

### MVHR264ME2CA

MRV 5 Series Heat Recovery  
22 Tons

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

Location: \_\_\_\_\_

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

Tag: \_\_\_\_\_

Reference

Approval

Construction



### Specifications

#### Performance<sup>1</sup>

|                             |               |
|-----------------------------|---------------|
| Cooling Capacity            | 253,000 Btu/h |
| Heating Capacity            | 282,000 Btu/h |
| EER (ducted/non-ducted)     | 9.80/10.40    |
| IEER (ducted/non-ducted)    | 19.8/17.9     |
| SCHE (ducted/non-ducted)    | 23.1/25.4     |
| COP 47F (ducted/non-ducted) | 3.20/3.20     |

#### Technical Details

|                            |                    |
|----------------------------|--------------------|
| Compressor Type            | DC Inverter 2+1    |
| Compressor RLA             | (20.5 + 20.5) + 24 |
| Condenser Fan Qty          | 2+2                |
| Condenser Fan Type         | Propeller          |
| Condenser Fan CFM          | 10,500 + 10,500    |
| Factory Refrigerant Charge | 43.65 + 47.18 lb   |

#### Electrical

|                                |                  |
|--------------------------------|------------------|
| Voltage (V / Ø / Hz)           | 208-230 / 3 / 60 |
| Minimum Circuit Ampacity (MCA) | 58.9A + 40.3A    |
| Maximum Overcurrent Protection | 80A + 50A        |

#### Sound Levels<sup>2</sup>

|                          |         |
|--------------------------|---------|
| Sound Power Level, dB(A) | 83 + 81 |
|--------------------------|---------|

#### Piping

|                     |          |
|---------------------|----------|
| Total System length | 3280 ft. |
| ODU to furthest IDU | 722 ft.  |
| ODU above IDU       | 295 ft.  |
| ODU below IDU       | 361 ft.  |

### Features and Benefits

- Ability to simultaneously heat and cool from different indoor units, maximizing efficiency and comfort
- Optimized, intelligent control with all DC inverter EVI compressor technology achieves high efficiency performance with high reliability
- Wide range of operation from -13°F (-25°C) to 122°F (50°C)
- IEER performance up to 24.5
- SCHE performance up to 28.0
- COP performance up to 3.6
- Delivers 80% of rated heating capacity at 5°F (-15°C)
- Four-sided heat exchanger reduces chassis footprint
- Hinged electrical box design for ease of access to system components
- Factory standard black fin anti corrosion coating
- Nighttime quiet operation reduces sound levels by 10 dB(A)
- Automatic oil balancing eliminates the need for oil balancing piping
- 10 year limited parts and compressor warranty<sup>2</sup>

### Notes

1. Cooling and heating capacities are based on the following temperatures:  
Cooling Indoor: 80°F DB, 67°F WB  
Cooling Outdoor: 95°F DB  
Heating Indoor: 70°F DB  
Heating Outdoor: 47°F WB, 43°F WB
2. Refer to warranty documentation for complete warranty details.
3. Refer to installation manual for complete installation requirements.

