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.

R32
Single / Multi

R410A
Multi

MSZ-AY25/35/42/50VGK(P)

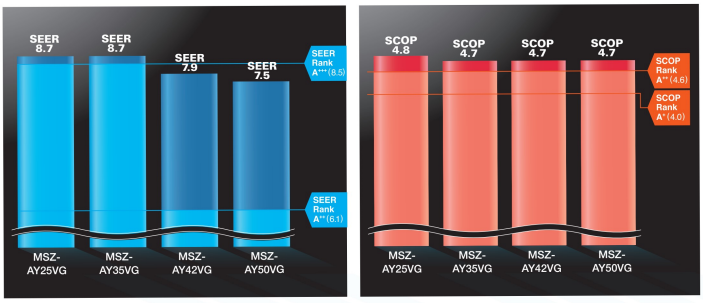


High energy saving

25/35 SEER A+++

25-50 SCOP A++

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



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

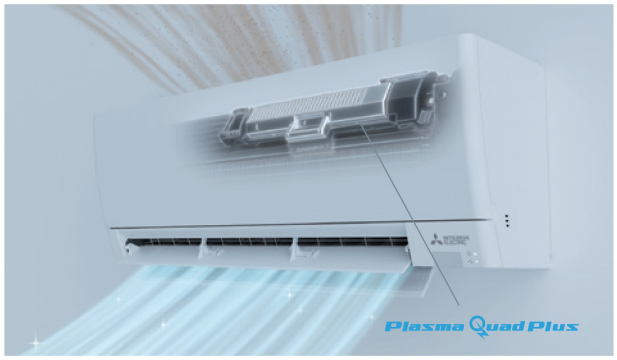
Simple and Compact size
While the plasma is built-in, the angle of the curve is carefully designed to maintain the compact unit.

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.



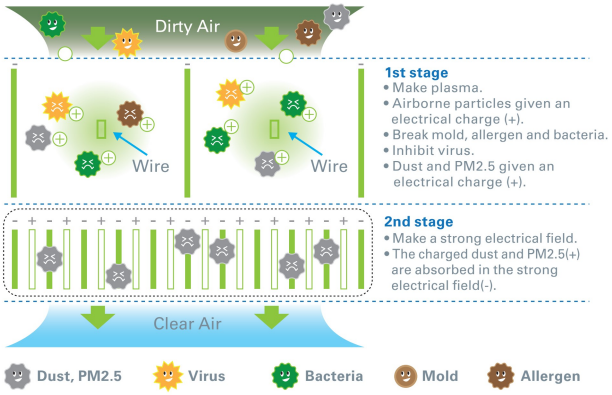


Plasma Quad Plus (only VGKP model)



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.



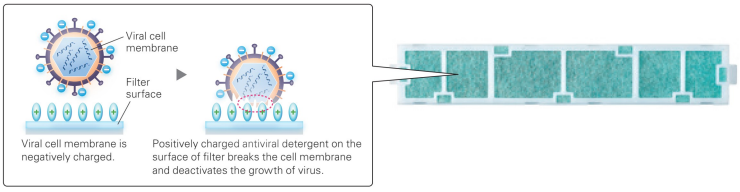
We have confirmed Plasma Quad Plus inhibits 99% of adhered COVID-19.

*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%.

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

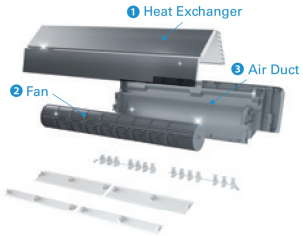


*Virus Test method: JIS L 1922, Tested Organization: Guangdong Detection Center of Microbiology, Test Report No: 2020FM30156R02D, Test result: 99% neutralized in 24 hours in a Testing Container.
Bacteria Test method: JIS L 1902, Tested Organization: Boken Quality Evaluation Institute, Test Report No: 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 in24 hours.

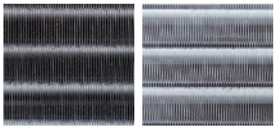
Dual Barrier Coating

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.



