

## Submittal Data: MXZ-3C30NAHZ3-U1

**Multi-Split Cold Climate Air Source Heat Pump System** 

Job Name:	Location:	
Purchaser:	Submitted By:	
Submitted To:	Reference: Approv	al: Construction:
Engineer:	Date:	Application:



- Variable speed INVERTER-driven compressor
- M-NET connection optional through outdoor unit (Part # listed below)
- Quiet outdoor unit operation as low as 54 dB(A)
- High pressure switch for additional protection
- Built-in base pan heater

Images provided for reference purposes only

Performance:			Non-Ducted	Mixed	Ducted
	Rated Capacity	Btu/h	28,400	27,800	27,400
Cooling at 95°F <sup>1</sup>	Capacity Range	Btu/h	12,600 - 23,600	12,600 - 23,600	12,600 - 23,600
	Rated Power Input	W	2,272	2,467	2,661
	Power Input Range	W	530 - 3,770	530 - 3,770	530 - 3,770
	Moisture Removal	pints/h	NA	NA	NA
	Sensible Heat Factor		NA	NA	NA
	Rated Capacity	Btu/h	28,600	28,000	27,600
11aatina at 4785 <sup>2</sup>	Capacity Range	Btu/h	11,400 - 36,000	11,400 - 30,600	11,400 - 30,600
Heating at 47°F <sup>2</sup>	Rated Power Input	W	2,096	2,142	2,187
	Power Input Range	W	850 - 4,540	850 - 4,540	850 - 4,540
	Maximum Capacity	Btu/h	28,600	28,100	27,600
	Rated Capacity	Btu/h	18,000	17,200	16,500
11aatina at 1785 <sup>3</sup>	Capacity Range	Btu/h	13,600 - 28,600	13,600 - 28,100	13,600 - 27,600
Heating at 17°F <sup>3</sup>	Maximum Power Input	W	4,192	4,223	4,258
	Rated Power Input	W	1,990	1,992	1,993
	Power Input Range	W	1,410 - 4,192	1,530 - 4,223	1,650 - 4,258
Heating at 5°F <sup>4</sup>	Maximum Capacity	Btu/h	28,600	28,100	27,600
	Maximum Power Input	W	4,290	4,495	4,700
Heating at -13°F <sup>5</sup>	Maximum Capacity	Btu/h	25,200	NA	24,300
	Maximum Power Input	W	4,430	NA	4,700
Efficiency:			Non-Ducted	Mixed	Ducted
EER			18.00	17.00	16.00
EER <sup>1</sup>			12.50	11.40	10.30
HSPF (IV)			11.00	10.40	9.80
COP at 47°F <sup>2</sup>			4.00	3.85	3.70
COP at 17°F <sup>3</sup>			2.00	1.95	1.90
COP at 5°F <sup>4</sup>	Maximum Capacity		1.95	1.91	1.72
Outdoor Operating Temperature Range	:				
Cooling Operation Air Temp (Maximum / Minimum)* (Comfort cooling only applications)			°F (°C)	* 115 to 14 (46 to -10)	
Cooling Operation Thermal Lock-out / Re-start Temperatures			°F (°C)		(-12 / -10 )
Heating Operation Air Temp (Maximum / Minimum)			°F (°C)	65 to -13	(18 to -25)
Heating Operation Thermal Lock-out / Re-start Temperatures			°F (°C)		(-28 / -26)
				•	

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed) (\* Windscreens required for cooling operations below 23°F (-5°C))

<sup>1</sup>Cooling (Indoor // Outdoor) 80°F (26.6°C) DB, 67°F (19.4°C) WB // 95°F (35°C) DB, 75°F (23.9°C) WB

<sup>2</sup>Heating at 47°F (8.3°C) (Indoor // Outdoor) 70°F (21.1°C) DB, 60°F (15.6°C) WB // 47°F (8.3°C) DB, 43°F (6.1°C) WB

