

# M-SERIES

## SUBMITTAL DATA: MSZ-GL12NA & MUZ-GL12NA 12,000 BTU/H WALL-MOUNTED HEAT PUMP SYSTEM



Job Name:

System Reference:

Date:

Indoor Unit:  
MSZ-GL12NA

Outdoor Unit:  
☐ MUZ-GL12NA-U1  
☐ MUZ-GL12NA-U2

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
- Multiple fan speed options: Quiet, Low, Medium, High, Super-high, Auto
- 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
- Quiet operation
- Smart Set: recalls a preferred preset temperature setting at the touch of a button
- Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life

# SPECIFICATIONS: MSZ-GL12NA & MUZ-GL12NA

|                              |  |             |                         |
|------------------------------|--|-------------|-------------------------|
| Cooling <sup>1</sup>         | Maximum Capacity   | BTU/H       | 13,600                  |
|                              | Rated Capacity   | BTU/H       | 12,000                  |
|                              | Minimum Capacity   | BTU/H       | 1,500                   |
|                              | Maximum Power Input  | W           | 1,300                   |
|                              | Rated Power Input  | W           | 920                     |
|                              | Moisture Removal   | Pints/h     | 2.5                     |
|                              | Sensible Heat Factor   |             | 0.77                    |
|                              | Power Factor   | %           | 95 / 95                 |
| Heating at 47°F <sup>2</sup> | Maximum Capacity   | BTU/H       | 18,100                  |
|                              | Rated Capacity   | BTU/H       | 14,400                  |
|                              | Minimum Capacity   | BTU/H       | 2,000                   |
|                              | Maximum Power Input  | W           | 1,620                   |
|                              | Rated Power Input  | W           | 1,100                   |
|                              | Power Factor   | %           | 96 / 96                 |
| Heating at 17°F <sup>3</sup> | Maximum Capacity   | BTU/H       | 12,000                  |
|                              | Rated Capacity   | BTU/H       | 9,200                   |
|                              | Maximum Power Input  | W           | 1,240                   |
|                              | Rated Power Input  | W           | 870                     |
| Heating at 5°F <sup>4</sup>  | Maximum Capacity   | BTU/H       | 9,790                   |
|                              | Maximum Power Input  | W           | 1,020                   |
| Heating at -4°F <sup>5</sup> | Maximum Capacity   | BTU/H       | 7,920                   |
| Efficiency                   | SEER   SEER2   |             | 23.1   23.1             |
|                              | EER <sup>1</sup>   EER2 <sup>1</sup>   |             | 13.0   13.0             |
|                              | HSPF (IV)   HSPF2 (IV)   |             | 12.5   10.7             |
|                              | COP at 47°F <sup>2</sup>   |             | 3.84                    |
|                              | COP at 17°F in Maximum Capacity <sup>3</sup>   |             | 2.84                    |
|                              | COP at 5°F in Maximum Capacity <sup>4</sup>  |             | 2.81                    |
|                              | ENERGY STAR® certified units (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                      |
|                              | Short-circuit Current Rating (SCCR)  | kA          | 5                       |
|                              | Recommended Fuse/Breaker Size (Outdoor)  | A           | 15                      |
|                              | Recommended Wire Size (Indoor - Outdoor)   | AWG         | 14                      |
| Indoor Unit                  | MCA  | A           | 1                       |
|                              | MOCP   | A           | 15                      |
|                              | Blower Motor Full Load Amperage  | A           | 0.76                    |
|                              | Blower Motor Output  | W           | 30                      |
|                              | Airflow Rate at Cooling, Dry   | CFM         | 399-321-237-170-145     |
|                              | Airflow Rate at Cooling, Wet   | CFM         | 364-286-201-134-109     |
|                              | Airflow Rate at Heating, Dry   | CFM         | 406-321-237-170-145     |
|                              | Sound Pressure Level (Cooling)   | dB(A)       | 45-37-30-22-19          |
|                              | Sound Pressure Level (Heating)   | dB(A)       | 43-37-30-22-19          |
|                              | 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) | 31-7/16 (798)           |
|                              |  | D: In. (mm) | 9-1/8 (232)             |
|                              |  | H: In. (mm) | 11-5/8 (295)            |

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|  |  |             |                             |
|--|--|-------------|-----------------------------|
|  | Package Dimensions                                 | W: In. (mm) | 33-1/2 (850)                |
|  |  | D: In. (mm) | 12 (300)                    |
|  |  | H: In. (mm) | 14 (350)                    |
|  | Unit Weight  | Lbs. (kg)   | 22 (10)                     |
|  | Package Weight                                     | Lbs. (kg)   | 26 (11.5)                   |
| 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           | 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              |
|  | Sound Pressure Level, Cooling <sup>1</sup>         | dB(A)       | 49                          |
|  | Sound Pressure Level, Heating <sup>2</sup>         | dB(A)       | 51                          |
|  | Compressor Type                                    |             | DC INVERTER-driven          |
|  | Compressor Model                                   |             | SNB092FQAMT                 |
|  | Compressor Rated Load Amps                         | A           | 6.6                         |
|  | Compressor Locked Rotor Amps                       | A           | 8.2                         |
|  | 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)              |
|  | Unit Weight  | Lbs. (kg)   | 81 (37)                     |
|  | Package Weight                                     | Lbs. (kg)   | 89 (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                              | 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) | <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 // 5 DB, 4 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.

