# Variable Refrigerant Flow

## Two-Pipe Heat Recovery and Heat Pump Systems

Carrier

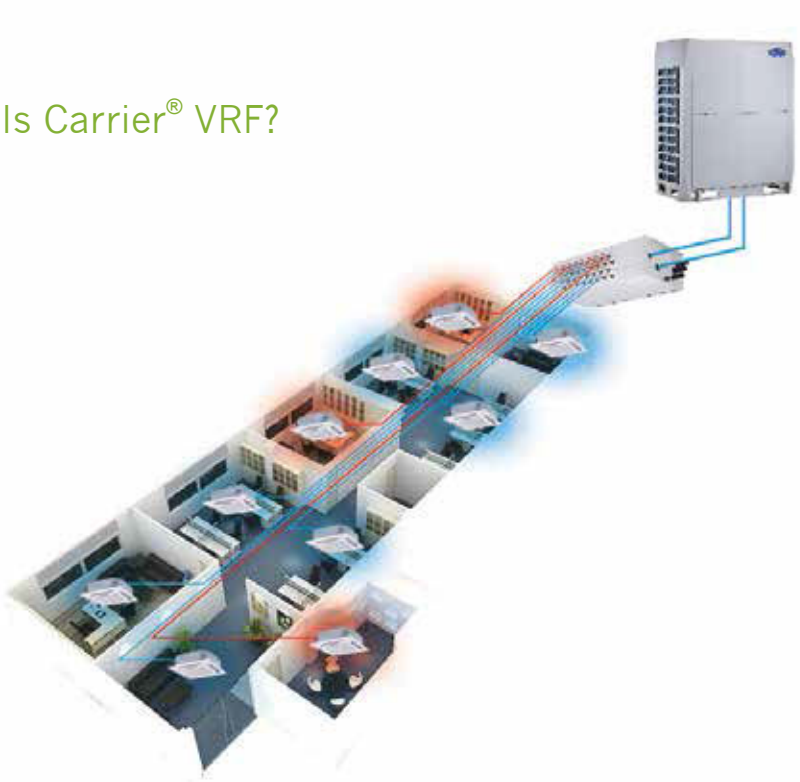
United Technologies

turn to the experts

# Index



## What Is Carrier® VRF?



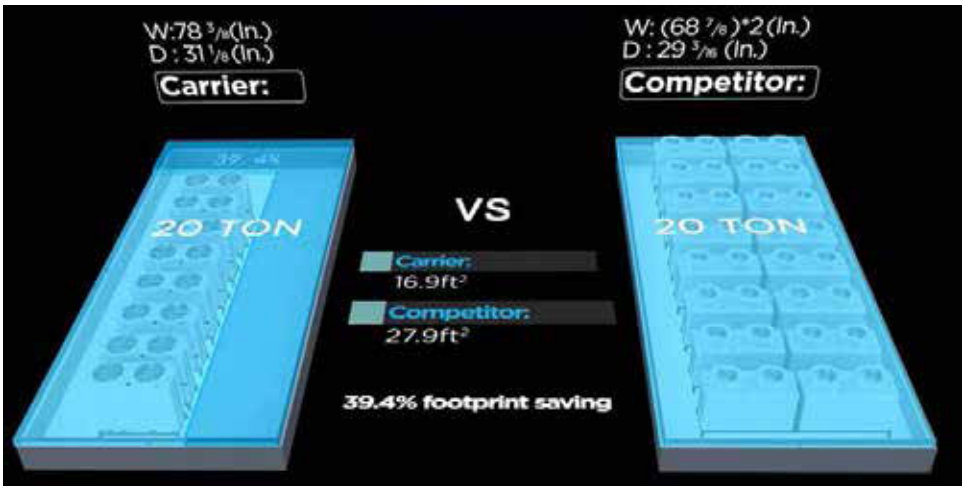
## Carrier® VRF Advantages

Suitable to precisely match the building's cooling and heating demands, Carrier® VRF systems utilize a 2-pipe system for both heat recovery and heat pump. A single outdoor VRF condenser can power up to 64 independent indoor units, depending on the system. This provides superior zoning because the refrigerant flow can vary from location to location, delivering only the necessary capacity to each zone. The system adjusts the flow of refrigerant to each indoor unit based on its operating conditions. It computes the amount of refrigerant required by each indoor unit and controls the refrigerant flow to ensure desired comfort level for each and every room.

# Revolutionary Design

## Smaller Footprint

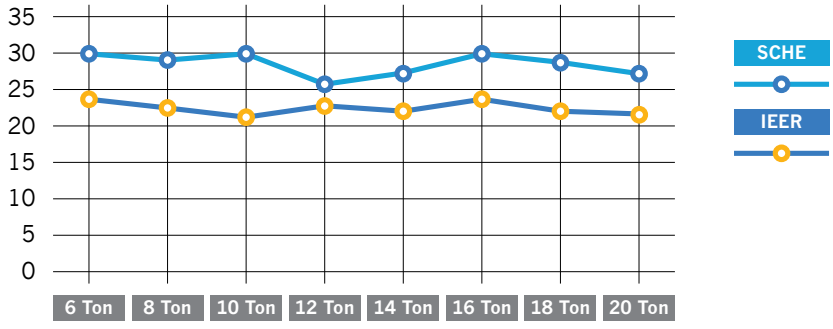
VRF systems provide several installation advantages by eliminating the need to install large distribution fans, water pumps and large pipes. VRF systems do not require dedicated maintenance rooms or service shafts, freeing up valuable real estate space in the buildings where they're installed. The Carrier® VRF heat recovery 20-ton system is 40 percent smaller compared to other VRF outdoor units in the marketplace.




## High Efficiency

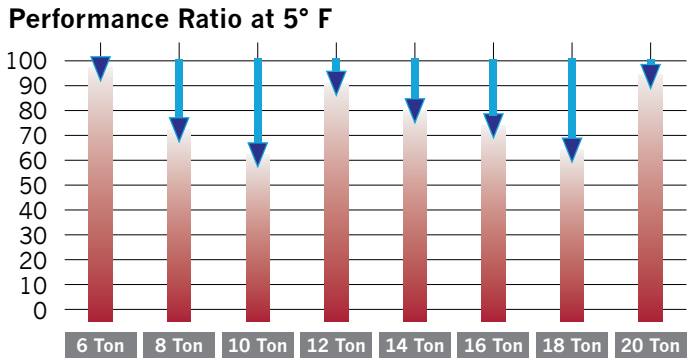
Carrier VRF achieves high efficiency in cooling and heating by utilizing all DC Inverter compressors, all DC fan motors and high-efficiency heat exchangers. The cooling IEER is 24.7, and heating SCHE is up to 30.0.

**Carrier HR VRF with Non-Ducted Indoor Units under AHRI rating**



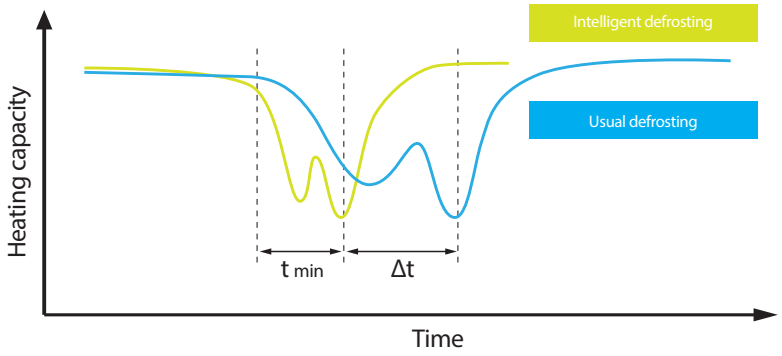
## High Heating Performance

The Carrier® VRF system provides heating down to -13° F with up to 70% of the rated heating capacity. This is just one more way we deliver comfort solutions for any indoor space, anytime of the year.




## Enhanced Defrost Control

The enhanced defrost control can adjust the defrosting cycle time based on system operating environments. This reduces heat loss due to unnecessary defrost operation and maintains indoor heating consistency by using hot gas through bottom of coil in the outdoor unit.



## Compressor


Occupants enjoy balanced, consistent comfort because the operating sequence of the outdoor units and the individual compressors are rotated to spread operating hours evenly. Because the compressors are all Inverter-driven, inrush currents are eliminated. There is no on/off power surge as the system adjusts to the demands of the occupant or system. And, the use of Inverter compressors reduces the risk of compressor failure, more common in standard non-Inverter systems.
The outdoor unit provides greater backup capability in case of a compressor failure. If that happens, the failed compressor can be easily isolated while the system continues to operate, maintaining comfort until the faulty compressor is repaired or addressed.

## Carrier® VRF Scroll Compressor

Asymmetric scroll compressor design reduces compression losses while increasing energy efficiency and reliability. The compression losses are minimized by applying fluid dynamic design principles. The compressors are equipped with cutting-edge DC Inverter technology and advanced permanent magnet DC motors, making them stable and robust.

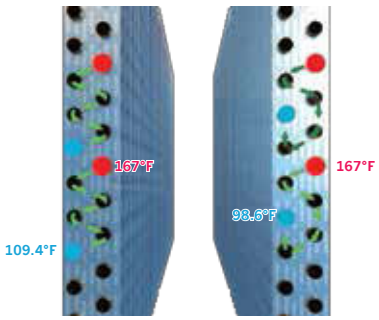
Carrier® VRF compressors are Inverter-driven, meaning they are capable of precisely matching the building's cooling and heating demands. Compressors operate the majority of the time within the most efficient frequency range, 50 ~ 80Hz.

**Asymmetric scroll wrap**

**Symmetric scroll wrap**

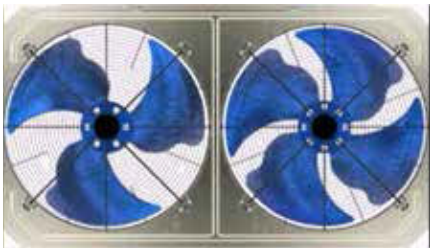
## High Performance Heat Exchanger

The advanced heat exchanger design enlarges the heat-exchange area, decreasing the air resistance while the hydrophilic fins and inner-threaded copper pipes optimize heat-exchange efficiency.



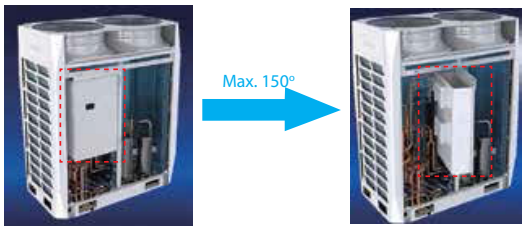

## Advanced Silent Technology with Fan Blade Design

The outlet grille and shape of the fan blade decrease the running noise and lower down airflow resistance and vibration. Paired with the DC Inverter compressor, the condenser is extremely quiet with operation as low as 58.4 dB(A).



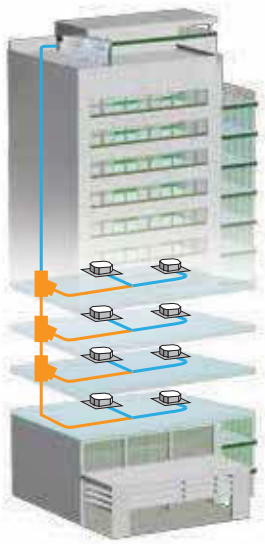
## Hinged Electrical and Control Design

The electric control box can be rotated by a maximum of 150 degrees to make it much easier to dismount the control box and convenient for pipeline inspection or servicing.




## Flexibility

Smaller equipment footprints matched with longer pipe lengths means there's a Carrier® VRF configuration for virtually any commercial or large residential application. Carrier VRF systems provide flexibility on reconfiguration of space for future use and can seamlessly adapt to building changes. Changing space can be easily accommodated with the different styles of indoor units without compromising the comfort level.



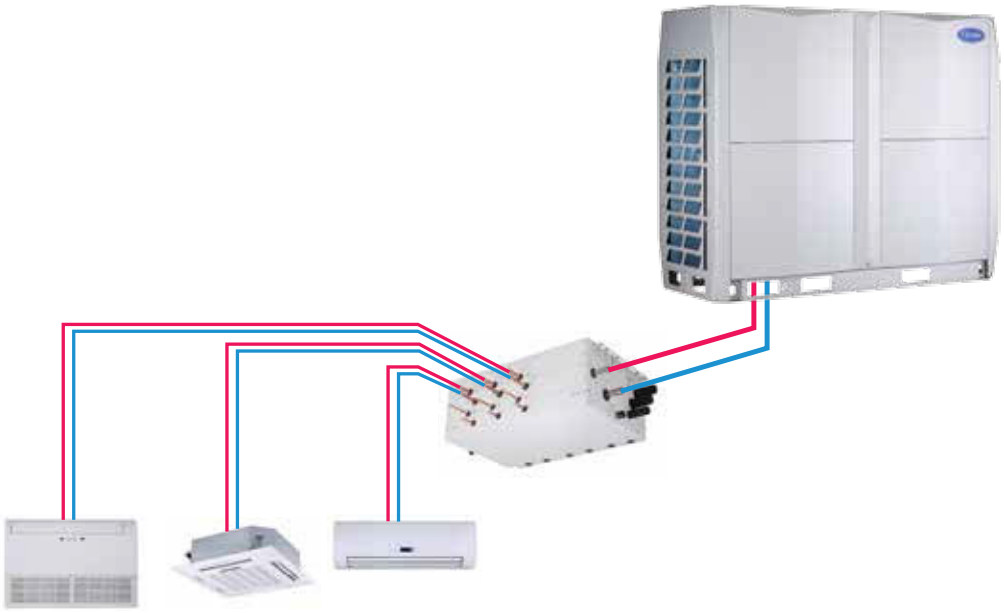
## Reliabilty

The operating sequence of the individual compressors is rotated, balancing their operating hours and distributing load evenly. Inverters reduce the risk of compressor failure and eliminate on/off power surges.

