

# VRF Outdoor Unit 38VMA408HDS5-1 - 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                            | 38VMA408HDS5-1 |                    |
| Header Unit Model                            | 38VMA144HDS5-1 |                    |
| Follower Model                               | 38VMA144HDS5-1 |                    |
| Follower Model                               | 38VMA120HDS5-1 |                    |
| <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        | 208-230/3/60       |
| Minimum Circuit Amps (MCA)                   | A              | 70 + 70 + 46       |
| Recommended Fuse Size                        | A              | 80 + 80 + 50       |

| COMPRESSORS                                     |                             |                                   |
|---|-----------------------------|-----------------------------------|
| Type (Number)                                   |                             | Inverter Hermetic Scroll (5)      |
| <b>FAN MOTOR</b>                                |                             |                                   |
| Motor Type (Steps)                              | Inverter Direct Driven (13) |                                   |
| Motor Output                                    | kW                          | 0.34 (X2) + 0.30 (X2) + 0.27 (X2) |
| <b>PHYSICAL DATA</b>                            |                             |                                   |
| 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                   |
| <b>REQUIRED ACCESSORY</b>                       |                             |                                   |
| Twining 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 twining kit.

††Additional charge required.

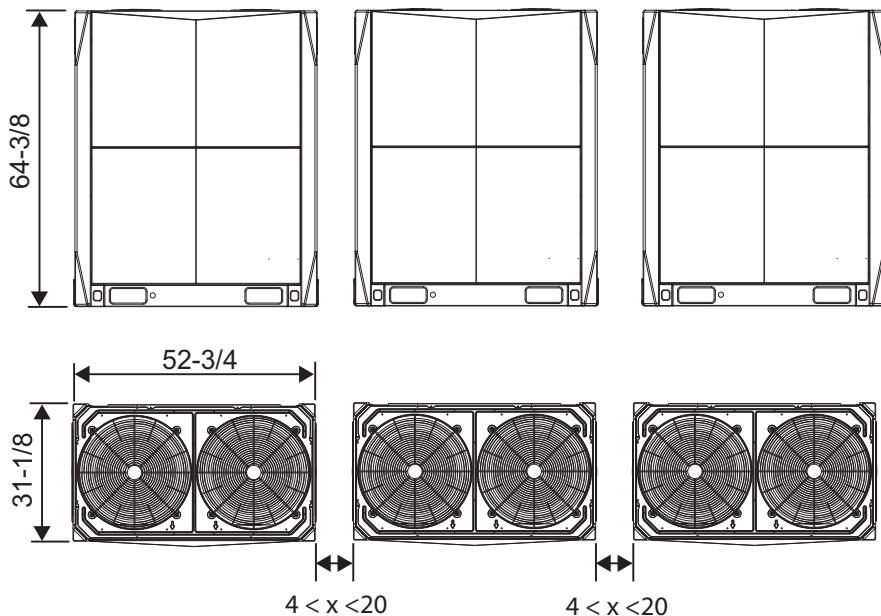
NOTE: Unit cabinet and coil slab shall be capable of withstanding 500-hour salt spray test.

### LEGEND

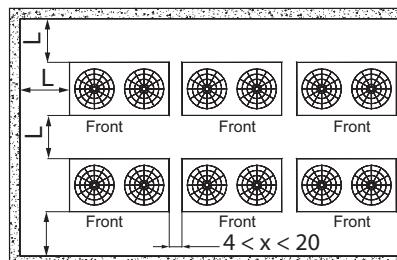
|      |                                      |
|------|--------------------------------------|
| db   | — Dry Bulb                           |
| COP  | — Coefficient of Performance         |
| EER  | — Energy Efficiency Ratio            |
| FCU  | — Fan Coil Unit                      |
| IEER | — Integrated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

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 38VMA408HDS5-1**

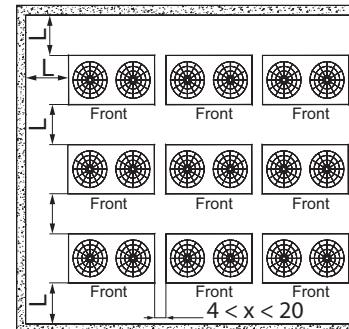


Two rows



Note:  $L \geq 40$  in.

