MSZ-AY SERIES

The AY series has an excellent cleanliness feature and ranges to two models: the VGK model comes standard with the V Blocking Filter, which has antiviral, antibacterial, anti-mold, and anti-allergen effects, and the VGKP model comes standard with Plasma Quad Plus, which can collect PM2.5 dust in addition to these effects. The AY series has also been upgraded in terms of quietness, energy efficiency, and ease of installation. Enjoy a comfortable air environment with the AY series.



MSZ-AY25/35/42/50VGKP



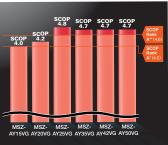
High energy saving



The AY series have achieved either the "Rank A^{+++} " or "Rank A^{++} " for SEER and SCOP as energy-savings rating.

The high-efficiency air conditioner is eco-friendly and economical.







Matt and Sophisticated Design

The elegant and sophisticated design has been created to fit in any room, with careful attention to detail in the surface finish and panel angles.



Rounded corners

The rounded corners give a soft impression that blends in with any room.

Simple and Compact size

While the plasma is built-in, the angle of the curve is carefully designed to maintain the compact unit.

Widely Ranged Capacities

Compact and stylish models are available.

The wide range of capacities is designed to match a variety of room types. In particular, the 1.5kW and 2.0kW models are ideal for children's rooms, bedrooms, and highly insulated homes.



MSZ-AY25/35/42/50VGKP

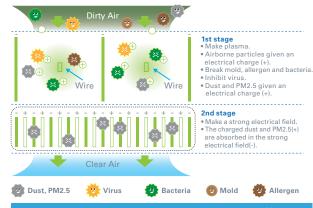


MSZ-AY15/20VGKP



You can enjoy the clean and safe air by Plasma Quad Plus.

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



We have confirmed Plasma Quad Plus inhibits 99% of adhered COVID-19.

- *Tested Organization: National Hospital Organization Sendai Medical Center, Test Report No: R4-001 Test result: Neutralised 99% of influenza A virus in 210.5 minutes in a 25m³ test space
- *Tested Organization: Japan Textile Products Quality and Technology Center, Test Report No: 20KB070569, Tested Materials: SARS-CoV-2, Test Method: Original (The test was conducted on the Plasma Quad device alone, not designed to evaluate product performance.) Test Result: Inhibited 99.8% in 360 minutes. The result without the effect of natural attenuation is 96.3%.

The above test results are for AY25-50. Test results for AY15/20 are on p10

V Blocking Filter (only VGK model)

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

Virus Test method: JIS L 1922, Tested Organization: Guangdong Detection Center of Microbiology, Test Report No: 2020FM30156R02D, Test result: 99% neutralized in 24 hours in a Testing Container.

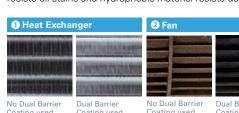
Bacteria Test method: JIS L 1902, Tested Organization: Boken Quality Evaluation

Institute, Test Report No: 29020006998-1, Test result: 99% neutralized in 18 hours in a Petri dish.

Mold Test method: JIS Z 2911, Tested Organization: Boken Quality Evaluation Institute, Test Report No: 29020006906-1, Test result: No moldgrowth was confirmed. Allergen Test method: ELISA, Tested Organization: Daiwa Chemical Industries Co., Ltd, Test Report No: 2021B267, Test result: 96% neutralized in 24 hours.



Mitsubishi Electric's Dual Barrier Coating prevents dust and greasy dirt from accumulating on the inner surface of the indoor unit, keeping your air conditioner clean. Hydrophilic material resists oil stains and hydrophobic material resists dust stains.







Coating used (Image after 10years)







Self Clean

When Self Clean Mode is activated, fan operation starts after cooling/dry mode. This operation helps to dry inside indoor unit to prevent molds and odors. You can feel the clean air without frequent cleaning by yourself.

1 High humidity inside the unit, which can lead to mold growth and odors.



Airflow operation suppresses mycelial growth.



