

MLZ-KP09NA2 & SUZ-KA09NAHZ
9,000 BTU/H EZ FIT CEILING CASSETTE
9,000 BTU/H HYPER-HEATING UNIVERSAL OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....MLZ-KP09NA2

Outdoor Unit.....SUZ-KA09NAHZ

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® Wireless Interface

OUTDOOR UNIT FEATURES

- The outdoor unit powers the indoor unit, and should a power outage occur, the system is automatically restarted when power returns
- INVERTER-driven compressor and LEV provide high efficiency and comfort while using only the energy needed to maintain maximum performance
- H2i® hyper heat performance offers 100% heating capacity at 5° F
- Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- Quiet operation
- Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life
- Built-in base pan heater
- Innovative Joint Lap DC Motor leads to high efficiency and reliability
- Pulse Amplitude Modulation technology

SPECIFICATIONS: MLZ-KP09NA2 & SUZ-KA09NAHZ

Cooling at 95°F ¹	Maximum Capacity	BTU/H	9,000
	Rated Capacity	BTU/H	9,000
	Minimum Capacity	BTU/H	4,800
	Maximum Power Input	W	720
	Rated Power Input	W	720
	Moisture Removal	Pints/h	1.8
	Sensible Heat Factor		0.78
Heating at 47°F ²	Power Factor [208V / 230V]	%	96.0 / 96.0
	Maximum Capacity	BTU/H	14,000
	Rated Capacity	BTU/H	12,000
	Minimum Capacity	BTU/H	8,300
	Maximum Power Input	W	1,100
	Rated Power Input	W	840
Heating at 17°F ³	Power Factor [208V / 230V]	%	98.0 / 98.0
	Maximum Capacity	BTU/H	12,000
	Rated Capacity	BTU/H	6,600
	Maximum Power Input	W	1,280
Heating at 5°F ⁴	Rated Power Input	W	700
	Maximum Capacity	BTU/H	12,000
Heating at 5°F ⁴	Maximum Power Input	W	2,100
Heating at -4°F ⁵	Maximum Capacity	BTU/H	10,700
Heating at -13°F ⁷	Maximum Capacity	BTU/H	9,600
Efficiency	SEER SEER2		18.9 19.0
	EER ¹ EER2 ¹		12.5 12.5
	HSPF [IV] HSPF2 [IV]		11.0 10.0
	COP at 47°F ²		4.1
	COP at 17°F at Maximum Capacity ³		2.7
	COP at 5°F at Maximum Capacity ⁴		2.14
	ENERGY STAR® Certified		Yes
Electrical	Voltage, Phase, Frequency		208/230, 1, 60
	Guaranteed Voltage Range	V AC	187 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Short-circuit Current Rating [SCCR]	kA	5
	Recommended Fuse/Breaker Size (Outdoor)	A	15
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
Indoor Unit	Power Supply		Indoor unit is powered by the outdoor unit
	MCA	A	1.0
	Fan Motor Full Load Amperage	A	0.68
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	212–254–282–311
	Airflow Rate at Cooling, Wet	CFM	180–216–240–264
	Airflow Rate at Heating, Dry	CFM	212–247–290–325
	Sound Pressure Level [Cooling]	dB[A]	27–31–34–38
	Sound Pressure Level [Heating]	dB[A]	26–29–34–37
	Drain Pipe Size	In. [mm]	1-1/4 [32]
	Condensate Lift Mechanism, Maximum Distance	In. [mm]	19-11/16 [500]
	Coating on Heat Exchanger		—
	External Finish Color		Munsell 4.0GY 9.1/0.2
	Unit Dimensions	W x D x H: In. [mm]	43-3/8 x 14-3/16 x 7-5/16 [1,102 x 360 x 185]
	Package Dimensions	W x D x H: In. [mm]	46-5/16 x 15-3/4 x 11-1/8 [1,177 x 400 x 284]
	Unit Weight	Lbs. [kg]	34 [15.5]
	Package Weight	Lbs. [kg]	41 [19.0]
Indoor Unit Operating Temperature Range	Cooling Intake Air Temp [Maximum / Minimum]*	°F	90 DB, 73 WB / 67 DB, 57 WB
	Heating Intake Air Temp [Maximum / Minimum]	°F	80 DB / 70 DB

NOTES:			
AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)	¹ Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
	² Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
	³ Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB
Conditions	⁴ Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 5 DB, 4 WB
	⁵ Heating at -4°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
	⁷ Heating at -13°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -13 DB, -14 WB

*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 to avoid thermistor error and automatically restarts at these temperatures.

