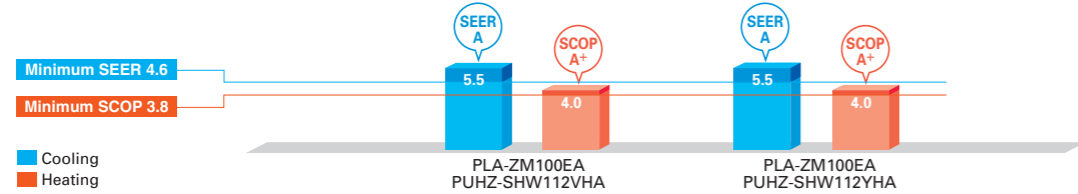


ErP Lot 10 Compliant with High Energy-efficiency Achieving SEER/SCOP Rank A and A+



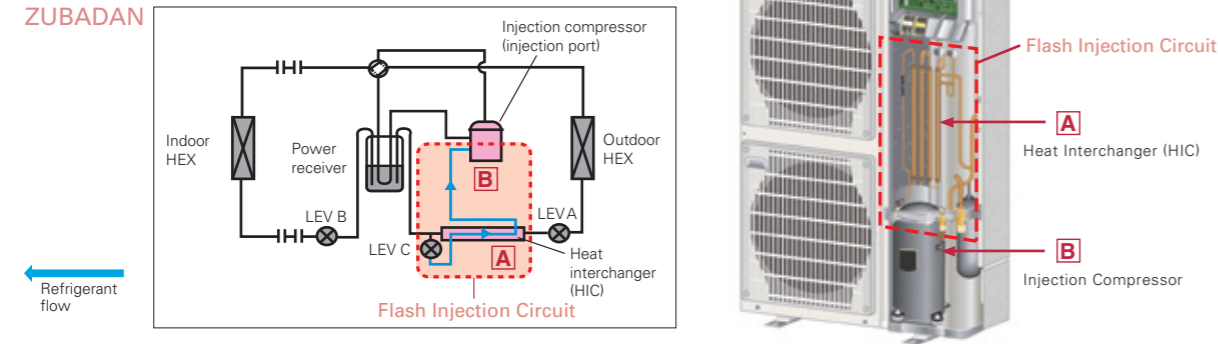
Powerful heating yet annually high energy efficiency in both cooling and heating, achieving rank A and A+.



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

Flash Injection Circuit

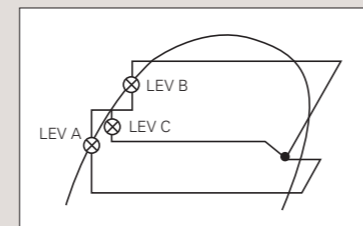
ZUBADAN



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

In traditional units, when the outdoor temperature is low, the volume of refrigerant circulating in the compressor decreases due to the drop in refrigerant pressure and the protection from overheating caused by high compression, thereby reducing heating capacity. The Flash Injection Circuit injects refrigerant to maintain the refrigerant circulation volume and compressor operation load, thereby maintaining heating capacity.

Mollier Chart Image Representing Flash Injection Circuit Operation



A Heat Interchanger (HIC)

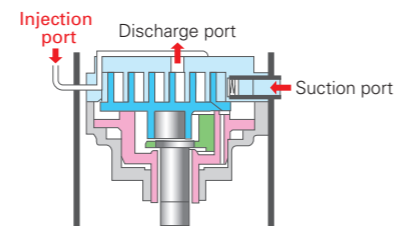
HIC cross-sectional view

Refrigerant which has passed through LEV C (refrigerant pressure lowered)
Refrigerant which hasn't passed through LEV C

Purpose: Transform liquid refrigerant into liquid-gas state
Effect: Injection circuit increases energy efficiency

The compressor is subjected to a heavy load when compressing liquid refrigerant, and the result is lower operation efficiency. The addition of HIC supports refrigerant heat exchange at two different pressure levels. The heat-exchange process transforms the injected liquid refrigerant into a gas liquid state, thereby decreasing the load on the compressor during the compression process.

B Injection Compressor



Purpose: To increase the volume of refrigerant being circulated
Effect: Improves heating capacity at low outdoor temperatures, and enables higher indoor-air outlet temperature adjustment and higher defrost operation speed

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

PLZ-SHW SERIES



Indoor Unit



Panel

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EAL	✓	✓		
PLP-6EAL	✓			✓
PLP-6EAL	✓	✓		✓
PLP-6EALM2	✓		✓	
PLP-6EALME2	✓	✓	✓	

