

# MXZ-SM36NAMHZ2 3-TON MULTI-ZONE INVERTER HEAT-PUMP SYSTEM



Job Name:

System Reference:

Date:



## FEATURES

- Compatible with M- and P-Series and CITY MULTI® indoor units. Branch box required for connection with M- and P-Series
- Variable speed INVERTER-driven compressor
- Seacoast protection on heat exchanger and base panel (rated for 2,000 hrs in accordance with ASTM B117 testing)
- Thermal Differential 1°F (with PAC-MKA32/52BC only)
- Built-in base pan heater
- Quiet outdoor unit operation, rated sound pressure as low as 49 dB(A)
- High pressure protection
- Compressor thermal protection
- Compressor overcurrent detection
- Fan motor overheating/voltage protection
- Hyper-heating performance offers 100% heating capacity at 5°F and 75% heating capacity at -13°F
- ENERGY STAR® certified (non-ducted, mixed & ducted)

ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.

Specifications are subject to change without notice.

© 2023 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

# SPECIFICATIONS: MXZ-SM36NAMHZ2

|   |   |                           |   |
|---|---|---------------------------|---|
| Cooling <sup>1</sup><br>(Non-Ducted // Mix (Mid-static) // Ducted<br>(Mid-static)   Mix (High-static) // Ducted<br>(High-static))         | Maximum Capacity  | BTU/H                     | 36,000 // 36,000 // 36,000   36,000 // 36,000                     |
|   | Rated Capacity  | BTU/H                     | 36,000 // 36,000 // 36,000   36,000 // 36,000                     |
|   | Minimum Capacity  | BTU/H                     | 14,000 // 14,000 // 14,000   14,000 // 14,000                     |
|   | Maximum Power Input   | W                         | 2,400 // 2,700 // 3,000   2,795 // 3,190                          |
|   | Rated Power Input   | W                         | 2,400 // 2,700 // 3,000   2,795 // 3,190                          |
|   | Power Factor (208V, 230V)   | %                         | 98.5, 98.5 // 98.5, 98.5 // 98.5, 98.5   98.5, 98.5 // 98.5, 98.5 |
| Heating at 47°F <sup>2</sup><br>(Non-Ducted // Mix (Mid-static) // Ducted<br>(Mid-static)   Mix (High-static) // Ducted<br>(High-static)) | Maximum Capacity  | BTU/H                     | 42,000 // 42,000 // 42,000   42,000 // 42,000                     |
|   | Rated Capacity  | BTU/H                     | 42,000 // 42,000 // 42,000   42,000 // 42,000                     |
|   | Minimum Capacity  | BTU/H                     | 22,600 // 22,600 // 22,600   18,600 // 14,600                     |
|   | Maximum Power Input   | W                         | 3,080 // 3,300 // 3,520   3,350 // 3,620                          |
|   | Rated Power Input   | W                         | 3,080 // 3,300 // 3,520   3,350 // 3,620                          |
|   | Power Factor (208V, 230V)   | %                         | 98.5, 98.5 // 98.5, 98.5 // 98.5, 98.5   98.5, 98.5 // 98.5, 98.5 |
| Heating at 17°F <sup>3</sup><br>(Non-Ducted // Mix (Mid-static) // Ducted<br>(Mid-static)   Mix (High-static) // Ducted<br>(High-static)) | Maximum Capacity  | BTU/H                     | 42,000 // 42,000 // 42,000   42,000 // 42,000                     |
|   | Rated Capacity  | BTU/H                     | 32,600 // 29,600 // 26,600   29,600 // 26,600                     |
|   | Maximum Power Input   | W                         | 5,600 // 5,878 // 6,155   6,298 // 6,995                          |
|   | Rated Power Input   | W                         | 3,415 // 3,153 // 2,890   3,333 // 3,250                          |
| Heating at 5°F <sup>4</sup><br>(Non-Ducted // Mix (Mid-static) // Ducted<br>(Mid-static)   Mix (High-static) // Ducted<br>(High-static))  | Maximum Capacity  | BTU/H                     | 38,500 // 38,500 // 38,500   38,500 // 38,500                     |
|   | Maximum Power Input   | W                         | 5,645 // 5,858 // 6,070   5,958 // 6,270                          |
| Efficiency<br>(Non-Ducted // Mix (Mid-static) // Ducted<br>(Mid-static)   Mix (High-static) // Ducted<br>(High-static))                   | SEER2   |                           | 23.0 // 20.75 // 18.5   19.3 // 15.6                              |
|   | EER2 <sup>1</sup>   |                           | 15.0 // 13.5 // 12.0   13.15 // 11.3                              |
|   | HSPF2 (IV)  |                           | 12.0 // 11.5 // 11.0   10.95 // 9.9                               |
|   | COP at 47°F <sup>2</sup>  |                           | 4.0 // 3.75 // 3.5   3.7 // 3.4                                   |
|   | COP at 17°F at Maximum Capacity <sup>3</sup>                                    |                           | 2.2 // 2.1 // 2.0   1.98 // 1.76                                  |
|   | COP at 5°F at Maximum Capacity <sup>4</sup>                                     |                           | 2.3 // 2.19 // 2.08   2.05 // 1.8                                 |
|   | ENERGY STAR <sup>®</sup> Certified  |                           | Yes // No // Yes   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 if Branch Box Powered by Outdoor Unit             | A                         | 40 (45)   |
|   | Recommended Fuse/Breaker Size without Branch Box or Branch Box Powered Separate | A                         | 40  |
|   | Recommended Wire Size (Indoor - Outdoor)  | AWG                       | 6   |
|   | MCA if Branch Box Powered by Outdoor Unit                                       | A                         | 42.0  |
|   | MOCP if Branch Box Powered by Outdoor Unit                                      | A                         | 50  |
|   | MCA without Branch Box or Branch Box Powered Separate                           | A                         | 36  |
|   | MOCP without Branch Box or Branch Box Powered Separate                          | A                         | 40  |
|   | Fan Motor Full Load Amperage  | A                         | 0.6+0.6   |

