Carrier VRF Catalog

2020 EDITION

Built for Purpose. Built for Performance. **Built for People.**

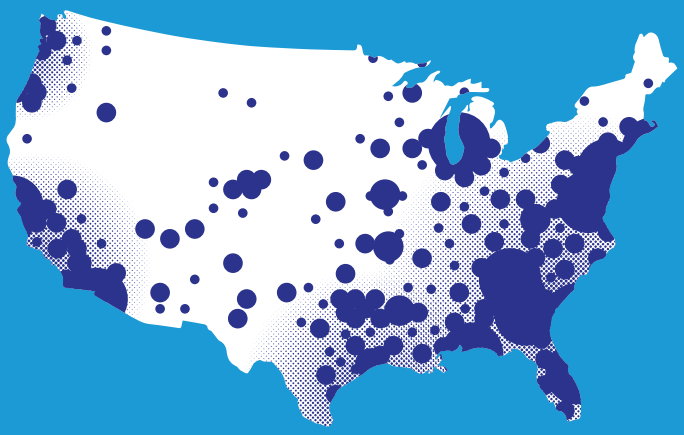
Carrier's invention of the modern air conditioner improved the way people live and work nationwide. Since 1902, we've taken a fit-for-purpose approach to our products and services—addressing customer pain points through intentionally designed technologies that provide simpler installation, better controls and unique integration. For great experiences from start to finish.

Our Variable Refrigerant Flow (VRF) solutions are no exception. In fact, they meet a wide range of needs and applications, while providing the unmatched flexibility and system confidence you need to get the job done.

THE CARRIER ADVANTAGE

*Founded in **1902***

*VRF Engineered for **North America***



*Carrier VRF systems have been installed **across all 5 climate zones in the U.S.***

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The Value of VRF

Setting the Standard for Flexibility, Efficiency & Performance

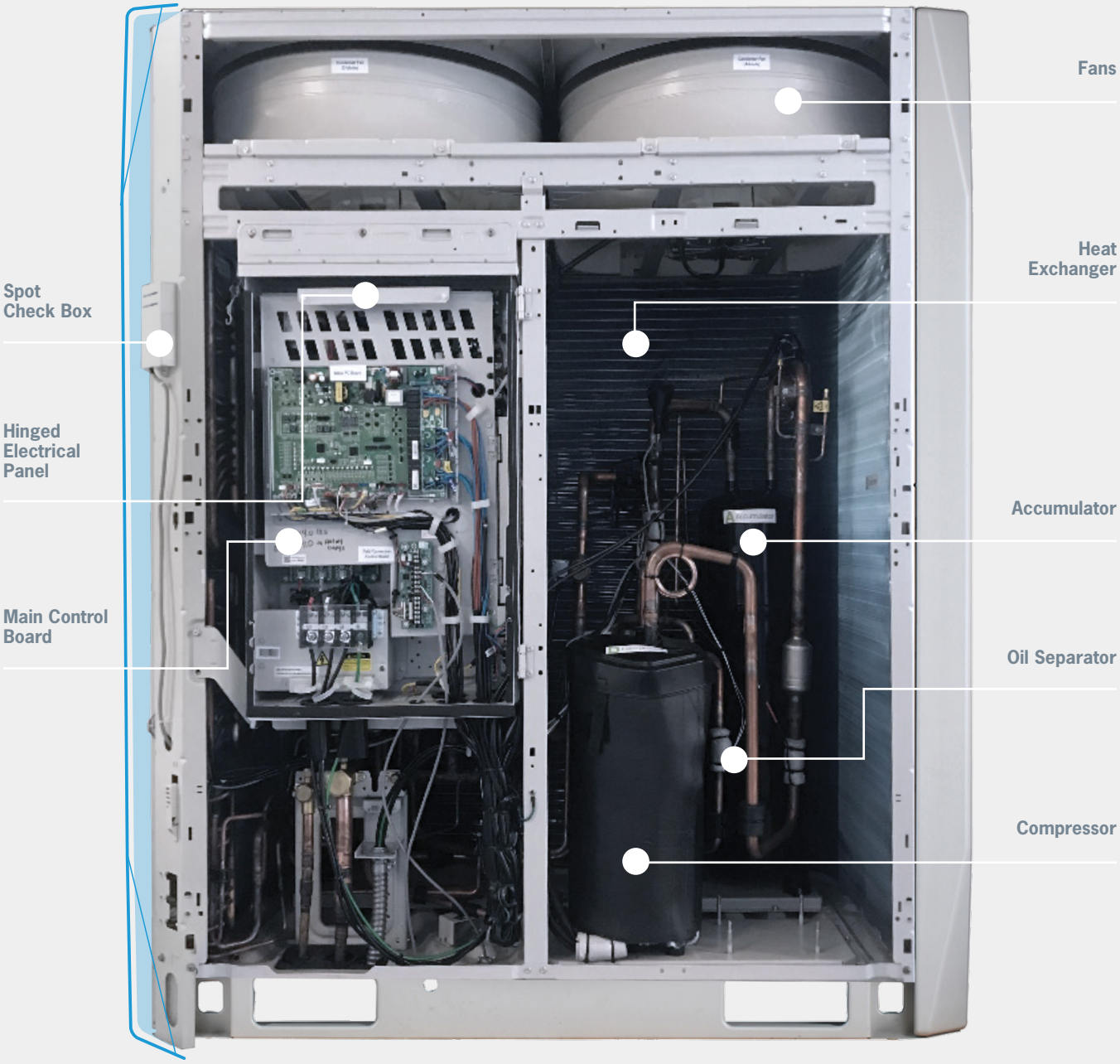
What exactly is Variable Refrigerant Flow? It's an HVAC system that uses refrigerant to heat and/or cool a space.

A multi-split solution, VRF systems can connect up to 64 indoor units to a single modular outdoor unit system. The system calculates the refrigerant required by each indoor unit and adjusts the amount provided to the fan coil units based on the space's operating conditions. In other words, it controls and varies the refrigerant flow to ensure the desired comfort level of each space without over-cooling or over-heating.

1. **How?** VRF system outdoor units have all inverter-driven compressors. This means their speed can be varied simply by changing the frequency of power supply to that compressor. As the speed changes, so does the amount of refrigerant delivered, allowing the compressor to operate continuously rather than repeatedly cycle on and off.

2. **There are two types of VRF systems:** heat recovery and heat pump. The biggest difference is that heat recovery units can heat and cool at the same time, while heat pump units can only heat or cool at once. So, heat recovery systems, which improve efficiency by taking heat from one space and redistributing it to another, are ideal for anywhere you need zone-by-zone control—like a hotel or assisted living facility. And heat pump systems are great for spaces where only one mode of operation is needed, like a bank.

As the speed changes, so does the amount of refrigerant delivered, allowing the compressor to operate continuously rather than repeatedly cycle on and off.


Fans
Heat Exchanger
Spot Check Box
Hinged Electrical Panel
Accumulator
Main Control Board
Oil Separator
Compressor

A Total System Solution. **With Benefits to Spare.**

Unlike other HVAC solutions, VRF is a closed-loop system—not just components. This means you get a complete solution from the start with confidence that everything will work seamlessly together.

FLEXIBILITY

From the system options to the ability to connect several indoor units to a single outdoor unit, VRF systems provide flexibility to accommodate almost any building requirement.

- Zoned comfort control from a central location
- Virtually seamless adaptation to building changes and reconfigurations
- No need for maintenance rooms or service shafts, freeing up valuable space
- Elimination of distribution fans, water pumps and large hydronic pipes
- Smaller equipment footprint paired with long piping lengths means more application options

EFFICIENCY

VRF systems use no-to-minimal ductwork, depending on the application. Not only does this make installation and maintenance easier, but it also eliminates any energy waste associated with central duct systems.

- Energy savings from moving conditioned refrigerant only to the needed units
- Asymmetric scroll compressors deliver optimal efficiency, at any speed
- High Integrated Energy Efficiency Ratio (IEER) achievement
- Can help commercial projects earn LEED or other “green” certifications

PERFORMANCE

System performance is significantly enhanced because of the heat transfer properties of refrigerant over other mediums.

- Air Conditioning, Heating & Refrigeration Institute (AHRI) certified
- Inverter-driven technology allows users to precisely dial into the compressor operation to deliver optimal capacity
- Operating hours are balanced among the compressors, distributing the load more evenly
- Having multiple compressors means greater backup capabilities

Why Customers Make Carrier **Their VRF System of Choice**

As an industry leader for over a century, we know the challenges you face—like complex installation, complicated controls and disjointed system views. So we've made it our business to develop solutions, like our 2-pipe VRF systems, that help you sidestep this complex and frustrating experience to one of efficiency, simplicity and high value.

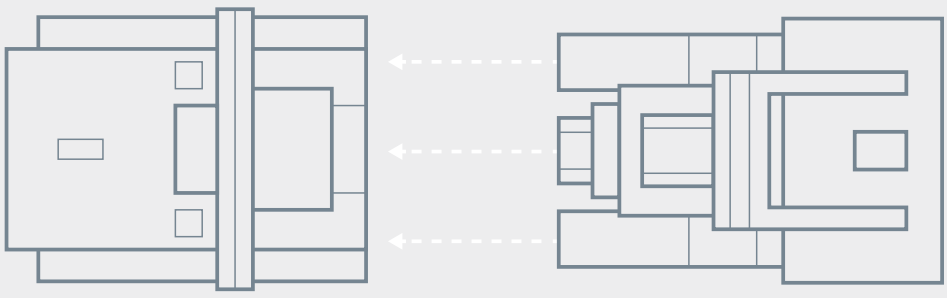
By design, Carrier systems are user-friendly, providing easy installation and operation. Combine this with our application, installation, and service training and software, and you have everything you need to be successful.

FASTER COMMISSIONING & SERVICING

When time is of the essence, being able to efficiently set up, install and service a system is crucial. We help simplify the installation process with:

- **2-Pipe Design**—Decrease installation needs and streamline the process with less connections.
- **Single-Point Electrical Connection**—Reduce the number of connections and eliminate intricate twinning piping with eight to 12 brazed joints on heat recovery models.
- **Spot Check Functionality**—Check error codes without having to disconnect power to the entire system for easier servicing.
- **Quick-Connect System**—Access wires with pre-installed connectors or field-provided wiring with the included terminal accessory without having to unscrew each wire individually.
- **Soft Copper Lines**—Save installation time and effort with lightweight and durable piping that extends easily across larger spaces.
- **No Manual Port Assignments**—Easily address system errors through automatic assignment of ports to individual indoor units.
- **Multiport Distribution Controller (MDC)**—Reverse the refrigerant flow for six to 16 indoor units to provide simultaneous heating and cooling on heat recovery models.

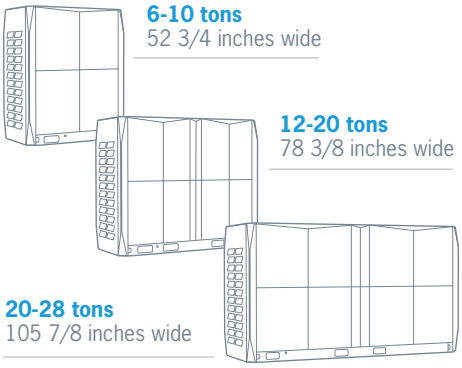
Quick-Connect System



FLEXIBLE DESIGN & APPLICATION

System simplicity and flexibility help improve the design experience. This idea is at the core of our VRF development process to ensure we provide:

- **Small Footprint**—Get greater flexibility and save valuable space with our non-modular 2-pipe heat recovery unit.



- **Consistent Pipe Sizing**—Find comfort in knowing the size of the pipes running from the outdoor unit to the MDC will never change, no matter the indoor unit capacity.
- **High Reliability**—See performance in extreme temperatures with heating in as low as -13º F and cooling in up to 125º F for heat recovery, and heating in as low as -5º F or cooling in up to 122º F for heat pumps.
- **Back-Up Operation**—Gain peace of mind from built-in system fallbacks, engineered to address the issue before requiring in-person service.

