

MXZ-2D20NL 20,000 BTU/H HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



GENERAL FEATURES

- High-pressure protection
- Variable speed INVERTER-driven compressor
- Rated for 2,000 hours spraying time per ASTM B117 Standard
- Quiet outdoor unit operation as low as 52 dB(A)
- Prolonged heating over an extended duration
- Fan motor overheating/voltage protection
- Compressor thermal protection
- Compressor overcurrent detection
- Compact, small chassis
- Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life

Specifications		System	
Unit Type		MXZ-2D20NL	
Cooling at 95F ¹ (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	20,000 // 21,000 // 22,000
	Rated Capacity	Btu/h	18,000 // 19,000 // 20,000
	Minimum Capacity	Btu/h	5,700 // 5,700 // 5,700
	Maximum Power Input	W	2,245 // 2,257 // 2,270
	Rated Power Input	W	1,384 // 1,692 // 2,000
	Power Factor (208V)	%	0.99 // 0.99 // 0.99
	Power Factor (230V)	%	0.99 // 0.99 // 0.99
Heating at 47F ² (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	25,700 // 25,750 // 25,800
	Rated Capacity	Btu/h	24,000 // 22,000 // 23,000
	Minimum Capacity	Btu/h	7,400 // 7,400 // 7,400
	Maximum Power Input	W	2,465 // 2,498 // 2,530
	Rated Power Input	W	1,794 // 1,783 // 1,771
	Power Factor (208V)	%	0.99 // 0.99 // 0.99
	Power Factor (230V)	%	0.99 // 0.99 // 0.99
Heating at 17F ³ (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	16,600 // 16,200 // 15,800
	Rated Capacity	Btu/h	16,500 // 15,000 // 13,500
	Maximum Power Input	W	1,860 // 1,910 // 1,960
	Rated Power Input	W	1,690 // 1,590 // 1,490
Heating at 5F ⁴ (Non-Ducted // Mixed // Ducted)	Maximum Capacity	Btu/h	13,700 // 12,600 // 11,800
	Maximum Power Input	W	1,800 // 1,815 // 1,830
Efficiency (Non-Ducted // Mixed // Ducted)	SEER ² ¹		20 // 18 // 16
	EER ² ¹		13 // 11.50 // 10
	HSPF ² (IV) ²		10 // 9.55 // 9.10
	COP at 47°F ²		3.92 // 3.76 // 3.64
	COP at 17°F at Maximum Capacity ³		2.60 // 2.48 // 2.36
	COP at 5°F at Maximum Capacity ⁴		2.23 // 2.04 // 1.88
	ENERGY STAR® Certified		Yes // Yes // No
Electrical	Electrical Power Requirements	V AC / V AC, ø, Hz	208 / 230, 1, 60
	Guaranteed Voltage Range	V AC	198 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
	Short-circuit Current Rating (SCCR)	kA	5
	Recommended Fuse/Breaker Size	A	20
	MCA	A	21.7
	MOCP	A	38

NOTES

¹Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB)

²Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB)

³Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)

⁴Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)

Capacity varies based on the number of indoor units operating and the model of the Multi-zone Outdoor Unit. For reference to connected capacity charts, please refer to Multi-zone Outdoor Unit Operational Performance.

For actual capacity performance based on indoor unit type and number of indoor units connected, please refer to MXZ Operational Performance.

Although the maximum connectable capacity is 130%, the outdoor unit cannot provide more than 100% of the rated capacity.

Please utilize this over capacity capability for load shedding or applications where it is known that all connected units will NOT be operating at the same time.

[†] Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):

• Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

** Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures):

• System cuts out in heating mode and automatically restarts at these temperatures.