# Installation Made Simple

## Reduce Piping Connections

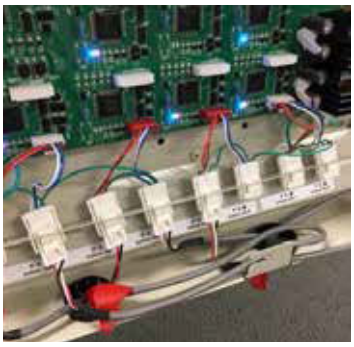
Two-pipe heat recovery system with innovative MDC provides simultaneous cooling and heating while reducing refrigerant pipe connections by reducing the number of joints between the outdoor unit and MDC. The centrally located MDC allows for the use of soft copper line sets, making installation simpler and faster.



## Single-Chassis Design (Heat Recovery Only)

The single-chassis design not only reduces the footprint of the outdoor unit, but also reduces electrical connections by proving a single-point power connection. Because of the non-modular design, there is no need to twin outdoor units together in the field, which reduces the amount of piping work that has to be done on site.

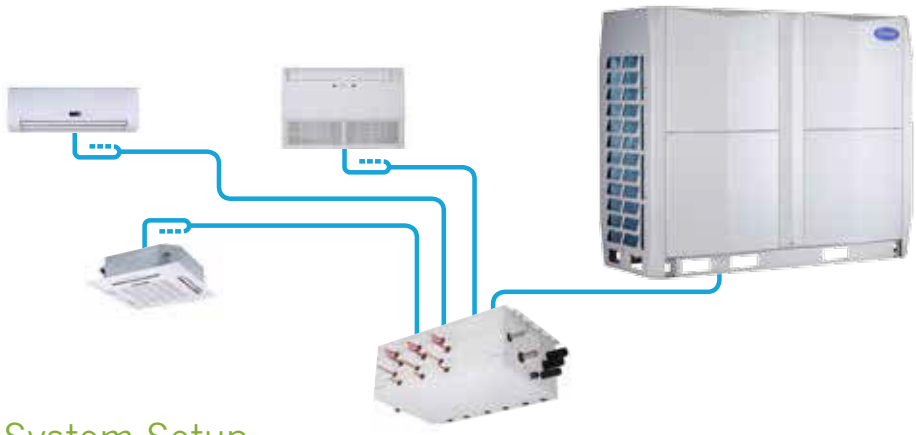
## Controls Quick Connects



All indoor units and MDCs are provided with a quick-connect controls system. This allows for the use of accessory wire with preinstalled connectors or the use of field-provided wiring with the included terminal accessory. This makes the wiring of controls faster and helps to reduce miswiring during installation.

## Controls Wiring Method/Design

The control wiring method was designed to more closely follow the piping arrangement. Heat pump systems use a daisy chain control wire configuration, while heat recovery systems use a hub and spoke design wiring from the outdoor unit to the MDC and then from the MDC to each indoor unit. This arrangement allows the control wire to follow the piping design, making it more intuitive for the contractor to install.



## System Setup

There is no need to try to access tight spaces above a ceiling to adjust rotary dials or dip switches to address and set functions on indoor units. All functions can be set up from a handheld wireless remote control with all of the functions written in an easy-to-understand format, which greatly reduces the time needed for system setup and startup.

# Heat Recovery Benefits

## Heat Recovery and Simultaneous Heating & Cooling

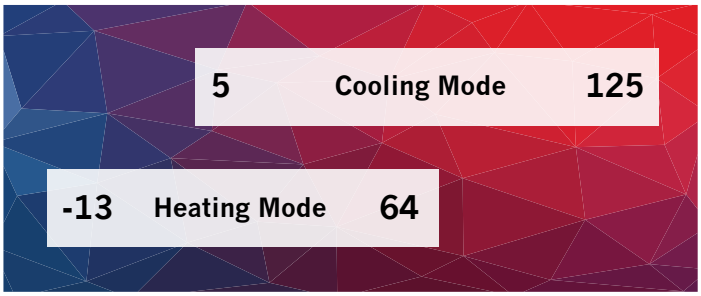
Carrier® VRF heat recovery utilizes a 2-pipe system that allows for simultaneous heating and cooling. Heat recovery and flexible refrigerant flow make it possible to heat and cool different zones on a single refrigerant piping system at any given time. The system can increase efficiency by recovering energy that might otherwise be wasted from one zone, like a sunlit lobby, and reusing it in another cooler part of the building. The Carrier VRF heat recovery outdoor unit lineup is a single module up to 28 tons, which saves space compared to the competition. There are three different cabinet sizes available for this product line. Heat recovery boosts efficiency and green scores, making it ideal for regions with Energy Building Certification™ incentives or requirements.

## Multi-port Distribution Controller (MDC)

The heat recovery system uses a multi-port distribution controller which acts as a central location. This allows better refrigerant distribution to all indoor units. The multi-port distribution control can connect up to 32 different indoor units. These systems typically take less piping and connections to configure between outdoor unit, multi-port distribution and indoor units.

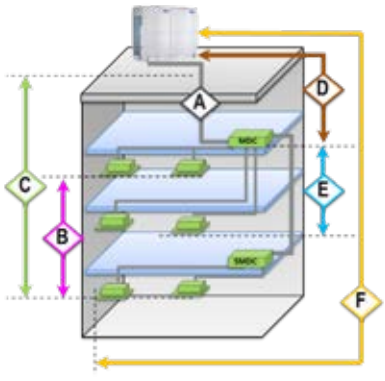
## Operating Ranges

The operating ranges for Carrier® VRF heat recovery systems provide heating down to -13 degrees with cooling up to 125 degrees Fahrenheit.




## Piping Length and Height Difference

The Carrier VRF heat recovery system includes the multi-port distribution controller that can be used as main or sub for greater piping flexibility. The main multi-port distribution controller can connect up to two sub multi-port distribution controllers to provide longer piping runs. A smaller equipment footprint matched with longer piping lengths allows delivery up to 2,642 feet, making it easier for design.




| | | Heat Recovery |
|---|---|---|
| A | Total length | 2642 ft* |
| B | Height between IDU-IDU | 98 ft |
| C | Height between ODU-IDU<br>- outdoor unit above<br>- outdoor unit below | 164 ft<br>131 ft |
| D | Distance between ODU-MDC | 360 ft |
| E | Height between MDC-IDU | 49 ft |
| F | Farthest equivalent length | 541 ft |

A* : Total piping length for 20 ton unit
Total piping length for 18 ton = 2476 ft
Total piping length for 8 ~ 16 ton = 1968 ft

## Electrical

Single-heat recovery system means single-point electrical connection. There is a tremendous amount of savings when you start comparing triple module units vs. single module units for the same tonnage. Servicing of the unit becomes easier as you only have one disconnect to switch off and lock out.

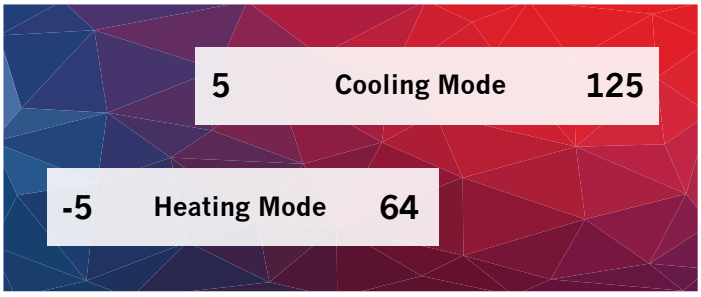
# Heat Pump Benefits

## Heat Pump

Carrier® VRF heat pumps boast variable speed technology with multiple inverter compressors. This significantly improves system efficiency and reliability. Carrier VRF heat pump capacity ranges from 6 tons up to 36 tons in a modular design, available as single, double or triple module. Heat pump systems are great for applications that do not require heating and cooling at the same time, such as a big auditorium.

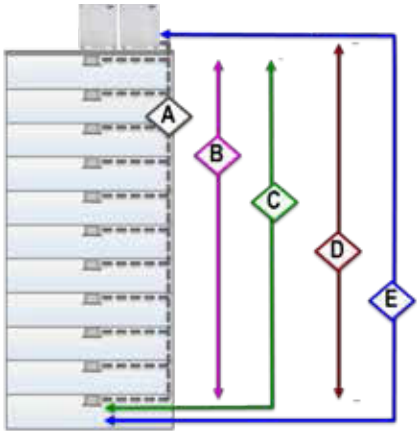
## Operating Ranges

The operating ranges for Carrier® VRF heat pump systems provide heating down to -5 degrees with cooling up to 125 degrees Fahrenheit.




## Piping Length and Height Difference

Carrier VRF heat pumps can deliver piping lengths of up to 3,280 feet. This leads to fewer limitations, making it much easier to design for floors with many small rooms, or for tenants who often rearrange their floor layouts. Y-shaped branching joints on the gas pipes between outdoor units ensure that refrigerant flow is equalized to each branch for enhanced system reliability.




| | | Heat Pump |
|---|---|---|
| A | Total length | 3280 ft |
| B | Height between IDU-IDU | 98 ft |
| C | Farthest pipe from 1st branch | 295 ft |
| D | Height between ODU-IDU<br>- outdoor unit above<br>- outdoor unit below | 164 ft<br>131 ft |
| E | Farthest equivalent length | 738 ft |

Outdoor Units

| Tons | Heat Recovery | Heat Pump Single-phase | Heat Pump | | |
|---|---|---|---|---|---|
| Combo | 1 Module | 1 Module | 1 | 2 | 3 |
| 3 | | 3 | | | |
| 4 | | 4 | | | |
| 5 | | 5 | | | |
| 6 | 6 | | 6 | | |
| 8 | 8 | | 8 | | |
| 10 | 10 | | 10 | | |
| 12 | 12 | | 12 | | |
| 14 | 14 | | | 8 + 6 | |
| 16 | 16 | | | 8 + 8 | |
| 18 | 18 | | | 10 + 8 | |
| 20 | 20 | | | 10 + 10 | |
| 22 | | | | 12 + 10 | |
| 24 | | | | 12 + 12 | |
| 26 | | | | | 10 + 8 + 8 |
| 28 | | | | | 10 + 10 + 8 |
| 30 | | | | | 10 + 10 + 10 |
| 32 | | | | | 12 + 10 + 10 |
| 34 | | | | | 12 + 12 + 10 |
| 36 | | | | | 12 + 12 + 12 |










Indoor Units

| | Cooling Capacity kBtu/h (Ton) | 4-Way Cassette | Compact 4-Way Cassette | High Wall | Underceiling / Floor Console (Exposed) | Floor Console (Recessed) |
|---|---|---|---|---|---|---|
| Non-Ducted Models | 7,000 | | ✓ | ✓ | | ✓ |
| | 9,000 | ✓ | ✓ | ✓ | | ✓ |
| | 12,000 | ✓ | ✓ | ✓ | ✓ | ✓ |
| | 15,000 | ✓ | ✓ | ✓ | ✓ | ✓ |
| | 18,000 | ✓ | | ✓ | ✓ | ✓ |
| | 24,000 | ✓ | | ✓ | ✓ | ✓ |
| | 30,000 | ✓ | | ✓ | ✓ | |
| | 36,000 | ✓ | | | ✓ | |
| | 48,000 | ✓ | | | ✓ | |
| | 53,500 | | | | | |
| | 72,000 | | | | | |
| | 96,000 | | | | | |

| | Cooling Capacity kBtu/h (Ton) | Low Static Duct (Slim Profile) | Medium Static Duct | High Static Duct | Vertical AHU | Outside Air Duct |
|---|---|---|---|---|---|---|
| Ducted Models | 7,000 | ✓ | ✓ | | | |
| | 9,000 | ✓ | ✓ | | | |
| | 12,000 | ✓ | ✓ | | | |
| | 15,000 | ✓ | ✓ | | | |
| | 18,000 | ✓ | ✓ | | ✓ | |
| | 24,000 | ✓ | ✓ | ✓ | ✓ | |
| | 30,000 | | ✓ | ✓ | ✓ | |
| | 36,000 | | ✓ | ✓ | ✓ | ✓ |
| | 48,000 | | ✓ | ✓ | ✓ | ✓ |
| | 53,500 | | | ✓ | ✓ | ✓ |
| | 72,000 | | | ✓ | | ✓ |
| | 96,000 | | | ✓ | | ✓ |

