

Job Name:

System Reference:

Date:



Outdoor Unit: MXZ-8C60NA

FEATURES

- Variable speed INVERTER-driven compressor
- Branch box for simplified piping and installation flexibility
- Up to 8 indoor units connectable (six [6] if a PLA-EA7 is connected)
- Optional base pan heater
- Quiet outdoor unit operation as low as 58 dB(A)
- High pressure protection
- Compressor thermal protection
- Compressor overcurrent detection
- Fan motor overheating/voltage protection
- Up to 98% of rated heating capacity at 17°F and 84% of rated heating capacity at 5°F (non-ducted, condition dependent)
- Energy Star® certified¹ (non-ducted)

¹ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.

SPECIFICATIONS: MXZ-8C60NA

Model Number	Outdoor Unit		MXZ-8C60NA		
	Indoor Unit Type		Non-ducted	Mix	Ducted
Cooling*1	Maximum Capacity	Btu/h	60,000	60,000	60,000
	Rated Capacity	Btu/h	60,000	60,000	60,000
	Minimum Capacity	Btu/h	30,000	30,000	30,000
	Maximum Power Input	W	4,800	5,525	6,250
	Rated Power Input	W	4,800	5,525	6,250
	Power Factor	%	-	-	-
Heating at 47° F*2	Maximum Capacity	Btu/h	66,000	66,000	66,000
	Rated Capacity	Btu/h	66,000	66,000	66,000
	Minimum Capacity	Btu/h	31,000	31,000	31,000
	Maximum Power Input	W	4,870	4,810	7,200
	Rated Power Input	W	4,870	4,810	4,750
	Power Factor	%	-	-	-
Heating at 17° F*3	Maximum Capacity	Btu/h	65,000	61,500	58,000
	Rated Capacity	Btu/h	41,500	41,000	40,500
	Maximum Power Input	W	9,525	8,810	8,095
	Rated Power Input	W	4,860	4,810	4,750
Heating at 5° F*4	Maximum Capacity	Btu/h	57,000	49,500	42,000
	Maximum Power Input	W	8,350	8,200	8,050
Connectable Capacity		Btu/h	12,000 - 78,000	12,000 - 78,000	12,000 - 78,000
Efficiency	SEER		17.40	16.30	15.10
	EER *1		12.50	11.05	9.60
	HSPF (IV)		10.50	10.25	10.00
	COP at 47° F*2		3.40	3.40	3.40
	COP at 17° F*3		2.50	2.50	2.50
	ENERGY STAR® Certified		Yes		
Electrical	Voltage, Phase, Frequency	V AC	208 / 230V, 1-phase, 60 Hz	208 / 230V, 1-phase, 60 Hz	208 / 230V, 1-phase, 60 Hz
	Guaranteed Voltage Range	V AC	187 - 253	187 - 253	187 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208V / 230	208V / 230	208V / 230
	Voltage: Indoor - Outdoor, S2-S3	V AC	24	24	24
	Voltage: Indoor - Remote Controller	V AC	12	12	12
	Recommended Fuse/Breaker Size	A	50	50	50
	Recommended Wire Size (Indoor-Outdoor)	AWG	16	16	16

