

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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CARRIER VARIABLE REFRIGERANT FLOW

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.

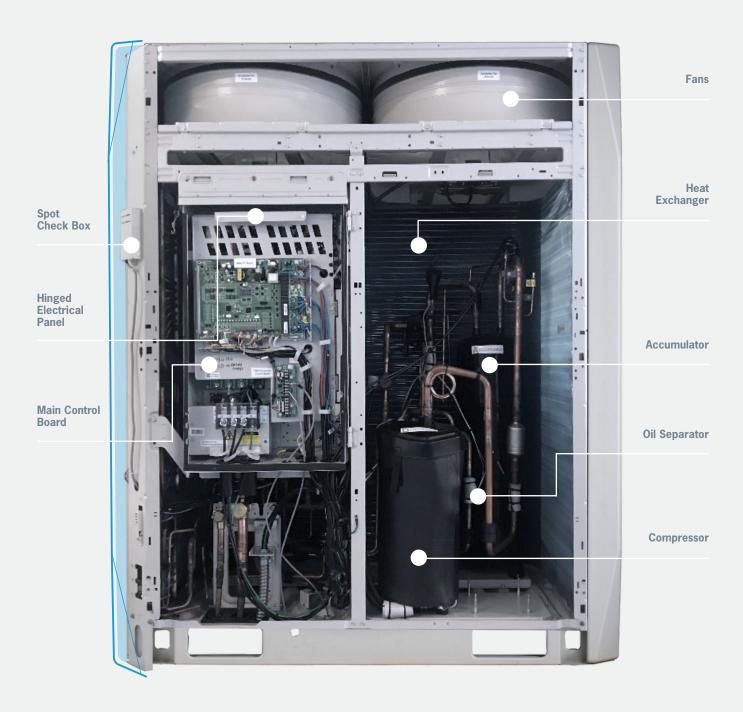


How? VRF system outdoor units have all inverter-driven compressors. This means their speed can be varied simply by changing the frequency of power supply to that compressor. As the speed changes, so does the amount of refrigerant delivered, allowing the compressor to operate continuously rather than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



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.



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.

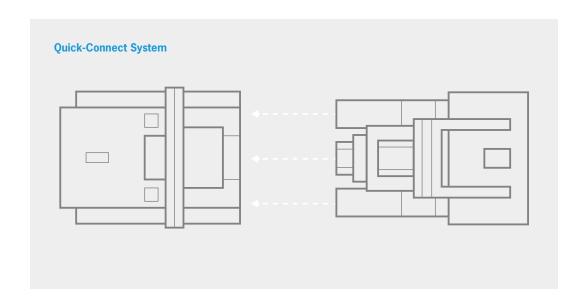
By design, Carrier systems are user-friendly, providing easy installation and operation. Combine this with our application, installation, and service training and software, and you have everything you need to be successful.

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 fieldprovided wiring with the included terminal accessory without having to unscrew each wire individually.

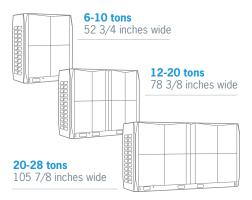
- **Soft Copper Lines**—Save installation time and effort with lightweight and durable piping that extends easily across larger spaces.
- No Manual Port Assignments—Easily address system errors through automatic assignment of ports to individual indoor units.
- Multiport Distribution Controller (MDC)— Reverse the refrigerant flow for six to 16 indoor units to provide simultaneous heating and cooling on heat recovery models.



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 -13° F and cooling in up to 125° F for heat recovery, and heating in as low as -5° F or cooling in up to 122° 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.



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.

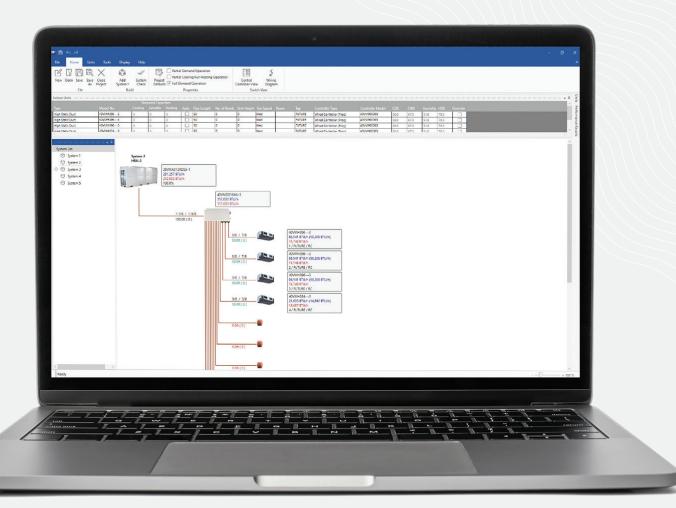
- **Warranties**—Standard warranty is 5 years for parts and components and 7 years for compressors. Special/extended warranties are available upon request.
- VRoom Selection Software—Once you've chosen Carrier VRF, easily design, layout and prepare VRF systems for quote with our advanced software, VRoom. 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



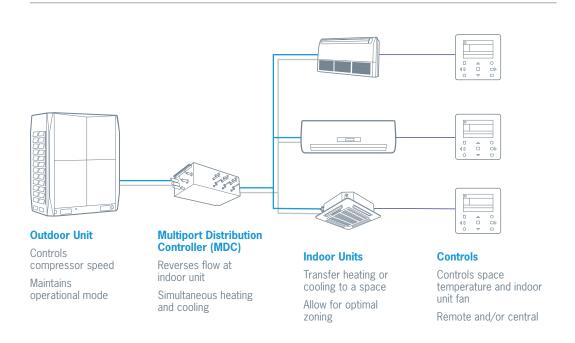
THE RIGHT SOLUTION FOR YOUR APPLICATION

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

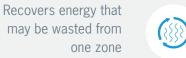
With a small footprint, the Carrier 2-pipe VRF heat recovery system is the perfect solution for new construction, retrofitting projects and expansions of medium-rise, wider buildings.

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.