# 38VMR Heat Recovery Outdoor Unit 208/230V–3–60

| | | | |
|---|---|---|---|
| Appearance |  | | |
| Nominal Tons | 6 | 8 | 10 |
| Model name | 38VMA072RDS5-1 | 38VMA096RDS5-1 | 38VMA120RDS5-1 |

## Single Module

## Technical Specifications

| Outdoor unit model name | | | | 38VMA072RDS5-1 | 38VMA096RDS5-1 | 38VMA120RDS5-1 |
|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 6 | 8 | 10 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 72 | 96 | 120 |
| | | Rated | kBtu/h | 69 | 92 | 114 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 80 | 108 | 126 |
| | | Rated | kBtu/h | 77 | 103 | 120 |
| With non-ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | | 208/230V, 3-Phase, 60Hz | |
| | Cooling | Power consumption | kW | 4.2 | 6.2 | 9.3 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.6 | 23.7 | 22.8 |
| | Heating | Power consumption | kW | 4.4 | 7.2 | 9.5 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 30.0 | 30.0 | 30.0 |
| With ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | | 208/230V, 3-Phase, 60Hz | |
| | Cooling | Power consumption | kW | 5.0 | 7.1 | 9.5 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.2 | 24.3 | 23.2 |
| | Heating | Power consumption | kW | 5.7 | 8.0 | 9.8 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 27.4 | 27.7 | 26.7 |
| External dimensions | | Height | in | | 64-3/8 | |
| | | Width | in | | 52-3/4 | |
| | | Depth | in | | 31-1/8 | |
| Total weight | Unit | | lb | | 672 | |
| Compressor | Type/Quanity | | | | Inverter-Driven Hermetic Scroll/1 | |
| Fan unit | Air volume | | cfm | 6,900 | 7,600 | 8,100 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 26.5 | 26.5 | 26.5 |
| Electrical specifications | Unit | MCA (*4) | A | 43 | 45 | 46 |
| | | Recommended fuse size | A | 45 | 50 | 50 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 3/4 | 7/8 | 1-1/8 |
| | | Liquid side (main pipe) (brazing) | in | 5/8 | 3/4 | 3/4 |
| Operation temperature range | | Cooling | °F DB | | 5 to 125 | |
| | | Heating | °F WB | | –13 to 64 | |
| Maximum external static pressure | | | in WG | | 0.24 | |
| Maximum number of connected indoor units | | | | 15 | 20 | 24 |
| Maximum capacity of combined indoor units | | | | | 50% to 150% | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 58.4 | 61.7 | 62.7 |

Specifications subject to change.
(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.
(*2) The source voltage must not fluctuate more than +/–10%.
(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMR Heat Recovery Outdoor Unit 208/230V–3–60H

| | | | | | |
|---|---|---|---|---|---|
| Appearance |  | | | | |
| Nominal Tons | 12 | 14 | 16 | 18 | 20 |
| Model name | 38VMA144DL5-1 | 38VMA168DS5-1 | 38VMA192DS5-1 | 38VMA216DS5-1 | 38VMA240DS5-1 |

## Single Module

## Technical Specifications

| Outdoor unit model name | | | | 38VMA144DL5-1 | 38VMA168DS5-1 | 38VMA192DS5-1 | 38VMA216DS5-1 | 38VMA240DS5-1 |
|---|---|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 12 | 14 | 16 | 18 | 20 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 144 | 168 | 192 | 216 | 234 |
| | | Rated | kBtu/h | 136 | 158 | 182 | 204 | 220 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 160 | 188 | 215 | 243 | 257 |
| | | Rated | kBtu/h | 150 | 180 | 204 | 222 | 236 |
| With non-ducted indoor units | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | | |
| Electrical characteristics (Nominal) (*1) | Cooling | Power consumption | kW | 9.0 | 11.9 | 14.7 | 16.8 | 19.7 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.4 | 23.1 | 23.9 | 23.0 | 22.4 |
| | Heating | Power consumption | kW | 9.6 | 13.3 | 16.2 | 18.0 | 20.2 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 26.5 | 27.0 | 28.2 | 27.3 | 27.0 |
| With ducted indoor units | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | | |
| Electrical characteristics (Nominal) (*1) | Cooling | Power consumption | kW | 10.6 | 13.3 | 15.9 | 17.9 | 20.4 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.0 | 22.9 | 23.6 | 21.7 | 21.0 |
| | Heating | Power consumption | kW | 11.8 | 14.4 | 17.4 | 19.1 | 20.9 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 26.5 | 25.2 | 25.5 | 26.5 | 26.5 |
| External Dimensions | | Height | in | 64-3/8 | | | | |
| | | Width | in | 78-3/8 | | | | |
| | | Depth | in | 31-1/8 | | | | |
| Total weight | Unit | | lb | 1137 | | | | |
| Compressor | Type | | | Inverter-Driven Hermetic Scroll/2 | | | | |
| Fan unit | Air volume | | cfm | 10,100 | 10,100 | 11,300 | 12,300 | 12,300 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 |
| Electrical specifications | Unit | MCA (*4) | A | 70 | 70 | 71 | 81 | 81 |
| | | Recommended fuse size | A | 80 | 80 | 80 | 90 | 90 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 1-1/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-3/8 |
| | | Liquid side (main pipe) (brazing) | in | 7/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 |
| Operation temperature range | | Cooling | ◦F DB | 5 to 125 | | | | |
| | | Heating | ◦F WB | –13 to 64 | | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | | |
| Maximum number of connected indoor units | | | | 29 | 34 | 39 | 44 | 49 |
| Maximum capacity of combined indoor units | | | | 50% to 150% | | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 63.3 | 63.3 | 64.9 | 67.1 | 67.1 |

# 38VMR Heat Recovery Outdoor Unit 460V–3–60

| | | | |
|---|---|---|---|
| Appearance |  | | |
| Nominal Tons | 6 | 8 | 10 |
| Model name | 38VMA072RDS6-1 | 38VMA096RDS6-1 | 38VMA120RDS6-1 |

## Single Module

## Technical Specifications

| Outdoor unit model name | | | | 38VMA072RDS6-1 | 38VMA096RDS6-1 | 38VMA120RDS6-1 |
|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 6 | 8 | 10 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 72 | 96 | 120 |
| | | Rated | kBtu/h | 69 | 92 | 114 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 80 | 108 | 126 |
| | | Rated | kBtu/h | 77 | 103 | 120 |
| With non-ducted indoor units | Power supply (*2) | | | | 460V, 3-Phase, 60Hz | |
| Electrical characteristics (Nominal) (*1) | Cooling | Power consumption | kW | 4.2 | 6.2 | 9.3 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.6 | 23.7 | 22.8 |
| | Heating | Power consumption | kW | 4.4 | 7.2 | 9.5 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 30.0 | 30.0 | 30.0 |
| With ducted indoor units | Power supply (*2) | | | | 460V, 3-Phase, 60Hz | |
| Electrical characteristics (Nominal) (*1) | Cooling | Power consumption | kW | 5.0 | 7.1 | 9.6 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.2 | 24.3 | 23.2 |
| | Heating | Power consumption | kW | 5.7 | 8.0 | 9.8 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 27.4 | 27.7 | 26.7 |
| External dimensions | | Height | in | | 64-3/8 | |
| | | Width | in | | 52-3/4 | |
| | | Depth | in | | 31-1/8 | |
| Total weight | Unit | | lb | | 672 | |
| Compressor | Type/Quanity | | | | Inverter-Driven Hermetic Scroll/1 | |
| Fan unit | Air volume | | cfm | 6,900 | 7,600 | 8,100 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 26.5 | 26.5 | 26.5 |
| Electrical specifications | Unit | MCA (*4) | A | 20 | 22 | 22 |
| | | Recommended fuse size | A | 25 | 25 | 25 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 3/4 | 7/8 | 1-1/8 |
| | | Liquid side (main pipe) (brazing) | in | 5/8 | 3/4 | 3/4 |
| Operation temperature range | | Cooling | °F DB | | 5 to 125 | |
| | | Heating | °F WB | | –13 to 64 | |
| Maximum external static pressure | | | in WG | | 0.24 | |
| Maximum number of connected indoor units | | | | 15 | 20 | 24 |
| Maximum capacity of combined indoor units | | | | | 50% to 150% | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 58.4 | 61.7 | 62.7 |

Specifications subject to change.

(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

(*2) The source voltage must not fluctuate more than +/–10%.

(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMR Heat Recovery Outdoor Unit 460V–3–60

| | | | | | |
|---|---|---|---|---|---|
| Appearance |  | | | | |
| Nominal Tons | 12 | 14 | 16 | 18 | 20 |
| Model name | 38VMA144DL6-1 | 38VMA168DL6-1 | 38VMA192DL6-1 | 38VMA216DL6-1 | 38VMA240DL6-1 |

## Single Module

## Technical Specifications

| Outdoor unit model name | | | | 38VMA144RDL6-1 | 38VMA168RDL6-1 | 38VMA192RDL6-1 | 38VMA216RDL6-1 | 38VMA240RDL6-1 |
|---|---|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 12 | 14 | 16 | 18 | 20 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 144 | 168 | 192 | 216 | 236 |
| | | Rated | kBtu/h | 136 | 158 | 182 | 204 | 220 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 160 | 188 | 215 | 243 | 257 |
| | | Rated | kBtu/h | 150 | 180 | 204 | 222 | 236 |
| With non-ducted indoor units Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | | |
| | Cooling | Power consumption | kW | 9.0 | 11.9 | 14.7 | 16.8 | 19.7 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.4 | 23.1 | 23.9 | 23.0 | 22.4 |
| | Heating | Power consumption | kW | 9.6 | 13.3 | 16.2 | 18.0 | 20.2 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 26.5 | 27.0 | 28.2 | 27.3 | 27.0 |
| With ducted indoor units Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | | |
| | Cooling | Power consumption | kW | 10.6 | 13.3 | 15.9 | 17.9 | 20.4 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 24.0 | 22.9 | 23.6 | 21.7 | 21.0 |
| | Heating | Power consumption | kW | 11.8 | 14.4 | 17.4 | 19.1 | 20.9 |
| | | SCHE (Simultaneous Cooling & Heating Efficiency) | Btu/W | 26.5 | 25.2 | 25.5 | 26.5 | 26.5 |
| External Dimensions | | Height | in | 64-3/8 | | | | |
| | | Width | in | 78-3/8 | | | | |
| | | Depth | in | 31-1/8 | | | | |
| Total weight | Unit | | lb | 1,137 | | | | |
| Compressor | Type | | | Inverter-Driven Hermetic Scroll/2 | | | | |
| Fan unit | Air volume | | cfm | 10,100 | 10,100 | 11,300 | 12,300 | 12,300 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 |
| Electrical specifications | Unit | MCA (*4) | A | 35 | 35 | 35 | 38 | 38 |
| | | Recommended fuse size | A | 40 | 40 | 40 | 40 | 40 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 1-1/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-3/8 |
| | | Liquid side (main pipe) (brazing) | in | 7/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | | |
| | | Heating | °F WB | –13 to 64 | | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | | |
| Maximum number of connected indoor units | | | | 29 | 34 | 39 | 44 | 49 |
| Maximum capacity of combined indoor units | | | | 50% to 150% | | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 63.3 | 63.3 | 64.9 | 67.1 | 67.1 |

# 40VMD Multi-port Distribution Controller for Heat Recovery

| | | | | |
|---|---|---|---|---|
| Appearance |  |  |  |  |
| Multi-ports | 6 | 8 | 10 | 16 |
| Model name | 40VMD006M···3 | 40VMD008M···3 | 40VMD010M···3 | 40VMD016M···3 |

The Carrier® VRF multi-port distribution controller (MDC) allows you to connect from 6 to 16 indoor units based on number of ports. The main multi-port distribution controller can connect up to two sub multi-port distribution controllers.