Outdoor Unit



Remote Controller



Type		Inverter Heat Pump			
Indoor Unit		PLA-ZM100EA2		PLA-ZM125EA2	
Outdoor Unit		PUHZ-SHW112VHA	PUHZ-SHW112YHA	PUHZ-SHW1140YHA	
Refrigerant		R410A*			
Power Supply		Outdoor power supply			
Source		VHA: 230 / Single / 50, YHA: 400 / Three / 50			
Cooling	Capacity	Rated	10.0	12.5	
		Min - Max	4.9 - 11.4	5.5 - 14.0	
	Total Input	Rated	2.857	5.000	
	EER		3.50	2.50	
		EEL Rank	-	-	
	Design Load		10.0	10.0	
	Annual Electricity Consumption**		633	-	
	SEER**		5.5	-	
		Energy Efficiency Class	A	-	
	Heating (Average Season)	Capacity	Rated	11.2	14.0
		Min - Max	4.5 - 14.0	5.0 - 16.0	
Total Input		Rated	2.667	4.000	
COP			4.20	3.50	
		EEL Rank	-	-	
Design Load			12.7	-	
Declared Capacity		at reference design temperature	11.2 (-10°C)	-	
		at bivalent temperature	11.2 (-7°C)	-	
		at operation limit temperature	9.3 (-25°C)	-	
Back Up Heating Capacity			1.5	-	
Annual Electricity Consumption**		4420	-		
SCOP**		4.0	-		
	Energy Efficiency Class	A+	-		
Operating Current (max)		A	35.5	13.5	
Indoor Unit	Input [Cooling/Heating]	Rated	0.07 / 0.07	0.08 / 0.08	
	Operating Current (max)		0.47	0.52	
	Dimensions <Panel>	H x W x D	298-840-840 <40-950-950>		
	Weight <Panel>		26 <5>	26 <5>	
	Air Volume [Lo-Mi2-Mi1-Hi]	m³/min	19-22-25-28	21-24-26-29	
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]	dB(A)	31-34-37-40	33-36-39-41	
	Sound Level (PWL)	dB(A)	61	62	
	Outdoor Unit	Dimensions	H x W x D	1350-950-330 (+30)	
		Weight	kg	120	134
		Air Volume	Cooling	100	100
		Heating	100	100	
Sound Level (SPL)		Cooling	51	51	
		Heating	52	52	
Sound Level (PWL)		Cooling	69	69	
Operating Current (max)		A	35	13	
Breaker Size		A	40	16	
Ext. Piping		Diameter	Liquid / Gas	9.52 / 15.88	9.52 / 15.88
	Max. Length	Out-In	75	75	
		Out-In	30	30	
Guaranteed Operating Range [Outdoor]	Cooling*3	°C	-15 ~ +46	-15 ~ +46	
	Heating	°C	-25 ~ +21	-25 ~ +21	

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid were to be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
*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.

PKZ-SHW SERIES



Indoor Unit

R32
R410A



PKA-M100KA(L)2

Outdoor Unit

R410A



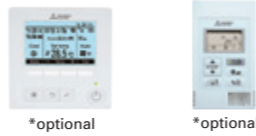
PUHZ-SHW112VHA(-BS)
PUHZ-SHW112YHA(-BS)

Remote Controller



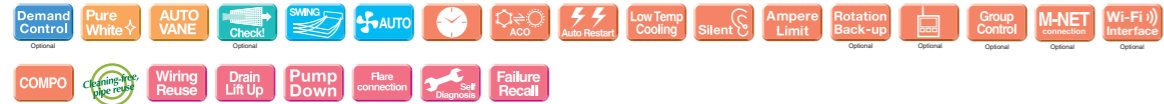
*KAL only

*optional



*optional

*optional



Type		Inverter Heat Pump				
Indoor Unit		PKA-M100KA(L)2				
Outdoor Unit		PUHZ-SHW112VHA	PUHZ-SHW112YHA			
Refrigerant		R410A*1				
Power Supply	Source	Outdoor power supply				
	Outdoor (V/Phase/Hz)	VHA: 230 / Single / 50, YHA: 400 / Three / 50				
Cooling	Capacity	Rated	kW	10.0	10.0	
		Min - Max	kW	4.9 - 11.4	4.9 - 11.4	
	Total Input	Rated	kW	2.924 (2.904)	2.924 (2.904)	
	Design Load		kW	3.42	3.42	
	Annual Electricity Consumption**		kWh/a	673	673	
	SEER**			5.2	5.2	
	Energy Efficiency Class			A	A	
Heating (Average Season)	Capacity	Rated	kW	11.2	11.2	
		Min - Max	kW	4.5 - 14.0	4.5 - 14.0	
	Total Input	Rated	kW	3.103	3.103	
	Design Load		kW	12.7	12.7	
	Declared Capacity		at reference design temperature	kW	11.2 (-10°C)	11.2 (-10°C)
			at bivalent temperature	kW	11.2 (-7°C)	11.2 (-7°C)
			at operation limit temperature	kW	9.4 (-25°C)	9.4 (-25°C)
	Back Up Heating Capacity		kW	1.5	1.5	
	Annual Electricity Consumption**		kWh/a	4664	4664	
	SCOP**			3.8	3.8	
	Energy Efficiency Class			A	A	
Operating Current (max)			A	35.6	13.6	
Indoor Unit	Input	Rated	kW	0.08 / 0.07	0.08 / 0.07	
	Operating Current (max)		A	0.57	0.57	
	Dimensions <Panel>	H x W x D	mm	365 - 1170 - 295		
	Weight <Panel>		kg	21	21	
	Air Volume [Lo-Mid-Hi]		m³/min	20 - 23 - 26	20 - 23 - 26	
	Sound Level (SPL) [Lo-Mid-Hi]		dB(A)	41 - 45 - 49	41 - 45 - 49	
	Sound Level (PWL)		dB(A)	65	65	
	Outdoor Unit	Dimensions	H x W x D	mm	1350 - 950 - 330 (+30)	
		Weight		kg	120	134
		Air Volume	Cooling	m³/min	100	100
Heating			m³/min	100	100	
Sound Level (SPL)		Cooling	dB(A)	51	51	
		Heating	dB(A)	52	52	
Sound Level (PWL)		Cooling	dB(A)	69	69	
		Heating	dB(A)	69	69	
Operating Current (max)			A	35	13	
Breaker Size			A	40	16	
Ext. Piping	Diameter	Liquid / Gas	mm	9.52 / 15.88	9.52 / 15.88	
	Max. Length	Out-In	m	75	75	
	Max. Height	Out-In	m	30	30	
Guaranteed Operating Range [Outdoor]	Cooling*3	°C		-15 ~ +46	-15 ~ +46	
	Heating	°C		-25 ~ +21	-25 ~ +21	