**MRV5**  
DC INVERTER

**MRV-S**  
SERIES



**MVHR264ME2CA**

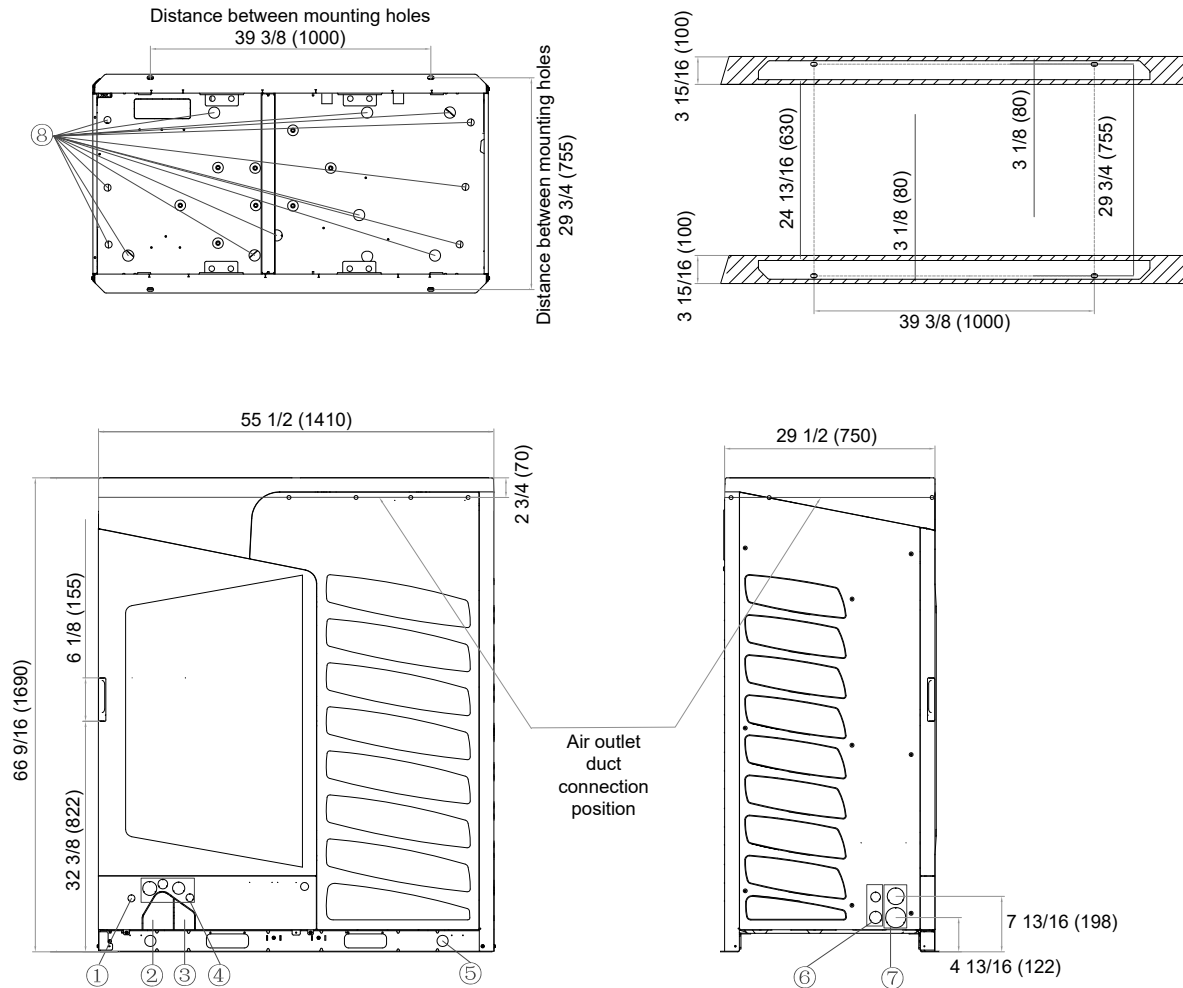
MRV 5 Series Heat Recovery  
22 Tons

|                                 | Module 1<br>MVHR144ME2CA | Module 2<br>MVHR120ME2CA |
|---------------------------------|--------------------------|--------------------------|
| <b>Technical Details</b>        |                          |                          |
| Compressor Type                 | DC Inverter x 2          | DC Inverter x 1          |
| Compressor RLA                  | 20.5+20.5 A              | 24 A                     |
| Condenser Fan Qty               | 2                        | 2                        |
| Condenser Fan Type              | Propeller                | Propeller                |
| Condenser Fan CFM               | 10,500                   | 10,500                   |
| Factory Refrigerant Charge      | 43.65 lbs.               | 47.18 lbs.               |
| <b>Electrical</b>               |                          |                          |
| Voltage (V / Ø / Hz)            | 208-230 / 3 / 60         | 208-230 / 3 / 60         |
| Minimum Circuit Ampacity (MCA)  | 58.9A                    | 40.3A                    |
| Maximum Overcurrent Protection  | 80A                      | 50A                      |
| <b>Sound Levels<sup>2</sup></b> |                          |                          |
| Sound Power Level, dB(A)        | 83                       | 81                       |
| <b>Dimensions</b>               |                          |                          |
| Height (in.)                    | 66 1/2                   | 66 1/2                   |
| Width (in.)                     | 55 1/2                   | 55 1/2                   |
| Depth (in.)                     | 29 1/2                   | 29 1/2                   |
| Weight (lb.)                    | 871                      | 750                      |
| <b>Piping</b>                   |                          |                          |
| Connections, Liquid/Gas         | 5/8" x 1 1/8"            | 5/8" x 1 1/8"            |

### Dimensional Drawings

MVHR144/120ME2CA

Unit: inch (mm)



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