## Main MDC — Technical Specifications

| Unit 40VMD | | 40VMD006M···3 | 40VMD008M···3 | 40VMD010M···3 | 40VMD016M···3 |
|---|---|---|---|---|---|
| Power supply (V·Ph·Hz) | | 208/230·1·60 | | | |
| Number of ports | | 6 | 8 | 10 | 16 |
| Unit | Unit dimensions, W x H x D (in) | 37 x 12·3/4 x 22·5/8 | | | 46·1/2 x 12·3/4 x 22·5/8 |
| | Packing dimensions, W x H x D (in) | 44·1/2 x 18 x 33·1/8 | | | 53·7/8 x 18 x 33·1/8 |
| | Net/gross weight (lb) | 132/205 | 137/209 | 143/216 | 190/269 |
| Design pressure, high/low (psig) | | 580/320 | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 20AWG·16AWG | | | |
| Condensate pipe diameter, OD (in) | | 1 | | | |
| MCA (A) | | 0.73 | 0.89 | 1.05 | 1.54 |
| Capacity per port | Kbtu | 54 | | | |

## Sub MDC — Technical Specifications

| Unit 40VMD | | 40VMD006S···3 | 40VMD008S···3 | 40VMD010S···3 | 40VMD016S···3 |
|---|---|---|---|---|---|
| Power supply (V·Ph·Hz) | | 208/230·1·60 | | | |
| Number of ports | | 6 | 8 | 10 | 16 |
| Unit | Unit dimensions, W x H x D (in) | 37 x 12·3/4 x 22·5/8 | | | 46·1/2 x 12·3/4 x 22·5/8 |
| | Packing dimensions, W x H x D (in) | 44·1/2 x 18 x 33·1/8 | | | 53·7/8 x 18 x 33·1/8 |
| | Net/gross weight (lb) | 126/168 | 130/203 | 137/209 | 183/262 |
| Design pressure, high/low (psig) | | 580/320 | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 20AWG·16AWG | | | |
| Condensate pipe diameter, OD (in) | | 1 | | | |
| MCA (A) | | 0.69 | 0.85 | 1.01 | 1.49 |
| Capacity per port | Kbtu | 54 max | | | |

# 38VMH Single-phase Heat Pump Outdoor Unit 208/230V–1–60

| | | | |
|---|---|---|---|
| Appearance |  | | |
| Nominal Tons | 3 | 4 | 5 |
| Model name | 38VMA036HDS3-1 | 38VMA048HDS3-1 | 38VMA060HDS3-1 |



## Technical Specifications

| Outdoor unit model name | | | | 38VMA036HDS3-1 | 38VMA048HDS3-1 | 38VMA060HDS3-1 |
|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 3 | 4 | 5 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 36 | 48 | 60 |
| | | Rated | kBtu/h | 36 | 48 | 60 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 40 | 52.5 | 66 |
| | | Rated | kBtu/h | 40 | 52.5 | 66 |
| With non-ducted indoor units Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 208/230V, 1-Phase, 60Hz | | |
| | Cooling | Power consumption | kW | 3.1 | 4.6 | 6.1 |
| | | SEER (Seasonal Energy Efficiency Ratio) | Btu/W | 18.0 | 18.0 | 18.6 |
| | Heating | Power consumption | kW | 3.1 | 4.3 | 5.8 |
| | | HSPF (Heating Seasonal Performace Factor) | Btu/W | 9.2 | 9.2 | 9.6 |
| With ducted indoor units Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 208/230V, 1-Phase, 60Hz | | |
| | Cooling | Power consumption | kW | 2.9 | 4.7 | 6.1 |
| | | SEER (Seasonal Energy Efficiency Ratio) | Btu/W | 17.8 | 17.8 | 18.6 |
| | Heating | Power consumption | kW | 3 .0 | 4.2 | 5.7 |
| | | HSPF (Heating Seasonal Performace Factor) | Btu/W | 9.6 | 9.6 | 10.0 |
| External dimensions | | Height | in | 52-1/4 | | |
| | | Width | in | 35-1/2 | | |
| | | Depth | in | 15-3/4 | | |
| Total weight | Unit | | lb | 220 | | |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Rotary/1 | | |
| | Motor output | | kW | 13 | | |
| Fan unit | Motor output | | W | 90+90 | | |
| | Air volume | | cfm | 4,100 | | |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 8.6 | | |
| Electrical specifications | Unit | MCA (*4) | A | 36 | 38 | 40 |
| | | Recommended fuse size | A | 40 | 40 | 45 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 5/8 | | 3/4 |
| | | Liquid side (main pipe) (brazing) | in | 3/8 | | |
| Operation temperature range | | Cooling | °F DB | 5 to 118 | | |
| | | Heating | °F WB | -13 to 64 | | |
| Maximum number of connected indoor units | | | | 5 | 7 | 9 |
| Maximum capacity of combined indoor units | | | | 50 to 130% | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 58.7 | 60.1 | 60.7 |

Specifications subject to change.
(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.
(*2) The source voltage must not fluctuate more than +/–10%.
(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMH Heat Pump Outdoor Unit 230V–3–60

| | | | | |
|---|---|---|---|---|
| Appearance |  | | | |
| Nominal Tons | 6 | 8 | 10 | 12 |
| Model name | 38VMA072HDS5-1 | 38VMA096HDS5-1 | 38VMA120HDS5-1 | 38VMA144HDS5-1 |

## Single Module

## Technical Specifications

| Outdoor unit model name | | | | 38VMA072HDS5-1 | 38VMA096HDS5-1 | 38VMA120HDS5-1 | 38VMA144HDS5-1 |
|---|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 6 | 8 | 10 | 12 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 72 | 96 | 120 | 144 |
| | | Rated | kBtu/h | 69 | 92 | 112 | 136 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 80 | 108 | 126 | 160 |
| | | Rated | kBtu/h | 77 | 103 | 120 | 150 |
| With non-ducted indoor units | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | |
| Electrical characteristics (Nominal) (*1) | Cooling | Power consumption | kW | 4.1 | 6.2 | 8.8 | 12.1 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 22.5 | 23.5 | 22.5 | 19.5 |
| | Heating | Power consumption | kW | 4.5 | 7.2 | 9.0 | 12.1 |
| | | COP (Coefficient of Performance) | W/W | 4.3 | 3.8 | 3.6 | 3.4 |
| With ducted indoor units | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | |
| Electrical characteristics (Nominal) (*1) | Cooling | Power consumption | kW | 5.1 | 7.5 | 9.6 | 12.3 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 23.6 | 23.0 | 21.9 | 19.5 |
| | Heating | Power consumption | kW | 5.6 | 8.0 | 9.8 | 12.6 |
| | | COP (Coefficient of Performance) | W/W | 3.9 | 3.6 | 3.5 | 3.4 |
| External dimensions | | Height | in | 64-3/8 | | | |
| | | Width | in | 52-3/4 | | | |
| | | Depth | in | 31-1/8 | | | |
| Total weight | Unit | | lb | 659 | 659 | 659 | 780 |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Scroll/1 | | | Inverter-Driven Hermetic Scroll Compressor/2 |
| Fan unit | Air volume | | cfm | 7,650 | 7,650 | 8,250 | 8,830 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 37.5 | 37.5 | 37.5 | 37.5 |
| Electrical specifications | Unit | MCA (*4) | A | 45 | 46 | 46 | 70 |
| | | Recommended fuse size | A | 50 | 50 | 50 | 80 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 7/8 | 7/8 | 1-1/8 | 1-1/8 |
| | | Liquid side (main pipe) (brazing) | in | 3/8 | 3/8 | 1/2 | 1/2 |
| | | Balance pipe (brazing) | in | 1/4 | 1/4 | 1/4 | 1/4 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | |
| | | Heating | °F WB | –5 to 64 | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | |
| Maximum number of connected indoor units | | | | 13 | 16 | 20 | 26 |
| Maximum capacity of combined indoor units | | | | 50% to 135% | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 62.5 | 63 | 63 | 65.5 |

Specifications subject to change.

(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

(*2) The source voltage must not fluctuate more than +/–10%.

(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMH Heat Pump Outdoor Unit 208/230V–3–60

| | | | | | | |
|---|---|---|---|---|---|---|
| Appearance |  | | | | | |
| Nominal Tons | 14 | 16 | 18 | 20 | 22 | 24 |
| Model name | 38VMA164HDS5-1 | 38VMA192HDS5-1 | 38VMA216HDS5-1 | 38VMA240HDS5-1 | 38VMA264HDS5-1 | 38VMA288HDS5-1 |

## Dual Module (Combined)

### Technical Specifications

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Combination model number | | | | 38VMA168HDS5-1 | 38VMA192HDS5-1 | 38VMA216HDS5-1 | 38VMA240HDS5-1 | 38VMA264HDS5-1 | 38VMA288HDS5-1 |
| Combination units | | | | 38VMA096HDS5-1<br>38VMA072HDS5-1 | 38VMA096HDS5-1<br>38VMA096HDS5-1 | 38VMA120HDS5-1<br>38VMA096HDS5-1 | 38VMA120HDS5-1<br>38VMA120HDS5-1 | 38VMA144HDS5-1<br>38VMA120HDS5-1 | 38VMA144HDS5-1<br>38VMA144HDS5-1 |
| Nominal tons | | | Ton | 14 | 16 | 18 | 20 | 22 | 24 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 168 | 192 | 216 | 240 | 264 | 288 |
| | | Rated | kBtu/h | 156 | 176 | 196 | 214 | 246 | 270 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 188 | 216 | 234 | 252 | 286 | 320 |
| | | Rated | kBtu/h | 180 | 206 | 224 | 240 | 270 | 300 |
| With non-ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 11.0 | 12.9 | 15.3 | 18.6 | 23.9 | 27.0 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 22.0 | 21.5 | 20.5 | 20.0 | 19.0 | 18.0 |
| | Heating | Power consumption | kW | 12.4 | 14.7 | 16.7 | 18.4 | 22.8 | 26.0 |
| | | COP (Coefficient of Performance) | W/W | 3.8 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 |
| With ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 12.4 | 14.5 | 16.6 | 18.7 | 24.2 | 27.4 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 22.0 | 22.0 | 21.3 | 20.6 | 19.0 | 18.0 |
| | Heating | Power consumption | kW | 13.9 | 16.1 | 17.8 | 19.5 | 23.8 | 26.4 |
| | | COP (Coefficient of Performance) | W/W | 3.6 | 3.6 | 3.5 | 3.5 | 3.2 | 3.2 |
| External Dimensions | | Height | in | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 |
| | | Width | in | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 |
| | | Depth | in | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 |
| Total weight | Unit | | lb | 659 x 2 | 659 x 2 | 659 x 2 | 659 x 2 | 780 + 659 | 780 + 780 |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Scroll/2 | | | | Inverter-Driven Hermetic Scroll/3 | Inverter-Driven Hermetic Scroll/4 |
| Fan unit | Air volume | | cfm | 7,650 x 2 | 7,650 x 2 | 8,250 + 7650 | 8,250 x 2 | 8,830 + 8,250 | 8,830 x 2 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 |
| Electrical specifications | Unit | MCA (*4) | A | 46 + 45 | 46 + 46 | 46 + 46 | 46 + 46 | 70 + 46 | 70 + 70 |
| | | Recommended fuse size | A | 50 + 50 | 50 + 50 | 50 + 50 | 50 + 50 | 80 + 50 | 80 + 80 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 1-1/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-3/8 | 1-3/8 |
| | | Liquid side (main pipe) (brazing) | in | 5/8 | 5/8 | 5/8 | 5/8 | 3/4 | 3/4 |
| | | Balance pipe (brazing) | in | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | | | |
| | | Heating | °F WB | –5 to 64 | | | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | | | |
| Maximum number of connected indoor units | | | | 29 | 33 | 36 | 39 | 46 | 50 |
| Maximum capacity of combined indoor units | | | | 50% to 135% | | | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 65 | 65 | 65 | 65 | 66.5 | 67.5 |

Specifications subject to change.
(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.
(*2) The source voltage must not fluctuate more than +/–10%.
(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMH Heat Pump Outdoor Unit 208/230V–3–60

| | | | | | | |
|---|---|---|---|---|---|---|
| Appearance |  | | | | | |
| Nominal Tons | 26 | 28 | 30 | 32 | 34 | 36 |
| Model name | 38VMA312HDS5-1 | 38VMA336HDS5-1 | 38VMA360HDS5-1 | 38VMA384HDS5-1 | 38VMA408HDS5-1 | 38VMA432HDS5-1 |