ACCESSIBLE, CENTRALIZED CONTROLS

Access to understandable controls from a centralized location provides a uniquely enhanced experience with greater system visibility and flexibility to meet specific application needs. Ways we help with this include:

- **Integrated Design**—Deliver total system regulation with individual controls at the zone level and centralized system and network controls that integrate seamlessly with existing and third-party building management systems.
- **i-Vu® Building Automation System**—Present greater comfort control, optimize energy usage and increase operating efficiency with a web-based interface that provides a 360-degree view of the building's entire operation, as well as centralized access to controls. i-Vu is optimized for Carrier equipment, but flexible enough to control any HVAC system.


Carrier
Carrier

WORRY-FREE IMPLEMENTATION

We have your back every step of the way. From project specifications to troubleshooting, we provide continuous support to help you confidently take on and complete VRF jobs. Here are a few ways we do this:

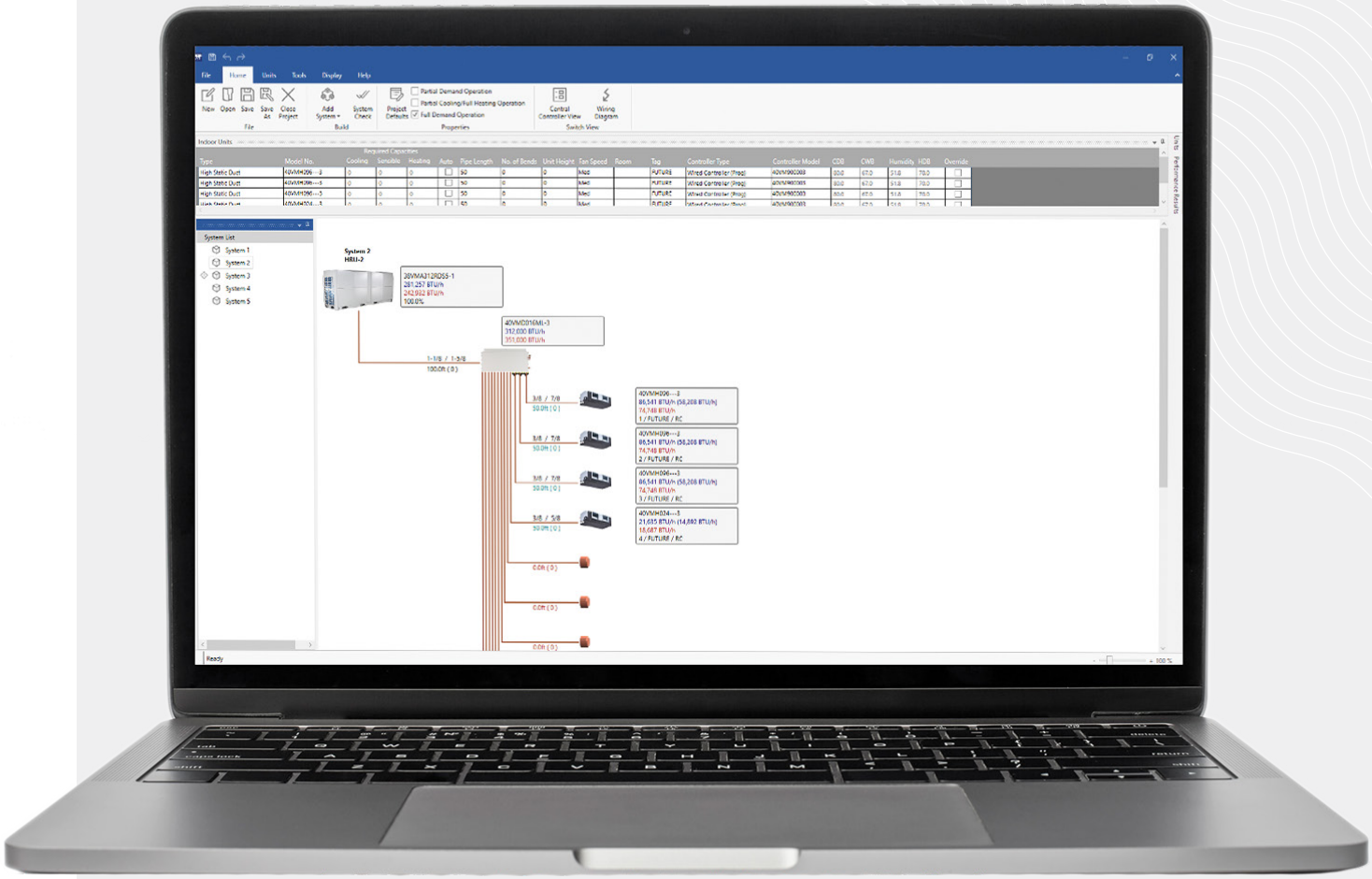
- **Startup Assistance Program**—Engage factory-authorized Carrier technicians during the time between VRF equipment installation and operation for on-site support, including:
  - Identifying and documenting installation issues that may impact startup
  - Utilizing service software to communicate with the system and collect data for one hour of run time
  - Verifying operating conditions of other system components
  - Conducting on-site training
  - Providing a post-visit Startup Report that includes all insights gathered

  Contact **VRFstartup@carrier.com** for more information.
- **Carrier Distributor Network**—Work with our nationwide network of distributors who have completed extensive training and are highly experienced and knowledgeable about our products and services.
- **Warranties**—All applications are eligible for 10 years parts and compressor if registered within 90 days of installation/ start-up. See warranty card for full details.
- **VRoom Selection Software**—Once you've chosen Carrier VRF, easily design, layout and prepare VRF systems for quote with our advanced software, VRoom. It's a selection tool designed for engineers with built-in error checking and system performance checks every step of the way. So you enjoy technical support as early as ideation, and issues are consistently easy to identify and resolve from day one.

  And that's just the start of how VRoom helps you get going:
  - Drag and drop feature for easy selection of indoor units
  - Quick edits of indoor unit type, piping length and operating conditions using Excel feature
  - Automatic software updates

  Contact **VRoomhelp@carrier.com** for VRoom selection software and support assistance.

VRoom Interface



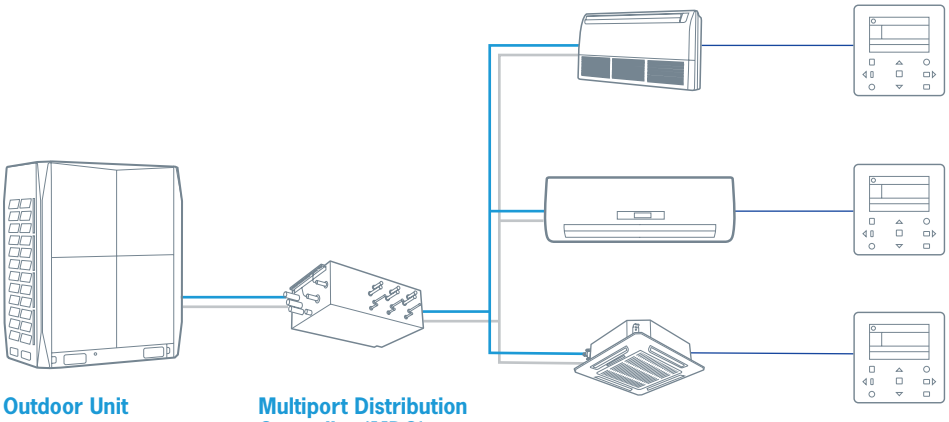
THE RIGHT SOLUTION FOR YOUR APPLICATION

Understanding that specific requirements call for different solutions, we've intentionally designed our VRF systems to satisfy an array of needs. No matter the building, application or project specifications, we have a VRF solution for you.

2-Pipe Heat Recovery Systems

With a small footprint, the Carrier 2-pipe VRF heat recovery system is the perfect solution for new construction, retrofitting projects and expansions of medium-rise, wider buildings.

Simultaneous heating and cooling and zoned control provide optimal individualized comfort and customization. And, they use a centralized, multiport distribution controller, which provides better refrigerant distribution to all units.



Outdoor Unit

Controls compressor speed

Maintains operational mode

Multiport Distribution Controller (MDC)

Reverses flow at indoor unit

Simultaneous heating and cooling

Indoor Units

Transfer heating or cooling to a space

Allow for optimal zoning

Controls

Controls space temperature and indoor unit fan

Remote and/or central

Heat Recovery Benefits

Simultaneous heating and cooling

Recovers energy that may be wasted from one zone and transfers it to another

Connect up to three multiport distribution controllers

Achieve up to 28-ton capacity in a single chassis

OFFICES

While the system you choose will ultimately depend on factors specific to your project, like climate, building needs and project type, 2-pipe VRF heat recovery systems are great for many applications.

Offices

- Less refrigerant pipe brazing joints means significant design and install cost reductions
- A single-point electrical connection allows you to easily and cost-effectively install and maintain the system
- Longer piping length (up to 3,280 feet) satisfies larger building needs
- System flexibility simplifies building expansions or “shell and core” construction projects

HOTELS

ASSISTED LIVING FACILITIES

Hotels

- Individual zoning and simultaneous heating and cooling optimize occupant comfort
- Quieter operating noise (as low as 58.4 db(A)) means less disruption
- Small footprint and non-modular design reduce the amount of piping work and eliminate the need for twinning outdoor units
- i-Vu Building Automation System provides centralized occupancy control to adjust room temperatures before guest arrival and after check-out

Assisted Living Facilities

- Individual zoning helps satisfy multiple HVAC needs
- Simultaneous heating and cooling provides flexibility and control of tenant comfort

SAMPLE APPLICATION: HOTEL

The Situation: A hotel in a national chain with over 100 rooms, this large new build required an HVAC system that would provide maximum guest comfort while operating quietly and taking up minimum space.

The Solution: Carrier VRF Heat Recovery

Given the number of indoor units needed and the limited space on each floor, Carrier VRF heat recovery was the best system to satisfy the design. All refrigeration distribution devices were placed on the top floor and then piped down through chases to feed the rooms on floors two through seven. Outdoor units were cleanly installed across the roof, providing easy access for maintenance and troubleshooting.

The Results: Because of the system's small footprint and non-modular design, the Carrier VRF heat recovery system reduced the amount of piping work needed on-site. The system also provides simultaneous heating and cooling, extremely quiet operation (as low as 58.4 dB(A)) and occupancy control via i-Vu Building Automation System.

SAMPLE APPLICATION: ASSISTED LIVING

The Situation: An assisted living facility was renovating an existing building that housed both long- and short-term rehabilitation patients, as well as constructing a 37,000 square foot addition. As part of this renovation and expansion, the company was looking for an HVAC system that could provide zoned control and optimal comfort while helping meet the required ventilation rates for assisted living facilities.

The Solution: Carrier VRF Heat Recovery

A 132-ton Carrier VRF heat recovery system met the project's unique requirements while providing segmented heating and cooling. The system also incorporated i-Vu Building Automation System for greater occupancy control and advanced system visibility.

The Results: Because of the system's ability to deliver zone-by-zone control, occupants and staff are provided with simultaneous heating and cooling for individualized comfort. And, with DOAS units with enthalpy wheels for ventilation, the system brings outside air into the space to help the facility meet its ventilation rate requirements.

Heat Pump Benefits

Either heat or cool

3,280 feet of piping that can extend up to 164 feet between the outdoor and indoor units

Improves system efficiency and long-term reliability

Uses variable speed technology with an inverter compressor for consistent temperature regulation

Achieve up to 36-ton capacity

3-PHASE HEAT PUMP SYSTEMS

Perfect for new builds and retrofitting projects in climates where only one zone is necessary, the Carrier VRF heat pump system either heats or cools at any given time. Its modular, scalable design allows for easy reconfiguration and add-ons, and its energy efficiency reduces operating costs.

