

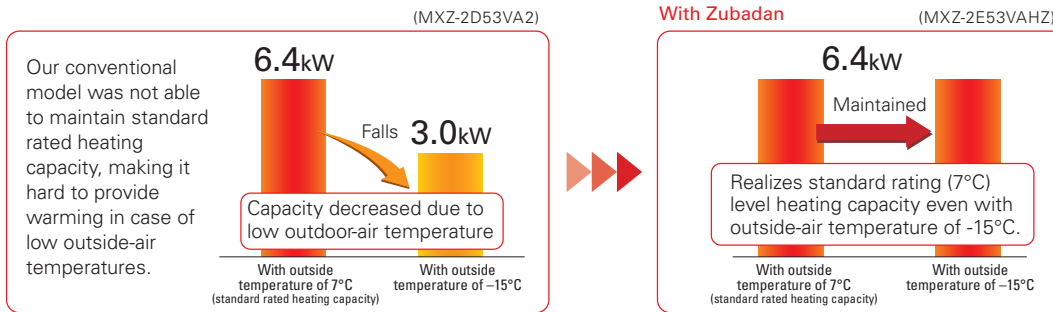
MXZ-VFHZ MXZ-VAHZ SERIES



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

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

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

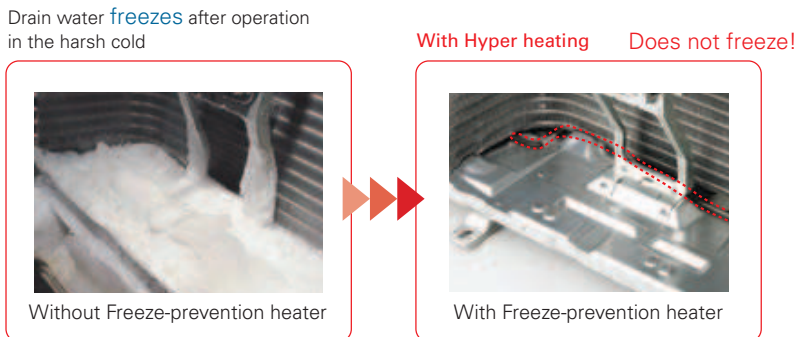


Can operate at outside-air temperature of -25°C

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

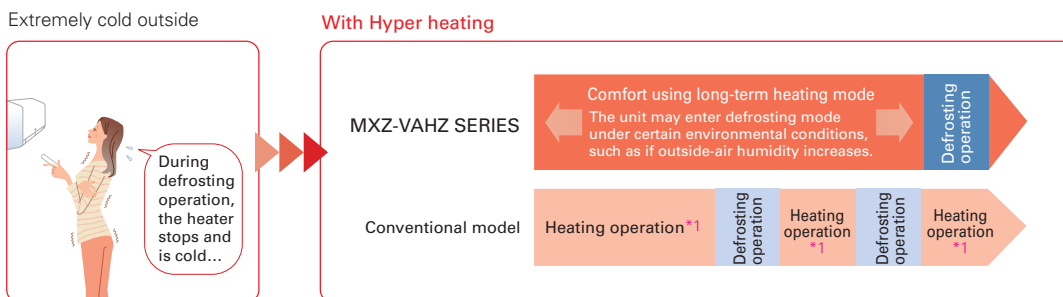
Freeze-prevention heater standard equipment

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



Continuous heating for long periods

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

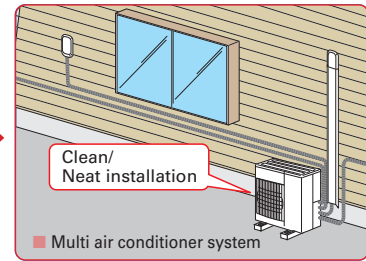
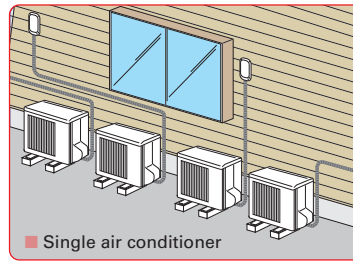


*1: Conventional model performs continuous heating approximately 30min up to a maximum of 90min.

