

## VRF ODU Unit – 14T

MVHQ168ME2CA



### FEATURES & BENEFITS

- Single chassis module 6-20T, 3 modules combination up to 38T.
- Increased operation ranges from -22°F heating to 122°F cooling.
- Improved quiet operation with a 10 dB(A) sound level reduction.
- Electronic Expansion Valves allow for precise temperature control at  $\pm 0.5^{\circ}\text{F}$ .
- Internal oil balancing, and recycling operation extends the life of compressors.

Job Name: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Submitted To: \_\_\_\_\_

Construction: \_\_\_\_\_

Reference: \_\_\_\_\_

Approval: \_\_\_\_\_

Date: \_\_\_\_\_

Submitted By: \_\_\_\_\_

Unit: \_\_\_\_\_

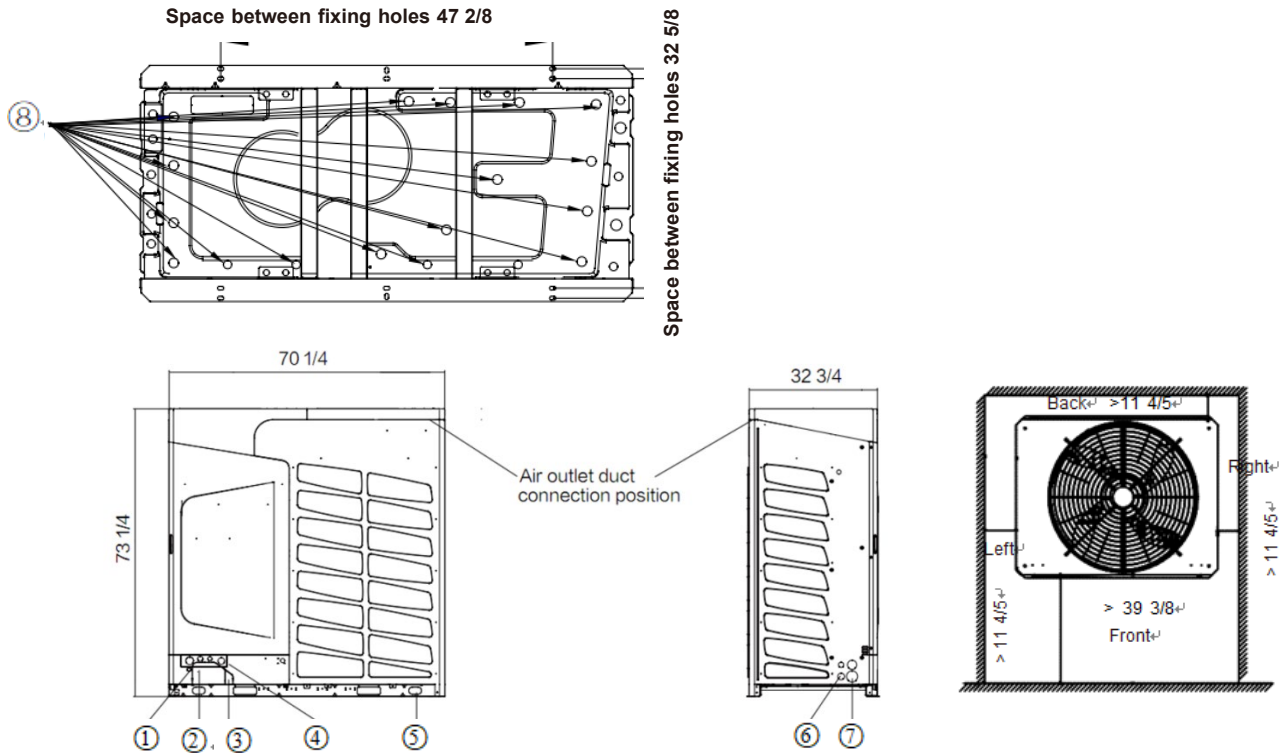
Drawing #: \_\_\_\_\_

**SPECIFICATIONS**

|                           |                                     |                      |                                                                                                                            |
|---------------------------|-------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| Marketing Model name      |                                     | MVHQ168ME2CA         | Notes                                                                                                                      |
| Nominal Capacity (Btu/h)  |                                     | 168000               | Compatible with all Haier MRV indoor units.                                                                                |
| Electrical                | Voltage, Cycle, Phase V/Hz/-        | 208-230/60/3         | <b>Structure</b>                                                                                                           |
| Performance<br>Non-Ducted | Rated Cooling Capacity@95°F (Btu/h) | 160000               | The unit shall be galvanized steel with a powder coated finish.                                                            |
|                           | EER @95 °F                          | 11.40                | Hinge access door design for easier installation and maintenance                                                           |
|                           | IEER                                | 23.20                | <b>Heat Exchanger</b>                                                                                                      |
|                           | Rated Heating Capacity @47°F(Btu/h) | 180000               | The heat exchanger shall be mechanically bonded fin to copper tube.                                                        |
|                           | COP @ 47°F                          | 3.60                 | The aluminum fins of the heat exchanger shall have a protective coating.                                                   |
|                           | Rated Heating Capacity@17°F(Btu/h)  | 122000               | Salt spray test method: ASTM B117-18 - the heat exchanger showed no unusual rust or corrosion development for 1000 hours.  |
|                           | COP @ 17°F                          | 2.50                 | <b>Refrigerant System</b>                                                                                                  |
|                           | SCHE                                | 26                   | EVI compressors provide advanced low ambient heating performance.                                                          |
| Performance<br>Ducted     | Rated Cooling Capacity@95°F (Btu/h) | 160000               | Refrigerant flow shall be controlled by EEV (electronic expansion valve) throughout the system.                            |
|                           | EER @95 °F                          | 11.50                | Sub-cooling devices in system maintain capacity at extreme system refrigerant pipe lengths and minimize refrigerant noise. |
|                           | IEER                                | 21.50                | <b>Automatic oil balancing</b>                                                                                             |
|                           | Rated Heating Capacity @47°F(Btu/h) | 180000               | The oil is balanced automatically internally which simplifies system design and improves reliability.                      |
|                           | COP @ 47°F                          | 3.40                 | <b>Agency</b>                                                                                                              |
|                           | Rated Heating Capacity@17°F(Btu/h)  | 122000               | Certified to latest version AHRI standard 1230.                                                                            |
|                           | COP @ 17°F                          | 2.40                 | <b>Snow hood accessory</b>                                                                                                 |
|                           | SCHE                                | 24.7                 | Compatible to optional snow hood accessories to protect unit in the worst weather.                                         |
| Electrical                | MCA (A) / MOP (A)                   | 59/90                | <b>Recommendation:</b>                                                                                                     |