Heat Recovery Benefits

Simultaneous heating and cooling



and transfers it to another

Connect up to three multiport distribution controllers

Achieve up to 28-ton capacity in a single chassis



CARRIER VARIABLE REFRIGERANT FLOW



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

CARRIER VARIABLE REFRIGERANT FLOW

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:

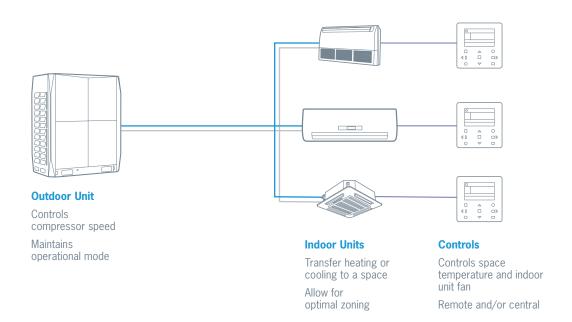
- Medium- or lowoccupancy buildings
- K-12 schools and university buildings
- Places of worship
- Banks and municipalities
- Retail spaces
- Storage facilities
- Parking garages

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



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

OUTDOOR UNITS: HEAT RECOVERY TECHNICAL SPECIFICATIONS

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		Nominal	kBtu/h	72.0	96.0	119.7
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	69.0	92.0	114.0
Heating Capacity ¹		Nominal	kBtu/h	80.0	108.0	126.0
(With Non-Ducted I Ducted)		Rated	kBtu/h	77.0	103.0	120.0
With Non-Ducted	Power Supply ²			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	4.2	6.2	9.3
	Cooling	IEER ³ Btu/W		24.6	23.7	22.8
Electrical		Power Consumption	kW	4.4	7.2	9.5
Characteristics (Nominal) ¹	Heating	SCHE ⁴	Btu/W*hr	30.0	30.0	30.0
With Ducted	Power Supply ²			208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Indoor Units		Power Consumption	kW	5.0	7.1	9.5
Electrical	Cooling	IEER ³	Btu/W*hr	24.2	24.3	23.2
Characteristics	Heating	Power Consumption	kW	5.7	8.0	9.8
(Nominal)1	пеашу	SCHE⁴	Btu/W*hr	27.4	27.7	26.7
		Height	in	64-3/8	64-3/8	64-3/8
External Dimension	IS	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 (Charg	ed Refrigerant A		lb	26.5	26.5	26.5
Electrical	Unit	MCA ⁶	A	43	45	46
Specifications	Offic	Recommended Fuse Size	A	50	50	50
Refrigerant Piping	Connecting Port	Gas Side (Main Pipe) (Brazing)	in	3/4	7/8	1-1/8
nemgerant riping	Diameter	Liquid Side (Main Pipe) (Brazing)	in	5/8	3/4	3/4
		Cooling	° F DB	5~125	5~125	5~125
Operation Temperature Range Heating °FW		°FWB	-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 Ir	ndoor Units		15	20	24
Maximum Capacit	y of Combined Ir	ndoor Units		50%~150%	50%~150%	50%~150%
Sound Pressure Le	evel Cooling / He	ating 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 $\pm\ 10\%.$

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 Ur	nit Model Name		38VMA144RDL5-1	38VMA168RDS5-1	38VMA192RDS5-1	38VMA216RDS5-1	38VMA240RDS5-1
Nominal Tons				12	14	16	18	20
Cooling Capacity ¹		Nominal	kBtu/h	142.8	165.9	191.1	214.2	231.0
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	136.0	158.0	182.0	204.0	220.0
Heating Capacity ¹		Nominal	kBtu/h	160.0	188.0	215.0	243.0	257.0
(With Non-Ducted Indoor Units / Ducted)		Rated	kBtu/h	150.0	180.0	204.0	222.0	230.0
With Non-Ducted	Power Supply ²			208/230V, 3-Phase, 60Hz				
Indoor Units	0 - 1 - 1	Power Consumption	kW	9.0	11.9	14.7	16.8	19.7
Electrical	Cooling	IEER ³	Btu/W*hr	24.4	23.1	23.9	23.0	22.4
Characteristics	Heating	Power Consumption	kW	9.6	13.3	16.2	18.0	20.2
(Nominal)1	пеаші	SCHE⁴	Btu/W*hr	26.5	27.0	28.2	27.3	27.0
With Ducted	Power Supply ²			208/230V, 3-Phase, 60Hz				
Indoor Units	Ozaliza	Power Consumption	kW	10.6	13.3	15.9	17.9	20.4
E	Cooling	IEER ³	Btu/W*hr	24.0	22.9	23.6	21.7	21.0
Electrical Characteristics		Power Consumption	kW	11.8	14.4	17.4	19.1	20.9
(Nominal) ¹	Heating	SCHE⁴	Btu/W*hr	26.5	25.2	25.5	26.5	26.5
,		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimension	S	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	Type / Quantity	,		INVERTER-driven Hermetic Scroll / 2				
Fan Unit	Air Volume		cfm	10,100	10,100	11,300	12,300	12,300
Refrigerant5 (Charge	ed Refrigerant Ar	nount)	lb	44.2	44.2	44.2	44.2	44.2
Electrical	11-2	MCA ⁶	Α	70	70	71	81	81
Specifications	Unit	Recommended Fuse Size	Α	80	80	80	90	90
Refrigerant	Connecting	Gas Side (Main Pipe) (Brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Brazing)	in	7/8	7/8	7/8	1-1/8	1-1/8
Operation Towns	uro Dongo	Cooling	° F DB	5~125	5~125	5~125	5~125	5~125
Operation Temperature Range 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 Inc	loor Units		29	34	39	44	49
Maximum Capacity	of Combined Inc	loor Units		50%~150%	50%~150%	50%~150%	50%~150%	50%~150%
Sound Pressure Lev	vel Cooling / Hea	ting 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 $\pm\ 10\%.$

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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).

