# MSZ-FS09NA & MUZ-FS09NA 9,000 BTU/H DELUXE WALL-MOUNTED INDOOR UNIT 9,000 BTU/H HYPER-HEATING OUTDOOR UNIT



Job Name:	
System Reference:	Date:





Indoor Unit	MSZ-FS09NA
Outdoor Unit	MUZ-FS09NA

#### INDOOR UNIT FEATURES

- · Slim wall-mounted indoor units provide zone comfort control
- · Dual Barrier Coating applied to the heat exchanger, vanes and fan to prevent hydrophilic and hydrophobic dirt build-up
- Multiple fan speed options: Quiet, Low, Medium, High, Super-high, Auto
- · 3D i-see Sensor® enables advance features:
  - o Indirect or Direct Airflow for personalized comfort
  - o Absence Detection for energy-saving mode
- Double Vane features:
  - o Separates airflow to deliver air across a large area
  - Simultaneously deliver to air separate sections of a room
  - o Generates more comfortable natural airflow pattern
- · Multiple control options available:
  - o Back-lit screen handheld remote controller (provided with unit)
  - o kumo cloud® smart device app for remote access
  - o Third-party interface options
  - o Wired or wireless controllers
- · Triple-action Filtration: Nano Platinum Filter, Deodorizing Filter, & Electrostatic Anti-Allergy Enzyme Filter
- · Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- · Quiet operation

#### **OUTDOOR UNIT FEATURES**

- · INVERTER-driven compressor and LEV provide high efficiency and comfort while using only the energy needed to maintain maximum performance
- H2i plus™ performance offers 100% heating capacity at -5° and 70% to 81% heating capacity at -13° F
- · Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life

### SPECIFICATIONS: MSZ-FS09NA & MUZ-FS09NA

	Maximum Capacity	BTU/H	12,000
	Rated Capacity	BTU/H	9,000
	Minimum Capacity	BTU/H	1,700
	Maximum Power Input W		1,000
Cooling at 95°F1	Rated Power Input	W	560
	Moisture Removal	Pints/h	0.6
	Sensible Heat Factor	T IIIO/II	0.92
	Power Factor [208V / 230V]	%	89.0 / 90.0
	Maximum Capacity	BTU/H	18,000
	Rated Capacity	BTU/H	9,600
	Minimum Capacity	BTU/H	1,600
Heating at 47°F2	Maximum Power Input	W	1,740
	Rated Power Input	W	620
		%	92.0 / 92.0
	Power Factor [208V / 230V]		
	Maximum Capacity	BTU/H	14,170
Heating at 17°F3	Rated Capacity	BTU/H	5,900
-	Maximum Power Input	W	1,580
	Rated Power Input	W	450
Heating at 5°F4	Maximum Capacity	BTU/H	11,590
	Maximum Power Input	W	1,410
Heating at -5°F <sup>6</sup>	Maximum Capacity	BTU/H	9,600
Heating at -13°F7	Maximum Capacity	BTU/H	8,000
	SEER   SEER2		30.5   29.8
	EER1   EER21		16.05   16.05
	HSPF [IV]   HSPF2 [IV]		13.5   10.9
	COP at 47°F2		4.54
Efficiency	COP at 17°F at Maximum Capacity³		2.63
	COP at 5°F at Maximum Capacity <sup>4</sup>		2.2
	COP at -5°F at Maximum Capacity <sup>6</sup>		2.2
	COP at -13°F at Maximum Capacity <sup>7</sup>		1.89
	ENERGY STAR® Certified		Yes
	Voltage, Phase, Frequency		208/230, 1, 60
	Guaranteed Voltage Range	VAC	187 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
Flooting	Voltage: Indoor - Outdoor, S2-S3	V DC	24
Electrical	Short-circuit Current Rating [SCCR]	kA	5
	Recommended Fuse/Breaker Size (Oudoor)	A	15
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	Power Supply	'	Indoor unit is powered by the outdoor unit
	MCA	A	1.0
	Fan Motor Full Load Amperage	A	0.65
	Fan Motor Type	'	DC Motor
	Airflow Rate at Cooling, Dry	CFM	137–167–221–304–381
	Airflow Rate at Cooling, Wet	CFM	117–143–190–261–328
	Airflow Rate at Heating, Dry	CFM	140–167–225–325–437
	Sound Pressure Level [Cooling]	dB[A]	20–23–29–36–40
Indoor Unit	Sound Pressure Level [Heating]	dB[A]	20-24-29-39-42
	Drain Pipe Size	In. [mm]	5/8 [15.88]
	Coating on Heat Exchanger	[]	Dual Barrier Coating
	External Finish Color		Munsell 1.0Y 9.2/0.2
		W x D x H: In. [mm]	36-7/16 x 9-3/16 x 12 (+11/16) [925 x 234 x 305 (+17)]
		W x D x H: In: [mm]	39 x 12-1/4 x 15-1/2 [990 x 310 x 400]
	-		
	Unit Weight	Lbs. [kg]	29 [13.5]
	Package Weight	Lbs. [kg]	34 [15.4]
Indoor Unit Operating Temperature	Cooling Intake Air Temp [Maximum / Minimum]*	°F	90 DB, 73 WB / 67 DB, 57 WB
Range	Heating Intake Air Temp [Maximum / Minimum]	°F	80 DB / 70 DB

