup> /h)	500	400	500	400		
Airiow		(L/s)	139	111	139	111		
External static pressure (Pa)			140	90	140 90			
Temperature exchange efficien	y (%)		77.5	80				
Enthalpy exchange efficiency (		Heating	68	71	-	-		
Entrialpy exchange eniciency (	0)	Cooling	65	67	-	-		
Cooling capacity (kW)				5.57	(1.94)			
Heating capacity (kW)				6.21	(2.04)			
Capacity equivalent to the indo	or unit			PS	32			
Humidit	ing			-	-			
Humidifier Humidif	ing cap	pacity (kg/h)		-	-			
Water s	Water supply pressure			-				
Noise (dB) (Measured at 1.5	oise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		namber) 33.5-34.5 29.5-30.5 35-36 29.5-30.5					
Weight (kg)	eight (kg)			48				

#### **Characteristic Curves**



# **Dimensions**

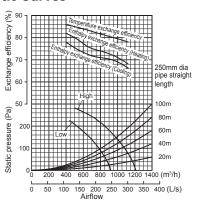


Unit: mm

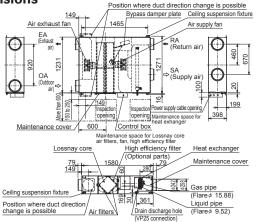
## **GUF-100RD4**

Electrical power supply			220-240	OV/50Hz			
Ventilation mode		Heat reco	very mode	Bypass	s mode		
Fan speed		High	High Low		Low		
Running current (A)		2.20	1.73	2.25	1.77		
Input power (W)		480-505	370-395	490-515 385-410			
Airflow	(m³/h)	1000	800	1000	800		
Alfilow	(L/s)	278	222	278	222		
External static pressure (Pa)		140	90	140 90			
Temperature exchange efficiency	%)	79.5	79.5 81.5 –				
Enthalpy exchange efficiency (%)	Heating	71	74	-	-		
Entitlalpy exchange efficiency (%)	Cooling	69	71	-	-		
Cooling capacity (kW)	·		11.44	(4.12)			
Heating capacity (kW)			12.56	(4.26)			
Capacity equivalent to the indoor	ınit		Pe	63			
Humidifyin			-	-			
Humidifier Humidifyin	Humidifying capacity (kg/h)		-				
Water supp	ly pressure	-					
Noise (dB) (Measured at 1.5m	Noise (dB) (Measured at 1.5m under the center of the unit in an anechoic chamber)		34-35	38-39	35-36		
Weight (kg)		82					

#### **Characteristic Curves**



**Dimensions** 



<sup>■</sup>For GUP 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

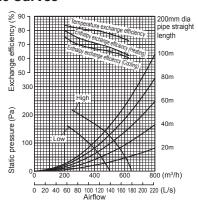
\*\*The figures in ( ) indicates heat recoverying capacity of heat exchange core.

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

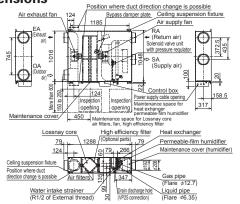
#### **GUF-50RDH4**

Let			I					
Electrical power supply					OV/50Hz			
Ventilation mode			Heat reco	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		
		(L/s)	139	111	139	111		
External static pressure (Pa	a)		125	80	125	80		
Temperature exchange effic	iciency (%)		77.5	80	-	-		
Enthalpy exchange efficiency (%)		Heating	68	71	-	-		
Entrialpy exchange enicien	ICY (70)	Cooling	65	67	-	-		
Cooling capacity (kW)			5.57 (1.94)					
Heating capacity (kW)			6.21 (2.04)					
Capacity equivalent to the	indoor unit		P32					
Hun	midifying			Permeable fi	lm humidifier			
Humidifier Hum	midifying cap	acity (kg/h)		2.7 (he	eating)			
Wat	ter supply pre	essure	Minimum pressure : 2.0 × 10 <sup>4</sup> Pa Maximum pressure : 49.0 × 10 <sup>4</sup> Pa					
Noise (dB) (Measured at	t 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-					
Weight (kg)			51 (filled with water 55)					

#### **Characteristic Curves**



## **Dimensions**

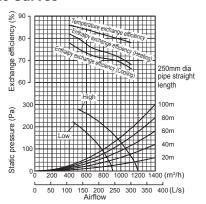


#### GUF-100RDH4

Electrical power supply				220-24	OV/50Hz			
Ventilation mode			Heat reco	very mode	Bypas	s mode		
Fan speed			High	Low	High	Low		
Running current (A)			2.20	1.76	2.25	1.77		
Input power (W)			480-505	385-400	490-515	385-410		
Airflow	(m <sup>3</sup> /h)		1000	800	1000	800		
Alfilow	(L/s)		278	222	278	222		
External static pressure (Pa)	·		135	86	135	86		
Temperature exchange efficience	/ (%)		79.5	81.5	-	-		
Enthalpy exchange efficiency (%)			71	74		-		
Entrialpy exchange eniciency (%	Cooling		69	71	-	-		
Cooling capacity (kW)			11.44 (4.12)					
Heating capacity (kW)			12.56 (4.26)					
Capacity equivalent to the indoo	r unit		P63					
Humidify	ng		Permeable film humidifier					
Humidifier Humidify	ng capacity (kg/	n)		5.4 (h	eating)			
Water su	oply pressure		Minimum	pressure : 2.0 × 10 <sup>4</sup> Pa	Maximum pressure : 49.	.0 × 10 <sup>4</sup> Pa		
Noise (dB) (Measured at 1.5r	under the cen	ter of the unit in an anechoic chamber)	38-39 34-35 38-39 35-36					
Weight (kg)			88 (filled with water 96)					

**Dimensions** 

#### **Characteristic Curves**



Position where duct direction change is possible

Bypass damper plate Airsupply fan Ceiling suspension fixture Air exhaust far EA opening opening Mainter Maintenance cover Heat exchanger Permeable-film humidifier 79 149 Maintenance cover (humidifier) Ceiling suspension fixture Gas pipe (Flare φ15.88) Liquid pipe (Flare  $\phi$ 9.52)

Water intake strainer (R1/2 of External thread)

Unit: mm

## Optimized System Integration

## **List of Remote Controller Settings and Functions**

The remote controller provides a wide range of functions and features in addition to the main functions described below, such as sophisticated energy saving control and easy user interface.

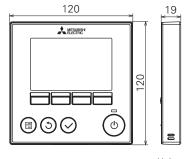
unction (Communicating mode)	PZ-61DR-E	PZ-43SMF-E
an speed selection	4 fan speeds	2 of 4 fan speeds
entilation mode selection	Energy recovery / Bypass / Auto	Energy recovery / Bypass / Auto
light-purge setting (time and fan speed)	Yes	No
unction setting from RC	Yes	No
ypass temp. free setting	Yes	No
leater-On temp. free setting	Yes	No
an power up after installation	Yes	No
- 10VDC external input	Yes	Yes
N/OFF timer	Yes	Yes
uto-Off timer	Yes	No
Veekly timer	Yes	No
peration restrictions (ON/OFF, Ventilation mode, fan speed)	Yes	No
peration restrictions (Fan speed skip setting)	Yes	No
creen contrast adjustment	Yes	No
anguage selection	Yes (8 languages)*	No (English only)
nitializing	Yes	No
ilter cleaning sign	Yes	Yes
ossnay core cleaning sign	Yes	No
rror indication	Yes	Yes
rror history	Yes	No
A/RA/SA temp. display	Yes	No

<sup>\*</sup>The 8 languages are English, German, French, Spanish, Italian, Portuguese, Russian and Swedish.

