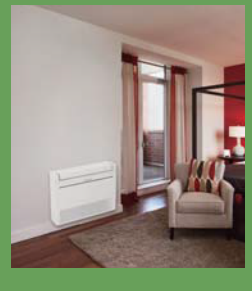
MXZ

SERIES

StudioKlima

Ηλία Ηλιού 83, Νέος Κόσμος - Αττική
Τηλ.: 210.90.14.154 - 210.90.15.947
mail: studioklima@studioklima.gr

www.studioklima.gr



SELECTION

Choose from five types of indoor units and fourteen outdoor units that can run up to eight indoor units each.
Create the system that best matches room shapes and number of rooms.

STEP 1 SELECT INDOOR UNITS

Select the indoor unit to be installed in each room.

Wall-mounted


MSZ-FH


MSZ-EF


MSZ-SF (15・20)


MSZ-SF (25-50)


MSZ-GF

Floor-standing


MFZ-KJ

Cassette


SLZ


MLZ


PLA

Ceiling-suspended


PCA

Ceiling-concealed


SEZ


PEAD

STEP 2 SELECT OUTDOOR UNITS

Select the best outdoor unit based on the number of indoor units and overall system capacity required.

2-port
Connect up to 2 indoor units


MXZ-2D33VA
MXZ-2D42VA
MXZ-2D53VA(H)

3-port
Connect up to 3 indoor units


MXZ-3D54VA2
MXZ-3D68VA

4-port
Connect up to 4 indoor units


MXZ-4D72VA
MXZ-4D83VA

5-port
Connect up to 5 indoor units


MXZ-5D102VA

6-port
Connect up to 6 indoor units


MXZ-6C122VA

8-port
Connect up to 8 indoor units

Outdoor Unit


MXZ-8B140V(Y)A
MXZ-8B160V(Y)A

Branch Box


PAC-AK32BC


PAC-AK53BC

Connection to indoor units requires an appropriate branch box (distribution piping is required when connecting two branch boxes).

STEP 3 CHECK SYSTEM COMPATIBILITY

Possible combinations depends on the outdoor unit chosen. Please check the following points.

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.

8-port

MXZ-8B140VA Single Phase
MXZ-8B140YA Three Phase
MXZ-8B160VA Single Phase
MXZ-8B160YA Three Phase

6-port

MXZ-6C122VA

4-port 5-port

MXZ-4D83VA
MXZ-5D102VA

3-port 4-port

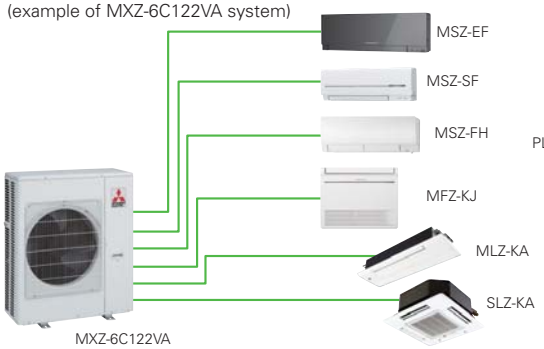
MXZ-3D54VA2
MXZ-3D68VA
MXZ-4D72VA

2-port

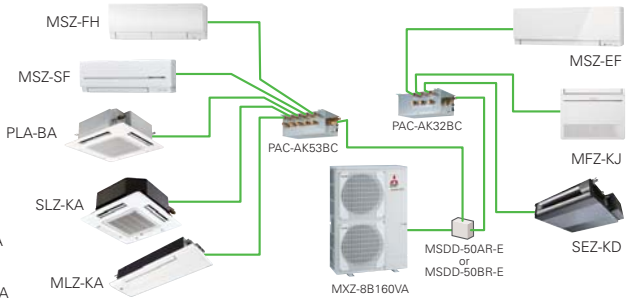
MXZ-2D33VA
MXZ-2D42VA
MXZ-2D53VA (H)

EXAMPLE SYSTEM

Smaller MXZ 2, 3, 4, 5 and 6 ports
(example of MXZ-6C122VA system)



Power Multi MXZ-8B160VA



Handle Up to 8 Rooms with a Single Outdoor Unit

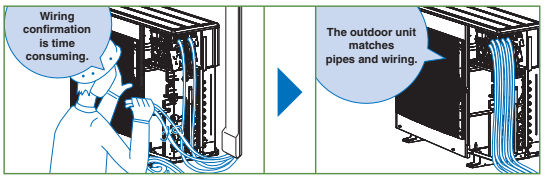
The MXZ Series offers a fourteen-system line-up to choose from, ranging between 3.3 and 15.5kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

Support Functions

Wiring/Piping Correction Function* (3D54/3D68/4D72/4D83/5D102/6C122)

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.