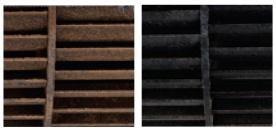


1 Heat Exchanger



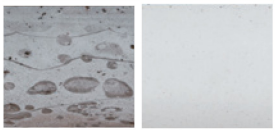
No Dual Barrier Coating used (Image after 10years) | Dual Barrier Coating used

2 Fan



No Dual Barrier Coating used (Image after 10years) | Dual Barrier Coating used

3 Air Duct

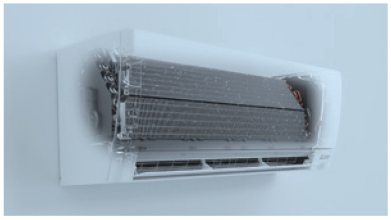


No Dual Barrier Coating used (Image after 10years) | Dual Barrier Coating used

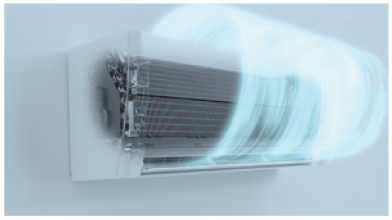
Self Clean

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.

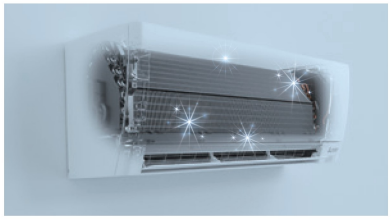
1 High humidity inside the unit, which can lead to mold growth and odors.



2 Airflow operation suppresses mycelial growth.



3 Maintains clean unit interior.



*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)

Quietness 18dB

Noiseless 18dB



Quiet, relaxing space is within reach. Operational noise is 18dB (25/35 classes), 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.

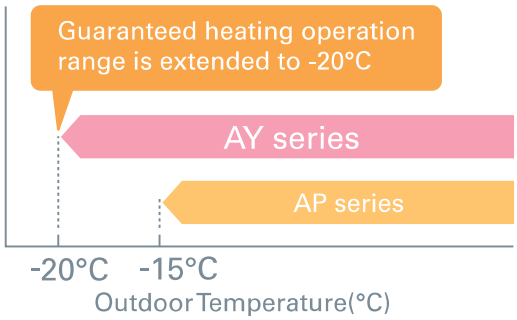
*The cooling/heating capacity may drop.



Wider Heating Operation Range

Mitsubishi Electric technology ensures that the unit will operate even when the outside temperature is down to -20°C.

Wider Heating Operation Range



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

Heater Installed



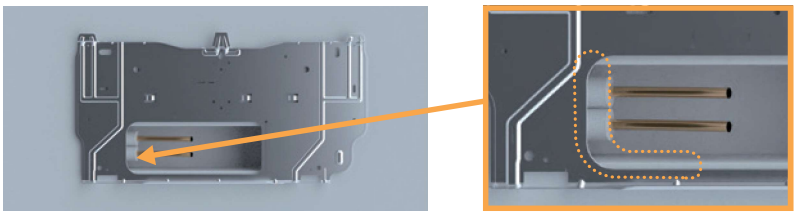
MUZ-AY25/35/42VGH



MUZ-AY50VGH

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.

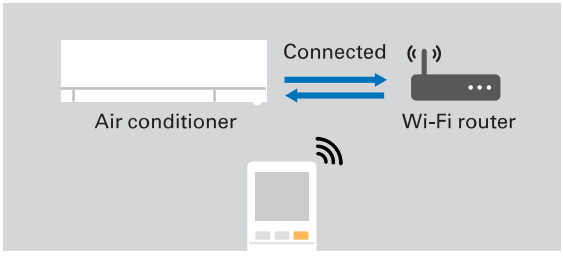
[key control and monitoring features]

- 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 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-AP20VG

R32 Single / Multi

R410A Multi

MSZ-AP15/20VG



GOOD DESIGN AWARD 2017

reddot award 2018 winner

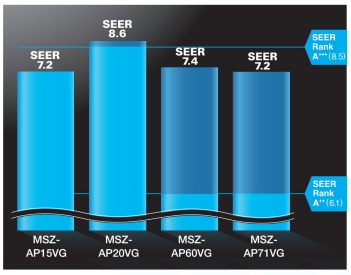
MSZ-AP60/71VG

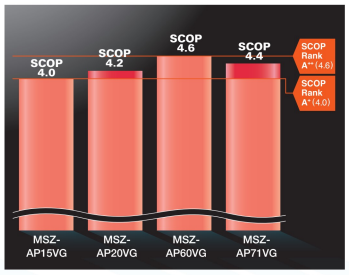


High energy saving

20 SEER A^{+++} 60 SCOP A^{++}

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.

