

MLZ-KX12NL & SUZ-AA12NL
11,300 BTU/H CEILING-MOUNTED INDOOR UNIT
11,300 BTU/H HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....MLZ-KX12NL

Outdoor Unit.....SUZ-AA12NL



INDOOR UNIT FEATURES

- Adjustable fan speeds and vane directions
- Auto Vane Control: Outlet vanes can be moved left and right, and up and down using the remote controller. This improved air flow control feature solves the problem of drafts
- Built-in condensate lift mechanism (19.6"): Reduces the need for an additional pump to remove condensate water
- Econo Cool: Econo Cool temporarily and automatically adjusts the airflow based on heat exchanger temperature. The set temperature is increased slightly, which saves energy, while maintaining comfort.
- Fits between 16" joists spacing
- Multiple control options including: Hand-held Remote Controller (provided with unit), comfort app, third-party interfaces and both wired and wireless controllers
- Serviceable from the bottom (electrical and flare connections)
- Stylish, square design panel
- Washable antibacterial and deodorizing filter
- Weekly Timer Function: Easily set desired temperatures and operation ON/OFF times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.
- Wi-Fi enabled units pair with the Comfort app for complete control over temperature, fan speeds, modes, schedules, and more.

OUTDOOR UNIT FEATURES

- Blue Fin Coating: An anti-corrosion treatment applied to the aluminum fins of the heat exchanger of the outdoor unit to protect against corrosion caused by salt, sulfur, and other airborne contaminants, especially in coastal and industrial areas.
- High-performance grooved piping : High-performance grooved piping for increased heat exchange efficiency
- Hot-Start Technology: Hot-Start Technology ensures the fan only activates once the heat exchanger is warm, preventing cold air blasts during start-up.
- INVERTER-driven compressor: An inverter-driven compressor generates the precise capacity needed to maintain a temperature set point.
- Joint Lap DC Motor: Innovative Joint Lap DC Motor leads to high efficiency and reliability
- Outdoor unit directed power: The outdoor unit powers the indoor unit, and should a power outage occur, the system is automatically restarted when power returns
- Pulse Amplitude Modulation technology: Pulse Amplitude Modulation technology enhances energy efficiency by adjusting the power supply to optimize compressor performance, ensuring precise capacity control and reduced energy consumption.
- Quiet operation: Quiet operation units are as quiet as a typical conversation, and most indoor units are whisper quiet.
- Single-zone: One outdoor unit connects to one indoor unit to control the comfort in a single space.

SPECIFICATIONS: MLZ-KX12NL & SUZ-AA12NL

| | | | |
|-----------------------------|--|--------------------------------------|---|
| Cooling at 95F ¹ | Maximum Capacity | Btu/h | 11,300 |
| | Rated Capacity | Btu/h | 11,300 |
| | Minimum Capacity | Btu/h | 2,900 |
| | Maximum Power Input | W | 950 |
| | Rated Power Input | W | 950 |
| | Moisture Removal | Pints/h | 2.6 |
| | Sensible Heat Factor | - | 0.74 |
| Heating at 47F ² | Power Factor [208V / 230V] | % | 96 / 96 |
| | Maximum Capacity | Btu/h | 14,600 |
| | Rated Capacity | Btu/h | 14,600 |
| | Minimum Capacity | Btu/h | 5,000 |
| | Maximum Power Input | W | 1,330 |
| | Rated Power Input | W | 1,330 |
| Heating at 17F ³ | Power Factor [208V / 230V] | % | 96 / 96 |
| | Maximum Capacity | Btu/h | 9,600 |
| | Rated Capacity | Btu/h | 9,600 |
| | Maximum Power Input | W | 1,080 |
| Heating at 5F ⁴ | Rated Power Input | W | 1,080 |
| | Maximum Capacity | Btu/h | 7,700 |
| Heating at -4F ⁵ | Maximum Power Input | W | 1,128 |
| | Maximum Capacity | Btu/h | 6,400 |
| Efficiency | SEER2 | | 20.7 |
| | EER2 ¹ | | 11.8 |
| | HSPF2 [IV] | | 10 |
| | COP at 47°F ² | | 3.2 |
| | COP at 17°F at Maximum Capacity ³ | | 2.6 |
| | COP at 5°F at Maximum Capacity ⁴ | | 2 |
| | COP at -4°F at Maximum Capacity ⁵ | | 2.03 |
| Electrical | ENERGY STAR [®] Certified | | Yes |
| | Voltage, Phase, Frequency | V AC / V AC, , Hz | 208 / 230, 1, 60 |
| | Guaranteed Voltage Range | V AC | 198 - 253 |
| | Voltage: Indoor - Outdoor, S1-S2 | V AC | 208/230 |
| | Voltage: Indoor - Outdoor, S2-S3 | V DC | 12-24 |
| | Short-circuit Current Rating [SCCR] | kA | 5 |
| | Recommended Fuse/Breaker Size (Outdoor) | A | 15 |
| Indoor Unit | Recommended Wire Size [Indoor - Outdoor] | AWG | 14 |
| | MCA | A | 1 |
| | Fan Motor Output | W | 30 |
| | Airflow Rate at Cooling, Dry | CFM | 212, 258, 297, 332 |
| | Airflow Rate at Heating, Dry | CFM | 212, 272, 311, 350 |
| | Sound Pressure Level [Cooling] | dB (A) | 27, 32, 36, 40 |
| | Sound Pressure Level [Heating] | dB (A) | 26, 32, 36, 40 |
| | Drain Pipe Size O.D. | inch [mm] | 1-1/16 [26] |
| | Unit Dimensions (W x D x H) | inch x inch x inch [mm x mm x 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) | inch x inch x inch [mm x mm x mm] | 46-3/8 x 11-3/16 x 15-3/4 [1,177 x 284 x 400] |
| | Unit Weight | lbs [kg] | 34 [15.50] |
| | Package Weight | lbs [kg] | 42 [19] |
| | Fan Motor Type | | DC Motor |