One outdoor unit supports multiple indoor units.

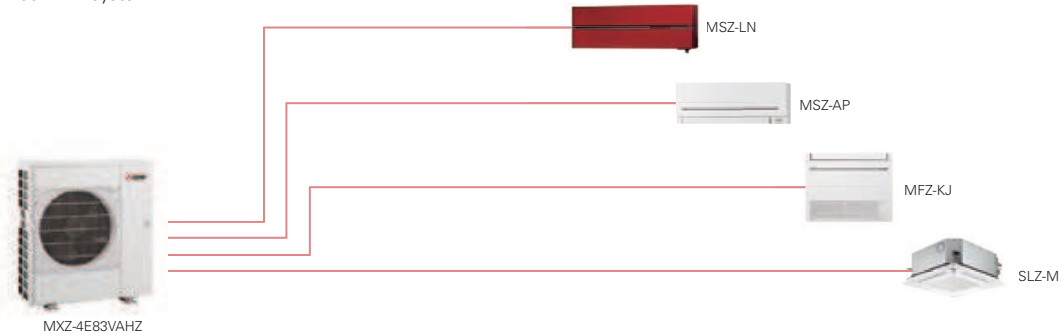
With MXZ-VAHZ, one outdoor unit can cool and heat up to six rooms. They can be installed neatly in sites with limited space such as condominium balconies.

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



EXAMPLE SYSTEM

MXZ-4E83VAHZ system



Freedom of combinations in cold region greatly enhanced

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

OUTDOOR UNITS

2-room use



4-room use



INDOOR UNITS

Wall-mounted



Floor-standing



Cassette



Ceiling-suspended



Ceiling-concealed



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

MXZ-VFHZ SERIES



Outdoor Unit

R32



MXZ-2F53VFHZ

R32



MXZ-4F83VFHZ

Type		Inverter Heat Pump				
Indoor Unit		Please refer to**4 **5				
Outdoor Unit		MXZ-2F53VFHZ	MXZ-4F83VFHZ			
Refrigerant		R32**1				
Power Source		Outdoor power supply				
Supply Outdoor (V/Phase/Hz)		220 - 230 - 240V / Single / 50				
Cooling	Capacity	Rated	kW	5.3	8.3	
		Min - Max	kW	1.1 - 6.0	3.5 - 9.2	
	Total Input	Rated	kW	1.29	1.90	
	Design Load		kW	5.3	8.3	
	Annual Electricity Consumption**2		kWh/a	274	398	
	SEER**4			6.8	7.3	
		Energy Efficiency Class**4		A++	A++	
Heating (Average Season)	Capacity	Rated (7°C)	kW	6.4	9.0	
		Rated (-7°C)	kW	6.4	9.0	
		Rated (-15°C)	kW	6.4	9.0	
		Min - Max	kW	1.0 - 7.0	3.5 - 11.6	
	Total Input	Rated	kW	1.36	1.70	
	Design Load		kW	6.4	8.3	
	Declared Capacity	at reference design temperature	kW	6.9	10.6	
		at bivalent temperature	kW	7.4	11.5	
		at operation limit temperature	kW	4.1	5.7	
	Back Up Heating Capacity		kW	0.0	1.1	
	Annual Electricity Consumption**2		kWh/a	2172	3286	
SCOP			4.1	4.3		
	Energy Efficiency Class**4		A+	A+		
Max. Operating Current (Indoor+Outdoor)			A	15.6	28.0	
Outdoor Unit	Dimensions	H x W x D	mm	796 x 950 x 330	1048 x 950 x 330	
	Weight		kg	61	86	
	Air Volume	Cooling	m ³ /min		63.0	63.0
		Heating	m ³ /min		47.0	77.0
	Sound Level (SPL)	Cooling	dB(A)		45	55
		Heating	dB(A)		47	57
	Sound Level (PWL)	Cooling	dB(A)		55	66
Breaker Size		A		16	30	
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 x 2 / 9.52 x 2	6.35 x 4 / 12.7 x 1+9.52 x 3	
	Total Piping Length (max)		m	30	70	
	Each Indoor Unit Piping Length (max)		m	20	25	
	Max. Height		m	15 (10)**3	15 (10)**3	
	Chargeless Length		m	30	70	
Guaranteed Operating Range [Outdoor]	Cooling	°C		-10 ~ +46	-10 ~ +46	
	Heating	°C		-25 ~ +24	-25 ~ +24	

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP; if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 2088. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 2088 times higher than 1 kg of 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.

