# 24 SERIES MINI-SPLIT

## DUAL / TRIPLE / QUAD ZONE / FIVE PORT

# INSTALLATION MANUAL

| | |
|---|---|
| **MZ18H424ZMO** | **Condenser** |
| **MZ27H424ZMO** | **Condenser** |
| **MZ36H424ZMO** | **Condenser** |
| **MZ48H424ZMO** | **Condenser** |
| **HMZ18H424ZMO** | **Condenser** |
| **HMZ28H424ZMO** | **Condenser** |
| **HMZ36H424ZMO** | **Condenser** |
| **HMZ48H424ZMO** | **Condenser** |
| **WM6H424ZMI** | **Evaporator** |
| **WM9H424ZMI** | **Evaporator** |
| **WM12H424ZMI** | **Evaporator** |
| **WM18H424ZMI** | **Evaporator** |
| **WM24H424ZMI** | **Evaporator** |
| **30H421ZMI** | **Evaporator** |
| **36H421ZMI** | **Evaporator** |

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Do not dispose this product as unsorted municipal waste. Collection of such waste for special treatment is necessary.

## INSTALLATION STEPS

- **Select the location for the indoor unit. (Page 7)**
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- **Drill wall penetration holes. (Page 9)**
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- **Locate and mount the outdoor unit. (Page 12)**
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- **Leak test & Evacuate unit. (Page 21-22)**
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## NOTES TO INSTALLER

This manual is to aid the qualified HVAC contractor in the installation of this Mini Split system.
Report all shipping damage to the carrier IMMEDIATELY. Check units and box exterior for damage.
Please read and understand these instructions prior to installing the unit, failure to comply with these instructions may result in improper installation, operation and maintenance, possibly resulting in fire, electrical shock, property damage, personal injury or death.

**CAUTION! Do not use old refrigerant lines with new installation:**
For connecting pipes use new and clean piping materials with high pressure fittings made for R410A only. This air conditioner utilizes the HFC refrigerant (R410A) which does not destroy ozone layer. R410A refrigerant operates at approximately 1.6 times the pressure of refrigerant R22. Accompanied with the adoption of the new refrigerant, the refrigeration lubricating oil has also been changed. During installation work be sure that water, dust, former refrigerant, or refrigeration lubricating oil does not enter into the new type refrigerant R410A air conditioner system. The system must not be left open to the atmosphere for any reason for any period of time as the systems oil quickly absorbs moisture and will contaminate and damage the system. To prevent mixing of refrigerant or refrigeration lubricating oil, the sizes of connecting sections of charging port on main unit and installation tools are different from those used for the conventional refrigerant units. Accordingly, special tools are required for the new refrigerant (R410A) units. For connecting pipes use new and clean piping materials with high pressure fittings made for R410A only. The best and recommended solution is not to use the existing line sets because there may be some problems with pressure fittings and possible impurities in the existing piping.
**When installing this unit, an electrical surge suppressor is recommended.**
Installers please pass this manual and warranty registration to end user. If technical assistance is required during installation or start up, please call 215-750-9876 (M-F 8:00 am to 4:30 pm ET) to speak to a Technical Service Engineer. Before calling please have the Model and Serial numbers available.

**Safety Instructions:**

1. Carefully read all instructions prior to installation.
2. Check Rating Plate for correct system voltage before installing the unit. Installing and operating a unit with the incorrect voltage may result in malfunction or other issues and will void the warranty.
3. Units must be connected to a correctly grounded electrical supply.
4. Do not use the units if they have been dropped or otherwise damaged or installed incorrectly.

The manufacturer of the unit will not be liable for any damages caused by failure to comply with the installation and operating instructions in this manual.

The unit rating plate contains pertinent information for unit operation; please refer to it as required.

Inspect all parts for damage prior to installation and start up. Units must be installed by a qualified HVAC contractor.

## PARTS INCLUDED WITH UNIT

| Wall-mounted Indoor unit | Outdoor Unit |
|---|---|
| ● Wall Bracket | ● Drain Fitting & Gasket |
| ● Remote Control | ● Installation Manual |
| ● Batteries for Remote Control (2 AAA) | ● Terminal Label |
| ● Remote Control Holder | ● Adapter: 3/8"F to 1/2"M (951-0569) - 2 pcs for 18K<br>3/8"F to 1/2"M (951-0569) - 3 pcs for 27/28K |
| ● Wi-Fi kit<br>● Manual | ● Adapter: 3/8"F to 1/2"M (951-0569) - 3 pcs (36K/48K)<br>1/2"F to 3/8"M (951-0570) - 1 pc (36K), - 2 pcs (48K)<br>1/4"F to 3/8"M (951-0571) - 1 pc (36K), - 2 pcs (48K)<br>1/2"F to 5/8"M (951-0572) - 1 pc (36K), - 2 pcs (48K) |
| ● Operation Manual | ● Cord Protection Rubber |
| ● Drain Tubing 6 ft. | |

**Note: The outdoor unit can also be connected to different types of indoor units as followings:**

**Console:** 12K – C12H424ZMI

**Cassette:** 9K – CA9H424ZMI, 12K - CA12H424ZMI, 18K - CA18H424ZMI, 24K - CA24H424ZMI

**Floor / Ceiling:** 18K - FC18H424ZMI, 24K - FC24H424ZMI.

**Ducted:** 9K - D9H424ZMI; 12K - D12H424ZIGX, 18K - D18H424ZMI, 24K –D24H424ZMI.

Air Handler: 24K – AH24H424ZMI

For the detail information about the included parts and connecting for above indoor units, please refer to the manual to be included with each indoor unit.

## INSTALLER SUPPLIED PARTS

The following additional Items are required for proper installation.

- Refrigerant line set: Insulated copper tubing:
  - 6K Indoor – 1/4" (liquid line) and 3/8" (suction line).
  - 9K Indoor – 1/4" (liquid line) and 3/8" (suction line).
  - 12K Indoor – 1/4" (liquid line) and 1/2" (suction line)
  - 18K Indoor – 1/4" (liquid line) and 1/2" (suction line).
  - 24K Indoor – 3/8" (liquid line) and 5/8" (suction line).
  - 30K Indoor – 3/8" (liquid line) and 5/8" (suction line).
  - 36K Indoor – 3/8" (liquid line) and 5/8" (suction line).

  Flare nuts 2 ea. required per line, see above (line set) for size.
- Vinyl UV resistant tape.
- Supply Power:

  **Dual Zone** MZ18H424ZMO / HMZ18H424ZMO
  - 25 amp circuit breaker

  **Triple Zone** MZ27H424ZMO / HMZ28H424ZMO
  - 30 amp circuit breaker / 40 amp circuit breaker

  **Quad Zone** MZ36H424ZMO / HMZ36H424ZMO
  - 40 amp circuit breaker / 60 amp circuit breaker

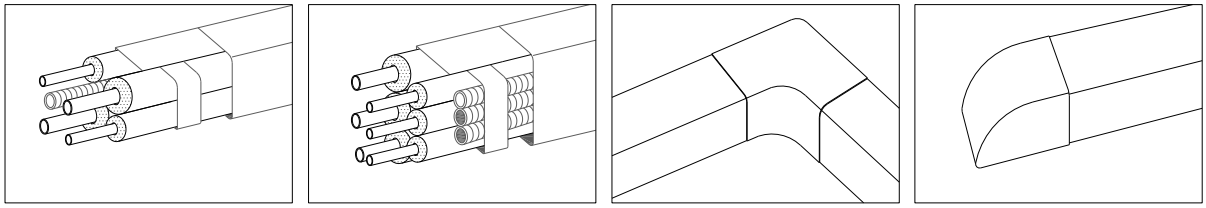
  **Five Port** MZ48H424ZMO / HMZ48H424ZMO
  - 60 amp circuit breaker / 60 amp circuit breaker
- Interconnect wire cable for all units
  - 4C 14 AWG stranded (Recommended) 16 AWG stranded 4C (min) per indoor unit.
- Refrigerant - R410A required for additional line set charge.
- Sealing putty.
- 1/4" to 5/16" access fitting adaptor (PN: QC-S5)
- Mounting hardware - Wall anchors, condenser pad etc.
- Surge protector (highly recommended)

**Note:** Condensate pump can be powered by connecting to the incoming power at the indoor OR outdoor terminal block.

Main system breaker or disconnect sized per unit requirements should be mounted adjacent to outdoor unit.

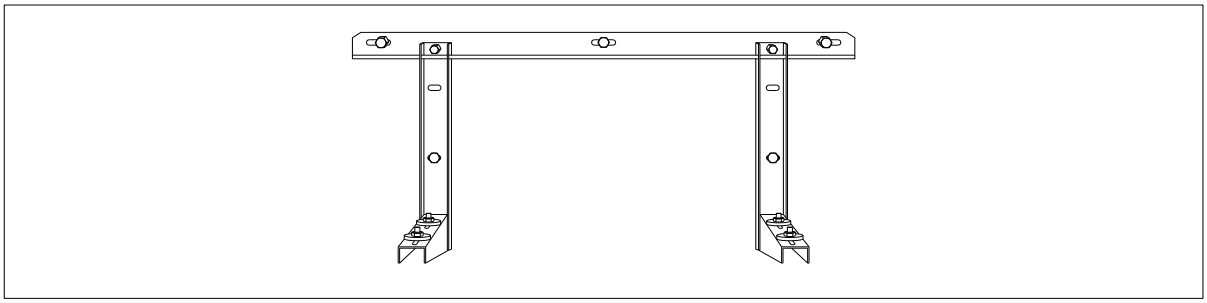
### Decorative Channel

Route the bundled piping and wiring to the outdoor unit and connect per the OUTDOOR UNIT installation instructions. IRP's **Plastic-Duct** piping and wiring duct work provides a convenient and professional looking system to route and protect the pipes and wires. Please see the illustrations below:



### Wall Bracket

The outdoor unit may be mounted using a wall bracket (optional) (Our Catalog # BR-440L for up to 440 lbs) or located in a freestanding position on the floor or pad (preferably slightly elevated).



## INSTALLATION CONSIDERATIONS

### General Information

**Application**
Check the application of the unit prior to installation. Certain applications require additional components or installation parameters.

**The below data is for the Northeast section of the US. Increase capacity by 25% for the East, 30% for the South and 40% for the West.**

**Computer or Data Server Rooms**
These require approximately 12,000 BTU/H capacities per 250 ft² of room size (Based on 8' ceiling height). Low ambient controller included.

**Offices and Commercial Spaces, Churches etc.**
These require approximately 12,000 BTU/H capacity per 400 ft² of room size (Based on 8' ceiling height).

**Residential, Bedrooms, Family Rooms etc.**
These require approximately 12,000 BTU/H capacity per 600 ft² of room size (Based on 8' ceiling height).

**Note: This system does not contain a back-up heat source and is NOT recommended as a primary source of heat.**

## System Configuration Options

### Dual Zone

**MZ18H424ZMO / HMZ18H424ZMO (2 indoor units)**

**Note:** Do not mismatch or connect to an outdoor unit other than the designed matched system.

| TWO INDOOR UNITS |
|---|
| 6K + 6K / 6K + 9K / 6K + 12K / 9K + 9K / 9K + 12K |

**Note: The system matches are not recommended if all indoor units require simultaneous continuous full duty above 22000 Btu.**

### Triple Zone

**MZ27H424ZMO / HMZ28H424ZMO (2 to 3 indoor units)**

**Note:** 1. Do not mismatch or connect to an outdoor unit other than the designed matched system.
2. This system **must** be used with a minimum of **two indoor units** (evaporators).

| 2 INDOOR UNITS | 3 INDOOR UNITS |
|---|---|
| 6K + 18K / 9K + 12K / 9K + 18K<br>12K + 12K / 12K + 18K | 6K + 6K +6K / 6K +6K + 9K / 6K + 6K +12K / 6K + 6K + 18K<br>6K + 9K + 9K / 6K +9K + 12K / 6K + 9K +18K / 6K + 12K + 12K<br>9K + 9K + 9K / 9K + 9K + 12K / 9K + 12K + 12K |

**Note: The system matches are not recommended if all indoor units require simultaneous continuous full duty above 30000 Btu.**

### Quad Zone

**MZ36H424ZMO / HMZ36H424ZMO (2 to 4 indoor units)**

**Note:** 1. Do not mismatch or connect to an outdoor unit other than the designed matched system.
2. This system **must** be used with a minimum of **two indoor units** (evaporators).

| 2 INDOOR UNITS | 3 INDOOR UNITS | 4 INDOOR UNITS |
|---|---|---|
| 6K + 24K / 9K + 24K<br>12K + 18K / 12K + 24K<br>18K + 18K / 18K + 24K* | 6K + 6K + 18K<br>6K + 9K + 18K<br>6K + 12K + 12K<br>6K + 12K + 18K<br>6K + 12K + 24K<br>6K + 18K + 18K<br>9K + 9K + 12K<br>9K + 9K + 18K<br>9K + 9K + 24K<br>9K + 12K + 12K<br>9K + 12K + 18K<br>9K + 12K + 24K<br>12K + 12K + 12K<br>12K + 12K + 18K | 6K + 6K + 6K + 6K / 6K + 6K + 6K + 9K<br>6K + 6K + 6K + 12K / 6K + 6K + 6K + 18K<br>6K + 6K + 6K + 24K / 6K + 6K + 9K + 9K<br>6K + 6K + 9K + 12K / 6K + 9K + 9K + 18K<br>6K + 6K + 9K + 24K / 6K + 6K + 12K + 12K<br>6K + 6K + 12K + 18K / 6K + 9K + 9K + 9K<br>6K + 9K + 9K + 12K / 6K + 9K + 9K + 18K<br>6K + 9K + 12K + 12K / 6K + 9K + 12K + 18K<br>6K + 12K + 12K + 12K / 9K + 9K + 9K + 9K<br>9K + 9K + 9K + 12K / 9K + 9K + 9K + 18K<br>9K + 9K + 12K + 12K / 9K + 12K + 12K + 12K |
| Note：The combinations with * are not available when an air handler is connected. | | |

**Note: The system matches are not recommended if all indoor units require simultaneous continuous full duty above 40000 Btu.**

**MZ48H424ZMO / HMZ48H424ZMO (2 to 5 indoor units)**

**Note:** 1. Do not mismatch or connect to an outdoor unit other than the designed matched system.
2. This system **must** be used with a minimum of **two indoor units** (evaporators).

| 2 INDOOR UNITS | 3 INDOOR UNITS | 4 INDOOR UNITS | 5 INDOOR UNITS |
|---|---|---|---|
| 6K + 30K | 6K + 6K + 30K | 6K + 6K + 6K + 24K | 6K + 6K + 6K + 6K + 9K |
| 6K + 36K | 6K + 6K + 36K | 6K + 6K + 6K + 30K | 6K + 6K + 6K + 6K + 12K |
| 9K + 30K | 6K + 9K + 24K | 6K + 6K + 6K + 36K | 6K + 6K + 6K + 6K + 18K |
| 9K + 36K | 6K + 9K + 30K | 6K + 6K + 9K + 18K | 6K + 6K + 6K + 6K + 24K |
| 12K + 30K | 6K + 9K + 36K | 6K + 6K + 9K + 24K | 6K + 6K + 6K + 6K + 30K |
| 12K + 36K | 6K + 12K + 24K | 6K + 6K + 9K + 30K | 6K + 6K + 6K + 6K + 36K |
| 18K + 24K* | 6K + 12K + 30K | 6K + 6K + 12K + 18K | 6K + 6K + 6K + 9K + 9K |
| 18K + 30K | 6K + 12K + 36K | 6K + 6K + 12K + 24K | 6K + 6K + 6K + 9K + 12K |
| 18K + 36K | 6K + 18K + 18K | 6K + 6K + 12K + 30K | 6K + 6K + 6K + 9K + 18K |
| 24K + 24K* | 6K + 18K + 24K* | 6K + 6K + 12K + 36K | 6K + 6K + 6K + 12K +12K |
| 24K + 36K* | 6K + 18 + 30K | 6K + 9K + 9K + 18K | 6K + 6K + 6K + 12K + 18K |
| 30K + 30K | 6K + 18K + 36K | 6K + 9K + 9K + 24K | 6K + 6K + 6K + 12K + 24K |
| | 6K + 24K + 24K* | 6K + 9K + 9K + 30K | 6K + 6K + 6K + 9K + 30K |
| | 6K + 24K + 30K | 6K + 9K + 9K + 36K | 6K + 6K + 6K + 9K + 36K |
| | 9K + 9K + 24K | 6K + 9K + 12K + 12K | 6K + 6K + 6K + 12K + 30K |
| | 9K + 9K + 30K | 6K + 9K + 12K + 18K | 6K + 6K + 6K + 18K + 18K |
| | 9K + 9K + 36K | 6K + 9K + 12K + 24K | 6K + 6K + 6K + 18K + 24K* |
| | 9K + 12K + 18K | 6K + 9K + 12K + 30K | 6K + 6K + 9K + 9K + 9K |
| | 9K + 12K + 24K | 6K + 12K + 12K + 12K | 6K + 6K + 9K + 9K + 12K |
| | 9K + 12K + 30K | 6K + 12K + 12K + 18K | 6K + 6K + 9K + 9K + 18K |
| | 9K + 12K + 36K | 6K + 12K + 12K + 24K | 6K + 6K + 9K + 9K + 24K |
| | 9K + 18K + 18K | 6K + 12K + 12K + 30K | 6K + 6K + 9K + 12K + 12K |
| | 9K + 18K + 24K* | 6K + 6K + 18K + 18K | 6K + 6K + 9K + 12K + 18K |
| | 9K + 18K + 30K | 6K + 6K + 18K+ 24K* | 6K + 6K + 9K + 12K +24K |
| | 9K + 24K + 24K* | 6K + 6K + 18K + 30K | 6K + 6K + 9K + 18K + 18K* |
| | 12K + 12K + 18K | 6K + 6K + 24K + 24K* | 6K + 6K + 9K + 18K + 24K* |
| | 12K + 12K + 24K | 6K + 9K + 18K + 18K | 6K + 6K + 12K + 12K +12K |
| | 12K + 12K + 30K | 6K + 9K + 18K + 24K* | 6K + 6K + 12K + 12K +18K |
| | 12K + 12K + 36K | 6K + 12K + 18K + 18K | 6K + 6K + 12K + 12K + 24K |
| | 12K + 18K + 18K | 6K + 12K + 18K + 24K* | 6K + 6K + 12K + 18K + 18K* |
| | 12K + 18K + 24K* | 9K + 9K + 9K + 12K | 6K + 9K + 9K + 9K +9K |
| | 12K + 18K + 30K | 9K + 9K + 9K + 18K | 6K + 9K + 9K + 9K +12K |
| | 12K + 24K + 24K* | 9K + 9K + 9K + 24K | 6K + 9K + 9K + 9K + 18K |
| | 18K + 18K + 18K | 9K + 9K + 9K + 30K | 6K + 9K + 9K + 9K + 24K |
| | 18K + 18K + 24K* | 9K + 9K + 9K + 36K | 6K + 9K + 9K + 12K + 12K |
| | | 9K + 9K + 12K + 12K | 6K + 9K + 9K + 12K + 18K |
| | | 9K + 9K + 12K + 18K | 6K + 9K + 9K + 12K + 24K |
| | | 9K + 9K + 12K + 24K | 6K + 9K + 9K + 18K + 18K* |
| | | 9K + 9K + 12K + 30K | 6K + 9K + 12K + 12K + 12K |
| | | 9K + 12K + 12K + 18K | 6K + 9K + 12K + 12K +18K |
| | | 9K + 12K + 12K + 24K | 6K + 12K + 12K + 12K + 12K |
| | | 9K + 9K + 18K + 18K | 6K + 12K + 12K + 12K + 18K |
| | | 9K + 9K + 18K + 24K* | 9K + 9K + 9K + 9K + 9K |
| | | 9K + 12K + 18K +18K | 9K + 9K + 9K + 9K + 12K |
| | | 12K + 12K + 12K + 12K | 9K + 9K + 9K + 9K + 18K |
| | | 12K + 12K + 12K + 18K | 9K + 9K + 9K + 9K + 24K |
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| | | | 9K + 9K + 12K + 12K + 18K |
| | | | 9K + 12K + 12K + 12K + 12K |
| | | | 12K + 12K + 12K + 12K + 12K |

1. Only one Air Handler indoor unit can be connected for all combinations.
2. The combinations with * are not available when an air handler is connected.
3. When connecting 30K/36K models, additional 17.64 oz. (500g) refrigerant is needed.

