

M-SERIES




SUBMITTAL DATA: MSZ-FH09NA & MUZ-FH09NA 9,000 BTU/H WALL-MOUNTED HEAT PUMP SYSTEM



Job Name:

System Reference:

Date:

Indoor Unit: MSZ-FH09NA	Outdoor Unit: MUZ-FH09NA	Wireless Remote Controller
		

GENERAL FEATURES

- Slim wall-mounted indoor units provide zone comfort control.
- 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 and 70%-81% heating capacity at -13°F
- Multiple fan speed options: Quiet, Low, Medium, High, Super-high, Auto
- 3D i-see Sensor™ enables advance features:
 - Indirect or Direct Airflow for personalized comfort
 - Absence Detection for energy-saving mode
- Double Vane features:
 - Separates airflow to deliver air across a large area
 - Simultaneously deliver air to two people in different locations
 - Generates more comfortable natural airflow pattern
- 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
- 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
- Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life
- Built-in base pan heater to prevent ice in drain pan

SPECIFICATIONS: MSZ-FH09NA & MUZ-FH09NA

Cooling ¹	Maximum Capacity	Btu/h	12,000
	Rated Capacity	Btu/h	9,000
	Minimum Capacity	Btu/h	1,700
	Maximum Power Input	W	1,000
	Rated Power Input	W	560
	Moisture Removal	Pints/h	0.6
	Sensible Heat Factor		0.92
	Power Factor	%	90 / 90
Heating at 47°F ²	Maximum Capacity	Btu/h	18,000
	Rated Capacity	Btu/h	10,900
	Minimum Capacity	Btu/h	1,600
	Maximum Power Input	W	1,470
	Rated Power Input	W	710
	Power Factor	%	94 / 94
Heating at 17°F ³	Maximum Capacity	Btu/h	12,200
	Rated Capacity	Btu/h	6,700
	Maximum Power Input	W	1,440
	Rated Power Input	W	600
Heating at 5°F ⁴	Maximum Capacity	Btu/h	10,900
	Maximum Power Input	W	1,350
Heating at -4°F ⁵	Maximum Capacity	Btu/h	9,260
Heating at -13°F ⁶	Maximum Capacity	Btu/h	7,630
Efficiency	SEER		30.5
	EER ¹		16.1
	HSPF (IV)		13.5
	COP at 47°F ²		4.50
	COP at 17°F in Maximum Capacity ³		2.48
	COP at 5°F in Maximum Capacity ⁴		2.37
	ENERGY STAR® Certified (ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.)		YES
Electrical	Voltage, Phase, Frequency		208/230V, 1 phase, 60Hz
	Guaranteed Voltage Range	V AC	187 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208 / 230
	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Voltage: Indoor - Remote Controller		Wireless Type
	Recommended Fuse/Breaker Size	A	15
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
Indoor Unit	MCA	A	1
	MOCP	A	15
	Blower Motor Full Load Amperage	A	0.67
	Blower Motor Output	W	30

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	Airflow Rate at Cooling, Dry		CFM	381-304-221-167-137
	Airflow Rate at Cooling, Wet		CFM	328-261-190-143-117
	Airflow Rate at Heating, Dry		CFM	437-325-225-167-140
	Sound Pressure Level (Cooling)		dB(A)	40-36-29-23-20
	Sound Pressure Level (Heating)		dB(A)	42-36-29-24-20
	Drain Pipe Size		In. (mm)	5/8 (15.88)
	Heat Exchanger Type			Plate fin coil
	External Finish Color			Munsell 1.0Y 9.2/0.2
	Unit Dimensions	W: In. (mm)	36-7/16 (925)	
		D: In. (mm)	9-3/16 (234)	
		H: In. (mm)	12 [+11/16] (305 [+17])	
	Package Dimensions	W: In. (mm)	39 (990)	
		D: In. (mm)	12-1/4 (310)	
		H: In. (mm)	12-3/16 (310)	
	Unit Weight		Lbs. (kg)	29 (13.5)
	Package Weight		Lbs. (kg)	34 (15.4)
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
Outdoor Unit	MCA		A	11
	MOCP		A	15
	Fan Motor Full Load Amperage		A	0.5
	Fan Motor Output		W	55
	Airflow Rate		CFM	1,074 / 1,202
	Refrigerant Control			LEV
	Defrost Method			Reverse cycle
	Heat Exchanger Type			Plate fin coil
	Sound Pressure Level, Cooling ¹		dB(A)	48
	Sound Pressure Level, Heating ²		dB(A)	49
	Compressor Type			DC INVERTER-driven
	Compressor Model			SNV0912FQAMT
	Compressor Rated Load Amps		A	8.2
	Compressor Locked Rotor Amps		A	10.3
	Compressor Oil Type // Charge		oz.	FV50S // 11.8
	External Finish Color			Munsell 3Y 7.8/1/1
	Base Pan Heater			Optional
	Unit Dimensions	W: In. (mm)	31-1/3 (800)	
		D: In. (mm)	11-1/5 (285)	
		H: In. (mm)	21-5/9 (550)	
	Package Dimensions	W: In. (mm)	37 (940)	
		D: In. (mm)	14-15/16 (380)	
		H: In. (mm)	24-13/16 (630)	

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	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 / -13
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-18 / -14
Refrigerant	Type		R410A
	Charge	Lbs, oz	2, 9
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
	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 // -4 DB, -5 WB
	⁵ Heating at -4°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB
	⁶ Heating at -13°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -13 DB, -14 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.