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

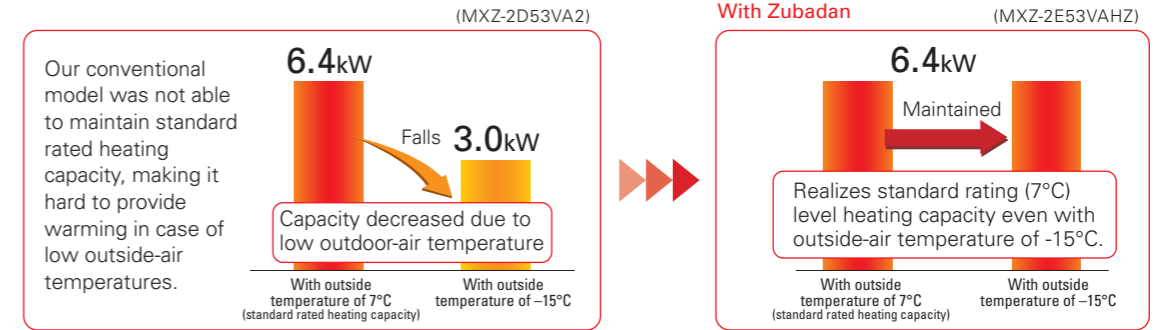
MXZ-VAHZ SERIES



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.

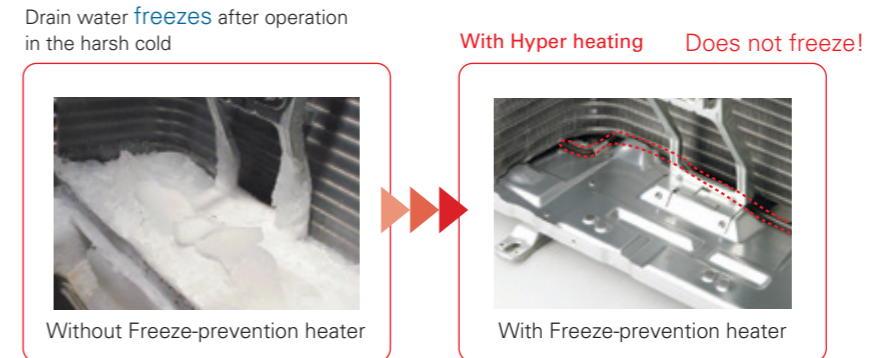


Can operate at outside-air temperature of -25°C

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.

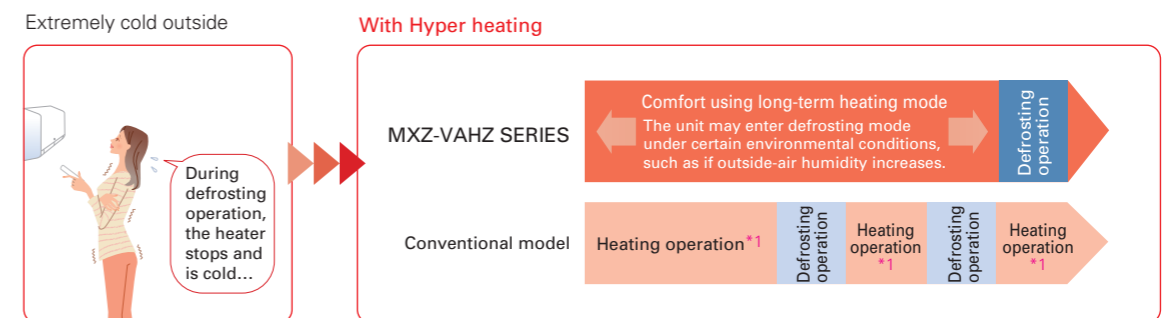
Freeze-prevention heater standard equipment

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.



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