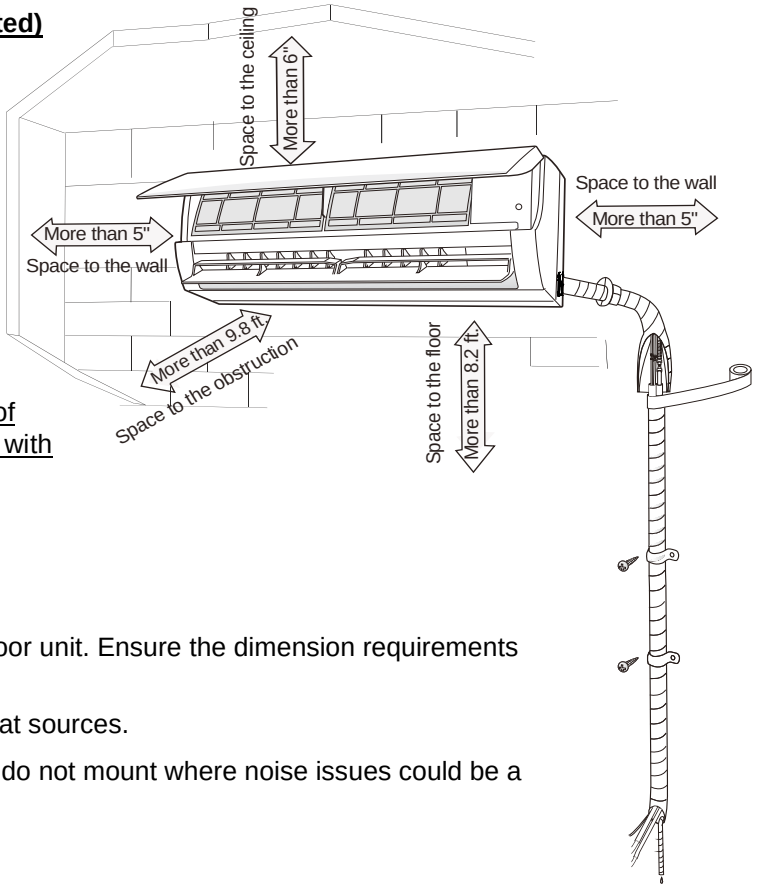
**Note: The system matches are not recommended if all indoor units require simultaneous continuous full duty above 50000 Btu.**

**Indoor Models Available:**

| Indoor Unit Type | Catalog Number | Outline | Remark |
|---|---|---|---|
| Wall-mounted Indoor Unit | WM6H424ZMI<br>WM9H424ZMI<br>WM12H424ZMI<br>WM18H424ZMI<br>WM24H424ZMI<br>30H421ZIMI<br>36H421ZIMI |  | |
| Console Indoor Unit | C12H424ZMI |  | For the detail information about connecting, please refer to the specific manual included with each indoor unit. |
| Cassette Indoor Unit | CA9H424ZMI<br>CA12H424ZMI<br>CA18H424ZMI<br>CA24H424ZMI |  | |
| Floor / Ceiling Indoor Unit | FC18H424ZMI<br>FC24H424ZMI |  | |
| Ducted Indoor Unit | D9H424ZMI<br>D12H424ZMIGX<br>D18H424ZIMGX<br>D24H424ZIMGX |  | |
| Air Handler | AH24H424ZMI |  | |

**Selecting locations for the Indoor unit (Wall-mounted)**

1. Determine the best location for mounting the Indoor unit. Ensure the dimensions requirement indicated be the arrows are followed.
2. Paying close attention to the air circulation in the room, these units throw air approximately 15ft. Ensure that no obstacles impede airflow.
3. Do not mount this unit close to a heat source or a doorway.




**Note：** For the detailed information about other types of indoor units, please refer to the manual to be included with each indoor unit.

**Selecting location for Outdoor unit**

1. Determine the best location for mounting the outdoor unit. Ensure the dimension requirements indicated by the arrows are followed.
2. Do not mount this unit close to combustibles or heat sources.
3. Although this unit is fairly quiet when in operation, do not mount where noise issues could be a problem.

**Line set length**

Locate the Indoor and Outdoor units as close together as possible. Line set height and length cannot exceed specifications.
Installation Notes:
DUAL ZONE – MZ18H424ZMO

1. The maximum total line set length must not exceed 131 feet for all units attached to the 18K condenser. Refrigerant must be added (0.161 oz./ft.) when line set total length exceeds 49.2 ft.
2. Dual Zone model MZ18H424ZMO is designed to operate with 2 indoor units.
3. The Dual Zone maximum length is 82 ft. for one indoor unit.

TRIPLE ZONE – MZ27H424ZMO / HMZ28H424ZMO

1. The maximum total line set length must not exceed 197 feet for all units using the 27K/28K condenser. Refrigerant must be added (0.161 oz./ft.) when line set length exceeds 74 ft. total.
2. TRIPLE ZONE model MZ27H424ZMO / HMZ28H424ZMO are designed to operate two to three indoor units. DO NOT use this system with one indoor unit.
3. The TRIPLE Zone maximum length is 98 ft. for one indoor unit.

QUAD ZONE – MZ36H424ZMO / HMZ36H424ZMO

1. The maximum total line set length must not exceed 262 feet for all units using the 36K condenser. Refrigerant must be added (0.161 oz./ft.) when line set length exceeds 98 ft. total.
2. Quad Zone model MZ36H424ZMO / HMZ36H424ZMO are designed to operate two to four indoor units. DO NOT use this system with one indoor unit.
3. The Quad Zone maximum length is 115 ft. for one indoor unit.

FIVE PORT – MZ48H424ZMO

1. The maximum total line set length must not exceed 262 feet for all units using the 48K condenser. Refrigerant must be added (0.161 oz./ft.) when line set length exceeds 131.2 ft. total.
2. Five Port model MZ48H424ZMO is designed to operate two to five indoor units. DO NOT use this system with one indoor unit.
3. The Five Port maximum length is 115 ft. for one indoor unit.

**NOTE**: **An oil trap is recommended if the indoor unit is over 15 feet in height from the outdoor unit.**

# INDOOR UNIT (EVAPORATOR) INSTALLATION

### 1. Clearances and Mounting requirements (Wall-mounted Indoor Unit)

Enough space should be left around the unit to facilitate maintenance. Please view Figure. 1 for recommended dimensions:

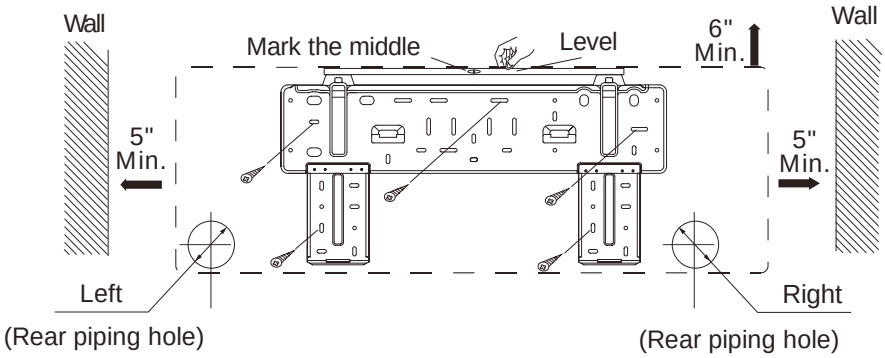



**Figure 1**

Minimum clearances as noted above. Mount indoor unit with a minimum 6” to ceiling. Indoor unit should have approximately 16 feet of unobstructed area directly in front for proper air flow for the 9K and 12K indoor units. The 18K should have approximately 25 feet of unobstructed area directly in front. Line set can exit at the right or left rear or ends of the indoor unit.

Be sure that the indoor unit is mounted firmly to the wall, and that the wall structure will support the weight of the unit.
Be sure that the air inlet and outlets are unobstructed.
Be sure that all clearances are as noted in the above Figure 1.
This unit is not designed to be connected to a plug-in outlet.

Do not install this unit near a heat source, direct sunlight, near hazardous chemicals or combustible gases.

### 2. Mounting the Wall Plate

After determining an acceptable location for the indoor unit, fasten the wall bracket securely to the wall using the proper anchors (installer supplied). Be sure the wall bracket is level and firm to the wall using a minimum of 4 screws or wall anchors. Failure to mount the wall bracket level can result in improper condensation drainage.

### 3. Wall Penetration

Using the measurements in Figure 1, determine the exit point of the line set. For best results, the right rear is preferred. Left rear exit of the line set requires that the line set be connected to the indoor unit prior to mounting it to the wall plate. If desired the line set may run along the inside wall by removing the cutouts along the back edge of the case. Line sets mounted along the inside wall may be covered with Plastic-Duct line set covering (See page 4).

Cut a 2-5/8” hole slanted downward towards the outside.
Hole diameter is based on wall sleeve made from 2-1/2” PVC pipe. Wall penetration should be slanted slightly downward to the outside a minimum of 3/8" to provide proper condensation drainage.

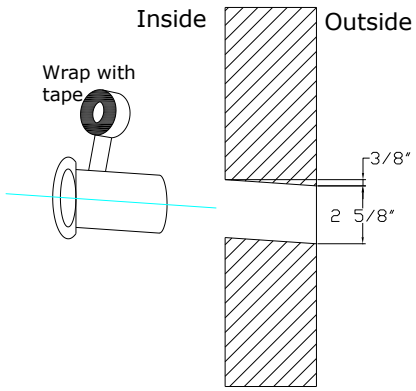



**Figure 2**

Wall sleeve can now be inserted into the hole. Insert sleeve from the inside to the outside. The sleeve should be approximately 3/16” longer than the wall thickness.

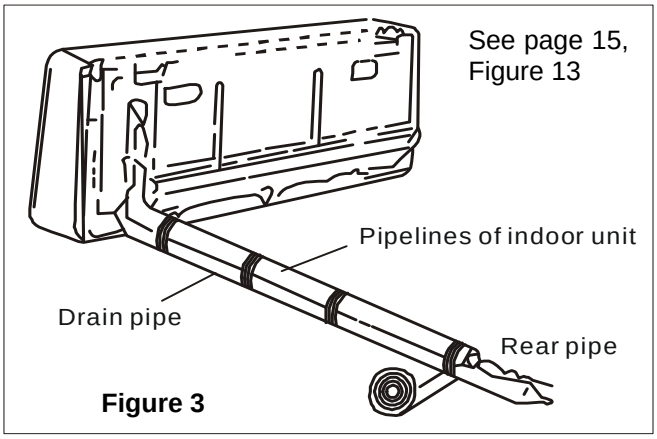


Figure 3

See page 15, Figure 13

**4. Identify Line Sets**

Mark the line sets as necessary to prevent crossed connections. Crossed line sets will prevent proper operation.

**5. Identify Interconnect cables**

Connect interconnect cable and identify cable at both ends using labels supplied with outdoor units. Cable routed to terminal from rear of indoor unit.

**6. Mounting the Indoor Unit**

If right rear exit of line set is used the indoor unit can now be mounted. Remove retaining clips from back of unit to allow access to the line set stubs. Gently form the line set stubs straight outward. Use caution when forming the line set; being careful not to kink the copper lines. See Figure 3.

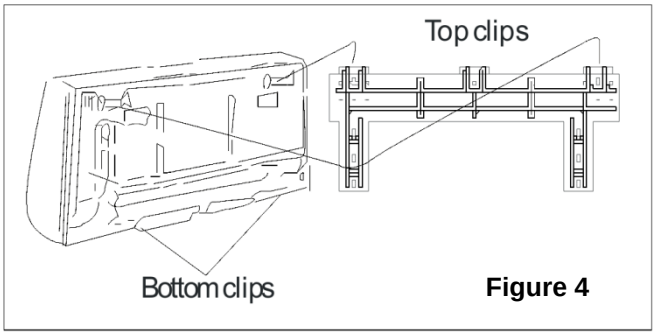


Figure 4

**7. Connecting Line Set**

If installer determines the line set should be connected at this time, see page 15 for torque standards.

**8. Hang the Indoor Units**

Once lines are straight, carefully slide the ends of line set out through the wall sleeve. Hook the indoor unit onto the top clips of the wall plate. Carefully lower the bottom portion of the indoor unit towards the wall, snapping it into the clips at the bottom of the unit. See Figure 4.

If using the left rear exit run lines from outside to indoor unit. Form line set to mate to indoor unit stubs and connect prior to mounting to indoor unit. If necessary run lines along inside wall and carefully remove the proper cut out from the indoor unit housing. Line sets may be covered with Plastic-Duct for a more professional job (see page 5).

**9. Inspect the Installation**

Ensure that the hooks at the top and bottom of the inside unit are firmly locked in place.

**10. Verify the Indoor Unit is Properly Leveled.**

Accurate leveling is critical to prevent water damage during operation.

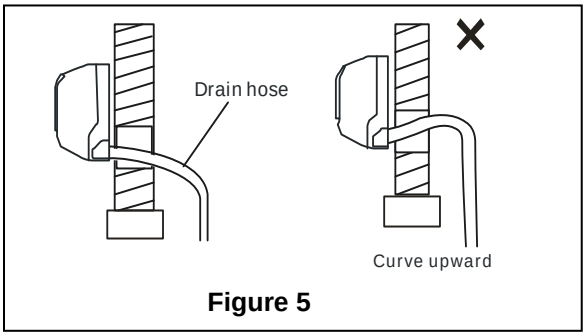


Figure 5

**11. Check the Drain Hose**

Observe that the condensate drain pipe does not curve upward and is in the lower part of the pipe bundle. See Figure 5.

**12. Seal the Hole**

Fill the gap between the wall sleeve and the line set with sealing putty (installer provided) to prevent outside air and moisture from entering room (see Figure 6).

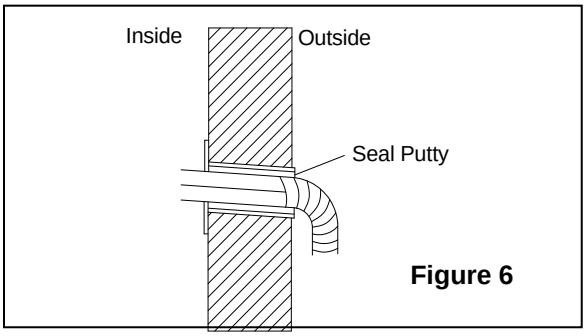


Figure 6

**Note**：For the detail information about other types of indoor unit, please refer to the manual to be included with each Indoor unit.