NOTES

¹Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB)

²Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB)

³Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)

⁴Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)

⁵Heating at -4°F (Indoor: 70°F DB, 60°F WB // Outdoor: -4°F DB, -5°F 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 and automatically restarts at these temperatures.

SPECIFICATIONS: MLZ-KX12NL & SUZ-AA12NL

| | | | |
|---|--|--|--|
| Outdoor Unit | MCA | A | 14 |
| | MOCP | A | 23 |
| | Fan Motor Output | W | 55 |
| | Airflow Rate Cooling | CFM | 1,229 |
| | Airflow Rate Heating | CFM | 1,172 |
| | Defrost Method | | Reverse Cycle |
| | Coating on Heat Exchanger (Bluefin, Sea Coast) | | Yes, Yes |
| | Sound Pressure Level, Cooling ¹ | dB (A) | 49 |
| | Sound Pressure Level, Heating ² | dB (A) | 51 |
| | Compressor Type | | Twin Rotary |
| | Compressor Model | | SRB092FQFMC |
| | Compressor Oil [Type // Charge] | Type // oz | RM68EH // 11.83 |
| | External Finish Color | | Munsell No.3Y 7.8/1.1 |
| | Base Pan Heater | | Optional |
| | Unit Dimensions (W x D x H) | inch x inch x inch [mm x mm x mm] | 31-1/2 x 11-1/4 x 21-5/8 [800 x 285 x 550] |
| | Package Dimensions (W x D x H) | inch x inch x inch [mm x mm x mm] | 37-1/16 x 15 x 24-13/16 [940 x 380 x 630] |
| | Unit Weight | lbs [kg] | 81 [37] |
| | Package Weight | lbs [kg] | 88.18 [40] |
| | ODU Operating Temp. Range | Cooling Intake Maximum Air Temp [Maximum / Minimum*] | °FDB |
| Cooling Thermal Lock-out / Re-start Temperatures** | | °FDB | -1 / 3 |
| Heating Air Temp [Maximum / Minimum] | | °FDB, °FWB / °FDB, °FWB | 75, 65 / -4, -5 |
| Heating Thermal Lock-out / Re-start Temperatures** | | °FDB | -14 / -4 |
| Refrigerant | Type | | R454B |
| | Pre-Charged Refrigerant Amount | lbs | 2 |
| | Maximum Pre-Charged Piping Length | ft [m] | 65 [7.60] |
| | Additional Refrigerant Charge Per Additional Piping Length | oz/ft | 0 |
| Piping | Gas Pipe Size O.D. [Flared] | inch [mm] | 3/8 [9.52] |
| | Liquid Pipe Size O.D. [Flared] | inch [mm] | 1/4 [6.35] |
| | Maximum Piping Length | ft [m] | 65 [19.80] |
| | Maximum Height Difference | ft [m] | 40 [12.10] |
| | Maximum Number of Bends | | 10 |
| NOTES ¹ Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB) ² Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB) ³ Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB) ⁴ Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB) ⁵ Heating at -4°F (Indoor: 70°F DB, 60°F WB // Outdoor: -4°F DB, -5°F 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 and automatically restarts at these temperatures. | | | |