SPECIFICATIONS: MXZ-8C60NA

Model Number	Outdoor Unit		MXZ-8C60NA		
	Indoor Unit Type		Non-ducted	Mix	Ducted
Outdoor Unit	MCA	A	46	46	46
	Fan Motor Full Load Amperage	A	-	-	-
	Fan Motor Output	W	0.2 + 0.2	0.2 + 0.2	0.2 + 0.2
	Airflow Rate	CFM	4879	4879	4879
	Refrigerant Control		Linear Expansion Valve	Linear Expansion Valve	Linear Expansion Valve
	Defrost Method		Reverse Cycle	Reverse Cycle	Reverse Cycle
	Heat Exchanger Type		Plate Fin Coil	Plate Fin Coil	Plate Fin Coil
	Sound Pressure Level, Cooling*1	dB(A)	58	58	58
	Sound Pressure Level, Heating*2	dB(A)	59	59	59
	Compressor Type		Hermetic	Hermetic	Hermetic
	Compressor Model		ANB66FFZMT	ANB66FFZMT	ANB66FFZMT
	Compressor Motor Output	kW	4.2	4.2	4.2
	Compressor Rated Load Amps	A	-	-	-
	Compressor Locked Rotor Amps	A	-	-	-
	Compressor Oil Type // Charge	oz.	FV50S // 78	FV50S // 78	FV50S // 78
	External Finish Color		Munsell 3Y 7.8/ 1.1	Munsell 3Y 7.8/ 1.1	Munsell 3Y 7.8/ 1.1
	Base Pan Heater		Optional (PAC-SJ20BH-E)	Optional (PAC-SJ20BH-E)	Optional (PAC-SJ20BH-E)
	Unit Dimensions	W: In. [mm]	41-11/32 [1,050]	41-11/32 [1,050]	41-11/32 [1,050]
		D: In. [mm]	13+1 [330+25]	13+1 [330+25]	13+1 [330+25]
		H: In. [mm]	52-11/16 [1,338]	52-11/16 [1,338]	52-11/16 [1,338]
	Package Dimensions	W: In. [mm]	42-15/16 [1,090]	42-15/16 [1,090]	42-15/16 [1,090]
		D: In. [mm]	17-11/16 [450]	17-11/16 [450]	17-11/16 [450]
		H: In. [mm]	56-1/4 [1,428]	56-1/4 [1,428]	56-1/4 [1,428]
	Unit Weight	Lbs. [kg]	309 [140]	309 [140]	309 [140]
	Package Weight	Lbs. [kg]	333 [151]	333 [151]	333 [151]
Outdoor unit operating temperature range	Cooling Intake Air Temp (Maximum / Minimum)	°F	115 DB / 23 DB	115 DB / 23 DB	115 DB / 23 DB
	Heating Intake Air Temp (Maximum / Minimum)	°F	70 DB / -4 DB	70 DB / -4 DB	70 DB / -4 DB
	Thermal Lock-out / Re-start Temperatures	°F	n/a	n/a	n/a

SPECIFICATIONS: MXZ-8C60NA

Model Number	Outdoor Unit		MXZ-8C60NA		
	Indoor Unit Type		Non-ducted	Mix	Ducted
Refrigerant	Type		R410A	R410A	R410A
	Charge	Lbs. Oz.	11 lbs, 4 oz	11 lbs, 4 oz	11 lbs, 4 oz
Indoor Unit Connection	Maximum Number of Connected IDU		8 (6 ^{*A})	8 (6 ^{*A})	8 (6 ^{*A})
	Minimum Number of Connected IDU		2	2	2
	Maximum Connected Capacity	Btu/h	78,000	78,000	78,000
	Minimum Connected Capacity	Btu/h	12,000	12,000	12,000
Piping	Gas Pipe Size O.D. (Flared)	In. [mm]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]
	Liquid Pipe Size O.D. (Flared)	In. [mm]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]
	Total Piping Length	Ft. [m]	492 [150]	492 [150]	492 [150]
	Maximum Height Difference ^{*B} , ODU above IDU	Ft. [m]	164 [50]	164 [50]	164 [50]
	Maximum Height Difference ^{*B} , ODU below IDU	Ft. [m]	131 [40]	131 [40]	131 [40]
	Maximum Height Difference ^{*B} , between branch boxes	Ft. [m]	49 [15]	49 [15]	49 [15]
	Max. Piping Length between ODU and Branch Box	Ft. [m]	180 [55]	180 [55]	180 [55]
	Farthest Piping Length from ODU to IDU	Ft. [m]	262 [80]	262 [80]	262 [80]
	Farthest Piping Length after Branch Box	Ft. [m]	82 [25]	82 [25]	82 [25]
	Total Piping Length between Branch Boxes and IDU	Ft. [m]	311 [95]	311 [95]	311 [95]
	Maximum Number of Bends		15	15	15
AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)	*1 Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB		
	*2 Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB		
	*3 Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB		
Conditions	*4 Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 5 DB, 5 WB		
Notes *5°F DB - 115°F DB when optional wind baffles are installed *A when 1 or more PLA-A-EA7 connected *B Branch box should be placed within the level between the outdoor unit and indoor units.					
For reference to connected capacity charts, please refer MXZ-8C60NA Operational Performance.					