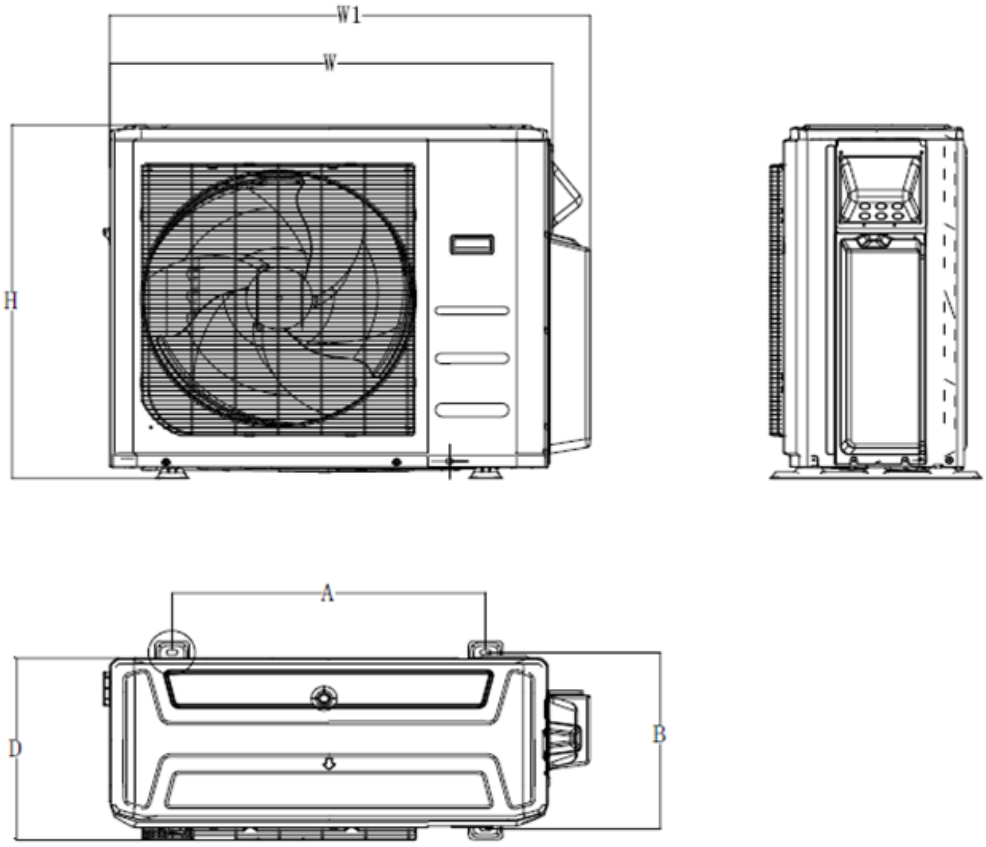
## OUTDOOR UNIT (CONDENSER) INSTALLATION

### Outdoor unit dimension

**MZ18H424ZMO / HMZ18H424ZMO – Dual Zone,**

**MZ27H424ZMO / HMZ28H424ZMO – Triple Zone,**

**MZ36H424ZMO – Quad Zone**

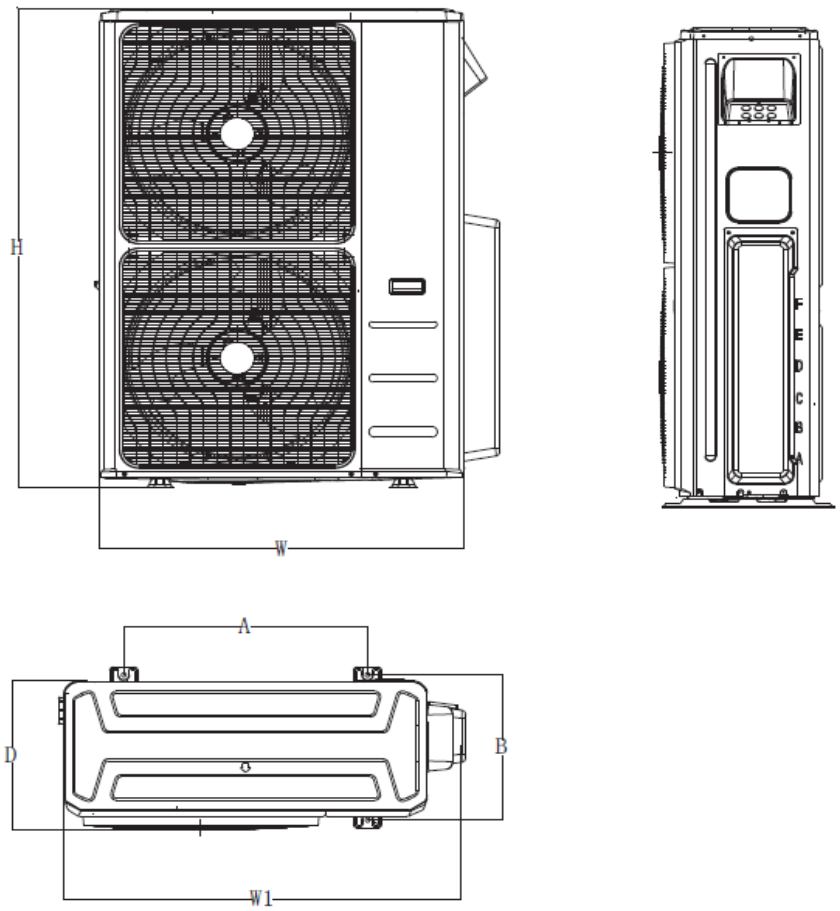



Unit: inch

| Model | W | D | H | W 1 | A | B |
|---|---|---|---|---|---|---|
| MZ18H424ZMO | 35.0 | 13.5 | 26.50 | 39.0 | 26.1 | 13.9 |
| HMZ18H424ZMO | 37.2 | 16.5 | 31.9 | 40.6 | 26.5 | 15.9 |
| MZ27H424ZMO | | | | | | |
| HMZ28H424ZMO | | | | | | |
| MZ36H424ZMO | | | | | | |

**HMZ36H424ZMO – Quad Zone**

**MZ48H424ZMO / HMZ48H424ZMO– Five Port**

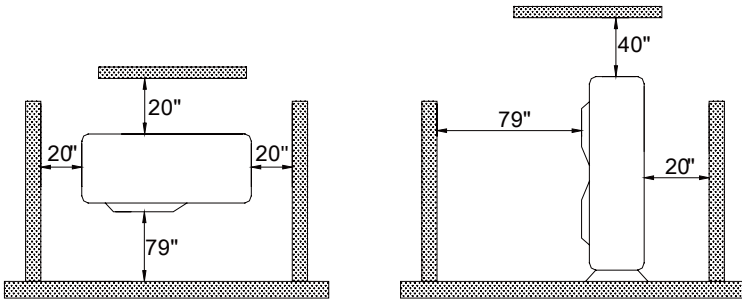



Unit: inch

| Model | W | D | H | W 1 | A | B |
|---|---|---|---|---|---|---|
| HMZ36H424ZMO<br>MZ48H424ZMO<br>HMZ48H424ZMO | 37.5 | 16.3 | 52.5 | 41.7 | 25.0 | 15.9 |

## Outdoor unit location

The location must allow easy servicing and provide good air circulation as shown in the illustration below:




Top View Side View

**Figure 7**

**Mounting the Outdoor (condenser) Unit**

Follow the clearance guidelines in the diagram above. Clearance distances are minimums. Minimum clearance above unit is 12" to allow for servicing.

Install drain plug as in Figure 8 (included). Drain hose not included.

Do not mount this unit close to combustibles or heat sources.

Although this unit is fairly quiet when in operation, do not mount this unit where noise issues could be a problem.

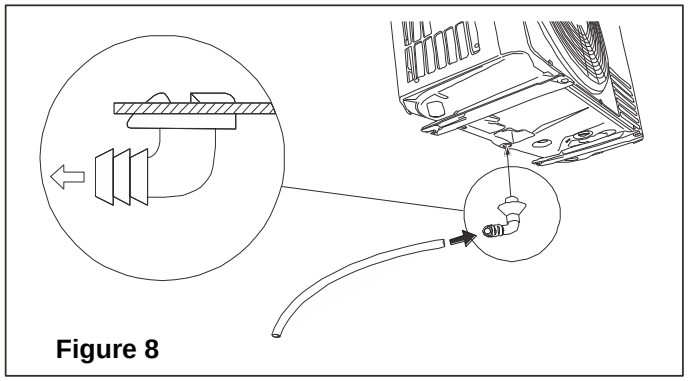


**Figure 8**

Mount unit on an equipment pad or solid surface, install drain plug and tube as necessary. If wall mounting is necessary a wall mount bracket may be purchased (BR-440L) for this purpose. Follow mounting instructions for bracket to ensure safe installation.

Anchor bolts of the proper size and type (Installer provided) must be used.

For best results mount this unit as close as possible to the evaporators. Check maximum line length specifications before mounting.

**Maximum Line length and height**

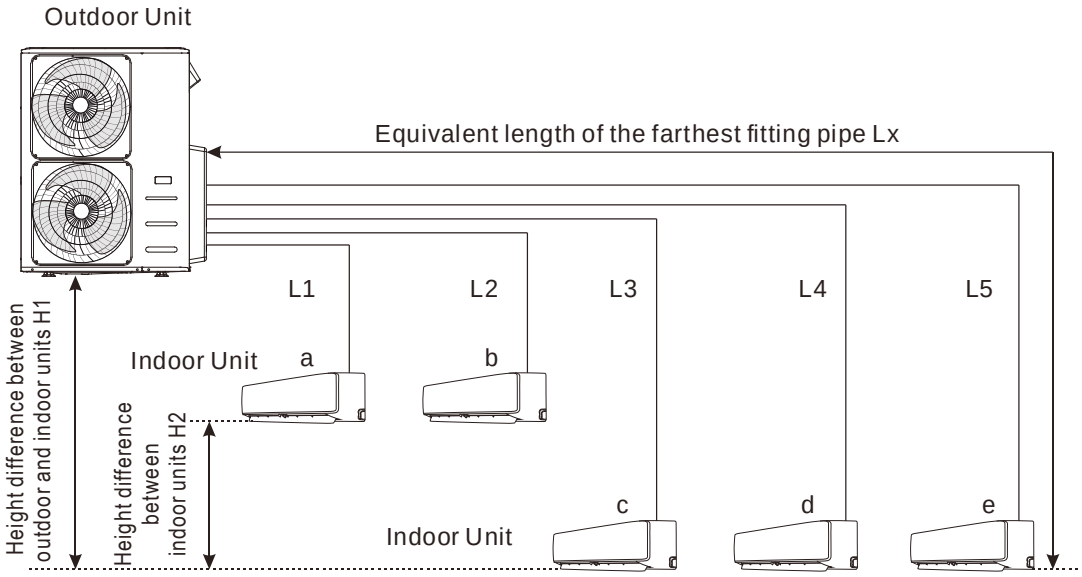



**Figure 9**

| Connection Length | MZ18H424ZMO<br>HMZ18H424ZMO<br>DUAL ZONE | SMZ27H424ZMO<br>HMZ28H424ZMO<br>TRIPLE ZONE | MZ36H424ZMO<br>HMZ36H424ZMO<br>QUAD ZONE | MZ482H424ZMO<br>HMZ48H424ZMO<br>FIVE PORT |
|---|---|---|---|---|
| Total Length | L1+L2 ≤ 131 ft. | L1+L2+L3 ≤ 197 ft. | L1+L2+L3+L4 ≤ 262 ft. | L1+L2+L3+L4+L5 ≤ 262 ft. |
| **Lx** - Max. Length for any indoor unit | 82 ft. | 98 ft. | 115 ft. | 115 ft. |
| **H1** - Max. Height between each indoor and the outdoor unit | 49.2 ft. | 49.2 ft. | 49.2 ft. | 49.2 ft. |
| **H2** - Max. Height difference between indoor units | 32.8 ft. | 32.8 ft. | 32.8 ft. | 32.8 ft. |

**MAXIMUM LINE LENGTH AND / OR HEIGHT MUST NOT BE EXCEEDED!**

## CONNECTING LINE SET

**CAUTION! IMPROPER CONNECTION OF THE LINE SETS WILL RESULT IN IMPROPER OPERATION OF THE SYSTEM. MARK EACH LINE SET AND WIRING FOR IDENTIFICATION. IDENTIFICATION LABELS ARE INCLUDED WITH EACH OUTDOOR UNIT. ENSURE THAT THE WIRING AND THE LINE SETS ARE ROUTED TO THE PROPER INDOOR ZONE.**

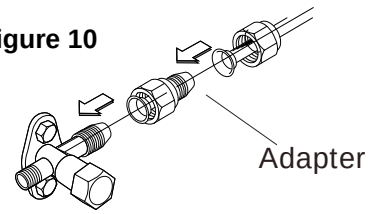
**INDOOR UNITS**

| Indoor Unit Type | Capacity | Liquid Line | Suction Line |
|---|---|---|---|
| Wall Mounted, Console, Cassette Floor / Ceiling, Ducted, Air Handler | 6K, 9K | 1/4” | 3/8” |
| | 12K, 18K | 1/4” | 1/2” |
| | 24K, 30K, 36K | 3/8” | 5/8” |

**OUTDOOR UNITS (adapters included)**

| Outdoor Unit Type | Port A liquid-suction | Port B liquid-suction | Port C liquid-suction | Port D liquid-suction | Port E Liquid-suction |
|---|---|---|---|---|---|
| 18K Dual Zone | 1/4”-3/8” | 1/4”-3/8” | N/A | N/A | N/A |
| 27K Triple Zone | 1/4”-3/8” | 1/4”-3/8” | 1/4”-3/8” | N/A | N/A |
| 28K Triple Zone (Peak Heat) | 1/4”-3/8” | 1/4”-3/8” | 1/4”-1/2” | N/A | N/A |
| 36K Quad Zone | 1/4”-3/8” | 1/4”-3/8” | 1/4”-3/8” | 1/4”-1/2” | N/A |
| 36K Quad Zone (Peak Heat) | 1/4”-3/8” | 1/4”-3/8” | 1/4”-1/2” | 1/4”-1/2” | N/A |
| 48K Five Port | 1/4”-3/8” | 1/4”-3/8” | 1/4”-3/8” | 1/4”-1/2” | 1/4”-1/2” |

**Figure 10**




### Refrigerant Tubing

1. After the outside unit is secured to the mounting location (Pad, Wall Brackets, etc.), route the line set(s) from the Indoor unit to the outdoor unit, and secure with clamps or Plastic-Duct as required.

**Installation Notes:**

- The MZ18H424ZMO / HMZ18H424ZMO Dual Zone unit are designed to run two indoor units. (See page 6)
- The MZ27H424ZMO / HMZ28H424ZMO Quad Zone unit are designed to run two or three units. DO NOT use this system with one indoor unit. (See page 5)
- The MZ36H424ZMO / HMZ36H424ZMO Quad Zone unit are designed to run two, three, or four indoor units. DO NOT use this system with one indoor unit. (See page 5)
- The MZ48H424ZMO / HMZ48H424ZMO Five Port unit is designed to run two, three, four or five indoor units. DO NOT use this system with one indoor unit. (See page 6)
- The outdoor unit is supplied with a sufficient refrigerant charge of R410A for a maximum Design Length, no extra refrigerant required. Beyond this length additional refrigerant is required and must be weighted in. (see specifications)

Indoor unit contains a small quantity of nitrogen. DO NOT remove the caps until the tubing is ready to be installed.

**NOTE**: An oil trap is recommended to be installed if the indoor unit is over 15 feet in height from the outdoor unit. To prevent kinking, bend tubes using a tubing tool.

**CAUTION! WHEN REMOVING THE VALVE CAPS, DO NOT STAND IN FRONT OF VALVES, AS THE SYSTEM IS UNDER HIGH PRESSURE.**

**CAUTION! DO NOT BRAZE TUBING OR USE THREAD SEALANT. USE FLARE CONNECTIONS ONLY.**

2. Line set can now be cut (if necessary), to the proper length. Cut the tubing a little longer than measured distance. Completely remove all burrs from the crosscut section of tubing. Do not allow debris to fall into copper tube. It is extremely important to clean the copper tubing prior to connecting to system.

3. Install flare nuts and follow standard flaring procedures. Use proper flaring tools for a leak proof connection. If a flared section is defective, cut it off and follow standard flaring procedures again.

4. After cutting to length, creating the flares and before connecting the line set, clear all foreign materials by blowing nitrogen through copper tubing. Align the center of the tubing flare with its mating connector. Screw on the flare nut by hand and tighten the nut with a spanner and torque wrench. See Figure 11.

**Note**: Exceeding the tightening torque will damage the flare surface.

| Tightening Torque Table: | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1/4” | 11 – 22 lbs ft. | 3/8” | 23 – 29 lbs ft. | 1/2” | 33 – 37 lbs ft. | 5/8” | 44 – 48 lbs ft. |

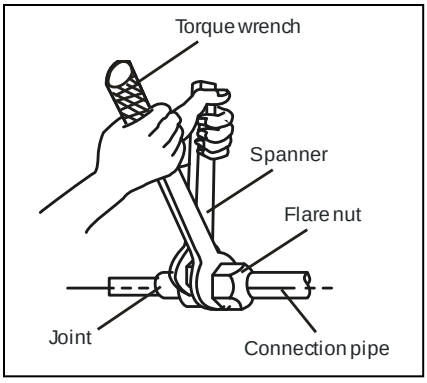



**Figure 11**

5. Verify that the proper line set is being connected to the intended port of the outdoor unit. Connect the line sets to their appropriate fittings on the outside unit, and torque the flare fittings per the table above.

**DO NOT CROSS WIRES OR CROSS CONNECT SYSTEMS TO OUTDOOR UNIT.**

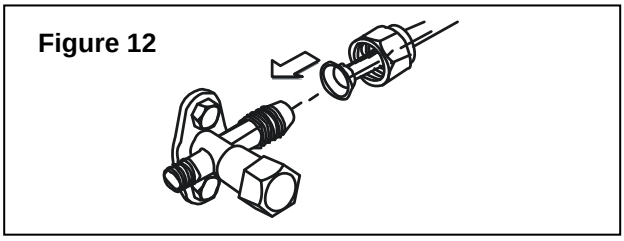


**Figure 12**

6. Bundle all lines, control cables and condensation drain together. Be sure to leave ample length on control cable to allow for termination. Bundle can be secured together using vinyl tape.

**Note:** Condensation drain MUST be placed at the bottom of the bundle as shown in the Figure 13. Failure to do so may cause evaporator to drain improperly.

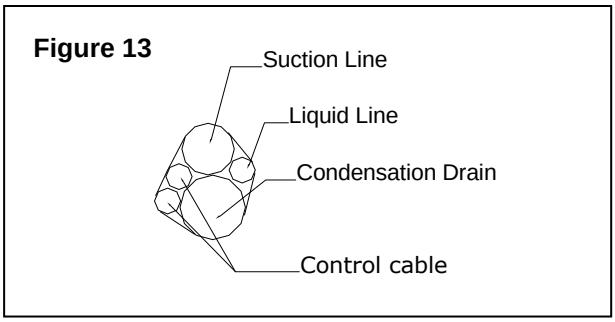



**Figure 13**

7. Line sets must have each tube insulated separately, including their unions with at least 1/4” thick insulation. Wrap the refrigeration tubing, drain hose, and electrical cables with a UV protected vinyl tape. Overlap insulation at all refrigeration joints per Figure 14.