SPECIFICATIONS: MLZ-KP09NA2 & SUZ-KA09NAHZ

Outdoor Unit	MCA	A	14.0
	MOCP	A	24
	Fan Motor Full Load Amperage	A	0.7
	Fan Motor Output	W	77
	Airflow Rate [Cooling / Heating]	CFM	1,691 / 1,691
	Refrigerant Control		LEV
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger		Blue Fin Coating
	Sound Pressure Level, Cooling ¹	dB(A)	49
	Sound Pressure Level, Heating ²	dB(A)	51
	Compressor Type		DC INVERTER-driven Twin Rotary
	Compressor Model		SNB130FHB2T
	Compressor Rated Load Amps	A	10
	Compressor Locked Rotor Amps	A	12.5
	Compressor Oil [Type // Charge]	oz.	FV50S // 22
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		Built-in
	Unit Dimensions	W x D x H: In. [mm]	38-1/16 x 13 x 34-5/8 [840 x 330 x 880]
	Package Dimensions	W x D x H: In. [mm]	38-3/4 x 16-3/4 x 39 [980 x 420 x 990]
	Unit Weight	Lbs. [kg]	129 [58.5]
	Package Weight	Lbs. [kg]	148 [67]
Outdoor Unit Operating Temperature Range	Cooling Air Temp [Maximum / Minimum]*	°F	115 DB / 14 DB
	Cooling Thermal Lock-out / Re-start Temperatures**	°F	-1 / 3
	Heating Air Temp [Maximum / Minimum]	°F	75 DB, 65 WB / -13 DB, -14 WB
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-25 / -14
Refrigerant	Type		R410A
	Pre-Charged Refrigerant Amount	Lbs, oz	3.0, 9.0
	Maximum Pre-Charged Piping Length	Ft. [m]	65.0 [20.0]
	Additional Refrigerant Charge Per Additional Piping Length	oz./Ft. [g/m]	0 [0]
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 [20]
	Maximum Height Difference	Ft. [m]	40 [12]
	Maximum Number of Bends		10

NOTES:

AHRI Rated Conditions

(Rated data is determined at a fixed compressor speed)

¹ Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
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³ Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB

Conditions

⁴ Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 5 DB, 4 WB
⁵ Heating at -4°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
⁷ Heating at -13°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -13 DB, -14 WB

*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 to avoid thermistor error and automatically restarts at these temperatures.

INDOOR UNIT ACCESSORIES: MLZ-KP09NA2

Control Interface	BACnet® and Modbus® Interface	PAC-UKPRC001-CN-1
	CN24 Relay Kit	CN24RELAY-KIT-CM3
	IT Extender	PAC-WHS01IE-E
	kumo station® for kumo cloud®	PAC-WHS01HC-E
	System Control Interface	MAC-334IF-E
	Thermostat Interface	PAC-US444CN-1
	Thermostat Interface	PAC-US445CN-1
	USNAP Adapter	PAC-WHS01UP-E
	Wireless Interface for kumo cloud®	PAC-USWHS002-WF-2
Remote Sensor	Wired Remote Sensor	M21EAA307
	Wireless temperature and humidity sensor for kumo cloud®	PAC-USWHS003-TH-1
Wired Remote Controller	Deluxe Wired MA Remote Controller†	PAR-40MAAU
	Simple Ductless Wired Remote Controller	PAC-SDW01RC-1
	Simple MA Remote Controller†	PAC-YT53CRAU-J
	Touch MA Controller†	PAR-CT01MAU-SB
Wireless Remote Controller	kumo touch™ RedLINK™ Wireless Controller	MHK2
	Lockdown bracket for remote controller	RCMKP1CB
Condensate	Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	X87-721
	Blue Diamond (MicroBlue) Mini Condensate Pump (110/208/230V) up to 18,000 BTU/H	X86-003
	Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H	COMBI
Disconnect Switch	(30A/600V/UL) [fits 2" X 4" utility box] - Black	TAZ-MS303
	(30A/600V/UL) [fits 2" X 4" utility box] - White	TAZ-MS303W
Filter	Anti-allergy Enzyme Filter	MAC-408FT-E
Grille	Grille (required)	MLP-444WU
Lineset	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