3-phase heat pump systems are great for:

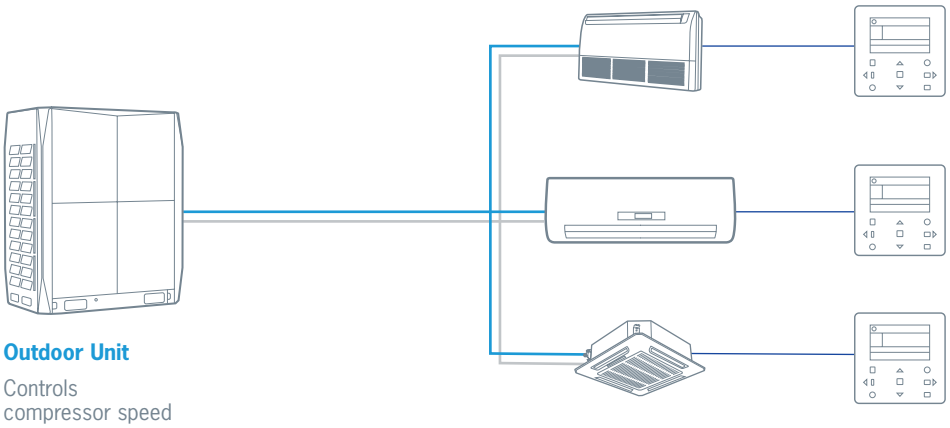
- Medium- or low-occupancy buildings
- K-12 schools and university buildings
- Places of worship
- Banks and municipalities
- Retail spaces
- Storage facilities
- Parking garages

SINGLE-PHASE HEAT PUMP SYSTEMS

A residential and light-commercial application, Carrier single-phase heat pump systems are ideal for spaces that are too small for a standard VRF system. Available in three capacities (3-, 4- and 5-ton), they can connect up to nine indoor units for the ultimate hybrid solution. And if you ever need to expand usable space or divide a building into smaller units, single-phase systems offer exceptional design flexibility.

Single-phase heat pump solutions are great for:

- One- or two-story office buildings
- Strip malls and retail spaces
- Fire and police stations
- Banks and municipalities



Outdoor Unit

Controls compressor speed

Maintains operational mode

Indoor Units

Transfer heating or cooling to a space

Allow for optimal zoning

Controls

Controls space temperature and indoor unit fan

Remote and/or central

CARRIER VRF SYSTEMS: OUTDOOR UNITS

The powerhouse of the system, Carrier VRF outdoor units are reliable and quiet—a fit for virtually every application. A single modular unit system can connect up to 64 indoor units for simple and flexible installation.

OUTDOOR UNITS

Heat Recovery
3-phase

Heat Pump
Single-phase

Heat Pump
3-phase

Tonnage	1 Module	1 Module	1 Module	2 Module	3 Module
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	22			12 + 10	
24	24			12 + 12	
26	26				10 + 8 + 8
28	28				10 + 10 + 8
30					10 + 10 + 10
32					12 + 10 + 10
34					12 + 12 + 10
36					12 + 12 + 12

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

Outdoor Unit Model Name				38VMA072RDS5-1	38VMA096RDS5-1	38VMA120RDS5-1
Nominal Tons				6	8	10
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	72.0	96.0	119.7
		Rated	kBtu/h	69.0	92.0	114.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	80.0	108.0	126.0
		Rated	kBtu/h	77.0	103.0	120.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	4.2	6.2	9.3
		IEER[3]	Btu/W*hr	24.6	23.7	22.8
	Heating	Power Consumption	kW	4.4	7.2	9.5
		SCHE[4]	Btu/W*hr	30.0	30.0	30.0
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	5.0	7.1	9.5
		IEER[3]	Btu/W*hr	24.2	24.3	23.2
	Heating	Power Consumption	kW	5.7	8.0	9.8
		SCHE[4]	Btu/W*hr	27.4	27.7	26.7
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8
		Width	in	52-3/4	52-3/4	52-3/4
		Depth	in	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	672	672	672
Compressor	Type / Quantity			INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1
Fan Unit	Air Volume		cfm	6,900	7,600	8,100
Refrigerant[5] (Charged Refrigerant Amount)			lb	26.5	26.5	26.5
Electrical Specifications	Unit	MCA[6]	A	43	45	46
		Recommended Fuse Size	A	50	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	5~125	5~125	5~125
		Heating	° F WB	-13~64	-13~64	-13~64
Maximum External Static Pressure			in WG	0.24 Max	0.24 Max	0.24 Max
Maximum Number of Connected Indoor Units				15	20	24
Maximum Capacity of Combined Indoor Units				50%~150%	50%~150%	50%~150%
Sound Pressure Level Cooling / Heating[7]			dB(A)	58.4	61.7	62.7

[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] Integrated Energy Efficiency Ratio

[4] Simultaneous Cooling & Heating Efficiency

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Outdoor Unit Model Name				38VMA144RDL5-1	38VMA168RDS5-1	38VMA192RDS5-1	38VMA216RDS5-1	38VMA240RDS5-1
Nominal Tons				12	14	16	18	20
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	142.8	165.9	191.1	214.2	231.0
		Rated	kBtu/h	136.0	158.0	182.0	204.0	220.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	160.0	188.0	215.0	243.0	257.0
		Rated	kBtu/h	150.0	180.0	204.0	222.0	230.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	9.0	11.9	14.7	16.8	19.7
		IEER[3]	Btu/W*hr	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[4]	Btu/W*hr	26.5	27.0	28.2	27.3	27.0
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	10.6	13.3	15.9	17.9	20.4
		IEER[3]	Btu/W*hr	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[4]	Btu/W*hr	26.5	25.2	25.5	26.5	26.5
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
		Width	in	78-3/8	78-3/8	78-3/8	78-3/8	78-3/8
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	1,137	1,137	1,137	1,137	1,137
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2
	Air Volume		cfm	10,100	10,100	11,300	12,300	12,300
Refrigerant[5] (Charged Refrigerant Amount)			lb	44.2	44.2	44.2	44.2	44.2
Electrical Specifications	Unit	MCA[6]	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	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-13~64	-13~64	-13~64	-13~64	-13~64
Maximum External Static Pressure			in WG	0.24 Max	0.24 Max	0.24 Max	0.24 Max	0.24 Max
Maximum Number of Connected Indoor Units				29	34	39	44	49
Maximum Capacity of Combined Indoor Units				50%~150%	50%~150%	50%~150%	50%~150%	50%~150%
Sound Pressure Level Cooling / Heating[7]			dB(A)	63.3	63.3	64.9	67.1	67.1

[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] Integrated Energy Efficiency Ratio

[4] Simultaneous Cooling & Heating Efficiency

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Outdoor Unit Model Name				38VMA240RDL5-1	38VMA264RDS5-1	38VMA288RDS5-1	38VMA312RDS5-1	38VMA336RDS5-1
Nominal Tons				20	22	24	26	28
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	239.4	260.4	287.7	310.8	323.4
		Rated	kBtu/h	230.0	248.0	274.0	296.0	308.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	270.0	295.0	323.0	343.0	357.0
		Rated	kBtu/h	256.0	282.0	298.0	314.0	322.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Cconsumption	kW	20.4	23.2	26.4	31.8	33.1
		IEER[3]	Btu/W*hr	22.4	22.0	21.0	20.2	19.5
	Heating	Power Consumption	kW	20.2	23.5	25.8	28.9	29.6
		SCHE[4]	Btu/W*hr	30.0	29.6	29.3	28.5	28.0
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	20.7	23.2	28.0	31.2	33.1
		IEER[3]	Btu/W*hr	21.1	21.0	20.5	19.8	19.0
	Heating	Power Consumption	kW	21.0	23.7	25.5	27.4	29.2
		SCHE[4]	Btu/W*hr	28.0	27.5	27.0	26.5	25.5
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
		Width	in	105-7/8	105-7/8	105-7/8	105-7/8	105-7/8
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	1,627	1,627	1,627	1,627	1,627
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3
	Air Volume		cfm	14,500	15,500	15,500	16,500	16,500
Refrigerant[5] (Charged Refrigerant Amount)			lb	77.2	77.2	77.2	77.2	77.2
Electrical Specifications	Unit	MCA[6]	A	101	104	104	106	106
		Recommended Fuse Size	A	110	110	110	110	110
Refrigerant Piping	Connecting Port Diameter	Gas Side (Main Pipe) (Brazing)	in	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8
		Liquid Side (Main Pipe) (Brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Operation Temperature Range		Cooling	° F DB	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-13~64	-13~64	-13~64	-13~64	-13~64
Maximum External Static Pressure			in WG	0.24 Max	0.24 Max	0.24 Max	0.24 Max	0.24 Max
Maximum Number of Connected Indoor Units				49	54	59	64	64
Maximum Capacity of Combined Indoor Units				50%~150%	50%~150%	50%~150%	50%~150%	50%~150%
Sound Pressure Level Cooling / Heating[7]			dB(A)	63.9	64.8	64.8	66.4	67.2

[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] Integrated Energy Efficiency Ratio

[4] Simultaneous Cooling & Heating Efficiency

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Outdoor Unit Model Name				38VMA072RDS6-1	38VMA096RDS6-1	38VMA120RDS6-1
Nominal Tons				6	8	10
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	72.0	96.0	119.7
		Rated	kBtu/h	69.0	92.0	114.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	80.0	108.0	126.0
		Rated	kBtu/h	77.0	103.0	120.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	4.2	6.2	9.3
		IEER[3]	Btu/W*hr	24.6	23.7	22.8
	Heating	Power Consumption	kW	4.4	7.2	9.5
		SCHE[4]	Btu/W*hr	30.0	30.0	30.0
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	5.0	7.1	9.6
		IEER[3]	Btu/W*hr	24.2	24.3	23.2
	Heating	Power Consumption	kW	5.7	8.0	9.8
		SCHE[4]	Btu/W*hr	27.4	27.7	26.7
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8
		Width	in	52-3/4	52-3/4	52-3/4
		Depth	in	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	672	672	672
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1
	Air Volume		cfm	6,900	7,600	8,100
Refrigerant[5] (Charged Refrigerant Amount)			lb	26.5	26.5	26.5
Electrical Specifications	Unit	MCA[6]	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	5~125	5~125	5~125
		Heating	° F WB	-13~64	-13~64	-13~64
Maximum External Static Pressure			in WG	0.24 Max	0.24 Max	0.24 Max
Maximum Number of Connected Indoor Units				15	20	24
Maximum Capacity of Combined Indoor Units				50%~150%	50%~150%	50%~150%
Sound Pressure Level Cooling / Heating[7]			dB(A)	58.4	61.7	62.7

[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] Integrated Energy Efficiency Ratio

[4] Simultaneous Cooling & Heating Efficiency

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Outdoor Unit Model Name				38VMA144RDL6-1	38VMA168RDS6-1	38VMA192RDS6-1	38VMA216RDS6-1	38VMA240RDS6-1
Nominal Tons				12	14	16	18	20
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	142.8	165.9	191.1	214.2	231.0
		Rated	kBtu/h	136.0	158.0	182.0	204.0	220.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	160.0	188.0	215.0	243.0	257.0
		Rated	kBtu/h	150.0	180.0	204.0	222.0	230.0
With Non-Ducted Indoor Units	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
Electrical Characteristics (Nominal)[1]	Cooling	Power Consumption	kW	9.0	11.9	14.7	16.8	19.7
		IEER[3]	Btu/W*hr	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[4]	Btu/W*hr	26.5	27.0	28.2	27.3	27.0
With Ducted Indoor Units	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
Electrical Characteristics (Nominal)[1]	Cooling	Power Consumption	kW	10.6	13.3	15.9	17.9	20.4
		IEER[3]	Btu/W*hr	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[4]	Btu/W*hr	26.5	25.2	25.5	26.5	26.5
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
		Width	in	78-3/8	78-3/8	78-3/8	78-3/8	78-3/8
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	1,137	1,137	1,137	1,137	1,137
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2
	Air Volume		cfm	10,100	10,100	11,300	12,300	12,300
Refrigerant[5] (Charged Refrigerant Amount)			lb	44.2	44.2	44.2	44.2	44.2
Electrical Specifications	Unit	MCA[6]	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	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-13~64	-13~64	-13~64	-13~64	-13~64
Maximum External Static Pressure			in WG	0.24 Max	0.24 Max	0.24 Max	0.24 Max	0.24 Max
Maximum Number of Connected Indoor Units				29	34	39	44	49
Maximum Capacity of Combined Indoor Units								
Sound Pressure Level Cooling / Heating[7]			dB(A)	63.3	63.3	64.9	67.1	67.1

