

Job Name:

System Reference:

Date:

MRCH2



MRCH2 REMOTE CONTROLLER SPECIFICATIONS

- Touch panel, Backlit, easy-to-read display
- Used RedLINK™ 3.0 wireless technology
 - Not compatible with MHK1, MOS1, and MCCH1 RedLINK 2.0 wireless technology environment.
- User functions allow user to set:
 - On/Off
 - Operation modes cool, heat, drying, fan
 - Set temperature (separate dual set points for heat and cool)
 - Fan speed setting
 - Airflow direction
- Set temperature range limits (dependent on the system connected):
 - Cooling from 50° to 99° F
 - Heating from 40° to 90° F
 - Auto from 50° to 90° F with dual temperature setting
- MHK2 Scheduling options:
 - No Schedule
 - MO-SU = Every day the same
 - MO-FR, SA, SU = 5-1-1 schedule
 - MO-FR, SA-SU = 5-2 schedule
 - Each Day = Every day individual
 - Allow kumo cloud to be schedule holder
- Hold function
- Temporary or Permanent schedule override
- Lockout:
 - On
 - Off
 - Mode
 - Fan Speed
 - Set point
 - Vane Direction
- Day/Time display with a 12 or 24-hour clock
- Supports both Fahrenheit and Celsius
- RedLINK™ Wireless Connection Status
- Filter sign display
- Diagnostics: Displays and records error codes
- Adjustable auto mode deadband

- Space temperature offset adjustment
- Space humidity offset adjustment
- Hide (on screen only)
 - Indoor temperature
 - Indoor humidity
- Temperature Sensing Source
 - MHK2
 - Indoor Unit
 - RedLINK Wireless Indoor Air Sensor (IAS)
 - Average of MHK2 and RedLINK Wireless Indoor Air Sensor (IAS)
- Indoor Humidity Source
 - MHK2
 - RedLINK Wireless Indoor Air Sensor (IAS)
 - Average of MHK2 and RedLINK Wireless Indoor Air Sensor (IAS)
- Improved indoor unit function code list
 - Indoor unit type
 - Expanded to 28 indoor unit codes
- Reset to factory default
- Uses two “AA” alkaline batteries (included)
- Dimensions: 4-5/64” x 4-5/64” x 1-1/16” (104 x 104 x 27 mm)
- Operating Ambient Temperature: 32° to 120° F (0° to 48.9° C)
- Operating Relative Humidity: 5% to 90%

MIFH2 WIRELESS RECEIVER SPECIFICATIONS:

- Included in MHK2 Kit
- Mounts next to or near indoor units to allow MRCH2 Remote Controller operation
- Connects to indoor unit control board with MRC2 Cable
- Dimensions: 3-3/32” H x 1-3/4” W x 39/64” D (74.8 x 44.4 x 15.4 mm)
- Operating Ambient Temperature: -40° to 165° F (-40° to 73.9° C)
- Operating Relative Humidity: 5% to 95%

MRC2 CABLE

- Included in MHK2 Kit in the MIFH2 box
- Connects MIFH2 Wireless Receiver to the CN105 connector on indoor unit control board
- Length: 39-23/64" (1 m)

