

Job Name:

System Reference:

Date:



## 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® certified (non-ducted)

## 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	6,000	6,000	6,000
	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	7,200	7,200	7,200
	Maximum Power Input	W	4,870	4,810	4,750
	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
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		208 / 230V, 1-phase, 60 Hz		
	Guaranteed Voltage Range		V AC	187 - 253	
	Voltage: Indoor - Outdoor, S1-S2		V AC	208V / 230	
	Voltage: Indoor - Outdoor, S2-S3		V DC	24	
	Voltage: Indoor - Remote controller		V DC	12	
	Recommended Fuse/Breaker Size		A	50	
	Recommended Wire Size (Indoor - Outdoor)		AWG	16	
Outdoor unit	MCA	A	46		

## SPECIFICATIONS: MXZ-8C60NA

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

## SPECIFICATIONS: MXZ-8C60NA

Model number	Outdoor unit		MXZ-8C60NA		
	Indoor unit type		Non-Ducted	Mix	Ducted
Refrigerant	Type		R410A		
	Charge	Lbs, oz	11 lbs, 4 oz		
Indoor unit connection	Maximum Number of Connected IDU		8 (6 <sup>*A</sup> )		
	Minimum Number of Connected IDU		2		
	Maximum connected capacity	Btu/h	78,000		
	Minimum connected capacity	Btu/h	12,000		
Piping	Gas Pipe Size O.D. (Flared)	In.[mm]	3/4 [19.05]		
	Liquid Pipe Size O.D. (Flared)	In.[mm]	3/8 [9.52]		
	Total Piping Length	Ft. [m]	492 [150]		
	Maximum Height Difference <sup>*B</sup> , ODU above IDU	Ft. [m]	164 [50]		
	Maximum Height Difference <sup>*B</sup> , ODU below IDU	Ft. [m]	131 [40]		
	Maximum Height Difference <sup>*B</sup> , between branch boxes	Ft. [m]	49 [15]		
	Max. Piping Length between ODU and Branch Box	Ft. [m]	180 [55]		
	Farthest Piping Length from ODU to IDU	Ft. [m]	262 [80]		
	Farthest Piping Length after Branch Box	Ft. [m]	82 [25]		
	Total Piping Length between Branch Boxes and IDU	Ft. [m]	311 [95]		
	Maximum Number of Bends		15		

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)	*1 Cooling (Indoor // Outdoor)	°F	80°F DB, 67°F WB // 95°F DB, 75°F WB
	*2 Heating at 47°F (Indoor // Outdoor)	°F	70°F DB, 60°F WB // 47°F DB, 43°F WB
	*3 Heating at 17°F (Indoor // Outdoor)	°F	70°F DB, 60°F WB // 17°F DB, 15°F WB
Conditions	*4 Heating at 5°F (Indoor // Outdoor)	°F	70°F DB, 60°F WB // -4°F DB, -5°F 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	Unit φ9.52 → Pipeφ15.88	□ PAC-SG76RJ-E
	Unit φ6.35 → Pipeφ9.52	□ PAC-493PI
	Unit φ9.52 → Pipeφ12.7	□ MAC-A454JP-E
	Unit φ12.7 → Pipeφ9.52	□ MAC-A455JP-E
	Unit φ12.7 → Pipeφ15.88	□ MAC-A456JP-E
	Unit φ15.88 → Pipeφ19.05	□ PAC-SG75RJ-E
Branch Box	Three-port Branch Box	□ PAC-MKA31BC
	Five-port Branch Box	□ PAC-MKA51BC
Air Discharge Guide		□ PAC-SH96SG-E
Drain Socket		□ PAC-SG61DS-E
Base Pan Heater		□ PAC-SJ20BH-E
Centralized Drain Pan		□ PAC-SH97DP-E
Control Cable		□ CW162S
3-pole Disconnect		□ TAZ-MS303
Wall Mounting Bracket (Powder-coated Steel)		□ QCWB2000M-1
Wall Mounting Bracket (316 Series Stainless Steel)		□ QCWBSS
Outdoor Unit Mounting Pad 24" x 42" x 3"		□ ULTRILITE2
MiniSplit Mounting Stand-Dual Fan models - 12"		□ QSMS1202M
MiniSplit Mounting Stand-Dual Fan models - 18"		□ QSMS1802M
MiniSplit Mounting Stand-Dual Fan models - 24"		□ QSMS2402M
Diamondback Linesets* <sup>1</sup>	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