#### Controllers

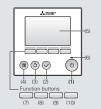
#### **Lossnay Remote Controller (PZ-61DR-E)**



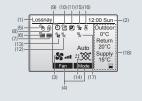


Unit: mm

#### Operation section



#### **Display section**



- (1) Press to turn ON/OFF the Lossnay unit.

- (2) Press to save the setting.
  (3) Press to return to the previous screen.
  (4) Press to bring up the Main menu.
- (5) Operation settings will appear. When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.
- (6) This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.

  (7) Main menu: Press to move the cursor down.
- (8) Main display: Press to change the fan speed. Main menu: Press to move the cursor up.
- (9) Main display: Press to change the ventilation mode.

  Main menu: Press to go to the previous page.

  (10) Main menu: Press to go to the next page.
- (1) Lossnay is always displayed.

- (1) Lossnay is aways displayed.
  (2) Current time appears here.
  (3) Fan speed setting appears here.
  (4) Functions of the corresponding buttons appear here.
  (6) Appears when the ON/OFF operation is centrally controlled.
  (6) Appears when the filter reset function is centrally controlled.

- (6) Appears when the filter reset function is centrally controlled.

  7) Indicates when the filter and/or Lossnay core needs maintenance.

  (8) Appears when the buttons are locked and/or a fan speed is skipped.

  (9) Appears when the On/Off timer or Auto-off timer function is enabled.

  (10) Appears when the Weekly timer is enabled.

  (11) Appears when the night-purge function is available.

  (12) Appears when performing operation to protect the equipment.

  (13) Appears when performing the power supply/exhaust function or the delay operation at the start of operation.

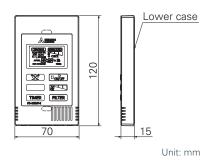
  (14) Indicates the ventilation mode setting.

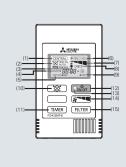
  (15) Appears when external fan speed operation.

- (15) Appears when external fan speed operation.
  (16) Appears when operation is interlocked with the external unit.
- (17) Appears when external ventilation mode operation.(18) Displays the outdoor temperature, return temperature, and supply temperature (calculated value)

## **Lossnay Remote Controller (PZ-43SMF-E)**







- (1) Displayed during remote operation is prohibited by the centralized control unit, etc
- (2) Displays the ventilation mode status.

₩ HEAT EX. Heat exchange By-pass ← BY-PASS Automatic (HEAT EX./BY-PASS) HEAT EX. OF AUTO BY-PASS

- (3) Displayed while the Lossnay remote controller is powered on. (4) Displays on-timer or off-timer duration.
- (5) When a button is pressed for a function which the Lossnay unit cannot perform, this display flashes concurrently with the display of the function.
- (6) Displayed when the Lossnay starts off by interlocked indoor unit or external signal.
   (7) Displays the selected fan speed.
- (8) Displayed together with the malfunctioning unit (3 digits) and an error code (4 digits).
- (9) Displayed when the accumulated operating time reaches the time set for filter maintenance.

  (10) Used to select the ventilation mode among heat exchange, by-pass
- or automatic (11) Increasing 0:30 by pressing it once. Keep pressing the button for

- fast-forwarding.

  (12) Switch for start and stop.

  (13) On during operation. Flashes when a malfunction occurs.

  (14) Used to select the fan speed either "Low" or "High".



(15) Press twice to reset the filter sign display.

## **Filters**

## **Standard Filters**

Replacements for the standard filter supplied with the Lossnay main unit.



		Filter			Lossnay	
Filter	Classif	ication	Model Name	Included	Applicable model	Required
Material	ISO 16890	EN779 (2012)	iviouei name	piece/set	Applicable filodel	filter pieces
			PZ-15RF8-E	2	LGH-15RVX-E	2
		G3*	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
	Coarse 35%		PZ-65RF <sub>8</sub> -E	4	LGH-65RVX-E	4
Non-woven Fabrics			PZ-80RF <sub>8</sub> -E	4	LGH-80RVX-E	4
1 051100				4	LGH-150RVX-E	8
			D7 100DE . E	4	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	4
			PZ-100RFs-E	4	LGH-200RVX-E	8
	C F00/	60	PZ-150RTF-E	4	LGH-150RVXT-E	4
	Coarse 50%	G3	PZ-250RTF-E	4	LGH-200RVXT-E, LGH-250RVXT-E	4

<sup>\*</sup>The classification in EN779 (2002) is G3.

## **High-efficiency Filters** Optional

These high-efficiency filters can be easily inserted in the Lossnay unit without the need to attach external parts.



		Filter			Lossnay			
Filter	Classif	ication	Model Name	Included	Applicable model	Required		
Material	ISO 16890	EN779 (2012)	Wiodel Name	piece/set	Applicable Hodel	filter pieces		
		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		
	ePM1075%		PZ-50RFM-E	2	LGH-50RVX-E, GUF-50RD4, GUF-50RDH4	2		
Synthetic fiber			PZ-65RFM-E	2	LGH-65RVX-E	2		
			PZ-80RFM-F		LGH-80RVX-E	2		
			PZ-8UNFIVI-E	2	LGH-150RVX-E	4		
			PZ-100RFM-E	2	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	2		
			PZ-TOURFIVI-E	Z	LGH-200RVX-E	4		

<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 0.5 $\mu$ m or larger )



		Filter			Lossnay				
Filter	Classif	ication		Included		Required			
Material	ISO 16890	ASHRAE 52.2 (2017)	Model Name	piece/set	Applicable model	filter pieces			
			PZ-15RFP <sub>2</sub> -E	1	LGH-15RVX-E	1			
		MERV16	PZ-25RFP <sub>2</sub> -E	2	LGH-25RVX-E	2			
			PZ-35RFP <sub>2</sub> -E	2	LGH-35RVX-E	2			
0 11 11	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			
Synthetic fiber			PZ-65RFP <sub>2</sub> -E	2	LGH-65RVX-E	2			
	ePM <sub>10</sub> 95%		PZ-80RFP <sub>2</sub> -E	2	LGH-80RVX-E	2			
			FZ-OUNFF2-E	2	LGH-150RVX-E	4			
			PZ-100RFP <sub>2</sub> -E	2	LGH-100RVX-E, GUF-100RD4, GUF-100RDH4	2			
			FZ-100RFP2-E	2	LGH-200RVX-E	4			

## 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	Included	Applicable model	Required		
Material	ISO 16890	EN779 (2012)	iviouei name	piece/set	Applicable model	filter pieces		
	ePM <sub>10</sub> 75%	M6*	PZ-M6RTFM-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		

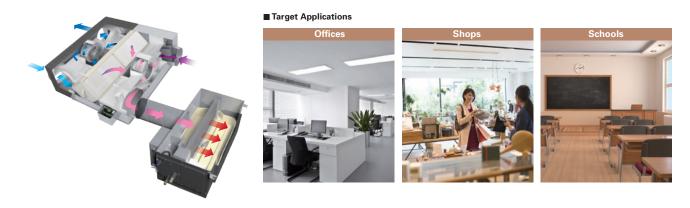
<sup>\*</sup>There is no data for the classification in EN779 (2002).