MODEL: MHK2 kumo touch™

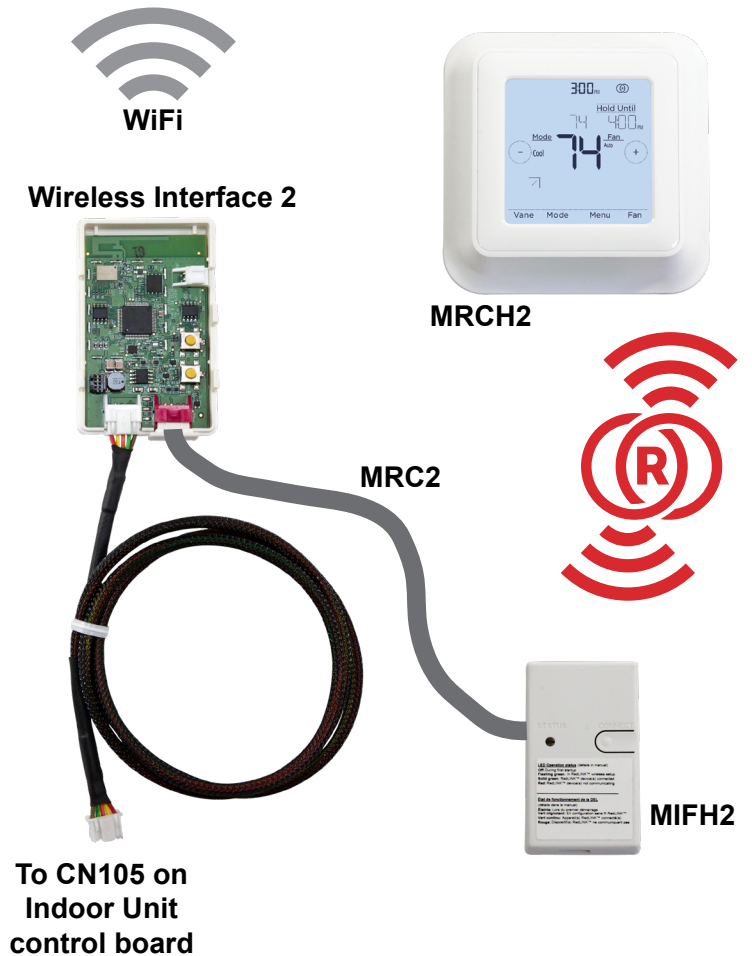


kumo cloud & MHK2

- kumo cloud and MHK2 can work together on the same indoor unit with the following devices:
 - Wireless Interface 2
 - PAC-USWHS002-WF-2
 - Wireless Interface 2 has an additional CN105 connector on it
 - MHK2 kit
- Compatibility with indoor units:
 - All CITY MULTI®
 - All P-Series
 - All M-series

Accessories

- Wireless Interface 2 (PAC-USWHS002-WF-2)
- CN105 IT Extender (PAC-WHS01E-E)
- RedLINK 3.0 Wireless Indoor Air Sensor
- Not sold by Mitsubishi Electric Trane HVAC LLC
- Honeywell (C7189R2002-2/U)



Specifications are subject to change without notice.
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 M_Submittal_MHK2 kumo touch 03-2020

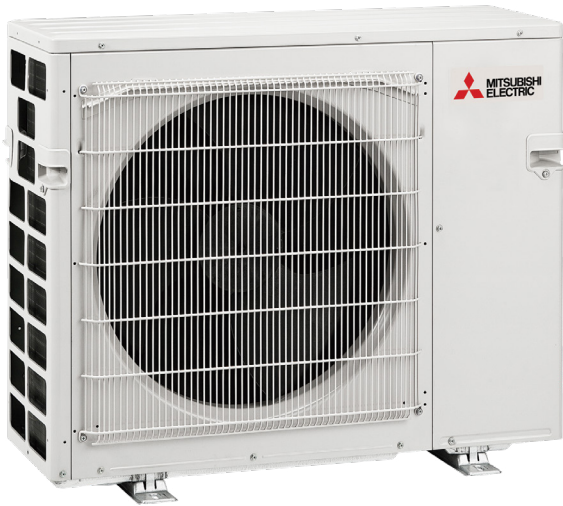
MXZ-4C36NA3 3-TON MULTI-ZONE INVERTER HEAT-PUMP SYSTEM



Job Name:

System Reference:

Date:



FEATURES

- Variable speed INVERTER-driven compressor
- Optional base pan heater
- Quiet outdoor unit operation as low as 54 dB(A)
- High pressure protection
- Compressor thermal protection
- Compressor overcurrent detection
- Fan motor overheating/voltage protection