ACCESSORIES: MXZ-8C60NA

Distribution Pipe for Flare Connection (necessary for installing two branch boxes)		☐ MSDD-50AR-E
Distribution Pipe for Brazed Connection (necessary for installing two branch boxes)		☐ MSDD-50BR-E
Joint Pipe - Port Adapter size: 3/8 x 5/8		☐ PAC-SG76RJ-E
Joint Pipe - Port Adapter size: 1/4 x 3/8		☐ PAC-493PI
Joint Pipe - Port Adapter size: 3/8 x 1/2		☐ MAC-A454JP-E
Joint Pipe - Port Adapter size: 3/8 x 1/2		☐ MAC-A455JP-E
Joint Pipe - Port Adapter size: 1/2 x 5/8		☐ MAC-A456JP-E
Joint Pipe - Port Adapter size: 5/8 x 3/4		☐ ADP-5834
Three-port Branch Box		☐ PAC-MKA31BC
Five-port Branch Box		☐ PAC-MKA51BC
Branch Box Enclosure		☐ BBE-1
Air Outlet Guide		☐ MAC-881SG
Air Outlet Guide		☐ PAC-SH96SG-E (two pieces are required)
Front Wind Baffle		☐ WB-PA3 (two pieces are required)
Drain Socket		☐ PAC-SG61DS-E
Defrost Heater		☐ PAC-SJ20BH-E
Centralized Drain Pan		☐ PAC-SH97DP-E
Refrigeration Ball Valve-Flare/Schrader/Insulated—1/2 size		☐ BV12FFSI2
Refrigeration Ball Valve-Flare/Schrader/Insulated—1/4 size		☐ BV14FFSI2
Refrigeration Ball Valve-Flare/Schrader/Insulated—3/8 size		☐ BV38FFSI2
Refrigeration Ball Valve-Flare/Schrader/Insulated—5/8 size		☐ BV58FFSI2
Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic		☐ DSD-400P
Condensing Unit Mounting Pad 16 x 36 x 3		☐ ULTRILITE1
Outdoor Unit Stand—12 High		☐ QSMS1201M
Outdoor Unit Stand—18 High		☐ QSMS1801M
Outdoor Unit Stand—24 High		☐ QSMS2401M
Heavy Duty Wall Mounting Bracket for Outdoor Units—Coated Steel		☐ QSWB2000M-1
Heavy Duty Wall Mounting Bracket for Outdoor Units—316 Series Stainless Steel		☐ QSWBSS
Diamondback Linesets ¹	1/4 x 1/2 x 15' / 1/2 Lineset (Twin-Tube Insulation)	☐ MLS141212T-15
	1/4 x 1/2 x 30' / 1/2 Lineset (Twin-Tube Insulation)	☐ MLS141212T-30
	1/4 x 1/2 x 50' / 1/2 Lineset (Twin-Tube Insulation)	☐ MLS141212T-50
	1/4 x 1/2 x 65' / 1/2 Lineset (Twin-Tube Insulation)	☐ MLS141212T-65
	1/4 x 1/2 x 100' / 1/2 Lineset (Twin-Tube Insulation)	☐ MLS141212T-100
	3/8 x 5/8 x 10' / 1/2 Lineset (Twin-Tube Insulation)	☐ MPLS385812T-10
	3/8 x 5/8 x 15' / 1/2 Lineset (Twin-Tube Insulation)	☐ MPLS385812T-15
	3/8 x 5/8 x 30' / 1/2 Lineset (Twin-Tube Insulation)	☐ MPLS385812T-30
	3/8 x 5/8 x 50' / 1/2 Lineset (Twin-Tube Insulation)	☐ MPLS385812T-50
	3/8 x 5/8 x 65' / 1/2 Lineset (Twin-Tube Insulation)	☐ MPLS385812T-65
	3/8 x 5/8 x 100' / 1/2 Lineset (Twin-Tube Insulation)	☐ MPLS385812T-100