<sup>3</sup>Heating at 17°F (-8.3°C) (Indoor // Outdoor) 70°F (21.1°C) DB, 60°F (15.6°C) WB // 17°F (-8.3°C) DB, 15°F (-9.4°C) WB Rated conditions:

 $^4$ Heating at 5°F (-15°C) (Indoor // Outdoor) 70°F (21.1°C) DB, 60°F (15.6°C) WB // 5°F (-15°C) DB, 4°F (-15.6°C) WB

<sup>5</sup>Heating at -13°F (25°C) (Indoor // Outdoor) 70°F (21.1°C) DB, 60°F (15.6°C) WB // -13°F (-25°C) DB, -15°F (-26.1°C) WB

### Note:

- 1. Mitsubishi Electric Sales Canada Inc. (MESCA) supports the use of only MESCA supplied and approved components and accessories for proper functioning of the unit(s). Use of non MESCA supported components and accessories will affect warranty coverage. MESCA recommends (A) consideration of all applicable design and application parameters and requirements specific to any project.
- 2. Should any person change this document in any manner whatsoever without MESCA's written permission, the document shall be of no force and effect and any change shall be deemed to be a representation and warranty made by that person and not MESCA. That person, and not MESCA, shall assume full responsibility for the consequences of such changes. MESCA assumes no responsibility for any consequences in such cases.

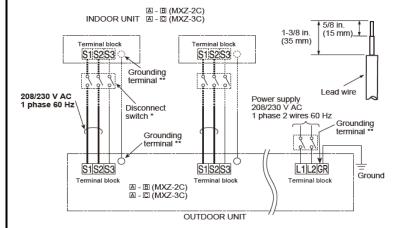
Notes:



# Submittal Data: MXZ-3C30NAHZ3-U1

Electrical:				
Power Supply		208/230V, 1Ph, 60Hz		
Voltage: Indoor - Outdoor, S1-S2	V AC	AC 208/230V		
Voltage: Indoor - Outdoor, S2-S3	V DC	DC 12-24V		
Short-circuit Current Rating (SCCR)	kA	5		
Recommended Fuse/Breaker Size (Outdoor)	Α	40		
Recommended Wire Size (Indoor - Outdoor)	AWG	14		
Outdoor Unit Specifications:				
MCA	А	30.5		
MOCP	А	40		
Fan Motor Output	W	2.43		
Airflow Rate (Cooling/Heating)	CFM	2,224 / 2,550		
Sound Pressure Level, Cooling1	dB(A)	54		
Sound Pressure Level, Heating2	dB(A)	58		
Refrigerant Control		LEV		
Compressor Oil Type / Refrigerant Charge		FV50S / 8 lbs. 13 oz. (4.0 kg)		
External Finish Color		Munsell 3.0Y 7.8/1.1		
Unit Weight	Lbs. [kg]	189 [86]		
	W: In. [mm]	37-13/32 [950]		
Unit Dimensions	D: In.[mm]	13 [330]		
	H: In. [mm]	41-17/64 [1,048]		
Gas Pipe Size O.D. (Flared)	In.[mm]	A: 1/2; B,C: 3/8 [A: 12.72; B,C: 9.52]		
Liquid Pipe Size O.D. (Flared)	In. [mm]	A,B,C: 1/4 [A,B,C: 6.35]		
Total Piping Length	Ft. [m]	230 [70]		
Maximum Height Difference, ODU above IDU	Ft. [m]	49 [15]		
Maximum Height Difference, ODU below IDU	Ft. [m]	49 [15]		
Farthest Piping Length from ODU to IDU	Ft. [m]	82 [25]		
Maximum Number of Bends for IDU		70		
Model No.	Description: (Optional Accessories)			
CM-S-FR-NKMU	Front Windscreen			
WRE2	Rear Windscreen			
WSD2	Side Windscreen			
PAC-IF01MNT-E	SYSTEM M-NET CONTROL INTERFACE			
MAC-A454JP-E	JOINT PIPE (3/8->1/2)			
MAC-A455JP-E	JOINT PIPE (1/2->3/8)			
MAC-A456JP-E	JOINT PIPE (1/2->5/8)			
PAC-SG76RJ-E	JOINT PIPE (3/8 -> 5/8)			
Notes:	SVZ Connections Rules:			
Minimum of two Indoor units must be connected	Only 1 SVZ may be used on any system			
Minimum installed capacity cannot be less than 12,000 Btu/h	When an SVZ is connected, total connected capacity must be less than 100%			
System can operate with only one Indoor unit turned on	When an SVZ is connected, no P-Series Indoor units can be used (PAC,PLA, or PEAD)			
May connect to any style Indoor unit or combination	,	, , ,		
Information provided at 208/230V				
Refer "MXZ Connection Rules" additional info available within TIC				