SPECIFICATIONS: MXZ-4C36NA3

| | | | | |
|--|--|---------------------------|--|------------------|
| Cooling ¹ (Non-Ducted // Mix // Ducted) | Maximum Capacity | BTU/H | 36,400 // 36,400 // 36,400 | |
| | Rated Capacity | BTU/H | 35,400 // 34,900 // 34,400 | |
| | Minimum Capacity | BTU/H | 11,700 // 11,500 // 11,300 | |
| | Maximum Power Input | W | 3,960 // 3,960 // 3,960 | |
| | Rated Power Input | W | 3,760 // 3,850 // 3,940 | |
| | Power Factor (208V, 230V) | % | 99.0, 99.0 // 99.0, 99.0 // 99.0, 99.0 | |
| Heating at 47°F ² (Non-Ducted // Mix // Ducted) | Maximum Capacity | BTU/H | 43,000 // 43,000 // 43,000 | |
| | Rated Capacity | BTU/H | 36,000 // 35,200 // 34,400 | |
| | Minimum Capacity | BTU/H | 18,300 // 18,800 // 19,300 | |
| | Maximum Power Input | W | 4,020 // 4,020 // 4,020 | |
| | Rated Power Input | W | 3,020 // 3,060 // 3,100 | |
| | Power Factor (208V, 230V) | % | 98.7, 98.7 // 98.8, 98.8 // 98.8, 98.8 | |
| Heating at 17°F ³ (Non-Ducted // Mix // Ducted) | Maximum Capacity | BTU/H | 26,600 // 26,600 // 26,600 | |
| | Rated Capacity | BTU/H | 22,400 // 22,400 // 22,400 | |
| | Maximum Power Input | W | 3,440 // 3,490 // 3,540 | |
| | Rated Power Input | W | 2,300 // 2,470 // 2,640 | |
| Heating at 5°F ⁴ (Non-Ducted // Mix // Ducted) | Maximum Capacity | BTU/H | 24,000 // 24,000 // 24,000 | |
| | Maximum Power Input | W | 3,320 // 3,280 // 3,240 | |
| Efficiency (Non-Ducted // Mix // Ducted) | SEER | | 19.2 // 17.6 // 16.0 | |
| | EER ¹ | | 9.41 // 9.07 // 8.73 | |
| | HSPF (IV) | | 11.0 // 10.4 // 9.8 | |
| | COP at 47°F ² | | 3.5 // 3.37 // 3.25 | |
| | COP at 17°F at Maximum Capacity ³ | | 2.27 // 2.24 // 2.2 | |
| | COP at 5°F at Maximum Capacity ⁴ | | 2.12 // 2.14 // 2.17 | |
| | ENERGY STAR [®] Certified | | No // No // No | |
| Electrical | Electrical Power Requirements | 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 | A | 25 | |
| | Recommended Wire Size | AWG | 14 | |
| | Minimum Circuit Ampacity | A | 23.1 | |
| | Maximum Overcurrent Protection | A | 25 | |
| | Fan Motor Full Load Amperage | A | 2.43 | |
| Outdoor unit | Airflow Rate (Cooling / Heating) | CFM | 2,287 / 2,382 | |
| | Refrigerant Control | | LEV | |
| | Defrost Method | | Reverse Cycle | |
| | Heat Exchanger Type | | Plate fin coil | |
| | Sound Pressure Level, Cooling ¹ | dB(A) | 54 | |
| | Sound Pressure Level, Heating ² | dB(A) | 56 | |
| | Compressor Type | | DC INVERTER-driven Twin Rotary | |
| | Compressor Model | | SNB220FQGMC | |
| | Compressor Rated Load Amps | A | 12 | |
| | Compressor Locked Rotor Amps | A | 13.7 | |
| | Compressor Oil Type // Charge | oz. | FV50S // 23.7 | |
| | Base Pan Heater | | Optional | |
| | Unit Dimensions | W: In. [mm] | | 37-13/32 [950] |
| | | D: In. [mm] | | 13 [330] |
| | | H: In. [mm] | | 31-11/32 [796] |
| | Package Dimensions | W: In. [mm] | | 40-15/16 [1,040] |
| | | D: In. [mm] | | 17-11/16 [450] |
| H: In. [mm] | | | 40-11/16 [1,033] | |
| Unit Weight | Lbs.[kg] | | 139 [63] | |
| Package Weight | Lbs.[kg] | | 159 [72] | |
| Outdoor unit operating temperature range | Cooling Intake Air Temp (Maximum / Minimum ⁵) | °FDB | 115 / 14 | |
| | Cooling Thermal Lock-out / Re-start Temperatures | °FDB | 10.4 / 14 | |
| | Heating Intake Air Temp (Maximum / Minimum) | °FWB | 65 / 5 | |
| | Heating Thermal Lock-out / Re-start Temperatures | °FDB | 1.4 / 5 | |
| Refrigerant | Charge | Lbs, oz | 6.0, 13.0 | |
| | Chargeless Piping Length | Ft. [m] | 98.0 [30.0] | |
| | Additional Refrigerant Charge Per Additional Piping Length | oz./Ft. [g/m] | 0.216 [20] | |

NOTES:

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

¹Cooling (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 WB
²Heating at 47°F (Indoor // Outdoor) °F 70 DB, 60 WB // 47 DB, 43 WB
³Heating at 17°F (Indoor // Outdoor) °F 70 DB, 60 WB // 17 DB, 15 WB

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

*Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

⁵ 5°F DB - 115°F DB when optional wind baffles are installed

For actual capacity performance based on indoor unit type and number of indoor units connected, please refer to MXZ Operational Performance.