## Optional Dx-coil Unit for Lossnay

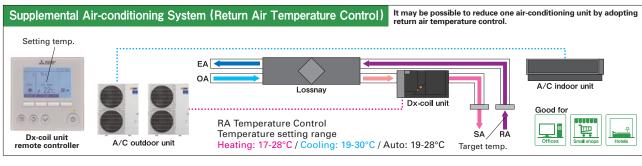
#### **Supply Comfortable Control**

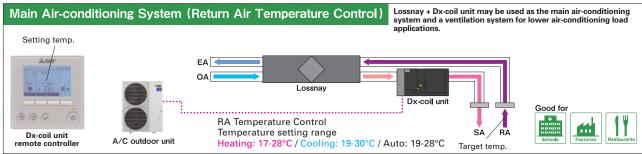
#### **Product Features**

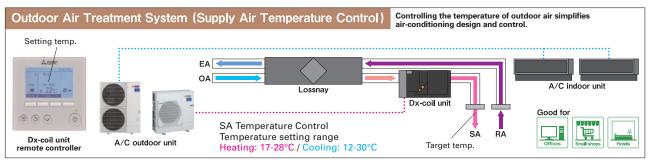
- Lossnay return air and supply air temperature control are possible by connecting the Dx-coil unit to Mr. Slim (power inverter series).
- Connecting the Dx-coil unit will expand Lossnay's temperature control range (500-2,500 CMH). Suitable for various applications such as offices, shops and schools etc.



#### **Application Examples**

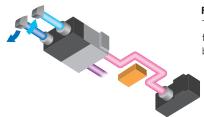






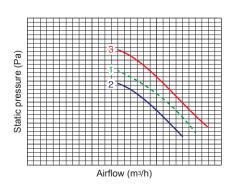
\*The above images of using the LGH-RVXT Series are simply examples for reference.

#### 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

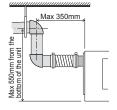
P-Q curve image

- 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-61DR-E Lossnay remote controller.

#### **Drain Pump Equipment**

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



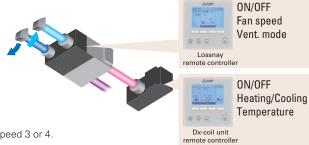
#### **User-friendly System Control**

#### Flexible Remote Controller Selection

#### (A) One remote controller



#### (B) Two remote controllers



When using only one remote controller, 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 fa	n 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		
Гап	FS2	FS2	FS2		
	FS1	FS1	FS1		

## **Specifications**

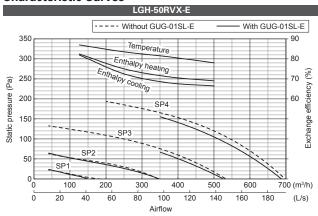
## **GUG-01SL-E (Connection to LGH-50RVX-E or LGH-65RVX-E)**

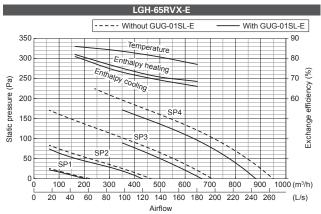


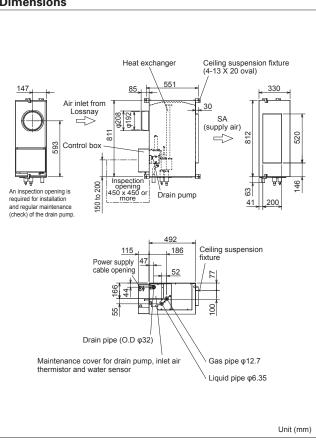
GUG-01SL-E

Refrigerant		R410A									
Electrical power supp	oly	220-240V / 50Hz	, 220V / 60Hz (Sup	plied from outdoor	unit)						
Input power		Heating / Fan: 2.5	W, Cooling: 12.4W	1				,			
Running current		Less than 0.1A									
Weight		21kg *Accesso	ries: Approx. 1kg								
Function		Heating / Cooling	/ Auto / Fan *Au	ito is only available	for RA temperatur	re control					
Function		RA (Return Air) to	emperature control								
					RA (Return Air) to	emperature control					
Connectable Lossnay	/ unit		LGH-50	DRVX-E			LGH-6	5RVX-E			
Consoity [I/M]	Heating		6.5 ( 2.4	4 + 4.1 )		7.7(3.2 + 4.5)					
Capacity [kW] Cooling			5.6 ( 2.0	0 + 3.6 )		6.6 ( 2.6 + 4.0 )					
SHF			0.0	66			0.	69			
Performance index	Heating		4.0	09			4.	72			
renormance index	Cooling		4.0	69		5.03					
Airflow range at SP3	and SP4		350 - 69	95 m³/h			350 - 9	00 m <sup>3</sup> /h			
Connectable outdoor	ectable outdoor unit PUHZ-ZRP35 PUHZ-ZRP35										
Fut minima			Diameter Liquid	I / Gas: 6.35 / 12.7		Diameter Liquid / Gas: 6.35 / 12.7					
Ext. piping		Max	imum length: 50m,	Maximum height:	30m	Maximum length: 50m, Maximum height: 30m					
					Ventilation s	pecifications					
Fan speed		SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1		
Airflow	[m³/h]	500	375	250	125	650	488	325	163		
Allilow	[L/s]	139	104	69	35	181	135	90	45		
External static pressu	External static pressure [Pa] 105 59 26 7 95 53 24					6					

## **Characteristic Curves**







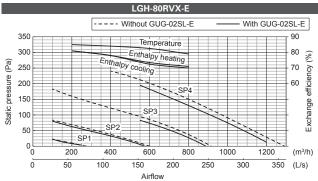
## **GUG-02SL-E** (Connection to LGH-80RVX-E or LGH-100RVX-E)