OUTDOOR UNITS: HEAT RECOVERY TECHNICAL SPECIFICATIONS

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



	Outdoor U	nit Model Name		38VMA240RDL5-1	38VMA264RDS5-1	38VMA288RDS5-1	38VMA312RDS5-1	38VMA336RDS5-1
Nominal Tons				20	22	24	26	28
Cooling Capacity ¹		Nominal	kBtu/h	239.4	260.4	287.7	310.8	323.4
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	230.0	248.0	274.0	296.0	308.0
Heating Capacity ¹		Nominal	kBtu/h	270.0	295.0	323.0	343.0	357.0
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	256.0	282.0	298.0	314.0	322.0
With Non-Ducted Power Supply ²				208/230V, 3-Phase, 60Hz				
Indoor Units	Cooling	Power Consumption	kW	20.4	23.2	26.4	31.8	33.1
Electrical	Cooling	IEER ³	Btu/W*hr	22.4	22.0	21.0	20.2	19.5
Characteristics	Hooting	Power Consumption	kW	20.2	23.5	25.8	28.9	29.6
(Nominal)1	Heating	SCHE⁴	Btu/W*hr	30.0	29.6	29.3	28.5	28.0
With Ducted	Power Supply ²			208/230V, 3-Phase, 60Hz				
Indoor Units	0	Power Consumption	kW	20.7	23.2	28.0	31.2	33.1
Electrical	Cooling	IEER ³	Btu/W*hr	21.1	21.0	20.5	19.8	19.0
Characteristics	Haalisa	Power Consumption	kW	21.0	23.7	25.5	27.4	29.2
(Nominal) ¹	Heating	SCHE ⁴	Btu/W*hr	28.0	27.5	27.0	26.5	25.5
	`	Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimension	IS	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	Type / Quantity	,		INVERTER-driven Hermetic Scroll / 3				
Fan Unit	Air Volume		cfm	14,500	15,500	15,500	16,500	16,500
Refrigerant5 (Charg	ed Refrigerant A	mount)	lb	77.2	77.2	77.2	77.2	77.2
Electrical	11.21	MCA ⁶	Α	101	104	104	106	106
Specifications	Unit	Recommended Fuse Size	Α	110	110	110	110	110
Refrigerant	Connecting	Gas Side (Main Pipe) (Brazing)	in	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Oneration Temperature Range		Cooling	° F DB	5~125	5~125	5~125	5~125	5~125
		°FWB	-13~64	-13~64	-13~64	-13~64	-13~64	
Maximum External	Static Pressure		in WG	0.24 Max				
Maximum Number	of Connected In	door Units		49	54	59	64	64
Maximum Capacity	of Combined In	door Units		50%~150%	50%~150%	50%~150%	50%~150%	50%~150%
Sound Pressure Le	vel Cooling / Hea	ating 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 \pm 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		Nominal	kBtu/h	72.0	96.0	119.7
(With Non-Ducted Inc Ducted)	loor Units /	Rated	kBtu/h	69.0	92.0	114.0
Heating Capacity ¹		Nominal	kBtu/h	80.0	108.0	126.0
(With Non-Ducted Inc Ducted)	loor Units /	Rated	kBtu/h	77.0	103.0	120.0
With Non-Ducted	Power Supply	y ²		460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	4.2	6.2	9.3
Electrical	Cooling	IEER ³	Btu/W*hr	24.6	23.7	22.8
Characteristics	Heating	Power Consumption	kW	4.4	7.2	9.5
(Nominal) ¹	пеаші	SCHE⁴	Btu/W*hr	30.0	30.0	30.0
With Ducted	Power Supply	y ²		460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	5.0	7.1	9.6
Electrical	Cooling	IEER ³	Btu/W*hr	24.2	24.3	23.2
Characteristics	Llooting	Power Consumption	kW	5.7	8.0	9.8
(Nominal)1	Heating	SCHE⁴	Btu/W*hr	27.4	27.7	26.7
		Height	in	64-3/8	64-3/8	64-3/8
External Dimensions		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 / Quanti	ty		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 Ar	mount)	lb	26.5	26.5	26.5
Electrical	Unit	MCA ⁶	Α	20	22	22
Specifications	Unit	Recommended Fuse Size	Α	25	25	25
Refrigerant	Connecting	Gas Side (Main Pipe) (Brazing)	in	3/4	7/8	1-1/8
Piping	Port Diameter	Liquid Side (Main Pipe) (Brazing)	in	5/8	3/4	3/4
Operation Temperatu	ro Dongo	Cooling	° F DB	5~125	5~125	5~125
operation temperatu	it nallyt	Heating	°FWB	-13~64	-13~64	-13~64
Maximum External S	tatic Pressure		0.24 Max	0.24 Max	0.24 Max	
Maximum Number of	Connected Inc	door Units		15	20	24
Maximum Capacity of	f Combined Inc	door Units		50%~150%	50%~150%	50%~150%
Sound Pressure Leve	l Cooling / Hea	ting 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 \pm 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).

OUTDOOR UNITS: HEAT RECOVERY TECHNICAL SPECIFICATIONS

38VMR Heat Recovery Outdoor Unit

460V-3-60



	Outdoor L	Init Model Name		38VMA144RDL6-1	38VMA168RDS6-1	38VMA192RDS6-1	38VMA216RDS6-1	38VMA240RDS6-1
Nominal Tons				12	14	16	18	20
Cooling Capacity ¹		Nominal	kBtu/h	142.8	165.9	191.1	214.2	231.0
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	136.0	158.0	182.0	204.0	220.0
Heating Capacity ¹		Nominal	kBtu/h	160.0	188.0	215.0	243.0	257.0
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	150.0	180.0	204.0	222.0	230.0
With Non-Ducted	Power Supply	y ²		460V, 3-Phase, 60Hz				
Indoor Units	Cooling	Power Consumption	kW	9.0	11.9	14.7	16.8	19.7
	Cooling	IEER ³	Btu/W*hr	24.4	23.1	23.9	23.0	22.4
Electrical Characteristics		Power Consumption	kW	9.6	13.3	16.2	18.0	20.2
(Nominal) ¹	Heating	SCHE ⁴	Btu/W*hr	26.5	27.0	28.2	27.3	27.0
With Ducted	Power Supply	V ²		460V, 3-Phase, 60Hz				
Indoor Units	0 "	Power Consumption	kW	10.6	13.3	15.9	17.9	20.4
	Cooling	IEER ³	Btu/W*hr	24.0	22.9	23.6	21.7	21.0
Electrical Characteristics (Nominal) ¹		Power Consumption	kW	11.8	14.4	17.4	19.1	20.9
	Heating	SCHE⁴	Btu/W*hr	26.5	25.2	25.5	26.5	26.5
	·	Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimension	S	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	Type / Quanti	ity		INVERTER-driven Hermetic Scroll / 2				
Fan Unit	Air Volume		cfm	10,100	10,100	11,300	12,300	12,300
Refrigerant5 (Charge	ed Refrigerant	Amount)	lb	44.2	44.2	44.2	44.2	44.2
Electrical	Unit	MCA ⁶	Α	35	35	35	38	38
Specifications	UIIIL	Recommended Fuse Size	Α	40	40	40	40	40
Refrigerant	Connecting Port	Gas Side (Main Pipe) (Brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8
Piping	Diameter	Liquid Side (Main Pipe) (Brazing)	in	7/8	7/8	7/8	1-1/8	1-1/8
Operation Townson	Operation Temperature Range Cooling Heating		° F DB	5~125	5~125	5~125	5~125	5~125
Operation remperat			°FWB	-13~64	-13~64	-13~64	-13~64	-13~64
Maximum External Static Pressure in WG			in WG	0.24 Max				
Maximum Number	of Connected I	ndoor Units		29	34	39	44	49
Maximum Capacity	of Combined I	ndoor Units						
Sound Pressure Lev	vel Cooling / He	eating 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 Un	it Model Name		38VMA240RDL6-1	38VMA264RDS6-1	38VMA288RDS6-1	38VMA312RDS6-1	38VMA336RDS6-1
Nominal Tons				20	22	24	26	28
Cooling Capacity ¹		Nominal	kBtu/h	239.4	260.4	287.7	310.8	323.4
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	228.0	248.0	274.0	296.0	308.0
Heating Capacity ¹		Nominal	kBtu/h	270.0	295.0	323.0	343.0	357.0
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	256.0	282.0	298.0	314.0	322.0
With Non-Ducted	Power Supply	,		460V, 3-Phase, 60Hz				
Indoor Units	Cooling	Power Consumption	kW	20.4	23.2	26.4	31.8	33.1
Electrical	Cooling	IEER ³	Btu/W*hr	22.4	22.0	21.0	20.2	19.5
Characteristics	H. P.	Power Consumption	kW	20.2	23.5	25.8	28.9	29.6
(Nominal) ¹	Heating	SCHE⁴	Btu/W*hr	30.0	29.6	29.3	28.5	28.0
With Ducted	Power Supply			460V, 3-Phase, 60Hz				
Indoor Units	Oneline	Power Consumption	kW	20.7	23.9	28.0	31.2	33.2
E	Cooling	IEER ³	Btu/W*hr	21.1	21.0	20.5	19.8	19.0
Electrical Characteristics		Power Consumption	kW	21.0	23.7	25.5	27.4	29.2
(Nominal) ¹	Heating	SCHE ⁴	Btu/W*hr	28.0	27.5	27.0	26.5	25.5
,		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimension	S	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	у		INVERTER-driven Hermetic Scroll / 3				
raii Uliil	Air Volume		cfm	14,500	15,500	15,500	16,500	16,500
Refrigerant ⁵ (Charge	ed Refrigerant A	mount)	lb	77.2	77.2	77.2	77.2	77.2
Electrical	Unit	MCA ⁶	Α	52	54	54	55	55
Specifications	UIIIL	Recommended Fuse Size	Α	60	60	60	60	60
Refrigerant	Connecting Port	Gas Side (Main Pipe) (Brazing)	in	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8
Piping	Diameter	Liquid Side (Main Pipe) (Brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Cooling		Cooling	° F DB	5~125	5~125	5~125	5~125	5~125
Operation temperat	Operation Temperature Range Heating °FV		°FWB	-13~64	-13~64	-13~64	-13~64	-13~64
Maximum External	Static Pressure		in WG	0.24 Max				
Maximum Number	of Connected In	door Units		49	54	59	64	64
Maximum Capacity	of Combined In	door Units		50%~150%	50%~150%	50%~150%	50%~150%	50%~150%
Sound Pressure Lev	el Cooling / Hea	nting 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 \pm 10%.