ACCESSORIES: MSZ-FH09NA

Deodorizing Filter	□ MAC-3000FT-E
Electrostatic Anti-allergy Enzyme Filter	□ MAC-2330FT-E
Backlit, Wall-mounted, Wireless Controller	□ MHK1
Portable Central Controller	□ MCCH1
Wired MA Controller ¹	□ PAR-33MAA
Simple MA Controller ¹	□ PAC-YT53CRAU
Touch MA Controller ¹	□ PAR-CT01MAU-SB
Wired Remote Sensor	□ M21-EAA-307
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	□ MOS1
System Control Interface ²	□ MAC-333IF-E
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
Lockdown Bracket for Hand-held Remote Controllers	□ RCMKP1CB
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 — 230 volt 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
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

¹ Requires MAC-333IF-E

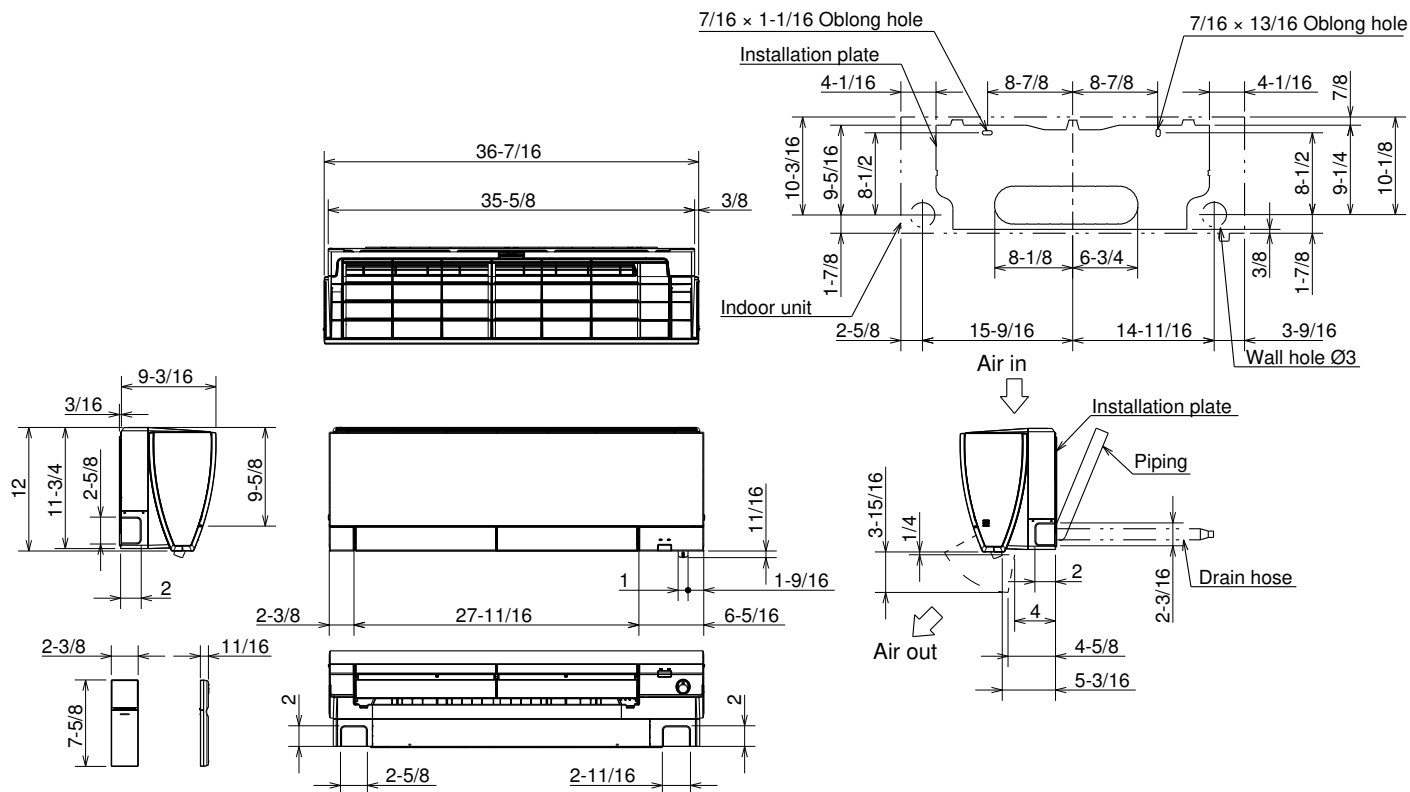
² Allows indoor units to connect to an MA Controller

