## **M-SERIES**

# SUBMITTAL DATA: MFZ-KJ18NA & MUFZ-KJ18NAHZ 18,000 BTU/H FLOOR-MOUNTED HEAT PUMP SYSTEM



Job Name:	
System Reference:	Date:

Indoor Unit: MFZ-KJ18NA	Outdoor Unit: MUFZ-KJ18NAHZ	Wireless Remote Controller
Actor		(SS)

#### **GENERAL FEATURES**

- Floor-mounted indoor unit mounts on the floor or up to 5" above the floor
- · Floor front panel access to the filter for ease of cleaning
- · Perfect for difficult areas that may be smaller or don't have usable space on the walls
- · Multiple fan speed options: Quiet, Low, Medium, High, Super-high, Auto
- · Quiet operation
- · Multi-flow vane for faster heating
- · Multiple control options available:
  - Hand-held Remote Controller (provided with unit)
  - kumo cloud $^{\tiny{\circledR}}$  smart device app for remote access
  - Third-party interface options
  - Wired or wireless controllers
- Unit can be recessed mounted into wall

## SPECIFICATIONS: MFZ-KJ18NA & MUFZ-KJ18NAHZ

Cooling <sup>1</sup>	Maximum Capacity	Btu/h	22,500
	Rated Capacity	Btu/h	17,000
	Minimum Capacity	Btu/h	5,300
	Maximum Power Input	W	2,320
	Rated Power Input	W	1,350
	Moisture Removal	Pints/h	4.4
	Sensible Heat Factor		0.65
	Power Factor	%	97/97
	Maximum Capacity	Btu/h	29,000
	Rated Capacity	Btu/h	21,000
Heating at 47°F <sup>2</sup>	Minimum Capacity	Btu/h	5,700
Treating at 47	Maximum Power Input	W	3,430
	Rated Power Input	W	1,730
	Power Factor	%	98/98
	Maximum Capacity	Btu/h	23,000
11-4:47053	Rated Capacity	Btu/h	12,800
Heating at 17°F3	Maximum Power Input	W	3,210
	Rated Power Input	W	1,430
114:	Maximum Capacity	Btu/h	21,000
Heating at 5°F4	Maximum Power Input	W	3000
Heating at -4°F <sup>5</sup>	Maximum Capacity	Btu/h	18,480
Heating at -13°F <sup>6</sup>	Maximum Capacity	Btu/h	16,170
	SEER		21
	EER <sup>1</sup>		12.6
	HSPF (IV)		11.3
Efficiency	COP at 47°F <sup>2</sup>		3.56
Lineiericy	COP at 17°F in Maximum Capacity <sup>3</sup>		2.10
	COP at 5°F in Maximum Capacity <sup>4</sup>		2.05
	ENERGY STAR® (ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.)		YES
	Voltage, Phase, Frequency		208/230V, 1 phase, 60Hz
	Guaranteed Voltage Range	V AC	187-253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
Electrical	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Voltage: Indoor - Remote controller	V DC	12
	Recommended Fuse/Breaker Size	A	20
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
	MCA	A	1
	MOCP	A	20
Indoor Unit			
Indoor Unit	Blower Motor Full Load Amperage	A	0.72