³ Integrated Energy Efficiency Ratio

Simultaneous Cooling & Heating Efficiency
 The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

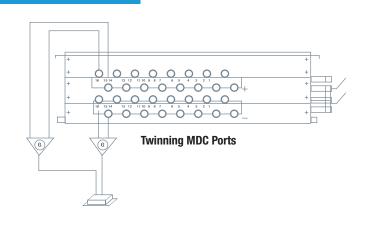
⁶ Select wire size based on larger value of MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

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.



Main MDC Units











				-			
	Outdoor Unit Model Na	ame	40VMD006M3	40VMD008M3	40VMD010M3	40VMD016M3	40VMD016ML-3
Power Supp	ly		208/230V, 1-Phase, 60Hz				
Number of F	Ports		6	8	10	16	16
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
W	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 Pres	sure, High / Low	psig	580/320	580/320	580/320	580/320	580/320
Connecting	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
Wiring	Signal Wiring	Signal Wiring		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 Na	me	40VMD006S3	40VMD008S3	40VMD010S3	40VMD016S3	
Power Suppl	y		208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	
Number of P	Number of Ports		6	8	10	16	
	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	ν In ΔΔ-1/2 γ 18 γ 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 Press	sure, High / Low	psig	580/320	580/320	580/320	580/320	
Connecting	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	
Wiring	Signal Wiring		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	

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38VMH-1PH Single-phase Heat Pump Outdoor Unit

208/230V-1-60

	Outdoor Ur	nit Model Name		38VMB036HDS3-1	38VMB048HDS3-1	38VMB060HDS3-1
Nominal Tons				3	4	5
Cooling Capacity ¹		Nominal	kBtu/h	36.0	48.0	60.0
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	36.0	48.0	60.0
Heating Capacity ¹		Nominal	kBtu/h	40.0	52.5	66
(With Non-Ducted I Ducted)	ndoor Units /	Rated kBtu/h		40.0	52.5	66
With Non-Ducted	Power Supply ²			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	3.1	4.6	6.1
Electrical	Cooling	SEER ³	Btu/W*hr	19.2	19.2	18.6
Characteristics	Llooting	Power Consumption	kW	3.1	4.3	5.8
Nominal)1	Heating	HSPF ⁴	Btu/W*hr	9.2	9.2	10.0
Nith Ducted	Power Supply ²			208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz	208/230V, 1-Phase, 60Hz
ndoor Units	0	Power Consumption	kW	2.9	4.7	6.1
Electrical	Cooling	SEER ³	Btu/W*hr	17.8	17.8	18.2
Characteristics	II P	Power Consumption	kW	3.0	4.2	5.7
	Heating	HSPF⁴	Btu/W*hr	9.6	9.6	10.0
		Height	in	52-1/4	52-1/4	52-1/4
External Dimension	IS	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	Type / Quantity			INVERTER-driven Hermetic Rotary / 1	INVERTER-driven Hermetic Rotary / 1	INVERTER-driven Hermetic Rotary / 1
Fan Unit	Air Volume		cfm	4,100	4,100	4,100
Refrigerant ⁵ (Charg	ed Refrigerant Ar	nount)	lb	8.6	8.6	8.6
Electrical		MCA ⁶	Α	36	38	40
Specifications	Unit	Recommended Fuse Size	Α	40	40	45
Refrigerant	Connecting	Gas Side (Main Pipe) (Brazing)	in	5/8	5/8	3/4
Piping	Port Diameter	Liquid Side (Main Pipe) (Brazing)	in	3/8	3/8	3/8
2 P T	D	Cooling	° F DB	5~118	5~118	5~118
Operation Tempera	ture Kange	Heating	°FWB	-13~64	-13~64	-13~64
Maximum Number	of Connected Inc	loor Units		5	7	9
Maximum Capacity	of Combined Inc	loor 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 \pm 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).