Automatic Line Correcting
(MXZ-2D33VA/2D42VA/2D53VA(H)/3D54VA2)

Improper wiring or piping can be automatically detected when one indoor unit is operated in COOL mode for 30 minutes. When improper wiring or piping is detected, wiring lines are corrected (A to B/B to A) with the software.

* This function may not work due to the condition or environment of the unit, such as the following:
  - gas leak, closed stop valve
  - unit failure such as defective LEV
  - indoor/outdoor temperature
* This function does not work when the "2" of SW2 on the outdoor display P.C. board is turned OFF.

Ampere Limit Adjustment
(4D83/5D102/6C122/8B140/8B160)

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.)

MXZ SERIES
INVERTER MULTI

Type (Inverter Multi - Split Heat Pump)				Up to 2 Indoor Units				Up to 3 Indoor Units		Up to 4 Indoor Units		Up to 5 Indoor Units
Indoor Unit				Please refer to (*5)								
Outdoor Unit				MXZ-2D33VA	MXZ-2D42VA	MXZ-2D53VA	MXZ-2D53VAH	MSZ-3D54VA2	MXZ-3D68VA	MXZ-4D72VA	MXZ-4D83VA	MXZ-5D102VA
Refrigerant				R410A*1								
Power Supply	Source			Outdoor power supply								
	Outdoor (V/Phase/Hz)			230 / Single / 50								
Cooling	Capacity	Rated	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
	Input (Indoor+Outdoor)	Rated	kW	0.90		1.54	1.54		2.19	2.25	2.83	3.91
	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		262	262		425	443	560	678
	SEER*5			5.5		7.1	7.1		5.6	5.7	5.2	5.3
		Energy Efficiency Class*5		A		A++	A++		A+	A+	A	A
Heating (Average Season)	Capacity	Rated	kW	4.0	4.5	6.4	6.4	7.0	8.6	8.6	9.0	10.5
	Input (Indoor+Outdoor)	Rated	kW	0.96		1.70	1.70		2.38	2.28	2.42	2.90
	Design Load		kW	2.7		4.5	4.5		6.8	7.0	7.1	8.6
	Declared Capacity	at reference design temperature	kW	2.1		3.7	3.6		5.4	5.6	5.6	6.9
		at bivalent temperature	kW	2.4		4.0	4.0		6.0	6.2	6.2	7.6
		at operation limit temperature	kW	1.7		3.3	3.0		4.4	4.7	4.7	5.6
	Back Up Heating Capacity		kW	0.6		0.8	0.9		1.4	1.4	1.5	1.7
	Annual Electricity Consumption*2		kWh/a	926		1507	1546		2466	2516	2536	3184
	SCOP*5			4.1		4.2	4.1		3.9	3.9	3.9	3.8
		Energy Efficiency Class*5		A+		A+	A+		A	A	A	A
Max. Operating Current (Indoor+Outdoor)			A	10.0		12.2	12.2		18.0	18.0	20.4	21.4
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800(+69) - 285(+59.5)				710 - 840(+30) - 330(+66)			915 - 900 - 320(+67)	
	Weight		kg	32	37	37	38	57	57	58	69	70
	Air Volume	Cooling	m³/min	32.9		32.9	32.9		42.1	42.1	42.1	56.6
		Heating	m³/min	33.7		33.3	33.3		43.0	43.0	43.8	59.3
	Sound Level (SPL)	Cooling	dB(A)	49		50	50		50	50	49	53
		Heating	dB(A)	50		53	53		53	53	50	55
	Sound Level (PWL)	Cooling	dB(A)	63		64	64		64	64	64	68
	Breaker Size		A	10	15	15	15	25	25	25	25	25
Ext. Piping	Diameter	Liquid	mm	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 3	6.35 × 3	6.35 × 4	6.35 × 4	6.35 × 5
		Gas	mm	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 3	9.52 × 3	12.7×1+9.52×3	12.7×1+9.52×3	12.7×1+9.52×4
	Total Piping Length (max)		m	20	30	30	30	50	60	60	70	80
	Each Indoor Unit Piping Length (max)		m	15	20	20	20	25	25	25	25	25
	Max. Height		m	10	15(10)*3	15(10)*3	15(10)*3	15(10)*3	15(10)*3	15(10) *3	15(10) *3	15(10)*3
	Chargeless Length		m	20	20	20	20	40	40	40	40	40
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46
		Heating	℃	–15 ~ +24	–15 ~ +24	–15 ~ +24	–20 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24