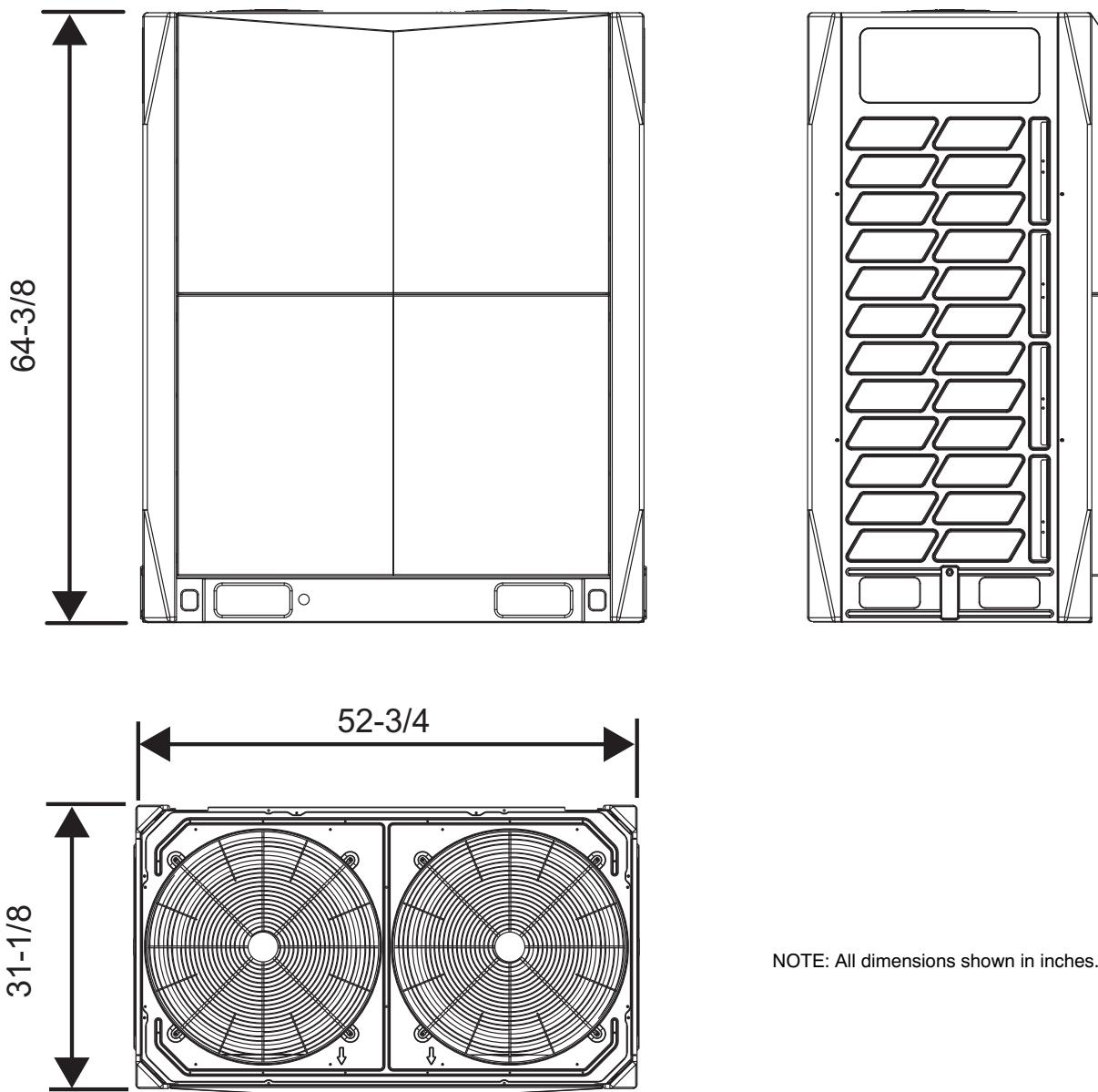
More than two rows



Note: All dimensions are shown in inches.

| Model Name     | Outdoor Unit   |                |                |
|----------------|----------------|----------------|----------------|
|                | Header Unit    | Follower Unit  | Follower Unit  |
| 38VMA408HDS5-1 | 38VMA144HDS5-1 | 38VMA144HDS5-1 | 38VMA120HDS5-1 |

**DIMENSIONAL DRAWING**  
**OUTDOOR SINGLE UNIT 38VMA144HDS5-1 and 38VMA120HDS5-1**



© Carrier Corporation 2018



Printed in U.S.A.

Form 38VMH4085-C-2SD

Pg 3

08-18

Replaces: 38VMH4085-C-1SD

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