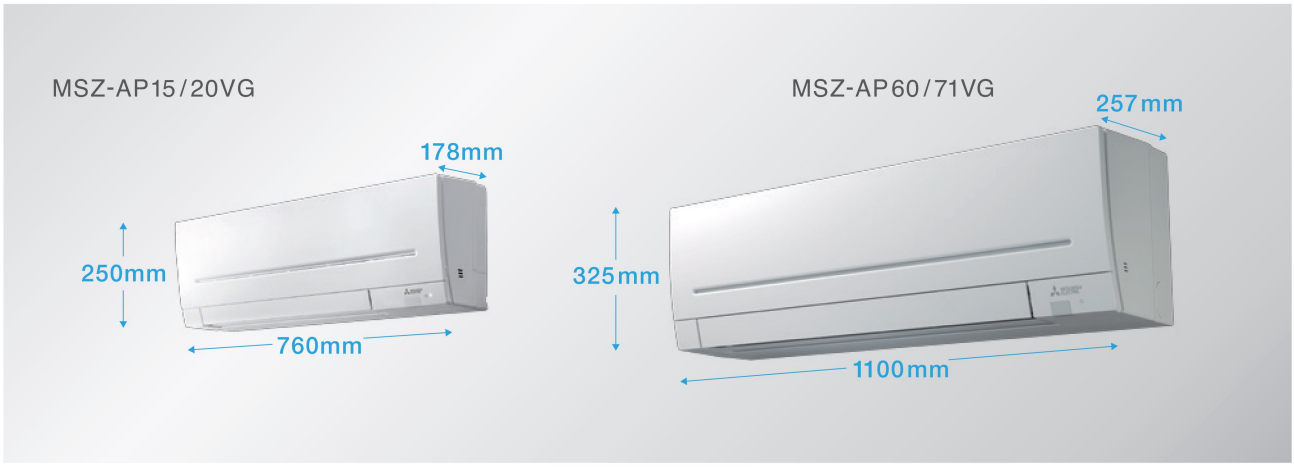






Compact and stylish

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.



■Living



■Study

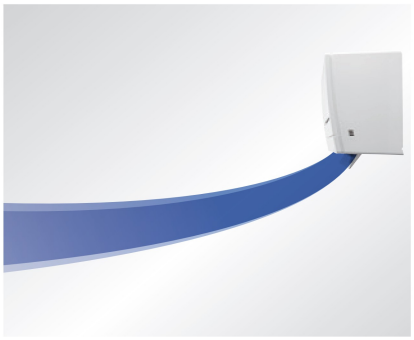


■Bedroom



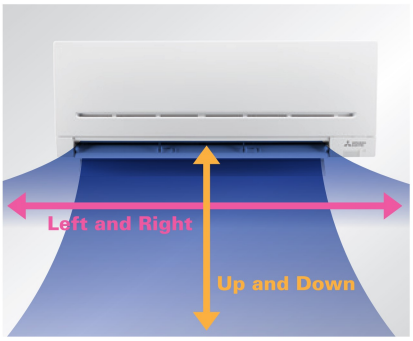
Evolved comfortable convenience function

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



"Weekly Timer"

Weekly Timer

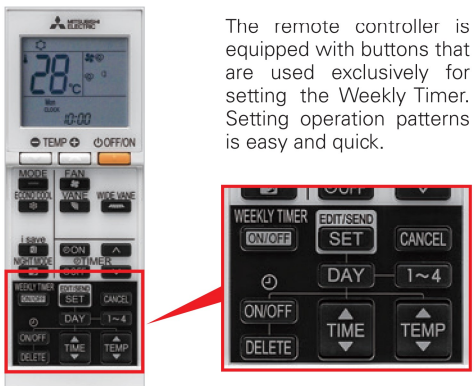
Easily set desired temperatures and operation start/stop times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