Although the maximum connectable capacity is 130%, the outdoor unit cannot provide more than 100% of the rated capacity. Please utilize this over capacity capability for load shedding or applications where it is known that all connected units will NOT be operating at the same time.

SPECIFICATIONS: MXZ-4C36NA3

| | | | |
|------------------------|--|---------|--|
| Indoor unit connection | Maximum Number of Connected IDU | | 4 |
| | Minimum Number of Connected IDU | | 2 |
| | Minimum connected capacity | BTU/H | 12,000 |
| | Maximum connected capacity | BTU/H | 42,000 |
| Piping | Liquid Pipe Size O.D. (Flared) | In.[mm] | A,B,C,D: 1/4 [A,B,C,D: 6.35] |
| | Gas Pipe Size O.D. (Flared) | In.[mm] | A: 1/2; B,C,D: 3/8 [A: 12.72; B,C,D: 9.52] |
| | Total Piping Length | Ft. [m] | 230 [70] |
| | Maximum Height Difference, ODU above IDU | Ft. [m] | 49 [15] |
| | Maximum Height Difference, ODU below IDU | Ft. [m] | 49 [15] |
| | Farthest Piping Length from ODU to IDU | Ft. [m] | 82 [25] |
| | Maximum Number of Bends for IDU | | 70 |

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

*Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

^A 5°F DB - 115°F DB when optional wind baffles are installed

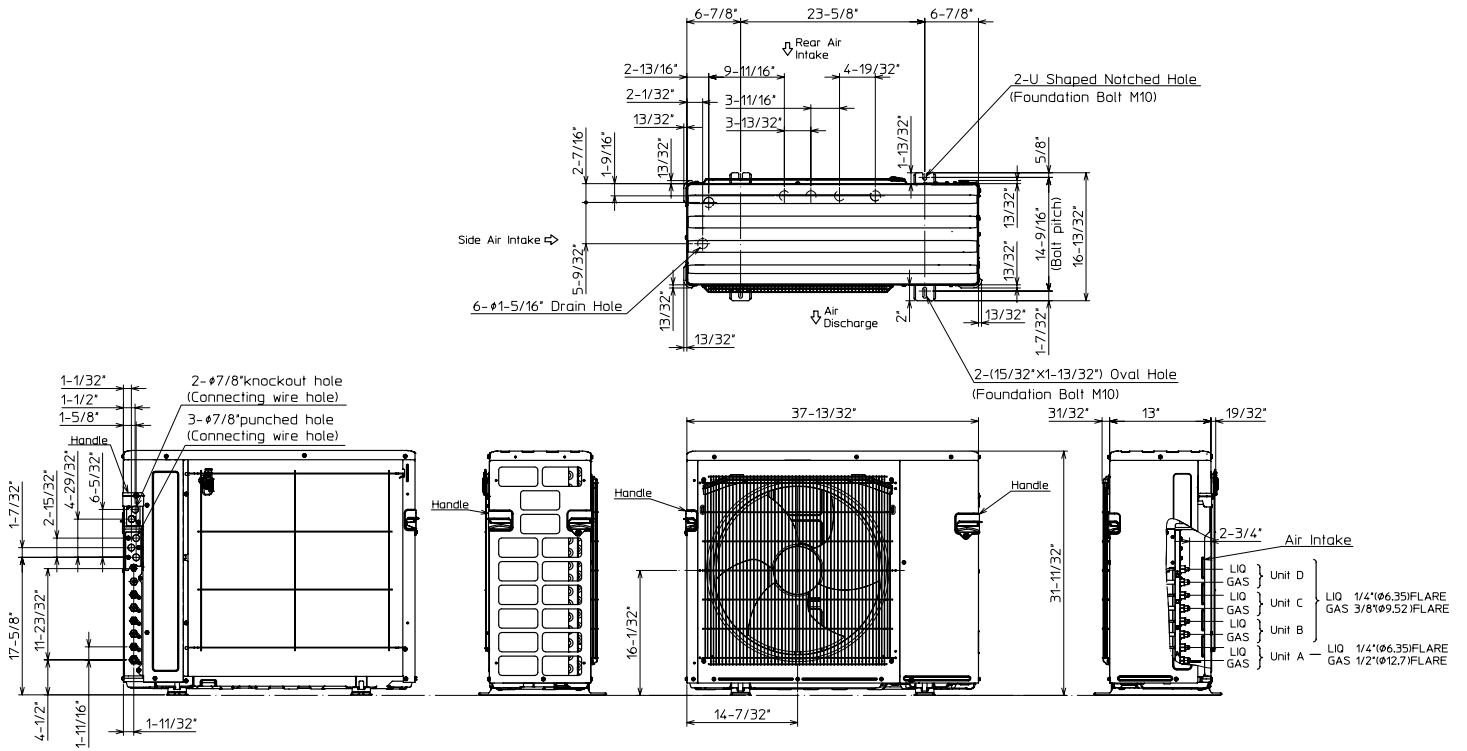
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OUTDOOR UNIT ACCESSORIES: MXZ-4C36NA3