## Triple Module (Combined)

## Technical Specifications

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Combination model number | | | | 38VMA312HDS5-1 | 38VMA336HDS5-1 | 38VMA360HDS5-1 | 38VMA384HDS5-1 | 38VMA408HDS5-1 | 38VMA432HDS5-1 |
| Combination units | | | | 38VMA120HDS5-1<br>38VMA096HDS5-1<br>38VMA096HDS5-1 | 38VMA120HDS5-1<br>38VMA120HDS5-1<br>38VMA096HDS5-1 | 38VMA120HDS5-1<br>38VMA120HDS5-1<br>38VMA120HDS5-1 | 38VMA144HDS5-1<br>38VMA120HDS5-1<br>38VMA120HDS5-1 | 38VMA144HDS5-1<br>38VMA144HDS5-1<br>38VMA120HDS5-1 | 38VMA144HDS5-1<br>38VMA144HDS5-1<br>38VMA144HDS5-1 |
| Nominal tons | | | Ton | 26 | 28 | 30 | 32 | 34 | 36 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 312 | 336 | 360 | 384 | 408 | 432 |
| | | Rated | kBtu/h | 284 | 304 | 326 | 356 | 380 | 400 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 342 | 360 | 378 | 412 | 446 | 480 |
| | | Rated | kBtu/h | 320 | 338 | 354 | 384 | 410 | 440 |
| With non-ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 24.1 | 27.0 | 30.5 | 34.9 | 38.6 | 40.7 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 20.0 | 19.0 | 17.5 | 18.0 | 17.5 | 17.0 |
| | Heating | Power consumption | kW | 25.9 | 28.5 | 31.0 | 33.7 | 36.1 | 38.9 |
| | | COP (Coefficient of Performance) | W/W | 3.4 | 3.31 | 3.2 | 3.2 | 3.2 | 3.2 |
| With ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 208/230V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 25.7 | 27.4 | 29.9 | 35.9 | 38.3 | 40.3 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 20.5 | 19.2 | 18.0 | 18.0 | 17.5 | 17.0 |
| | Heating | Power consumption | kW | 27.3 | 29.2 | 31.0 | 33.6 | 35.9 | 38.5 |
| | | COP (Coefficient of Performance) | W/W | 3.3 | 3.3 | 3.2 | 3.2 | 3.2 | 3.2 |
| External Dimensions | | Height | in | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 |
| | | Width | in | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 |
| | | Depth | in | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 |
| Total weight | Unit | | lb | 659 x 3 | 659 x 3 | 659 x 3 | 780 + 659 x 2 | 780 x 2 + 659 | 780 x 3 |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Scroll/3 | | | Inverter-Driven Hermetic Scroll/4 | Inverter-Driven Hermetic Scroll/5 | Inverter-Driven Hermetic Scroll/6 |
| Fan unit | Air volume | | cfm | 8,250 + 7,650 x 2 | 8,250 x 2 + 7,650 | 8,250 x 3 | 8,830 + 8,250 x 2 | 8,830 x 2 + 8,250 | 8,830 x 3 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 |
| Electrical specifications | Unit | MCA (*4) | A | 46 + 46 + 46 | 46 + 46 + 46 | 46 + 46 + 46 | 70 + 46 + 46 | 70 + 70 + 46 | 70 + 70 + 70 |
| | | Recommended fuse size | A | 50 + 50 + 50 | 50 + 50 + 50 | 50 + 50 + 50 | 80 + 50 + 50 | 80 + 80 + 50 | 80 + 80 + 80 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 1-3/8 | 1-3/8 | 1-3/8 | 1-3/8 | 1-3/8 | 1-3/8 |
| | | Liquid side (main pipe) (brazing) | in | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | | Balance pipe (brazing) | in | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | | | |
| | | Heating | °F WB | –5 to 64 | | | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | | | |
| Maximum number of connected indoor units | | | | 53 | 56 | 59 | 63 | 64 | 64 |
| Maximum capacity of combined indoor units | | | | 50% to 135% | | | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 66.5 | 66.5 | 66.5 | 67 | 68.5 | 69 |

Specifications subject to change.

(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

(*2) The source voltage must not fluctuate more than +/–10%.

(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMH Heat Pump Outdoor Unit 460V–3–60

| | | | | |
|---|---|---|---|---|
| Appearance |  | | | |
| Nominal Tons | 6 | 8 | 10 | 12 |
| Model name | 38VMA072HDS6-1 | 38VMA096HDS6-1 | 38VMA120HDS6-1 | 38VMA144HDS6-1 |

## Single Module

## Technical Specifications

| Outdoor unit model name | | | | 38VMA072HDS6-1 | 38VMA096HDS6-1 | 38VMA120HDS6-1 | 38VMA144HDS6-1 |
|---|---|---|---|---|---|---|---|
| Nominal tons | | | Ton | 6 | 8 | 10 | 12 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 72 | 96 | 120 | 144 |
| | | Rated | kBtu/h | 69 | 92 | 112 | 136 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 80 | 108 | 126 | 160 |
| | | Rated | kBtu/h | 77 | 103 | 120 | 150 |
| With non-ducted indoor units Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | |
| | Cooling | Power consumption | kW | 4.1 | 6.2 | 8.8 | 12.1 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 22.5 | 23.5 | 22.5 | 19.5 |
| | Heating | Power consumption | kW | 4.5 | 7.2 | 9.0 | 12.1 |
| | | COP (Coefficient of Performance) | W/W | 4.3 | 3.8 | 3.6 | 3.4 |
| With ducted indoor units Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | |
| | Cooling | Power consumption | kW | 5.1 | 7.5 | 9.6 | 12.3 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 23.6 | 23.0 | 21.9 | 19.5 |
| | Heating | Power consumption | kW | 5.6 | 8.0 | 9.8 | 12.6 |
| | | COP (Coefficient of Performance) | W/W | 3.9 | 3.6 | 3.5 | 3.4 |
| External dimensions | | Height | in | 64-3/8 | | | |
| | | Width | in | 52-3/4 | | | |
| | | Depth | in | 31-1/8 | | | |
| Total weight | Unit | | lb | 659 | 659 | 659 | 772 |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Scroll/1 | | | Inverter-Driven Hermetic Scroll/2 |
| Fan unit | Air volume | | cfm | 7,650 | 7,650 | 8,250 | 8,830 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 37.5 | 37.5 | 37.5 | 37.5 |
| Electrical specifications | Unit | MCA (*4) | A | 22 | 25 | 25 | 33 |
| | | Recommended fuse size | A | 25 | 30 | 30 | 35 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 7/8 | 7/8 | 1-1/8 | 1-1/8 |
| | | Liquid side (main pipe) (brazing) | in | 3/8 | 3/8 | 1/2 | 1/2 |
| | | Balance pipe (brazing) | in | 1/4 | 1/4 | 1/4 | 1/4 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | |
| | | Heating | °F WB | –5 to 64 | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | |
| Maximum number of connected indoor units | | | | 13 | 16 | 20 | 26 |
| Maximum capacity of combined indoor units | | | | 50% to 135% | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 62.5 | 63 | 63 | 65.5 |

Specifications subject to change.

(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

(*2) The source voltage must not fluctuate more than +/–10%.

(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# 38VMH Heat Pump Outdoor Unit 460V–3–60

| | | | | | | |
|---|---|---|---|---|---|---|
| Appearance |  | | | | | |
| Nominal Tons | 14 | 16 | 18 | 20 | 22 | 24 |
| Model name | 38VMA168HDS6-1 | 38VMA192HDS6-1 | 38VMA216HDS6-1 | 38VMA240HDS6-1 | 38VMA264HDS6-1 | 38VMA288HDS6-1 |

## Dual Module (Combined)

## Technical Specifications

| Combination model number | | | | 38VMA168HDS6-1 | 38VMA192HDS6-1 | 38VMA216HDS6-1 | 38VMA240HDS6-1 | 38VMA264HDS6-1 | 38VMA288HDS6-1 |
|---|---|---|---|---|---|---|---|---|---|
| Combination units | | | | 38VMA096HDS6-1<br>38VMA072HDS6-1 | 38VMA096HDS6-1<br>38VMA096HDS6-1 | 38VMA120HDS6-1<br>38VMA096HDS6-1 | 38VMA120HDS6-1<br>38VMA120HDS6-1 | 38VMA144HDS6-1<br>38VMA120HDS6-1 | 38VMA144HDS6-1<br>38VMA144HDS6-1 |
| Nominal tons | | | Ton | 14 | 16 | 18 | 20 | 22 | 24 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 168 | 192 | 216 | 240 | 264 | 288 |
| | | Rated | kBtu/h | 156 | 176 | 196 | 214 | 246 | 270 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 188 | 216 | 234 | 252 | 286 | 320 |
| | | Rated | kBtu/h | 180 | 206 | 224 | 240 | 270 | 300 |
| With non-ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 11.0 | 12.9 | 15.3 | 18.6 | 23.9 | 27.0 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 22.0 | 21.5 | 20.5 | 20.0 | 19.0 | 18.0 |
| | Heating | Power consumption | kW | 12.4 | 14.7 | 16.7 | 18.4 | 22.8 | 26.0 |
| | | COP (Coefficient of Performance) | W/W | 3.8 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 |
| With ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 12.4 | 14.5 | 16.6 | 18.7 | 24.2 | 27.4 |
| | | IEER (Integrated Energy Efficiency Ratio) | Btu/W | 22.0 | 22.0 | 21.3 | 20.6 | 19.0 | 18.0 |
| | Heating | Power consumption | kW | 13.9 | 16.1 | 17.8 | 19.5 | 23.8 | 26.4 |
| | | COP (Coefficient of Performance) | W/W | 3.6 | 3.6 | 3.5 | 3.5 | 3.2 | 3.2 |
| External Dimensions | | Height | in | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 |
| | | Width | in | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 | 52-3/4 x 2 |
| | | Depth | in | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 |
| Total weight | Unit | | lb | 659 x 2 | 659 x 2 | 659 x 2 | 659 x 2 | 772 + 659 | 772 + 772 |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Scroll/2 | | | | Inverter-Driven Hermetic Scroll/3 | Inverter-Driven Hermetic Scroll/4 |
| Fan unit | Air volume | | cfm | 7,650 x 2 | 7,650 x 2 | 8,250 + 7,650 | 8,250 x 2 | 8,250 + 8,830 | 8,830 x 2 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 | 37.5 x 2 |
| Electrical specifications | Unit | MCA (*4) | A | 25 + 22 | 25 + 25 | 25 + 25 | 25 + 25 | 33 + 25 | 33 + 33 |
| | | Recommended fuse size | A | 30 + 25 | 30 + 30 | 30 + 30 | 30 + 30 | 35 + 30 | 35 + 35 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 1-1/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-3/8 | 1-3/8 |
| | | Liquid side (main pipe) (brazing) | in | 5/8 | 5/8 | 5/8 | 5/8 | 3/4 | 3/4 |
| | | Balance pipe (brazing) | in | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | | | |
| | | Heating | °F WB | –5 to 64 | | | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | | | |
| Maximum number of connected indoor units | | | | 29 | 33 | 36 | 39 | 46 | 50 |
| Maximum capacity of combined indoor units | | | | 50% to 135% | | | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 65 | 65 | 65 | 65 | 66.5 | 67.5 |

Specifications subject to change.

(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

(*2) The source voltage must not fluctuate more than +/–10%.

(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation these values are normally somewhat higher as a result of ambient conditions.

# 38VMH Heat Pump Outdoor Unit 460V–3–60

| | | | | | | |
|---|---|---|---|---|---|---|
| Appearance |  | | | | | |
| Nominal Tons | 26 | 28 | 30 | 32 | 34 | 36 |
| Model name | 38VMA312HDS6-1 | 38VMA336HDS6-1 | 38VMA360HDS6-1 | 38VMA384HDS6-1 | 38VMA408HDS6-1 | 38VMA432HDS6-1 |

## Triple Module (Combined)

## Technical Specifications

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Combination model number | | | | 38VMA312HDS6-1 | 38VMA336HDS6-1 | 38VMA360HDS6-1 | 38VMA384HDS6-1 | 38VMA408HDS6-1 | 38VMA432HDS6-1 |
| Combination units | | | | 38VMA120HDS6-1<br>38VMA096HDS6-1<br>38VMA096HDS6-1 | 38VMA120HDS6-1<br>38VMA120HDS6-1<br>38VMA096HDS6-1 | 38VMA120HDS6-1<br>38VMA120HDS6-1<br>38VMA120HDS6-1 | 38VMA144HDS6-1<br>38VMA120HDS6-1<br>38VMA120HDS6-1 | 38VMA144HDS6-1<br>38VMA144HDS6-1<br>38VMA120HDS6-1 | 38VMA144HDS6-1<br>38VMA144HDS6-1<br>38VMA144HDS6-1 |
| Nominal tons | | | Ton | 26 | 28 | 30 | 32 | 34 | 36 |
| Cooling capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 312 | 336 | 360 | 384 | 408 | 432 |
| | | Rated | kBtu/h | 284 | 304 | 326 | 356 | 380 | 400 |
| Heating capacity (*1) (with non-ducted indoor units/ducted) | | Nominal | kBtu/h | 342 | 360 | 378 | 412 | 446 | 480 |
| | | Rated | kBtu/h | 320 | 338 | 354 | 384 | 410 | 440 |
| With non-ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 24.1 | 27.0 | 30.5 | 34.9 | 38.6 | 40.7 |
| | | IEER (IntegratedEnergy Efficiency Ratio) | Btu/W | 20.5 | 19.2 | 18.0 | 18.0 | 17.5 | 17.0 |
| | Heating | Power consumption | kW | 25.9 | 28.5 | 31.0 | 33.7 | 36.1 | 38.9 |
| | | COP (Coefficient of Performance) | W/W | 3.4 | 3.3 | 3.2 | 3.2 | 3.2 | 3.2 |
| With ducted indoor units<br>Electrical characteristics (Nominal) (*1) | Power supply (*2) | | | 460V, 3-Phase, 60Hz | | | | | |
| | Cooling | Power consumption | kW | 25.7 | 27.4 | 29.9 | 35.9 | 38.3 | 40.3 |
| | | IEER (IntegratedEnergy Efficiency Ratio) | Btu/W | 20.0 | 19.0 | 17.5 | 18.0 | 17.5 | 17.0 |
| | Heating | Power consumption | kW | 27.3 | 29.2 | 31.0 | 33.6 | 35.9 | 38.5 |
| | | COP (Coefficient of Performance) | W/W | 3.3 | 3.3 | 3.2 | 3.2 | 3.2 | 3.2 |
| External Dimensions | | Height | in | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 | 64-3/8 |
| | | Width | in | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 | 52-3/4 x 3 |
| | | Depth | in | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 | 31-1/8 |
| Total weight | Unit | | lb | 659 x 3 | 659 x 3 | 659 x 3 | 772 + 659 x 2 | 772 x 2 + 659 | 772 x 3 |
| Compressor | Type/Quanity | | | Inverter-Driven Hermetic Scroll/3 | | | Inverter-Driven Hermetic Scroll/4 | Inverter-Driven Hermetic Scroll/5 | Inverter-Driven Hermetic Scroll/6 |
| Fan unit | Air volume | | cfm | 8,250 + 7,650 x 2 | 8,250 x 2 + 7,650 | 8,250 x 3 | 8,830 + 8,250 x 2 | 8,250 x 2 + 8,830 | 8,830 x 3 |
| Refrigerant (*3) (Charged refrigerant amount) | | | lb | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 | 37.5 x 3 |
| Electrical specifications | Unit | MCA (*4) | A | 25 + 25 + 25 | 25 + 25 + 25 | 25 + 25 + 25 | 33 + 25 + 25 | 33 + 33 + 25 | 33 + 33 + 33 |
| | | Recommended fuse size | A | 30 + 30 + 30 | 30 + 30 + 30 | 30 + 30 + 30 | 35 + 30 + 30 | 35 + 35 + 30 | 35 + 35 + 35 |
| Refrigerant piping | Connecting port diameter | Gas side (main pipe) (brazing) | in | 1-3/8 | 1-3/8 | 1-3/8 | 1-3/8 | 1-3/8 | 1-3/8 |
| | | Liquid side (main pipe) (brazing) | in | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | | Balance pipe | in | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| Operation temperature range | | Cooling | °F DB | 5 to 125 | | | | | |
| | | Heating | °F WB | –5 to 64 | | | | | |
| Maximum external static pressure | | | in WG | 0.24 | | | | | |
| Maximum number of connected indoor units | | | | 53 | 56 | 59 | 63 | 64 | 64 |
| Maximum capacity of combined indoor units | | | | 50% to 135% | | | | | |
| Sound pressure level cooling/heating (*5) | | | dB(A) | 66.5 | 66.5 | 66.5 | 67 | 68.5 | 69 |