SPECIFICATIONS: MXZ-2D20NL

Specifications		System
Unit Type		MXZ-2D20NL
Outdoor Unit	Fan Motor Full Load Amperage	A 1.77
	Fan Motor Output	W 64
	Defrost Method	Reverse Cycle
	Blue Fin Heat Exchanger Coating	Yes
	Airflow Rate Cooling/Heating	CFM 1,324 / 1,451
	Sound Pressure Level, Cooling ¹	dB (A) 51
	Sound Pressure Level, Heating ²	dB (A) 55
	Compressor Type	Twin Rotary
	Compressor Model	SRB140FQHM1T
	Compressor Oil Type // Charge	Type // oz RM68EH // 20.3
	External Finish Color	Munsell 3.0Y 7.8/1.1
	Base Pan Heater	Optional
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm] 33-1/16 x 13 x 27-15/16 [840 x 330 x 710]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm] 38-31/32 x 17-5/16 x 34-21/32 [990 x 440 x 880]
Unit Weight	lbs [kg] 119 [54]	
Package Weight	lbs [kg] 137 [62]	
ODU Operating Temp. Range	Cooling Intake Air Temp (Maximum / Minimum ³)	°FDB 115 / 14
	Cooling Thermal Lock-out / Re-start Temperatures	°FDB 10 / 14
	Heating Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB 75, 65 / 6, 5
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB -4 / 5
Refrigerant	Type	R454B
	Pre-Charged Refrigerant Amount	lbs, oz 4, 7
	Maximum Pre-Charged Piping Length	ft 164
IDU Connection	Minimum Number of Connected IDU	2
	Maximum Number of Connected IDU	2
	Minimum Connected Capacity	Btu/h 12,000
	Maximum connected capacity	Btu/h 24,000
Piping	Liquid Pipe Size O.D. (Flared)	inch A: 1/4 B: 1/4
	Gas Pipe Size O.D. (Flared)	inch A: 3/8 B: 3/8
	Total Piping Length	ft [m] 164 [50]
	Farthest Piping Length	ft [m] 82 [25]
	Maximum Height Difference ⁴ , ODU above IDU	ft [m] 32 [10]
	Maximum Height Difference ⁴ , ODU below IDU	ft [m] 49 [15]
	Maximum Number of Bends for IDU	50

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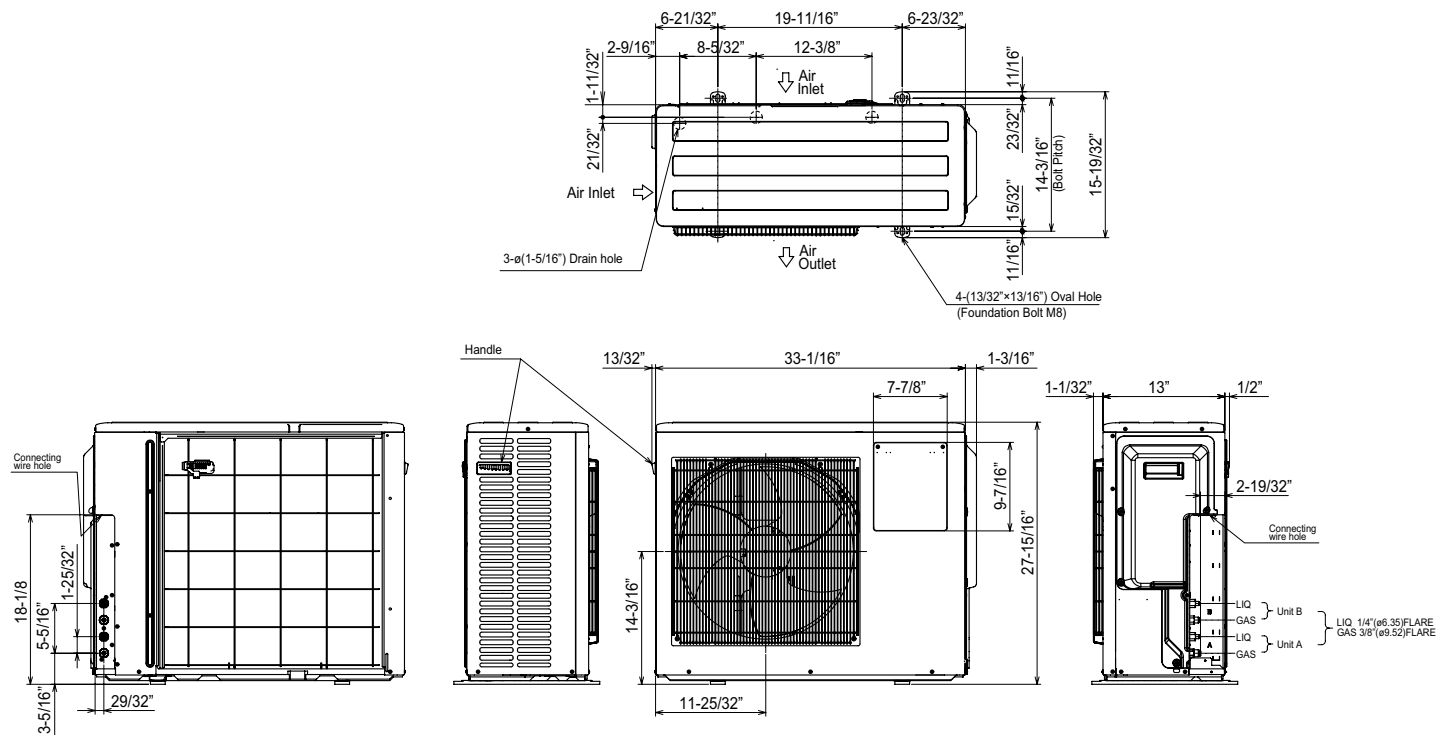
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OUTDOOR UNIT ACCESSORIES: MXZ-2D20NL