**Note:** Completely wrap line set with insulation. Insulation joints may overlap if desired.

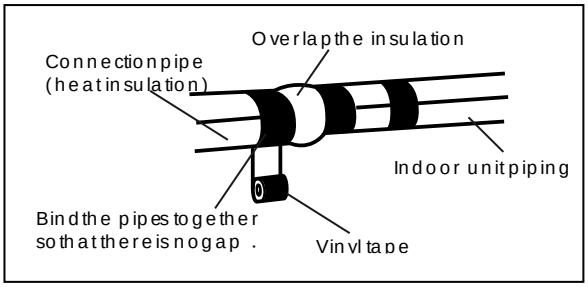



**Figure 14**

**CAUTION!** Failure to completely wrap both lines with insulation may result in damage from condensation forming on lines, and dripping onto walls, ceilings, etc.

## ELECTRICAL CONNECTION

**WARNING! Improper wiring between the inside units and the outside unit can cause serious damage to the system, and the risk of personal injury or fire. Use caution when connecting the wiring to ensure that the wires are connected properly.**

**DO NOT USE THERMOSTAT WIRE TO CONNECT OUTDOOR TO INDOOR UNIT!**

**NOTES:**

- Electrical wiring and connections should be made by qualified electricians in accordance with National and Local electrical codes and regulations.
- Proper grounding is a **must**.
- Voltage range is 187 – 253 VAC.
- See the specifications page for proper wire sizes and circuit breaker sizes.
- Connect the control cables according to the diagrams on page 18.
- Make power connections per diagram on page 18.

### Specifications

| | | |
|---|---|---|
| Compressor stop / start frequency | Stop time | 3 minutes or more |
| Power source voltage | Voltage fluctuation | Within ±10% of rated voltage |
| | Voltage drop during start | Within ±15% of rated voltage |
| | Interval unbalance | Within ±3% of rated voltage |

**Connect the Cable to the Outdoor Unit**

1. Remove the cover on the right side of the outdoor unit.
2. Remove the cable clamp and connect the power connection cable to the terminal.
3. Connect the wires to the terminals. Wiring should be terminal to terminal and to correct indoor unit. (See wiring diagram Figure 18). Do not cross wires!
4. Reattach the cable clamp.
5. Reinstall the cover.
6. Secure wire cables.

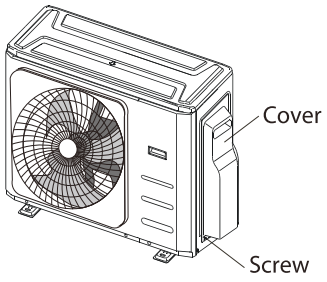
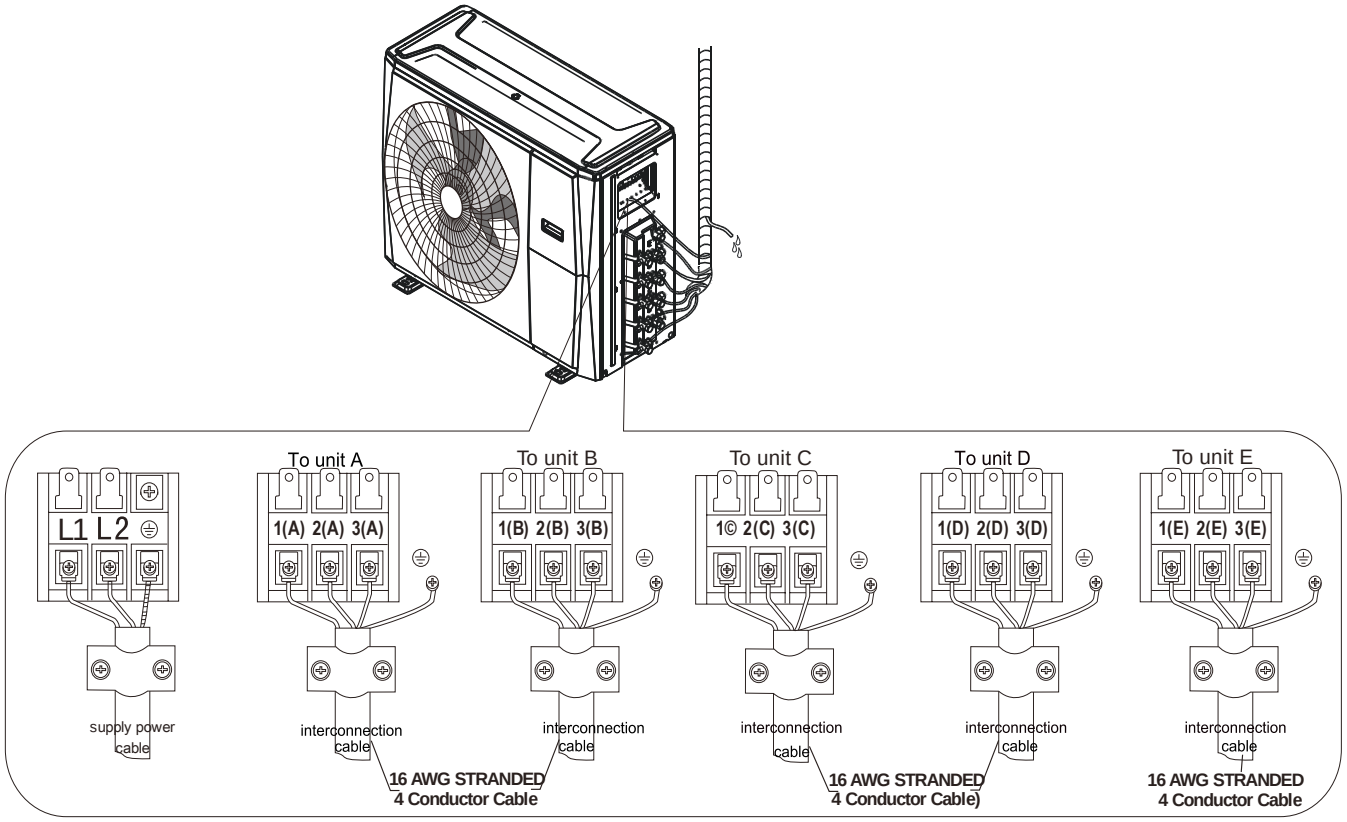



**Figure 15a**

## TYPICAL ELECTRICAL WIRING CONNECTIONS

Typical electrical wiring for the Dual and Quad Zone units. (Dual Zone units use “A” and “B” connections, Triple Zone units use “A”, “B”, “C” connections, Quad Zone unit use “A”, “B”, “C” and “D” connections, Five Port unit use “A”, “B”, “C”, “D” and “E”).



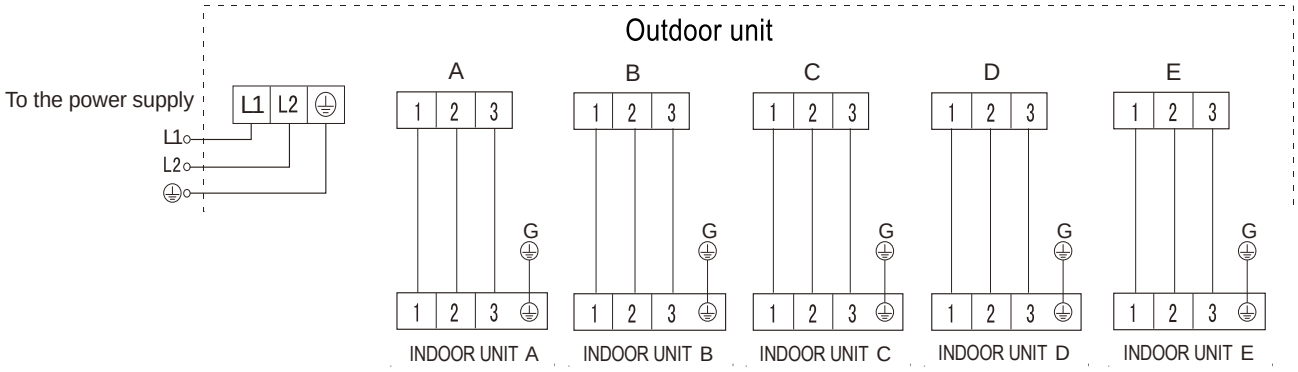




**Figure 15b**

Wiring identification labels are supplied with each outdoor unit.

**Electrical connection of the indoor unit (Wall-mounted)**

Open the front cover by pressing inward on the sides of the cover near the bottom to release, then pull bottom of cover outwards.

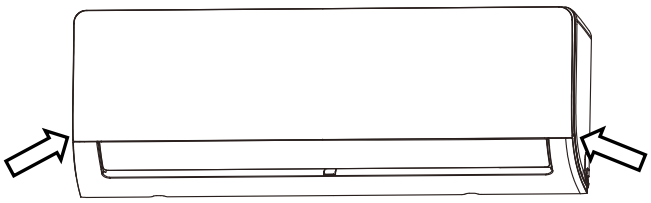


**Figure 16**

Feed the cable wire in from the rear of unit.

Open the electric box cover; connect the wires to the terminal strip individually according to the wiring diagram above. Ensure that the colors of the wires and terminal No. are the same as the wiring diagram. Tighten terminal screws for safe connections.

## DO NOT CROSS WIRES

## DO NOT CONNECT CONDENSATE PUMP TO THE INDOOR UNIT

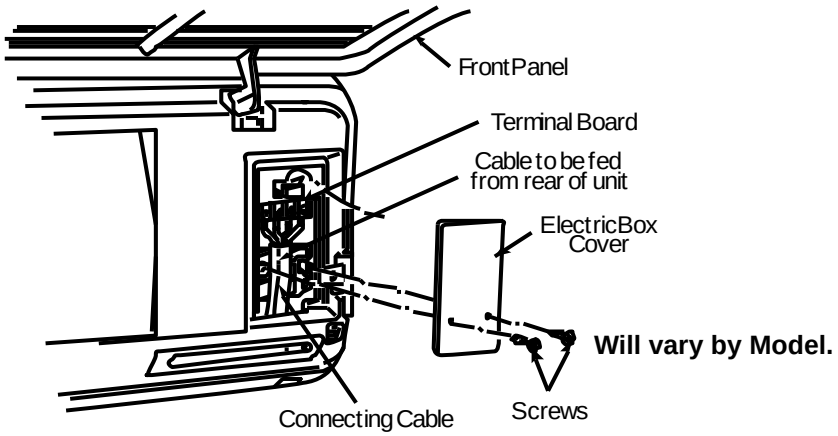



**Figure 17**

Identify each end of the interconnect cable and each of the conductor using the labels provided. Units A, B, C, D and E.

After wiring, replace the electric box cover, and then close the front panel by pressing the corners inward to latch.

**Note：** For detailed information about other types of indoor units, please refer to the manual packed with each indoor unit.

## TYPICAL OUTDOOR INSTALLATION

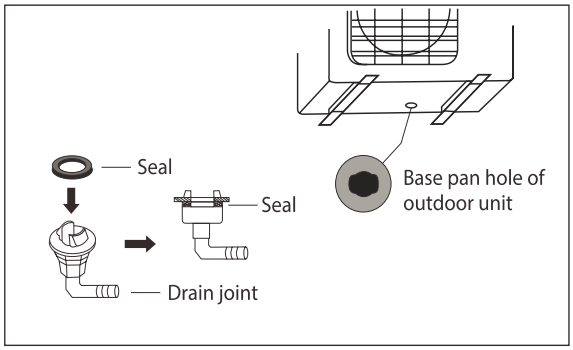



**Figure 18a**

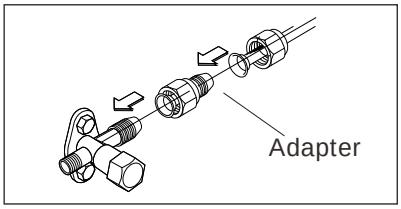



**Figure 18b**




**Figure 18c**

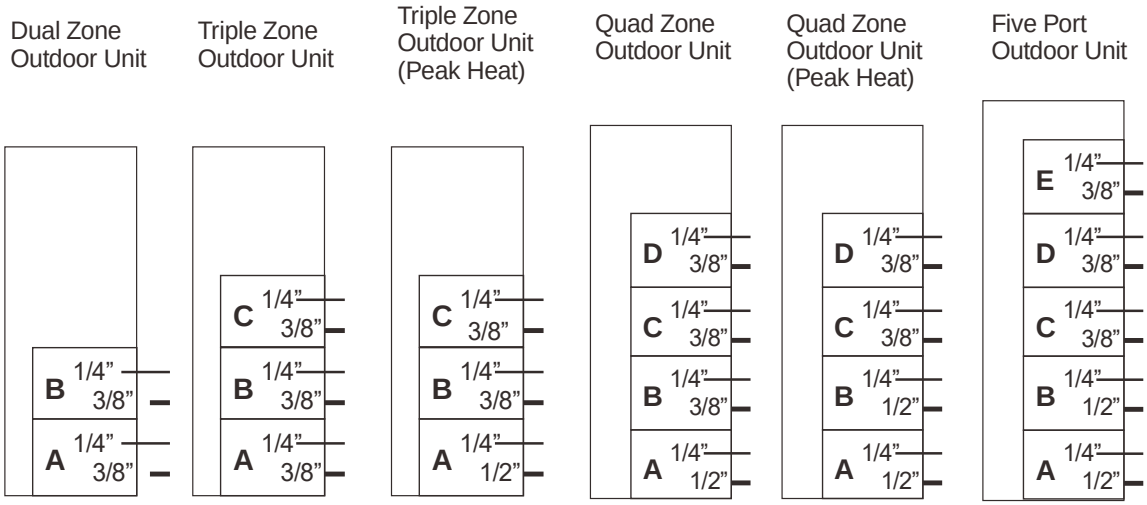



**Figure 18d**

# TUBING CONNECTION

## System structure

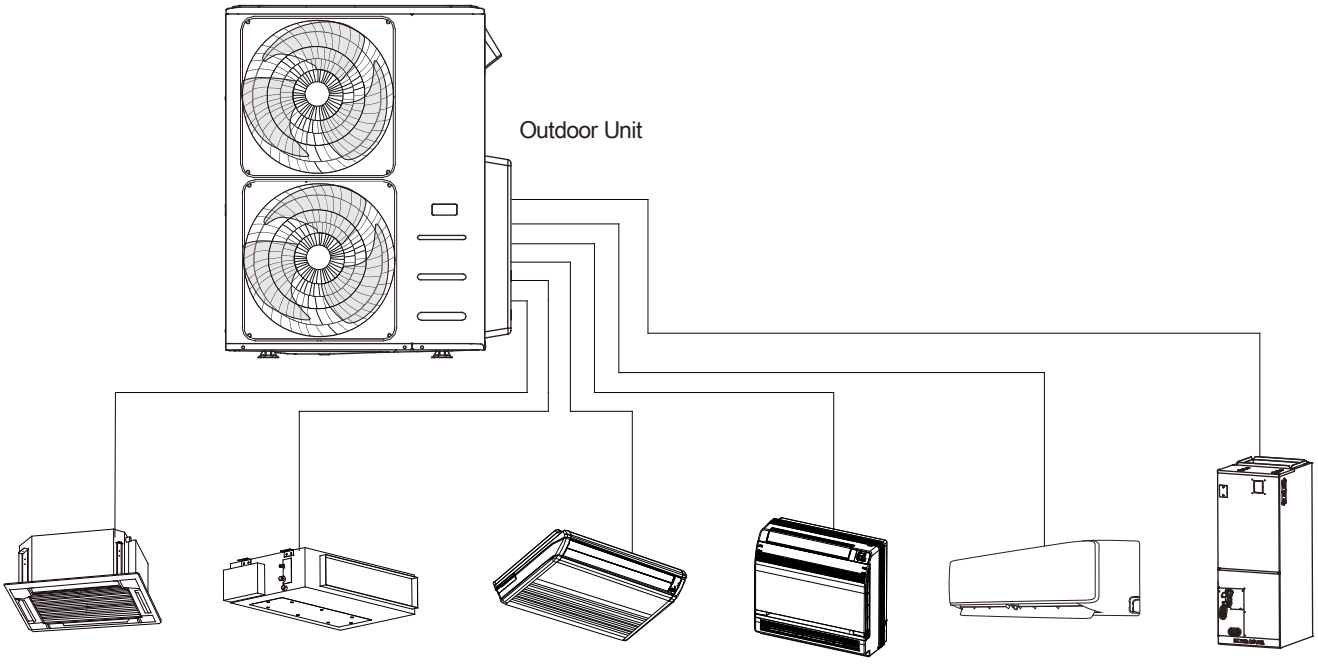



**Figure 19**

For these multi-zone air conditioning systems, the outdoor units are able to operate up to five indoor units which can be different types as shown above. The indoor units can be controlled by either the remote control or the wall control. Wi-Fi control is available for wall mounted indoor units and optional for others. The outdoor unit will run if any of the indoor units sends a request for heating or cooling. All indoor units will stop once the outdoor unit is turned off.