Specifications subject to change.

(*1) Rated conditions. Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb.
Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

(*2) The source voltage must not fluctuate more than +/–10%.

(*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

(*4) Select wire size based on larger value of MCA.
MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

(*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

## 40VMF 4-Way Cassette

The Carrier® VRF 4-Way Cassette provides supreme comfort by delivering conditioned airflow in four directions to customize the airflow control based on user comfort preferences.

- Integrated condensate lift up to 30"
- Panel accessory required, model number 40VMF00···



### Technical Specifications

| Unit 40VMF | | 40VMF009···3 | 40VMF012···3 | 40VMF015···3 | 40VMF018···3 | 40VMF024···3 | 40VMF030···3 | 40VMF036···3 | 40VMF048···3 |
|---|---|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | | | |
| Cooling capacity (Btuh) | | 9,000 | 12,000 | 15,000 | 18,000 | 24,000 | 30,000 | 36,000 | 48,000 |
| Heating capacity (Btuh) | | 10,000 | 13,500 | 17,000 | 21,000 | 27,000 | 34,000 | 40,000 | 54,000 |
| Indoor fan motor | Type | DC | | | | | | | |
| | Input (W) | 16.5 | | 23 | 35 | 45 | | 75 | 100 |
| Indoor airflow (cfm) | Low | 350 | | 400 | 400 | 460 | 560 | 700 | 780 |
| | Medium | 400 | | 460 | 500 | 560 | 650 | 850 | 950 |
| | High | 460 | | 560 | 650 | 725 | 780 | 950 | 1,100 |
| Indoor unit sound level dB(A) | Low | 31.3 | 32.6 | 32.4 | 31.3 | 35 | 34.1 | 39.9 | 43.1 |
| | Medium | 32.6 | 33 | 34 | 35.2 | 38.8 | 37.1 | 43.9 | 47.9 |
| | High | 34.4 | 35.2 | 37.3 | 40.8 | 44.2 | 40.8 | 46.7 | 49.3 |
| Unit | Unit dimension, W x H x D (in) | 33-1/8 x 9 x 33-1/8 | | | | | | 33-1/8 x 11-3/4 x 33-1/8 | |
| | Panel/grille dimension, W x H x D (in) | 37-3/8 x 1-3/4 x 37-3/8 | | | | | | | |
| | Total weight (lb) | 13.2/20 | | | | | | | |
| Refrigeration type | | R410a | | | | | | | |
| Expansion device | | EXV | | | | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | | 3/8 | | | | |
| | Suction side, OD (Flare) | 1/2 | | | 5/8 | | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | | | | | |
| Condensate drain pipe diameter, OD (in) | | 1-1/4 | | | | | | | |
| Electrical data | MCA (A) | 0.98 | | | | | 2.08 | | |
| | MOPD (A) | 15 | | | | | | | |

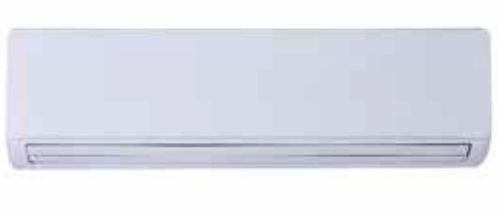
# 40VMC Compact 4-Way Cassette

The Carrier® VRF Compact 4-Way Cassette provides supreme comfort by delivering conditioned airflow in four directions while fitting in a standard T grid ceiling.

- Integrated condensate lift up to 24"
- Panel accessory required, model number 40VMC001---

## Technical Specifications

| Unit 40VMC | | 40VMC007---3 | 40VMC009---3 | 40VMC012---3 | 40VMC015---3 |
|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | |
| Cooling capacity (Btuh) | | 7,000 | 9,000 | 12,000 | 15,000 |
| Heating capacity (Btuh) | | 8,000 | 10,000 | 13,000 | 17,000 |
| Indoor fan motor | Type | DC | | | |
| | Input (W) | 16 | | 24 | |
| Indoor airflow (cfm) | Low | 229 | | 253 | |
| | Medium | 282 | | 306 | |
| | High | 306 | | 359 | |
| Indoor unit sound level dB(A) | Low | 34.7 | | 38.1 | |
| | Medium | 38.5 | | 42.3 | |
| | High | 40.4 | | 45.5 | |
| Unit | Unit dimension, W x H x D (in) | 24-7/8 x 10-1/4 x 22-7/16 | | | |
| | Panel/grille dimension, W x H x D (in) | 25-1/2 x 2 x 25-1/2 | | | |
| | Total weight (lb) | 5.5/9.9 | | | |
| Refrigeration type | | R410a | | | |
| Expansion device | | EXV | | | |
| Design pressure, high/low (psig) | | 580/320 | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | | |
| | Suction side, OD (Flare) | 1/2 | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | |
| Condensate drain pipe diameter, OD (in) | | 1 | | | |
| Electrical data | MCA (A) | 0.38 | | 0.53 | |
| | MOPD (A) | 15 | | | |



## 40VMW High Wall Unit

The Carrier® VRF High Wall unit mounts on the wall providing conditioned air to fit any type of space.

- Condensate pump is accessory
- Filter is washable



### Technical Specifications

| Unit 40VMW | | 40VMW007···3 | 40VMW009···3 | 40VMW012···3 | 40VMW015···3 | 40VMW018···3 | 40VMW024···3 | 40VMW030···3 |
|---|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | | |
| Cooling capacity (Btuh) | | 7,500 | 9,500 | 12,000 | 15,000 | 18,000 | 24,000 | 30,000 |
| Heating capacity (Btuh) | | 8,500 | 10,900 | 13,500 | 17,000 | 21,000 | 27,000 | 34,000 |
| Indoor fan motor | Type | DC | | | | | | |
| | Input (W) | 25 | | 30 | 35 | 45 | 75 | 85 |
| Indoor airflow (cfm) | Low | 245 | | 250 | 380 | 440 | 460 | 480 |
| | Medium | 270 | | 280 | 420 | 470 | 530 | 600 |
| | High | 320 | | 360 | 480 | 560 | 650 | 770 |
| Indoor unit sound level dB(A) | Low | 31.2 | 31.8 | 32.8 | 38.4 | 38.9 | 36.8 | 38.1 |
| | Medium | 32.2 | 32.6 | 34.6 | 39.6 | 40.2 | 42 | 43.6 |
| | High | 34 | 34.5 | 36.4 | 41.7 | 41.8 | 43.2 | 48.3 |
| Unit | Unit dimension, W x H x D (in) | 36 x 11-3/8 x 9 | | | 42-1/4 x 12-3/8 x 9 | | 47 x 13-1/2 x 10-1/8 | |
| | Total weight (lb) | 28/35 | | | 32/40.5 | | 38/50.5 | |
| Refrigeration type | | R410a | | | | | | |
| Expansion device | | EEV | | | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | | | 3/8 | | |
| | Suction side, OD (Flare) | 1/2 | | | | 5/8 | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | | | | |
| Condensate drain pipe diameter, OD (in) | | 3/4 | | | | | | |
| Electrical data | MCA (A) | 0.45 | | | | | 0.86 | |
| | MOPD (A) | 15 | | | | | | |

# 40VMU Underceiling Unit – Floor Console (Exposed)

The Carrier® VRF Underceiling unit can be installed exposed below the ceiling or floor standing as an exposed Floor Console unit.

- Condensate pump is accessory
- Filter is washable

## Technical Specifications

| Unit 40VMU | | 40VMU012···3 | 40VMU015···3 | 40VMU018···3 | 40VMU024···3 | 40VMU030···3 | 40VMU036···3 | 40VMU048···3 |
|---|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | | |
| Cooling capacity (Btuh) | | 12,000 | 15,000 | 18,000 | 24,000 | 30,000 | 36,000 | 48,000 |
| Heating capacity (Btuh) | | 13,500 | 17,000 | 21,000 | 27,000 | 34,000 | 40,000 | 54,000 |
| Indoor fan motor | Type | DC Motor | | | | | | |
| | Input (W) | 24 | 47 | 53 | 80 | 107 | 67 x 2 | 115 x 2 |
| Indoor airflow (cfm) | Low | 259 | 359 | 394 | 494 | 624 | 906 | 929 |
| | Medium | 294 | 412 | 424 | 529 | 676 | 976 | 1,000 |
| | High | 335 | 441 | 471 | 571 | 729 | 1,094 | 1,353 |
| Indoor unit sound level dB(A) | Low | 35.8 | 41.7 | 44.1 | 50.2 | 50.4 | 48.4 | 50.6 |
| | Medium | 37.7 | 45.4 | 46.5 | 52 | 52.1 | 50.3 | 52.3 |
| | High | 40.5 | 47.2 | 48.5 | 53.8 | 53.9 | 53 | 59.8 |
| Unit | Unit dimension, W x H x D (in) | 39 x 26 x 8 | | | | 50-1/2 x 26 x 8 | 66 x 27 x 10 | |
| | Total weight (lb) | 57/71 | 62/75 | | | 77/90 | 106/128 | |
| Refrigeration type | | R410a | | | | | | |
| Expansion device | | EXV | | | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | 3/8 | | | | |
| | Suction side, OD (Flare) | 1/2 | | 5/8 | | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | | | | |
| Condensate drain pipe diameter, OD (in) | | 5/8 | | | | | | |
| Electrical data | MCA (A) | 0.44 | 0.73 | 0.87 | 1.2 | 1.4 | 1.8 | 2.8 |
| | MOPD (A) | 15 | | | | | | |

## 40VMR Floor Console (Recessed)

The Carrier® VRF Floor Console (recessed) units can be installed inside a wall or custom-built cabinet to match interior space design.
Adjustable filter rack 1"– 2".

- Condensate pump is accessory
- Filter is washable
- External static pressure up to 0.15



### Technical Specifications

| Unit 40VMR | | 40VMR007···3 | 40VMR009···3 | 40VMR012···3 | 40VMR015···3 | 40VMR018···3 | 40VMR024···3 |
|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | |
| Cooling capacity (Btuh) | | 7,000 | 9,000 | 12,000 | 15,000 | 18,000 | 24,000 |
| Heating capacity (Btuh) | | 8,000 | 10,000 | 13,000 | 17,000 | 20,000 | 27,000 |
| Indoor fan motor | Type | DC | | | | | |
| | Input (W) | 19 | | 25 | 41 | 27 | 79 |
| Indoor airflow (cfm) | Low | 253 | | 271 | 347 | 365 | 553 |
| | Medium | 276 | | 335 | 424 | 418 | 635 |
| | High | 300 | | 400 | 500 | 488 | 776 |
| Indoor external static pressure | in. wg | 0.15 | | | | | |
| Indoor unit sound level dB(A) | Low | 35.7 | 35.8 | 32.5 | 36.8 | 32.8 | 42.5 |
| | Medium | 38.2 | 37.9 | 36.3 | 41.7 | 35.5 | 45.2 |
| | High | 39.9 | 39.8 | 40.3 | 45.3 | 39 | 49.9 |
| Unit | Unit dimension, W x H x D (in) | 35-1/4 x 24 x 8-3/8 | | 43-1/8 x 24 x 8-3/8 | | 55 x 24 x 8-3/8 | |
| | Total weight (lb) | 48.9/80 | | 59.1/91.5 | | 69.2/102.1 | |
| Refrigeration type | | R410a | | | | | |
| Expansion device | | EEV | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | | | 3/8 | |
| | Suction side, OD (Flare) | 1/2 | | | | 5/8 | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 20AWG-16AWG | | | | | |
| Condensate drain pipe diameter, OD (in) | | 5/8 | | | | | |
| Electrical data | MCA (A) | 0.55 | | 0.63 | 0.83 | 0.72 | 1.38 |
| | MOPD (A) | 15 | | | | | |
| External static pressure | in. wg | 0.15 | | | | | |

# 40VML Low Static Duct (Slim Profile)

The Carrier® VRF Slim Duct (low static) unit is only 8-1/4" in height, making it an ideal candidate for narrow soffit space applications. Air return can be rear or bottom, but rear is default.