**NOTES:**

AHRI Rated Conditions <sup>1</sup>Cooling (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 WB  
(Rated data is determined at a fixed compressor speed) <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  
<sup>4</sup>Heating 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.

<sup>A</sup> when 1 or more PLA-A EA7 connected

<sup>B</sup> Branch box should be placed within the level between the outdoor unit and indoor units

<sup>C</sup> 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.

Mid and high external static pressure tests conducted at 0.3 and 0.5 in.w.g. respectively, according to AHRI 210/240. The external static pressures utilized have no bearing on the capabilities of the indoor unit; please refer to the indoor unit manual to select the correct external static pressure setting for the application.

# SPECIFICATIONS: MXZ-SM36NAMHZ2

|  |  |             |                      |                  |
|--|--|-------------|----------------------|------------------|
| Outdoor unit                             | Airflow Rate (Cooling / Heating)                                 | CFM         | 3,885 / 3,885        |                  |
|  | Refrigerant Control  |             | LEV                  |                  |
|  | Defrost Method   |             | Reverse Cycle        |                  |
|  | Heat Exchanger Type  |             | Plate fin coil       |                  |
|  | Heat Exchanger Coating   |             | Blue Fin Coating     |                  |
|  | Sound Pressure Level, Cooling <sup>1</sup>                       | dB(A)       | 49                   |                  |
|  | Sound Pressure Level, Heating <sup>2</sup>                       | dB(A)       | 53                   |                  |
|  | Compressor Type  |             | Hermetic             |                  |
|  | Compressor Model   |             | ANB33FJSMT           |                  |
|  | Compressor Motor Output  | kW          | 2.8                  |                  |
|  | Compressor Rated Load Amps                                       | A           | 19                   |                  |
|  | Compressor Locked Rotor Amps                                     | A           | 22.0                 |                  |
|  | Compressor Oil Type // Charge                                    | oz.         | FV50S // 73          |                  |
|  | Base Pan Heater  |             | Built-in             |                  |
|  | Unit Dimensions  | W: In. [mm] |                      | 41-11/32 [1,050] |
|  |  | D: In. [mm] |                      | 13 [330]         |
|  |  | H: In. [mm] |                      | 52-11/16 [1,338] |
|  | Package Dimensions   | W: In. [mm] |                      | 43 [1,090]       |
|  |  | D: In. [mm] |                      | 18 [450]         |
|  |  | H: In. [mm] |                      | 57 [1,430]       |
| Unit Weight                              | Lbs.[kg]   |             | 278 [126]            |                  |
| Package Weight                           | Lbs.[kg]   |             | 302 [137]            |                  |
| Outdoor unit operating temperature range | Cooling Intake Air Temp (Maximum / Minimum) <sup>3</sup>         | °FDB        | 115 / 5 <sup>c</sup> |                  |
|  | Cooling Thermal Lock-out / Re-start Temperatures                 | °FDB        | N/A / N/A            |                  |
|  | Heating Intake Air Temp (Maximum / Minimum)                      | °FDB        | 59 / -13             |                  |
|  | Heating Thermal Lock-out / Re-start Temperatures                 | °FDB        | -24 / -14            |                  |
| Refrigerant                              | Pre-Charged Refrigerant Amount                                   | Lbs, oz     | 10.0, 9.0            |                  |
| Indoor unit connection                   | Maximum Number of Connected IDU with Branch Box                  |             | 4 (3) <sup>A</sup>   |                  |
|  | Maximum Number of Connected IDU without Branch Box               |             | 11                   |                  |
|  | Minimum Connected Capacity with Branch Box                       |             | 12,000               |                  |
|  | Minimum Connected Capacity without Branch Box                    |             | 18,000               |                  |
|  | Maximum connected capacity                                       |             | 46,800               |                  |
| Piping                                   | Liquid Pipe Size O.D. (Flared)                                   | In.[mm]     | 3/8 [9.52]           |                  |
|  | Gas Pipe Size O.D. (Flared)                                      | In.[mm]     | 5/8 [15.88]          |                  |
|  | Total Piping Length when using Branch Box                        | Ft. [m]     | 492 [150]            |                  |
|  | Total Piping Length without Branch Box                           | Ft. [m]     | 984 [300]            |                  |
|  | Maximum Height Difference <sup>B</sup> , ODU above IDU           | Ft. [m]     | 164 [50]             |                  |
|  | Maximum Height Difference <sup>B</sup> , ODU below IDU           | Ft. [m]     | 131 [40]             |                  |
|  | Maximum Height Difference <sup>B</sup> , between branch boxes    | Ft. [m]     | 49 [15]              |                  |
|  | Maximum Height Difference between IDU and IDU without branch box | Ft. [m]     | 49 [15]              |                  |
|  |  | Ft. [m]     | 49 [15]              |                  |
|  | Maximum Piping Length between ODU and Branch Box                 | Ft. [m]     | 180 [55]             |                  |
|  | Farthest Piping Length from ODU to IDU with Branch Box           | Ft. [m]     | 262 [80]             |                  |
|  | Farthest Piping Length from ODU to IDU without Branch Box        | Ft. [m]     | 492 [150]            |                  |
|  | Farthest Piping Length after Branch Box                          | Ft. [m]     | 82 [25]              |                  |
|  | Total Piping Length between Branch Boxes and IDU                 | Ft. [m]     | 311 [95]             |                  |
| Maximum Number of Bends for IDU          |  | 15          |                      |                  |

