

# VRF Outdoor Unit 38VMA144HDS5-1 - 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

|                                              |         |                |
|----------------------------------------------|---------|----------------|
| Header Unit Model                            |         | 38VMA144HDS5-1 |
| <b>PERFORMANCE</b>                           |         |                |
| Nominal Cooling Capacity                     | Btu/h   | 142,800        |
| Nominal Heating Capacity                     | Btu/h   | 160,000        |
| Maximum Total Connected Indoor Unit Capacity |         | 50% to 135%    |
| <b>COOLING EFFICIENCY†</b>                   |         |                |
| EER/IEER, Ducted FCUs                        | Btu/Wh  | 10.60/19.50    |
| Power Consumption, Ducted FCUs               | kW      | 12.30          |
| EER/IEER, Ductless FCUs                      | Btu/Wh  | 10.60/19.50    |
| Power Consumption, Ductless FCUs             | kW      | 12.10          |
| <b>HEATING EFFICIENCY†</b>                   |         |                |
| COP at 47°F, Ducted FCUs                     |         | 3.35           |
| Power Consumption, Ducted FCUs               | kW      | 12.60          |
| COP at 47°F, Ductless FCUs                   |         | 3.40           |
| Power Consumption, Ductless FCUs             | kW      | 12.10          |
| Fan Type (Qty)                               |         | Propeller (2)  |
| Airflow, Standard Range                      | CFM     | 8830           |
| Sound Pressure                               | dBA     | 65.5           |
| External Static Pressure*                    | in. wg  | 0.08           |
| <b>ELECTRICAL</b>                            |         |                |
| Power Supply                                 | V/Ph/Hz | 208-230/3/60   |
| Minimum Circuit Amps (MCA)                   | A       | 70             |
| Recommended Fuse Size                        | A       | 80             |

### 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 (2) |
|---------------|--|------------------------------|
|---------------|--|------------------------------|

### FAN MOTOR

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

### PHYSICAL DATA

|                                               |        |                |
|-----------------------------------------------|--------|----------------|
| Pipe Connection Size - Liquid (High Pressure) | in.    | 1/2 (Brazed)   |
| Pipe Connection Size - Gas (Low Pressure)     | in.    | 1-1/8 (Brazed) |
| Balance                                       | in.    | 1/4 (Brazed)   |
| Refrigerant                                   | R-410A |                |
| Factory Charge††                              | lb     | 37.5           |
| Unit Width                                    | in.    | 52-3/4         |
| Unit Height                                   | in.    | 64-3/8         |
| Unit Depth                                    | in.    | 31-1/8         |
| Net Weight                                    | lb     | 780            |

†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

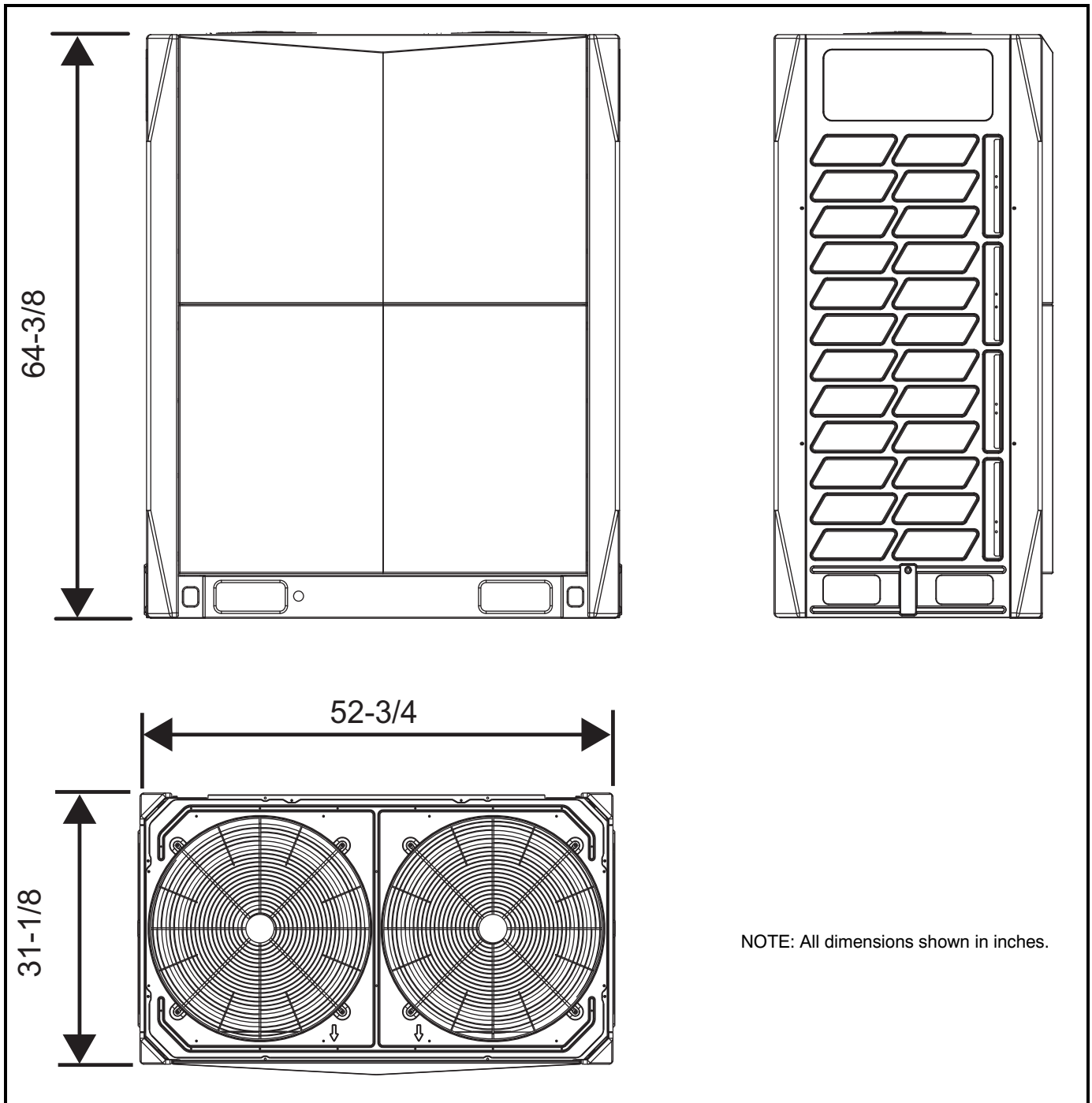
\*Requires setting by menu functions.

††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 38VMA144HDS5-1



© Carrier Corporation 2018