NOTES:

†Requires MAC-334IF-E

- M-Series EZ FIT® Recessed Ceiling Cassette, Floor-mount and Wall-mount
Allows indoor units to connect to an MA Controller:
Deluxe MA Remote Controller
Simple MA Controller
Touch MA Controller

OUTDOOR UNIT ACCESSORIES: SUZ-KA09NAHZ

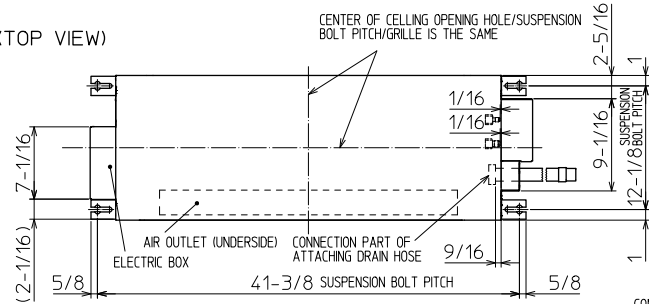
Air Outlet Guide	Air Outlet Guide	MAC-886SG-E
Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	M21EC0397
Mini-Split Wire	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S144-250
	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	SW144-250
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S144-50
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	SW144-50
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S164-250
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	SW164-250
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S164-50
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	SW164-50
Mounting Pad	Condensing Unit Mounting Pad: 16" x 36" x 3"	ULTRILITE1
Stand	18" Single Fan Stand	QSMS1801M
	24" Single Fan Stand	QSMS2401M
	Condenser Wall Bracket	QSWB2000M-1
	Outdoor Unit Stand — 12" High	QSMS1201M

INDOOR UNIT DIMENSIONS: MLZ-KP09NA2

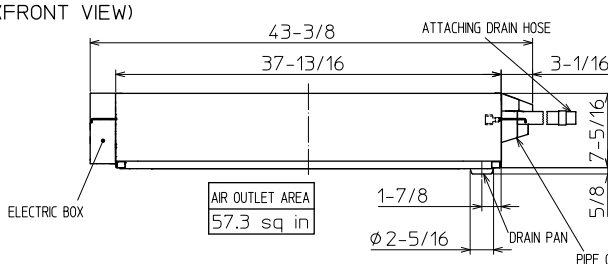
Unit: inch

INDOOR UNIT OUTLINE DRAWING

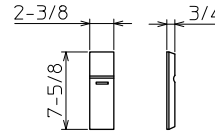
(TOP VIEW)



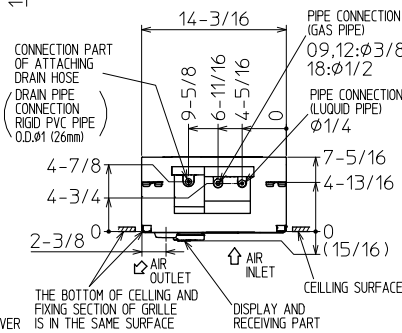
(FRONT VIEW)