**NOTES:**

AHRI Rated Conditions <sup>1</sup>Cooling (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 WB  
 (Rated data is determined at a fixed compressor speed) <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>1</sup>Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

<sup>A</sup> when 1 or more PLA-A-EA7 connected

<sup>B</sup> Branch box should be placed within the level between the outdoor unit and indoor units

<sup>C</sup> 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.

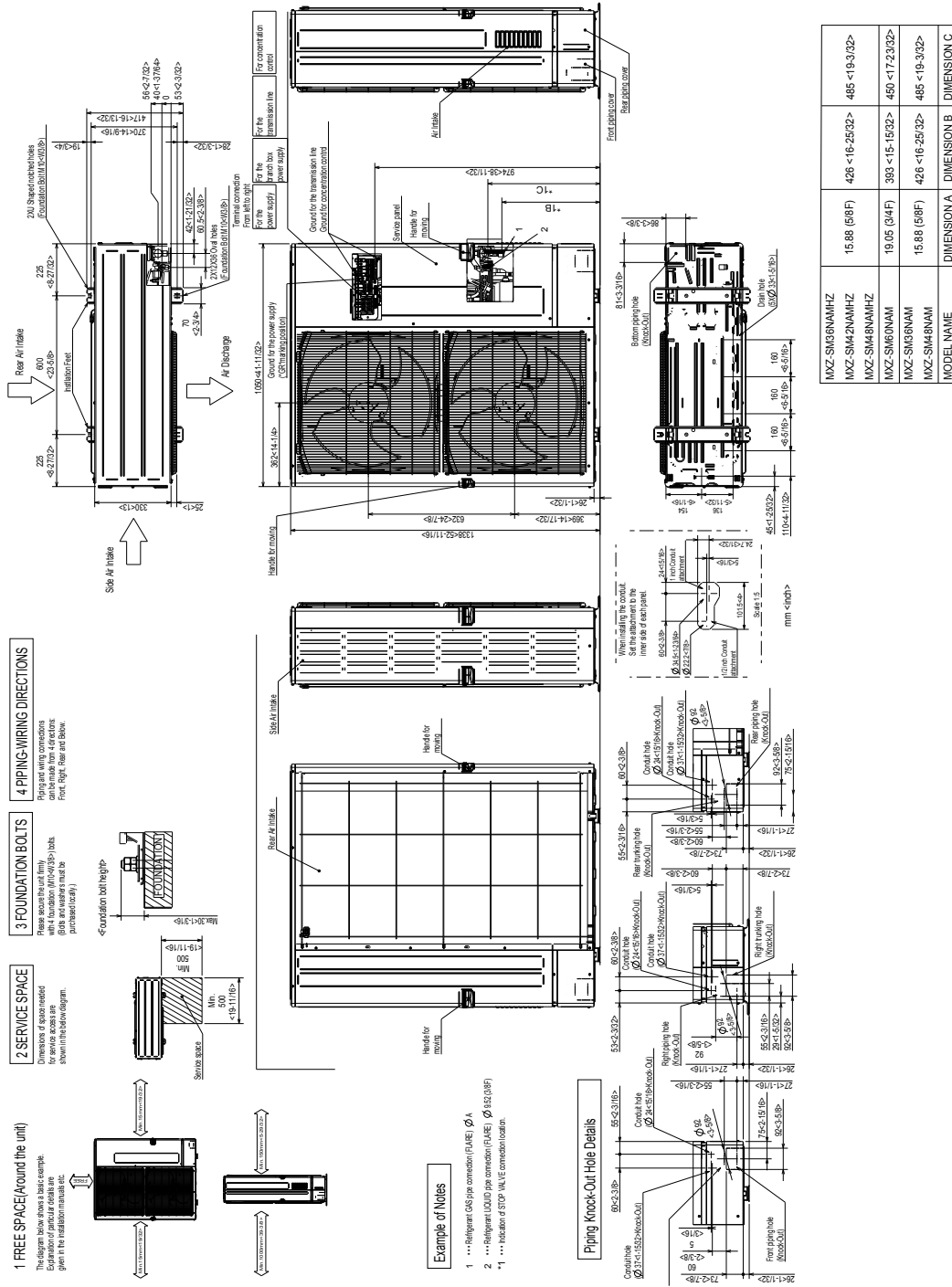
Mid and high external static pressure tests conducted at 0.3 and 0.5 in.w.g. respectively, according to AHRI 210/240. The external static pressures utilized have no bearing on the capabilities of the indoor unit; please refer to the indoor unit manual to select the correct external static pressure setting for the application.

## OUTDOOR UNIT ACCESSORIES: MXZ-SM36NAMHZ2

|                       |  |  |
|-----------------------|--|--|
| Air Deflector         | Vertical Air Deflector   | ADV-1                                  |
| Air Outlet Guide      | Air Outlet Guide (1 Piece)   | PAC-SH96SG-E (two pieces are required) |
| 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                              |
| Branch Box            | 3 Port Branch Box  | PAC-MKA32BC                            |
|                       | 5 Port Branch Box  | PAC-MKA52BC                            |
|                       | Branch Box Enclosure   | BBE-1                                  |
| Centralized Drain Pan | Central Drain Pan  | PAC-SH97DP-E                           |
| 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                             |
| Control/Service Tool  | Maintenance Tool Interface   | PAC-USCMS-MN-1                         |