Type (Inverter Multi - Split Heat Pump)				Up to 6 Indoor Units	Up to 8 Indoor Units			
Indoor Unit				Please refer to (*6)				
Outdoor Unit				MXZ-6C122VA	MXZ-8B140VA	MXZ-8B140YA	MXZ-8B160VA	MXZ-8B160YA
Refrigerant				R410A*1				
Power Supply	Source			Outdoor power supply				
	Outdoor (V/Phase/Hz)			VA:230 / Single / 50, YA:400 / Three / 50				
Cooling	Capacity	Rated	kW	12.2	14.0	14.0	15.5	15.5
		Min - Max	kW	3.5 - 13.5	–	–	–	–
	Input*7	Rated	kW	4.05	3.86	3.86	4.71	4.71
	EER*6			3.01	3.52	3.52	3.21	3.21
		EEL Rank		B	–	–	–	–
Heating	Capacity	Rated	kW	14.0	16.0	16.0	18.0	18.0
		Min - Max	kW	3.5 - 16.5	–	–	–	–
	Input*7	Rated	kW	3.81	3.87	3.87	4.77	4.77
	COP*6			3.67	3.91	3.91	3.61	3.61
		EEL Rank		A	–	–	–	–
Operating Current (max)*7			A	30.0	29.5	13.0	29.5	13.0
Total Capacity of All Indoor Units (max)			kW	Please refer to combination table	18.5	18.5	20.2	20.2
Outdoor Unit	Dimensions	H × W × D	mm	1070-900-320 (+67)	1350-950-330			
	Weight		kg	87	129	139	129	139
	Air Volume	Cooling	m³/min	59.5	100.0	100.0	106.0	106.0
		Heating	m³/min	69.9	100.0	100.0	106.0	106.0
	Sound Level (SPL)	Cooling	dB(A)	55	50 - 47	50 - 47	51 - 48	51 - 48
		Heating	dB(A)	57	52	52	54	54
	Sound Level (PWL)	Cooling	dB(A)	69	–	–	–	–
	Breaker Size		A	32	40	25	40	25
Ext. Piping	Diameter	Liquid	mm	6.35×6	9.52×1	9.52×1	9.52×1	9.52×1
		Gas	mm	12.7×1+9.52×5	15.88×1	15.88×1	15.88×1	15.88×1
	Total Piping Length (max)		m	80	115	115	115	115
	Each Indoor Unit Piping Length (max)		m	25	15	15	15	15
	Max. Height		m	15 (10)*3	20 (30)*4	20 (30)*4	20 (30)*4	20 (30)*4
	Chargeless Length		m	60	40	40	40	40
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–5 ~ +46	–5 ~ +46	–5 ~ +46	–5 ~ +46
		Heating	℃	–15 ~ +24	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21

Type				Branch Box	
Model Name				PAC-AK53BC*8	PAC-AK32BC
Connectable Number of Indoor Units				Max. 5	Max. 3
Power Supply	Source			Outdoor power supply	
	Outdoor [V/Phase/Hz]			VA:230/Single/50, YA:400/Three/50	
Total Input			kW	0.003	
Operating Current			A	0.05	
Drain Hose Size*7			mm	O.D. 20 (VP - 16)	
Dimensions [HxWxD]			mm	198 - 450 - 280	
Weight			kg	9.3	8.1
Piping [diameter]	Branch [Indoor side]	Liquid	mm	6.35 × 5	6.35 × 3
		Gas	mm	9.52×4, 12.7×1	9.52 × 3
	Main [Outdoor side]	Liquid	mm	9.52	
		Gas	mm	15.88	
	Connection Method			Flared	
Wiring	to Indoor Unit			3-wire + Earth wire	
	to Outdoor Unit			3-wire + Earth wire	

*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 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.

