# **M-SERIES**

#### SUBMITTAL DATA: MLZ-KP09NA & SUZ-KA09NA2 9,000 BTU/H ONE-WAY CEILING-CASSETTE HEAT PUMP SYSTEMS



#### Job Name:

System Reference:

Date:



#### INDOOR UNIT FEATURES

- · Fits between 16" joists spacing
- Stylish, square design panel
- Built-in condensate lift mechanism (19.6")
- · Serviceable from the bottom (electrical and flare connections)
- Adjustable fan speeds and vane directions
- Washable antibacterial and deodorizing filter
- Multiple control options available:
  - Hand-held Remote Controller (provided with unit)
  - kumo cloud® smart device app for remote access
  - Third-party interface options
- Wired or wireless controllers
- Pocket inside the access panel for kumo cloud<sup>®</sup> Wireless Interface

#### OUTDOOR UNIT FEATURES

- Variable speed INVERTER-driven compressor
- · Innovative Joint Lap DC Motor leads to high efficiency and reliability
- Pulse Amplitude Modulation technology
- · High-performance grooved piping for increased heat exchange efficiency

## SPECIFICATIONS: MLZ-KP09NA & SUZ-KA09NA2

	Maximum Capacity	Btu/h	9,000
Cooling at 95°F <sup>1</sup>	Rated Capacity	Btu/h	9,000
	Minimum Capacity	Btu/h	3,600
	Maximum Power Input	W	710
	Rated Power Input	W	710
	Moisture Removal	Pints/h	1.5
	Sensible Heat Factor	0.82	
	Power Factor (208/230V)		
	Maximum Capacity	Btu/h	96 9,500
		Btu/h	
Cooling at 00°E	Rated Capacity		9,500
Cooling at 82°F	Minimum Capacity	Btu/h	4,100
	Maximum Power Input	W	600
	Rated Power Input	W	600
	Maximum Capacity	Btu/h	13,000
	Rated Capacity	Btu/h	12,000
Heating at 47°F <sup>2</sup>	Minimum Capacity	Btu/h	4,010
<b>J</b>	Maximum Power Input	W	1,000
	Rated Power Input	W	860
	Power Factor	%	98
	Maximum Capacity	Btu/h	7,700
Heating at 17°F <sup>3</sup>	Rated Capacity	Btu/h	7,700
	Maximum Power Input	W	700
	Rated Power Input	W	700
Heating at 5°F <sup>4</sup>	Maximum Capacity	Btu/h	6,100
Heating at 5 F	Maximum Power Input	W	580
Heating at -4°F <sup>5</sup>	Maximum Capacity	Btu/h	4,500
	SEER	19.5	
	EER <sup>1</sup>	12.6	
	HSPF (IV)	13.3	
Efficiency	COP at 47°F <sup>2</sup>	4.09	
	COP at 17°F in Maximum Capacity <sup>3</sup>	3.22	
	COP at 5°F in Maximum Capacity <sup>4</sup>	3.08	
	ENERGY STAR <sup>®</sup> Certified (ENERGY STAR products are 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	Wireless type
	Recommended Fuse/Breaker Size	A	15
		AWG	14

## SPECIFICATIONS: MLZ-KP09NA & SUZ-KA09NA2

	MCA	A	1
	Fan Motor Full Load Amperage	A	0.76
	Fan Motor Output	W	30
	Airflow Rate at Cooling, Dry	CFM	311-283-254-212
	Airflow Rate at Cooling, Wet	CFM	264-240-216-180
	Airflow Rate at Heating, Dry	CFM	325-290-247-212
	Sound Pressure Level (Cooling)	dB(A)	38-34-31-27
	Sound Pressure Level (Heating)	dB(A)	37-34-29-26
	Drain Pipe Size	In. (mm)	1-1/4 (32)
	Condensate Lift Mechanism, Maximum Distance	In. (mm)	19-11/16 (500)
Indoor Unit	Heat Exchanger Type		Plate fin coil
	External Finish Color	White	
		W: In. (mm)	43-3/8 (1,102)
	Unit Dimensions	D: In. (mm)	14-3/16 (360)
		H: In. (mm)	7-5/16 (185)
		W: In. (mm)	46-5/16 (1,180)
	Package Dimensions	D: In. (mm)	15-3/4 (400)
		H: In. (mm)	11 (280)
	Unit Weight	Lbs. (kg)	34 (15.5)
	Package Weight	Lbs. (kg)	41 (18)
Indoor Unit Operating	Cooling Intake Air Temp (Maximum / Minimum)*	°F	90F D.B / 73F W.B // 67F D.B / 57F W.B
Temperature Range	Heating Intake Air Temp (Maximum / Minimum)	°F	80F D.B // 70F D.B
	MCA	A	9
	MOCP	A	15
	Fan Motor Full Load Amperage	A	0.5
	Fan Motor Output	W	55
	Airflow Rate	CFM	1,229 / 1,172
	Refrigerant Control		LEV
	Defrost Method	Reverse cycle	
	Heat Exchanger Type	Plate fin coil	
	Blue Fin Coating on Heat Exchanger	Yes	
Outdoor Unit	Sound Pressure Level, Cooling <sup>1</sup>	dB(A)	48
	Sound Pressure Level, Heating <sup>2</sup>	dB(A)	50
	Compressor Type		DC INVERTER-driven
	Compressor Model		KNB073FRVMC
	Compressor Rated Load Amps	А	6.2
	Compressor Locked Rotor Amps	A	7.7
	Compressor Oil Type // Charge	OZ.	FV50S // 9.1
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater	Optional	
	Unit Dimensions	W: In. (mm)	31-1/2 (800)