OUTDOOR UNITS: HEAT PUMP TECHNICAL SPECIFICATIONS

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		Nominal	kBtu/h	72.0	96.0	117.6	142.8
(With Non-Ducted In Ducted)	door Units /	Rated	kBtu/h	69.0	92.0	112.0	136.0
Heating Capacity ¹		Nominal	kBtu/h	80.0	108.0	126.0	160.0
(With Non-Ducted In Ducted)	door Units /	Rated	kBtu/h	77.0	103.0	120.0	150.0
With Non-Ducted Power Supply		2		208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	4.1	6.2	8.8	12.1
Electrical	Cooling	IEER ³	Btu/W*hr	22.5	23.5	22.5	19.5
Characteristics	Heating	Power Consumption	kW	4.5	7.2	9.0	12.1
(Nominal)1	Heating	COP ⁴	W/W	4.29	3.82	3.6	3.4
With Ducted	Power Supply	2		208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz	208/230V, 3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	5.1	7.5	9.6	12.3
Electrical	Cooling	IEER ³	Btu/W*hr	23.6	23.0	21.9	19.5
Characteristics	Heating	Power Consumption	kW	5.6	8.0	9.8	12.6
(Nominal)1	Heating	COP ⁴	W/W	3.85	3.63	3.45	3.35
		Height	in	64-3/8	64-3/8	64-3/8	64-3/8
External Dimensions	3	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	Type / Quantit	dy		INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 2
Fan Unit	Air Volume		cfm	7,650	7,650	8,250	8,830
Refrigerant ⁵ (Charge	d Refrigerant A	mount)	lb	37.5	37.5	37.5	37.5
Electrical	Unit	MCA ⁶	Α	45	46	46	70
Specifications	Unit	Recommended Fuse Size	Α	50	50	50	80
	Connecting	Gas Side (Main Pipe) (Brazing)	in	7/8	7/8	1-1/8	1-1/8
Refrigerant Piping	Port Diameter	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
		Cooling	° F DB	5~125	5~125	5~125	5~125
Operation Temperat	ure Kange	Heating	°FWB	-5~64	-5~64	-5~64	-5~64
Maximum External S	Maximum External Static Pressure in WG			0.24	0.24	0.24	0.24
Maximum Number	of Connected In	door Units		13	16	20	26
Maximum Capacity	of Combined In	door Units		50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Lev			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 (Com	bined)								
	Combination	n 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		Nominal	kBtu/h	163.8	184.8	205.8	224.7	258.3	283.5
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	156.0	176.0	196.0	214.0	246.0	270.0
Heating Capacity ¹		Nominal	kBtu/h	188.0	216.0	234.0	252.0	286.0	320.0
(With Non-Ducted In Ducted)	ndoor Units /	Rated	kBtu/h	180.0	206.0	224.0	240.0	270.0	300.0
With Non-ducted Indoor Units	Power supply ²	y ²		208/230V, 3-Phase, 60Hz					
	Cooling	Power Consumption	kW	11.0	12.9	15.3	18.6	23.9	27.0
Electrical	Cooling	IEER ³	Btu/W*hr	22.0	21.5	20.5	20.0	19.0	18.0
Characteristics	Heating	Power Consumption	kW	12.4	14.7	16.7	18.4	22.8	26.0
(Nominal)1	Heating	COP ⁴	W/W	3.80	3.75	3.62	3.54	3.27	3.20
With Ducted Indoor Units	Power supply ²	oly ²		208/230V, 3-Phase, 60Hz					
	Cooling	Power Consumption	kW	12.4	14.5	16.6	18.7	24.2	27.4
Electrical		IEER ³	Btu/W*hr	22.0	22.0	21.3	20.6	19.0	18.0
Characteristics	Heating	Power Consumption	kW	13.9	16.1	17.8	19.5	23.8	26.4
(Nominal) ¹		COP ⁴	W/W	3.64	3.60	3.54	3.47	3.20	3.20
	Height in		in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimension	3	Width	in	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				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 (Charge	ed Refrigerant A	mount)	lb	37.5 x 2					
Electrical	Unit	MCA ⁶	Α	46 + 45	46 + 46	46 + 46	46 + 46	70 + 46	70 + 70
Specifications		Recommended Fuse Size	Α	50 + 50	50 + 50	50 + 50	50 + 50	80 + 50	80 + 80
Refrigerant	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
Piping		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 Temperat	uro Dango	Cooling	° F DB	5~125	5~125	5~125	5~125	5~125	5~125
		Heating	°FWB	-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 50%~135%	33	36	39	46	50
	Maximum Capacity of Combined Indoor Units				50%~135%	50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Lev	Sound Pressure Level Cooling / Heating ⁷ dB(A)				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 $\pm\ 10\%.$

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.

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

OUTDOOR UNITS: HEAT PUMP TECHNICAL SPECIFICATIONS

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



MODULAR DESIGN

	Combination	Model Number		38VMA312HDS5-1	38VMA336HDS5-1	38VMA360HDS5-1	38VMA384HDS5-1	38VMA408HDS5-1	38VMA432HDS5-1
Combination Units Nominal Tons				38VMA120HDS5-1	38VMA120HDS5-1	38VMA120HDS5-1	38VMA144HDS5-1	38VMA144HDS5-1	38VMA144HDS5-1
				38VMA096HDS5-1	38VMA120HDS5-1	38VMA120HDS5-1	38VMA120HDS5-1	38VMA144HDS5-1	38VMA144HDS5-1
				38VMA096HDS5-1	38VMA096HDS5-1	38VMA120HDS5-1	38VMA120HDS5-1	38VMA120HDS5-1	38VMA144HDS5-1
				26	28	30	32	34	36
Cooling Capacity ¹		Nominal	kBtu/h	298.2	319.2	342.3	373.8	399.0	420.0
(With Non-Ducted Indoor Units / Ducted)		Rated	kBtu/h	284.0	304.0	326.0	356.0	380.0	400.0
Heating Capacity ¹		Nominal	kBtu/h	342.0	360.0	378.0	412.0	446.0	480.0
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	320.0	338.0	354.0	384.0	410.0	420.0
With Non-Ducted Indoor Units	Power Supply	y ²		208/230V, 3-Phase, 60Hz					
maoor ormo	Cooling	Power Consumption	kW	24.1	27.0	30.5	34.9	38.6	40.7
Electrical	Cooling	IEER ³	Btu/W*hr	20.0	19.0	17.5	18.0	17.5	17.0
Characteristics	Heating	Power Consumption	kW	25.9	28.5	31.0	33.7	36.1	38.9
(Nominal) ¹	пеаші	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					
muoor omio	0	Power Consumption	kW	25.7	27.4	29.9	35.9	38.3	40.3
Electrical	Cooling	IEER ³	Btu/W*hr	20.5	19.2	18.0	18.0	17.5	17.0
Characteristics	Heating	Power Consumption	kW	27.3	29.2	31.0	33.6	35.9	38.5
(Nominal) ¹		COP ⁴	W/W	3.30	3.25	3.20	3.20	3.20	3.20
External Dimensions Width in		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					
		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 / Quantit	tity		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
ran unit	Air Volume		cfm	8,250 + 7,650 x 2	8,250 x 2 + 7,650	8,250 x 3	8,830 + 8,250 x 2	8,830 x 2 + 8,250	8,830 x 3
Refrigerant ⁵ (Charg	ed Refrigerant A	mount)	lb	37.5 x 3					
Electrical		MCA ⁶	Α	46 + 46 + 46	46 + 46 + 46	46 + 46 + 46	70 + 46 + 46	70 + 70 + 46	70 + 70 + 70
Specifications	Unit	Recommended Fuse Size	А	50 + 50 + 50	50 + 50 + 50	50 + 50 + 50	80 + 50 + 50	80 + 80 + 50	80 + 80 + 80
	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
Refrigerant Piping		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 Towns	turo Dongo	Cooling	° F DB	5~125	5~125	5~125	5~125	5~125	5~125
Operation Tempera	une Hange	Heating	°FWB	-5~64	-5~64	-5~64	-5~64	-5~64	-5~64
Maximum External Static Pressure in WG			in WG	0.24	0.24	0.24	0.24	0.24	0.24
Maximum Number	of Connected In	door 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)			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 $\pm\ 10\%.$