- Integrated condensate lift up to 28”
- Filter is washable

## Technical Specifications

| Unit 40VML | | 40VML007···3 | 40VML009···3 | 40VML012···3 | 40VML015···3 | 40VML018···3 | 40VML024···3 |
|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | |
| Cooling capacity (Btuh) | | 7,000 | 9,000 | 12,000 | 15,000 | 18,000 | 24,000 |
| Heating capacity (Btuh) | | 8,000 | 10,000 | 13,500 | 17,000 | 21,000 | 27,000 |
| Indoor fan motor | Type | DC | | | | | |
| | Input (W) | 25 | | 32 | 43 | 56 | 68 |
| Indoor airflow (cfm) | Low | 224 | | 236 | 306 | 353 | 471 |
| | Medium | 253 | | 294 | 367 | 424 | 565 |
| | High | 283 | | 353 | 459 | 530 | 701 |
| Indoor external static pressure | in. wg | 0.20 | | | | | |
| Indoor unit sound level dB(A) | Low | 31.4 | 31 | 33 | 33.2 | 36 | 37 |
| | Medium | 32 | 32 | 34.6 | 35.2 | 38 | 38.8 |
| | High | 34 | 34.5 | 37 | 36.7 | 40.2 | 41.3 |
| Unit | Unit dimension, W x H x D (in) | 30-3/4 x 8-1/4 x 19-3/4 | | | 39-1/4 x 8-1/4 x 19-3/4 | | 48 x 8-1/4 x 19-3/4 |
| | Total weight (lb) | 41/48.5 | | | 48.5/57.5 | | 59.5/71.5 |
| Refrigeration type | | R410a | | | | | |
| Expansion device | | EEV | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | | | 3/8 | |
| | Suction side, OD (Flare) | 1/2 | | | | 5/8 | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | | | |
| Condensate drain pipe diameter, OD (in) | | 1 | | | | | |
| Electrical data | MCA (A) | 0.5 | | 0.6 | 0.8 | 0.95 | 1.18 |
| | MOPD (A) | 15 | | | | | |

## 40VMM Medium Static Duct

The Carrier® VRF Medium Static Duct unit is ideal for single room hideaway or ducted applications. Air return can be rear or bottom, but rear is default.

- Integrated condensate lift up to 28"
- Filter is washable



### Technical Specifications

| Unit 40VMM | | 40VMM007···3 | 40VMM009···3 | 40VMM012···3 | 40VMM015···3 | 40VMM018···3 | 40VMM024···3 | 40VMM030···3 | 40VMM036···3 | 40VMM048···3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | | | | |
| Cooling capacity (Btuh) | | 7,000 | 9,000 | 12,000 | 15,000 | 19,000 | 24,000 | 30,000 | 38,000 | 48,000 |
| Heating capacity (Btuh) | | 8,000 | 10,000 | 13,500 | 17,000 | 21,000 | 27,000 | 34,000 | 42,000 | 54,000 |
| Indoor fan motor | Type | DC | | | | | | | | |
| | Input (W) | 50 | | 115 | 140 | 155 | 195 | 260 | 310 | 430 |
| Indoor airflow (cfm) | Low | 230 | | 250 | 326 | 376 | 501 | 626 | 751 | 1,001 |
| | Medium | 271 | | 294 | 385 | 444 | 592 | 740 | 888 | 1,184 |
| | High | 312 | | 375 | 462 | 565 | 707 | 908 | 1,117 | 1,366 |
| Indoor external static pressure | in. wg | 0.32 | | 0.6 | | | | | | |
| Indoor unit sound level dB(A) | Low | 28.1 | 29.3 | 30 | 31.9 | 35.5 | 36.4 | 40.8 | 39.2 | 44.7 |
| | Medium | 29.3 | 30.9 | 32 | 34.5 | 38.2 | 38.6 | 43.7 | 42.6 | 47.5 |
| | High | 31.3 | 32.2 | 36.1 | 38.5 | 41.1 | 41.8 | 46.9 | 46.2 | 50.8 |
| Unit | Unit dimension, W x H x D (in) | 39-1/4 x 8-1/4 x 19-3/4 | | 39-3/4 x 10-5/8 x 25 | | | 48-1/2 x 10-5/8 x 30-1/2 | | 50-3/4 x 11-7/8 x 34-1/8 | |
| | Total weight (lb) | 48.5/57.5 | | 76/88 | | 97/115 | 99/117 | | 124/143 | |
| Refrigeration type | | R410a | | | | | | | | |
| Expansion device | | EXV | | | | | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 1/4 | | | | 3/8 | | | | |
| | Suction side, OD (Flare) | 1/2 | | | | 5/8 | | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | | | | | | |
| Condensate drain pipe diameter, OD (in) | | 1 | | 3/4 | | | | | | |
| Electrical data | MCA (A) | 1.25 | | 3.13 | | | | | 5 | |
| | MOPD (A) | 15 | | | | | | | | |

# 40VMH High Static Duct

The Carrier® VRF High Static Ducted indoor units can handle higher static to support longer ductwork for a given space and are ideal for hideaway applications serving multiple zones.

- Integrated condensate lift up to 28", for sizes up to 54
- For sizes 72 and 96, condensate pump is an accessory

## Technical Specifications

| Unit 40VMH | | 40VMH024···3 | 40VMH030···3 | 40VMH036···3 | 40VMH048···3 | 40VMH054···3 | 40VMH072···3 | 40VMH096···3 |
|---|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | | |
| Cooling capacity (Btuh) | | 24,000 | 30,000 | 36,000 | 48,000 | 53,500 | 72,000 | 96,000 |
| Heating capacity (Btuh) | | 27,000 | 34,000 | 40,000 | 54,000 | 60,000 | 81,000 | 108,000 |
| Indoor fan motor | Type | DC Motor | | | | | | |
| | Input (W) | 81 | 140 | 190 | 220 | 420 | 245*2 | 395*2 |
| Indoor airflow (cfm) | Low | 524 | 647 | 882 | 1,041 | 1,412 | 1,559 | 2,076 |
| | Medium | 600 | 753 | 1,029 | 1,200 | 1,618 | 1,794 | 2,400 |
| | High | 735 | 971 | 1,188 | 1,429 | 1,835 | 2,235 | 2,824 |
| Indoor external static pressure | in. wg | 0.8 | | | | | 1 | |
| Indoor unit sound level dB(A) | Low | 44.7 | 43.3 | 49.1 | 48.3 | 52 | 48.7 | 52.4 |
| | Medium | 47.8 | 46.9 | 52.8 | 51.8 | 55.7 | 52.2 | 54.7 |
| | High | 50.9 | 51.2 | 55.5 | 54.9 | 58.1 | 55.9 | 56.4 |
| Unit | Unit dimension, W x H x D (in) | 37-1/2 x 16-1/2 x 27-1/4 | | | 51-1/4 x 16-1/2 x 27-1/4 | | 56-3/4 x 20 x 36-1/2 | |
| | Total weight (lb) | 110/168.4 | 114.6/171 | | 159.2/231.5 | | 254.2/342.8 | |
| Refrigeration type | | R410a | | | | | | |
| Expansion device | | EXV | | | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 3/8 | | | | | | |
| | Suction side, OD (Flare) | 5/8 | | | | | 7/8 | |
| Connecting wiring | Power wiring | Sized per NEC and Local Codes based on Nameplate Electrical Data | | | | | | |
| | Signal wiring | 2-core stranded shielded twisted pair cable 18AWG-16AWG | | | | | | |
| Condensate drain pipe diameter, OD (in) | | 1 | | | | | 1-5/8 | |
| Electrical data | MCA (A) | 5.7 | 7.1 | 7.3 | 7.6 | 7.8 | 9.7 | 10.2 |
| | MOPD (A) | 15 | | | | | | |

## 40VMV Vertical AHU

The Carrier® VRF Vertical Air Handling unit is a multi-positional unit – vertical and horizontal – ideal for closet applications. Comes standard with a constant CFM ECM motor to ensure you always get the air flow you need.

- Constant CFM motor

### Technical Specifications

| Unit 40VMV | | 40VMV018···3 | 40VMV024···3 | 40VMV030···3 | 40VMV036···3 | 40VMV048···3 | 40VMV054···3 |
|---|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | | |
| Cooling capacity (Btuh) | | 18,000 | 24,000 | 30,000 | 36,000 | 48,000 | 53,500 |
| Heating capacity (Btuh) | | 21,000 | 27,000 | 34,000 | 40,000 | 54,000 | 60,000 |
| Indoor fan motor | Type | DC | | | | | |
| | Input (W) | 60 | 100 | 151 | 187 | 355 | 466 |
| Indoor airflow (cfm) | Low | 420 | 560 | 700 | 840 | 1,120 | 1,260 |
| | Medium | 510 | 680 | 850 | 1,020 | 1,360 | 1,530 |
| | High | 600 | 800 | 1,000 | 1,200 | 1,600 | 1,800 |
| Indoor external static pressure | in. wg | 0.8 | | | | | |
| Indoor unit sound level dB(A) | Low | 34.4 | 37.9 | 44.4 | 39.3 | 43.8 | 47.9 |
| | Medium | 37.1 | 42.3 | 48.4 | 44.1 | 48.5 | 52.6 |
| | High | 41.6 | 46.2 | 52.2 | 46.9 | 53 | 57.1 |
| Unit | Unit dimension, W x H x D (in) | 19-5/8 x 46-1/2 x 20-5/8 | | | 22 x 54-1/2 x 24 | | |
| | Total weight (lb) | 123/147 | | | 163/189 | | |
| Refrigeration type | | R410a | | | | | |
| Expansion device | | EXV | | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 3/8 | | | | | |
| | Suction side, OD (Flare) | 5/8 | | | | | |
| Connecting wiring | Power wiring | Sized Per NEC and Local Codes Based on Nameplate Electrical Data | | | | | |
| | Signal wiring | 2-Core Stranded Shielded Twisted Pair Cable 18AWG-16AWG | | | | | |
| Condensate drain pipe diameter, OD (in) | | 3/4 NPT | | | | | |
| Electrical data | MCA (A) | 3.8 | | | 5.3 | | 7.2 |
| | MOPD (A) | 15 | | | | | |

# 40VMA Outside Air Duct

The Carrier® Outside Air unit draws in ventilation air into the space to provide fresh air. The units are installed in plenum and can be connected to a heat pump system along with other styles of indoor unit.