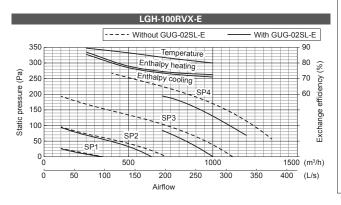


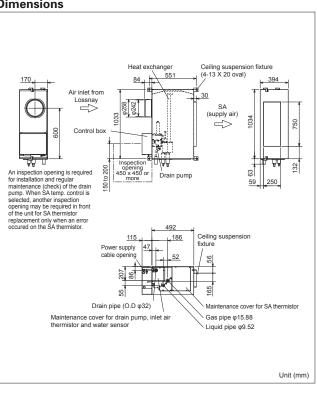
GUG-02SL-E

Refrigerant	
Input power	
Running current	
Weight   26kg *Accessories: Approx. 1kg	
Heating / Cooling / Auto / Fan	
RA (Return Air) temperature control / SA (Supply Air) temperature control [Must be set at initial setting and not possible to change from remote controller]   RA (Return 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	
Must be set at initial setting and not possible to change from remote controller    RA (Return Air) temperature control   Connectable Lossnay unit	
Connectable Lossnay unit         LGH-80RVX-E         LGH-100RVX-E           Capacity [kW]         Heating Dooling         10.0 (4.0 + 6.0)         13.2 (5.1 + 8.1)           SHF         0.69         0.66           Performance index         Heating Dooling         4.62         4.42           Cooling Cooling         4.76         4.98           Airflow range at SP3 and SP4         560 - 1200 m³/h         700 - 1200 m³/h           Connectable outdoor unit         PUHZ-ZRP50         PUHZ-ZRP71           Ext. piping         Diameter Liquid / Gas: 6.35 / 12.7         Diameter Liquid / Gas: 9.52 / 15.88           Maximum length: 50m, Maximum height: 30m         Maximum length: 50m, Maximum height: 30m           Required optional parts         PAC-SH30RJ-E and PAC-SH50RJ-E	
Capacity [kW]	
Capacity [kW]	
Cooling   S.1 (3.3 + 5.0)   II.3 (4.2 + 7.1)	
Heating	
Performance index	
A:76	
Connectable outdoor unit PUHZ-ZRP50 PUHZ-ZRP71 Ext. piping Diameter Liquid / Gas: 6.35 / 12.7 Diameter Liquid / Gas: 9.52 / 15.88 Maximum length: 50m, Maximum height: 30m Maximum length: 50m, Maximu	
Ext. piping Diameter Liquid / Gas: 6.35 / 12.7 Diameter Liquid / Gas: 9.52 / 15.88  Maximum length: 50m, Maximum height: 30m Maximum length: 50m, Maximum height: 30m  Required optional parts PAC-SH30RJ-E and PAC-SH50RJ-E	
Required optional parts  Maximum length: 50m, Maximum height: 30m  Maximum length: 50m, Maximum height: 30m  Maximum length: 50m, Maximum height: 30m  PAC-SH30RJ-E and PAC-SH50RJ-E	
Required optional parts PAC-SH30RJ-E and PAC-SH50RJ-E - Maximum length: 30m Maximum le	
SA (Supply Air) temperature control	
Connectable Lossnay unit LGH-80RVX-E LGH-100RVX-E	
10.0 (4.0 + 6.0) 11.4 (5.1 + 6.3)	
Capacity [kW] Cooling 8.3 (3.3 + 5.0) 9.5 (4.2 + 5.3)	
SHF 0.69 0.73	
Performance index Heating 4.62 5.09	
Performance index Cooling 4.76 5.43	
Airflow range at SP3 and SP4 560 - 1200 m³/h 700 - 1200 m³/h	
Connectable outdoor unit PUHZ-ZRP50 PUHZ-ZRP50	
Diameter Liquid / Gas: 6.35 / 12.7 Diameter Liquid / Gas: 6.35 / 12.7	
Ext. piping Maximum length: 50m, Maximum length: 30m Maximum length: 30m Maximum length: 30m	
Required optional parts PAC-SH30RJ-E and PAC-SH50RJ-E PAC-SH30RJ-E and PAC-SH50RJ-E	
Ventilation specifications	
Connectable Lossnay unit LGH-80RVX-E LGH-100RVX-E	
	SP1
$[m^3/h]$ 800 600 400 200 1,000 750 500	
Airflow [L/s] 222 167 111 56 278 208 139	250
External static pressure [Pa] 130 73 33 8 130 73 33	250 69

#### **Characteristic Curves**







## **Specifications**

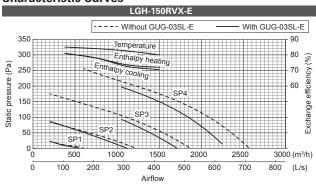
## GUG-03SL-E (Connection to LGH-150RVX-E or LGH-200RVX-E)

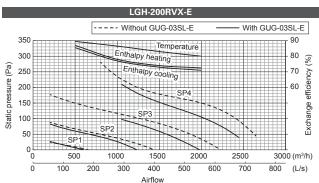


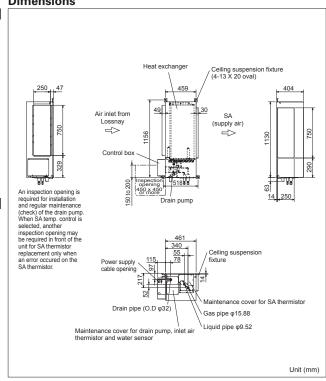
GUG-03SL-E

Refrigerant   R410A   220-240V / 50Hz, 220V / 60Hz (Supplied from outdoor unit)	D.C. Company											
Input power	3		R410A									
Running current   Less than 0.1A   Weight   28kg "Accessories: Approx. 1kg		у				r unit)						
Weight   28kg *Accessories: Approx. 1kg				5W, Cooling: 12.4W								
Heating / Cooling / Auto / Fan	ning current											
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	ght		- 5									
Must be set at initial setting and not possible to change from remote controller												
Connectable Lossnay unit   LGH-150RVX-E   LGH-200RVX-E	tion		[Must be set at initial setting and not possible to change from remote controller]									
Capacity [kW]         Heating Cooling         20.7 (7.7 + 13.0)         23.8 (10.3 + 13.5)           SHF         0.68         0.76           Performance index         Heating Cooling         4.24         5.02           Cooling         5.27         5.86           Airflow range at SP3 and SP4         1050 - 2250 m³/h         1050 - 2600 m³/h           Connectable outdoor unit         PUHZ-ZRP100         PUHZ-ZRP100           Ext. piping         Diameter Liquid / Gas: 9.52 / 15.88         Diameter Liquid / Gas: 9.52 / 15.88           Maximum length: 75m, Maximum height: 30m         Maximum length: 75m, Maximum height: 30m           SA (Supply Air) temperature control           Connectable Lossnay unit         LGH-150RVX-E         LGH-200RVX-E           Capacity [kW]         Heating         16.6 (7.7 + 8.9)         19.5 (10.3 + 9.2)           SHF         0.85         0.90           Performance index         Heating         5.46         6.30												
Capacity   KW   Cooling   15.8 (6.3 + 9.5)   18.4 (8.4 + 10.0)	nectable Lossnay ı	unit		LGH-15	0RVX-E			LGH-20	00RVX-E			
SHF	16 - 11.04.0	Heating		20.7 ( 7.7	7 + 13.0 )			23.8 ( 10.	.3 + 13.5 )			
Performance index	acity [KVV]	Cooling		15.8 ( 6.	3 + 9.5)			18.4 ( 8.	4 + 10.0 )			
Performance index				0.	68			0.	.76			
Sum   Sum		Heating		4.:	24			5.	.02			
Connectable outdoor unit	ormance index	Cooling		5.	27		5.86					
Diameter   Liquid / Gas: 9.52 / 15.88   Diameter   Liquid / Gas: 9.52 / 15.88   Maximum length: 75m, Maximum height: 30m   Maximum length: 75m, Maximum height: 30m   Maximum length: 75m, Maximum height: 30m   SA (Supply Air) temperature control	w range at SP3 ar	ind SP4		1050 - 2	250 m³/h							
Maximum length: 75m, Maximum height: 30m   Maximum length: 75m, Maximum height: 30m	nectable outdoor u	unit		PUHZ-2	ZRP100			PUHZ-	ZRP100			
Maximum length: 75m, Maximum neight: 30m   SA (Supply Air) temperature control	Fix alalas			Diameter Liquid	/ Gas: 9.52 / 15.88	3		Diameter Liquid	/ Gas: 9.52 / 15.88			
Connectable Lossnay unit         LGH-150RVX-E         LGH-200RVX-E           Capacity [kW]         Heating         16.6 (77 + 8.9)         19.5 (10.3 + 9.2)           Cooling         13.4 (6.3 + 7.1)         15.9 (8.5 + 7.4)           SHF         0.85         0.90           Porformance index         Heating         5.46         6.30	piping	Ì	Max	kimum length: 75m,	Maximum height:	30m	Max	imum length: 75m	, Maximum height:	30m		
Capacity [kW]         Heating Cooling         16.6 (7.7 + 8.9)         19.5 (10.3 + 9.2)           SHF         0.85         0.90           Performance index         Heating         5.46         6.30												
Capacity [kW]         Cooling         13.4 (6.3 + 7.1)         15.9 (8.5 + 7.4)           SHF         0.85         0.90           Performance index         Heating         5.46         6.30	nectable Lossnay ı	unit		LGH-15	0RVX-E		LGH-200RVX-E					
Cooling   13.4 (6.3 + 7.1)   15.9 (8.5 + 7.4)	16 - 11.04.0	Heating		16.6 ( 7.	7 + 8.9 )		19.5 ( 10.3 + 9.2 )					
Performance index Heating 5.46 6.30	acity [KVV]	Cooling		13.4 ( 6.	3 + 7.1)		15.9 ( 8.5 + 7.4 )					
Porformanco indov				0.	85		0.90					
Performance index Cooling 5.32 5.85		Heating		5	46		6.30					
	rmance index	Cooling		5.	32		5.85					
Airflow range at SP3 and SP4	ow range at SP3 ar	ind SP4		1050 - 2	250 m³/h							
Connectable outdoor unit PUHZ-ZRP71 PUHZ-ZRP71	nectable outdoor u	unit		PUHZ-	ZRP71							
Diameter Liquid / Gas: 9.52 / 15.88 Diameter Liquid / Gas: 9.52 / 15.88				Diameter Liquid	/ Gas: 9.52 / 15.88	3		Diameter Liquid	/ Gas: 9.52 / 15.88	}		
Ext. piping	piping	Ì	Max	kimum length: 50m,	Maximum height:	30m						
Ventilation specifications				,		Ventilation s	pecifications		,			
Connectable Lossnay unit LGH-150RVX-E LGH-200RVX-E	nectable Lossnay ı	unit		LGH-15	0RVX-E							
			SP4	SP3	SP2	SP1	SP4	SP3	SP2	SP1		
[m³/h] 1,500 1,125 750 375 2,000 1,500 1,000 5		[m <sup>3</sup> /h]	1,500	1,125	750	375	2,000	1,500	1,000	500		
Airflow [L/s] 417 313 208 104 556 417 278 1	W	[L/s]	417	313	208	104	556	417	278	139		
External static pressure [Pa] 150 84 38 9 105 59 26	rnal static pressure	e [Pa]	150	84	38	9	105	59	26	7		