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

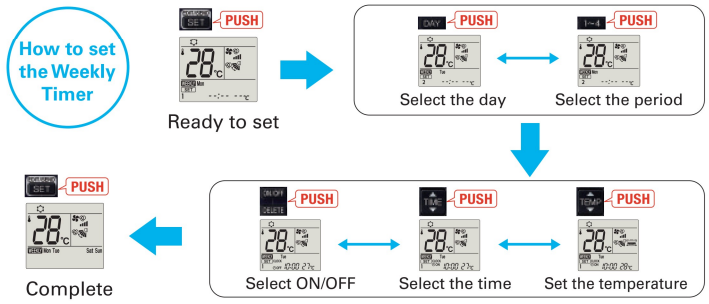
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
	Automatically changes to high-power operation at wake-up time						
8:00							
10:00							
12:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
	Automatically turned off during work hours					Midday is warmer, so the temperature is set lower	
14:00							
16:00							
18:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
20:00	Automatically turns on, synchronized with arrival at home					Automatically raises temperature setting to match time when outside-air temperature is low	
22:00							
(during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
	Automatically lowers temperature at bedtime for energy-saving operation at 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



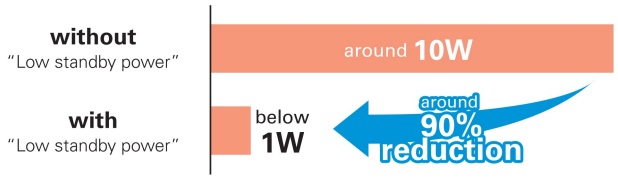
The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired patterns into the remote controller memory. Pushing the "CANCEL" button will end the set-up process without sending the operation patterns to the indoor unit).
- It takes a few seconds to transmit the Weekly Timer operation patterns to the indoor unit. Please continue to point the remote controller at the indoor unit until all data has been sent.
- When "Weekly Timer" is set, temperature can not be set 10°C. (only for 15/20 models)

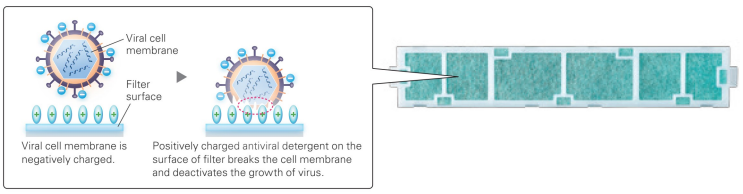
Low Standby Power

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



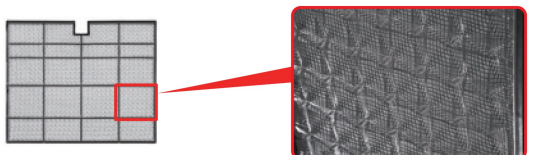
V Blocking Filter

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



Air Purifying Filter

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

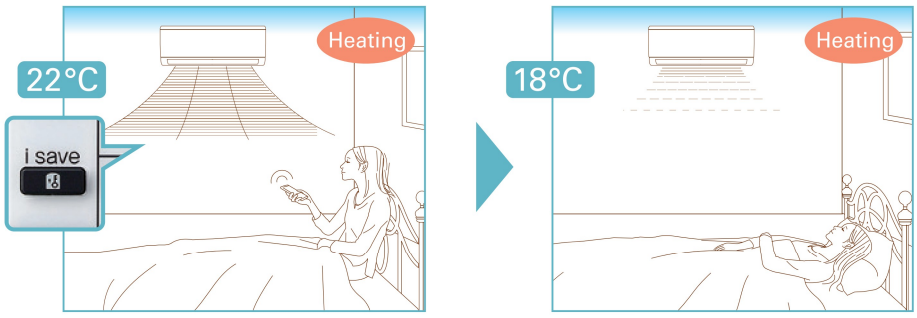


✻ It is okay to wash the filter with water (air-cleaning effect is maintained)

3D surface (Waved surface)

"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.

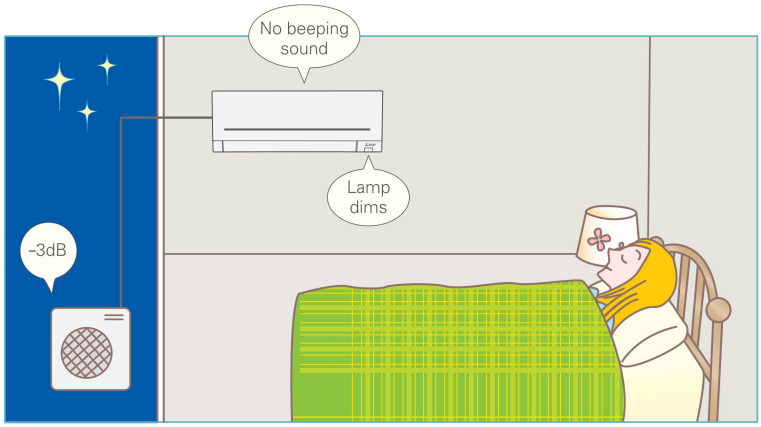


✻ Temperature can be preset to 10°C when heating in the "i-save" mode.