- emark: A disconnect switch should be required. Check the local code. Use a ring tongue terminal in order to connect a ground wire to terminal.



- Connect wires to the matching numbers of terminals.
- Be sure to attach each screw to its correspondent terminal when securing the cord and/or the wire to the terminal block.

## CONNECTING WIRES AND CONNECTING GROUND WIRE

- Use solid conductor Min. AWG14 or stranded conductor Min. AWG14. Use double insulated copper wire with 600 V insulation.
- Use copper conductors only
- Follow local electrical code.

### POWER SUPPLY CABLE

- Use solid or stranded conductor Min. AWG8.
- Use copper conductors only
- Follow local electrical code.

### GROUND WIRE

- Use solid or stranded conductor Min. AWG8.
- Use copper conductors only.
- Follow local electrical code.

## **⚠ WARNING:**

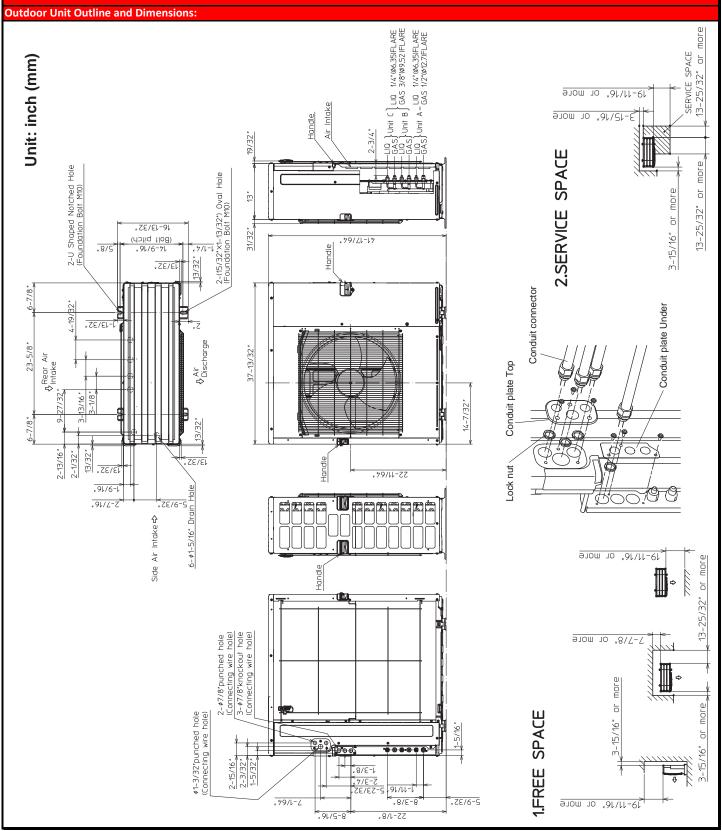
Use the indoor/outdoor unit connecting wire that meets the Standards to connect the indoor and outdoor units and fix the wire to the terminal block securely so that no external force is conveyed to the connecting section of the terminal block. An incomplete connection or fixing of the wire could result in a fire.

For future servicing, give extra length to the connecting wires.

- Turn on the main power when the ambient temperature is -4°F (-20°C) or higher.
- Under conditions of -4°F (-20°C), it needs at least 4hr stand by before the units operate in order to warm the electrical parts.



# Submittal Data: MXZ-3C30NAHZ3-U1







Page 3 of 3