INDOOR UNIT ACCESSORIES: MLZ-KX12NL

| | | |
|--|--|-------------------|
| Wireless Remote Controller | Lockdown Bracket for Wireless Handheld Remote Controllers | RCMKP1CB |
| | RedLINK Wireless Remote Controller | MHK2 |
| Condensate | Blue Diamond Advanced Mini Condensate Pump w Reservoir Sensor 208230V recommended | X87-721 |
| | Blue Diamond MaxiBlue Advanced Mini Condensate Pump w Reservoir Sensor 110V up to 48000 BTUH recommended | X87-711 |
| | Blue Diamond MegaBlue Advanced Condensate Pump w Reservoir Sensor | X87-835 |
| | Blue Diamond MicroBlue Mini Condensate Pump 110208230V up to 18000 BTUH | X86-003 |
| | Blue Diamond Sensor Extension Cable 15 Ft | C13-103 |
| | Refco Condensate Pump 100-240 VAC up to 120000 BTUH | COMBI |
| | Saueremann Condensate Pump | SI30-230 |
| Control Interface | Airzone Wired Blueface Controller Black | AZZBSBLUEZEROCN |
| | Airzone Wired Blueface Controller White | AZZBSBLUEZEROCB |
| | Airzone Wireless Lite Controller Black | AZZBSLITERN |
| | Airzone Wireless Lite Controller White | AZZBSLITERB |
| | Airzone Wireless Think Controller Black | AZZBSTHINKRN |
| | Airzone Wireless Think Controller White | AZZBSTHINKRB |
| | IT Extender for kumo station | PAC-WHS01IE-E |
| | kumo station for the Comfort app | PAC-WHS01HC-E |
| | M-Net I/O Control Interface for M-Series ² | MAC-334IF-E |
| | Procon BACnet and Modbus Interface | PAC-UKPRC001-CN-1 |
| | Thermostat Interface for 3rd Party Thermostats | PAC-US445CN-1 |
| Wireless Interface Adapter for the Comfort app | PAC-USWHS002-WF-2 | |
| Filter | Anti-allergy Enzyme Filter | MAC-408FT-E |
| | Microparticle Filter | MAC-EMF515FT-E |
| 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 |
| Power Supplies and Auxiliary Components | Backup Heat Relay Kit Adapter for CN24 or CN152 Connector | CN24RELAY-KIT-CM3 |
| Wired Remote Controller | Deluxe Wired MA Remote Controller ¹ | PAR-42MAAUB |
| | Simple Direct Wired Remote Controller | PAC-SDW01RC-1 |
| | Simple MA Remote Controller ¹ | PAC-YT53CRAU-J |
| | Touch MA Wired Remote Controller ¹ | PAR-CT01MAU-SB |
| Remote Sensor | Remote Temperature Sensor for MFZ MLZ and MSZ models | M21EAA307 |
| | Wireless temperature and humidity sensor for the Comfort app | PAC-USWHS003-TH-1 |
| Drain Hose | Flexible Mini-Split Drain Hose | DRX-16 |
| Disconnect Switch | 30A600VUL fits 2 X 4 utility box - Black | TAZ-MS303 |
| | 30A600VUL fits 2 X 4 utility box - White | TAZ-MS303W |
| Grille | Grille (required) | MLP-449WU |

NOTES

²Allows IDU Connection to MA Controller:

Deluxe MA Remote Controller

Simple MA Controller

Touch MA Controller

¹Requires MAC-334IF-E Adapter

¹Requires MAC-334IF-E Adapter

¹Requires MAC-334IF-E Adapter

OUTDOOR UNIT ACCESSORIES: SUZ-AA12NL

| | | |
|-------------------------|---|----------------|
| Control/Service Tool | M- & P-Series Maintenance Tool Cable Set | M21EC0397 |
| | Maintenance Tool Interface | PAC-USCMS-MN-1 |
| Mounting Pad | Condensing Unit Mounting Pad 16 x 36 x 3 | ULTRILITE1 |
| Mini-Split Wire | 14 Gauge 4 wire Armored MiniSplit Cable250 ft roll | SW144-250 |
| | 14 Gauge 4 wire Armored MiniSplit Cable50 ft roll | SW144-50 |
| | 14 Gauge 4 wire MiniSplit Cable250 ft roll | S144-250 |
| | 14 Gauge 4 wire MiniSplit Cable50 ft roll | S144-50 |
| Stand | 18 Single Fan Stand | QSMS1801M |
| | 24 Single Fan Stand | QSMS2401M |
| | Condenser Wall Bracket | QSWB2000M-1 |
| | Condenser Wall Bracket - Stainless Steel Finish | QSWBSS |
| | Outdoor Unit 3-14 inch Mounting Base Pair - Plastic | DSD-400P |
| | Outdoor Unit Stand 12 High | QSMS1201M |
| Hail Guards | Hail Guard | HG-B4 |
| Optional Defrost Heater | Base Heater | MAC-640BH-U1 |
| Air Outlet Guide | Air Outlet Guide | MAC-881SG-E |
| Port Adaptor | Adaptor 12 x 38 | PAC-SK88RJ-E |
| Drain Socket | Drain Socket | MAC-871DS |
| Snow/Rain Diverter | SnowRain Diverter | SRD-1 |
| Muffler | Muffler for Connection to SLZ | MAC-001MF-E |
| Centralized Drain Pan | Centralized Drain Pan | PAC-SG63DP-E |
| NOTES | | |