## **Characteristic Curves**



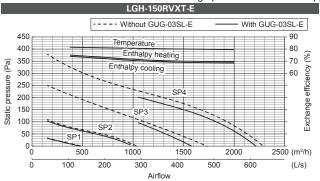


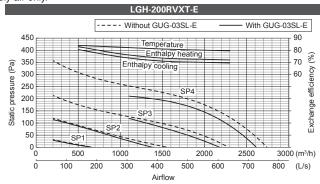


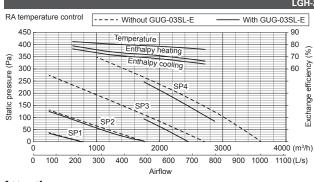
#### GUG-03SL-E (Connection to LGH-150RVXT-E, LGH-200RVXT-E or LGH-250RVXT-E)

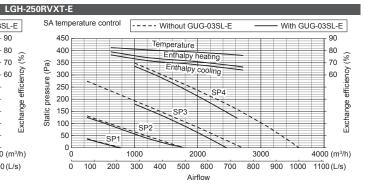
Refrigerant		R410A											
Electrical power supp	oly	220-240V /	50Hz, 220V	/ 60Hz (Sup	oplied from o	utdoor unit)							
Input power		Heating / F	an: 2.5W, Co	ooling: 12.4V	V								
Running current		Less than (	0.1A										
Weight		28kg *Ac	28kg *Accessories: Approx. 1kg										
		Heating / C	cooling / Auto	/Fan *Au	ito is only av	ailable for R	A temperatu	re control					
Function		RA (Return	Air) temper	ature control	/ SA (Suppl	y Air) temper	ature contro	Ī					
		[Must be se	et ať initial se	etting and no	t possible to	change from	remote con	troller]					
						RA (F	Return Air) te	mperature c	ontrol				
Connectable Lossnay	/ unit		LGH-150	RVXT-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)				.1 + 14.0 )	
Capacity [KVV]	Cooling		15.7 ( 6.	2 + 9.5)		18.4 ( 8.4 + 10.0 )					22.3 ( 9.	8 + 12.5)	
SHF				68		0.76						.87	
Performance index	Heating			07		4.86						75	
	Cooling			03		5.59				4.59			
Airflow range at SP3			250 m³/h			1050 - 2600 m³/h				1750 - 2880 m³/h			
Connectable outdoor		PUHZ-				PUHZ-ZRP100					ZRP125		
Ext. piping		Diame		/ Gas: 9.52		Diame		/ Gas: 9.52		Diame		/ Gas: 9.52	
		Maximum	length: 75m	Maximum h	eight: 30m		length: 75m,			Maximum	length: 75m	, Maximum h	eight: 30m
						SA (S	Supply Air) te		ontrol				
Connectable Lossnay		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				15.9 ( 8					.8 + 7.8 )	
SHF		0.86 0.90							.95				
Performance index	Heating			16			6.					97	
	Cooling			03				54				31	
Airflow range at SP3				250 m³/h				600 m³/h				600 m <sup>3</sup> /h	
Connectable outdoor unit			PUHZ-				PUHZ-					-ZRP71	
Ext. piping		Diame		/ Gas: 9.52		Diame		/ Gas: 9.52		Diame		/ Gas: 9.52	
		Maximum	length: 50m	Maximum h	eight: 30m		length: 50m,			Maximum	length: 50m	, Maximum h	eight: 30m
			1.011.45	DIVITE		Ventilation specifications							
Connectable Lossnay unit		004		DRVXT-E	0.04	004		ORVXT-E	004	004		0RVXT-E	0.04
Fan speed	I r 3 a z	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
F	[L/s]	417	313	208	104	556	417	278	139	694	521	347	174
External static pressure [Pa]		150	84	38	9	145	82	36	9	140	79	35	9

#### **Characteristic Curves** Note The graphs below show the supply air only.









#### **Attention**

- 1. The running current and input power are based on 230V/50Hz.
- 2. The cooling and heating capacities are based on the air conditions listed below and the rated airflow of fan speed 4. Cooling Indoor: 27°CDB/19°CWB, Outdoor: 35°CDB/24°CWB Heating Indoor: 20°CDB/15°CWB, Outdoor: 7°CDB/6°CWB
- 3. The first figure in ( ) of the capacity specification is the heat recovery energy of the Lossnay unit. The second figure is the capacity specification for the Dx-coil connected to the outdoor unit.
- "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 purposes.
- By installing the Dx-coil unit with a Lossnay unit, the air blow noise level is quieter at fan speed 4. Please refer to the "Direct Expansion coil unit for Lossnay" catalog.
- 8. Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit or disassemble the product yourself and always ask a professional.

## **Duct Silencer**

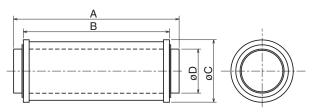
- This duct silencer connects to Lossnay unit to reduce the noise of its airflow.
- There are 4 sizes in order to cover a wide range of duct sizes.