[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] Integrated Energy Efficiency Ratio

[4] Simultaneous Cooling & Heating Efficiency

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Outdoor Unit Model Name				38VMA240RDL6-1	38VMA264RDS6-1	38VMA288RDS6-1	38VMA312RDS6-1	38VMA336RDS6-1
Nominal Tons				20	22	24	26	28
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	239.4	260.4	287.7	310.8	323.4
		Rated	kBtu/h	228.0	248.0	274.0	296.0	308.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	270.0	295.0	323.0	343.0	357.0
		Rated	kBtu/h	256.0	282.0	298.0	314.0	322.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	20.4	23.2	26.4	31.8	33.1
		IEER[3]	Btu/W*hr	22.4	22.0	21.0	20.2	19.5
	Heating	Power Consumption	kW	20.2	23.5	25.8	28.9	29.6
		SCHE[4]	Btu/W*hr	30.0	29.6	29.3	28.5	28.0
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	20.7	23.9	28.0	31.2	33.2
		IEER[3]	Btu/W*hr	21.1	21.0	20.5	19.8	19.0
	Heating	Power Consumption	kW	21.0	23.7	25.5	27.4	29.2
		SCHE[4]	Btu/W*hr	28.0	27.5	27.0	26.5	25.5
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
		Width	in	105-7/8	105-7/8	105-7/8	105-7/8	105-7/8
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	1,627	1,627	1,627	1,627	1,627
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3
	Air Volume		cfm	14,500	15,500	15,500	16,500	16,500
Refrigerant[5] (Charged Refrigerant Amount)			lb	77.2	77.2	77.2	77.2	77.2
Electrical Specifications	Unit	MCA[6]	A	52	54	54	55	55
		Recommended Fuse Size	A	60	60	60	60	60
Refrigerant Piping	Connecting Port Diameter	Gas Side (Main Pipe) (Brazing)	in	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8
		Liquid Side (Main Pipe) (Brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Operation Temperature Range		Cooling	° F DB	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-13~64	-13~64	-13~64	-13~64	-13~64
Maximum External Static Pressure			in WG	0.24 Max	0.24 Max	0.24 Max	0.24 Max	0.24 Max
Maximum Number of Connected Indoor Units				49	54	59	64	64
Maximum Capacity of Combined Indoor Units				50%~150%	50%~150%	50%~150%	50%~150%	50%~150%
Sound Pressure Level Cooling / Heating[7]			dB(A)	64	65.8	65.8	66.7	67.2

[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] Integrated Energy Efficiency Ratio

[4] Simultaneous Cooling & Heating Efficiency

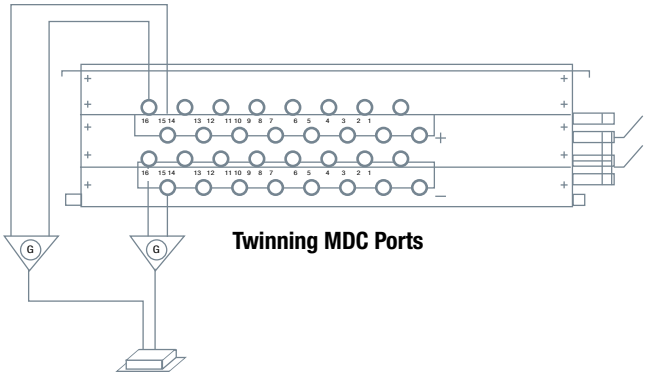
[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

40VMD
Multiport Distribution Controller (MDC) for Heat Recovery

The Carrier VRF Multiport Distribution Controller (MDC) allows you to connect up to 48 zones. The main multiport distribution controller can connect up to two sub multiport distribution controllers. For indoor units with capacities greater than 54 kBtu/h, two MDC ports must be twinned using the Y-joint to create a single port. The two ports to be paired should be next to each other. The first port of the pair should have an odd number and the second port should be the next sequential even number.



Twinning MDC Ports

Main MDC Units





Outdoor Unit Model Name			40VMD006M---3	40VMD008M---3	40VMD010M---3	40VMD016M---3	40VMD016ML-3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Number of Ports			6	8	10	16	16
Unit	Unit Dimensions W x H x D	in	37 x 12-3/4 x 22-5/8	37 x 12-3/4 x 22-5/8	37 x 12-3/4 x 22-5/8	46-1/2 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	44-1/2 x 18 x 33-1/8	44-1/2 x 18 x 33-1/8	53-7/8 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	196/273
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG
Condensate Pipe Diameter, "OD"		in	1	1	1	1	1
MCA(A)			0.73	0.89	1.05	1.54	1.54
Capacity Per Port		kBtu/h	54	54	54	54	54

Sub MDC Units




Outdoor Unit Model Name			40VMD006S--3	40VMD008S--3	40VMD010S--3	40VMD016S--3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
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	37 x 12-3/4 x 22-5/8	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	44-1/2 x 18 x 33-1/8	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	580/320	580/320	580/320
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based On Nameplate Electrical Data	Sized Per NEC and Local Codes Based On Nameplate Electrical Data	Sized Per NEC and Local Codes Based On Nameplate Electrical Data	Sized Per NEC and Local Codes Based On Nameplate Electrical Data
	Signal Wiring		2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG	2-Core Shielded Cable 18 AWG
Condensate Pipe Diameter, "OD"		in	1	1	1	1
MCA(A)			0.69	0.85	1.01	1.49
Capacity Per Port		kBtu/h	54	54	54	54

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

Outdoor Unit Model Name				38VMB036HDS3-1	38VMB048HDS3-1	38VMB060HDS3-1
Nominal Tons				3	4	5
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	36.0	48.0	60.0
		Rated	kBtu/h	36.0	48.0	60.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	40.0	52.5	66
		Rated	kBtu/h	40.0	52.5	66
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
	Cooling	Power Consumption	kW	3.1	4.6	6.1
		SEER[3]	Btu/W*hr	19.2	19.2	18.6
	Heating	Power Consumption	kW	3.1	4.3	5.8
		HSPF[4]	Btu/W*hr	9.2	9.2	10.0
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
	Cooling	Power Consumption	kW	2.9	4.7	6.1
		SEER[3]	Btu/W*hr	17.8	17.8	18.2
	Heating	Power Consumption	kW	3.0	4.2	5.7
		HSPF[4]	Btu/W*hr	9.6	9.6	10.0
External Dimensions		Height	in	52-1/4	52-1/4	52-1/4
		Width	in	35-1/2	35-1/2	35-1/2
		Depth	in	15-3/4	15-3/4	15-3/4
Total Weight	Unit		lb	220	220	220
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Rotary / 1	INVERTER-driven Hermetic Rotary / 1	INVERTER-driven Hermetic Rotary / 1
	Air Volume		cfm	4,100	4,100	4,100
Refrigerant[5] (Charged Refrigerant Amount)			lb	8.6	8.6	8.6
Electrical Specifications	Unit	MCA[6]	A	36	38	40
		Recommended Fuse Size	A	40	40	45
Refrigerant Piping	Connecting Port Diameter	Gas Side (Main Pipe) (Brazing)	in	5/8	5/8	3/4
		Liquid Side (Main Pipe) (Brazing)	in	3/8	3/8	3/8
Operation Temperature Range		Cooling	° F DB	5~118	5~118	5~118
		Heating	° F WB	-13~64	-13~64	-13~64
Maximum Number of Connected Indoor Units				5	7	9
Maximum Capacity of Combined Indoor Units				50%~130%	50%~130%	50%~130%
Sound Pressure Level Cooling / Heating[7]			dB(A)	58.7	60.1	60.7

[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] Seasonal Energy Efficiency Ratio

[4] Heating Seasonal Performance Factor

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Single Module							
Outdoor Unit Model Name				**38VMA072HDS5-1**	**38VMA096HDS5-1**	**38VMA120HDS5-1**	**38VMA144HDS5-1**
Nominal Tons				6	8	10	12
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	72.0	96.0	117.6	142.8
		Rated	kBtu/h	69.0	92.0	112.0	136.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	80.0	108.0	126.0	160.0
		Rated	kBtu/h	77.0	103.0	120.0	150.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	4.1	6.2	8.8	12.1
		IEER[3]	Btu/W*hr	22.5	23.5	22.5	19.5
	Heating	Power Consumption	kW	4.5	7.2	9.0	12.1
		COP[4]	W/W	4.29	3.82	3.6	3.4
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	5.1	7.5	9.6	12.3
		IEER[3]	Btu/W*hr	23.6	23.0	21.9	19.5
	Heating	Power Consumption	kW	5.6	8.0	9.8	12.6
		COP[4]	W/W	3.85	3.63	3.45	3.35
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8	64-3/8
		Width	in	52-3/4	52-3/4	52-3/4	52-3/4
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	659	659	659	780
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 2
	Air Volume		cfm	7,650	7,650	8,250	8,830
Refrigerant[5] (Charged Refrigerant Amount)			lb	37.5	37.5	37.5	37.5
Electrical Specifications	Unit	MCA[6]	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	5~125	5~125	5~125	5~125
		Heating	° F WB	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure			in WG	0.24	0.24	0.24	0.24
Maximum Number of Connected Indoor Units				13	16	20	26
Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Level Cooling / Heating[7]			dB(A)	62.5	63	63	65.5

[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] Integrated Energy Efficiency Ratio

[4] Coefficient of Performance

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

MODULAR DESIGN

Dual Module (Combined)									
Combination Model Number				38VMA168HDS5-1	38VMA192HDS5-1	38VMA216HDS5-1	38VMA240HDS5-1	38VMA264HDS5-1	38VMA288HDS5-1
Combination Units				38VMA096HDS5-1 38VMA072HDS5-1	38VMA096HDS5-1 38VMA096HDS5-1	38VMA120HDS5-1 38VMA096HDS5-1	38VMA120HDS5-1 38VMA120HDS5-1	38VMA144HDS5-1 38VMA120HDS5-1	38VMA144HDS5-1 38VMA144HDS5-1
Nominal Tons				14	16	18	20	22	24
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	163.8	184.8	205.8	224.7	258.3	283.5
		Rated	kBtu/h	156.0	176.0	196.0	214.0	246.0	270.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	188.0	216.0	234.0	252.0	286.0	320.0
		Rated	kBtu/h	180.0	206.0	224.0	240.0	270.0	300.0
With Non-ducted Indoor Units	Power supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Electrical Characteristics (Nominal)[1]	Cooling	Power Consumption	kW	11.0	12.9	15.3	18.6	23.9	27.0
		IEER[3]	Btu/W*hr	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[4]	W/W	3.80	3.75	3.62	3.54	3.27	3.20
With Ducted Indoor Units	Power supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Electrical Characteristics (Nominal)[1]	Cooling	Power Consumption	kW	12.4	14.5	16.6	18.7	24.2	27.4
		IEER[3]	Btu/W*hr	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[4]	W/W	3.64	3.60	3.54	3.47	3.20	3.20
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 Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 4
	Air Volume		cfm	7,650 x 2	7,650 x 2	8,250 + 7650	8,250 x 2	8,830 + 8250	8,830 x 2
Refrigerant[5] (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[6]	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	5~125	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-5~64	-5~64	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure			in WG	0.24	0.24	0.24	0.24	0.24	0.24
Maximum Number of Connected Indoor Units				29	33	36	39	46	50
Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Level Cooling / Heating[7]			dB(A)	65	65	65	65	66.5	67.5