## Tubing Connection Size

| INDOOR unit copper tubing | | 1/4" | 3/8" | 1/2" | 5/8" |
|---|---|---|---|---|---|
| Wall-Mount, Cassette, Floor/ceiling, Console, Ducted, Air Handler | 6K / 9K | x | x | | |
| | 12K / 18K | x | | x | |
| | 24K | | x | | x |
| | 30K / 36K | | x | | x |

| OUTDOOR UNIT | Terminal A | Terminal B | Terminal C | Terminal D | Terminal E | Adapter Included |
|---|---|---|---|---|---|---|
| MZ18H424ZMO / HMZ18H424ZMO | 1/4", 3/8" | 1/4", 3/8" | | | | 3/8"F to 1/2”M -2 pcs, |
| MZ27H424ZMO | 1/4", 3/8" | 1/4", 3/8" | 1/4", 3/8" | | | 3/8"F to 1/2”M -3 pcs, |
| HMZ28H424ZMO | 1/4", 1/2" | 1/4", 3/8" | 1/4", 3/8" | | | 3/8"F to 1/2”M -2 pcs, 1/2"F to 3/8”M -1 pc, 1/4"F to 3/8”M -1 pc, 1/2"F to 5/8”M -1 pc |
| MZ36H424ZMO | 1/4", 1/2" | 1/4", 3/8" | 1/4", 3/8" | 1/4", 3/8" | | 3/8"F to 1/2”M -3 pcs, 1/2"F to 3/8”M -1 pc, 1/4"F to 3/8”M -1 pc, 1/2"F to 5/8”M -1 pc |
| HMZ36H424ZMO | 1/4", 1/2" | 1/4", 1/2" | 1/4", 3/8" | 1/4", 3/8" | | 3/8"F to 1/2”M -2 pcs, 1/2"F to 3/8”M -2 pc, 1/4"F to 3/8”M -2 pc, 1/2"F to 5/8”M -2 pc |
| MZ18H424ZMO / HMZ18H424ZMO | 1/4", 1/2" | 1/4", 1/2" | 1/4", 3/8" | 1/4", 3/8" | 1/4", 3/8" | 3/8"F to 1/2”M -3 pcs, 1/2"F to 3/8”M -2 pc, 1/4"F to 3/8”M -2 pc, 1/2"F to 5/8”M -2 pc |

## EVACUATION OF THE REFRIGERATION TUBES AND INDOOR UNIT

After connecting the indoor and outdoor units, evacuate the air from the line set and the indoor unit as follows:

### Leak Testing

Indoor units are nitrogen pre-charged, however they should be pressure tested before installation.

1. Connect the charging hoses to the low side of the manifold and the service port of the suction valve (See figure 21b).

2. Connect the center hose of the manifold valve to a nitrogen source.

**NOTE**: The nitrogen gas cylinder is used in a vertical standing position.

3. Charge system with nitrogen to 400 PSI and check for leaks, using standard industry leak detection methods.

4. Pay attention to possible evaporator leaks that may have occurred during shipping or installation.

5. Remove the nitrogen by opening the manifold valves.

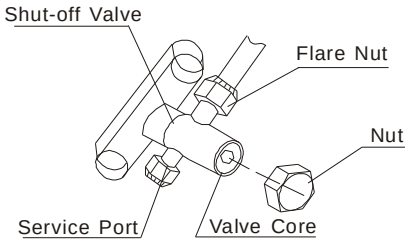



**Figure 20**

Perform previous steps 1 to 4 on all indoor units. (See Figure 21)

### Vacuum Purge

**DO NOT OPEN SERVICE PORT VALVES**

1. Turn on the vacuum pump. Evacuate system for about 30 minutes and confirm that the vacuum reading to each indoor unit is 500 microns. After reaching 500 microns continue evacuation for approximately 2 hours.

2. Close all manifold valves and turn off the vacuum pump. After waiting for 30 minutes, confirm that the vacuum reading has not changed. If the vacuum reading has changed, there is a leak that must be found and repaired before continuing.

Perform previous steps 1 to 3 on all indoor units. Then proceed with the next step (3).

3. Remove the valve caps from all valves. Slowly open each liquid line fully using a hexagonal Allen wrench. Use the same procedure on the suction valve. Open all valves to the full back seat position.

4. Securely tighten the caps back onto liquid and suction the valves.

5. Check for gas leaks from all connections. Test with an electronic leak detector, or with soapy water and check for bubbles. Be sure to wipe off the soap with a clean cloth after leakage test.

SUCTION PORT CONNECTIONS
Use these ports for connection to each of the linesets.
Each line set / evaporator assembly must be prepared separately.

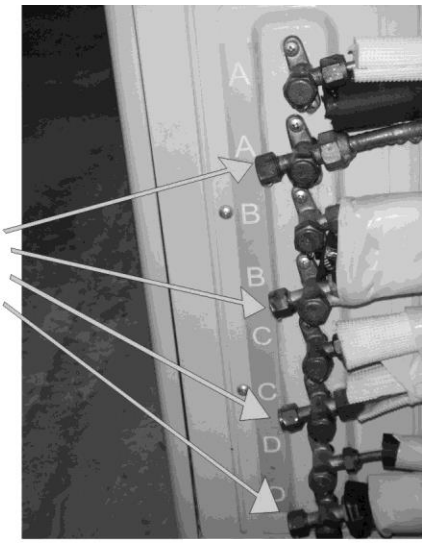



**Figure 21a**

Loosen the liquid side flare fitting slightly to allow nitrogen purge.

Connect the manifold set to each suction port.

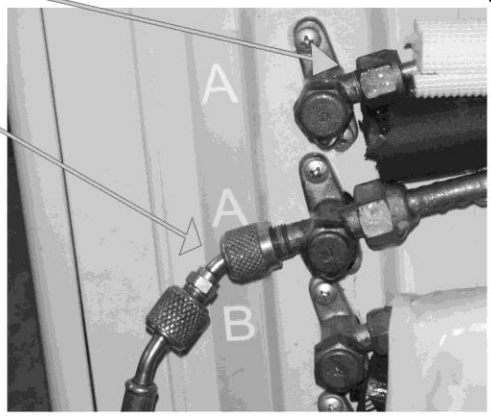



**Figure 21b**

**Figure 21c**

Nitrogen bottle connected for purge of unit A.
Purge @ 150 PSI for 1-2 minutes.

Re-tighten flare fitting. Remove nitrogen tank from manifold and replace with vacuum pump.

Vacuum to 500 microns for 30 minutes. Repeat the above steps for each connected indoor unit.

**Figure 21d**


Once the vacuum operation has been performed on Unit A, open the valves slowly to allow the flow of refrigerant. Once the refrigerant flow cannot be heard, open both valves completely. These valves must be opened completely in order to prevent leaks. Replace caps on service ports and valves as added protection against leaks.

Repeat for each connected indoor unit.

# START UP TESTING

## Preparation

1. Double check that all wiring has been properly connected.
2. Check that tubing has been properly connected and ensure the suction and liquid side service valves are fully open.
3. Review remote control functions in the Operators manual.

**Note:** A wall control is optional 7DP120X (246-1002). For the details of installation and operation, please refer to the manual to be placed with the wall control.

## Operational Test

**Note:**

**For model: MZ18H424ZMO, MZ27H424ZMO, MZ36H424ZMO, MZ48H424ZMO**
The cooling test may be performed if the outdoor temperature is between -13 ºF to 122 ºF.
The heating test may be performed if the outdoor temperature is between -13 ºF to 86 ºF.
**For model: HMZ18H424ZMO, HMZ28H424ZMO, HMZ36H424ZMO, HMZ48H424ZMO**
The cooling test may be performed if the outdoor temperature is between -22 ºF to 122 ºF.
The heating test may be performed if the outdoor temperature is between -22 ºF to 86 ºF.

1) With the unit turned on, press the mode button and select “COOL” mode for all indoor units (see **Note** above). Allow 3 minutes for compressor delay timer to expire.
2) Press the “∨” button until it reads 60 ºF on all indoor units.
3) Operate indoor units for no less than 15 minutes in the cooling mode.
4) Press the “FAN” button to select high fan speed on all units.
5) After operating for several minutes, check for cool air flow. Outlet temperature should be 20 to 24 ºF lower than ambient temperature. (If outlet temperature is out of range contact technical support).
6) If cooling mode is operating properly, check for proper heat operation.
7) Press the mode button to select “HEAT” (see **Note** above).
8) Press the “∧” button until it reads 86 ºF.
9) Allow approximately 5 minutes for compressor delay timer to expire before unit will operate.
10) The indoor fan will turn on and heat should be present.
11) If unit(s) does not perform as described, see the troubleshooting section.
12) All functions should be tested for operation, see Operation manual. Review remote control functions with owner.
13) Emergency operation button – test to confirm proper operation (see Operation Manual).

**Notes:**

1. Indoor fan will not turn off in the cooling mode.
2. Indoor fan will turn off in heating mode shortly after the set point has been satisfied.
3. Unit may require several minutes to confirm the condition of temperature set point and system functions.

## Technical Specifications for DUAL ZONE Outdoor Unit

| Model Number | | 246-0600 MZ18H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 13 |
| Min. Circuit Ampacity (A) | | 18 |
| Circuit Breaker Size (A) | | 25 |
| Working Temperature Range (°F) | | Cooling: -13 to 122; Heating: -13 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 58.5 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 18000 (5650~22000) |
| | Cooling Power Input (W) | 1,355 |
| | Cooling Current Input (A) | 6.2 |
| | EER (Btu/h/W) | 13.3 |
| | SEER | 21.5 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 19000 (5050~24400) |
| | Heating Power Input (W) | 1,420 |
| | Heating Current Input (A) | 6.3 |
| | COP (W/W) | 3.92 |
| | HSPF4 | 10.8 |
| | HSPF5 | 8.5 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 12400 |
| | COP (W/W) | 1.75 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-80-8-3 |
| | Motor Insulation Class | E |
| | Input (W) | 88 |
| | Fan Speed (RPM) | 750/600/500 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 21.06 / 5.24 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 2,129 |
| Compressor | Model | KTN150D30UFZA |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 16139 |
| | Input (W) | 1,250 |
| | Crankcase Heater Input (W) | 20 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 15.22 |
| | Overload Protector | / |
| Condenser | Number of Rows | 2 |
| | Fin Pitch (in) | 0.051 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 35.43 x 23.98 x 0.87 +34.06 x 23.98 x 0.87 |
| | Number of circuits | 6 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 35.04 x 13.46 x 26.50 |
| | Packing Dimensions (W x D x H) (in) | 40.55 x 17.24 x 29.53 |
| | Net / Gross Weight (lb) | 100.31 / 109.13 |
| Connection | Flare Liquid line | 2 x 1/4" |
| | Flare Suction line | 2 x 3/8" [*1] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 2 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 49.2 (total) [*2] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 82 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 131 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*2] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 65.26 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 12 AWG |

*1. 12,000 BTU indoor units use a 1/2" to 3/8" adapter joint that is included with the unit.
*2. When the total length of liquid line is over 49 ft, the additional refrigerant charge is required.
NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for TRIPLE ZONE Outdoor Unit

| Model Number | | 246-0601 MZ27H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 19 |
| Min. Circuit Ampacity (A) | | 24.5 |
| Circuit Breaker Size (A) | | 30 |
| Working Temperature Range (°F) | | Cooling: -13 to 122; Heating: -13 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 61 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 28000 (9838~30438) |
| | Cooling Power Input (W) | 2,240 |
| | Cooling Current Input (A) | 11 |
| | EER (Btu/h/W) | 12.5 |
| | SEER | 22.5 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 28000 (8218~31000) |
| | Heating Power Input (W) | 2,200 |
| | Heating Current Input (A) | 10.5 |
| | COP (W/W) | 3.73 |
| | HSPF4 | 10.2 |
| | HSPF5 | 8.8 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 15500 |
| | COP (W/W) | 1.75 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-120-8-2 |
| | Motor Insulation Class | B |
| | Input (W) | 150 |
| | Fan Speed (RPM) | 1050/900/850 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 22.05 / 5.47 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 2,129 |
| Compressor | Model | KTM240D43UKT |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 25932 |
| | Input (W) | 2,045 |
| | Crankcase Heater Input (W) | 25 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 20.97 |
| | Overload Protector | / |
| Condenser | Number of Rows | 2 |
| | Fin Pitch (in) | 0.055 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 39.57 x 29.76 x 0.53 +38.78 x 29.76 x 0.53 |
| | Number of circuits | 6 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.24 x 16.14 x 31.89 |
| | Packing Dimensions (W x D x H) (in) | 42.91 x 19.69 x 34.45 |
| | Net / Gross Weight (lb) | 139.77 / 150.79 |
| Connection | Flare Liquid line | 1/4" |
| | Flare Suction line | 3/8" [*1] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 3 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 74 (total) [*2] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 98 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 197 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*2] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 91.7 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 10 AWG |

*1. 12,000 / 18,000 BTU indoor units use a 1/2" to 3/8" adapter joint that is included with the unit.

*2. When the total length of liquid line is over 74 ft, the additional refrigerant charge is required.

NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for QUAD ZONE Outdoor Unit

| Model Number | | 246-0602 MZ36H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 20.5 |
| Min. Circuit Ampacity (A) | | 25 |
| Circuit Breaker Size (A) | | 40 |
| Working Temperature Range (°F) | | Cooling: -13 to 122; Heating: -13 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 63 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 36000 (8209~40555) |
| | Cooling Power Input (W) | 3,125 |
| | Cooling Current Input (A) | 13.6 |
| | EER (Btu/h/W) | 11.5 |
| | SEER | 21.8 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 37000 (8008~44632) |
| | Heating Power Input (W) | 3,000 |
| | Heating Current Input (A) | 13 |
| | COP (W/W) | 3.61 |
| | HSPF4 | 11.5 |
| | HSPF5 | 9.2 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 23959 |
| | COP (W/W) | 1.75 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-120-8-2 |
| | Motor Insulation Class | B |
| | Input (W) | 150 |
| | Fan Speed (RPM) | 1000/900/750 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 22.05 / 5.47 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 2,147 |
| Compressor | Model | KTF310D43UMT |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 34155 |
| | Input (W) | 2,765 |
| | Crankcase Heater Input (W) | 25 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 33.81 |
| | Overload Protector | INT01L-4639 |
| Condenser | Number of Rows | 2.6 |
| | Fin Pitch (in) | 0.059 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 39.17 x 30.0 x 0.87 +37.8 x 30.0 x 0.87+22.83x 30.0 x 0.87 |
| | Number of circuits | 6 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.24 x 16.14 x 31.89 |
| | Packing Dimensions (W x D x H) (in) | 42.91 x 19.69 x 34.45 |
| | Net / Gross Weight (lb) | 169.09 / 181.66 |
| Connection | Flare Liquid line | Four of 1/4"- 6K, 9K, 12K, 18K [*1] |
| | Flare Suction line | Three of 3/8" - 6K, 9K Btu [*2] ,<br>One of 1/2" - 12K, 18K Btu [*3] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 4 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 98 (total) [*4] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 115 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 262 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*4] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 134.04 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 8 AWG |

*1. 24,000 BTU indoor unit use a 3/8" to 1/4" adapter joint that is included with the unit.
*2. 12,000 / 18,000 BTU indoor units use a 1/2" to 3/8" adapter joint that are included with the unit.
*3. 6,000 / 9,000 indoor units use a 3/8" to 1/2" adapter joint that is included with the unit.
24,000 BTU indoor unit use a 5/8" to 1/2" adapter joint that is included with the unit.
*4. When the total length of liquid line is over 98 ft, the additional refrigerant charge is required.
NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for FIVE PORT Outdoor Unit

| Model Number | | 246-0603 MZ48H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 26 |
| Min. Circuit Ampacity (A) | | 40 |
| Circuit Breaker Size (A) | | 60 |
| Working Temperature Range (°F) | | Cooling: -13 to 122; Heating: -13 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 64 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 48000 (19000~50000) |
| | Cooling Power Input (W) | 3,840 |
| | Cooling Current Input (A) | 16.8 |
| | EER (Btu/h/W) | 12.5 |
| | SEER | 21 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 48000 (12500~52000) |
| | Heating Power Input (W) | 3,910 |
| | Heating Current Input (A) | 17.1 |
| | COP (W/W) | 3.6 |
| | HSPF4 | 11.5 |
| | HSPF5 | 8.8 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 27000 |
| | COP (W/W) | 1.65 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-85-8-22-5 |
| | Motor Insulation Class | E |
| | Input (W) | 126 |
| | Fan Speed (RPM) | 900/850/800/750 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 21.81 / 5.83 x 2 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 4,500 |
| Compressor | Model | ATQ360D1UMU |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 38216 |
| | Input (W) | 3,040 |
| | Crankcase Heater Input (W) | 27 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 47.34 |
| | Overload Protector | / |
| Condenser | Number of Rows | 2 |
| | Fin Pitch (in) | 0.047 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 38.58 x 24.8 x 1.73 + 38.58 x 24.8 x 1.73 |
| | Number of circuits | 10 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.48 x 16.34 x 52.48 |
| | Packing Dimensions (W x D x H) (in) | 43.11 x 19.49 x 57.48 |
| | Net / Gross Weight (lb) | 225.53 / 256.62 |
| Connection | Flare Liquid line | Five of 1/4"- 6K, 9K, 12K, 18K [*1] |
| | Flare Suction line | Three of 3/8" - 6K, 9K Btu [*2]<br>Two of 1/2" - 12K, 18K Btu [*3] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 5 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 123 (total) [*4] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 115 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 262 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*4] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 162 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 6 AWG |

*1. 24,000 / 30,000 / 36,000 BTU indoor units use a 3/8" to 1/4" adapter joint that is included with the unit.
*2. 12,000 / 18,000 BTU indoor units use a 1/2" to 3/8" adapter joint that are included with the unit.
*3. 6,000 / 9,000 indoor units use a 3/8" to 1/2" adapter joint that is included with the unit.
24,000 / 30,000 / 36,000 BTU indoor units use a 5/8" to 1/2" adapter joint that is included with the unit.
*4. When the total length of liquid line is over 123 ft, the additional refrigerant charge is required.

NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for DUAL ZONE PEAK HEAT Outdoor Unit

| Model Number | | 246-0706 HMZ18H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 18 |
| Min. Circuit Ampacity (A) | | 20 |
| Circuit Breaker Size (A) | | 25 |
| Working Temperature Range (°F) | | Cooling: -22 to 122; Heating: -22 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 61 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 19000 (5500~25000) |
| | Cooling Power Input (W) | 1,520 |
| | Cooling Current Input (A) | 9.1 |
| | EER (Btu/h/W) | 12.5 |
| | SEER | 20.5 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 20000 (8100~29700) |
| | Heating Power Input (W) | 1,725 |
| | Heating Current Input (A) | 9.4 |
| | COP (W/W) | 3.4 |
| | HSPF4 | 9.8 |
| | HSPF5 | 8.7 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 19000 |
| | COP (W/W) | 1.96 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-80-8-3 |
| | Motor Insulation Class | E |
| | Input (W) | 150 |
| | Fan Speed (RPM) | 1050/900/850 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 21.06 / 5.24 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 2,129 |
| Compressor | Model | KTM240D43UKT |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 25932 |
| | Input (W) | 2,045 |
| | Crankcase Heater Input (W) | 25 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 20.96 |
| | Overload Protector | / |
| Condenser | Number of Rows | 2 |
| | Fin Pitch (in) | 0.055 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 39.57 x 29.76 x 0.53 +38.78 x 29.76 x 0.53 |
| | Number of circuits | 6 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.24 x 16.14 x 31.89 |
| | Packing Dimensions (W x D x H) (in) | 42.91 x 19.69 x 34.45 |
| | Net / Gross Weight (lb) | 138.23 / 149.25 |
| Connection | Flare Liquid line | 2 x 1/4" |
| | Flare Suction line | 2 x 3/8" [*1] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 2 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 49.2 (total) [*2] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 82 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 131 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*2] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 91.7 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 12 AWG |

*1. 12,000 BTU indoor units use a 1/2" to 3/8" adapter joint that is included with the unit.

