

# VRF Outdoor Unit 38VMA408HDS6-1 - Heat Pump



## Submittal Data

Job Data \_\_\_\_\_ Location \_\_\_\_\_  
 Buyer \_\_\_\_\_ Buyer PO # \_\_\_\_\_ Carrier # \_\_\_\_\_  
 Unit Number \_\_\_\_\_ Model Number \_\_\_\_\_  
 Performance Data Certified By \_\_\_\_\_ Date \_\_\_\_\_



### Heat Pump Features

- 6, 8, 10, and 12 ton modules available
- Modules have inverter-driven scroll compressors
- Direct-drive, inverter-driven outdoor motor
- Modules can be combined to form larger systems, up to 36 tons
- 3280 ft (1000 m) actual total system piping (liquid line)
- 656 ft (200 m) actual piping length from outdoor unit to furthest fan coil
- Up to 3937 ft (1200 m) control wiring between the outdoor units and indoor units

- Operating temperature range  
Cooling (db): 5° to 125°F  
(-15° to 52°C)  
Heating (wb): -5° to 64°F  
(-21° to 18°C)
- Protection: high pressure sensor and switch, low pressure sensor and switch, process controller board fuse, inverter overload protection
- 7-year compressor limited warranty
- 5-year parts limited warranty

|  |         |                    |
|--|---------|--------------------|
| Combination Model                            |         | 38VMA408HDS6-1     |
| Header Unit Model                            |         | 38VMA144HDS6-1     |
| Follower Model                               |         | 38VMA144HDS6-1     |
| Follower Model                               |         | 38VMA120HDS6-1     |
| <b>PERFORMANCE</b>                           |         |                    |
| Nominal Cooling Capacity                     | Btu/h   | 399,000            |
| Nominal Heating Capacity                     | Btu/h   | 446,000            |
| Maximum Total Connected Indoor Unit Capacity |         | 50% to 135%        |
| <b>COOLING EFFICIENCY†</b>                   |         |                    |
| EER/IEER, Ducted FCUs                        | Btu/Wh  | 9.50/17.50         |
| Power Consumption, Ducted FCUs               | kW      | 38.30              |
| EER/IEER, Ductless FCUs                      | Btu/Wh  | 9.50/17.50         |
| Power Consumption, Ductless FCUs             | kW      | 38.60              |
| <b>HEATING EFFICIENCY†</b>                   |         |                    |
| COP at 47°F, Ducted FCUs                     |         | 3.20               |
| Power Consumption, Ducted FCUs               | kW      | 35.90              |
| COP at 47°F, Ductless FCUs                   |         | 3.20               |
| Power Consumption, Ductless FCUs             | kW      | 36.10              |
| Fan Type (Qty)                               |         | Propeller (6)      |
| Airflow, Standard Range                      | CFM     | 8830 + 8830 + 8250 |
| Sound Pressure                               | dBA     | 68.5               |
| External Static Pressure*                    | in. wg  | 0.24               |
| <b>ELECTRICAL</b>                            |         |                    |
| Power Supply                                 | V/Ph/Hz | 460/3/60           |
| Minimum Circuit Amps (MCA)                   | A       | 33 + 33 + 25       |
| Recommended Fuse Size                        | A       | 40 + 40 + 30       |

### LEGEND

db — Dry Bulb  
 COP — Coefficient of Performance  
 EER — Energy Efficiency Ratio  
 FCU — Fan Coil Unit  
 IEER — Integrated Energy Efficiency Ratio  
 wb — Wet Bulb

### COMPRESSORS

| Type (Number) | Inverter | Hermetic Scroll (5) |
|---------------|----------|---------------------|
|---------------|----------|---------------------|

### FAN MOTOR

| Motor Type (Steps) | Inverter Direct Driven (13) |                                   |
|--------------------|-----------------------------|-----------------------------------|
| Motor Output       | kW                          | 0.34 (X2) + 0.30 (X2) + 0.27 (X2) |