[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] Integrated Energy Efficiency Ratio

[4] Coefficient of Performance

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

MODULAR DESIGN

Triple Module (Combined)										
Combination Model Number				38VMA312HDS5-1	38VMA336HDS5-1	38VMA360HDS5-1	38VMA384HDS5-1	38VMA408HDS5-1	38VMA432HDS5-1
Combination Units				38VMA120HDS5-1 38VMA096HDS5-1 38VMA096HDS5-1	38VMA120HDS5-1 38VMA120HDS5-1 38VMA096HDS5-1	38VMA120HDS5-1 38VMA120HDS5-1 38VMA120HDS5-1	38VMA144HDS5-1 38VMA120HDS5-1 38VMA120HDS5-1	38VMA144HDS5-1 38VMA144HDS5-1 38VMA120HDS5-1	38VMA144HDS5-1 38VMA144HDS5-1 38VMA144HDS5-1
Nominal Tons				26	28	30	32	34	36
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	298.2	319.2	342.3	373.8	399.0	420.0
		Rated	kBtu/h	284.0	304.0	326.0	356.0	380.0	400.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	342.0	360.0	378.0	412.0	446.0	480.0
		Rated	kBtu/h	320.0	338.0	354.0	384.0	410.0	420.0
With Non-Ducted Indoor Units	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Electrical Characteristics (Nominal)[1]	Cooling	Power Consumption	kW	24.1	27.0	30.5	34.9	38.6	40.7
		IEER[3]	Btu/W*hr	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[4]	W/W	3.43	3.31	3.20	3.20	3.20	3.20
With Ducted Indoor Units	Power Supply[2]			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Electrical Characteristics (Nominal)[1]	Cooling	Power Consumption	kW	25.7	27.4	29.9	35.9	38.3	40.3
		IEER[3]	Btu/W*hr	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[4]	W/W	3.30	3.25	3.20	3.20	3.20	3.20
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 Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 4	INVERTER-driven Hermetic Scroll / 5	INVERTER-driven Hermetic Scroll / 6
	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[5] (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[6]	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	5~125	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-5~64	-5~64	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure			in WG	0.24	0.24	0.24	0.24	0.24	0.24
Maximum Number of Connected Indoor Units				53	56	59	63	64	64
Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Level Cooling / Heating[7]			dB(A)	66.5	66.5	66.5	67	68.5	69

[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] Integrated Energy Efficiency Ratio

[4] Coefficient of Performance

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

Single Module							
Outdoor Unit Model Name				38VMA072HDS6-1	38VMA096HDS6-1	38VMA120HDS6-1	38VMA144HDS6-1
Nominal Tons				6	8	10	12
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	72.0	96.0	117.6	142.8
		Rated	kBtu/h	69.0	92.0	112.0	136.0
Heating capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	80.0	108.0	126.0	160.0
		Rated	kBtu/h	77.0	103.0	120.0	150.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	4.1	6.2	8.8	12.1
		IEER[3]	Btu/W*hr	22.5	23.5	22.5	19.5
	Heating	Power consumption	kW	4.5	7.2	9.0	12.1
		COP[4]	W/W	4.29	3.8	3.60	3.40
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	5.1	7.5	9.6	12.3
		IEER[3]	Btu/W*hr	23.6	23.0	21.9	19.5
	Heating	Power Consumption	kW	5.6	8.0	9.8	12.6
		COP[4]	W/W	3.85	3.63	3.45	3.35
External Dimensions		Height	in	64-3/8	64-3/8	64-3/8	64-3/8
		Width	in	52-3/4	52-3/4	52-3/4	52-3/4
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	659	659	659	772
Compressor Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 2
	Air Volume		cfm	7650	7650	8250	8830
Refrigerant[5] (Charged Refrigerant Amount)			lb	37.5	37.5	37.5	37.5
Electrical Specifications	Unit	MCA[6]	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	5~125	5~125	5~125	5~125
		Heating	° F WB	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure			in WG	0.24	0.24	0.24	0.24
Maximum Number of Connected Indoor Units				13	16	20	26
Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Level Cooling / Heating[7]			dB(A)	62.5	63	63	65.5

[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] Integrated Energy Efficiency Ratio

[4] Coefficient of Performance

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

MODULAR DESIGN

Dual Module (Combined)										
Combination Model Number				**38VMA168HDS6-1**	**38VMA192HDS6-1**	**38VMA216HDS6-1**	**38VMA240HDS6-1**	**38VMA264HDS6-1**	**38VMA288HDS6-1**
Combination Units				**38VMA096HDS6-1**	**38VMA096HDS6-1**	**38VMA120HDS6-1**	**38VMA120HDS6-1**	**38VMA144HDS6-1**	**38VMA144HDS6-1**
				38VMA072HDS6-1	**38VMA096HDS6-1**	**38VMA096HDS6-1**	**38VMA120HDS6-1**	**38VMA120HDS6-1**	**38VMA144HDS6-1**
Nominal Tons				14	16	18	20	22	24
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	163.8	184.8	205.8	224.7	258.3	283.5
		Rated	kBtu/h	156.0	176.0	196.0	214.0	246.0	270.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	188.0	216.0	234.0	252.0	286.0	320.0
		Rated	kBtu/h	180.0	206.0	224.0	240.0	270.0	300.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	11.0	12.9	15.3	18.6	23.9	27.0
		IEER[3]	Btu/W*hr	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[4]	W/W	3.80	3.75	3.62	3.54	3.27	3.20
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	12.4	14.5	16.6	18.7	24.2	27.4
		IEER[3]	Btu/W*hr	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[4]	W/W	3.64	3.60	3.54	3.47	3.20	3.20
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 Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 4
	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[5] (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[6]	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	5~125	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-5~64	-5~64	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure			in WG	0.24	0.24	0.24	0.24	0.24	0.24
Maximum Number of Connected Indoor Units				29	33	36	39	46	50
Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Level Cooling / Heating[7]			dB(A)	65	65	65	65	66.5	67.5

[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] Integrated Energy Efficiency Ratio

[4] Coefficient of Performance

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

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

MODULAR DESIGN

Triple Module (Combined)										
Combination Model Number				38VMA312HDS6-1	38VMA336HDS6-1	38VMA360HDS6-1	38VMA384HDS6-1	38VMA408HDS6-1	38VMA432HDS6-1
Combination Units				38VMA120HDS6-1 38VMA096HDS6-1 38VMA096HDS6-1	38VMA120HDS6-1 38VMA120HDS6-1 38VMA096HDS6-1	38VMA120HDS6-1 38VMA120HDS6-1 38VMA120HDS6-1	38VMA144HDS6-1 38VMA120HDS6-1 38VMA120HDS6-1	38VMA144HDS6-1 38VMA144HDS6-1 38VMA120HDS6-1	38VMA144HDS6-1 38VMA144HDS6-1 38VMA144HDS6-1
Nominal Tons				26	28	30	32	34	36
Cooling Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	298.2	319.2	342.3	373.8	399.0	420.0
		Rated	kBtu/h	284.0	304.0	326.0	356.0	380.0	400.0
Heating Capacity[1] (With Non-Ducted Indoor Units / Ducted)		Nominal	kBtu/h	342.0	360.0	378.0	412.0	446.0	480.0
		Rated	kBtu/h	320.0	338.0	354.0	384.0	410.0	420.0
With Non-Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	24.1	27.0	30.5	34.9	38.6	40.7
		IEER[3]	Btu/W*hr	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[4]	W/W	3.43	3.31	3.20	3.20	3.20	3.20
With Ducted Indoor Units Electrical Characteristics (Nominal)[1]	Power Supply[2]			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
	Cooling	Power Consumption	kW	25.7	27.4	29.9	35.9	38.3	40.3
		IEER[3]	Btu/W*hr	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[4]	W/W	3.30	3.25	3.20	3.20	3.20	3.20
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 Fan Unit	Type / Quantity			INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 4	INVERTER-driven Hermetic Scroll / 5	INVERTER-driven Hermetic Scroll / 6
	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[5] (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[6]	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 (Brazing)	in	1/4	1/4	1/4	1/4	1/4	1/4
Operation Temperature Range		Cooling	° F DB	5~125	5~125	5~125	5~125	5~125	5~125
		Heating	° F WB	-5~64	-5~64	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure			in WG	0.24	0.24	0.24	0.24	0.24	0.24
Maximum Number of Connected Indoor Units				53	56	59	63	64	64
Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Level Cooling / Heating[7]			dB(A)	66.5	66.5	66.5	67	68.5	69

[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] Integrated Energy Efficiency Ratio

[4] Coefficient of Performance

[5] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

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

[7] These values, measured in anechoic chamber, at a point 3.3 ft (1 m) in front of the unit at a height of 4.6 ft (1.4m).

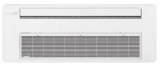
CARRIER VRF SYSTEMS: INDOOR UNITS

Carrier offers a variety of unique indoor units to meet a range of needs, spaces and designs. Plus, they're inherently efficient, quiet and easy to install and service.

INDOOR UNITS

NON-DUCTED MODELS






	4-way Cassette	Compact 4-way Cassette	Compact One Way Cassette	High Wall Indoor Unit	Underceiling / Floor Console (Exposed)	Floor Console (Recessed)
	40VMF	40VMC	40VMI	40VMW	40VMU	40VMR
Cooling Capacity kBtu/h (Ton)						
5,000 (0.4)		■	■	■		
7,000 (0.6)		■	■	■		■
9,000 (0.75)	■	■	■	■		■
12,000 (1.0)	■	■	■	■	■	■
15,000 (1.25)	■	■	■	■	■	■
18,000 (1.5)	■		■	■	■	■
24,000 (2.0)	■		■	■	■	■
30,000 (2.5)	■			■	■	
36,000 (3.0)	■				■	
48,000 (4.0)	■				■	

DUCTED MODELS





	Low Static Ducted (Slim Profile)	Medium Static Ducted	High Static Ducted	Vertical Air Handling Unit (AHU)	Outside Air Ducted
	40VML	40VMM	40VMH	40VMV	40VMA
Cooling Capacity kBtu/h (Ton)					
7,000 (0.6)	■	■			
9,000 (0.75)	■	■			
12,000 (1.0)	■	■		■	
15,000 (1.25)	■	■			
18,000 (1.5)	■	■		■	
24,000 (2.0)	■	■	■	■	
30,000 (2.5)		■	■	■	
36,000 (3.0)		■	■	■	■
48,000 (4.0)		■	■	■	■
53,500 (4.4)			■	■	■
72,000 (6.0)			■		■
96,000 (8.0)			■		■

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.

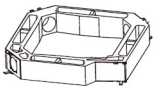
- Integrated condensate lift up to 29.5"
- Panel accessory required, model number 40VMF001----
- 2-3/4" knockout for outside air opening

OPTIONS

2" Filter Rack
40VMF002----

The filter rack accessory allows for 2" filter to be installed without increasing the height of the unit.

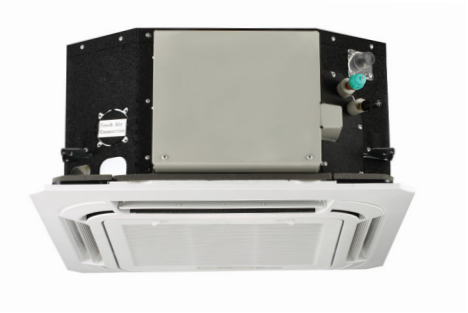
Outside Air Kit
40VMF003----



The outside air accessory has three inlets which allows this unit to handle more volume of ventilation air.