*2. When the total length of liquid line is over 49 ft, the additional refrigerant charge is required.

NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for TRIPLE ZONE PEAK HEAT Outdoor Unit

| Model Number | | 246-0703 HMZ28H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| ated Input Current of the Power Conversion Equipment | | 20 |
| Min. Circuit Ampacity (A) | | 25 |
| Circuit Breaker Size (A) | | 40 |
| Working Temperature Range (°F) | | Cooling: -22 to 122; Heating: -22 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 63 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 28000 (7995~32826) |
| | Cooling Power Input (W) | 2,240 |
| | Cooling Current Input (A) | 11 |
| | EER (Btu/h/W) | 12.5 |
| | SEER | 22.0 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 28000 (5035~38712) |
| | Heating Power Input (W) | 2,240 |
| | Heating Current Input (A) | 10.5 |
| | COP (W/W) | 3.66 |
| | HSPF4 | 10.1 |
| | HSPF5 | 9 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 24000 |
| | COP (W/W) | 1.75 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-120-8-2 |
| | Motor Insulation Class | B |
| | Input (W) | 150 |
| | Fan Speed (RPM) | 1050/900/850 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 22.05 / 5.47 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 2,129 |
| Compressor | Model | KTM240D43UKT |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 34155 |
| | Input (W) | 2,765 |
| | Crankcase Heater Input (W) | 25 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 33.81 |
| | Overload Protector | INT01L-4639 |
| Condenser | Number of Rows | 2.6 |
| | Fin Pitch (in) | 0.059 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 39.17 x 30.0 x 0.87 +37.8 x 30.0 x 0.87+22.83x 30.0 x 0.87 |
| | Number of circuits | 6 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.24 x 16.14 x 31.89 |
| | Packing Dimensions (W x D x H) (in) | 42.91 x 19.69 x 34.45 |
| | Net / Gross Weight (lb) | 167.99 / 179.90 |
| Connection | Flare Liquid line | Three of 1/4" |
| | Flare Suction line | Two of 3/8" - 6K, 9K Btu [*1]<br>One of 1/2" - 12K, 18K Btu [*2] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 3 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 74 (total) [*3] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 98 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 197 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*2] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 134.04 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 8 AWG |

*1. 12,000 / 18,000 BTU indoor units use a 1/2" to 3/8" adapter joint that is included with the unit.
*2. 6,000 / 9,000 indoor units use a 3/8" to 1/2" adapter joint that is included with the unit.
*3. When the total length of liquid line is over 74 ft, the additional refrigerant charge is required.

NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for QUAD ZONE PEAK HEAT Outdoor Unit

| Model Number | | 246-0704 HMZ36H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 26 |
| Min. Circuit Ampacity (A) | | 40 |
| Circuit Breaker Size (A) | | 60 |
| Working Temperature Range (°F) | | Cooling: -22 to 122; Heating: -22 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 63 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 36000 (17900~42000) |
| | Cooling Power Input (W) | 2,650 |
| | Cooling Current Input (A) | 11.8 |
| | EER (Btu/h/W) | 13.6 |
| | SEER | 20 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 36500 (12500~49000) |
| | Heating Power Input (W) | 2,780 |
| | Heating Current Input (A) | 12.2 |
| | COP (W/W) | 3.85 |
| | HSPF4 | 11 |
| | HSPF5 | 9 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 26000 |
| | COP (W/W) | 1.9 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-85-8-22-5 |
| | Motor Insulation Class | E |
| | Input (W) | 126 |
| | Fan Speed (RPM) | 900/850/800/750 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 21.81 / 5.83 x 2 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 4,500 |
| Compressor | Model | ATQ360D1UMU |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 38216 |
| | Input (W) | 3,040 |
| | Crankcase Heater Input (W) | 27 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 47.34 |
| | Overload Protector | / |
| Condenser | Number of Rows | 2 |
| | Fin Pitch (in) | 0.047 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 38.58 x 24.8 x 1.73 + 38.58 x 24.8 x 1.73 |
| | Number of circuits | 10 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.48 x 16.34 x 52.48 |
| | Packing Dimensions (W x D x H) (in) | 43.11 x 19.49 x 57.48 |
| | Net / Gross Weight (lb) | 223.11 / 253.97 |
| Connection | Flare Liquid line | Four of 1/4"- 6K, 9K, 12K, 18K [*1] |
| | Flare Suction line | Two of 3/8" - 6K, 9K Btu [*2]<br>Two of 1/2" - 12K, 18K Btu [*3] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 4 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 98 (total) [*4] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 115 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 262 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*4] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 162 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 6 AWG |

*1. 24,000 BTU indoor units use a 3/8" to 1/4" adapter joint that is included with the unit.
*2. 12,000 / 18,000 BTU indoor units use a 1/2" to 3/8" adapter joint that are included with the unit.
*3. 6,000 / 9,000 indoor units use a 3/8" to 1/2" adapter joint that is included with the unit.
24,000 BTU indoor unit use a 5/8" to 1/2" adapter joint that is included with the unit.
*4. When the total length of liquid line is over 98 ft, the additional refrigerant charge is required.
NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

## Technical Specifications for FIVE PORT PEAK HEAT Outdoor Unit

| Model Number | | 246-0705 HMZ48H424ZMO |
|---|---|---|
| Rated Voltage & Frequency and Phase | | 208-230V / 60Hz / 1PH |
| Min. - Max. Operating Voltage | | 187 - 253 VAC |
| Rated Input Current of the Power Conversion Equipment | | 26 |
| Min. Circuit Ampacity (A) | | 40 |
| Circuit Breaker Size (A) | | 60 |
| Working Temperature Range (°F) | | Cooling: -22 to 122; Heating: -22 to 86 |
| Low Ambient Cooling Function | | Yes |
| Sound Power Level dB(A) | | 65 |
| Resistance Class | | IPX4 |
| Cooling | Capacity Invert Range (Btu/h) | 48000 (19300~51000) |
| | Cooling Power Input (W) | 4150 |
| | Cooling Current Input (A) | 18.0 |
| | EER (Btu/h/W) | 11.6 |
| | SEER | 21.0 |
| Heating @ 47 °F | Capacity Invert Range (Btu/h) | 49000 (11500~58000) |
| | Heating Power Input (W) | 4000 |
| | Heating Current Input (A) | 17.8 |
| | COP (W/W) | 3.59 |
| | HSPF4 | 11.5 |
| | HSPF5 | 9.0 |
| Heating @ 5 °F | Rated Capacity (Btu/h) | 48000 |
| | COP (W/W) | 2.0 |
| Fan Motor | Fan Type | Axial-flow |
| | Fan Motor Type / Model | DC Motor / ZKFN-85-8-22-5 |
| | Motor Insulation Class | E |
| | Input (W) | 126 |
| | Fan Speed (RPM) | 900/850/800/750 |
| Outdoor Fan | Fan Blade Diameter / Height (in) | 21.81 / 5.83 x 2 |
| | Max. Air Flow Volume of Outdoor Unit (CFM) | 4,500 |
| Compressor | Model | EAPQ420D1UMUA |
| | TYPE | Rotary |
| | Brand | GMCC |
| | Capacity (Btu/h) | 44015 |
| | Input (W) | 3565 |
| | Crankcase Heater Input (W) | 27 |
| | Oil Type / Charge Volume (oz.) | ESTER OIL VG74 / 49.37 |
| | Overload Protector | INT01L-4639 |
| Condenser | Number of Rows | 2 |
| | Fin Pitch (in) | 0.055 |
| | Fin Type | Hydrophilic Aluminum |
| | Coil Length x Height x Width (in) | 38.98 x50.0 x 1.73 + 38.98 x50.0 x 1.73 |
| | Number of circuits | 8 |
| | Defrosting Method | Automatic Defrosting |
| | Chassis Electrical Heater Power Input (W) | 150 |
| Dimensions & Weight | Unit Dimensions (W x D x H) (in) | 37.48 x 16.34 x 52.48 |
| | Packing Dimensions (W x D x H) (in) | 43.11 x 19.49 x 57.48 |
| | Net / Gross Weight (lb) | 238.32 / 269.84 |
| Connection | Flare Liquid line | Five of 1/4"- 6K, 9K, 12K, 18K [*1] |
| | Flare Suction line | Three of 3/8" - 6K, 9K Btu [*2]<br>Two of 1/2" - 12K, 18K Btu [*3] |
| | Service Port Fitting | 1/2" - 20 UNF |
| | Max. drive IDU Number | 5 |
| | High Pressure (psi) | 550 |
| | Low Pressure (psi) | 340 |
| | Design Length (ft) | 123 (total) [*4] |
| | Max Line Set Vertical Height (between outdoor and indoor unit) (ft) | 49.2 |
| | Max Line Set Vertical Height (between indoor and indoor unit) (ft) | 32.8 |
| | Max Line Set Length (ft) | 115 (for the farthest indoor unit) |
| | Max Line Set Length (ft) | 262 (total) |
| | Charge over Design Length on 1/4" liquid pipe [*4] (oz. / ft) | 0.161 |
| | Refrigerant / Charge | R410A / 162 oz. |
| | Wiring (Indoor to Outdoor) | 4C- 16 AWG |
| | Wiring (Outdoor unit to Power Disconnect) | 3C- 6 AWG |

*1. 24,000 / 30,000 / 36,000 BTU indoor units use a 3/8" to 1/4" adapter joint that is included with the unit.
*2. 12,000 / 18,000 BTU indoor units use a 1/2" to 3/8" adapter joint that are included with the unit.
*3. 6,000 / 9,000 indoor units use a 3/8" to 1/2" adapter joint that is included with the unit.
24,000 / 30,000 / 36,000 BTU indoor units use a 5/8" to 1/2" adapter joint that is included with the unit.
*4. When the total length of liquid line is over 123 ft, the additional refrigerant charge is required.

NOTE: Outdoor unit must connect to a minimum of TWO indoor units.

# Technical Specifications for WALL MOUNTED Indoor Units

| Model Number | | | 246-0005 WM6H424ZMI | 246-0001 WM9H424ZMI |
|---|---|---|---|---|
| Power supply | | Ph-V-Hz | 208/230V, 1Ph, 60Hz | 208/230V, 1Ph, 60Hz |
| Voltage range | | V | 187-253 | 187-253 |
| Cooling Capacity | | Btu/h | 6000 (2500~11800) | 9000 (2500~11900) |
| Heating Capacity | | Btu/h | 7000 (3400~11230) | 10000 (3400~13000) |
| Indoor fan motor | Model | | ZKFP-13-8-4 | ZKFP-13-8-4 |
| | Input | W | / | / |
| | RLA | A | 0.25 | 0.15 |
| | Speed (Hi/Mi/Lo) | r/min | 1100/810/690 | 1150/990/750 |
| Indoor air flow (Hi/Mi/Lo) | | CFM | 247/176/141 | 291/194/153 |
| Indoor noise level (Hi/Mi/Lo) | | dB(A) | 38.5/33/20.5 | 40/34/23.5 |
| Indoor unit | Dimension (W*D*H) | inch | 28.70x7.87x11.50 | 31.57x7.87x11.61 |
| | Packing (W*D*H) | inch | 31.10x10.63x14.76 | 34.45x11.34x14.76 |
| | Net/Gross weight | lbs. | 17.64/22.49 | 18.96/24.91 |
| Design pressure | | PSIG | 550/340 | 550/340 |
| Refrigerant piping | Liquid side/ Gas side | inch | 1/4" / 3/8" | 1/4" / 3/8" |
| Wire Size / No. of Conductors | | | 14 AWG / 4C (Recommended) | 14 AWG / 4C (Recommended) |
| Electrical Shock Protection | | | I | I |
| Thermostat type | | | Remote Control | Remote Control |
| Wifi compatible | | | YES | YES |
| Wall Control (Optional) | | | YES | YES |
| Indoor selection range - remote | Indoor(cooling/heating) | ℉ | 60～90/32～86 | 60～90/32～86 |

| Model Number | | | 246-0002 WM12H424ZMI | 246-0003 WM18H424ZMI | 246-0004 WM24H424ZMI |
|---|---|---|---|---|---|
| Power supply | | Ph-V-Hz | 208/230V, 1Ph, 60Hz | 208/230V, 1Ph, 60Hz | 208/230V, 1Ph, 60Hz |
| Voltage range | | V | 187-253 | 187-253 | 187-253 |
| Cooling Capacity | | Btu/h | 12000 (3600~13300) | 18000 (1980~19500) | 24000 (9200~25000) |
| Heating Capacity | | Btu/h | 12000(4500~13500) | 18000 (6620~21200) | 26000 (10350~26410) |
| Indoor fan motor | Model | | ZKFP-13-8-4 | ZKFP-58-8-1-5 | ZKFP-58-8-1-5 |
| | Input | W | / | 58 | 58 |
| | RLA | A | 0.38 | 0.25 | 0.38 |
| | Speed (Hi/Mi/Lo) | r/min | 1250/950/750 | 1120/950/700 | 1200/1080/600 |
| Indoor air flow (Hi/Mi/Lo) | | CFM | 291/194/153 | 531/459/382 | 601/459/382 |
| Indoor noise level (Hi/Mi/Lo) | | dB(A) | 42/36/25 | 45.5/41/24.5 | 48/40/28 |
| Indoor unit | Dimension (W*D*H) | inch | 31.57x7.87x11.61 | 42.60x9.21x13.27 | 42.60x9.21x13.27 |
| | Packing (W*D*H) | inch | 34.45x11.34x14.76 | 45.47x16.34x12.52 | 45.47x16.34x12.52 |
| | Net/Gross weight | lbs. | 18.74/24.91 | 29.54/38.80 | 29.98/39.46 |
| Design pressure | | PSIG | 550/340 | 550/340 | 550/340 |
| Refrigerant piping | Liquid side/ Gas side | inch | 1/4" / 1/2" | 1/4" / 1/2" | 3/8" / 5/8" |
| Wire Size / No. of Conductors | | | 14 AWG / 4C (Recommended) | 14 AWG / 4C (Recommended) | 14 AWG / 4C (Recommended) |
| Electrical Shock Protection | | | I | I | I |
| Thermostat type | | | Remote Control | Remote Control | Remote Control |
| Wifi compatible | | | YES | YES | YES |
| Wall Control (Optional) | | | YES | YES | YES |
| Indoor selection range - remote | Indoor(cooling/heating) | ℉ | 60～90/32～86 | 60～90/32～86 | 60～90/32～86 |

| Model Number | | | 244-1605-E<br>30H421ZIMI | 244-1606-E<br>36H421ZIMI |
|---|---|---|---|---|
| Power supply | | Ph-V-Hz | 208/230V, 1Ph, 60Hz | 208/230V, 1Ph, 60Hz |
| Voltage range | | V | 187-253 | 187-253 |
| Cooling Capacity | | Btu/h | 30000 (7200~31600) | 36000 (8300~37500) |
| Heating Capacity | | Btu/h | 30000 (11700~32000) | 36000 (10900~37360) |
| Indoor fan motor | Model | | ZKFP-58-8-1-5 | ZKFP-58-8-1-5 |
| | Input | W | 58 | 58 |
| | RLA | A | / | / |
| | Speed(Hi/Mi/Lo) | r/min | 1200/1050/950 | 1200/960/600 |
| Indoor air flow (Hi/Mi/Lo) | | CFM | 702/536/380 | 653/447/329 |
| Indoor noise level (Hi/Mi/Lo) | | dB(A) | 49.5/43.5/39.5 | 54/45/40 |
| Indoor unit | Dimension(W*D*H) | inch | 49.57x11.14x14.25 | 49.57x11.14x14.25 |
| | Packing (W*D*H) | inch | 52.76x17.72x15.16 | 52.76x17.72x15.16 |
| | Net/Gross weight | lbs. | 42.99/55.56 | 42.77/55.56 |
| Design pressure | | PSIG | 550/340 | 550/340 |
| Refrigerant piping | Liquid side/ Gas side | inch | 3/8" / 5/8" | 3/8" / 5/8" |
| Wire Size / No. of Conductors | | | 14 AWG / 4C | 14 AWG / 4C |
| Electrical Shock Protection | | | I | I |
| Thermostat type | | | Remote Control | Remote Control |
| Wifi compatible (Optional) | | | YES | YES |
| Wall Control (Optional) | | | YES | YES |
| Indoor selection range - remote | Indoor(cooling/heating) | ℉ | 60～90/32～86 | 60～90/32～86 |

## TROUBLESHOOTING

**The first step in troubleshooting is to disconnect power for 3 minutes to allow the unit to reset. If this does not rectify the problem, proceed with the troubleshooting chart below.**

| Problem | Troubleshooting |
|---|---|
| The unit does not run. | • Is the power off?<br>• Is the circuit protection device tripped?<br>• Is voltage too high or low? (Tested by a professional)<br>• Is the Timer on?<br>• A 3 minute delay occurs before each compressor start. |
| Cooling and or Heating efficiency is not good. | • Is temperature setting correct?<br>• Are the inlet or outlet vents obstructed?<br>• Is the filter clean?<br>• Are windows and doors closed?<br>• Is fan set to low speed?<br>• Is there a heat source in the room? |
| Wireless remote control is not working. (See Note 2) | • Reset unit. Disconnect main power for 30 seconds then reapply.<br>• Is it within receiving range? Is it obstructed?<br>• Replace the batteries.<br>• Is remote control damaged? |
| Water leaking into room. | • The air humidity is excessively high. Check to see if all windows and doors are closed.<br>• Call service Tech if not corrected by the above action. |
| Water leakage in outdoor unit. | • When the unit is running in Auto Defrosting mode, ice will thaw and drip into pan.<br>• When the unit is running in HEAT mode, the water adhered to the condenser coil drains into pan. |
| Noise from indoor unit emitted. | • When defrosting is started or stopped, it will make a sound. This is due to the refrigerant flow reversing directions.<br>• Normal refrigerant flowing in unit. |