### PHYSICAL DATA

|   |     |                 |
|---|-----|-----------------|
| Pipe Connection Size - Liquid (High Pressure)** | in. | 3/4 (Brazed)    |
| Pipe Connection Size - Gas (Low Pressure)**     | in. | 1-3/8 (Brazed)  |
| Balance   | in. | 1/4 (Brazed)    |
| Refrigerant                                     |     | R-410A          |
| Factory Charge††                                | lb  | 3 X 37.5        |
| Unit Width                                      | in. | 3 X 52-3/4      |
| Unit Height                                     | in. | 64-3/8          |
| Unit Depth                                      | in. | 31-1/8          |
| Net Weight                                      | lb  | 780 + 780 + 659 |

### REQUIRED ACCESSORY

|              |            |
|--------------|------------|
| Twinning Kit | 40VM900022 |
|--------------|------------|

†Rated per AHRI (Air-Conditioning, Heating and Refrigeration Institute) 1230 Standard.

Cooling: Indoor 80°F (27°C) db/67°F (20°C) wb; Outdoor 95°F (35°C) db

Heating: Indoor 70°F (21°C) db; Outdoor 47°F (8°C) db/43°F (6°C) wb

\*Requires setting by menu functions.

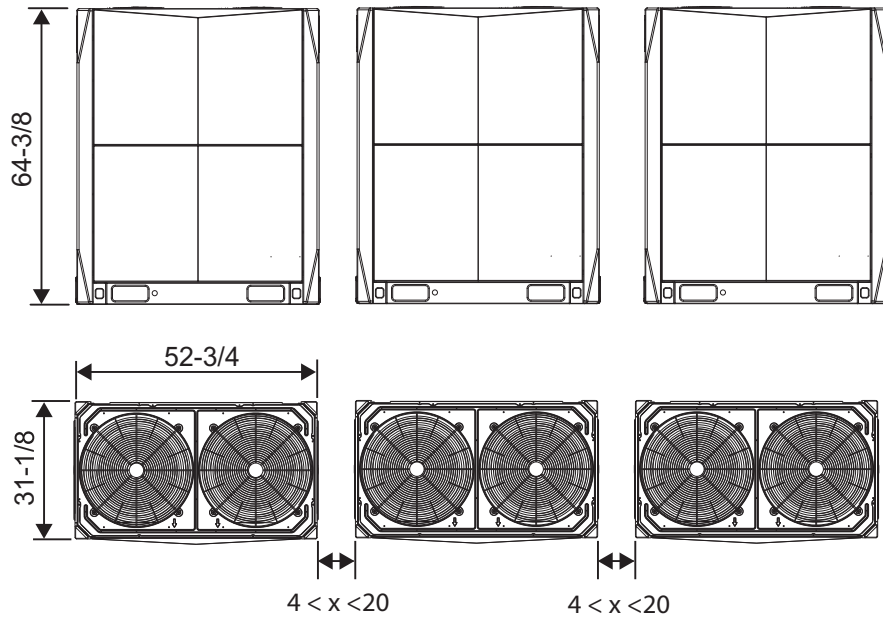
\*\*Main pipe size leaving twinning kit.

††Additional charge required.

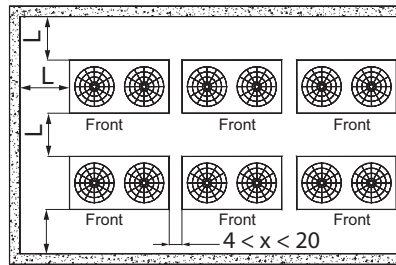
NOTE: Unit cabinet and coil slab shall be capable of withstanding 500-hour salt spray test.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

# DIMENSIONAL DRAWING OUTDOOR UNIT COMBINATION 38VMA408HDS6-1

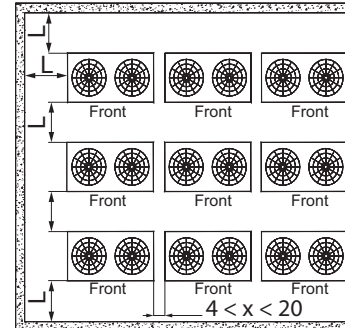


Two rows



Note:  $L \geq 40$  in.

