

### MVHR144ME2CA

MRV 5 Series Heat Recovery  
12 Tons



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

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

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

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

Reference

Approval

Construction

### Specifications

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

Cooling Capacity	138,000 Btu/h
Heating Capacity	154,000 Btu/h
EER (ducted/non-ducted)	11.0/11.4
IEER (ducted/non-ducted)	20.8/22.0
SCHE (ducted/non-ducted)	24.5/26.7
COP 47F (ducted/non-ducted)	3.50/3.50

#### Technical Details

Compressor Type	DC Inverter x 2
Compressor RLA	20.5 + 20.5
Condenser Fan Qty	2
Condenser Fan Type	Propeller
Condenser Fan CFM	10,500
Factory Refrigerant Charge	43.65 lbs.

#### Electrical

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

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

Sound Power Level, dB(A)	83
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#### Dimensions

Height (in.)	66 1/2
Width (in.)	55 1/2
Depth (in.)	29 1/2
Weight (lb.)	871

#### Piping

Connections, Liquid/Gas	5/8" x 1 1/8"
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

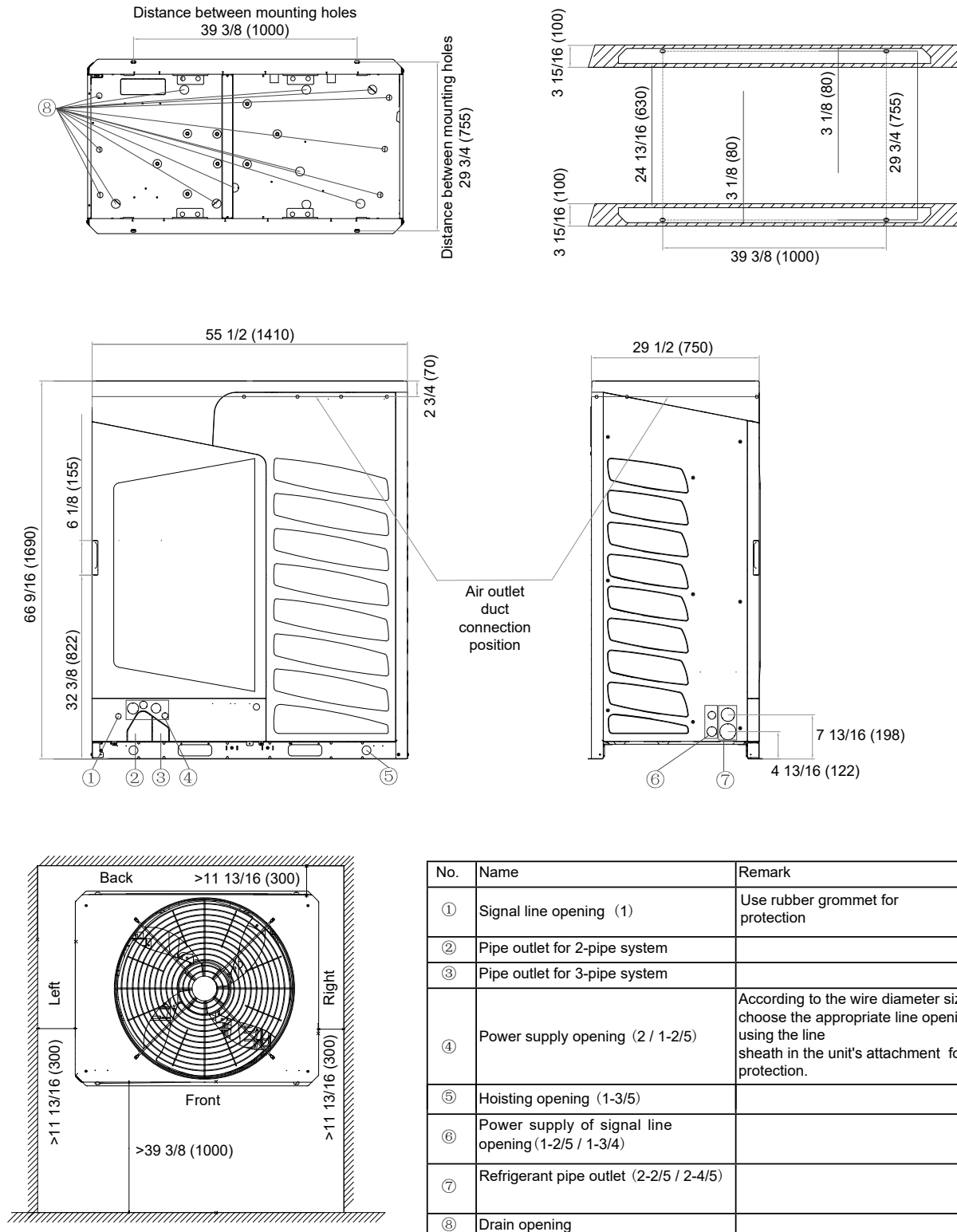
**MRV-S**  
SERIES



### Dimensional Drawings

MVHR144ME2CA

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	