Notes:

This air conditioning system has been provided with built in self diagnostic error codes. Please refer to the following table for error code definitions:

## INDOOR UNIT ERROR CODES

| Display | INFORMATION |
|---|---|
| dF | Defrost – Normal operation |
| CL | Active clean – Normal operation |
| nF | Filter replacement reminder (power on display for 15 seconds) |
| FP | Freeze protection under 46ºF – Normal operation |
| FC | Forced cooling – Normal operation |
| AP | AP mode of Wi-Fi connection |
| CP | Remote switched off |
| EH 00/EH 0A | Indoor unit EEPROM parameter error |
| EL 01 | Indoor and outdoor units' communication error |
| EH 02 | Zero-crossing signal detection error |
| EH 03 | Indoor fan speed has been out of control |
| EC 51 | Outdoor unit EEPROM parameter error |
| EC 52 | Condenser coil temperature sensor T3 open circuit or short circuit |
| EC 53 | Outdoor ambient temperature sensor T4 open circuit or short circuit |
| EC 54 | Compressor discharge temperature sensor Tp open circuit or short circuit |
| EC 56 | Evaporator coil outlet temperature sensor T2b open circuit or short circuit |
| EH 60 | Indoor room temperature sensor T1 open circuit or short circuit |
| EH 61 | Evaporator coil temperature sensor T2 open circuit or short circuit |
| EC 07 | Outdoor fan speed has been out of control |
| EH 0b | Indoor PCB / Display board communication error |
| EL 0C | Refrigerant leakage detection |
| PC 00 | IPM malfunction or IGBT over-strong current protection |
| PC 01 | Over voltage or over low voltage protection |
| PC 02 | High temperature protection of compressor or High temperature protection of IPM module or High pressure protection |
| PC 03 | Low pressure protection |
| PC 04 | Inverter compressor drive error |
| PC 08 | Current overload protection |
| PC 40 | Communication error between outdoor main chip and compressor driven chip |

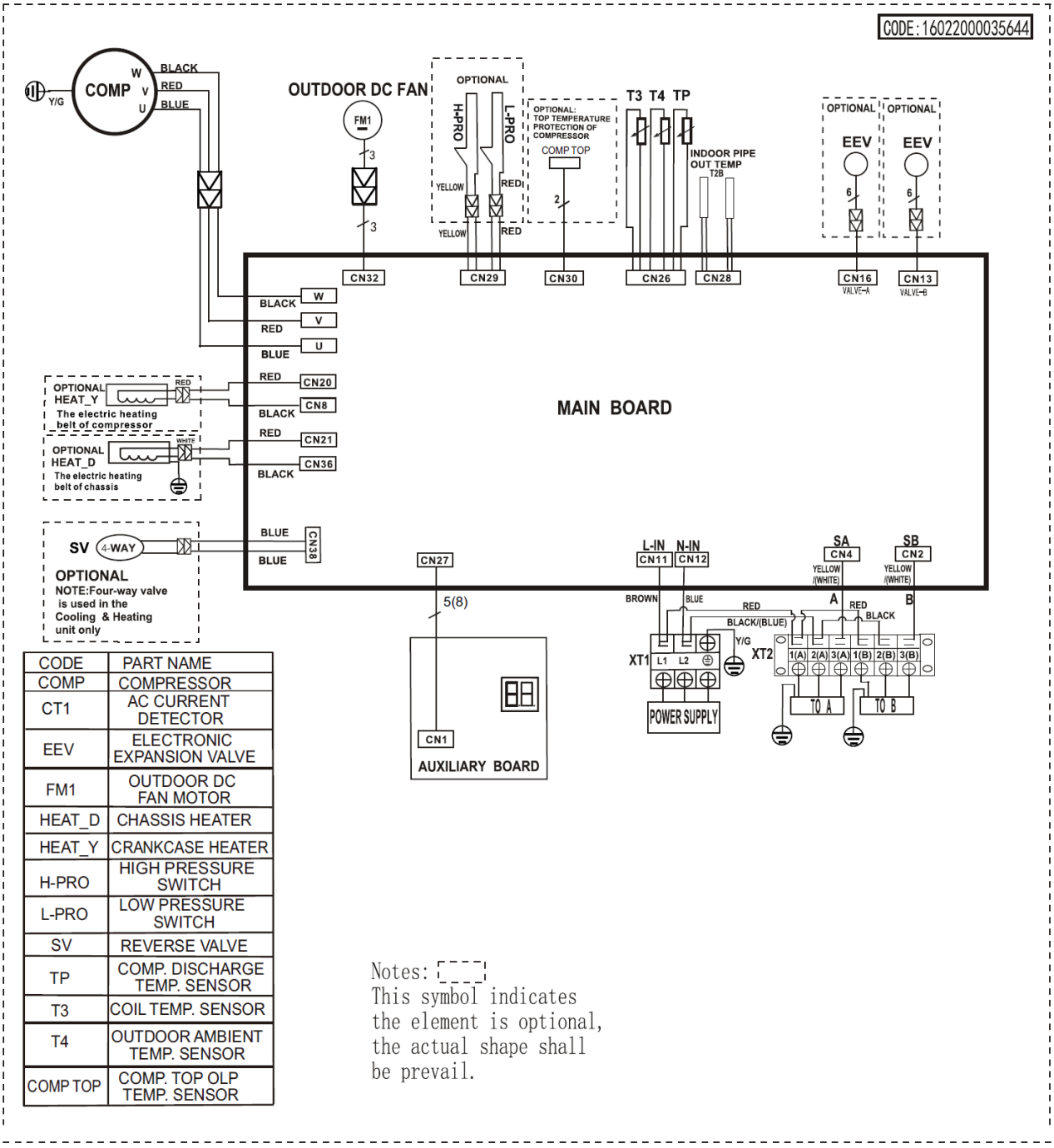
## TERMINAL READINGS ON INDOOR UNIT

The reading on terminals 1 and 3 of indoor unit are the same as the outdoor unit which shows the power supply 208V – 230V.
The terminal 2 is for signal, the reading between 1 and 2 is fluctuating.

| 1 | 2 | 3 | ⏚ |
|---|---|---|---|

## OUTDOOR ELECTRICAL SCHEMATICS

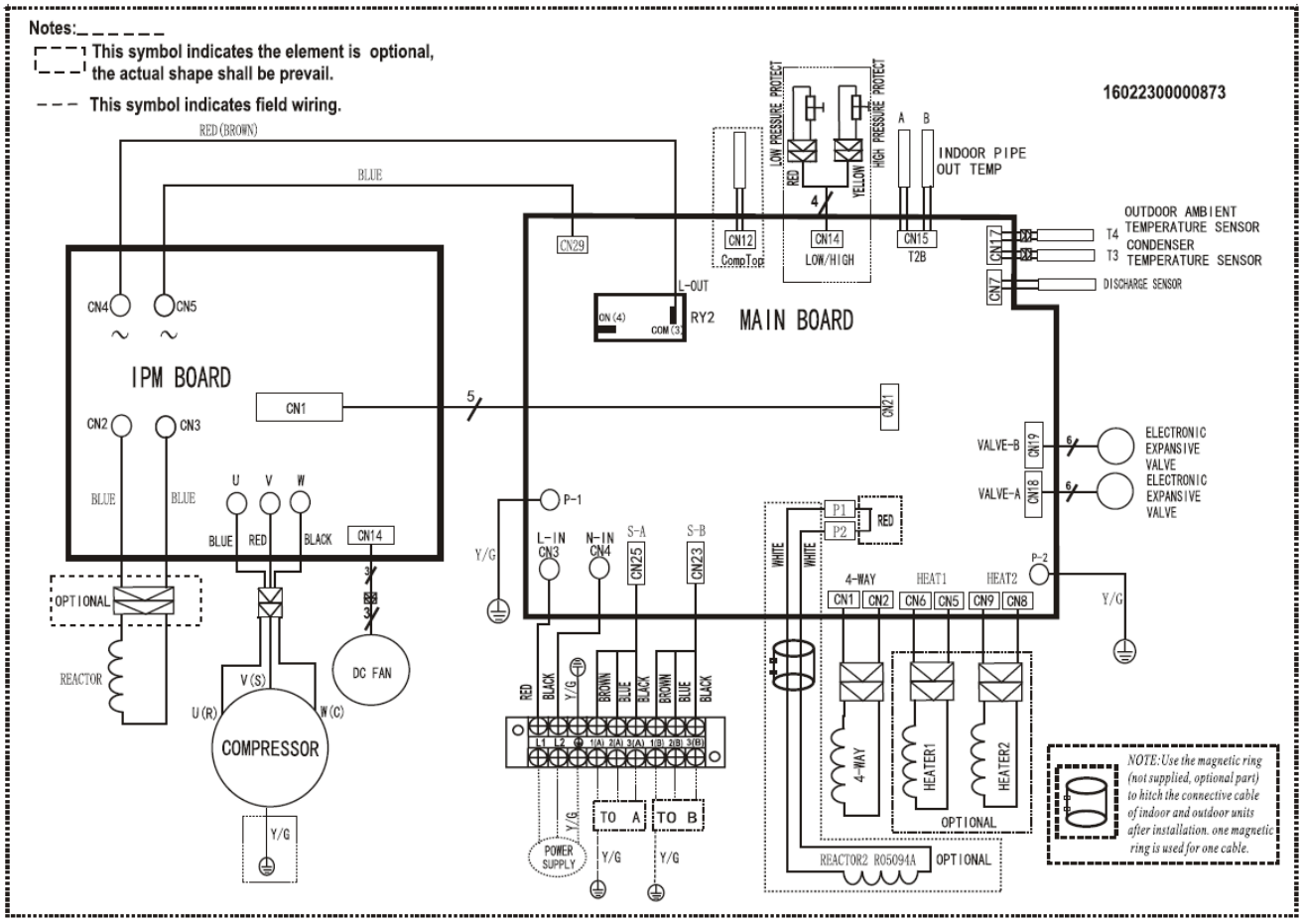
**Wiring Diagram for MZ18H424ZMO (Dual Zone)**



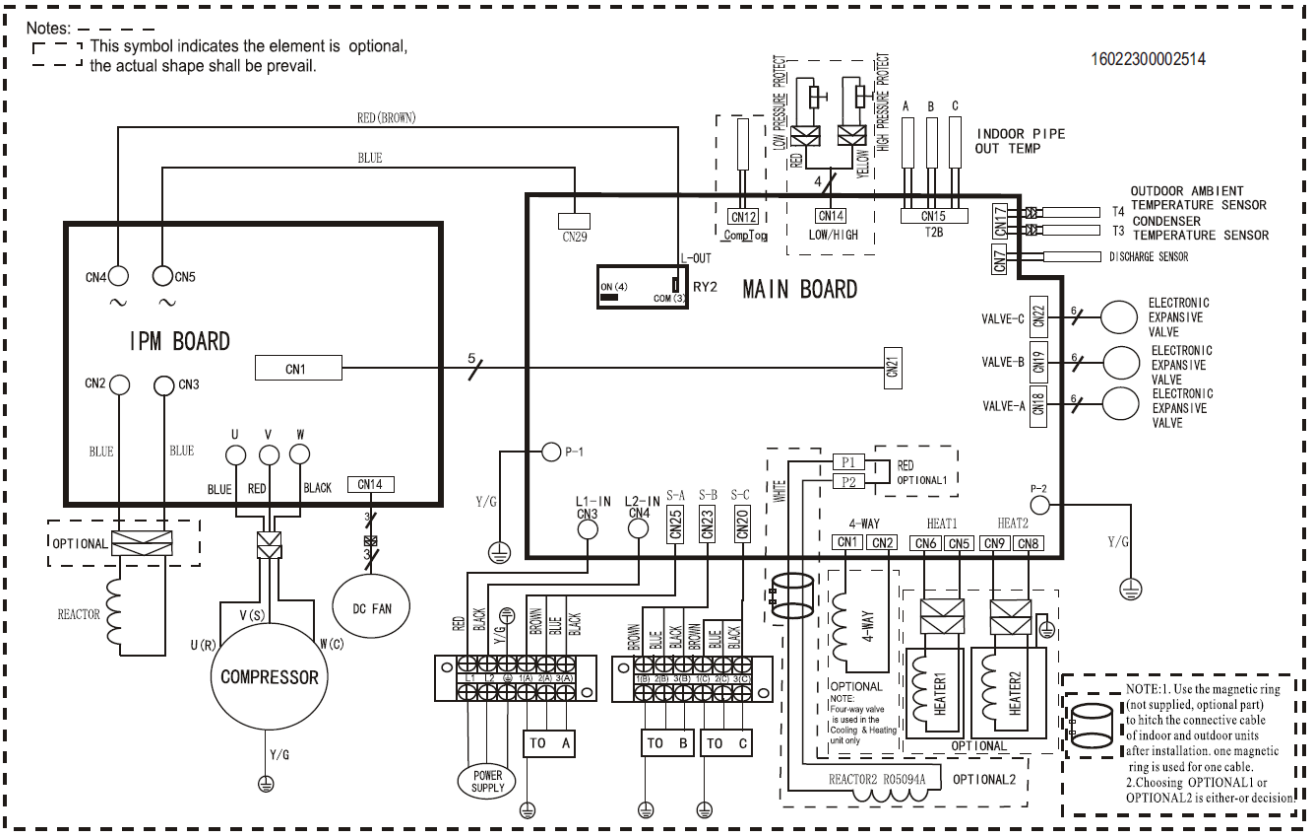

| CODE | PART NAME |
|---|---|
| COMP | COMPRESSOR |
| CT1 | AC CURRENT DETECTOR |
| EEV | ELECTRONIC EXPANSION VALVE |
| FM1 | OUTDOOR DC FAN MOTOR |
| HEAT_D | CHASSIS HEATER |
| HEAT_Y | CRANKCASE HEATER |
| H-PRO | HIGH PRESSURE SWITCH |
| L-PRO | LOW PRESSURE SWITCH |
| SV | REVERSE VALVE |
| TP | COMP. DISCHARGE TEMP. SENSOR |
| T3 | COIL TEMP. SENSOR |
| T4 | OUTDOOR AMBIENT TEMP. SENSOR |
| COMP TOP | COMP. TOP OLP TEMP. SENSOR |

Notes: ⬚
This symbol indicates the element is optional, the actual shape shall be prevail.

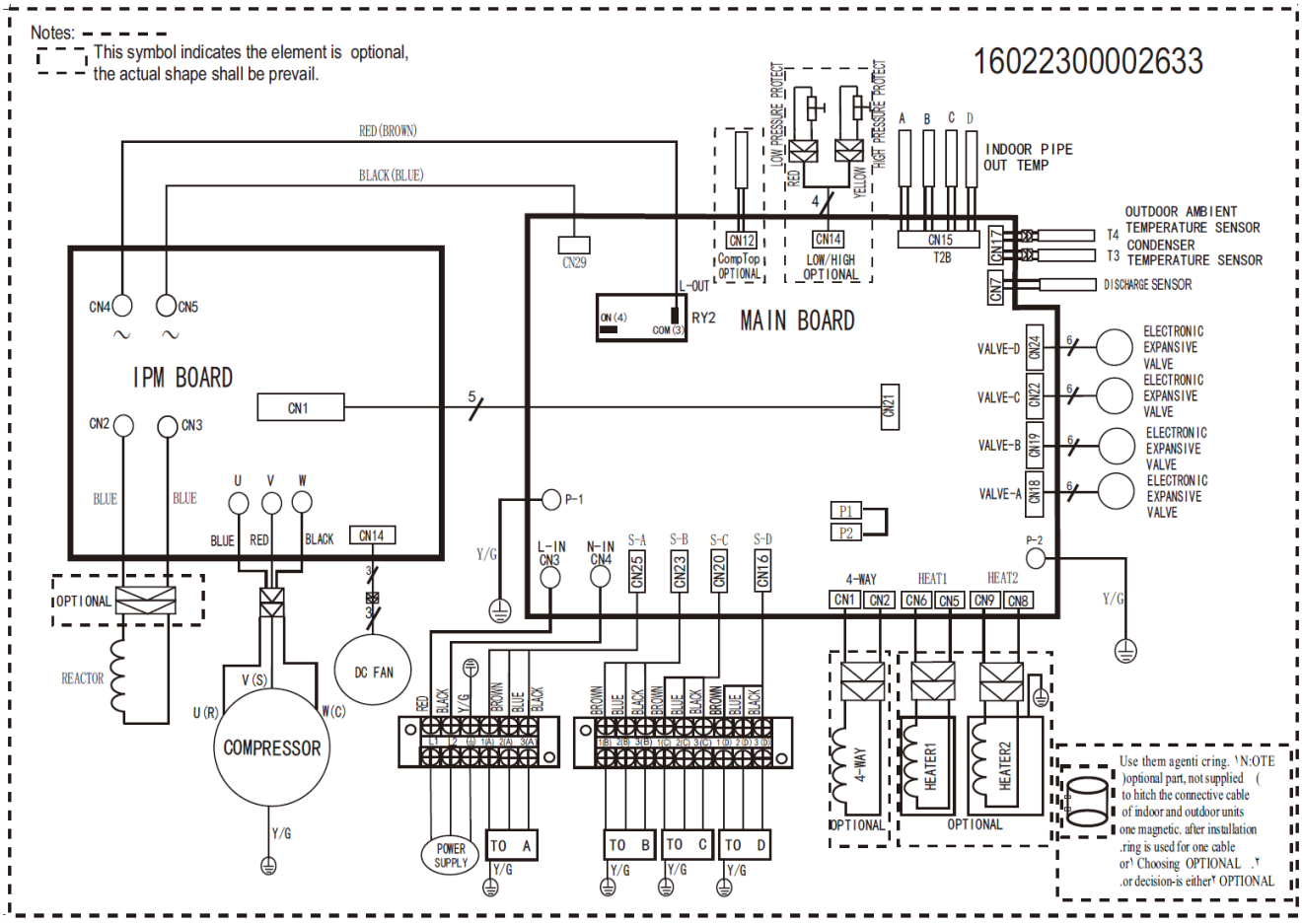
## Wiring Diagram for HMZ18H424ZMO (Dual Zone)