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							
	Ou	itdoor 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	Power Supply ²			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
Indoor Units	Cooling	Power Consumption	kW	4.1	6.2	8.8	12.1
Electrical	Cooling	IEER ³	Btu/W*hr	22.5	23.5	22.5	19.5
Characteristics	Heating	Power consumption	kW	4.5	7.2	9.0	12.1
Nominal)1	пеаину	COP ⁴	W/W	4.29	3.8	3.60	3.40
With Ducted	Power Supply ²			460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz	460V, 3-Phase, 60Hz
ndoor Units	Cooling	Power Consumption	kW	5.1	7.5	9.6	12.3
Electrical	Cooling	IEER ³	Btu/W*hr	23.6	23.0	21.9	19.5
Characteristics	Heating	Power Consumption	kW	5.6	8.0	9.8	12.6
(Nominal) ¹		COP ⁴	W/W	3.85	3.63	3.45	3.35
External Dimensions Height Width Depth		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
		in	31-1/8	31-1/8	31-1/8	31-1/8	
Total Weight	al Weight Unit Ib			659	659	659	772
Compressor Fan Unit	Type / Quantity	ı	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 1	INVERTER-driven Hermetic Scroll / 2	
ran unit	Air Volume cfm			7650	7650	8250	8830
Refrigerant⁵ (Charge	d Refrigerant Am	nount)	lb	37.5	37.5	37.5	37.5
Electrical	Unit	MCA ⁶	А	22	25	25	33
Specifications	UIIIL	Recommended Fuse Size	A	25	30	30	35
	Connecting	Gas Side (Main Pipe) (Brazing)	in	7/8	7/8	1-1/8	1-1/8
Refrigerant Piping	Port	Liquid Side (Main Pipe) (Brazing)	in	3/8	3/8	1/2	1/2
iping	Diameter	Balance Pipe (Brazing)	in	1/4	1/4	1/4	1/4
Inoration Tomporate	uro Dongo	Cooling	° F DB	5~125	5~125	5~125	5~125
Operation Temperature Range		Heating	°FWB	-5~64	-5~64	-5~64	-5~64
Maximum External S	Static Pressure		in WG	0.24	0.24	0.24	0.24
Maximum Number o	of Connected Indo	oor Units		13	16	20	26
Maximum Capacity	of Combined Indo	oor Units		50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Lev	el Cooling / Heati	inq 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 $\pm\ 10\%.$

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).