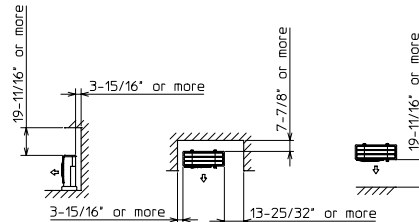
Stand	18 Single Fan Stand	QSMS1801M
	24 Single Fan Stand	QSMS2401M
	Condenser Wall Bracket	QSWB2000M-1
	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Outdoor Unit 3-14 inch Mounting Base Pair - Plastic	DSD-400P
	Outdoor Unit Stand 12 High	QSMS1201M
Drain Socket	Drain Socket	MAC-811DS
Optional Defrost Heater	Optional Defrost Heater	PAC-646BH-E
Ball Valve	Refrigeration Ball Valve - 1/2	BV12FFSI2
	Refrigeration Ball Valve - 1/4	BV14FFSI2
	Refrigeration Ball Valve - 3/8	BV38FFSI2
	Refrigeration Ball Valve - 5/8	BV58FFSI2
Mini-Split Wire	14 Gauge 4 wire Armored MiniSplit Cable250 ft roll	SW144-250
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	14 Gauge 4 wire MiniSplit Cable250 ft roll	S144-250
	14 Gauge 4 wire MiniSplit Cable50 ft roll	S144-50
	16 Gauge 4 wire Armored MiniSplit Cable250 ft roll	SW164-250
	16 Gauge 4 wire Armored MiniSplit Cable50 ft roll	SW164-50
	16 Gauge 4 wire MiniSplit Cable250 ft roll	S164-250
	16 Gauge 4 wire MiniSplit Cable50 ft roll	S164-50
Control Interface	M-NET Interface for MXZ	PAC-IF01MNT-E
Mounting Pad	Condensing Unit Mounting Pad 16 x 36 x 3	ULTRILITE1
Muffler	Muffler	MAC-001MF-E
Control/Service Tool	Maintenance Tool Interface	PAC-USCMS-MN-1
Port Adaptor	Adaptor 1/2 x 3/8	PAC-SK88RJ-E
	Adaptor 1/2 x 5/8	PAC-SK89RJ-E
	Adaptor 1/4 x 3/8	PAC-493PI
	Adaptor 3/8 x 1/2	ADP3812
	Adaptor 3/8 x 5/8	PAC-SK90RJ-E
Air Outlet Guide	Air Outlet Guide	MAC-856SG
Snow/Rain Diverter	SnowRain Diverter	SRD-4
Hail Guards	Hail Guard	HG-A8
NOTES		

OUTDOOR UNIT DIMENSIONS: MXZ-2D20NL

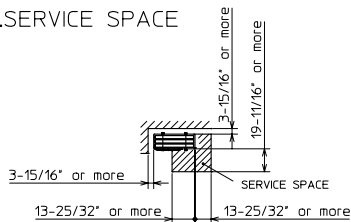
MXZ-2D20NL-U1



1.FREE SPACE



2.SERVICE SPACE



1340 Satellite Boulevard Suwanee, GA 30024
Toll Free: 800-433-4822 <https://mitsubishi.com/comfort>