¹ Linesets are indoor unit specific and will be listed in the IDU information - the Joint Pipe adaptors are used in this application

MXZ-8C60NA SYSTEM DESIGN

Outdoor unit			MXZ-4C36NAHZ(-U1)	MXZ-5C42NAHZ(-U1)	MXZ-8C48NAHZ(-U1) MXZ-8C48NA(-U1)	MXZ-8C60NA-U1
			4HP	4.5HP	5HP	7HP
	Rated capacity (kBTU/h)	Cooling	36	42	48	60
		Heating	45	48	54	66
		Refrigerant	R410A			
Connectable indoor unit	Capacity		Type 06 to Type 36 Caution: The indoor unit which rated capacity exceeds 36 kBTU/h (Type 36) can NOT be connected.			
	Number of units		2(*1) to 4 units	2(*1) to 5 units	2(*1) to 8 units	2(*1) to 8 units
	Total system wide capacity		33 to 130% of outdoor unit capacity (12 to 46.8 kBTU/h)	29 to 130% of outdoor unit capacity (12 to 54.6 kBTU/h)	25 to 130% of outdoor unit capacity (12 to 62.4 kBTU/h)	20 to 130% of outdoor unit capacity (12 to 78 kBTU/h)
Connectable branch box	Number of units		1 or 2 units			



Connectable indoor unit lineups (Heat pump inverter type)										
	Model type	Model name	Capacity class [kBTU/h]							
			06	09	12	15	18	24	30	36
Wall mounted	Deluxe	MSZ-FE09/12/18NA		●	●		●			
		MSZ-FH06/09/12/15NA, 18NA2	●	●	●	●	●			
	Designer	MSZ-EF09/12/15/18NA(W/B/S)		●	●	●	●			
	Standard	MSZ-GE06/09/12/15/18/24NA	●	●	●	●	●	●		
		MSZ-GL06/09/12/15/18/24NA	●	●	●	●	●	●		
Ceiling concealed	Low static pressure*3	SEZ-KD09/12/15/18NA		●	●	●	●			
	Middle static pressure*3	PEAD-A24/30/36AA5						●	●	●
4-way ceiling cassette	2 by 2 type	SLZ-KA09/12/15NA		●	●	●				
	Standard	PLA-A12/18/24/30/36BA6			●		●	●	●	●
		PLA-A12/18/24/30/36EA7*4			●		●	●	●	●
Floor standing		MFZ-KA09/12/18NA		●	●		●			
		MFZ-KJ09/12/15/18NA		●	●	●	●			
		MVZ-A12/18/24/30/36AA4			●		●	●	●	●



Branch box	PAC-MKA50BC	PAC-MKA51BC	PAC-MKA30BC	PAC-MKA31BC
Number of branches (Indoor unit that can be connected)	5 branches (MAX. 5 units)		3 branches (MAX. 3 units)	

Note: A maximum of 2 branch boxes can be connected to 1 outdoor unit.



2- branch pipe (joint): Optional parts			
In case of using 1- branch box		No need	
In case of using 2- branch boxes		Model name	Connection method
		MSDD-50AR-E	flare
		MSDD-50BR-E	brazing
		Select a model according to the connection method.	



Option	Optional accessories for indoor units and outdoor units are available.
--------	--

*1 1 for MVZ model. Single unit connection is possible with MVZ-series unit.

*2 When connecting a multi-position unit(s), set additional constraints as follows. For connections other than those specified below, consult your dealer.

• Models other than MXZ-8C60NA

Number of connecting multi-position unit	Constraints
2	Any indoor units other than multi-position models are not connectable.
1	None (Only the ordinal constraints apply.)

• MXZ-8C60NA (For each connected branch box)

Number of connecting multi-position unit	Constraints
2	Any indoor units other than multi-position models are not connectable.
1	- The total system wide capacity should be 100% or below including the MVZ-series unit. - Only 1 SEZ or 1 PEAD can be included in the connection.