Night Mode

When Night Mode is activated using the wireless remote controller, air conditioner operation will switch to the following settings.
- The brightness of the operation indicator lamp will become dimmer.
- The beeping sound will be disabled.
- The outdoor operating noise will drop to 3dB lower than the rated operating noise specification.

*The cooling/heating capacity may drop.



Built-in Wi-Fi Interface

(MSZ-AP15/20/60/71VGK)

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

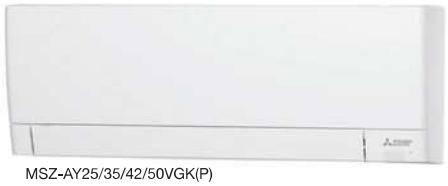
Blacklight function incorporated, making screen easy to read in the dark. Even in dimly lit rooms, the screen can be seen clearly for trouble-free remote controller operation.



MSZ-AY SERIES

Joint Lap | DC Fan Motor | PAM | Grooved Piping | SEER A+++ | SCOP A++

Indoor Unit R32 R410A



MSZ-AY25/35/42/50VGK(P)

Outdoor Unit R32



MUZ-AY25/35/42VG(H)



MUZ-AY50VG(H)

Remote Controller



Circulator | Econo Cool (-E,-ET,-ER Only) | Plasma Quad Plus (VGKP Only) | Air Purifying | V Blocking Filter (VGK Only) | Self Clean Mode | Dual Barrier Coating | AUTO VANE | SWING | SWING | AUTO | Night | Back Light Remote | Weekly Timer | i save