Indoor Unit Model Name			40VMF009A--3	40VMF012A--3	40VMF015A--3	40VMF018A--3	40VMF024A--3	40VMF030A--3	40VMF036A--3	40VMF048A--3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	9,000	12,000	15,000	19,100	24,000	30,000	36,000	48,000
Sensible Cooling Capacity		Btu/H	8,620	10,880	13,370	18,220	18,350	22,330	26,240	32,390
Heating Capacity		Btu/H	10,900	13,600	17,000	21,500	27,000	34,000	40,000	54,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC	DC	DC
	Input	W	40	54	67	153.5	85.4	131.7	182.7	202.3
Indoor Airflow	Low	cfm	330	390	460	610	610	680	800	950
	Medium	cfm	390	460	560	700	700	800	950	1,100
	High	cfm	460	560	680	1,000	800	950	1,100	1,200
Indoor Unit Sound Level	Low	dB(A)	32.1	33.0	37.0	40.2	40.2	42.1	47.3	50.5
	Medium	dB(A)	34.0	37.3	41.5	43.1	42.5	45.1	50.4	54.0
	High	dB(A)	36.7	41.4	45.6	52.5	44.7	49.5	53.9	55.4
Unit	Dimensions, W x H x D	in	33-1/8 x 9 x 33-1/8	33-1/8 x 9 x 33-1/8	33-1/8 x 9 x 33-1/8	33-1/8 x 11-3/4 x 33-1/8	33-1/8 x 11-3/4 x 33-1/8	33-1/8 x 11-3/4 x 33-1/8	33-1/8 x 11-3/4 x 33-1/8	33-1/8 x 11-3/4 x 33-1/8
	Net / Gross Weight	lb	54/71	54/71	54/71	69/86	69/86	69/86	69/86	69/86
Panel / Grille	Dimensions, W x H x D	in	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8	37-3/8 x 1-3/4 x 37-3/8
	Net / Gross Weight	lb	13.2/20	13.2/20	13.2/20	13.2/20	13.2/20	13.2/20	13.2/20	13.2/20
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4
Condensate Lift			Included	Included	Included	Included	Included	Included	Included	Included
Electrical Data	MCA	A	0.73	0.91	1.10	2.00	1.30	1.70	2.30	2.40
	MOPD	A	15	15	15	15	15	15	15	15

Note: Testing Condition AHRI 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.



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 23.5"
- Panel accessory required, model number 40VMC001----

Indoor Unit Model Name			40VMC005A--3	40VMC007A--3	40VMC009A--3	40VMC012A--3	40VMC015A--3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	5,070	7,100	9,130	12,170	15,210
Sensible Cooling Capacity		Btu/H	4,450	5,470	6,330	8,050	9,490
Heating Capacity		Btu/H	5,000	8,000	10,000	13,000	17,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC
	Input	W	16	16	16	24	24
Indoor Airflow	Low	cfm	241	229	229	253	253
	Medium	cfm	241	282	282	306	306
	High	cfm	300	306	306	359	359
Indoor Unit Sound Level	Low	dB(A)	32.9	34.7	34.7	38.1	38.1
	Medium		32.9	38.5	38.5	42.3	42.3
	High		38.5	40.4	40.4	45.5	45.5
Unit	Dimensions, W x H x D	in	24-13/16 x 10-1/4 x 22-7/16	24-13/16 x 10-1/4 x 22-7/16	24-13/16 x 10-1/4 x 22-7/16	24-13/16 x 10-1/4 x 22-7/16	24-13/16 x 10-1/4 x 22-7/16
	Net / Gross Weight	lb	40/51	40/51	40/51	53/53	53/53
Panel / Grille	Dimensions, W x H x D	in	25-1/2 x 2 x 25-1/2	25-1/2 x 2 x 25-1/2	25-1/2 x 2 x 25-1/2	25-1/2 x 2 x 25-1/2	25-1/2 x 2 x 25-1/2
	Net / Gross Weight	lb	5.5/9.9	5.5/9.9	5.5/9.9	5.5/9.9	5.5/9.9
Refrigerant Type			R410A	R410A	R410A	R410A	R410A
Expansion Device			EXV	EXV	EXV	EXV	EXV
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	1/4
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	1/2
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	1	1	1	1	1
Condensate Lift			Included	Included	Included	Included	Included
Electrical Data	MCA	A	0.38	0.38	0.38	0.53	0.53
	MOPD	A	15	15	15	15	15

Note: Testing Condition AHRI 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.

40VMW
High Wall Unit

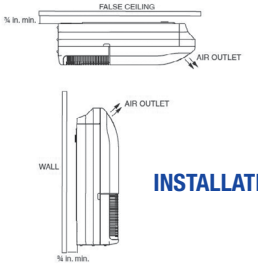
The Carrier VRF High Wall Unit mounts on the wall providing conditioned air to fit any type of space.

- Filter is washable
- Flared refrigerant pipe connections

Indoor Unit Model Name			40VMW005---3	40VMW007---3	40VMW009---3	40VMW012---3	40VMW015---3	40VMW018---3	40VMW024---3	40VMW030---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	5,000	7,500	9,500	12,000	15,000	18,000	24,000	30,000
Sensible Cooling Capacity		Btu/H	4,060	5,640	6,520	7,930	10,140	12,040	15,330	18,950
Heating Capacity		Btu/H	6,000	8,500	10,900	13,500	17,000	21,000	27,000	34,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC	DC	DC
	Input	W	11	25	25	30	35	45	75	85
Indoor Airflow	Low	cfm	245	245	245	250	380	440	460	480
	Medium	cfm	245	270	270	280	420	470	530	600
	High	cfm	245	320	320	360	480	560	650	770
Indoor Unit Sound Level	Low	dB(A)	31.7	31.2	31.8	32.8	38.4	38.9	36.8	38.1
	Medium	dB(A)	31.7	32.2	32.6	34.6	39.6	40.2	42.0	43.6
	High	dB(A)	31.7	34.0	34.5	36.4	41.7	41.8	43.2	48.3
Unit	Dimensions, W x H x D	in	36 x 11-3/8 x 9	36 x 11-3/8 x 9	36 x 11-3/8 x 9	36 x 11-3/8 x 9	42-1/4 x 12-3/8 x 9	42-1/4 x 12-3/8 x 9	47 x 13-1/2 x 10-1/8	47 x 13-1/2 x 10-1/8
	Net / Gross Weight	lb	28/35	28/35	28/35	28/35	32/40.5	32/40.5	38/50.5	38/50.5
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Electrical Data	MCA	A	0.29	0.45	0.45	0.45	0.45	0.45	0.86	0.86
	MOPD	A	15	15	15	15	15	15	15	15

Note: Testing Condition AHRI 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.

40VMU Underceiling Unit Floor Console (Exposed)



INSTALLATION

The Carrier VRF Underceiling Unit can be installed exposed below the ceiling or mounted to the floor standing as an exposed Floor Console Unit.

- Condensate pump is accessory
- Filter is washable
- Knock-out for outside air on sizes 36 and 38

Indoor Unit Model Name			40VMU012---3	40VMU015---3	40VMU018---3	40VMU024---3	40VMU030---3	40VMU036---3	40VMU048---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	12,000	15,000	18,000	24,000	30,000	36,000	48,000
Sensible Cooling Capacity		Btu/H	8,540	10,820	12,420	15,980	20,080	26,230	33,660
Heating Capacity		Btu/H	13,500	17,000	21,000	27,000	34,000	40,000	54,000
Indoor Fan Motor	Type		DC Motor	DC Motor	DC Motor	DC Motor	DC Motor	DC Motor	DC Motor
	Input	W	24	47	53	80	107	67 x 2	115 x 2
Indoor Airflow	Low	cfm	259	359	394	494	624	906	929
	Medium	cfm	294	412	424	529	676	976	1,000
	High	cfm	335	441	471	571	729	1,094	1,353
Indoor Unit Sound Level	Low	dB(A)	35.8	41.7	44.1	50.2	50.4	48.4	50.6
	Medium	dB(A)	37.7	45.4	46.5	52.0	52.1	50.3	52.3
	High	dB(A)	40.5	47.2	48.5	53.8	53.9	53.0	59.8
Unit	Dimensions, W x H x D	in	39 x 26 x 8	39 x 26 x 8	39 x 26 x 8	39 x 26 x 8	50-1/2 x 26 x 8	66 x 27 x 10	66 x 27 x 10
	Net / Gross Weight	lb	57/71	62/75	62/75	62/75	77/90	106/128	106/128
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	3/8	3/8	3/8	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	5/8	5/8	5/8	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Electrical Data	MCA	A	0.44	0.73	0.87	1.20	1.40	1.80	2.80
	MOPD	A	15	15	15	15	15	15	15

Note: Testing Condition AHRI 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.

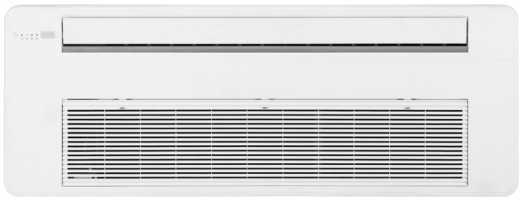
40VMR
Floor Console (Recessed)

The Carrier VRF Floor Console (Recessed) Units can be installed inside a wall or custom-built cabinet to match interior space design.

- Washable filter in an adjustable (1"-2") filter rack
- External static pressure up to 0.15

Indoor Unit Model Name			40VMR007---3	40VMR009---3	40VMR012---3	40VMR015---3	40VMR018---3	40VMR024---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Cooling Capacity		Btu/H	7,000	9,000	12,000	15,000	18,000	24,000
Sensible Cooling Capacity		Btu/H	6,000	6,830	9,140	11,390	12,610	17,880
Heating Capacity		Btu/H	8,000	10,000	13,000	17,000	20,000	27,000
Indoor Fan Motor	Type		DC Motor	DC Motor	DC Motor	DC Motor	DC Motor	DC Motor
	Input	W	19	19	25	41	27	79
Indoor Airflow	Low	cfm	253	253	271	347	365	553
	Medium	cfm	276	276	335	424	418	635
	High	cfm	300	300	400	500	488	776
Indoor External Static Pressure		in WG	0.12	0.12	0.12	0.12	0.12	0.12
Indoor Unit Sound Level	Low	dB(A)	35.7	35.8	32.5	36.8	32.8	42.5
	Medium	dB(A)	38.2	37.9	36.3	41.7	35.5	45.2
	High	dB(A)	39.9	39.8	40.3	45.3	39.0	49.9
Unit	Dimensions, W x H x D	in	35-1/4 x 24 x 8-3/8	35-1/4 x 24 x 8-3/8	43-1/8 x 24 x 8-3/8	43-1/8 x 24 x 8-3/8	54-15/16 x 24 x 8-3/8	54-15/16 x 24 x 8-3/8
	Net / Gross Weight	lb	48.9/80	48.9/80	59.1/91.5	59.1/91.5	69.2/102.1	69.2/102.1
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	5/8	5/8	5/8	5/8	5/8	5/8
Electrical Data	MCA		0.55	0.55	0.63	0.83	0.72	1.38
	MOPD		15	15	15	15	15	15

Note: Testing Condition AHRI 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.



40VMI One Way Compact Cassette

The Carrier One Way Compact Cassette has a slim and compact design, ideal for any solution in which ceiling space is limited.