<sup>1</sup> 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	<b>Capacity</b>	Type 06 to Type 36 <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Caution: The indoor unit which rated capacity exceeds 36 kBTU/h (Type 36) can NOT be connected.</div>				
	Number of units	2 <sup>(*1)</sup> to 4 units	2 <sup>(*1)</sup> to 5 units	2 <sup>(*1)</sup> to 8 units	2 <sup>(*1)</sup> 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 <sup>*3</sup>	SEZ-KD09/12/15/18NA		●	●	●				
	Middle static pressure <sup>*3</sup>	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 <sup>*4</sup>			●		●	●	●	●
Floor standing		MFZ-KA09/12/18NA		●	●		●			
		MFZ-KJ09/12/15/18NA		●	●	●	●			
Multi-position <sup>*2</sup>		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.
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\*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	<ul style="list-style-type: none"> <li>· The total system wide capacity should be 100% or below including the MVZ-series unit.</li> <li>· Only 1 SEZ or 1 PEAD can be included in the connection.</li> </ul>

\*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

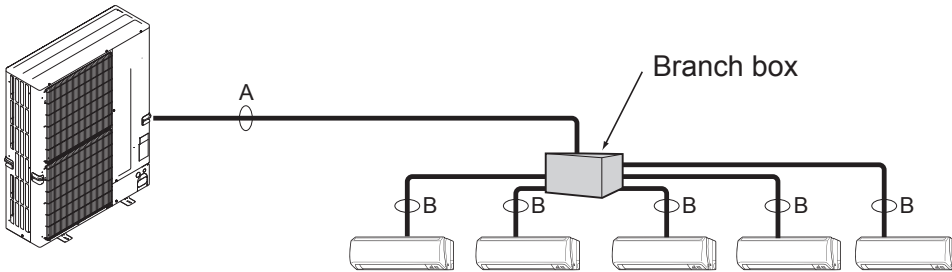
## Piping connection size

	A	B
Liquid	$\phi 3/8$ 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	$\phi 5/8$ inch / $\phi 3/4$ inch* [15.88 mm] / [19.05 mm]	