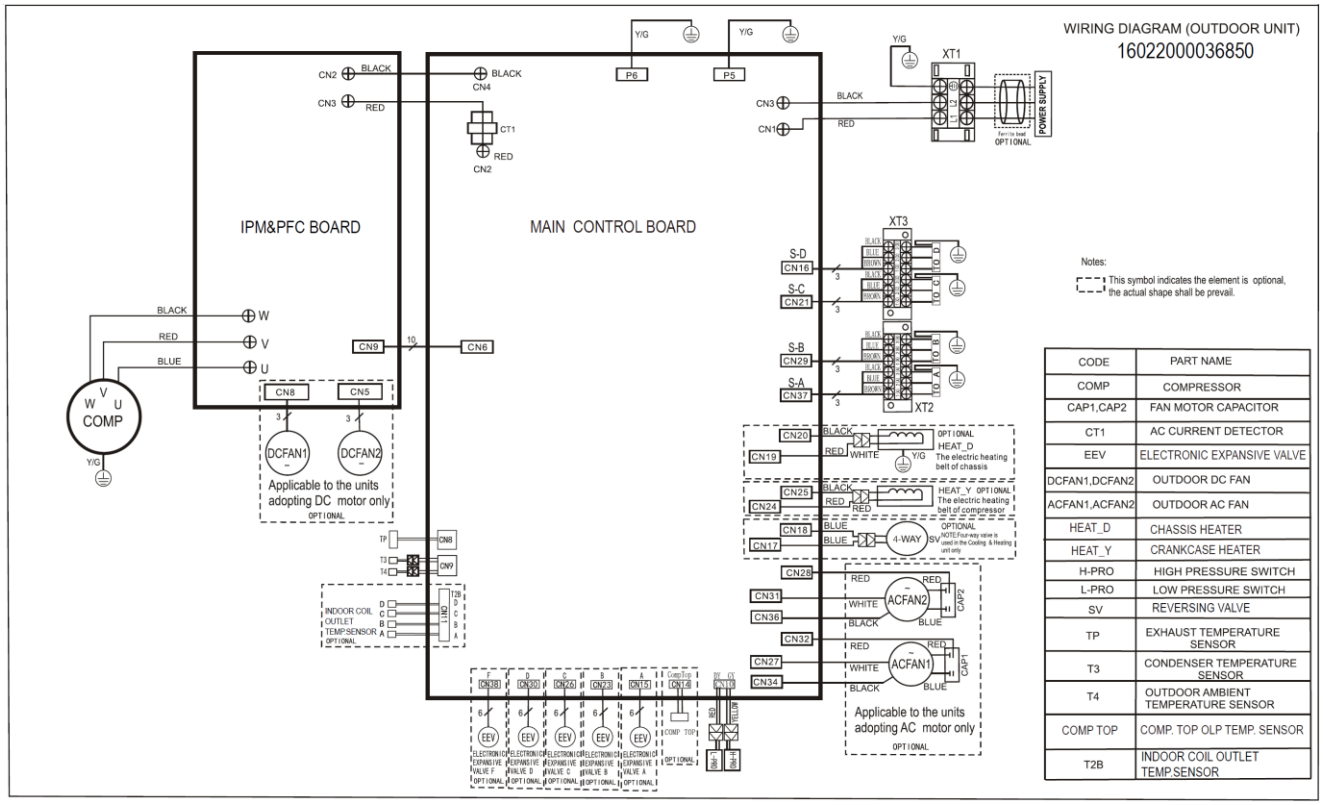

## Wiring Diagram for MZ27H424ZMO / HMZ28NH424ZMO (Triple Zone)



## Wiring Diagram for MZ36H424ZMO (Quad Zone)

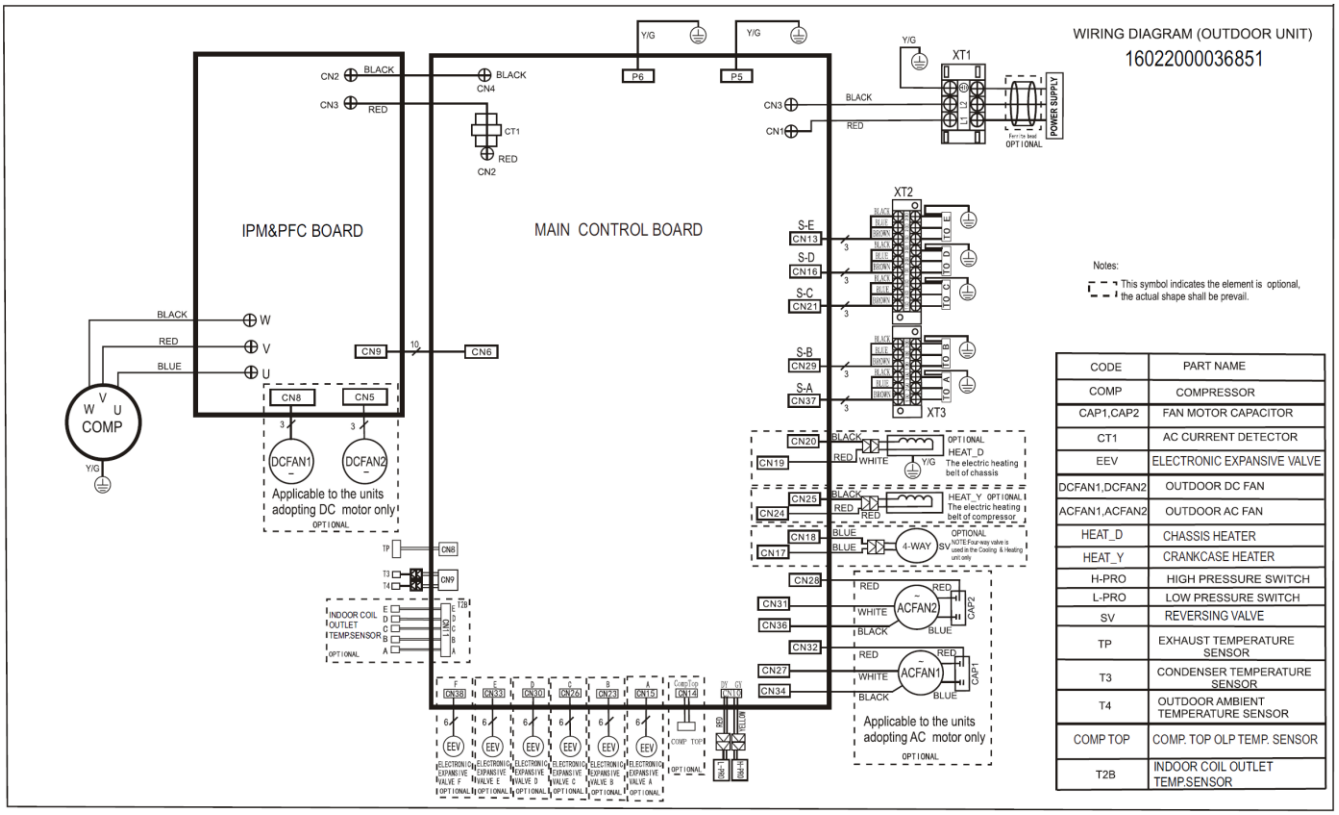



## Wiring Diagram for HMZ36H424ZMO (Quad Zone)



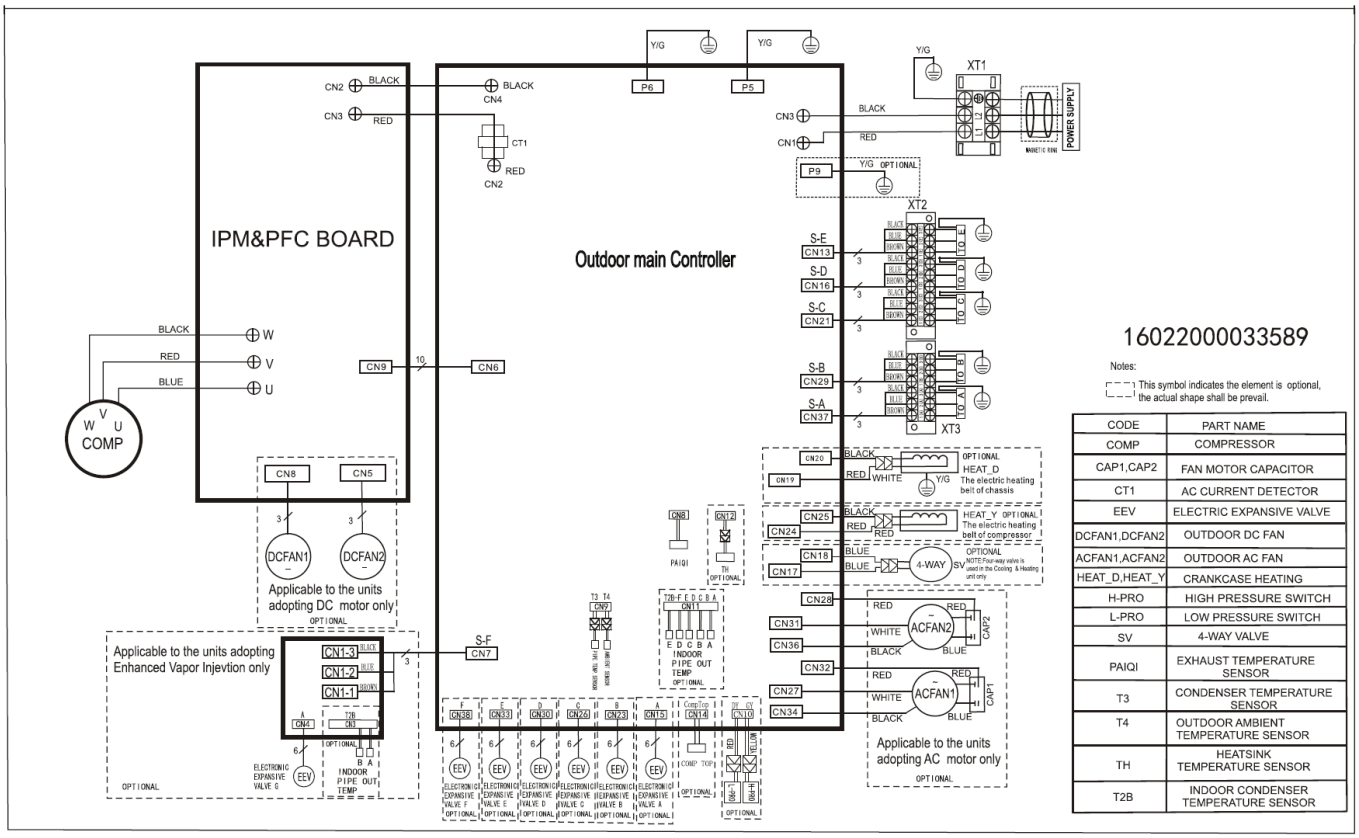

| CODE | PART NAME |
|---|---|
| COMP | COMPRESSOR |
| CAP1,CAP2 | FAN MOTOR CAPACITOR |
| CT1 | AC CURRENT DETECTOR |
| EEV | ELECTRONIC EXPANSIVE VALVE |
| DCFAN1,DCFAN2 | OUTDOOR DC FAN |
| ACFAN1,ACFAN2 | OUTDOOR AC FAN |
| HEAT_D | CHASSIS HEATER |
| HEAT_Y | CRANKCASE HEATER |
| H-PRO | HIGH PRESSURE SWITCH |
| L-PRO | LOW PRESSURE SWITCH |
| SV | REVERSING VALVE |
| TP | EXHAUST TEMPERATURE SENSOR |
| T3 | CONDENSER TEMPERATURE SENSOR |
| T4 | OUTDOOR AMBIENT TEMPERATURE SENSOR |
| COMP TOP | COMP. TOP OLP TEMP. SENSOR |
| T2B | INDOOR COIL OUTLET TEMP.SENSOR |

## Wiring Diagram for MZ48H424ZMO (Five Port)




| CODE | PART NAME |
|---|---|
| COMP | COMPRESSOR |
| CAP1,CAP2 | FAN MOTOR CAPACITOR |
| CT1 | AC CURRENT DETECTOR |
| EEV | ELECTRONIC EXPANSIVE VALVE |
| DCFAN1,DCFAN2 | OUTDOOR DC FAN |
| ACFAN1,ACFAN2 | OUTDOOR AC FAN |
| HEAT_D | CHASSIS HEATER |
| HEAT_Y | CRANKCASE HEATER |
| H-PRO | HIGH PRESSURE SWITCH |
| L-PRO | LOW PRESSURE SWITCH |
| SV | REVERSING VALVE |
| TP | EXHAUST TEMPERATURE SENSOR |
| T3 | CONDENSER TEMPERATURE SENSOR |
| T4 | OUTDOOR AMBIENT TEMPERATURE SENSOR |
| COMP TOP | COMP. TOP OLP TEMP. SENSOR |
| T2B | INDOOR COIL OUTLET TEMP.SENSOR |

## Wiring Diagram for HMZ48H424ZMO (Five Port)




| CODE | PART NAME |
|---|---|
| COMP | COMPRESSOR |
| CAP1,CAP2 | FAN MOTOR CAPACITOR |
| CT1 | AC CURRENT DETECTOR |
| EEV | ELECTRIC EXPANSIVE VALVE |
| DCFAN1,DCFAN2 | OUTDOOR DC FAN |
| ACFAN1,ACFAN2 | OUTDOOR AC FAN |
| HEAT_D,HEAT_Y | CRANKCASE HEATING |
| H-PRO | HIGH PRESSURE SWITCH |
| L-PRO | LOW PRESSURE SWITCH |
| SV | 4-WAY VALVE |
| PAIQI | EXHAUST TEMPERATURE SENSOR |
| T3 | CONDENSER TEMPERATURE SENSOR |
| T4 | OUTDOOR AMBIENT TEMPERATURE SENSOR |
| TH | HEATSINK TEMPERATURE SENSOR |
| T2B | INDOOR CONDENSER TEMPERATURE SENSOR |

# ERROR CODES ON OUTDOOR PC BOARD

| Display | INFORMATION |
|---|---|
| dF | Defrost – Normal operation |
| FC | Forced cooling – Normal operation |
| PH | Compressor pre-heating (for Five-Port unit only) |
| RO | Oil return process (for Five-Port unit only) |
| LC | Low ambient cooling mode (for Five-Port unit only) |
| E6 | PFC module protection occurs three times within 15 minutes (for Five-Port unit only) |
| EL 01 | Indoor and outdoor units' communication error |
| EC 50 | Open or short circuit of outdoor unit temperature sensor (T3, T4, T5) |
| EC 51 | Outdoor unit EEPROM parameter error |
| EC 52 | Condenser coil temperature sensor T3 open circuit or short circuit |
| EC 53 | Outdoor ambient temperature sensor T4 open circuit or short circuit |
| EC 54 | Compressor discharge temperature sensor Tp open circuit or short circuit |
| EC 56 | Evaporator coil outlet temperature sensor T2b open circuit or short circuit |
| EC 71 | Over current failure of outdoor DC fan motor |
| EC 72 | Lack phase failure of outdoor DC fan motor |
| EC 07 | Outdoor fan speed has been out of control |
| PC 00 | IPM malfunction or IGBT over-strong current protection |
| PC 0A | High temperature protection of condenser |
| PC 0F | PFC module protection |
| PC 0L | Low ambient temperature protection |
| PC 02 | High temperature protection of compressor |
| PC 06 | Compressor discharge temperature protection |
| PC 08 | Outdoor current overload protection |
| PC 10 | Outdoor unit low AC voltage protection |
| PC 11 | Outdoor unit main control board DC bus high voltage protection |
| PC 12 | Outdoor unit main control board DC bus high voltage protection /341 MCE error |
| PC 40 | Communication error between outdoor main board and IPM board |
| PC 43 | Outdoor compressor lack phase protection |
| PC 44 | Outdoor unit zero speed protection |
| PC 45 | Outdoor unit IR chip drive failure |
| PC 46 | Compressor speed has been out of control |
| PC 49 | Compressor overcurrent failure |

# WARRANTY

**INTERNATIONAL REFRIGERATION PRODUCTS** warrants the accompanying split air conditioner or heat pump system to be free of defects in material and workmanship for the applications specified in the operation manual and installation manual for a period of two (2) years on parts and seven (7) years on compressor, valid from the date of original retail purchase in the United States or Canada. **Labor is not covered under warranty.**

If the unit exhibits a defect in normal use and is determined to be within the warranty period, **INTERNATIONAL REFRIGERATION PRODUCTS** will, at its discretion, either repair or replace the unit free of charge within a reasonable time after the unit is returned.

This warranty DOES NOT cover:

- Damage, accidental or otherwise, to the unit while in possession of the consumer that is not a result of a defect in material in workmanship.
- Damage caused by consumer misuse, tampering, or failure to follow all care and maintenance instructions in the manuals.
- Damage to the finish of the case or other parts caused by water.
- Damage caused by repairs or alterations to the unit by anyone other than a qualified technician.
- Filter.
- Freight and Insurance cost for the warranty service.

*Warranty Activation Card must be completed and sent in to activate the warranty for the accompanying unit. Warranty may also be activated via the website www.irpsales.com*

**TECHNICAL SUPPORT**

**If you need technical support please call 215-750-9876 M-F 8:00am to 4:30pm ET.**
**When calling, please have your unit model numbers and serial numbers available.**

**Electronic warranty activation and product information www.irpsales.com**

**International Refrigeration Products Inc., 1035 Wheeler Way**
**Langhorne, PA 19047**