## **Specifications**

Model	Airflow		Attenuation of sound power level [dB] for center frequency (Discharge)											
Wiodei	[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					
	150	0	3	6	7	7	7	7	9					
PZ-150SS-E	250	0	1	5	8	15	21	20	14					
PZ-15055-E	350	0	1	4	8	14	21	21	16					
PZ-200SS-E	500	0	1	4	7	13	18	16	9					
PZ-20055-E	650	0	1	3	8	12	17	14	6					
PZ-250SS-E -	800	0	2	4	12	22	21	14	13					
	1000	0	1	4	12	22	20	14	13					

## **Dimensions**

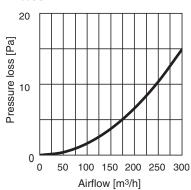


Unit: mm

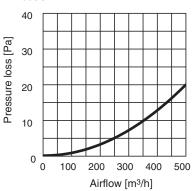
Model	Α	В	С	D	Connecting duct	Weight (kg)
PZ-100SS-E	450	400	152	99	ø100	1.9
PZ-150SS-E	560	500	202	149	ø150	3.5
PZ-200SS-E	660	600	252	199	ø200	5.3
PZ-250SS-E	660	600	332	249	ø250	8.9

#### Pressure loss curve

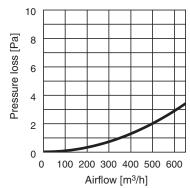
PZ-100SS-E



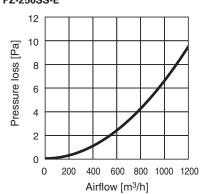
PZ-150SS-E



PZ-200SS-E



PZ-250SS-E



## **Optional Parts List**

	Lossnay	RVX-E	RVX-E	LGH-35RVX-E	RVX-E	LGH-65RVX-E	RVX-E	LGH-100RVX-E	LGH-150RVX-E	LGH-200RVX-E	LGH-150RVXT-E	LGH-200RVXT-E	LGH-250RVXT-E	RD4	RDH4	0RD4	GUF-100RDH4
Optional Parts		LGH-15RVX-E	LGH-25RVX-E	LGH-35	LGH-50RVX-E	LGH-65	LGH-80RVX-E	LGH-10	LGH-15	LGH-20	LGH-15	LGH-20	LGH-25	GUF-50RD4	GUF-50RDH4	GUF-100RD4	GUF-10
Lossnay	PZ-61DR-E	•	•	•	•	•	•	•	•	•	•	•	•				
Remote Controller	PZ-43SMF-E	•	•	•	•	•	•	•	•	•	•	•	•				
	PZ-15RF <sub>8</sub> -E	•															
	PZ-25RF <sub>8</sub> -E		•														
	PZ-35RF <sub>8</sub> -E			•													
0	PZ-50RF8-E				•									•	•		
Standard Filter	PZ-65RF <sub>8</sub> -E					•											
	PZ-80RF <sub>8</sub> -E						•		•								
	PZ-100RF <sub>8</sub> -E							•		•						•	•
	PZ-150RTF-E										•						
	PZ-250RTF-E											•	•				
	PZ-15RFM-E	•															
	PZ-25RFM-E		•														
	PZ-35RFM-E			•													
High-efficiency Filters	PZ-50RFM-E				•									•	•		
	PZ-65RFM-E					•											
	PZ-80RFM-E						•		•								
	PZ-100RFM-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				•									•	•		
Advanced High-efficiency	PZ-65RFP <sub>2</sub> -E				_	•											
Filters	PZ-80RFP <sub>2</sub> -E						•		•								
	PZ-100RFP <sub>2</sub> -E							•		•						•	•
	PZ-M6RTFM-E										•	•	•				
	PZ-F8RTFM-E										•	•	•				
	PZ-100SS-E	•															
D . (C)	PZ-150SS-E		•	•													
Duct Silencer	PZ-200SS-E		_		•	•								•	•		
	PZ-250SS-E				_	_	•	•						-	-	•	•
WiFi Interface	MAC-567IF-E	•	•	•	•	•	•	•	•	•	•	•	•			_	_
Remote On/Off Adapter	PAC-SE55RA-E	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1	•*1
Connector Cable for Remote Display	PAC-SA88HA-E	•*2	•*2	•*2	•*2	•*2	•*2	•*2	•*2	•*2	•*2	<b>●</b> *2	•*2	•*3	•*3	●*3	●*3

<sup>\*1:</sup> PAC-SE55RA-E is used for CN32 of Lossnay unit.

\*2: PAC-SA88HA-E is used for CN17 and CN26 of Lossnay unit.

\*3: PAC-SA88HA-E is used for CN51 and CN52 of Lossnay unit.

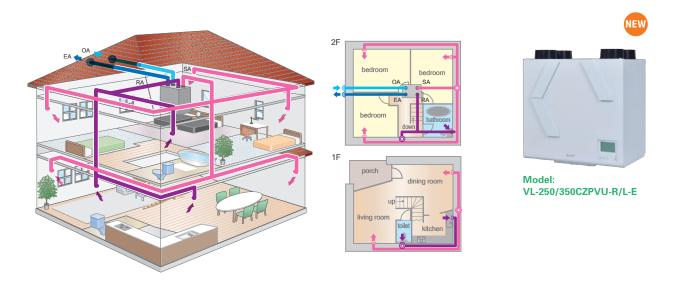
Note: Please refer to each product page for required number of pieces/sets.

## Residential Use Lossnay

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

#### **Centralized Ventilation Solution**

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

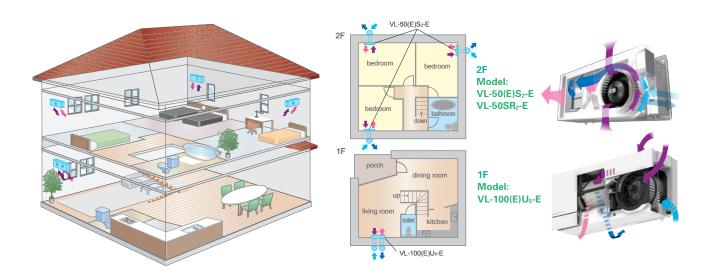


#### **Decentralized Ventilation Solution**

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.





## VL-250CZPVU-R/L-E, VL-350CZPVU-R/L-E



#### **Quiet Operation**



Noise is one of the most common concern for residential ventilation. Ultra quiet operation is achieved with the sirocco fan designed by Mitsubishi Electric. The balance between airflow and the static pressure is optimized and the fan rotation is minimized, which leads to a low noise level.

#### **Air Purification**



The optional filter corresponding to NOx and PM2.5 removes the substance and improves the 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) etc.
- \*PM2.5: Airborne particulates that are 2.5µm or smaller in size.

## Wi-Fi Control



MELCloud is a Cloud-based solution for controlling Lossnay either locally or remotely by computer, tablet or smartphone via the Internet. You can control and check Lossnay via MELCloud from virtually anywhere an Internet connection is available. With MELCloud, you can use Lossnay much more easily and conveniently.

## **Key Features**

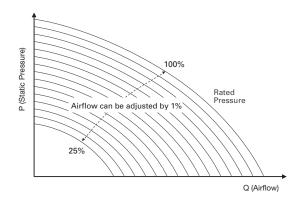
#### **Energy Efficient**

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



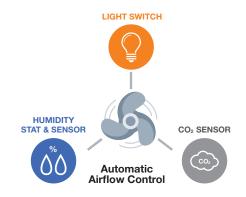
#### Variable Airflow Control

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 more flexibly. Within the range between 25% and 100%, airflow can be adjusted by 1% to satisfactorily meet the designed airflow rate. This enables to simplify the airflow setting in commissioning.