*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 If the outdoor unit is installed higher than the indoor unit, max. height is increased to 30m.

*5 EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-2D33VA → MSZ-SF15VA + MSZ-EF18VE
MXZ-2D42VA → MSZ-EF18VE + MSZ-EF25VE
MXZ-2D53VA → MSZ-EF18VE + MSZ-EF35VE
MXZ-3D54VA2 → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MXZ-3D68VA → MSZ-EF18VE + MSZ-EF25VE + MSZ-EF25VE
MXZ-4D72VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MXZ-4D83VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE
MXZ-5D102VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF22VE + MSZ-EF22VE

*6 EER/COP, EEL rank, values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-6C122VA → MSZ-EF25VA × 6
MXZ-8B140VA → MSZ-EF22VE × 8
MXZ-8B140YA → MSZ-EF22VE × 8
MXZ-8B160VA → MSZ-EF25VE × 8
MXZ-8B160YA → MSZ-EF25VE × 8

*7 Drain hose is to be locally purchased.

*8 When using PAC-AK53BC and PAC-AK52YP-E, PLA-RP100BA and PEAD-RP100JA(L)Q can be connected to MXZ-8B140V(Y)/160V(Y)A.

Indoor Unit Compatibility Table

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

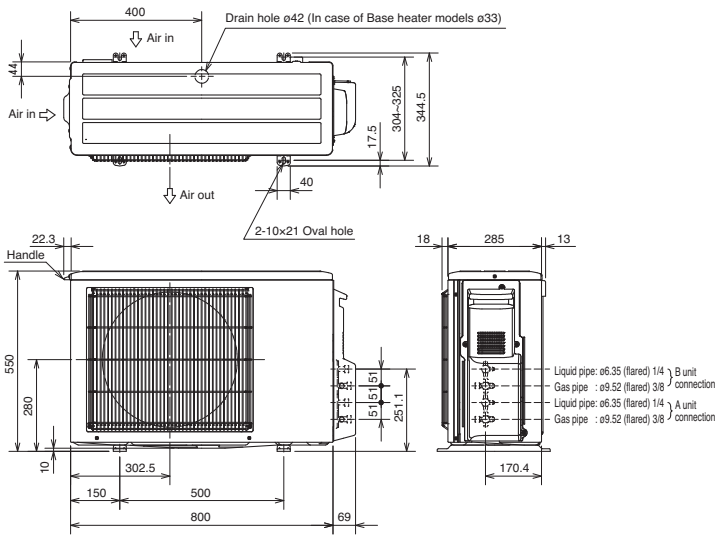
Indoor Unit		Outdoor Unit / Inverter Models Heat pump type	MXZ-2D33VA *5	MXZ-2D42VA *5	MXZ-2D53VA/H *5	MXZ-3D54VA2 *5	MXZ-3D68VA *5	MXZ-4D72VA *5	MXZ-4D83VA *5	MXZ-5D102VA *5	MXZ-6C122VA	MXZ-8B140VA *6	MXZ-8B140YA *6	MXZ-8B160VA *6	MXZ-8B160YA *6
M series	Wall-Mounted	MSZ-FH25VE	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-FH35VE		●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-FH50VE				●	●	●	●	●	●	●	●	●	●
		MSZ-SF15VA	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF20VA	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF25VE	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF35VE		●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF42VE			●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF50VE			●	●	●	●	●	●	●	●	●	●	●
		MSZ-GF60VE					●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3
		MSZ-GF71VE							●*3	●*3	●*3	●*3	●*3	●*3	●*3
		MSZ-EF18VE2W/B/S	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF22VE2W/B/S	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF25VE2W/B/S	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF35VE2W/B/S		●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF42VE2W/B/S			●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF50VE2W/B/S			●	●	●	●	●	●	●	●	●	●	●
	Floor-Standing	MFZ-KJ25VE *7	●	●	●	●	●	●	●	●	●	●	●	●	●