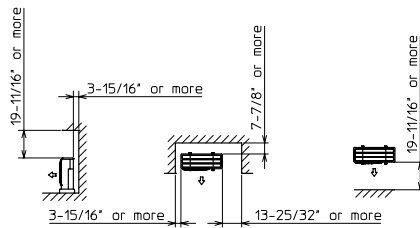
| | | |
|-------------------------|--|---------------|
| Ball Valve | Refrigeration Ball Valve - 1/2" | BV12FFSI2 |
| | Refrigeration Ball Valve - 1/4" | BV14FFSI2 |
| | Refrigeration Ball Valve - 3/8" | BV38FFSI2 |
| | Refrigeration Ball Valve - 5/8" | BV58FFSI2 |
| Control Wire | M-Net Control Wire, 1,000' Roll (16-AWG, Standard, Twisted Pair, Shielded, Jacketed- Plenum rated) | CW162S-1000 |
| | M-Net Control Wire, 250' Roll (16-AWG, Standard, Twisted Pair, Shielded, Jacketed- Plenum rated) | CW162S-250 |
| Drain Socket | Drain Socket | PAC-SG60DS-E |
| Hail Guards | Hail Guard | HG-A9 |
| M-NET Converter | M-NET Converter | PAC-IF01MNT-E |
| 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 |
| | Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic | DSD-400P |
| Optional Defrost Heater | Optional Defrost Heater | PAC-645BH-E |
| Port Adapter | Adaptor: 1/2" x 3/8" | MAC-A455JP-E |
| | Adaptor: 1/2" x 5/8" | MAC-A456JP-E |
| | Adaptor: 3/8" x 1/2" | MAC-A454JP-E |
| | Adaptor: 3/8" x 5/8" | PAC-SG76RJ-E |
| 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 Stand — 12" High | QSMS1201M |

OUTDOOR UNIT DIMENSIONS: MXZ-4C36NA3

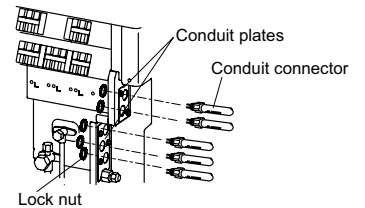
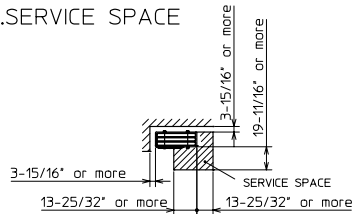
Unit: inch (mm)



1. FREE SPACE



2. SERVICE SPACE



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FORM# MXZ-4C36NA3 - 202206



SUBMITTAL DATA: SEZ-KD09NA4**
9,000 BTU/H HORIZONTAL-DUCTED INDOOR UNIT FOR MXZ MULTI-ZONE HEAT-PUMP SYSTEMS

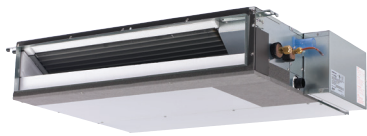
Job Name:

System Reference:

Date:

****APPLIES TO INDOOR UNIT:**

- SEZ-KD09NA4
- SEZ-KD09NA4.TH
- SEZ-KD09NAR1.TH
- SEZ-KD09NA4R1.TH



Indoor Unit: SEZ-KD09NA4**

GENERAL FEATURES

- Horizontal-ducted indoor unit for concealed applications
- Ultra thin body: 7-7/8" high
- Built-in drain mechanism for condensate removal; lifts to 21-11/16"
- Air filter is included with indoor unit
- Quiet operation — as low as 23 dBA
- Indoor unit powered from outdoor unit using A-Control
- AUTO fan speed control
- Automatic restart following a power outage
- Limited warranty: five years parts and seven years compressors