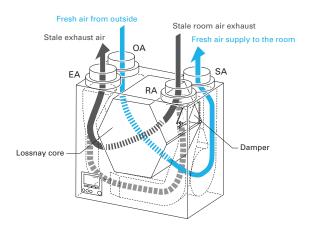
#### **External Airflow Control**

Using a 0-10V signal from the controllers such as the humidity stats and  $CO_2$  sensors, the airflow of the Lossnay unit can be changed. It is also connected to the light switch and can change to the boost operation (Input 220-240V). They are connected directly to the Lossnay units allowing the fan speed to automatically change according to the bathroom occupation, the  $CO_2$  level, and the humidity level.



#### **Automatic Bypass Mode**

It is possible to select manual switching or automatic switching between "Lossnay ventilation (with heat exchange)" and "Bypass ventilation (without heat exchange)". When the outside air is cooler than the indoor air in summer, the unit will bypass the heat exchanger and draw in outside air directly.



\* The figure shows VL-350CZPVU-L-E

#### **Wide Operating Temperature Range**

The VL-CZPVU series operating temperature range is down to -15°C. With a pre-heater, it is available down to -25°C.

- \* In areas where the outdoor air is below -20°C, electric shutters (local supply) is required in the OA duct in addition to the pre-heater.
- \* With the pre-heater, the OA temperature must be higher than -15  $^{\circ}\text{C}.$

#### **MELCloud for Lossnay**

MELCloud enables fast, easy remote control and monitoring for Lossnay. All you need is wireless computer connectivity in your home where Lossnay is installed and Internet connection on your mobile or fixed terminal. It can also be controlled with room air conditioner/ecodan simultaneously.

#### Key Control and monitoring features

- 1. Turn system on/off
- 2. Change the airflow & operating mode (Heat recovery / Bypass)
- 3. See the status of the filter (Maintenance notification)



#### **New Ventilator Selection Software**

The new selection tool enables the user to see the specification of the duty point including SFP, noise level, and exchange efficiency. It also provides the certification documents and CAD data for each models.

#### Easy 3 steps

- 1. Input the required airflow and pressure.
- 2. Select model which matches the request.
- 3. Output the "Fan Data Sheet" by PDF.



#### YouTube Channel

In the new YouTube channel "Mitsubishi Electric Nakatsugawa Works", videos about ventilation products, remote controller commissioning, how to use the software is available.



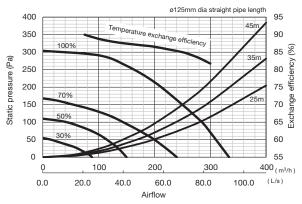
## Residential Lossnay Specifications

## VL-250CZPVU-R/L-E

Electrical Power Supply			220-240V/50H	lz, 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	a)	150	150 74 38 14						
Temperature Exchange Effi	ciency (%)	85	87	88	90				
Noise Level (dB)		31	22	16	15>				
Energy Efficiency Class		Ä+							
Weight (kg)		26							
Dimensions (mm)			(W) 595 x (D)	356 x (H) 565					

- 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 air volume, and 230V/50Hz.
  3. The sound pressure level at 3m is spherical.
  4. Temperature exchange efficiency (%) is based on winter condition.
  5. Mitsubishi Electric measures figures in the chart according to EN13141-7:2010, and the characteristic curves are measured by chamber method.

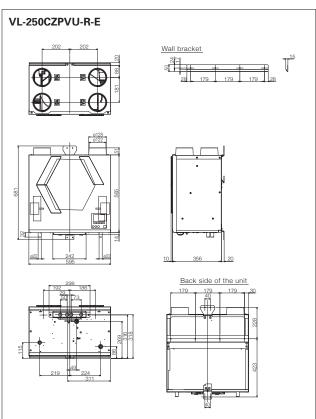
## **Characteristic Curves**

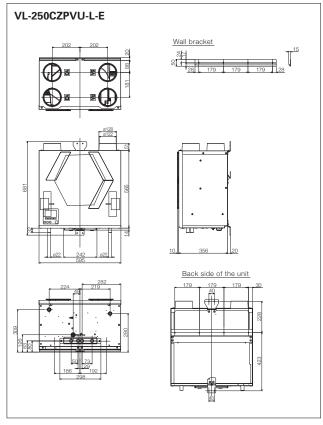


#### ■ Attention

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

**Dimensions** Unit: mm



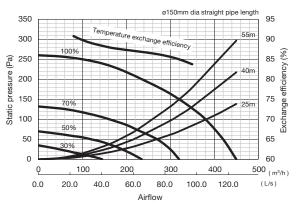


## VL-350CZPVU-R/L-E

Electrical Power Supply			220-240V/50H	Hz, 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					
All How	(l/s)	89	62	44	27					
External Static Pressure (Pa	a)	150	74	38	14					
Temperature Exchange Efficiency	ciency (%)	85	87	88	90					
Noise Level (dB)		35	26	26 19						
Energy Efficiency Class		A+								
Weight (kg)		32								
Dimensions (mm)		(W) 658 × (D) 432 × (H) 623								

- 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 air volume, and 230V/50Hz.
  3. The sound pressure level at 3m is spherical.
  4. Temperature exchange efficiency (%) is based on winter condition.
  5. Mitsubishi Electric measures figures in the chart according to EN13141-7:2010, and the characteristic curves are measured by chamber method.

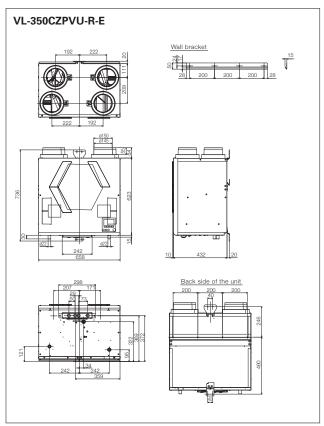
## **Characteristic Curves**

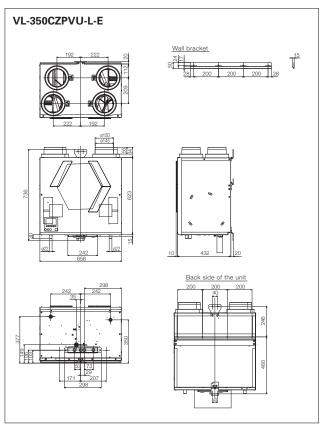


#### ■ Attention

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

**Dimensions** Unit: mm

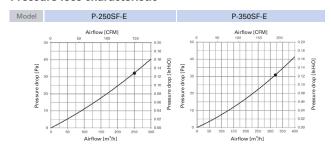


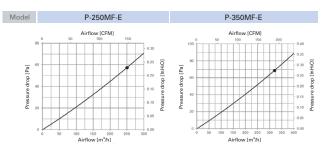


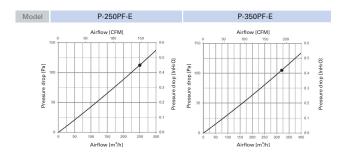
## **Filters**

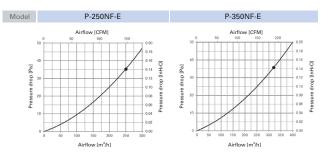
Тур	9	Replacement Filter	Standard Filter	Medium Efficiency Filter	PM2.5 Filter	NOx Filter
Desiç	Design					
Mod	Model P-250F-E P-350F-E		P-250SF-E P-350SF-E	P-250MF-E P-350MF-E	P-250PF-E P-350PF-E	P-250NF-E P-350NF-E
Classification	EN779 G3		G4	M6	M6	NO2 90%
Ciassification	ISO 16890	Coarse 55%	Coarse 90%	ePM10 80%	ePM2.5 50%	1002 30 70

## **Pressure loss characteristic**









## **Remote Controller Cover**

P-RCC-E

With Remote Controller Cover, the remote controller can be installed apart from the unit.