*When SELF CLEAN operation is set, it performs for 25 minutes when unit is stopped after COOL/DRY operation.

SELF CLEAN operation performs when: COOL/DRY is operated more than 3 minutes.

The fan is stopped for the first 3 minutes. Then, the horizontal vane is set to higher than angle 1 and the fan is operated for 25 minutes.

To enable this function, press "Self Clean Mode" button on remote controller. (Default setting is OFF)

Maintains clean unit interior.



Quietness 18dB

Noiseless 18dB 18dB Super Quiet

Quiet, relaxing space is within reach. Operational noise is 18dB (for AY25/35 single connection), which is so quiet that you might even forget the air conditioner is on.

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 be 3dB lower than the rated operating noise specification.





•

Wider Heating Operation Range

Mitsubishi Electric technology ensures that the unit will operate even when the outside temperature is down to -20°C for AY20/25/ 35/42/50 single connection only.

Guaranteed heating operation range is extended to -20°C AY series AP series -20°C -15°C OutdoorTemperature(°C)

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.

Standard Units



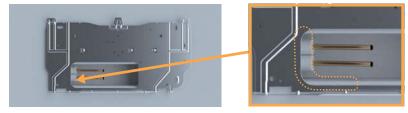
MUZ-AY25/35/42VG

MUZ-AY50VG

^{*}The cooling/heating capacity may drop.

Back Plate with a Hole

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



The edge of the hole is reinforced to ensure the strength.

□ Spacer

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



Built-in Wi-Fi & App Control

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

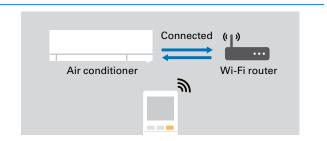
[key control and monitoring features]

- On/Off
- Check and set driving conditions
- Notification of weather conditions from current location
- Weekly timer set
- Energy consumption check
- Air purification on/off



Easy Wi-Fi Set Up

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



Remote Controller features

The remote controller screen is equipped with LED backlight. The luminous screen allows you to check the setting easily even in the dark. You can easily connect Wi-Fi adaptor in the indoor unit and your local router with just a simple operation of remote controller.



MSZ-AP

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-AP20VG





MSZ-AP60/71VG

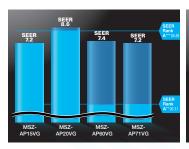


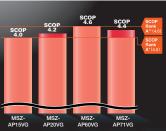


reddot award 2018

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.







Large capacity model

Suitable model for large rooms.





Wide and Long Airflow

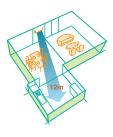
The wide and long airflow function is especially beneficial for large spaces, helping to ensure that air is well circulated and reaches every corner of the room.

Wide Airflow

This unique airflow system distributes air horizontally over a wide-ranging 150° in heating mode and 100° in cooling mode. Simply press the Wide Swing icon on the remote controller to select the desired airflow from seven different patterns.

Long Airflow

Use this function to ensure that the airflow circulates to areas far across the room. Press the Long Airflow icon on the remote controller to extend reach up to as far as 12 metres from the unit.



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

"WeeklyTimer"

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

■ Example Operation Pattern (Winter/Heating mode)

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	
			Automatically change					
8:00								
10:00								
15:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C	
		Midday is warmer, so the temperature						
14:00					oo are temperatur	10 000 104401		
IP:00								
18:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	
50:00		Automatically tur	Automatically raises temperature setting to match time when outside-air temperature is low					
55:00								
(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		
		Automa	t nignt					