ACCESSORIES
Indoor Unit

- Filter Box with MERV 8 Filters (FBL1-1)
- Bottom Return Plate (BRP-1)

Controller Options

- Wireless Wall-mounted Remote Controller Kit (MHK1)*
- Portable Central Controller (MCCH1)*
- Outdoor Air Sensor (MOS1)*
- Wired Wall-mounted Controller (PAR-31MAA)*
- Simple MA Remote Controller (PAC-YT53CRAU)*

*See Submittal for information on each option.

- Remote Temperature Sensor (M21-JKO-307)
- Hand-held Wireless Remote Controller (PAR-FL32MA; req. PAR-FA32MA-E)
- Wireless Signal Receiver PAR-FA32MA (for PAR-FL32MA)
- Lockdown Bracket for Hand-held Controller (RCMKP1CB)

SPECIFICATIONS

Cooling Capacity* 8,100 Btu/h
 Heating Capacity at 47°F* 10,900 Btu/h

*** Rating Conditions per AHRI Standard**

Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB
 Cooling | Outdoor: 95° F (35° C) DB / 75° F (24° C) WB
 Heating at 47°F | Indoor: 70° F (21° C) DB / 60° F (16° C) WB
 Heating at 47°F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

(For data on specific indoor units [all ducted, all non-ducted, and both ducted and non-ducted] combinations, see the MXZ Technical and Service Manual.)

Electrical Requirements

Power Supply 208 / 230V, 1-Phase, 60 Hz
 MCA 1 A

Voltage

Indoor - Outdoor S1-S2 AC 208 / 230V
 Indoor - Outdoor S2-S3 DC ±24V

Blower Motor (ECM) 0.51 F.L.A.

Airflow (Lo - Med - Hi)

Cooling 194 - 247 - 317 Dry CFM
 174 - 222 - 285 Wet CFM
 Heating 194 - 247 - 317 CFM

Sound Pressure Level (Lo - Med - Hi)

Cooling 23 - 26 - 30 dB(A)
 Heating 23 - 26 - 30 dB(A)

| DIMENSIONS | UNIT INCHES / MM |
|------------|------------------|
| W | 31-1/8 / 790 |
| D | 27-9/16 / 700 |
| H | 7-7/8 / 200 |

Weight 42 lbs. / 19 kg
 External Finish Galvanized-steel Sheets
 Field Drainpipe Size O.D. 1-1/4" / 32 mm

Refrigerant Type R410A
 Refrigerant Pipe Size O.D.

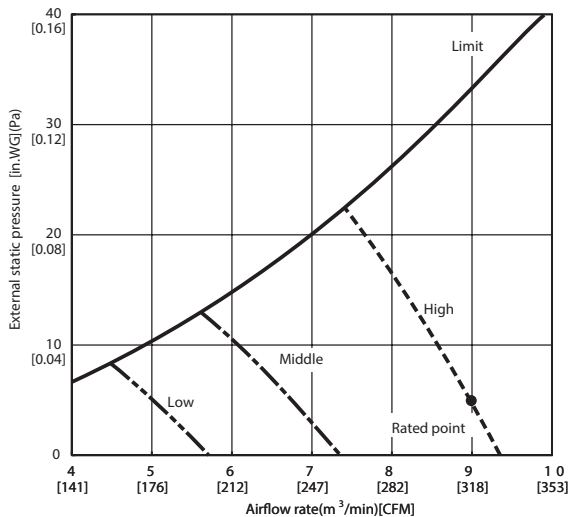
Gas Side 3/8" / 9.52 mm
 Liquid Side 1/4" / 6.35 mm
 Connection Method Flared