ACO | Auto Restart | Low Temp Cooling | Optional | Group Control (Optional) | M-NET connection (Optional) | Wi-Fi Interface | MXZ connection | 10°C | Indoor | Cleaning-free pipe route | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump							
Indoor Unit				MSZ-AY25VGK(P)	MSZ-AY25VGK(P)	MSZ-AY35VGK(P)	MSZ-AY35VGK(P)	MSZ-AY42VGK(P)	MSZ-AY42VGK(P)	MSZ-AY50VGK(P)	MSZ-AY50VGK(P)
Outdoor Unit				MUZ-AY25VG	MUZ-AY25VGH	MUZ-AY35VG	MUZ-AY35VGH	MUZ-AY42VG	MUZ-AY42VGH	MUZ-AY50VG	MUZ-AY50VGH
Refrigerant				R32(*1)							
Power Supply	Source			Outdoor Power supply							
	Outdoor (V / Phase / Hz)			230/Single/50							
Cooling	Design load		kW	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0
	Annual electricity consumption (*2)		kWh/a	100	100	141	141	186	186	232	232
	SEER (*4)			8.7	8.7	8.7	8.7	7.9	7.9	7.5	7.5
		Energy efficiency class		A+++	A+++	A+++	A+++	A++	A++	A++	A++
	Capacity	Rated	kW	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0
		Min-Max	kW	0.9-3.4	0.9-3.4	1.1-3.8	1.1-3.8	0.9-4.5	0.9-4.5	1.4-5.4	1.4-5.4
	Total Input	Rated	kW	0.600	0.600	0.990	0.990	1.300	1.300	1.540	1.540
Heating (Average Season)(*5)	Design load		kW	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)
	Declared Capacity	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)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)
		at bivalent temperature	kW	2.4 (-10°C)	2.4 (-10°C)	2.9 (-10°C)	2.9 (-10°C)	3.8 (-10°C)	3.8 (-10°C)	4.2 (-10°C)	4.2 (-10°C)
		at operation limit temperature	kW	1.9 (-20°C)	1.9 (-20°C)	2.0 (-20°C)	2.0 (-20°C)	2.7 (-20°C)	2.7 (-20°C)	3.0 (-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°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)	0.0 (-10°C)
	Annual electricity consumption (*2)		kWh/a	697	709	863	880	1131	1146	1248	1265
	SCOP (*4)			4.8	4.7	4.7	4.6	4.7	4.6	4.7	4.6
		Energy efficiency class		A++	A++	A++	A++	A++	A++	A++	A++
	Capacity	Rated	kW	3.2	3.2	4.0	4.0	5.2	5.2	5.5	5.5
		Min	kW	1.0	1.0	1.3	1.3	1.3	1.3	1.4	1.4
		Max at 7°C	kW	4.1	4.1	4.6	4.6	6.0	6.0	7.3	7.3
	Total Input	Rated	kW	0.780	0.780	1.030	1.030	1.390	1.390	1.470	1.470
Operating Current (Max)			A	7.6	7.6	7.6	7.6	9.9	9.9	13.8	13.8
Indoor Unit	Input	Rated	kW	0.026	0.026	0.026	0.026	0.032	0.032	0.032	0.032
	Operating Current (Max)		A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Dimensions	H*W*D	mm	299-798-245	299-798-245	299-798-245	299-798-245	299-798-245	299-798-245	299-798-245	299-798-245
	Weight		kg	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5	VGKP:11, VGK:10.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	m^3/min	3.6- 5.0 - 6.3 - 7.8- 10.5	3.6- 5.0 - 6.3 - 7.8- 10.5	3.6- 5.0 - 6.3 - 7.8 - 11.1	3.6- 5.0 - 6.3 - 7.8 - 11.1	4.5 - 5.7 - 7.0 - 8.4 - 10.5	4.5 - 5.7 - 7.0 - 8.4 - 10.5	5.2 - 6.4 - 7.5 - 9.1 - 11.7	5.2 - 6.4 - 7.5 - 9.1 - 11.7
		Heating	m^3/min	4.0 - 5.0 - 6.8 - 8.0 - 11.8	4.0 - 5.0 - 6.6 - 8.0 - 11.8	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	4.4 - 5.4 - 7.0 - 8.6 - 12.9	4.8 - 5.7 - 7.3 - 9.1 - 12.9	4.8 - 5.7 - 7.3 - 9.1 - 12.9
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	18 - 24 - 30 - 36 - 42	18 - 24 - 30 - 36 - 42	18 - 24 - 30 - 36 - 42	18 - 24 - 30 - 36 - 42	21 - 29 - 34 - 39 - 42	21 - 29 - 34 - 38 - 42	28 - 33 - 36 - 40 - 44	28 - 33 - 36 - 40 - 44
		Heating	dB(A)	18 - 24 - 34 - 39 - 45	18 - 24 - 34 - 39 - 45	18 - 24 - 31 - 38 - 45	18 - 24 - 31 - 38 - 45	21 - 29 - 35 - 40 - 45	21 - 29 - 35 - 40 - 45	28 - 33 - 38 - 43 - 48	28 - 33 - 38 - 43 - 48
	Sound Level (PWL)	Cooling	dB(A)	57	57	57	57	57	57	58	58
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285	714-800-285	714-800-285
	Weight		kg	27	27	28.5	28.5	34	34	40.5	40.5
	Air Volume	Cooling	m^3/min	32.2	32.2	32.2	32.2	32	32	40.5	40.5
		Heating	m^3/min	29.8	29.8	29.8	29.8	28.1	28.1	37.4	37.4
	Sound Level (SPL)	Cooling	dB(A)	47	47	49	49	50	50	52	52
		Heating	dB(A)	48	48	50	50	51	51	52	52
	Sound Level (PWL)	Cooling	dB(A)	59	59	61	61	61	61	64	64
	Operating Current (Max)		A	7.3	7.3	7.3	7.3	9.6	9.6	13.5	13.5
	Breaker Size		A	10	10	10	10	10	10	16	16
Ext. Piping	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	6.35 / 9.52	6.35 / 9.52
	Chargeless piping lengh	Out-In	m	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	Max.Length	Out-In	m	20	20	20	20	20	20	20	20
	Max.Height	Out-In	m	12	12	12	12	12	12	12	12
Guaranteed Operating Range (Outdoor)		Cooling	℃	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	℃	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-20 ~ +24	-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 would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO_2, 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 57-58 for heating (warmer season) specifications.