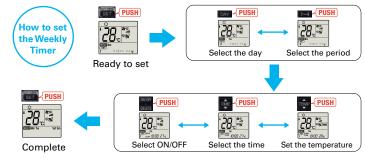
Settings

Pattern Settings: Input up to four settings for each day

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

■ Easy set-up using dedicated buttons -

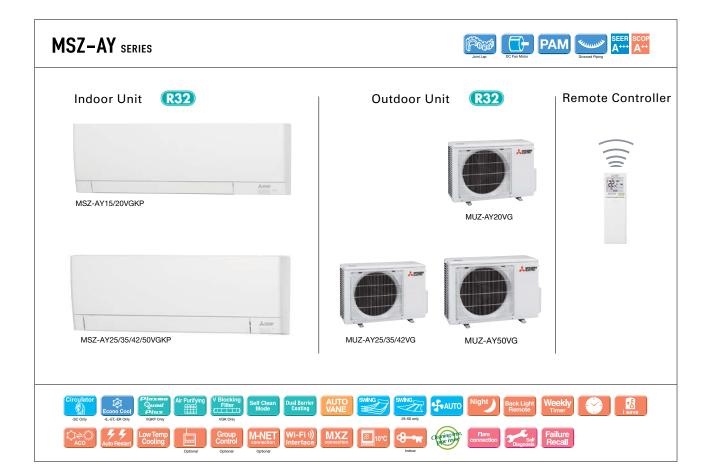




- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired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

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

 When "Weekly Timer" is set, temperature can not be set 10°C. (only for 15/20 models)