*3 Actual energy consumption will depend on how the appliance is used and where it is located.

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

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

MXZ-2E53VAHZ MSZ-EF18VE + MSZ-EF35VE

MXZ-4E83VAHZ MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE

*5 Indoor unit compatibility table is shown on page 114.

MXZ-VAHZ SERIES



Outdoor Unit

R410A



MXZ-2E53VAHZ

R410A



MXZ-4E83VAHZ

Type			Inverter Heat Pump		
Indoor Unit			Please refer to*4 *5		
Outdoor Unit			MXZ-2E53VAHZ		MXZ-4E83VAHZ
Refrigerant			R410A*1		
Power Supply			Outdoor power supply		
Source			220 - 230 - 240V / Single / 50		
Outdoor (V/Phase/Hz)					
Cooling	Capacity	Rated	kW	5.3	8.3
		Min - Max	kW	1.1 - 6.0	3.5 - 9.2
	Total Input	Rated	kW	1.29	2.25
	Design Load		kW	5.3	8.3
	Annual Electricity Consumption*2		kWh/a	282	447
	SEER*4			6.5	6.5
		Energy Efficiency Class*4		A++	A++
Heating (Average Season)	Capacity	Rated (7°C)	kW	6.4	9.0
		Rated (-7°C)	kW	6.4	9.0
		Rated (-15°C)	kW	6.4	9.0
		Min - Max	kW	1.0 - 7.0	3.5 - 11.6
		Total Input	Rated	kW	1.36
	Design Load		kW	6.4	10.1
	Declared Capacity	at reference design temperature	kW	6.4	9.0
		at bivalent temperature	kW	6.4	9.0
		at operation limit temperature	kW	2.4	2.5
	Back Up Heating Capacity		kW	0.0	1.1
Annual Electricity Consumption*2		kWh/a	2165	3446	
SCOP			4.1	4.1	
	Energy Efficiency Class*4		A+	A+	
Max. Operating Current (Indoor+Outdoor)			A	15.6	28.0
Outdoor Unit	Dimensions	H x W x D	mm	796 x 950 x 330	1048 x 950 x 330
	Weight		kg	61	87
	Air Volume	Cooling	m ³ /min	47.0	63.0
		Heating	m ³ /min	47.0	77.0
	Sound Level (SPL)	Cooling	dB(A)	45	53
		Heating	dB(A)	47	57
	Sound Level (PWL)	Cooling	dB(A)	55	66
	Breaker Size		A	16	30
Ext. Piping	Diameter	Liquid / Gas	mm	6.35 x 2 / 9.52 x 2	6.35 x 4 / 12.7 x 1 + 9.52 x 3
	Total Piping Length (max)		m	30	70
	Each Indoor Unit Piping Length (max)		m	20	25
	Max. Height		m	15 (10)*3	15 (10)*3
	Chargeless Length		m	20	25
Guaranteed Operating Range [Outdoor]	Cooling	°C		-10 ~ +46	-10 ~ +46
	Heating	°C		-25 ~ +24	-25 ~ +24

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP; if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 2088. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 2088 times higher than 1 kg of 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.

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*3 Actual energy consumption will depend on how the appliance is used and where it is located.

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

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

MXZ-2E53VAHZ MSZ-EF18VE + MSZ-EF35VE

MXZ-4E83VAHZ MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE

*5 Indoor unit compatibility table is shown on page 114.