		MFZ-KJ35VE *7		●	●	●	●	●	●	●	●	●	●	●	●
		MFZ-KJ50VE				●	●	●	●	●	●	●	●	●	●
	1-way Cassette	MLZ-KA25VA	●	●	●	●	●	●	●	●	●	●	●	●	●
		MLZ-KA35VA		●	●	●	●	●	●	●	●	●	●	●	●
		MLZ-KA50VA				●	●	●	●	●	●	●	●	●	●
S series	4-way Cassette	SLZ-KA25VAQ2	●	●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA25VAL2	●	●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA35VAQ		●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA35VAL		●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA50VAQ				●	●	●	●	●	●	●	●	●	●
		SLZ-KA50VAL				●	●	●	●	●	●	●	●	●	●
	Ceiling-Concealed	SEZ-KD25VAQ *4	●	●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD25VAL *4	●	●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD35VAQ		●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD35VAL		●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD50VAQ				●	●	●	●	●	●	●	●	●	●
		SEZ-KD50VAL				●	●	●	●	●	●	●	●	●	●
		SEZ-KD60VAQ					●	●	●	●	●	●	●	●	●
		SEZ-KD60VAL					●	●	●	●	●	●	●	●	●
		SEZ-KD71VAQ							●	●	●	●	●	●	●
		SEZ-KD71VAL							●	●	●	●	●	●	●
P series	4-way Cassette	PLA-RP35BA										●	●	●	●
		PLA-RP50BA				●	●	●	●	●	●	●	●	●	●
		PLA-RP60BA					●	●	●	●	●	●	●	●	●
		PLA-RP71BA							●	●	●	●	●	●	●
		PLA-RP100BA										●	●	●	●
	Ceiling-Suspended	PCA-RP50KAQ				●	●	●	●	●	●				
		PCA-RP60KAQ					●	●	●	●	●				
		PCA-RP71KAQ							●	●	●				
	Ceiling-Concealed	PEAD-RP50JAQ				●*1	●*1	●*1	●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP50JALQ				●*1	●*1	●*1	●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP60JAQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP60JALQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP71JAQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP71JALQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP100JAQ										●*2	●*2	●*2	●*2
		PEAD-RP100JALQ										●*2	●*2	●*2	●*2

*1 Maximum total current of indoor units: 3A or less.
*2 Total indoor unit capacity should be 100% or less.
*3 The combination is still under evaluation.
*4 SEZ-KD25 cannot be connected with MXZ-2D/3D/4D/5D when total capacity of connected indoor units is equivalent to outdoor capacity (capacity ratio is 1).
*5 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.
*6 Branch box PAC-AK53BC and PAC-AK32BC require connection of at least two indoor units connection.
*7 MFZ-KJ25/35VE "-E1" can not be connected with MXZ.

Unit : mm

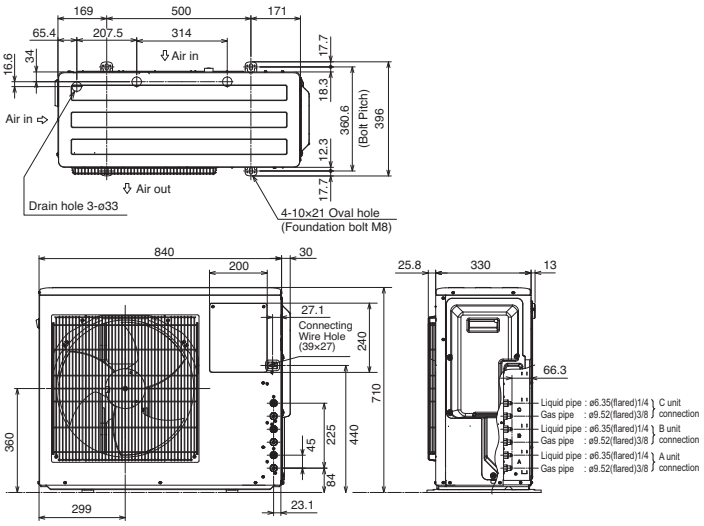
MXZ-2D33VA MXZ-2D42VA MXZ-2D53VA MXZ-2D53VAH