### SPECIFICATIONS: MLZ-KP09NA & SUZ-KA09NA2

		D: In. (mm)	11-1/4 (285)
		H: In. (mm)	21-5/8 (550)
		W: In. (mm)	37 (940)
	Package Dimensions	D: In. (mm)	14-15/16 (380)
		H: In. (mm)	24-13/16 (630)
	Unit Weight	Lbs. (kg)	81 (37)
	Package Weight	Lbs. (kg)	88 (40)
Outdoor Unit Operating Temperature Range	Cooling Air Temp (Maximum / Minimum)*	°F	115 / 14
	Cooling Thermal Lock-out / Re-start Temperatures**	°F	-1 / 3
	Heating Air Temp (Maximum / Minimum)	°F	75 / -4
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-9 / -4
Refrigerant	Туре		R410A
	Charge	Lbs, oz	2, 5
Piping	Gas Pipe Size O.D. (Flared)	In.(mm)	3/8 (9.52)
	Liquid Pipe Size O.D. (Flared)	In.(mm)	1/4 (6.35)
	Maximum Piping Length	Ft. (m)	65
	Maximum Height Difference	Ft. (m)	40
	Maximum Number of Bends		10
	<u> </u>		

#### 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
Conditions	<sup>4</sup> Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
	<sup>5</sup> Heating at -4°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB

\*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.

#### Notes

Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB
Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
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### ACCESSORIES: MLZ-KP09NA

Grille (required)	□ MLP-444W
Anti-allergy Enzyme Filter	□ MAC-408FT-E
Backlit, Wall-mounted, Wireless Controller	D MHK1
Portable Central Controller	D MCCH1
Wired MA Controller <sup>1</sup>	D PAR-33MAA
Simple MA Controller <sup>1</sup>	D PAC-YT53CRAU
Touch MA Controller <sup>1</sup>	D PAR-CT01MAU-SB
Wired Remote Sensor	□ M21-EAA-307
Wireless Temperature and Humidity Sensor	D PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	MOS1
System Control Interface <sup>2</sup>	□ MAC-333IF-E
External Fan / Heater Control Relay Adapter	CN24RELAY-KIT-CM3
Wireless Interface	PAC-USWHS002-WF-1
Thermostat Interface	D PAC-US444CN-1
kumo station®	D PAC-WHS01HC-E
USNAP Interface	D PAC-WHS01UP-E
IT Extender	D PAC-WHS01IE-E
BACnet <sup>®</sup> and MODBUS <sup>®</sup> Interface	D PAC-UKPRC001-CN-1
External Fan / Heater Control Relay Adapter	CN24RELAY-KIT-CM3
Lockdown Bracket for Hand-held Remote Controllers	□ RCMKP1CB
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
Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [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	DPLS2
(30A/600V/UL) [fits 2" X 4" utility box] - Black	□ TAZ-MS303
(30A/600V/UL) [fits 2" X 4" utility box] - White	□ TAZ-MS303W