- One directional airflow with multiple fan speeds
- Knock-out for outside air on sizes 15K to 24K
- Quite operation even at high fan speed settings

Indoor Unit Model Name			40VMI005---3	40VMI007---3	40VMI009---3	40VMI012---3	40VMI015---3	40VMI018---3	40VMI024---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	5,070	7,100	9,130	12,170	15,210	18,250	24,340
Sensible Cooling Capacity		Btu/H	4,370	5,530	6,900	8,590	10,660	12,950	16,130
Heating Capacity		Btu/H	6,000	8,000	10,000	13,500	17,000	21,000	27,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC	DC
	Input	W	10	10	10	15	20	30	31
Indoor Airflow	Low	cfm	143	143	180	213	309	387	408
	Medium	cfm	174	181	226	266	345	429	472
	High	cfm	198	227	273	310	379	472	517
Indoor Unit Sound Level	Low	dB(A)	28.5	29.4	32.5	36.1	36.3	40.8	42.2
	Medium	dB(A)	29.6	32.0	36.0	41.0	38.1	43.1	43.3
	High	dB(A)	31.7	35.4	41.5	45.0	40.7	45.5	46.2
Unit	Dimensions, W x H x D	in	41-1/2 x 6 x 16-3/4	41-1/2 x 6 x 16-3/4	41-1/2 x 6 x 16-3/4	41-1/2 x 6 x 16-3/4	50-1/4 x 7-1/2 x 17-3/4	50-1/4 x 7-1/2 x 17-3/4	50-1/4 x 7-1/2 x 17-3/4
	Net / Gross Weight	lb	27.1/36.8	28.0/37.5	29.1/37.9	29.1/37.9	38.8/51.6	38.8/51.6	41.0/54.7
Panel / Grille	Dimensions, W x H x D	in	46-1/2 x 1 x 18-1/4	46-1/2 x 1 x 18-1/4	46-1/2 x 1 x 18-1/4	46-1/2 x 1 x 18-1/4	53-1/8 x 1 x 19-7/8	53-1/8 x 1 x 19-7/8	53-1/8 x 1 x 19-7/8
	Net / Gross Weight	lb	7.7/11.4	7.7/11.4	7.7/11.4	7.7/11.4	8.8/11.9	8.8/11.9	8.8/11.9
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	1/4	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	1/2	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	1	1	1	1	1	1	1
Condensate Lift			Included	Included	Included	Included	Included	Included	Included
Electrical Data	MCA	A	0.29	0.29	0.29	0.37	0.44	0.58	0.58
	MOPD	A	15	15	15	15	15	15	15

Note: Limits connected capacity at 30%.

Note: Testing Condition AHRI 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.

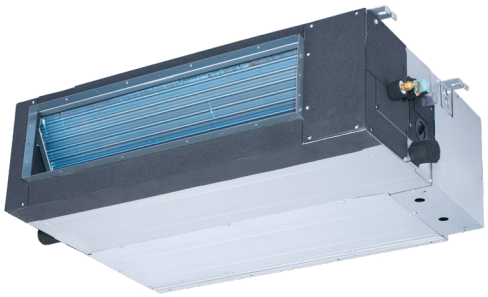
40VML
Low Static Ducted (Slim Profile)

The Carrier VRF Low Static Ducted (Slim Profile) 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 27.5"
- Filter is washable

Indoor Unit Model Name			40VML007---3	40VML009---3	40VML012---3	40VML015---3	40VML018---3	40VML024---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	7,000	9,000	12,000	15,000	18,000	24,000
Sensible Cooling Capacit		Btu/H	5,740	6,580	8,290	10,560	12,520	16,690
Heating Capacity		Btu/H	8,000	10,000	13,500	17,000	21,000	27,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC
	Input	W	25	25	32	43	56	68
Indoor Airflow	Low	cfm	224	224	236	306	353	471
	Medium	cfm	253	253	294	367	424	565
	High	cfm	283	283	353	459	530	701
Indoor External Static Pressure		in WG	0-0.20	0-0.20	0-0.20	0-0.20	0-0.20	0-0.20
Indoor Unit Sound Level	Low	dB(A)	31.4	31.0	33.0	33.2	36.0	37.0
	Medium	dB(A)	32.0	32.0	34.6	35.2	38.0	38.8
	High	dB(A)	34.0	34.5	37.0	36.7	40.2	41.3
Unit	Dimensions, W x H x D	in	30-3/4 x 8-1/4 x 19-3/4	30-3/4 x 8-1/4 x 19-3/4	30-3/4 x 8-1/4 x 19-3/4	39-1/4 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
	Net / Gross Weight	lb	41/48.5	41/48.5	41/48.5	48.5/57.5	48.5/57.5	59.5/71.5
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping (in)	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	1	1	1	1	1	1
Condensate Lift			Included	Included	Included	Included	Included	Included
Electrical Data	MCA	A	0.50	0.50	0.60	0.80	0.95	1.18
	MOPD	A	15	15	15	15	15	15

Note: Testing Condition AHRI 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.



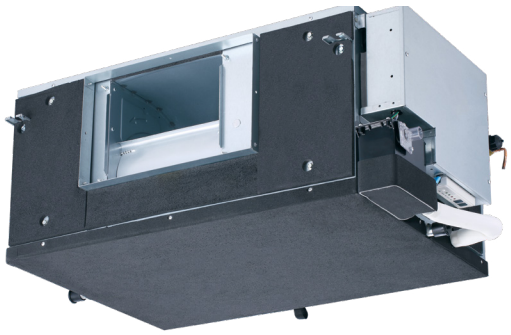
40VMM
Medium Static Ducted

The Carrier VRF Medium Static Ducted 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 27.5"
- Filter is washable

Indoor Unit Model Name			40VMM007A--3	40VMM009A--3	40VMM012A--3	40VMM015A--3	40VMM018A--3	40VMM024A--3	40VMM030A--3	40VMM036A--3	40VMM048A--3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	7,000	9,000	12,000	15,000	18,000	24,000	30,000	38,000	48,000
Sensible Cooling Capacity		Btu/H	5,490	7,080	9,310	11,630	14,000	17,730	23,140	27,460	32,860
Heating Capacity		Btu/H	8,000	10,000	13,600	17,000	21,000	27,000	34,000	42,000	54,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC	DC	DC	DC
	Input	W	50	50	135	145	185	230	290	325	370
Indoor Airflow	Low	cfm	220	220	320	400	480	570	780	860	980
	Medium	cfm	220	260	360	450	540	640	900	980	1,100
	High	cfm	260	330	430	535	640	800	1,070	1,200	1,370
Indoor External Static Pressure		in WG	0.32	0.32	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Indoor Unit Sound Level	Low	dB(A)	31.8	31.8	32.7	31.4	31.9	34.2	39.4	40.8	41.2
	Medium	dB(A)	32.1	32.4	33.7	32.7	33.6	36.3	42.3	43.8	43.8
	High	dB(A)	33.2	32.7	36.7	35.9	38.6	42.0	46.7	47.8	48
Unit	Dimensions, W x H x D	in	39-1/4 x 8-1/4 x 19-3/4	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	48-1/2 x 10-5/8 x 30-1/2	48-1/2 x 10-5/8 x 30-1/2	50-3/4 x 11-7/8 x 34-1/8	50-3/4 x 11-7/8 x 34-1/8	50-3/4 x 11-7/8 x 34-1/8
	Net / Gross Weight	lb	50.7/57.5	50.7/57.5	76/88	99.2/115	99.2/115	99.2/115	124/143	124/143	124/143
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8
	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Condensate Lift			Included	Included	Included	Included	Included	Included	Included	Included	Included
Electrical Data	MCA	A	1.25	1.25	3.13	3.13	3.13	3.13	5.00	5.00	5.00
	MOPD	A	15	15	15	15	15	15	15	15	15

Note: Testing Condition AHRI 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.



40VMH
High Static Ducted

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 27.5", for sizes up to 54
- For sizes 72 and 96, condensate pump is an accessory (model #40VM900024)

Indoor Unit Model Name			40VMH024---3	40VMH030---3	40VMH036---3	40VMH048---3	40VMH054---3	40VMH072---3	40VMH0964---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	24,000	30,000	36,000	48,000	53,500	72,000	96,000
Sensible Cooling Capacity		Btu/H	16,520	20,500	24,420	32,600	38,790	50,920	64,570
Heating Capacity		Btu/H	27,000	34,000	40,000	54,000	60,000	81,000	108,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC	DC
	Input	W	81	140	190	220	420	245*2	395*2
Indoor Airflow	Low	cfm	524	647	882	1,041	1,412	1,559	2,076
	Medium	cfm	600	753	1,029	1,200	1,618	1,794	2,400
	High	cfm	735	971	1,188	1,429	1,835	2,235	2,824
Indoor External Static Pressure		in WG	0.8	0.8	0.8	0.8	0.8	1.0	1.0
Indoor Unit Sound Level	Low	dB(A)	44.7	43.3	49.1	48.3	52.0	48.7	52.4
	Medium	dB(A)	47.8	46.9	52.8	51.8	55.7	52.2	54.7
	High	dB(A)	50.9	51.2	55.5	54.9	58.1	55.9	56.4
Unit	Dimensions, W x H x D	in	37-1/2 x 16-1/2 x 27-3/16	37-1/2 x 16-1/2 x 27-3/16	37-1/2 x 16-1/2 x 27-3/16	51-3/16 x 16-1/2 x 27-3/16	51-3/16 x 16-1/2 x 27-3/16	56-3/4 x 20 x 36-7/16	56-3/4 x 20 x 36-7/16
	Net / Gross Weight	lb	110/168.4	114.6/171	114.6/171	159.2/231.5	159.2/231.5	254.2/342.8	254.2/342.8
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare Braze)	in	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Suction Side, OD (Flare Braze)	in	5/8	5/8	5/8	5/8	5/8	7/8	7/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	22-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	1	1	1	1	1	1-5/8	1-5/8
Condensate Pump			Included	Included	Included	Included	Included	Not included (field supplied, field installed)	Not included (field supplied, field installed)
Electrical Data	MCA	A	5.70	7.10	7.30	7.60	7.80	9.70	10.20
	MOPD	A	15	15	15	15	15	15	15

Note: Testing Condition AHRI 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.

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.

- Single point power connection for electrical heater (MCA and MOPD field calculated)

Indoor Unit Model Name			40VMV012---3	40VMV018---3	40VMV024---3	40VMV030---3	40VMV036---3	40VMV048---3	40VMV054---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	1,2000	18,000	24,000	30,000	36,000	48,000	53,500
Sensible Cooling Capacity		Btu/H	8,710	12,940	17,270	21,460	26,340	34,500	38,370
Heating Capacity		Btu/H	13,500	21,000	27,000	34,000	40,000	54,000	60,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC	DC	DC
	Input	W	43	60	100	151	187	355	466
Indoor Airflow	Low	cfm	320	420	560	700	840	1,120	1,260
	Medium	cfm	320	510	680	850	1,020	1,360	1,530
	High	cfm	400	600	800	1,000	1,200	1,600	1,800
Indoor External Static Pressure		in WG	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Indoor Unit Sound Level	Low	dB(A)	34.5	34.4	37.9	44.4	39.3	43.8	47.9
	Medium	dB(A)	34.5	37.1	42.3	48.4	44.1	48.5	52.6
	High	dB(A)	37.6	41.6	46.2	52.2	46.9	53.0	57.1
Unit	Dimensions, W x H x D	in	19-5/8 x 46-1/2 x 20-5/8	19-5/8 x 46-1/2 x 20-5/8	19-5/8 x 46-1/2 x 20-5/8	19-5/8 x 46-1/2 x 20-5/8	22 x 54-1/2 x 24	22 x 54-1/2 x 24	22 x 54-1/2 x 24
	Net / Gross Weight	lb	119/143	123/147	123/147	123/147	163/189	163/189	163/189
Refrigerant Type			R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Sweat)	in	1/4	3/8	3/8	3/8	3/8	3/8	3/8
	Suction Side, OD (Sweat)	in	1/2	5/8	5/8	5/8	5/8	5/8	5/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
Electrical data	MCA	A	1.5	3.80	3.80	3.80	5.30	5.30	7.20
	MOPD	A	15	15	15	15	15	15	15
Optional									
Electical Heater (208V / 230V)	40VM910005 (5.0 kW)		•	•	•	•	•	•	•
	40VM910007 (7.5 kW)			•	•	•	•	•	•
	40VM910010 (10.0 kW)				•	•	•	•	•
	40VM910015 (15.0 kW)							•	•
	40VM910020 (20.0 kW)							•	•

Note: Testing Condition AHRI 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.