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	Airflow Rate at Cooling, Dry	CFM	491-420-328-254-198
	Airflow Rate at Cooling, Wet	CFM	417-357-279-216-168
	Airflow Rate at Heating, Dry	CFM	470-399-328-268-212
	Sound Pressure Level (Cooling)	dB(A)	50-45-39-33-28
	Sound Pressure Level (Heating)	dB(A)	49-45-40-35-29
	Drain Pipe Size	In. (mm)	5/8 (15.88)
	Heat Exchanger Type		Plate fin coil
	External Finish Color		White
	W: In. (mm)		29-17/32 (750)
	Unit Dimensions	D: In. (mm)	8-15/32 (215)
		H: In. (mm)	23-5/8 (600)
		W: In. (mm)	32-2/16 (816)
	Package Dimensions	D: In. (mm)	10-13/16 (275)
		H: In. (mm)	27-12/16 (693)
	Unit Weight	Lbs. (kg)	33 (15)
	Package Weight	Lbs. (kg)	41 (18.5)
door Unit	Cooling Intake Air Temp (Maximum / Minimum)*	°F	90 DB / 73 WB // 67 DB / 57 WB
perating mperature Range	Heating Intake Air Temp (Maximum / Minimum)	°F	80 DB // 70 DB
	MCA	A	16
	MOCP	A	20
	Fan Motor Full Load Amperage	A	0.93
	Fan Motor Output	W	77
	Airflow Rate	CFM	1,653 / 1,730
	Refrigerant Control		LEV
	Defrost Method		Reverse cycle
	Heat Exchanger Type	Plate fin coil	
	Sound Pressure Level, Cooling <sup>1</sup>	dB(A)	55
	Sound Pressure Level, Heating <sup>2</sup>	dB(A)	51
	Compressor Type		DC INVERTER-driven Twin Rotary
utdoor Unit	Compressor Model	SNB173FQKMT	
	Compressor Rated Load Amps	A	12.0
	Compressor Locked Rotor Amps	A	15.0
	Compressor Oil Type // Charge	OZ.	FV50S // 13.5
	External Finish Color		Munsell 3Y 7.8/1/1
	Base Pan Heater	Built-in	
		W: In. (mm)	33-1/16 (840)
	Unit Dimensions	D: In. (mm)	13 (330)
		H: In. (mm)	34-5/8 (880)
		W: In. (mm)	38-9/16 (980)
	Package Dimensions	D: In. (mm)	16-9/16 (420)
		H: In. (mm)	39 (990)

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	Unit Weight	Lbs. (kg)	124 (56)
	Package Weight	Lbs. (kg)	144 (65)
Outdoor Unit Operating Temperature Range	Cooling Air Temp (Maximum / Minimum)*	°F	14 to 115
	Cooling Thermal Lock-out / Re-start Temperatures**	°F	11 / 14
	Heating Air Temp (Maximum / Minimum)	°F	-13 to 75
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-18 / -14
Туре			R410A
Refrigerant	Charge	Lbs, oz	3, 5
	Gas Pipe Size O.D. (Flared)	In. (mm)	1/2 (12.7)
	Liquid Pipe Size O.D. (Flared)	In. (mm)	1/4 (6.35)
Piping	Maximum Piping Length	Ft. (m)	100 (30)
	Maximum Height Difference	Ft. (m)	50 (15)
	Maximum Number of Bends		10

#### Notes

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)	<sup>1</sup> Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
	<sup>2</sup> Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
	<sup>3</sup> Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB
	<sup>4</sup> Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
Conditions	<sup>5</sup> Heating at -4°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
	<sup>6</sup> Heating at -13°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -13 DB, -14 WB

<sup>\*</sup>Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.
\*\*System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

## **ACCESSORIES: MFZ-KJ18NA**

Anti-Allergy Enzyme Filter	□ MAC-408FT-E
Backlit, Wall-mounted, Wireless Controller	□ MHK1
Portable Central Controller	□ MCCH1
Wired MA Controller <sup>1</sup>	□ PAR-33MAA
Simple MA Controller <sup>1</sup>	□ PAC-YT53CRAU
Touch MA Controller <sup>1</sup>	□ PAR-CT01MAU-SB
Lockdown Bracket for Wireless, Hand-held, Remote Controller	□ RCMKP1CB
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	□ MOS1
System Control Interface	□ MAC-333IF-E <sup>2</sup>
Wireless Interface	□ PAC-USWHS002-WF-1
Thermostat Interface	□ PAC-US444CN-1
kumo station®	□ PAC-WHS01HC-E
USNAP Interface	□ PAC-WHS01UP-E
IT Extender	□ PAC-WHS01IE-E
BACnet® and Modbus Interface	□ PAC-UKPRC001-CN-1
External Fan / Heater Control Relay Adapter	□ CN24RELAY-KIT-CM3
Blue Diamond Sensor Extension Cable—15 Ft.	□ C13-103
Blue Diamond Alarm Extension Cable—6.5 Ft.	□ C13-192
Blue Diamond MultiTank—collection tank for use with multiple pumps	□ C21-014
Blue Diamond Rubber Foot Pads	□ F10-010
Mini Condensate Pump—230V application	□ SI30-230
MegaBlue Advanced Blue Diamond Condensate Pump w/ Reservoir & Sensor	□ X87-835 - 110 to 250V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (110V) up to 48,000 Btu/h [recommended]	□ X87-711 - 110V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) up to 48,000 Btu/h [recommended]	□ X87-721 - 208/230V
MicroBlue Blue Diamond Mini Condensate Pump (110/208/230V) up to 18,000 Btu/h	□ X85-003
Fascia Kit for MicroBlue Pump – mounts the MicroBlue and sensor directly beneath the indoor unit	□ T18-016
Drain Pan Level Sensor (Control for indoor unit shut off to prevent drain pan overflow)	□ DPLS2
3 Pole Disconnect Switch (30A/600VUL) [fits 2"X4" utility] - Black	□ TAZ-MS303
3 Pole Disconnect Switch (30A/600VUL) [fits 2"X4" utility] - White	□ TAZ-MS303W
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
1 Requires MAC-333IF-F	