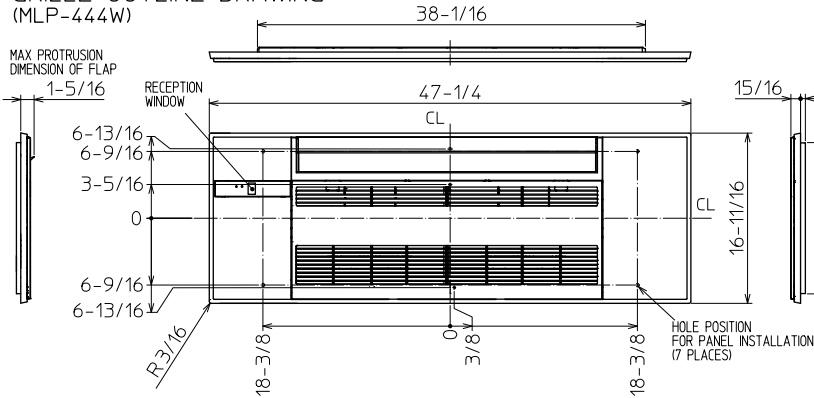
REMOTE CONTROLLER OUTLINE DRAWING



(RIGHT SIDE VIEW)



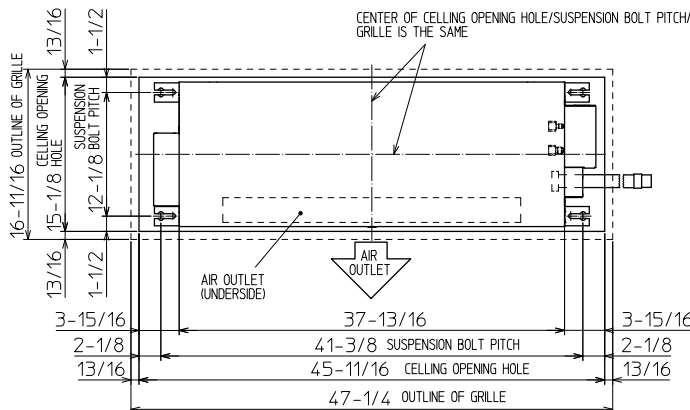
GRILLE OUTLINE DRAWING (MLP-444W)



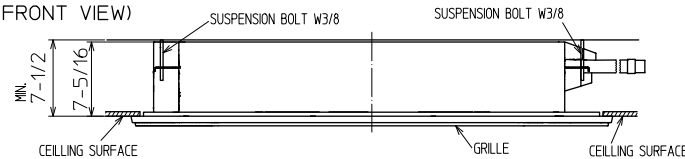
		KP09/12NA	KP18NA
EXTENSION PIPE	LIQUID PIPE O.D.	φ1/4	
	GAS PIPE O.D.	φ3/8	φ1/2
CONNECTION OF PIPE	LIQUID PIPE	FLARED CONNECTION φ1/4	
	GAS PIPE	FLARED CONNECTION φ3/8	FLARED CONNECTION φ1/2
DRAIN HOSE		HEAT INSULATOR O.D.	CONNECTION I.D. EFFECTIVE LENGTH
DRAIN PIPE CONNECTION		φ1-1/4	φ1 18-7/8
		RIGID PVC PIPE O.D. φ1 (26mm)	

NOTE1. CUT THE DRAIN HOSE (ACCESSORY) FOR USE, IF NECESSARY.

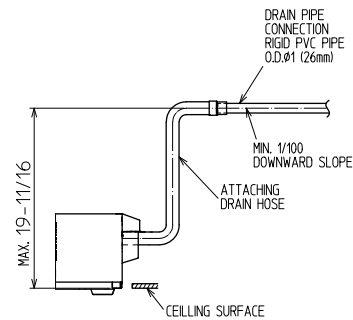
INDOOR UNIT DETAIL VIEW (TOP VIEW)



(FRONT VIEW)



THE METHOD FOR STANDING DRAIN FROM INDOOR UNIT
* CUT THE DRAIN HOSE (ACCESSORY) FOR USE, IF NECESSARY.