NOTES:

Conditions

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)

¹Cooling (Indoor // Outdoor) ²Heating at 47°F (Indoor // Outdoor) ³Heating at 17°F (Indoor // Outdoor)

80 DB, 67 WB // 95 DB, 75 WB 70 DB, 60 WB // 47 DB, 43 WB 70 DB, 60 WB // 17 DB, 15 WB °F

<sup>4</sup>Heating at 5°F (Indoor // Outdoor) <sup>6</sup>Heating at -5°F (Indoor // Outdoor) <sup>7</sup>Heating at -13°F (Indoor // Outdoor)

70 DB, 60 WB // 5 DB, 4 WB 70 DB, 60 WB // -5 DB, -6 WB 70 DB, 60 WB // -13 DB, -14 WB

<sup>\*</sup>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.

<sup>\*\*</sup>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: MSZ-FS09NA & MUZ-FS09NA

	MCA	Α	10.0
	MOCP	A	15
	Fan Motor Full Load Amperage	A	0.5
	Fan Motor Output	W	55
	Airflow Rate [Cooling / Heating]	CFM	1141 / 1183
	Refrigerant Control		LEV
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger		Blue Fin Coating
	Sound Pressure Level, Cooling <sup>1</sup>	dB(A)	48
	Sound Pressure Level, Heating <sup>2</sup>	dB(A)	49
Outdoor Unit	Compressor Type		Twin Rotary
	Compressor Model		SNB092FQAMT
	Compressor Rated Load Amps	A	9.2
	Compressor Locked Rotor Amps	A	7.4
	Compressor Oil [Type // Charge]	OZ.	FV50S // 0.35
	External Finish Color		Munsell 3Y 7.8/1.1
	Base Pan Heater		Optional
	Unit Dimensions	W x D x H: In. [mm]	31-1/2 x 11-1/4 x 21-5/8 [800 x 285 x 550]
	Package Dimensions	W x D x H: In. [mm]	37 x 15 x 24-1/2 [940 x 380 x 630]
	Unit Weight	Lbs. [kg]	82 [37]
	Package Weight	Lbs. [kg]	89 [40]
	Cooling Air Temp [Maximum / Minimum]*	°F	115 DB / 14 DB
Outdoor Unit Operating Temperature	Cooling Thermal Lock-out / Re-start Temperatures**	°F	-4 / 0
Range	Heating Air Temp [Maximum / Minimum]	°F	75 DB, 65 WB / -13 DB, -14 WB
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-18 / -14
	Туре		R410A
Refrigerant	Maximum Charge Quantity	Lbs, oz	2.0, 9.0
Reingerani	Initial Charge Quantity	Ft. [m]	25.0 [7.5]
	Additional Refrigerant Charge Per Additional Piping Length	oz./Ft. [g/m]	0.216 [20]
	Gas Pipe Size O.D. [Flared]	In.[mm]	3/8 [9.52]
	Liquid Pipe Size O.D. [Flared]	In.[mm]	1/4 [6.35]
Piping	Maximum Piping Length	Ft. [m]	65 [20]
	Maximum Height Difference	Ft. [m]	40 [12]
	Maximum Number of Bends		10

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### **INDOOR UNIT ACCESSORIES: MSZ-FS09NA**

	BACnet® and Modbus® Interface	PAC-UKPRC001-CN-1
	CN24 Relay Kit	CN24RELAY-KIT-CM3
	IT Extender	PAC-WHS01IE-E
Control Interface	kumo station® for kumo cloud®	PAC-WHS01HC-E
ontroi interiace	System Control Interface	MAC-334IF-E
	Thermostat Interface	PAC-US445CN-1
	USNAP Adapter	PAC-WHS01UP-E
	Wireless Interface for kumo cloud®	PAC-USWHS002-WF-2
emote Sensor	Wired Remote Sensor	M21EAA307
emote Sensor	Wireless temperature and humitity sensor for kumo cloud®	PAC-USWHS003-TH-1
	Deluxe Wired MA Remote Controller <sup>†</sup>	PAR-40MAAU
rired Remote Controller	Simple MA Remote Controller <sup>†</sup>	PAC-YT53CRAU-J
	Touch MA Controller <sup>†</sup>	PAR-CT01MAU-SB
/ireless Remote Controller	kumo touch™ RedLINK™ Wireless Controller	MHK2
rifeless Remote Controller	Lockdown bracket for remote controller	RCMKP1CB
	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
	Blue Diamond Alarm Extension Cable—6.5 Ft.	C13-192
	Blue Diamond MultiTank — collection tank for use with multiple pumps	C21-014
ondensate	Blue Diamond Sensor Extension Cable — 15 Ft.	C13-103
ondensale	Drain Pan Level Sensor/Control	SS610E
	Fascia Kit for MicroBlue Pump, mounts the MicroBlue and sensor directly beneath indoor unit	T18-016
	Refco Condensate Pump (100-240 VAC)	GOBI-II
	Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H	COMBI
	Sauermann Condensate Pump	SI30-230
isconnect Switch	(30A/600V/UL) [fits 2" X 4" utility box] - Black	TAZ-MS303
isconnect Switch	(30A/600V/UL) [fits 2" X 4" utility box] - White	TAZ-MS303W
ilko s	Electro Static Anti-allergy Enzyme Filter	MAC-2330FT-E
Iter	Platinum Deodorizing Filter	MAC-3000FT-E
	15' x 1/4" x 15' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-15
naaat	30' x 1/4" x 30' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-30
ineset	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:

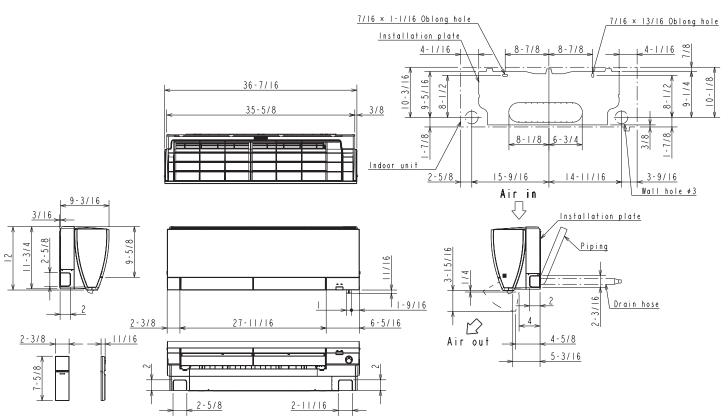
Deluxe MA Remote Controller
Simple MA Controller
Touch MA Controller

## **OUTDOOR UNIT ACCESSORIES: MUZ-FS09NA**

M- & P-Series Maintenance Tool Cable Set		M21EC0397
Control/Service 1001	USB/UART Conversion Cable (Required for all laptop connection)	M21EC1397
Drain Socket Drain Socket		MAC-871DS
Hail Guards	Guards Hail Guard HG-B4	
	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S144-250
Mini Culit Wine	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S144-50
Mini-Split Wire	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	\$164-250
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S164-50
	Condensing Unit Mounting Pad: 16" x 36" x 3"	ULTRILITE1
Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic		DSD-400P
Optional Defrost Heater Optional Defrost Heater		MAC-640BH-U
	18" Single Fan Stand	QSMS1801M
	24" Single Fan Stand	QSMS2401M
Stand	Condenser Wall Bracket	QSWB2000M-1
	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Outdoor Unit Stand — 12" High	QSMS1201M

### **INDOOR UNIT DIMENSIONS: MSZ-FS09NA**

### Unit: inch



### (06/09/12 KBTU/H)

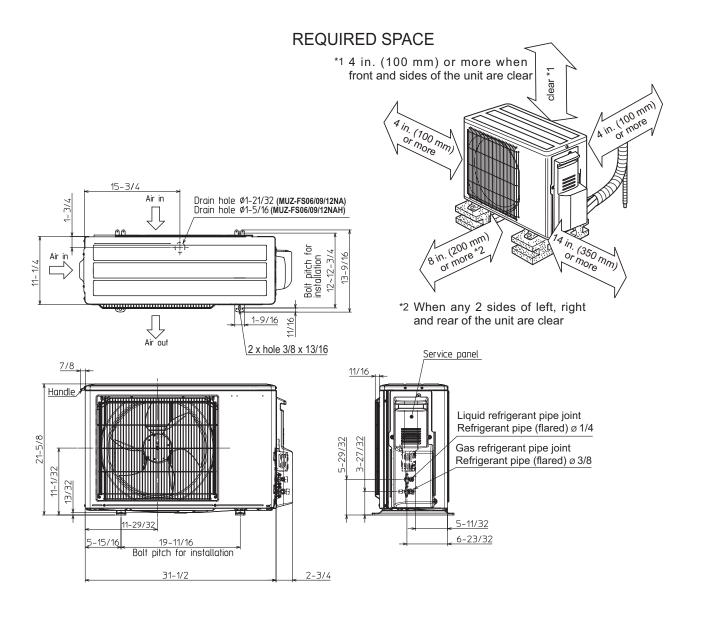
	`		,
0	١g	Insulation	
l	<u>-</u>	Liquid line	♦1/4   19-11/16 (Flared connection ♦1/4)
l	P	Gas line	♦3/8   16-15/16 (Flared connection ♦3/8)
ĺ		rain hose)	Insulation #1-1/8 Connected part #5/8 O.D

### (15/18 KBTU/H)

ച Insulation	♦1-7/16 O.D
Liquid line ا	♦1/4 19-11/16 (Flared connection ♦1/4)
Gas line	♦3/8   16-15/16 (Flared connection ♦1/2)
Drain hose	Insulation #1-1/8 Connected part #5/8 O.D

### **OUTDOOR UNIT DIMENSIONS: MUZ-FS09NA**

Unit: inch



1340 Satellite Boulevard Suwanee, GA 30024 Toll Free: 800-433-4822 www.mehvac.com