*3 For MXZ-8C60NA; When connecting the SEZ and PEAD-series units, the total system wide capacity per 1 branch box should be 100% or below including the SEZ and PEAD-series units. (Only if connecting to PAC-MKA50/51BC)

*4 When the system includes even 1 unit of PLA-A-EA7, the number of the maximum connectable indoor units is decreased as follows:
3 for MXZ-4C36NAHZ-U1, 4 for MXZ-5C42NAHZ-U1, and 6 for MXZ-8C48NA(HZ)-U1 and MXZ-8C60NA-U1

MXZ-8C60NA SYSTEM DESIGN

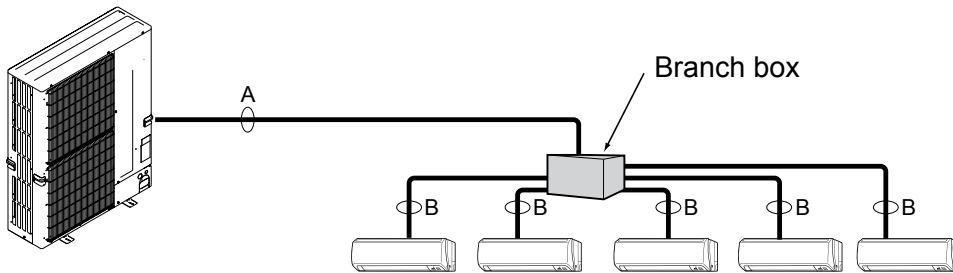
Piping connection size

	A	B
Liquid	{ 3/8 inch [9.52 mm]	The piping connection size differs according to the type and capacity of indoor units. Match the piping connection size of branch box with indoor unit. If the piping connection size of branch box does not match the piping connection size of indoor unit, use optional different-diameter (deformed) joints to the branch box side. (Connect deformed joint directly to the branch box side.)
Gas	{ 5/8 inch [15.88 mm] / { 3/4 inch* [19.05 mm]	

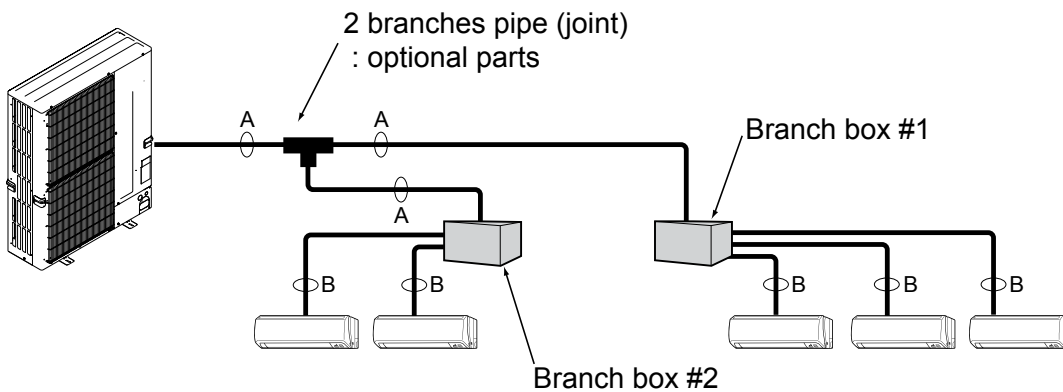
* MXZ-8C60NA only

Flare connection employed. (No brazing!)

- In case of using 1-branch box
Flare connection employed (No brazing)



- In case of using 2-branch boxes



- Installation procedure (2 branches pipe (joint))
Refer to the installation manuals of MSDD-50AR-E and MSDD-50BR-E.