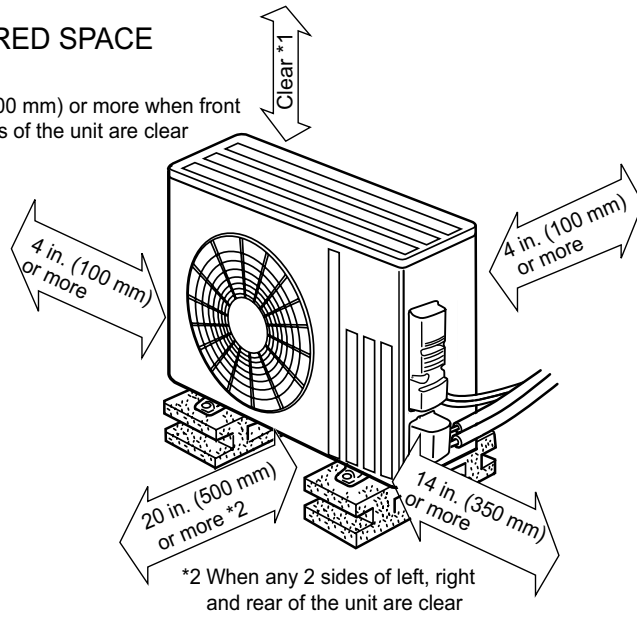
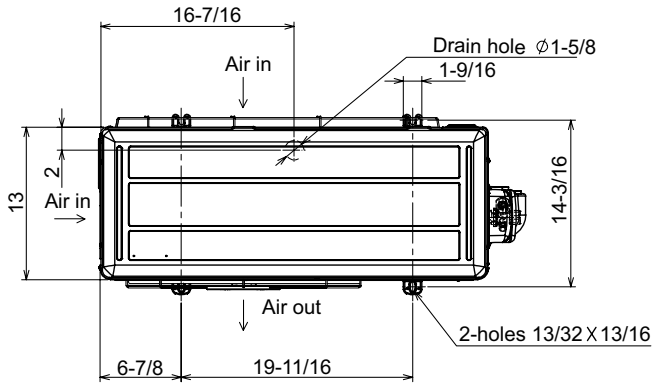


OUTDOOR UNIT DIMENSIONS: SUZ-KA09NAHZ

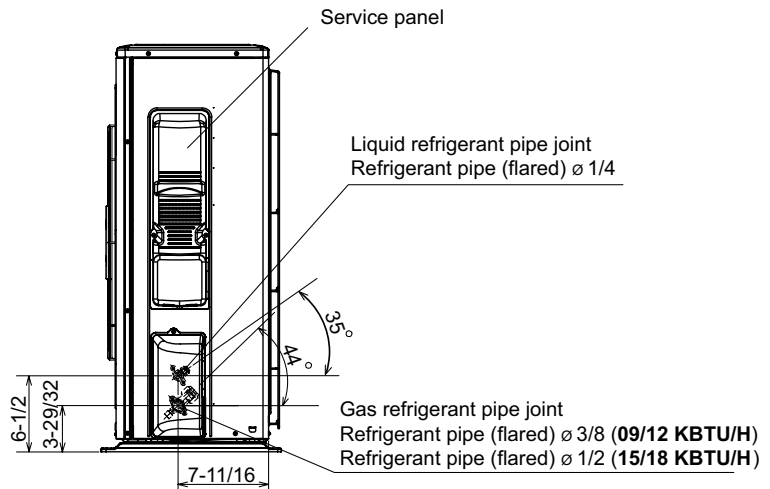
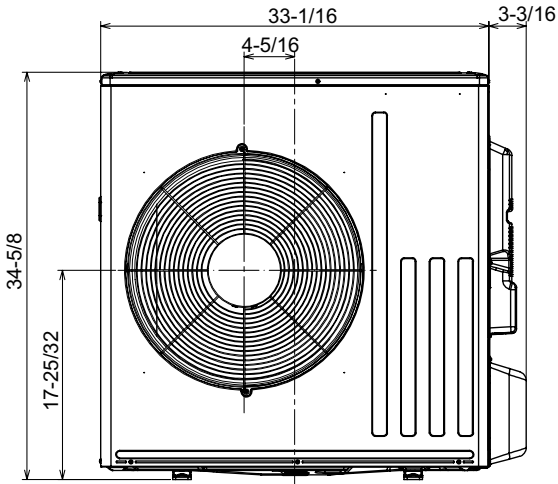
Unit: inch

REQUIRED SPACE

*1 20 in. (500 mm) or more when front and sides of the unit are clear



*2 When any 2 sides of left, right and rear of the unit are clear



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FORM# MLZ-KP09NA2 & SUZ-KA09NAHZ - 202304