| Distribution pipe     | Brazed Connection  | MSDD-50BR-E                            |
|                       | Flare Connection   | MSDD-50AR-E                            |
| Drain Socket          | Drain Socket   | PAC-SG60DS-E                           |
| Hail Guards           | Hail Guard   | HG-A2                                  |
| 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: 24" x 42" x 3"   | ULTRILITE2                             |
|                       | Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic   | DSD-400P                               |
| Port Adaptor          | Adaptor: 1/2" x 3/8"   | MAC-A455JP-E                           |
|                       | Adaptor: 1/2" x 5/8"   | MAC-A456JP-E                           |
|                       | Adaptor: 1/4" x 3/8"   | PAC-493PI                              |
|                       | Adaptor: 3/8" x 1/2"   | MAC-A454JP-E                           |
|                       | Adaptor: 3/8" x 5/8"   | PAC-SG76RJ-E                           |
| Stand                 | 18" Dual Fan Stand   | QSMS1802M                              |
|                       | 24" Dual Fan Stand   | QSMS2402M                              |
|                       | Condenser Wall Bracket   | QSWB2000M-1                            |
|                       | Condenser Wall Bracket - Stainless Steel Finish  | QSWBSS                                 |
|                       | Outdoor Unit Stand — 12" High  | QSMS1202M                              |
| Wind Baffle           | Front Wind Baffle  | WB-PA3 (two pieces are required)       |

# OUTDOOR UNIT DIMENSIONS: MXZ-SM36NAMHZ2

Unit: mm  
inch



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