DIMENSIONS: PAC-MKA51BC AND PAC-MKA31BC BRANCH BOXES

PAC-MKA51BC

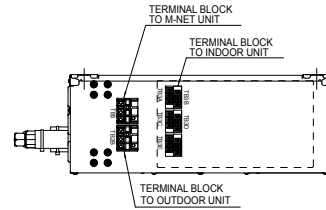
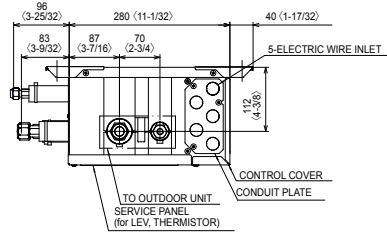
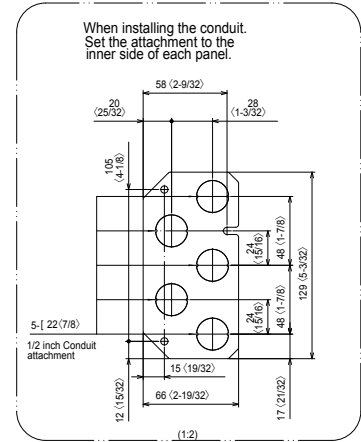
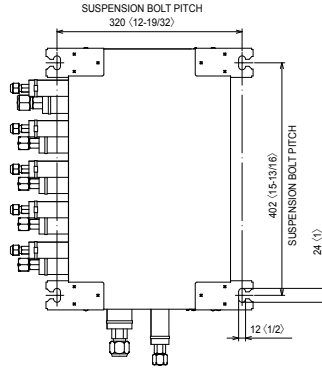
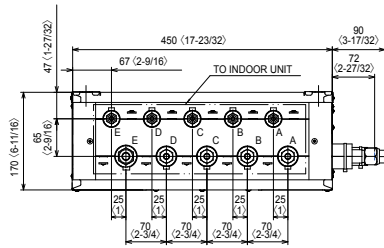
Unit: mm <inch>

SUSPENSION BOLT : W3/8(M10)

REFRIGERANT PIPE FLARED CONNECTION

Unit: inch

	A	B	C	D	E	TO OUTDOOR UNIT
LIQUID PIPE	1/4F	1/4F	1/4F	1/4F	1/4F	3/8F
GAS PIPE	3/8F	3/8F	3/8F	3/8F	1/2F	5/8F



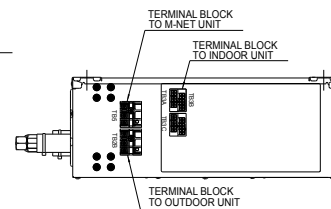
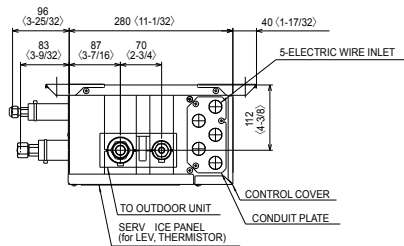
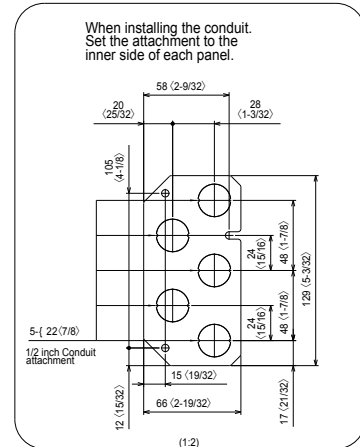
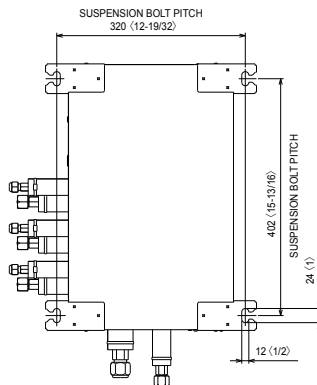
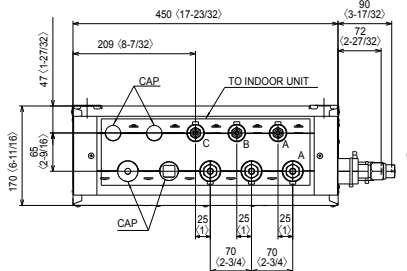
PAC-MKA31BC

SUSPENSION BOLT : W3/8(M10)