уре			_				Inverte	r Heat Pump				
Indoor Unit			MSZ-AY15VGKP	MSZ-AY20VGKP	MSZ-AY25VGKP	MSZ-AY35VG		SZ-AY42VGKP	MSZ-A	Y50VGKP		
Outdoor Unit					MUZ-AY20VG	MUZ-AY25VG	MUZ-AY35\	'G N	/IUZ-AY42VG	MUZ	-AY50VG	
Refrigerant		R32 ⁽¹⁾										
ower	Source				Outdoor Power supply							
upply	Outdoor (V/Ph	ase / Hz)		230/Single/50								
Cooling	Design load			1.5	2.0	2.5	3.5		4.2		5.0	
	Annual electricity consumption (*2) kW		kWh/a	72	81	100	141		186		232	
	SEER (*4)			7.2	8.6	8.7	8.7		7.9		7.5	
		Energy efficiency class		A++	A+++	A+++	A+++		A++		A++	
		Rated	kW	1.5	2.0	2.5	3.5		4.2		5.0	
	Capacity	Min-Max	kW	0.5-2.2	0.6-2.7	0.9-3.4	1.1-3.8		0.9-4.5	1.	4-5.4	
	Total Input	Rated	kW	0.370	0.460	0.600	0.990		1.300	1	.540	
	Design load		kW	1.6 (-10°C)	2.3 (-10°C)	2.4 (-10°C)	2.9 (-10°0	3)	3.8 (-10°C)	4.2	(-10°C)	
		at reference design temperature	kW	1.6 (-10°C)	2.3 (-10°C)	2.4 (-10°C)	2.9 (-10°0	3)	3.8 (-10°C)	4.2	(-10°C)	
	Declared Capacity	at bivalent temperature	kW	1.6 (-10°C)	2.3 (-10°C)	2.4 (-10°C)	2.9 (-10°0	:)	3.8 (-10°C)	4.2	(-10°C)	
	Сарасну	at operation limit temperature	kW	1.6 (-15°C)	1.8 (-20°C)	1.9 (-20°C)	2.0 (-20°0	()	2.7 (-20°C)	3.0	(-20°C)	
	Back up heating	capacity	kW	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°0	()	0.0 (-10°C)	0.0	(-10°C)	
Heating		y consumption (*2)	kWh/a	558	766	697	863		1131	1	1248	
verage ason) ^(*5)	SCOP (*4)			4.0	4.2	4.8	4.7		4.7		4.7	
		Energy efficiency class		A+	A+	A++	A++		A++		A++	
		Rated	kW	2.0	2.5	3.2	4.0		5.2		5.5	
	Capacity	Min	kW	0.5	0.5	1.0	1.3		1.3		1.4	
		Max at 7°C	kW	3.1	3.5	4.1	4.6		6.0		7.3	
	Total Input	Rated	kW	0.500	0.600	0.780	1.030		1.390	1	.470	
Operating Current (Max)		5.5	7.0	7.6	7.6		9.9		13.8			
	Input	Rated	kW	0.017	0.019	0.026	0.026		0.032	C	0.032	
	Operating Curre	nt (Max)	Α	0.17	0.2	0.3	0.3		0.3		0.3	
	Dimensions	H*W*D	mm	250-760-199	250-760-199	299-798-245	299-798-2	45 2	99-798-245	299-	798-245	
	Weight		kg	VGKP 9.1, VGK 8.9	VGKP 9.1, VGK 8.9	VGKP:11, VGK:10.5	VGKP:11, VGK:		KP:11, VGK:10.5	VGKP:1	11, VGK:10.5	
	Air Volume	Cooling	m³/min	2.8 - 3.7 - 4.4 - 5.2 - 6.1	2.8 - 3.7 - 4.4 - 5.2 - 6.6	3.6- 5.0 - 6.3 - 7.8- 10.5	3.6- 5.0 - 6.3 - 7.8 -	11.1 4.5	- 5.7 - 7.0 - 8.4 - 10.5	5.2 - 6.4	- 7.5 - 9.1 - 11.7	
	(SLo-Lo-Mid-Hi-SHi ^(*3))	Heating	m³/min	2.8 - 3.9 - 4.5 - 5.4 - 6.1	2.8 - 3.9 - 4.5 - 5.4 - 7.1	4.0 - 5.0 - 6.6 - 8.0 - 11.8	4.0 - 5.0 - 6.6 - 8.0	11.8 4.4	- 5.4 - 7.0 - 8.6 - 12.9	4.8 - 5.7	- 7.3 - 9.1 - 12.9	
	Sound Level (SPL)	Cooling	dB(A)	19 ⁽¹⁶⁾ - 26 - 30 - 35 - 40	19 ⁽¹⁶⁾ - 26 - 30 - 35 - 42	18 - 24 - 30 - 36 - 42	18 - 24 - 30 - 36	- 42 21	- 29 - 34 - 38 - 42	28 - 33	- 36 - 40 - 44	
	(SLo-Lo-Mid-Hi-SHi ^(*3))	Heating	dB(A)		19 ⁽¹⁶⁾ - 26 - 30 - 35 - 42		18 - 24 - 31 - 38	- 45	- 29 - 35 - 40 - 45	28 - 33	- 38 - 43 - 48	
	Sound Level (PWL)	Cooling	dB(A)	54	57	57	57		57		58	
	Dimensions	H*W*D	mm		550-800-285	550-800-285	550-800-2	35 5	50-800-285		800-285	
	Weight	Weight kg			27.5	27	28.5		34		40.5	
	Air Volume	Cooling	m³/min		32.2	32.2	32.2		32		40.5	
utdoor	· FOIGITIC	Heating	m³/min		29.8	29.8	29.8		28.1	;	37.4	
utaoor nit	Sound Level (SPL)	Cooling	dB(A)		47	47	49		50		52	
-	Count Level (SFL)	Heating	dB(A)		48	48	50		51		52	
	Sound Level (PWL)	Cooling	dB(A)		59	59	61		61		64	
			Α		6.8	7.3	7.3		9.6		13.5	
	Breaker Size		Α		10	10	10		10		16	