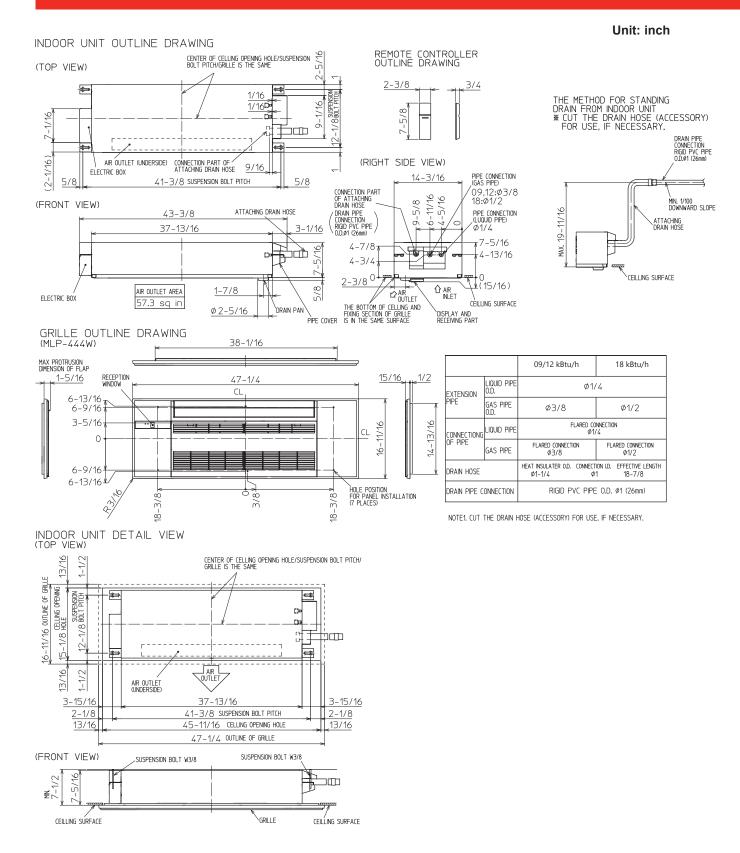
<sup>1</sup> Requires MAC-333IF-E

<sup>2</sup> Allows indoor units to connect to an MA Controller

### ACCESSORIES: SUZ-KA09NA2

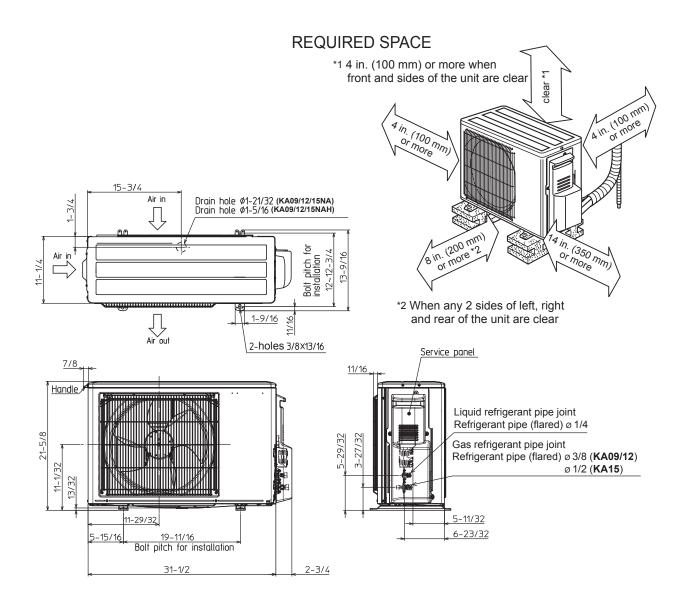
Air Outlet Guide	□ MAC-881SG
Optional Defrost Heater	□ MAC-640BH-U
Hail Guard	□ HG-B4
Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	□ DSD-400P
Condensing Unit Mounting Pad 16" x 36" x 3"	DULTRILITE1
Outdoor Unit Stand — 12" High	□ QSMS1201M
Outdoor Unit Stand — 18" High	□ QSMS1801M
Outdoor Unit Stand — 24" High	□ QSMS2401M
Heavy Duty Wall Mounting Bracket— Coated Steel	□ QSWB2000M-1
Heavy Duty Wall Mounting Bracket — 316 Series Stainless Steel	
15' x 1/4" x 15' / 3/8" Lineset (Twin-Tube Insulation)	□ MLS143812T-15
30' x 1/4" x 30' / 3/8" Lineset (Twin-Tube Insulation)	□ MLS143812T-30
50' x 1/4" x 50' / 3/8" Lineset (Twin-Tube Insulation)	□ MLS143812T-50
65' x 1/4" x 65' / 3/8" Lineset (Twin-Tube Insulation)	□ MLS143812T-65

### DIMENSIONS: MLZ-KP09NA



#### **DIMENSIONS: SUZ-KA09NA2**

Unit: inch(mm)





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FORM# MLZ-KP09NA / SUZ-KA09NA2 - 201902