- Discharge temperature control

## Technical Specifications

| Unit 40VMA | | 40VMA036···3 | 40VMA048···3 | 40VMA054···3 | 40VMA072···3 | 40VMA096···3 |
|---|---|---|---|---|---|---|
| Power supply (V-Ph-Hz) | | 208/230-1-60 | | | | |
| Cooling capacity (Btuh) | | 36,000 | 48,000 | 12,000 | 15,000 | 96,000 |
| Heating capacity (Btuh) | | 24,000 | 30,000 | 13,500 | 17,000 | 59,000 |
| Indoor fan motor | Type | DC Motor | | | | |
| | Input (W) | 64 | 71 | 87 | 60*2 | 80*2 |
| Indoor airflow (cfm) | Low | 441 | 471 | 529 | 882 | 1,029 |
| | Medium | 529 | 559 | 647 | 971 | 1,176 |
| | High | 588 | 647 | 765 | 1,059 | 1,294 |
| Indoor external static pressure | in. wg | 0.8 | | | 1 | |
| Indoor unit sound level dB(A) | Low | 43.8 | 43.4 | 43.9 | 48.5 | 47.7 |
| | Medium | 47.8 | 47.8 | 47.8 | 50 | 50.8 |
| | High | 49.5 | 50.4 | 51.4 | 52.1 | 53.5 |
| Unit | Unit dimension, W x H x D (in) | 51-1/4 x 16-1/2 x 27-1/4 | | | 56-3/4 x 20 x 36-1/2 | |
| | Total weight (lb) | 161.4/233.7 | | | 255.7/346.2 | |
| Refrigeration type | | R410a | | | | |
| Expansion device | | EXV | | | | |
| Design pressure, high/low (psig) | | 580/320 | | | | |
| Refrigerant piping (in) | Liquid side, OD (Flare) | 3/8 | | | 3/8 | |
| | Suction side, OD (Flare) | 5/8 | | | 7/8 | |
| Connecting wiring | Power wiring | Sized per NEC and Local Codes based on Nameplate Electrical Data | | | | |
| | Signal wiring | 2-core stranded shielded twisted pair cable 18AWG-16AWG | | | | |
| Condensate drain pipe diameter, OD (in) | | 1 | | | 1-5/8 | |
| Electrical data | MCA (A) | 5.7 | 6.3 | 6.9 | 8.5 | 10 |
| | MOPD (A) | 15 | | | | |

## Individual Zone Controls



### Wireless Remote Controller – 40VM900001

- Mode
- Fan Speed
- Set Point
- Swing
- ON/OFF
- Clock
- Timer
- Lock Function
- 1° F Temperature Indication
- Addressing Capability

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### Simple Wired Remote Controller – 40VM900002

- Simple, Easy to Use
- Backlight
- ON/OFF
- Mode
- Fan Speed
- Set Point
- Swing
- Group Control
  (Max 16 indoor units)
- Dual Set Point
- Set Temperature Range Limiting
- Room Temperature Display
- Error Display
- 1° F Temperature Indication
- Addressing Capability

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### Scheduling Wired Remote Controller – 40VM900003

- Weekly Scheduling
- ON/OFF
- Mode
- Fan Speed
- Set Point
- Swing
- Backlight
- Group Control
  (Max 16 indoor units)
- Dual Set Point
- Set Temperature Range Limiting
- Room Temperature Display
- Error Display
- 1° F Temperature Indication
- Addressing Capability


### Touchscreen Wired Remote Controller – 40VM900005

- Display Resolution Is 800*480
- Weekly Scheduling
- Touchscreen
- Backlight
- ON/OFF
- Mode
- Fan Speed
- Set Point
- Swing
- Group Control (Max 16 indoor units)
- Dual Set Point
- Set Temperature Range
- Room Temperature Display
- Error Display
- 1° F Temperature Indication
- Addressing Capability

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### 24V Interface – 40VM900008

- Works With All Indoor Units
- Allows Standard 24V Thermostat Connection
- Integration With Thermostat Features Including Wi-Fi®, One Per Indoor Unit
- ON/OFF
- Mode
- Fan Speed
- Set Point
- Room Temperature Display

**Sold Separately**


Côr® Thermostat


33CONNECTSTAT

## Central Control

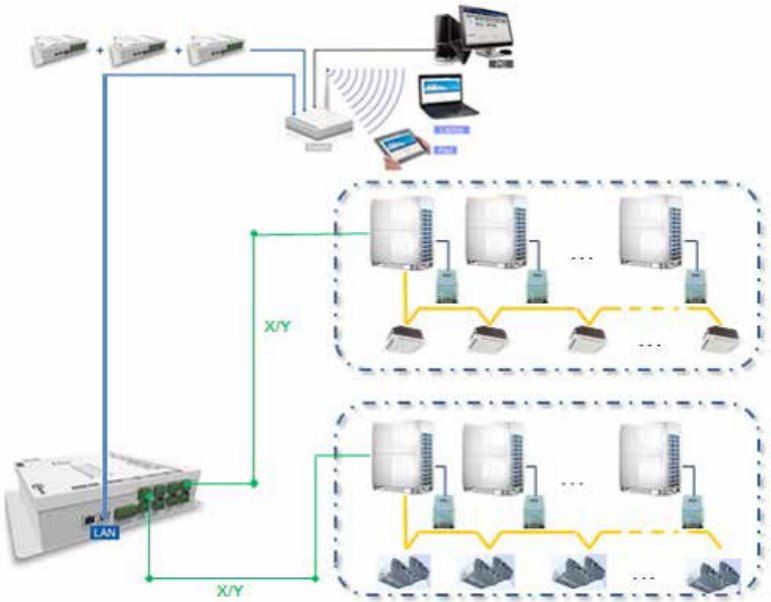
**Schedule Central Controller – 40VM900004**

- Group Control (Max 64 indoor units)
- Backlight
- ON/OFF
- Mode
- Fan Speed
- Set Point
- Swing
- Set Temperature Range Limiting
- Room Temperature Display
- Error Display

**Touchscreen Central Controller – 40VM900006**

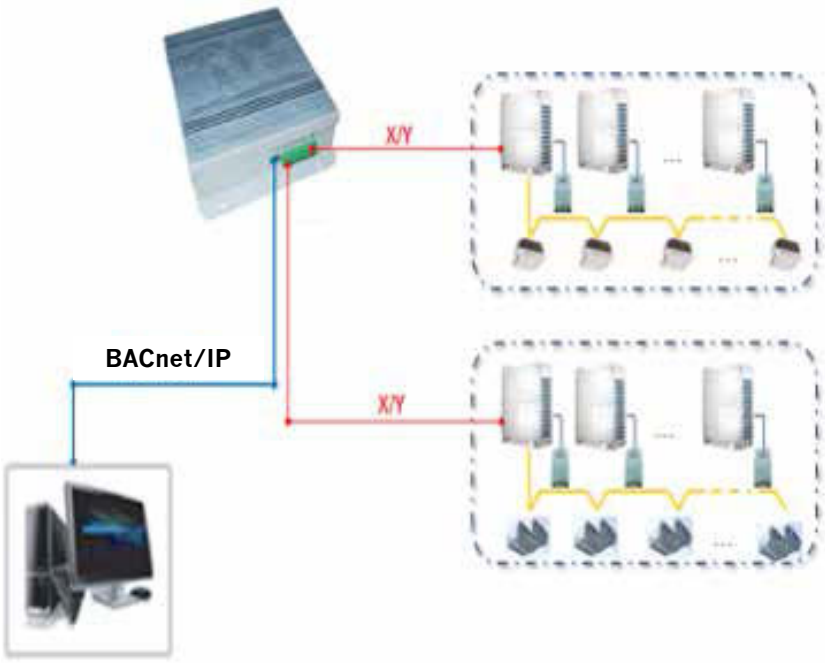
- Group Control (Max 512 indoor units & 20 outdoor units)
- 10.1 Inch Screen, 1200*800 Resolution
- 3 Levels of Account Management, Can Set Up 20 Users
- Remote Access
- Alarm Notification Via Email
- Fire Alarm and Interacting Information
- 4-path DI and DO
- Recognize Units Automatically
- ON/OFF
- Weekly Scheduling
- Mode
- Fan Speed
- Set Point
- Swing
- Dual Set Point
- Set Temperature Range Limiting
- Error Display
- Remote Access and Web Control

## Building Automation



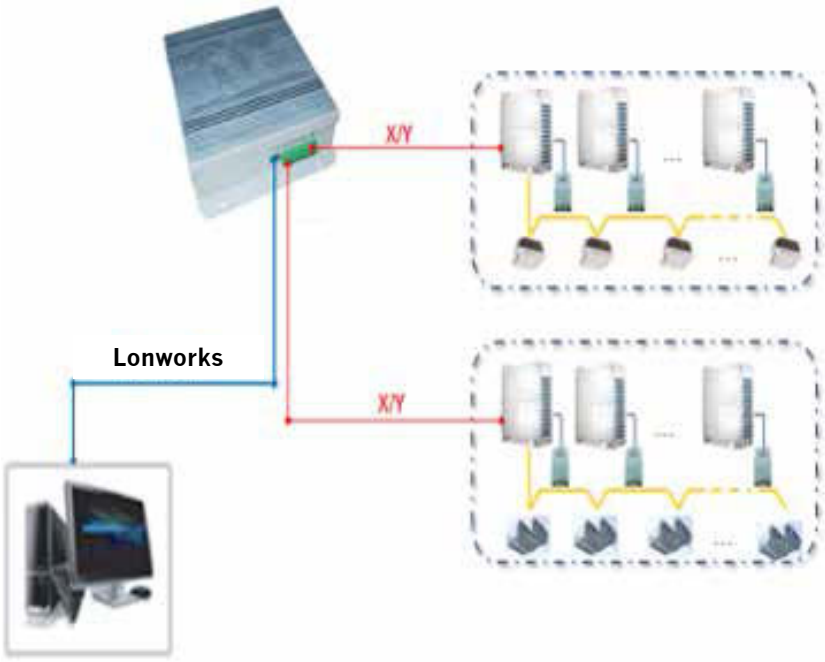

**Intelligent Manager – 40VM900051**

- Manage 64 Refrigerant Systems (1,024 indoor units, 256 outdoor units)
- Monitor Both Outdoor and Indoor Unit Operation
- Scheduling (Daily/Weekly)
- Energy-Saving Management:
  - Set Temperature Range Limiting
  - Lock Mode, Etc.
- Group Management
- Export Software Log



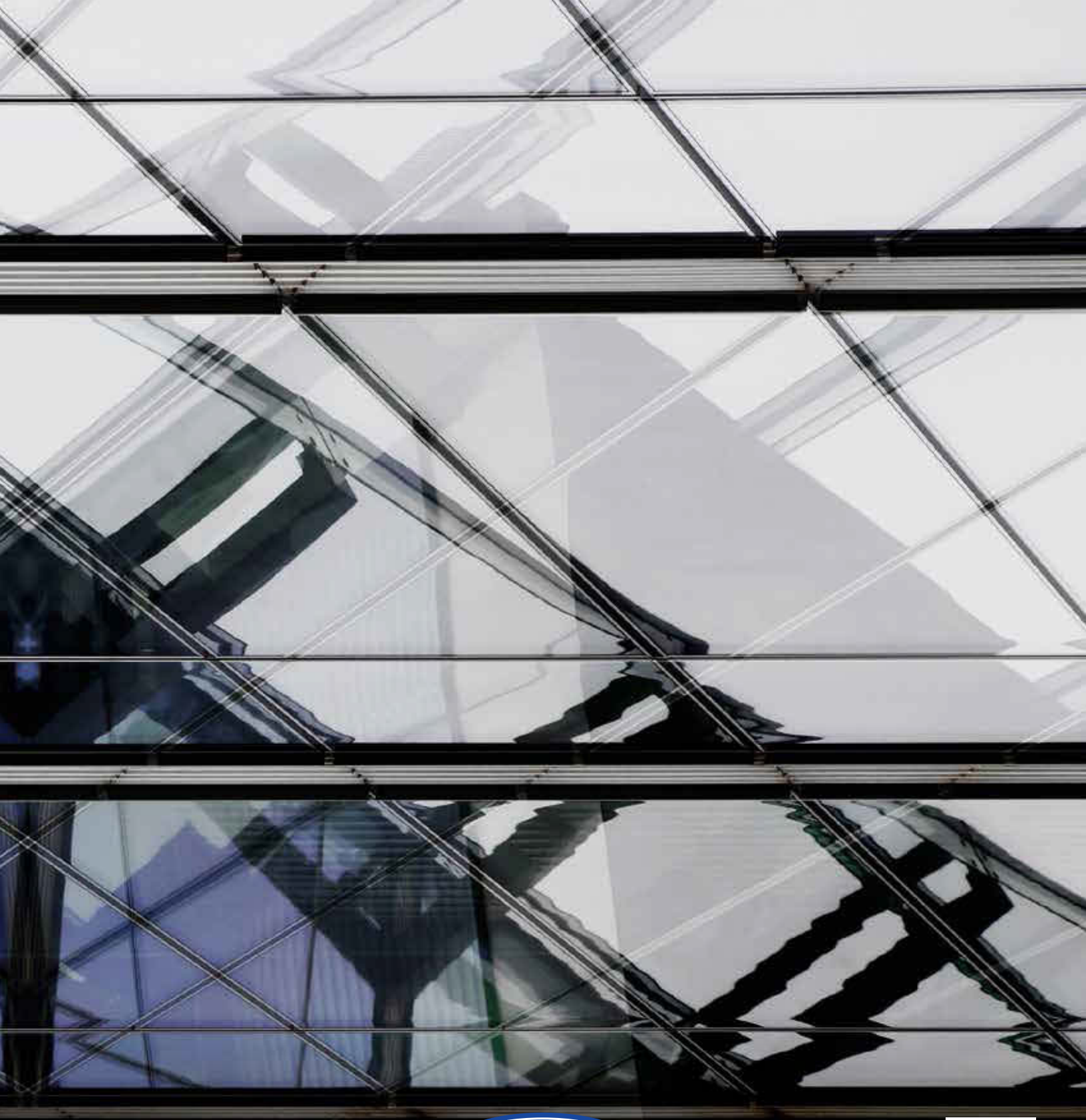

**BACnet – 40VM900052**

- Four 485 Ports, Each Port Can Access 64 Indoor Units or 8 Refrigeration Systems
- WEB Service Allows Log In Through Web
- Indoor Unit
  - Temperature Set
  - Indoor Temperature
  - Operate Mode
  - Error Code
  - Set Mode
- Outdoor Unit
  - Mode
  - Outdoor Temperature
  - Error Code




**Lonworks – 40VM900053**

- Supports 64 Indoor Units
- Indoor Unit
  - Temperature Set
  - Indoor Temperature
  - Operate Mode
  - Fault Code
- Outdoor Unit
  - Mode
  - Fault
  - Outdoor Temperature
  - Fault Code



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