ACCESSORIES: MUZ-FH09NA

Air Outlet Guide	□ MAC-881SG
Drain Socket	□ MAC-860DS
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"	□ ULTRILITE1
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	□ QSWBSS
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: MSZ-FH09NA

Unit: inch



(Capacities in kBtu/h: 06, 09,12)

Piping	Insulation	Ø1-7/16 O.D
	Liquid line	Ø1/4 19-11/16 (Flared connection Ø1/4)
	Gas line	Ø3/8 16-15/16 (Flared connection Ø3/8)
	Drain hose	Insulation Ø1-1/8 Connected part Ø5/8 O.D

(Capacities in kBtu/h: 15, 18)

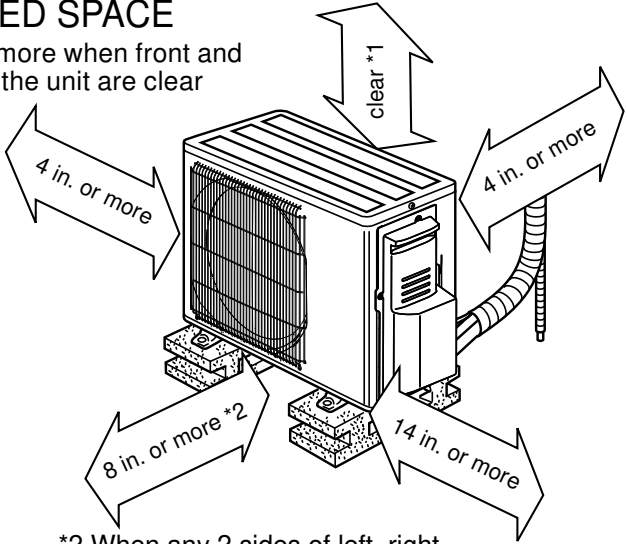
Piping	Insulation	Ø1-7/16 O.D
	Liquid line	Ø1/4 19-11/16 (Flared connection Ø1/4)
	Gas line	Ø3/8 16-15/16 (Flared connection Ø1/2)
	Drain hose	Insulation Ø1-1/8 Connected part Ø5/8 O.D

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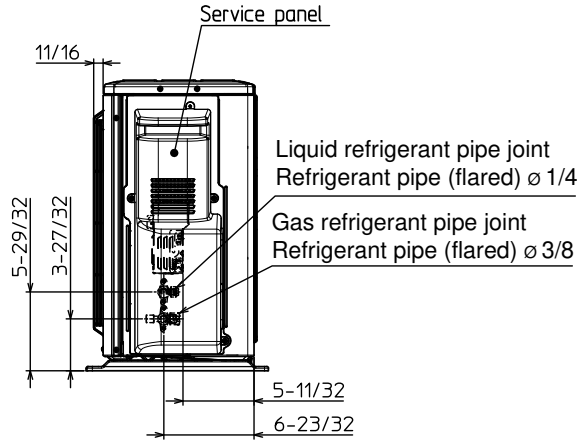
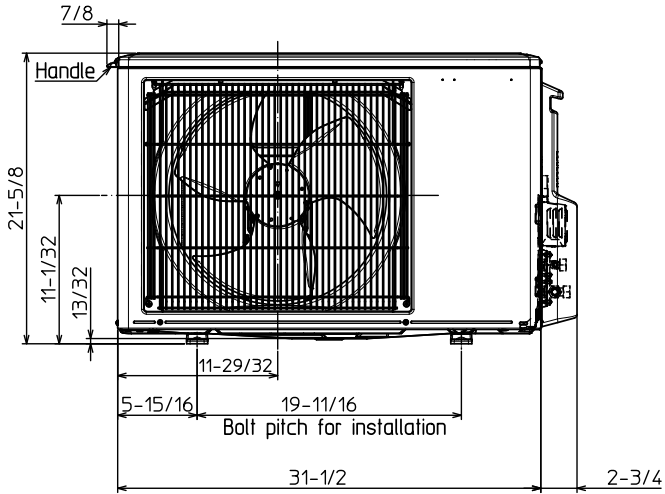
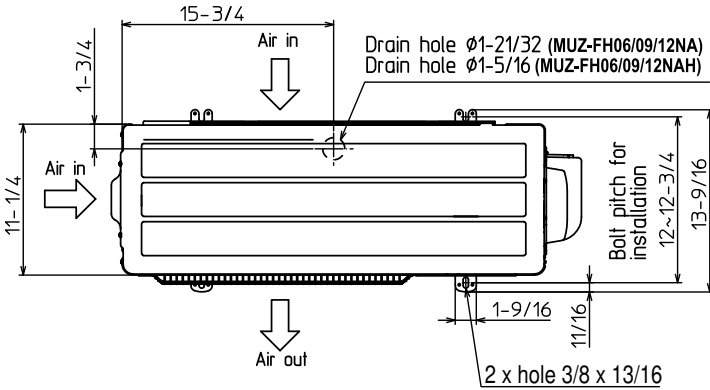
Unit: inch

*1 4 in. or more when front and sides of the unit are clear

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



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Specifications are subject to change without notice.

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