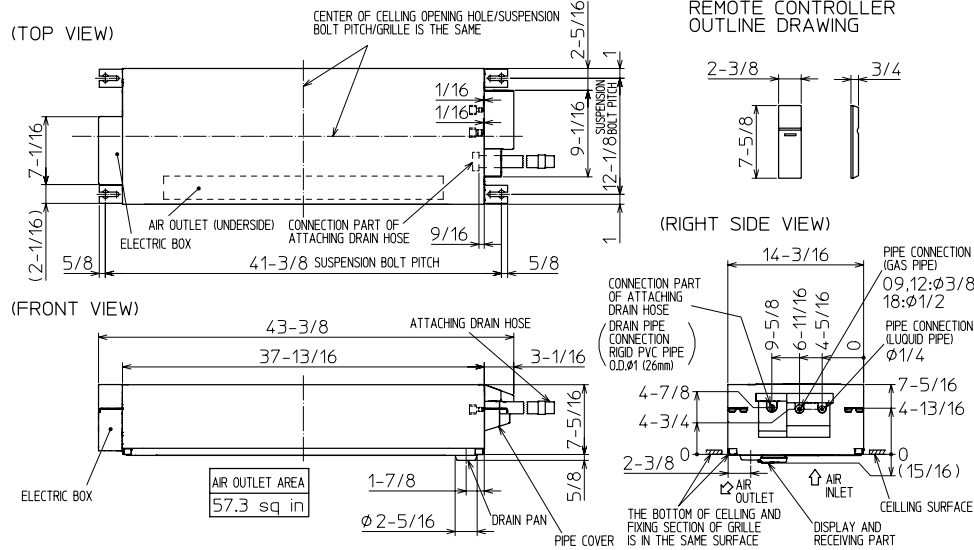
INDOOR UNIT DIMENSIONS: MLZ-KX12NL

MLZ-KX09NL- U1

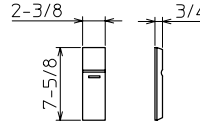
MLZ-KX12NL- U1

MLZ-KX18NL- U1

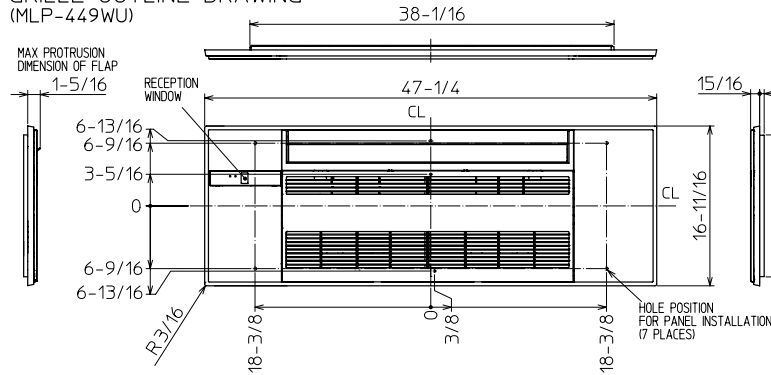
INDOOR UNIT OUTLINE DRAWING



REMOTE CONTROLLER OUTLINE DRAWING



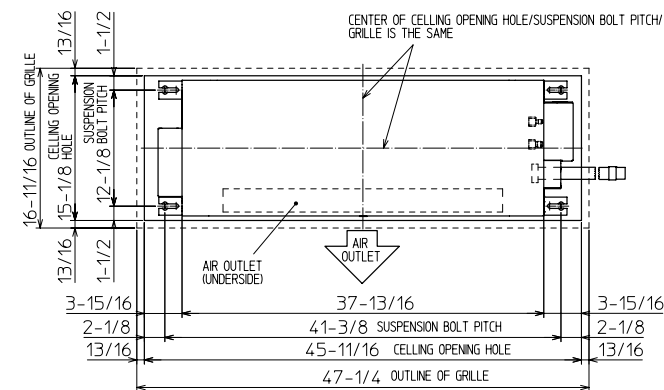
GRILLE OUTLINE DRAWING (MLP-449WU)



| | KX09/12NL | KX18NL | |
|-----------------------|---|------------------------|------------------------|
| 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 φ1-1/4 φ1 18-7/8 | | |
| DRAIN PIPE CONNECTION | RIGID PVC PIPE O.D. φ1 (26mm) | | |

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

INDOOR UNIT DETAIL VIEW (TOP VIEW)



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