40VMA
Outside Air Ducted

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

- Discharge temperature control
- Integrated condensate lift up to 27.5"

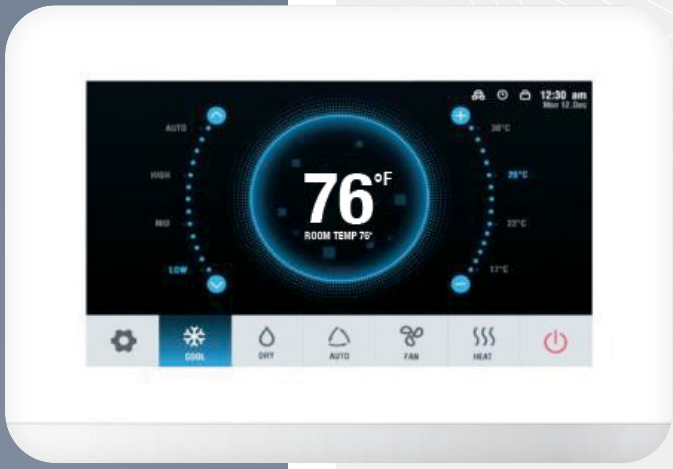
Indoor Unit Model Name			40VMA036---3	40VMA048---3	40VMA054---3	40VMA072---3	40VMA096---3
Power Supply			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Total Cooling Capacity		Btu/H	36,000	48,000	53,500	72,000	96,000
Heating Capacity		Btu/H	24,000	30,000	36,000	47,000	59,000
Indoor Fan Motor	Type		DC	DC	DC	DC	DC
	Input	W	64	71	87	60*2	80*2
Indoor Airflow	Low	cfm	441	471	529	882	1,029
	Medium	cfm	529	559	647	971	1,176
	High	cfm	588	647	765	1,059	1,294
Indoor External Static Pressure		in WG	0.8	0.8	0.8	1.0	1.0
Indoor Unit Sound Level	Low	dB(A)	43.8	43.4	43.9	48.5	47.7
	Medium	dB(A)	47.8	47.8	47.8	50.0	50.8
	High	dB(A)	49.5	50.4	51.4	52.1	53.5
Unit	Dimensions, W x H x D	in	51-3/16 x 16-1/2 x 27-3/16	1-3/16 x 16-1/2 x 27-3/16	1-3/16 x 16-1/2 x 27-3/16	56-3/4 x 20 x 36-7/16	56-3/4 x 20 x 36-7/16
	Net / Gross Weight	lb	161.4/233.7	61.4/233.7	61.4/233.7	255.7/346.2	61.4/233.7
Refrigerant Type			R410a	R410a	R410a	R410a	R410a
Expansion Device			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Design Pressure, High / Low		psig	580/320	580/320	580/320	580/320	580/320
Refrigerant Piping	Liquid Side, OD (Flare Braze)	in	3/8	3/8	3/8	3/8	3/8
	Suction Side, OD (Flare Braze)	in	5/8	5/8	5/8	7/8	7/8
Connecting Wiring	Power Wiring		Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data	Sized Per NEC and Local Codes Based on Nameplate Electrical Data
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG	2-Core Stranded Shielded Cable 18AWG
Condensate Pipe Diameter, OD		in	1	1	1	1-5/8	1-5/8
Condensate Pump			Included	Included	Included	Not included (field supplied, field installed)	Not included (field supplied, field installed)
Electrical Data	MCA	A	5.7	6.30	6.9	8.5	10.0
	MOPD	A	15	15	15	15	15

Note: Limits connected capacity at 30%

Note: Testing Condition AHRI 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.

CARRIER VRF SYSTEMS: CONTROLS

Carrier controls provide maximum flexibility and regulation. They easily integrate with all Carrier HVAC lines and VRF systems, and they communicate with existing and third-party building management systems for a complete view of your entire system.



Individual Zone **Controls**

WIRELESS REMOTE CONTROLLER – 40VM900001

The Carrier VRF Wireless Remote Controller is a handheld thermostat that maintains room temperature by controlling indoor unit operation through transmission of signal that is free of obstruction.

- Mode setting
- Fan speed setting
- Setpoint display
- Louver swing setting
- ON / OFF
- Clock and timer setting
- Lock function
- Addressing capability

NON-PROGRAMMABLE WIRED REMOTE CONTROLLER – 40VM900002

The Carrier VRF Wired Remote Controller (non-programmable) is a wall-mounted thermostat that maintains room temperature by controlling system operation.

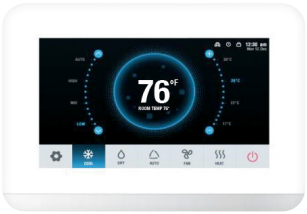
- Easy to use
- Mode setting
- Fan speed setting
- Dual setpoint control
- Louver swing setting
- ON / OFF
- Touch button
- Backlight
- Group control (max 16 indoor units)
- Addressing capability
- Error display

PROGRAMMABLE WIRED REMOTE CONTROLLER – 40VM900003

The Carrier VRF Wired Remote Controller (programmable) is a wall-mounted thermostat that maintains room temperature by controlling system operation.

- Easy to use
- Mode setting
- Fan speed setting
- Dual setpoint control
- Weekly scheduling
- Louver swing setting
- ON / OFF
- Touch button
- Backlight
- Group control (max 16 indoor units)
- Addressing capability
- Error display

TOUCH SCREEN WIRED REMOTE CONTROLLER – 40VM900005



The Touch Screen Wired Controller is a low voltage, wall-mounted controller that maintains room temperature by controlling the Carrier VRF system operation. The controller is capable of displaying temperature from 54° F to 86° F for standard indoor units and 50° F to 86° F for outside air units.

- Group control (max 16 indoor units)
- Dual setpoint control
- Weekly scheduling
- Touchscreen
- Mode setting: fan speed, swing
- Room temperature display
- Controls up to 384 indoor units
- Addressing capability
- Error code display
- 1° F temperature indication

24V INTERFACE – 40VM900008

The 24V Interface for Carrier VRF systems is a device that enables the use of a conventional 24VAC thermostat with indoor units. The Interface receives 24VAC signals for cool, heat and fan. This translates these commands to the system's communication protocol and sends the commands to the indoor units over the HA/HB communication bus.

- Cool / heat / fan inputs
- One interface per indoor unit
- Indoor use only

LOW PROFILE "BUTTON" SENSOR – 40VM900009

The Low Profile "Button" Sensor is ideal for locations where aesthetics are as important as the temperature measurement. The inconspicuous wall sensor mounts easily by pushing through a small 7/16" hole and secured with a peel off tape strip. The only visible portion is a flush 7/8" dot on the wall.

- Small flush sensor mounting
- Accurate direct air measurement
- Paintable with latex or oil base

Central **Controls**

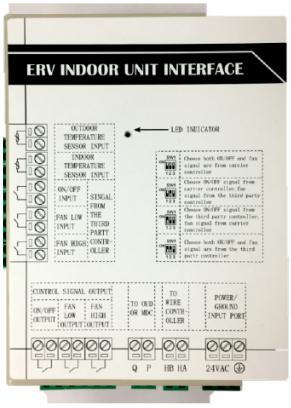
TOUCH SCREEN CENTRAL CONTROLLER – 40VM900006

The Touch Screen Central Controller is a low voltage, wall-mounted controller that provides site-level control of multiple Carrier VRF systems. The controller allows central management of mode, set-point and scheduling of indoor units.

- Three levels of account management for up to 20 users
- Remote access to the system
- Alarm notification via email
- Dual setpoint control
- Weekly scheduling
- Settings: mode, fan speed, swing, temperature range and dual setpoint control
- Digital input and digital output
- Controls up to 384 indoor units
- Recognize units automatically
- Error code display

ERV INTERFACE (DI/DO) – 40VM900007

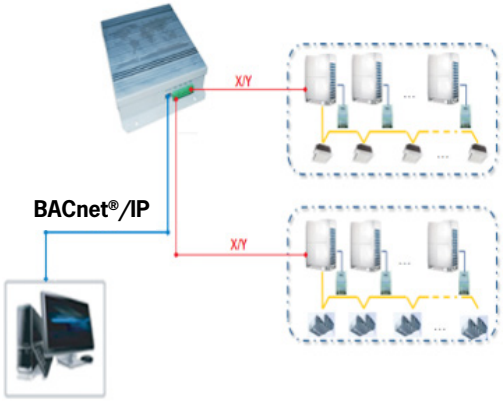
- Outdoor temperature sensor input
- Indoor temperature sensor input
- Compatible with third party controller input
  - ON / OFF
  - Fan low
  - Fan high
- Controls signal output
  - ON / OFF
  - Fan low
  - Fan high
- Connects to IDU



Building **Automation**

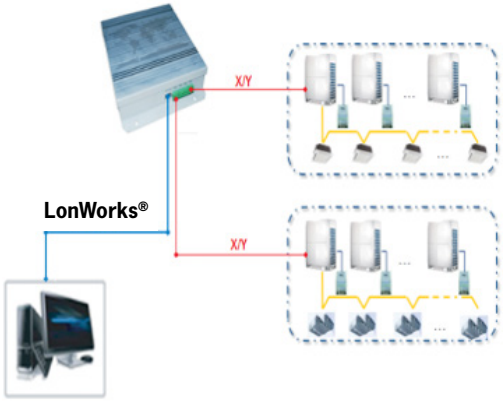
BACNET® AND WEB-BASED CENTRALIZED CONTROLLER – 40VM900052

- 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
- Compressor monitoring system



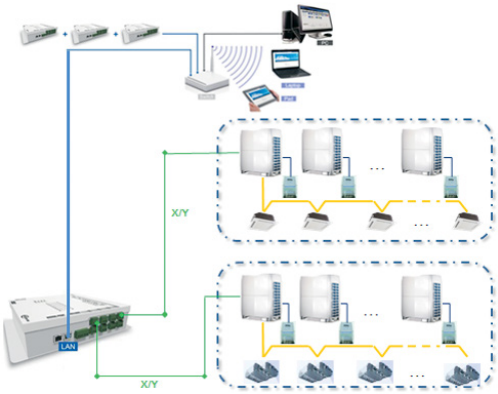
LONWORKS® – 40VM900053

- Can support up to 64 indoor units
- Indoor unit
  - Temperature set
  - Indoor temperature
  - Operate mode
  - Fault code
- Outdoor unit
  - Mode
  - Fault
  - Outdoor temperature
  - Fault code



ENERGY MANAGEMENT MODULE (EMM) – 40VM900051

- Energy Management Module (EMM)
- 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



Benchmark **Tools**

VROOM SELECTION SOFTWARE

VRoom selection software enables engineers to easily design, layout and prepare VRF systems for quote.

- Sleek drag-and-drop interface
- Quick global edits for wired controllers
- Table edit features for quick editing of multiple units

For more information, contact **VRoomhelp@carrier.com**.

SERVICE TECHNICAL TOOL

The Carrier VRF Service Technical Tool provides a graphical view of an entire system. It has a Port Check Function which checks to see if the communication wire is crossed with the refrigerant pipe. The Service Technical Tool is not required for start-up or commissioning a system.

The Service Technical Tool software can be downloaded for free on **hvacpartners.com.**

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Carrier provides our family of distributors with excellent support and training programs to keep them well-informed and equipped to sell every system.

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CarrierVRF.com

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