## ACCESSORIES: MSZ-GL12NA

|  |                         |
|--|-------------------------|
| Anti-allergy Enzyme Filter   | □ MAC-408FT-E           |
| kumo touch™ RedLINK™ Wireless Controller   | □ MHK2                  |
| Deluxe MA Remote Controller <sup>1</sup>   | □ PAR-40MAAU            |
| Simple MA Controller <sup>1</sup>  | □ PAC-YT53CRAU-J        |
| Touch MA Controller <sup>1</sup>   | □ PAR-CT01MAU-SB        |
| Wired Remote Sensor  | □ M21EAA307             |
| Wireless Temperature and Humidity Sensor   | □ PAC-USWHS003-TH-1     |
| System Control Interface <sup>2</sup>  | □ MAC-334IF-E           |
| Wireless Interface 2   | □ PAC-USWHS002-WF-2     |
| Thermostat Interface   | □ PAC-US444CN-1         |
| Thermostat Interface   | □ PAC-US445CN-1         |
| kumo station® for kumo cloud®  | □ PAC-WHS01HC-E         |
| USNAP Interface  | □ PAC-WHS01UP-E         |
| IT Extender  | □ PAC-WHS01IE-E         |
| BACnet® and MODBUS® Interface  | □ PAC-UKPRC001-CN-1     |
| 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               |
| Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H  | □ COMBI                 |
| Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H  | □ GOBI-II               |
| Drain Pan Level Sensor   | □ SS610E                |
| (30A/600V/UL) [fits 2" X 4" utility box] - Black   | □ TAZ-MS303             |
| (30A/600V/UL) [fits 2" X 4" utility box] - White   | □ TAZ-MS303W            |
| Flexible Mini-Split Drain Hose   | □ DRX-16                |

<sup>1</sup> Requires MAC-334IF-E

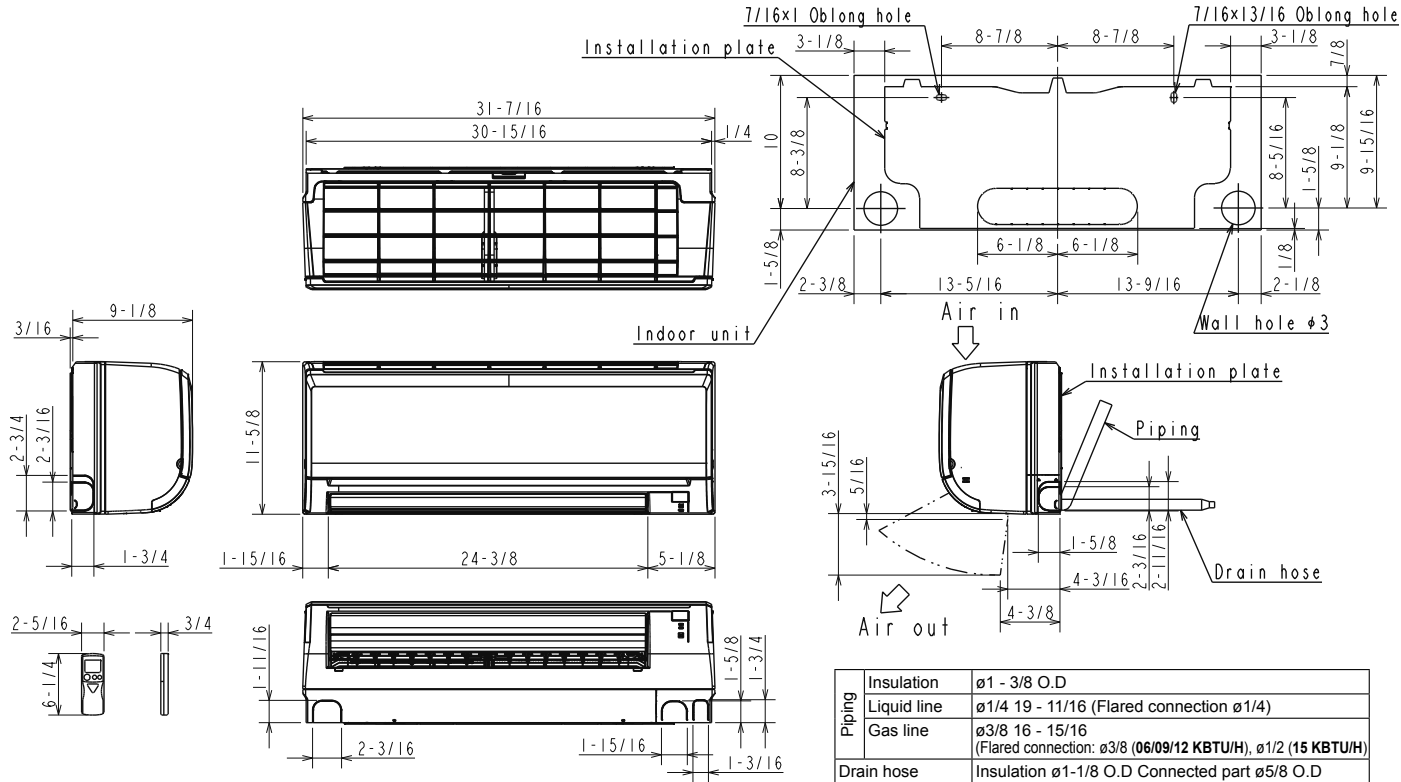
<sup>2</sup> Allows indoor units to connect to an MA Controller

## ACCESSORIES: MUZ-GL12NA

|   |                 |
|---|-----------------|
| 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-GL12NA

Unit: inch



Unit: inch

## REQUIRED SPACE

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