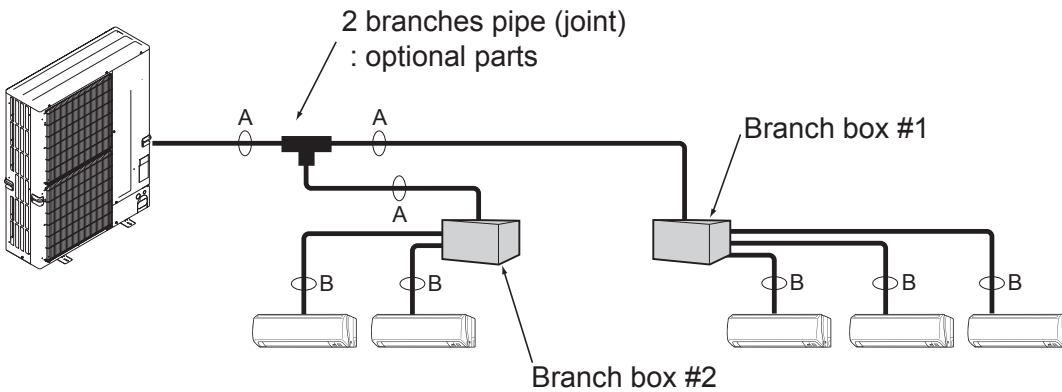
\* MXZ-8C60NA only

**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.

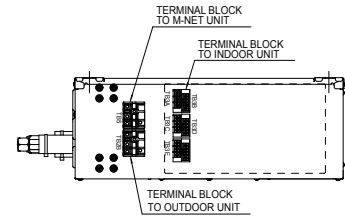
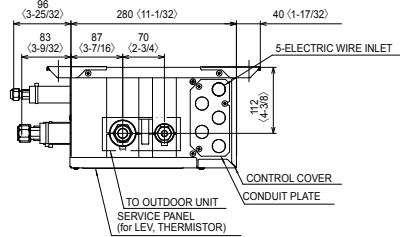
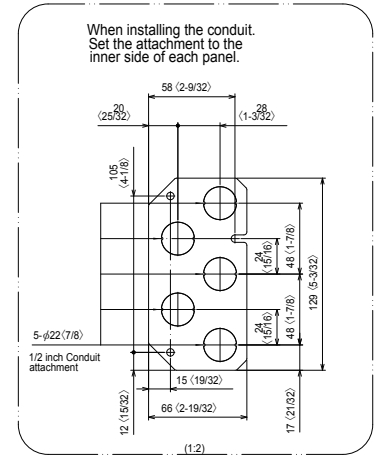
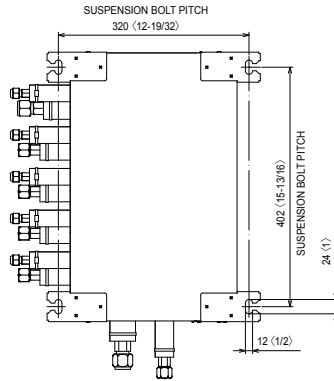
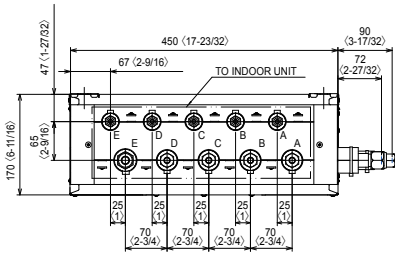
# DIMENSIONS: PAC-MKA51BC AND PAC-MKA31BC BRANCH BOXES

## PAC-MKA51BC

Unit: mm <inch>

SUSPENSION BOLT : W3/8(M10)  
 REFRIGERANT PIPE FLARED CONNECTION Unit: inch

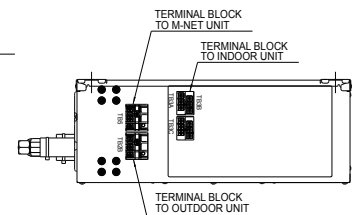
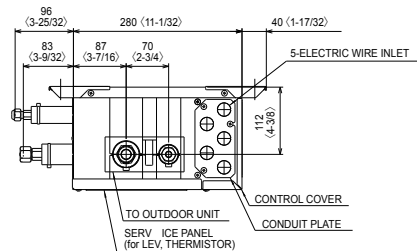
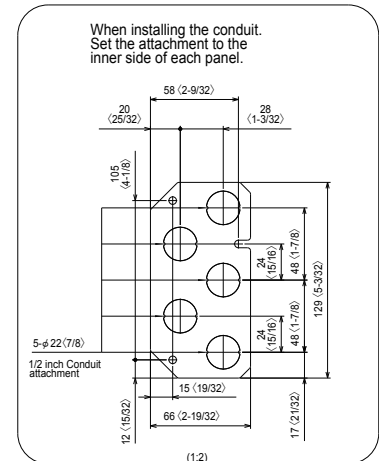
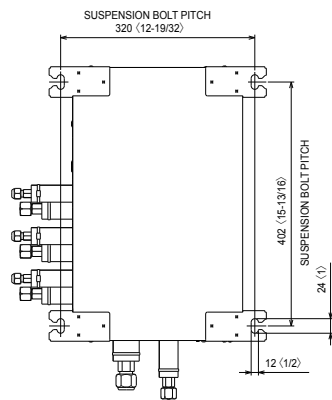
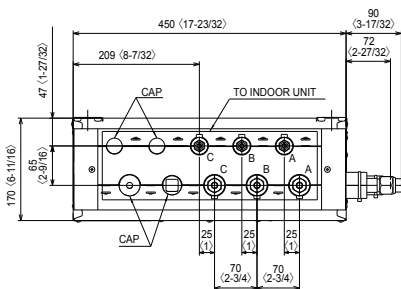
	A	B	C	D	E	TO OUTDOOR UNIT
LIQUID PIPE	1/4F	1/4F	1/4F	1/4F	1/4F	3/8F
GAS PIPE	3/8F	3/8F	3/8F	3/8F	1/2F	5/8F