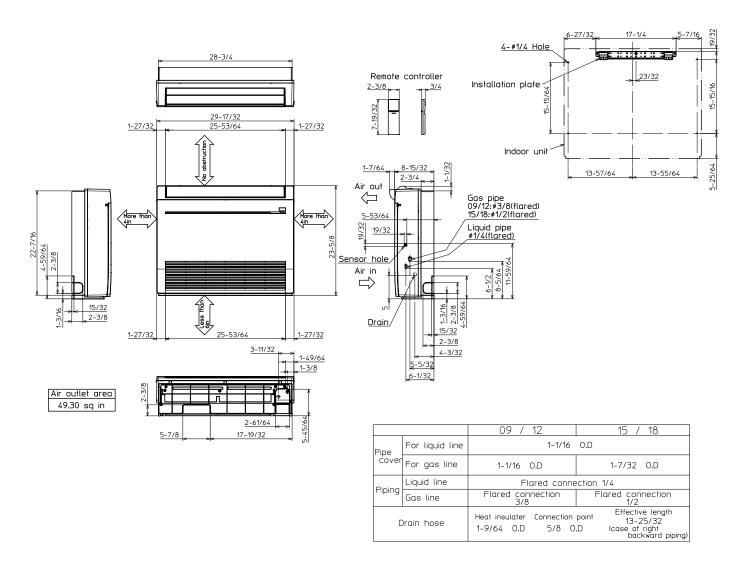
<sup>&</sup>lt;sup>1</sup> Requires MAC-333IF-E

 $<sup>^{\</sup>rm 2}\,\mbox{Allows M-Series}$  indoor units to connect to an MA controller

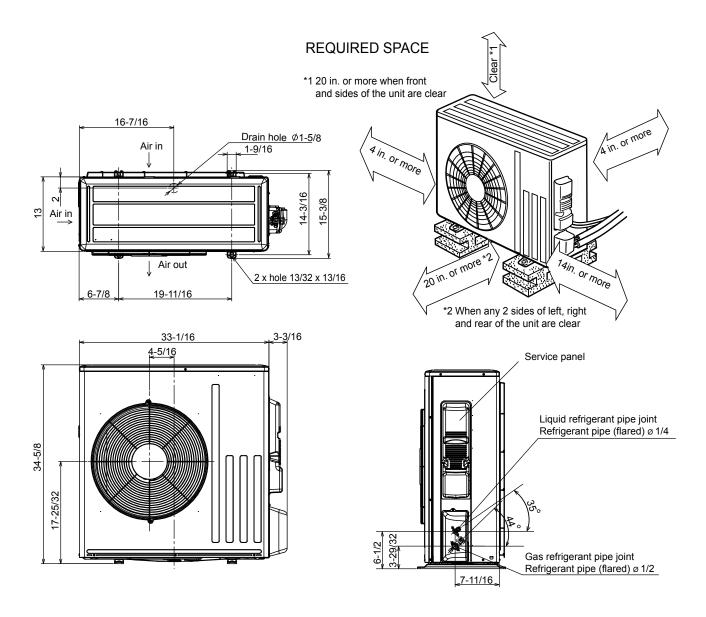
## **ACCESSORIES: MUFZ-KJ18NAHZ**

Hail Guard	□ HG-A7
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

#### Unit: inch



Unit: inch





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