SEZ-KD09NA4** INDOOR FAN PERFORMANCE AND CORRECTED AIR FLOW CHARTS

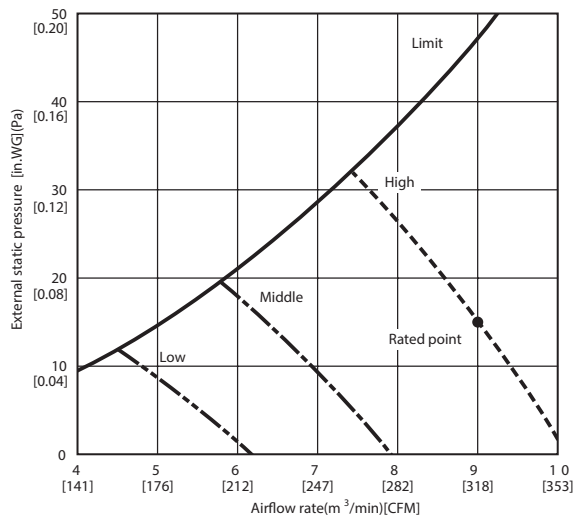
SEZ-KD09NA4**

(External static pressure 0.02[in.WG](5P a) 208/230V 60Hz



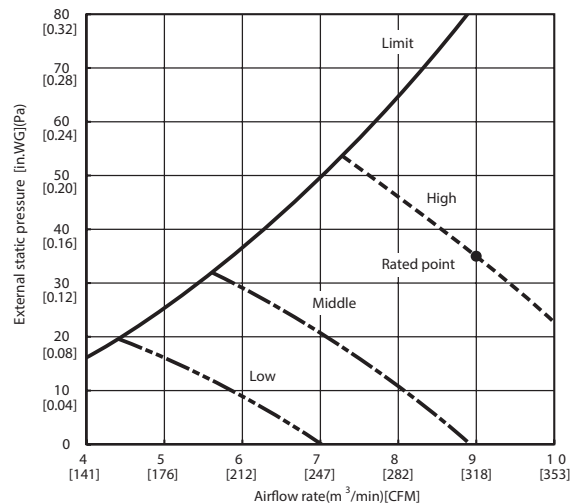
SEZ-KD09NA4**

(External static pressure 0.06[in.WG](15P a) 208/230V 60Hz



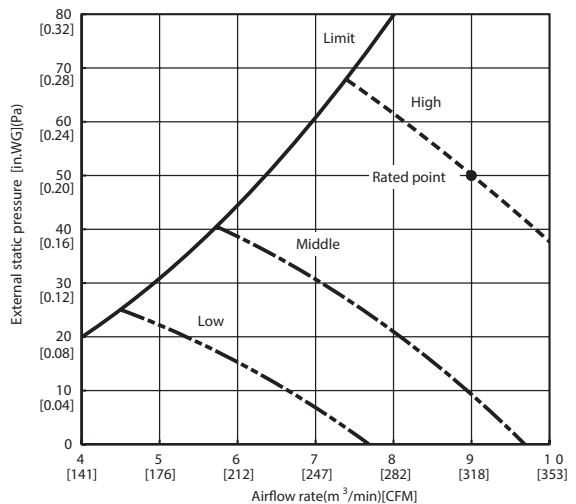
SEZ-KD09NA4**

(External static pressure 0.14[in.WG](35P a) 208/230V 60Hz



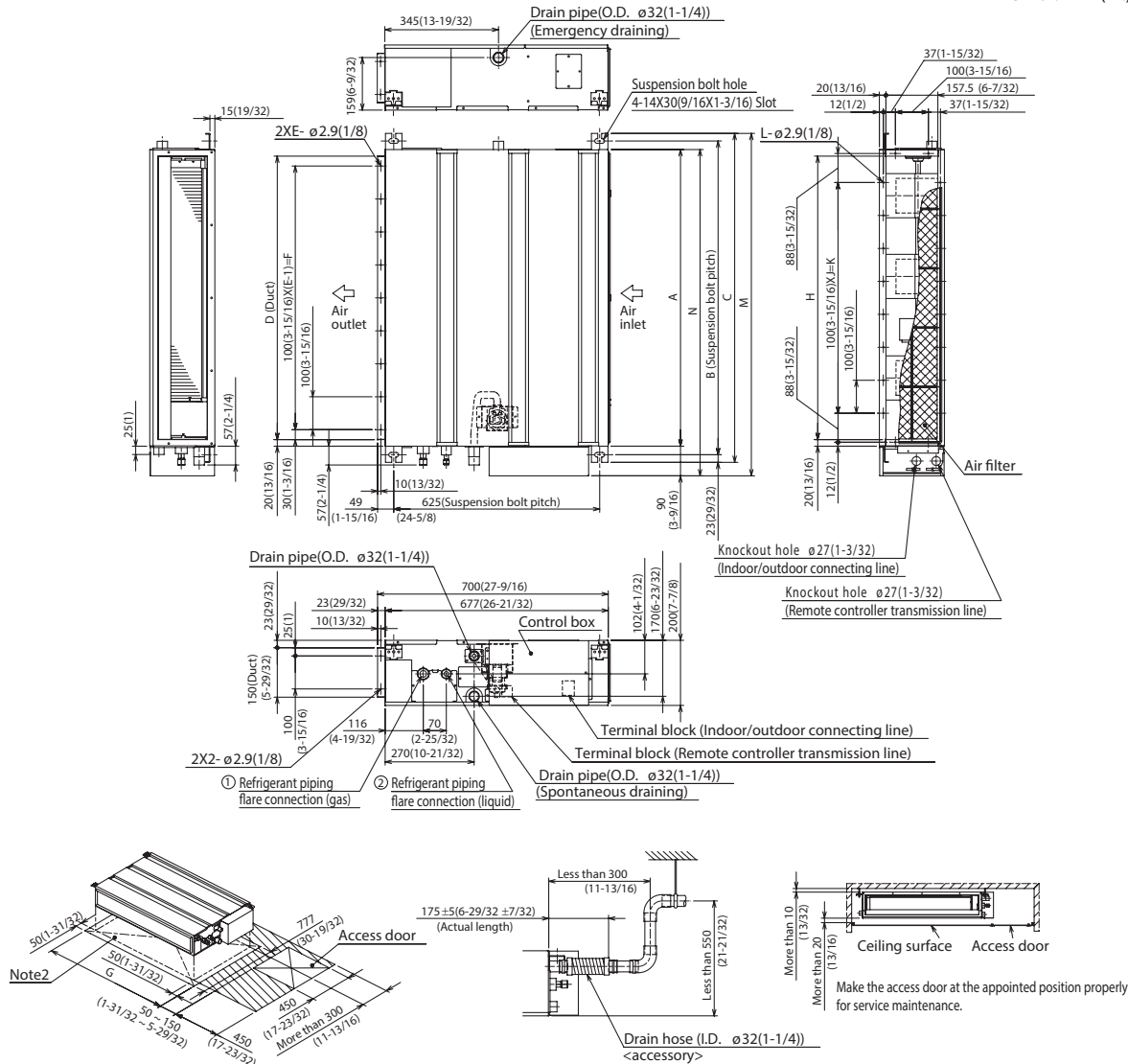
SEZ-KD09NA4**

(External static pressure 0.20[in.WG](50P a) 208/230V 60Hz



DIMENSIONS: SEZ-KD09NA4**

Unit : mm(in.)



Required space for service and maintenance

| Model | mm(in.) | | | | | | | | | | | | | | mm(in.) | |
|---------------|-------------------|------------------|-------------------|------------------|----|------------------|------------------|------------------|---|-------------------|----|--------------------|------------------|------------------|------------------|--|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | ① Gas pipe | ② Liquid pipe | |