OUTDOOR UNIT



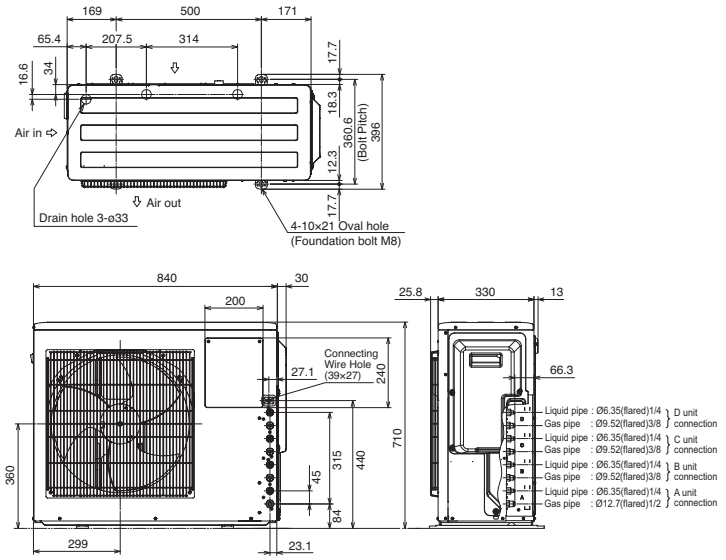
MXZ-3D54VA2 MXZ-3D68VA

OUTDOOR UNIT



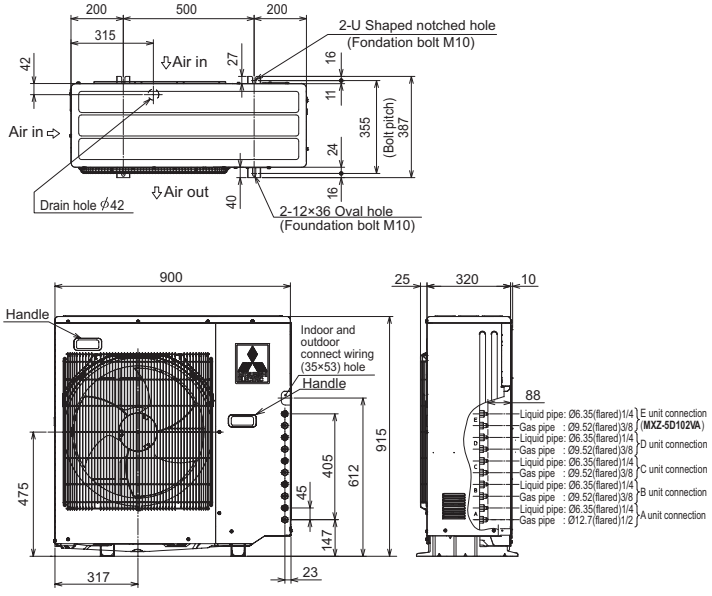
MXZ-4D72VA

OUTDOOR UNIT



MXZ-4D83VA MXZ-5D102VA

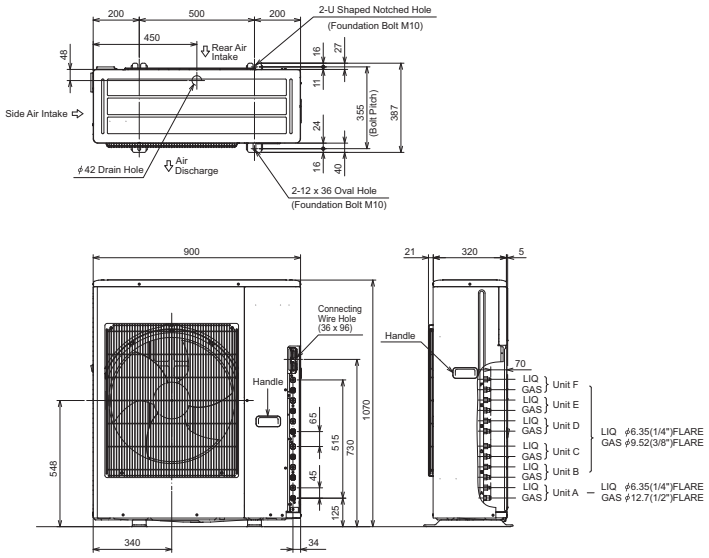
OUTDOOR UNIT



Unit : mm

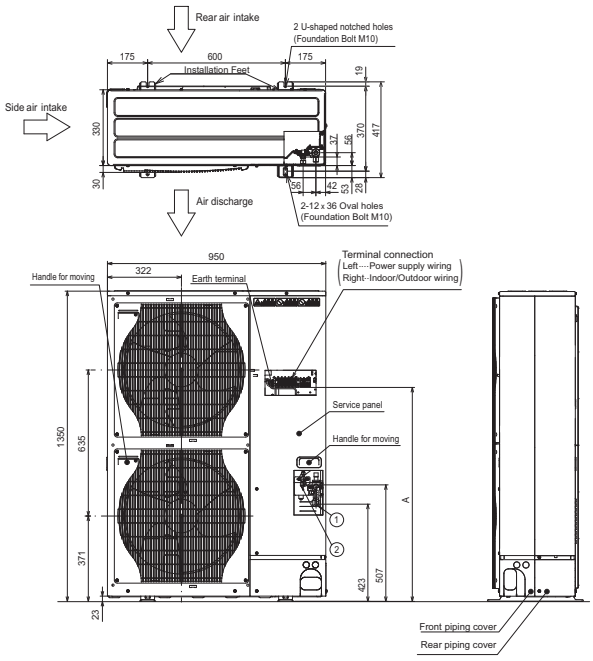
MXZ-6C122VA

OUTDOOR UNIT



MXZ-8B140VA MXZ-8B140YA