OUTDOOR UNITS: HEAT PUMP TECHNICAL SPECIFICATIONS

38VMH Heat Pump Outdoor Unit

460V-3-60



MODULAR DESIGN

Dual Module (Con		on Model Number		38VMA168HDS6-1	38VMA192HDS6-1	38VMA216HDS6-1	38VMA240HDS6-1	38VMA264HDS6-1	38VMA288HDS6-1
				38VMA096HDS6-1	38VMA096HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA144HDS6-1	38VMA144HDS6-1
Combination Units				38VMA072HDS6-1	38VMA096HDS6-1	38VMA096HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA144HDS6-1
Nominal Tons				14	16	18	20	22	24
Cooling Capacity ¹		Nominal	kBtu/h	163.8	184.8	205.8	224.7	258.3	283.5
(With Non-Ducted Indoor Units / Ducted)		Rated	kBtu/h	156.0	176.0	196.0	214.0	246.0	270.0
Heating Capacity ¹		Nominal	kBtu/h	188.0	216.0	234.0	252.0	286.0	320.0
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	180.0	206.0	224.0	240.0	270.0	300.0
With Non-Ducted	Power Supply ²			460V, 3-Phase, 60Hz					
Indoor Units	0	Power Consumption	kW	11.0	12.9	15.3	18.6	23.9	27.0
	Cooling	IEER ³	Btu/W*hr	22.0	21.5	20.5	20.0	19.0	18.0
Electrical		Power Consumption	kW	12.4	14.7	16.7	18.4	22.8	26.0
Characteristics (Nominal) ¹	Heating	COP ⁴	W/W	3.80	3.75	3.62	3.54	3.27	3.20
With Ducted	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	
Indoor Units	Cooling	Power Consumption	kW	12.4	14.5	16.6	18.7	24.2	27.4
	Cooling	IEER ³	Btu/W*hr	22.0	22.0	21.3	20.6	19.0	18.0
Electrical	Heating	Power Consumption	kW	13.9	16.1	17.8	19.5	23.8	26.4
Characteristics (Nominal) ¹		COP ⁴	W/W	3.64	3.60	3.54	3.47	3.20	3.20
	Height in			64-3/8	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimensions		Width	in	52-3/4 x 2					
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	659 x 2	659 x 2	659 x 2	659 x 2	772 + 659	772 + 772
Compressor	Type / Quantity	У		INVERTER-driven Hermetic Scroll / 2	INVERTER-driven Hermetic Scroll / 3	INVERTER-driven Hermetic Scroll / 4			
Fan Unit	Air Volume cfm			7,650 x 2	7,650 x 2	8,250 + 7,650	8,250 x 2	8,250 + 8,830	8,830 x 2
Refrigerant5 (Charg	ed Refrigerant A	Amount)	lb	37.5 x 2					
Electrical	Unit	MCA ⁶	Α	25 + 22	25 + 25	25 + 25	25 + 25	33 + 25	33 + 33
Specifications		Recommended Fuse Size	Α	30 + 25	30 + 30	30 + 30	30 + 30	35 + 30	35 + 35
Defriesess	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
Refrigerant Piping		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		Cooling	° F DB	5~125	5~125	5~125	5~125	5~125	5~125
· · · · · ·	Operation Temperature Range 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 \pm 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 (Co	mbined)								
	Combinatio	on Model Number		38VMA312HDS6-1	38VMA336HDS6-1	38VMA360HDS6-1	38VMA384HDS6-1	38VMA408HDS6-1	38VMA432HDS6-1
				38VMA120HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA144HDS6-1	38VMA144HDS6-1	38VMA144HDS6-1
	Combi	ination Units		38VMA096HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA144HDS6-1	38VMA144HDS6-1
				38VMA096HDS6-1	38VMA096HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA120HDS6-1	38VMA144HDS6-1
Nominal Tons				26	28	30	32	34	36
Cooling Capacity ¹		Nominal	kBtu/h	298.2	319.2	342.3	373.8	399.0	420.0
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	284.0	304.0	326.0	356.0	380.0	400.0
Heating Capacity ¹		Nominal	kBtu/h	342.0	360.0	378.0	412.0	446.0	480.0
(With Non-Ducted I Ducted)	ndoor Units /	Rated	kBtu/h	320.0	338.0	354.0	384.0	410.0	420.0
With Non-Ducted Power Supply				460V, 3-Phase, 60Hz					
Indoor Units Cooling Electrical		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
Characteristics	Heating	Power Consumption	kW	25.9	28.5	31.0	33.7	36.1	38.9
(Nominal) ¹	Heating	COP ⁴	W/W	3.43	3.31	3.20	3.20	3.20	3.20
With Ducted	Power Supply ²			460V, 3-Phase, 60Hz					
Indoor Units	Cooling	Power Consumption	kW	25.7	27.4	29.9	35.9	38.3	40.3
Flactrical	Cooling	IEER ³	Btu/W*hr	20.5	19.2	18.0	18.0	17.5	17.0
Electrical Characteristics	H P	Power Consumption	kW	27.3	29.2	31.0	33.6	35.9	38.5
(Nominal) ¹	Heating	COP ⁴	W/W	3.30	3.25	3.20	3.20	3.20	3.20
,		Height	in	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8	64-3/8
External Dimension	S	Width	in	52-3/4 x 3					
		Depth	in	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8	31-1/8
Total Weight	Unit		lb	659 x 3	659 x 3	659 x 3	772 + 659 x 2	772 x 2 + 659	772 x 3
Compressor	Type / Quantity	1		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
Fan Unit	Air Volume		cfm	8,250 + 7,650 x 2	8,250 x 2 + 7,650	8,250 x 3	8,830 + 8,250 x 2	8,250 x 2 + 8,830	8,830 x 3
Refrigerant ⁵ (Charg	ed Refrigerant A	mount)	lb	37.5 x 3					
Electrical	Unit	MCA ⁶	Α	25 + 25 + 25	25 + 25 + 25	25 + 25 + 25	33 + 25 + 25	33 + 33 + 25	33 + 33 + 33
Specifications	Offic	Recommended Fuse Size	Α	30 + 30 + 30	30 + 30 + 30	30 + 30 + 30	35 + 30 + 30	35 + 35 + 30	35 + 35 + 35
Defricance	Connecting	Gas Side (Main Pipe) (Brazing)	in	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8
Refrigerant Piping	Port Diameter	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 Tempore	turo Dango	Cooling	° F DB	5~125	5~125	5~125	5~125	5~125	5~125
operation rempera	Operation Temperature Range Heating ° F V		°FWB	-5~64	-5~64	-5~64	-5~64	-5~64	-5~64
Maximum External	Maximum External Static Pressure in WG			0.24	0.24	0.24	0.24	0.24	0.24
Maximum Number	Maximum Number of Connected Indoor Units			53	56	59	63	64	64
Maximum Capacity	Maximum Capacity of Combined Indoor Units			50%~135%	50%~135%	50%~135%	50%~135%	50%~135%	50%~135%
Sound Pressure Le	Sound Pressure Level Cooling / Heating ⁷ dB(r			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 \pm 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.

Select wire size based on larger value of MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
 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 Capac	city kBtu/h (1	īon)				
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 Capa	city 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		40VMF009A3	40VMF012A3	40VMF015A3	40VMF018A3	40VMF024A3	40VMF030A3	40VMF036A3	40VMF048A3
Power Supply			208/230V, 1-Phase, 60Hz							
Total Cooling C	apacity	Btu/H	9,000	12,000	15,000	19,100	24,000	30,000	36,000	48,000
Sensible Coolin	ng Capacity	Btu/H	8,620	10,880	13,370	18,220	18,350	22,330	26,240	32,390
Heating Capaci	ity	Btu/H	10,900	13,600	17,000	21,500	27,000	34,000	40,000	54,000
Indoor Fan	Туре		DC							
Motor	Input	W	40	54	67	153.5	85.4	131.7	182.7	202.3
	Low	cfm	330	390	460	610	610	680	800	950
Indoor Airflow	Medium	cfm	390	460	560	700	700	800	950	1,100
	High	cfm	460	560	680	1,000	800	950	1,100	1,200
	Low	dB(A)	32.1	33.0	37.0	40.2	40.2	42.1	47.3	50.5
Indoor Unit Sound Level	Medium	dB(A)	34.0	37.3	41.5	43.1	42.5	45.1	50.4	54.0
Journa Level	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							
	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 Typ	ре		R410a							
Expansion Dev	ice		Electronic Expansion Valve							
Design Pressur	re, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8
Piping	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							
3	Signal Wiring		2-Core Stranded Shielded Cable 18AWG							
Condensate Pip Diameter, OD	ре	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 Lif	ft		Included							
Electrical	MCA	А	0.73	0.91	1.10	2.00	1.30	1.70	2.30	2.40
Data	MOPD	Α	15	15	15	15	15	15	15	15



40VMC Compact 4-Way Cassette

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

- Integrated condensate lift up to 23.5"
- Panel accessory required, model number 40VMC001----