| SEZ-KD09NA4** | 700 (27-9/16) | 752 (29-5/8) | 798 (31-7/16) | 660 (26) | 7 | 600 (23-5/8) | 800 (31-1/2) | 660 (26) | 5 | 500 (19-11/16) | 16 | 839 (33-1/16) | 790 (31-1/8) | $\phi 9.52(3/8)$ | $\phi 6.35(1/4)$ | |
| SEZ-KD12NA4** | 900 (35-7/16) | 952 (37-1/2) | 998 (39-5/16) | 860 (33-7/8) | 9 | 800 (31-1/2) | 1000 (39-3/8) | 860 (33-7/8) | 7 | 700 (27-9/16) | 20 | 1039 (40-29/32) | 990 (39) | | | |
| SEZ-KD15NA4** | 1100 (43-5/16) | 1152 (45-3/8) | 1198 (47-3/16) | 1060 (41-3/4) | 11 | 1000 (39-3/8) | 1200 (47-1/4) | 1060 (41-3/4) | 9 | 900 (35-7/16) | 24 | 1239 (48-25/32) | 1190 (46-7/8) | | | |

- Note1. Use M10 screw for the suspension bolt (field supply).
 2. Keep the service space for the maintenance at the bottom.
 3. This chart indicates for SEZ-KD15NA4** model, which has 3 fans.
 SEZ-KD09, 12NA4** models have 2 fans.
 SEZ-KD18NA4** models have 4 fans.
 4. In case an inlet duct is used, remove the air filter (supply with the unit), then install the filter (field supply) at suction side.



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