## 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



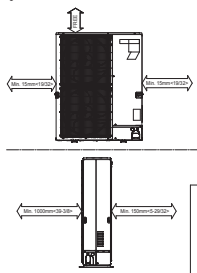


# DIMENSIONS: MXZ-8C60NA

Unit: mm <inch>

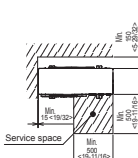
### 1 FREE SPACE (Around the unit)

The diagram below shows a basic example. Explanation of particular details are given in the installation manuals etc.



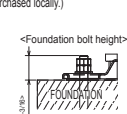
### 2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.



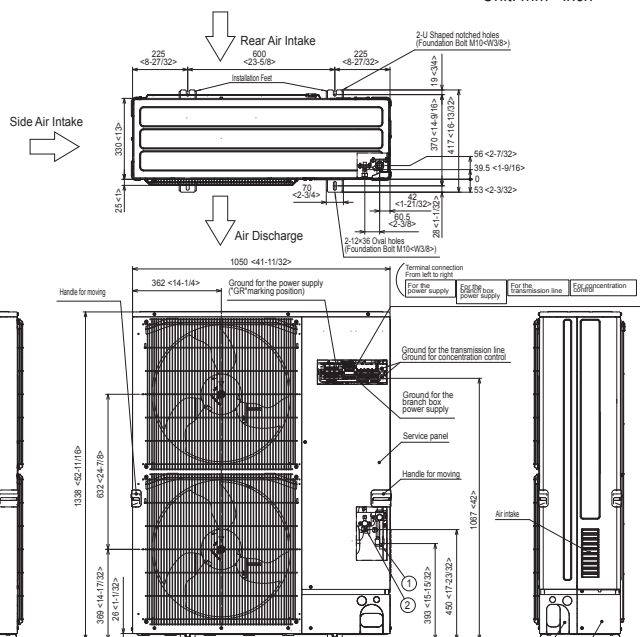
### 3 FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10-W3/8") bolts. (Bolts and washers must be purchased locally.)



### 4 PIPING-WIRING DIRECTIONS

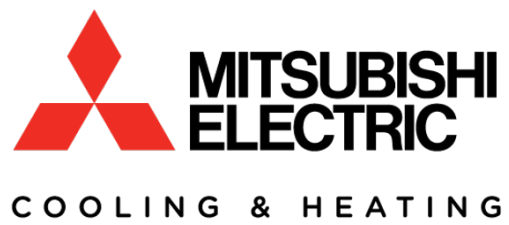
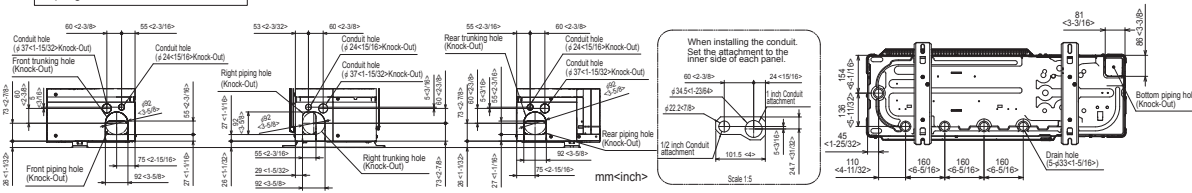
Piping and wiring connections can be made from 4 directions: FRONT, Right, Rear and Below.



### Example of Notes

- ① ---Refrigerant GAS pipe connection (FLARE) φ19.05 (3/4")
- ② ---Refrigerant LIQUID pipe connection (FLARE) φ6.35 (1/8")
- \* ---Indication of STOP VALVE connection location.

### Piping Knock-Out Hole Details



1340 Satellite Boulevard, Suwanee, GA 30024  
Toll Free: 800-433-4822 [www.mehvac.com](http://www.mehvac.com)



FORM# MXZ-8C60NA - 201701

Specifications are subject to change without notice.

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