More than two rows

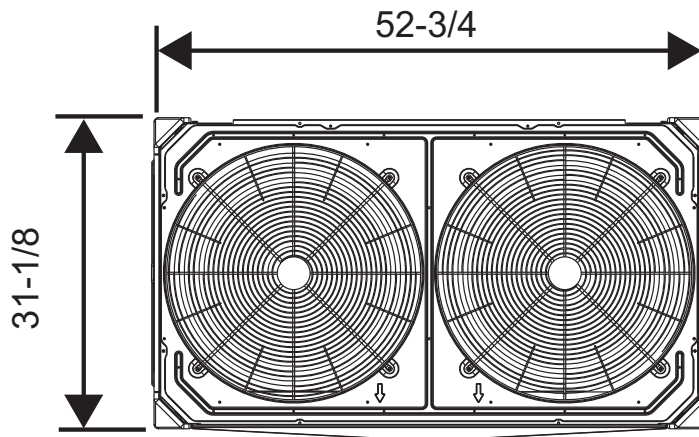
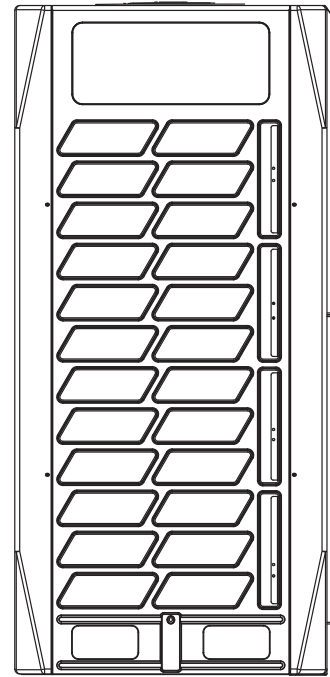
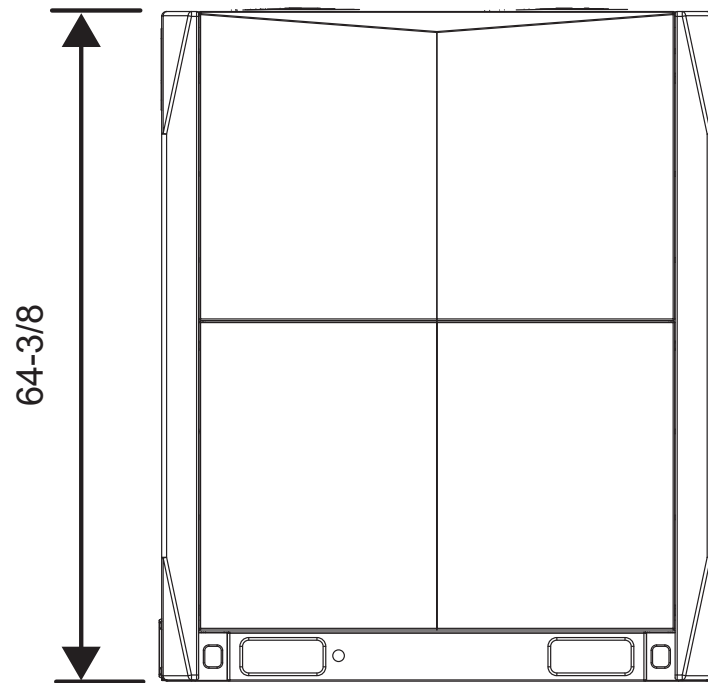


Note: All dimensions are shown in inches.

| Model Name     | Outdoor Unit   |                |                |
|----------------|----------------|----------------|----------------|
|                | Header Unit    | Follower Unit  | Follower Unit  |
| 38VMA408HDS6-1 | 38VMA144HDS6-1 | 38VMA144HDS6-1 | 38VMA120HDS6-1 |

# DIMENSIONAL DRAWING

## OUTDOOR SINGLE UNIT 38VMA144HDS6-1 and 38VMA120HDS6-1



NOTE: All dimensions shown in inches.



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Replaces: 38VMH4086-C-1SD