MXZ-8B160VA MXZ-8B160YA

OUTDOOR UNIT



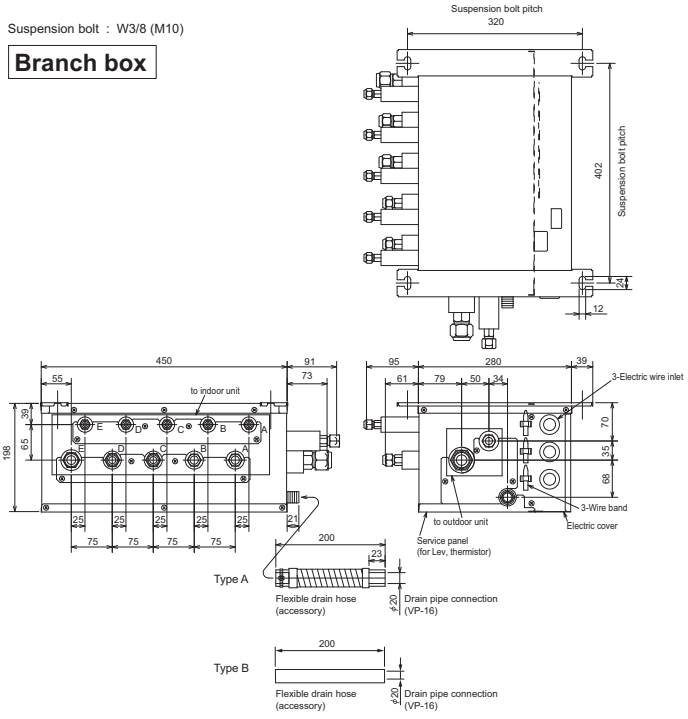
①···Refrigerant gas pipe connection (FLARE)
②···Refrigerant liquid pipe connection (FLARE)
Indicates stop valve connection location

Model	A
MXZ-8B140VA/160VA	1079
MXZ-8B140YA/160YA	930

PAC-AK53BC

Suspension bolt : W3/8 (M10)

Branch box



PAC-AK32BC

Suspension bolt : W3/8 (M10)

Branch box