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

3 Important Points to Remember When Installing the Outdoor Unit



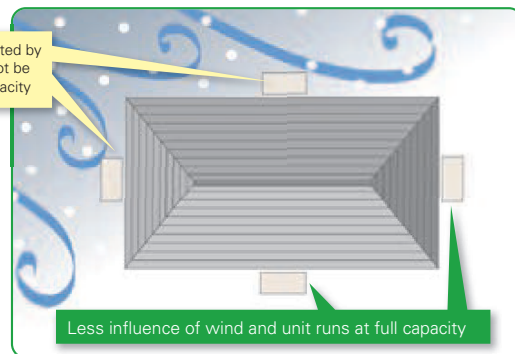
* RAC/PAC (inc. Air to Water) /MXZ

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

1 Installation Location

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

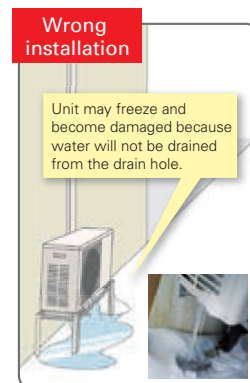
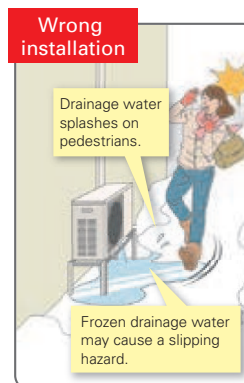
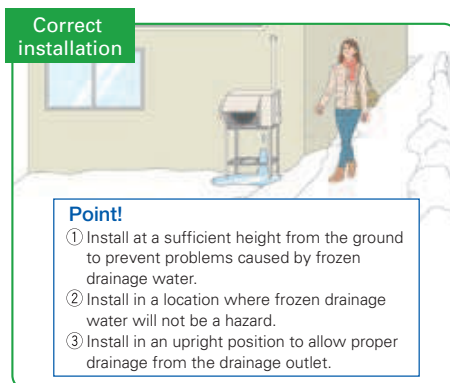
Units are easily affected by wind and unit may not be able to run at full capacity



2 Measures for Drainage of Water

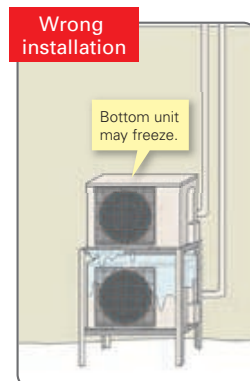
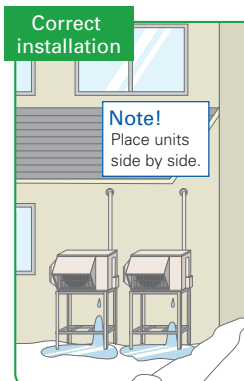
Case 1: Unit is installed close to passage (walkway)

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



Case 2: Multiple units are installed

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



3 Measures for Snow

Unit is installed on the ground

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

[RAC / PAC / MXZ]

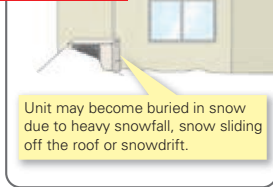
Correct installation



Point!

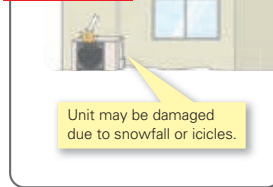
- ① Install at a position/height to prevent the unit being buried in snow*1 and the adverse effects of frozen drainage water.*2
 - ② Install so as to avoid the effects of snow or snowdrift.
 - ③ Install so as to avoid the damage from falling snow or icicles.
- *1 Install at a height above the highest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

Wrong installation



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

Wrong installation

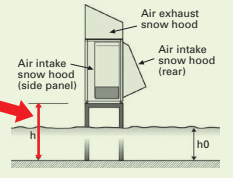


Unit may be damaged due to snowfall or icicles.

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

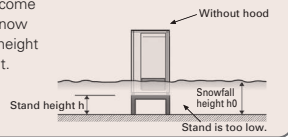
Correct installation

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



Wrong installation

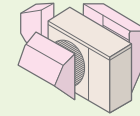
Unit may become covered in snow if the stand height is insufficient.



Install snow protection hood as necessary

[RAC / PAC / MXZ]


Correct installation



Point!

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

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

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

CAUTION About disposal of drainage water

When the unit is installed in cold or snowy regions :

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



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

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

Arrangement for snow protection hood

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