Ext. Piping	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.5	2	6.35 / 9.52		5 / 9.52	
	Chargeless piping lengh	Out-In	m		7.5	7.5	7.5		7.5		7.5	
	Max.Length	Out-In	m		20	20	20		20		20	
	Max.Height	Out-In	m		12	12	12		12		12	
	ed Operating	Cooling	*C		-10 ~ +46	-10 ~ +46	-10 ~ +46		-10 ~ +46) ~ +46	
ange (C	Outdoor)	or) Heating °C			-20 ~ +24	-20 ~ +24	-20 ~ +24	1	-20 ~ +24	-20) ~ +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 550. This means that if 1 kg of this refrigerant fluid with 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 RS2 is 675 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) SHE: 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 55-54 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-AP60VG(K)	MSZ-AP71VG(K)					
Outdoor Unit				MUZ-AP60VG	MUZ-AP71VG					
Refrigerar	Refrigerant			Single: R32 ⁽¹⁾ / Multi: R32 ⁽¹⁾						
Power	Source			Outdoor Power supply						
	Outdoor (V / Ph	ase / Hz)		230 / Single / 50						
	Design load kW			6.1	7.1					
	Annual electricity consumption (*2)			288	345					
	Annual electricity consumption (*2) K			7.4	7.2					
Cooling	Energy efficiency class			A++	A++					
-		Rated	kW	6.1	7.1					
	Capacity	Min-Max	kW	1.4-7.3	2.0-8.7					
	Total Input	Rated	kW	1.590	2.010					
			kW	4.6 (-10°C)	6.7 (-10°C)					
	Design load		kW	. ,	, ,					
	Declared	at reference design temperature	_	4.6 (-10°C)	6.7 (-10°C)					
	Capacity	at bivalent temperature	kW	4.6 (-10°C)	6.7 (-10°C)					
		at operation limit temperature	kW kW	3.7 (-15°C)	5.4 (-15°C)					
Heating				0.0 (-10°C)	0.0 (-10°C)					
(Average	Annual electricity	consumption (*2)	kWh/a	1398	2126					
Season)(*5)	SCOP (*4)			4.6	4.4					
		Energy efficiency class		A++	A+					
	Capacity	Rated	kW	6.8	8.1					
	Сарасну	Min-Max	kW	2.0-8.6	2.2-10.3					
	Total Input Rated		kW	1.670	2.120					
Operating	Operating Current (Max) A		Α	14.1	16.4					
	Input	Rated	kW	0.049	0.045					
	Operating Current (Max)		Α	0.5	0.4					
	Dimensions H*W*D		mm	325-1100-257	325-1100-257					
	Weight		kg	16.0	17.0					
Indoor	Air Volume Cooling		m³/min	9.4 - 11.0 - 13.2 - 16.0 - 18.9	9.6 - 11.5 - 13.2 - 15.3 - 18.6					
Unit	(SLo-Lo-Mid-Hi-SHi ^(*3))	Heating	m³/min	10.8- 13.4 - 15.4 - 17.4 - 20.3	10.2- 11.5 - 13.2 - 15.3 - 19.2					
	Sound Level (SPL)	Cooling	dB(A)	29 - 37 - 41 - 45 - 48	30 - 37 - 41 - 45 - 49					
	(SLo-Lo-Mid-Hi-SHi ^(*3))	Heating	dB(A)	30 - 37 - 41 - 45 - 48	30 - 37 - 41 - 45 - 51					
	Sound Level (PWL)	Cooling	dB(A)	65	65					
	Dimensions	H*W*D	mm	714-800-285	880-840-330					
	Weight		kg	40	53					
Outdoor Unit	Cooling		m³/min	52.1	63.7					
	Air Volume	Heating	m³/min	52.1	57.7					
		Cooling	dB(A)	56	56					
	Sound Level (SPL)									
	Council and (DWII)	Heating	dB(A)	57	55					
	Sound Level (PWL) Cooling		dB(A)	69	69					
			A	13.6	16.0					
	Breaker Size		Α	16						
Eve	Diameter	Liquid/Gas	mm	6.35 / 12.7	6.35 / 12.7					
Piping	Max.Length	Out-In	m	30	30					
p9	Max.Height	Out-In	m	15	15					
	ed Operating	Cooling	°C	-10 ~ +46	-10 ~ +46					
Range (Outdoor)		Heating	*C	-15 ~ +24	-15 ~ +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 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 6482 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, SCO2 and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".

(5) Please see page 53-54 for heating (warmer season) specifications.