REFRIGERANT PIPE FLARED CONNECTION

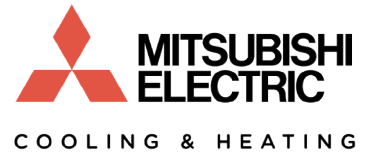
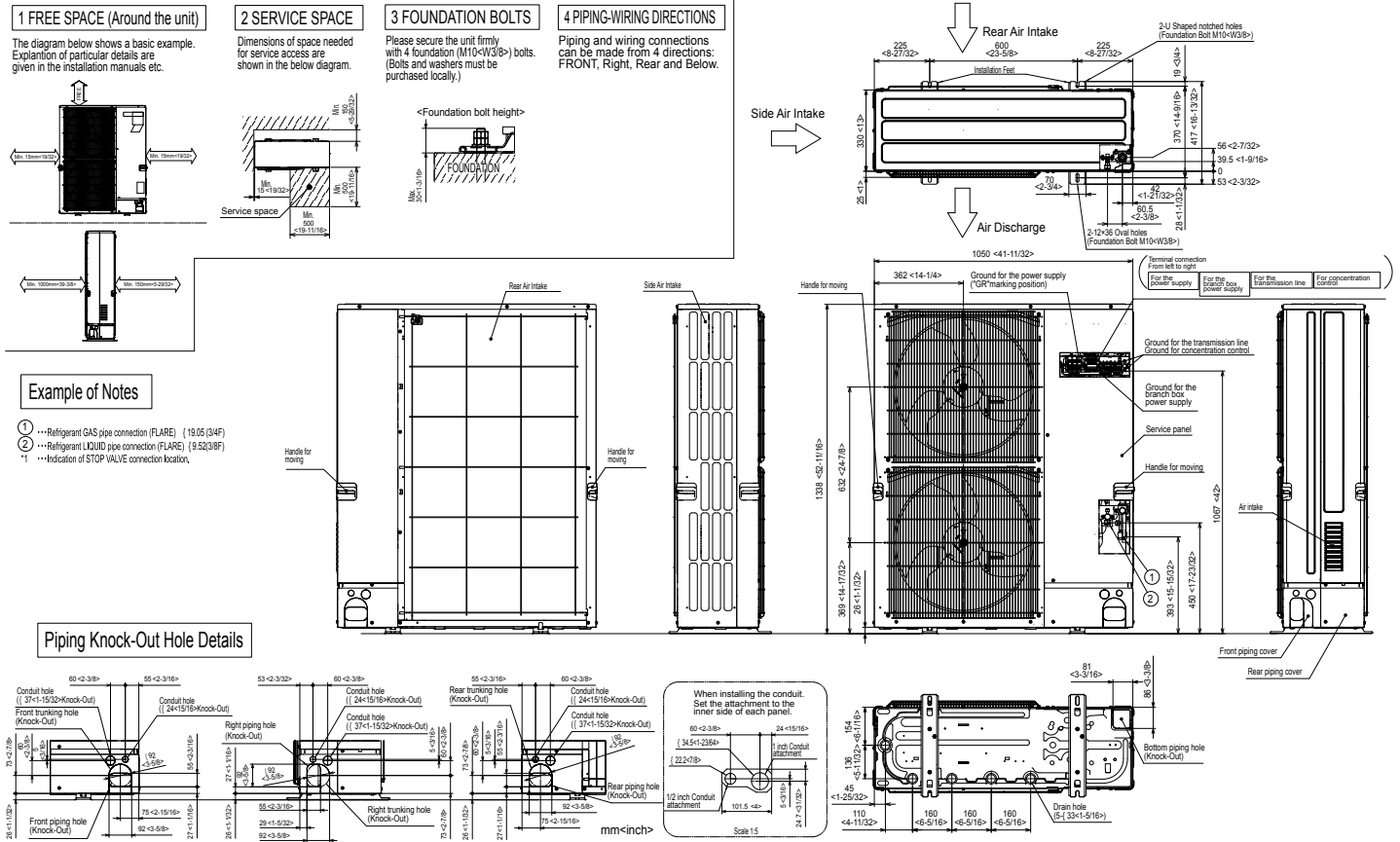
Unit: inch

	A	B	C	TO OUTDOOR UNIT
LIQUID PIPE	1/4F	1/4F	1/4F	3/8F
GAS PIPE	3/8F	3/8F	3/8F	5/8F



DIMENSIONS: MXZ-8C60NA

Unit: mm <inch>



1340 Satellite Boulevard, Suwanee, GA 30024
Toll Free: 800-433-4822 www.mehvac.com