| Operation<br>Range        | Working temp. Cooling F°+ Snow hood | -4°F -122°F          | The minimum number of indoor machine connections is greater than or equal to 2.                                            |
|                           | Working temp. Heating F°            | -22°F ~60°F          |                                                                                                                            |
| ODU                       | Dimension: H*W*D                    | 73-1/4*70-1/4*32-1/4 |                                                                                                                            |
|                           | Refrigerant charge (oz.)            | 1040.6               |                                                                                                                            |
|                           | Net Weight- lbs                     | 1162.0               |                                                                                                                            |
| Compressor                | Type                                | Scroll               |                                                                                                                            |
|                           | Qty                                 | 2                    |                                                                                                                            |
|                           | Oil Type                            | FVC68D               |                                                                                                                            |
|                           | Refrigerant Type                    | R410A                |                                                                                                                            |
| Connection<br>ratio       | Maximum number of indoor units      | 33                   |                                                                                                                            |
|                           | Connection ratio (IDU/ODU capacity) | 50% — 130%           |                                                                                                                            |
| Fan                       | Type/ Qty                           | Propeller/2          |                                                                                                                            |
|                           | CFM                                 | 16400                |                                                                                                                            |
| Refrigerant<br>piping     | Liquid pipe O.D. I in               | 5/8                  |                                                                                                                            |
|                           | Gas pipe O.D. i in                  | 1-1/8                |                                                                                                                            |
|                           | High Gas pipe O.D. i in             | 1-1/8                |                                                                                                                            |
| Sound                     | Sound Level dB(A)                   | 72                   |                                                                                                                            |

**Drawing**

UNIT: Inches



| No. | Name Remark                      |                                                                                                                                            |
|-----|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Signal line hole(Ø25)            | Using the rubber plug in the unit's attachment for protection                                                                              |
| 2   | Pipe outlet for 2-pipe system    |                                                                                                                                            |
| 3   | Pipe outlet for 3-pipe system    |                                                                                                                                            |
| 4   | Power supply hole                | According to the wire diameter size to choose the appropriate line hole, and using the line sheath in the unit's attachment for protection |
| 5   | Hoisting hole                    |                                                                                                                                            |
| 6   | Power supply of signal line hole |                                                                                                                                            |
| 7   | Refrigerant pipe outlet          |                                                                                                                                            |
| 8   | Drain hole                       |                                                                                                                                            |