

### Submittal Data: MXZ-5C42NA4-U1

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

Job Name:	Location:		
Purchaser:	Submitted By:		
Submitted To:	Reference: Appro-	al: C	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 56 dB(A)
- High pressure switch for additional protection
- Base pan heater optional (Part # listed below)

Images provided for reference purposes only

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Performance:			Non-Ducted	Mixed	Ducted
Cooling at 95°F <sup>1</sup>	Rated Capacity	Btu/h	40,500	38,450	36,400
	Capacity Range	Btu/h	12,600 - 43,000	12,600 - 43,000	12,600 - 43,000
	Rated Power Input	W	4,403	4,257	4,112
	Power Input Range	W	530 - 4,775	530 - 4,775	530 - 4,775
	Moisture Removal	pints/h	NA	NA	NA
	Sensible Heat Factor		NA	NA	NA
	Rated Capacity	Btu/h	45,000	43,000	41,000
11aatina at 470 <sup>2</sup>	Capacity Range	Btu/h	11,400 - 53,600	11,400 - 53,600	11,400 - 53,600
Heating at 47°F <sup>2</sup>	Rated Power Input	W	3,575	3,519	3,463
	Power Input Range	W	850 - 6,160	850 - 6,160	850 - 6,160
	Maximum Capacity	Btu/h	30,500	29,800	29,100
	Rated Capacity	Btu/h	24,400	23,600	23,000
11	Capacity Range	Btu/h	18,600 - 30,500	18,600 - 29,800	18,600 - 29,100
Heating at 17°F <sup>3</sup>	Maximum Power Input	W	4,750	4,990	5,231
	Rated Power Input	W	2,943	2,906	2,869
	Power Input Range	W	1,800 - 4,750	1,975 - 4,991	2,150 - 5,231
1111	Maximum Capacity	Btu/h	25,000	25,000	25,000
Heating at 5°F <sup>4</sup>	Maximum Power Input	W	5,000	5,200	5,400
Heating at -13°F <sup>5</sup>	Maximum Capacity	Btu/h	NA	NA	NA
	Maximum Power Input	W	NA	NA	NA
Efficiency:			Non-Ducted	Mixed	Ducted
SEER2			19.70	17.45	15.20
ER2 <sup>1</sup>			9.20	9.10	9.00
HSPF2 (IV) / (V)		9.2 / 7.40	8.75 / 7.20	8.30 / 7.00	
COP at 47°F <sup>2</sup>			3.68	3.57	3.46
P at 17°F <sup>3</sup> Maximum Capacity		1.88	1.75	1.63	
COP at 5°F <sup>4</sup>	Maximum Capacity		1.47	1.42	1.36
Outdoor Operating Temperature Range	e:				
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)	· · · · · · · · · · · · · · · · · · ·	18 to -15)
Heating Operation Thermal Lock-out / Re-start Temperatures			°F (°C)		(-17 / -15)
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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:

<sup>4</sup>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

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:



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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)	A	40			
Recommended Wire Size (Indoor - Outdoor)	AWG	14			
Outdoor Unit Specifications:					
MCA	A	32.5			
MOCP	A	40			
Fan Motor Output	W	2.43			
Airflow Rate (Cooling/Heating)	CFM	2,150 / 2,550			
Sound Pressure Level, Cooling1	dB(A)	56			
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]	41-11/32 [1,048]			
Gas Pipe Size O.D. (Flared)	In.[mm]	A: 1/2; B,C,D,E: 3/8 [A: 12.72; B,C,D,E: 9.52]			
Liquid Pipe Size O.D. (Flared)	In. [mm]	A,B,C,D,E: 1/4 [A,B,C,D,E: 6.35]			
Total Piping Length	Ft. [m]	262 [80]			
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		80			
Model No.	Description: (Optional Access	sories)			
CM-S-FR-NKMU	Front Windscreen	Front Windscreen			
WRE2	Rear Windscreen				
WSD2	Side Windscreen				
PAC-IF01MNT-E	SYSTEM M-NET CONTROL INTERF	SYSTEM M-NET CONTROL INTERFACE			
MAC-A454JP-E	JOINT PIPE (3/8->1/2)	JOINT PIPE (3/8->1/2)			

PAC-645BH-E
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MAC-A455JP-E

MAC-A456JP-E

PAC-SG76RJ-E

#### Base Heater Notes: SVZ Connections Rules: Only 1 SVZ may be used on any system Minimum of two Indoor units must be connected Minimum installed capacity cannot be less than 12,000 Btu/h When an SVZ is connected, total connected capacity must be less than 100% When an SVZ is connected, no P-Series Indoor units can be used (PCA.PLA. or PEAD) System can operate with only one Indoor unit turned on May connect to any style Indoor unit or combination Information provided at 208/230V Refer "MXZ Connection Rules" additional info available within TIC

OINT PIPE (1/2->3/8)

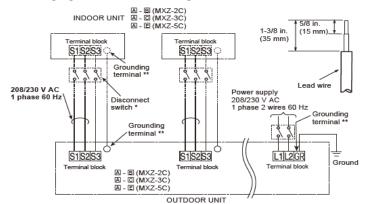
JOINT PIPE (1/2->5/8)

JOINT PIPE (3/8 -> 5/8)

Remark:

\* 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.



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