#### Model: VL-220CZGV-E

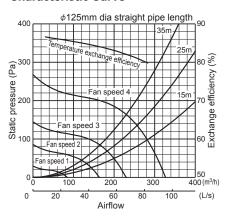
Model		VL-220CZGV-E							
Electrical power supply			220-240V/50H	Hz 220V/60Hz					
Ventilation mode			Heat reco	very mode					
Fan speed		Fan speed 4	Fan speed 3	Fan speed 2	Fan speed 1				
Running current		0.60	0.29	0.18	0.11				
Input power (W)		80	35	18.5	8.5				
Airflow	(m³/h)	230	165	120	65			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

- 1. The running current, the input power, the efficiency and the noise are based on the rating air volume, and 230V/50Hz. The noise is measured at 1.5m under the center of the unit in an anechoic chamber.
- in an anection charmoer.

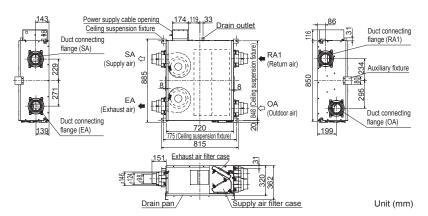
  2. Temperature exchange efficiency (%) is based on winter condition.

  3. Mitsubishi Electric measures figures in the chart according to Japan Industrial Standard (JIS B 8628), therefore the characteristic curves are measured by chamber method.

#### **Characteristic Curve**



#### **Dimensions**

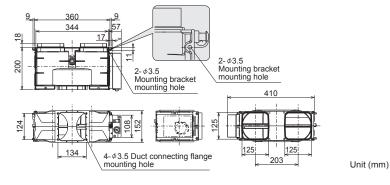


## **Optional Parts**

## Parts for VL-220CZGV-E

**Bypass Damper** Model: P-133DUE-E





#### Filters

Туре	Standard Replacement Filter	Medium Efficiency Exhaust Air Filter	High Efficiency Supply Air Filter
Design		Optional	Optional
Model	P-220F-E	P-220EMF-E	P-220SHF-E
Classification (EN779:2012)	G3	G4	M6
Classification (ISO16890)	Coarse 35%	ePM10 50%	ePM10 70%

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

#### **Product Merit**

#### Air supplied and Exhausted Simultaneously

Supply and exhaust air simultaneously while transferring the heat.



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



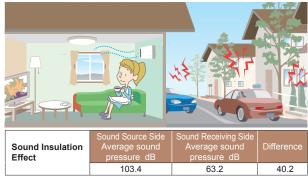
#### \*Condition: 50Hz, 230V, low fan spee

## **Energy Efficient**

- Total heat exchanger minimizes heat loss.
- Achieve over 80%\* temperature efficiency.
- $^*\mbox{VL-}100(\mbox{E})\mbox{U}_5\mbox{-E}$  at low fan speed in 230V 50Hz  $^*\mbox{VL-}50(\mbox{E})\mbox{S}_2\mbox{-E}$  at low fan speed in 230V 50Hz

#### **Sound Insulation**

A sound insulation effect reduces noise generated outside.



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

#### **Product Features**

#### Stylish Design

Match any interior decor to create a comfortable room.

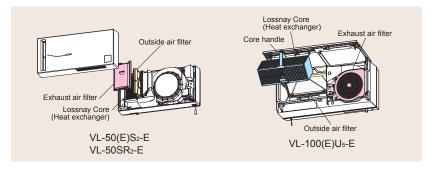




VL-100(E)U5-E

#### Easy Maintenance

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



#### Flexible Installation for Only VL-50(E)S<sub>2</sub>-E and VL-50SR<sub>2</sub>-E

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

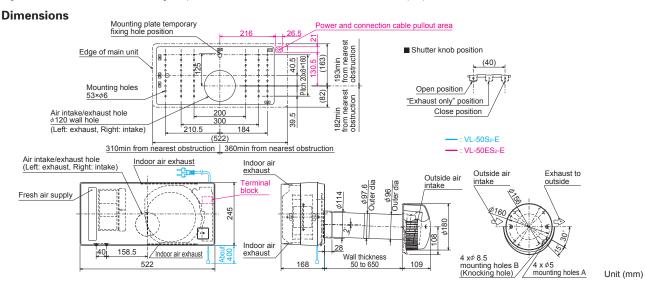


## Residential Lossnay Specifications

#### 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		/50Hz	240V/	/50Hz	220V/	60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low	
Airflow (m³/h)	51	15	52.5	16	54	17	54	17	
Power consumption (W)	19	4	20	4.5	21	5	21	5.5	
Temperature exchange efficiency (%)	70	86	69	85	68	84	68	84	
Noise level (dB)	36.5	14	37	15	37.5	15.5	37.5	15.5	
Weight (kg)	6.2								
Specific energy consumption class		С							

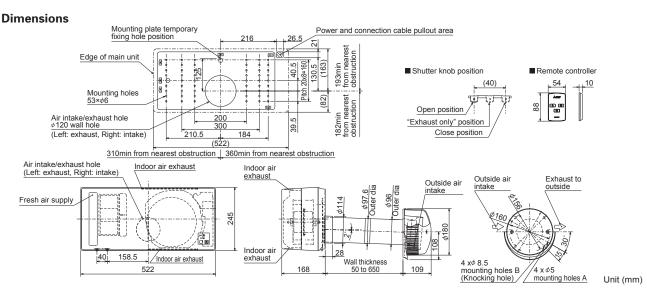
<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.



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

Model		VL-50SR₂-E							
Electrical power supply	220V	/50Hz	230V/50Hz		240V	/50Hz	220V	/60Hz	
Fan speed	High	Low	High	Low	High	Low	High	Low	
Airflow (m³/h)	51	15	52.5	16	54	17	54	17	
Power consumption (W)	19	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							

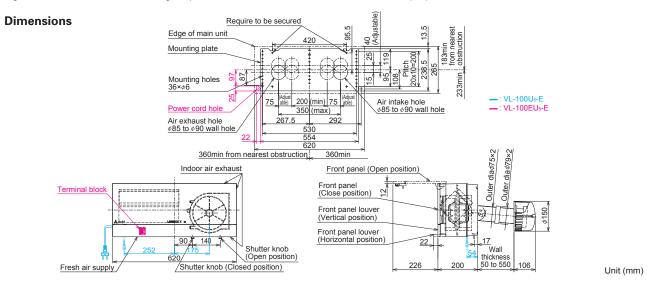
<sup>\*</sup>Figures in the chart were measured according to Japan Industrial Standard (JIS B 8628) with the shutter knob in open position.



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

Model		VL-100(E)U₅-E						
Electrical power supply	220V	220V/50Hz		230V/50Hz		/50Hz	220V/60Hz	
Fan speed	High	Low	High	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

Туре	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)	G3	-	-	-	-
Classification (ISO16890)	Coarse 35%	ePM10 75%	-	-	-

## Optional Parts for VL-100(E)U<sub>5</sub>-E

Filter and Extension Pipe

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%	-	-



- 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

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