	Indoor Unit Model Name		40VMC005A3	40VMC007A3	40VMC009A3	40VMC012A3	40VMC015A3
Power Supply			208/230V, 1-Phase, 60Hz				
Total Cooling C	Capacity	Btu/H	5,070	7,100	9,130	12,170	15,210
Sensible Coolin	ng Capacity	Btu/H	4,450	5,470	6,330	8,050	9,490
Heating Capac	city	Btu/H	5,000	8,000	10,000	13,000	17,000
Indoor Fan	Туре		DC	DC	DC	DC	DC
Motor	Input	W	16	16	16	24	24
	Low	cfm	241	229	229	253	253
Indoor Airflow	Medium	cfm	241	282	282	306	306
7 1111044	High	cfm	300	306	306	359	359
	Low	dB(A)	32.9	34.7	34.7	38.1	38.1
Indoor Unit Sound Level	Medium		32.9	38.5	38.5	42.3	42.3
Count Love	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				
	Net / Gross Weight		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				
ranei / Gillie	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 Typ	ое		R410A	R410A	R410A	R410A	R410A
Expansion Dev	vice		EXV	EXV	EXV	EXV	EXV
Design Pressu	re, High / Low	psig	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	1/4
Piping	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	1/2
Connecting	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
Wiring Signal Wiring			2-Core Stranded Shielded Cable 18AWG				
Condensate Pi	pe Diameter, OD	in	1	1	1	1	1
Condensate Li	ft		Included	Included	Included	Included	Included
Electrical	MCA	Α	0.38	0.38	0.38	0.53	0.53
Data	MOPD	Α	15	15	15	15	15

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

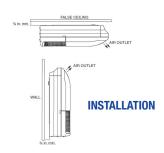
Indoo	or Unit Model Name	;	40VMW0053	40VMW0073	40VMW0093	40VMW0123	40VMW0153	40VMW0183	40VMW0243	40VMW0303
Power Supply	,		208/230V, 1-Phase, 60Hz							
Total Cooling (Capacity	Btu/H	5,000	7,500	9,500	12,000	15,000	18,000	24,000	30,000
Sensible Cooli	ing Capacity	Btu/H	4,060	5,640	6,520	7,930	10,140	12,040	15,330	18,950
Heating Capac	city	Btu/H	6,000	8,500	10,900	13,500	17,000	21,000	27,000	34,000
Indoor Fan	Туре		DC							
Motor	Input	W	11	25	25	30	35	45	75	85
	Low	cfm	245	245	245	250	380	440	460	480
Indoor Airflow	Medium	cfm	245	270	270	280	420	470	530	600
7	High	cfm	245	320	320	360	480	560	650	770
	Low	dB(A)	31.7	31.2	31.8	32.8	38.4	38.9	36.8	38.1
Indoor Unit Sound Level	Medium	dB(A)	31.7	32.2	32.6	34.6	39.6	40.2	42.0	43.6
Count Love	High	dB(A)	31.7	34.0	34.5	36.4	41.7	41.8	43.2	48.3
11-2	Dimensions, W x H x D	in	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			
Unit	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 Ty	pe	'	R410a							
Expansion De	vice		Electronic Expansion Valve							
Design Pressu	ıre, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8
Piping	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							
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG							
Condensate P	ipe Diameter, OD	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Electrical	MCA	Α	0.29	0.45	0.45	0.45	0.45	0.45	0.86	0.86
Data	MOPD	А	15	15	15	15	15	15	15	15



40VMU Underceiling Unit Floor Console (Exposed)

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



Indo	or Unit Model Name	;	40VMU0123	40VMU0153	40VMU0183	40VMU0243	40VMU0303	40VMU0363	40VMU0483
Power Supply			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 Cooli	ing Capacity	Btu/H	8,540	10,820	12,420	15,980	20,080	26,230	33,660
Heating Capac	city	Btu/H	13,500	17,000	21,000	27,000	34,000	40,000	54,000
Indoor Fan	Туре		DC Motor						
Motor	Input	W	24	47	53	80	107	67 x 2	115 x 2
	Low	cfm	259	359	394	494	624	906	929
Indoor Airflow	Medium	cfm	294	412	424	529	676	976	1,000
74111044	High	cfm	335	441	471	571	729	1,094	1,353
	Low	dB(A)	35.8	41.7	44.1	50.2	50.4	48.4	50.6
Indoor Unit Sound Level	Medium	dB(A)	37.7	45.4	46.5	52.0	52.1	50.3	52.3
Oddila Lovei	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	50-1/2 x 26 x 8	66 x 27 x 10	66 x 27 x 10			
UIIIL	Net / Gross Weight	lb	57/71	62/75	62/75	62/75	77/90	106/128	106/128
Refrigerant Ty	ре		R410a						
Expansion De	vice		Electronic Expansion Valve						
Design Pressu	ıre, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	3/8	3/8	3/8	3/8	3/8
Piping	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						
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG						
Condensate P	ipe Diameter, OD	in	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Electrical	MCA	Α	0.44	0.73	0.87	1.20	1.40	1.80	2.80
Data	MOPD	Α	15	15	15	15	15	15	15

40VMR

Floor Console (Recessed)

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

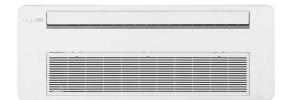
- Washable filter in an adjustable (1"-2") filter rack
- External static pressure up to 0.15



Indoo	r Unit Model Nam	е	40VMR0073	40VMR0093	40VMR0123	40VMR0153	40VMR0183	40VMR0243
Power Supply			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	1	Btu/H	8,000	10,000	13,000	17,000	20,000	27,000
Indoor Fan	Туре		DC Motor					
Motor	Input	W	19	19	25	41	27	79
	Low	cfm	253	253	271	347	365	553
Indoor Airflow	Medium	cfm	276	276	335	424	418	635
	High	cfm	300	300	400	500	488	776
Indoor External S	tatic Pressure	in WG	0.12	0.12	0.12	0.12	0.12	0.12
	Low	dB(A)	35.7	35.8	32.5	36.8	32.8	42.5
Indoor Unit Sound Level	Medium	dB(A)	38.2	37.9	36.3	41.7	35.5	45.2
554.14 25751	High	dB(A)	39.9	39.8	40.3	45.3	39.0	49.9
11.2	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
Unit	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	е		Electronic Expansion Valve					
Design Pressure	, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	3/8	3/8
Piping	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	5/8	5/8
Connecting	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
Wiring	Signal Wiring		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
Electrical Data	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.

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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

Indo	oor Unit Model Name		40VMI0053	40VMI0073	40VMI0093	40VMI0123	40VMI0153	40VMI0183	40VMI0243
Power Supply			208/230V, 1-Phase, 60Hz						
Total Cooling Ca	apacity	Btu/H	5,070	7,100	9,130	12,170	15,210	18,250	24,340
Sensible Coolin	g Capacity	Btu/H	4,370	5,530	6,900	8,590	10,660	12,950	16,130
Heating Capaci	ty	Btu/H	6,000	8,000	10,000	13,500	17,000	21,000	27,000
Indoor Fan	Туре		DC						
Motor	Input	W	10	10	10	15	20	30	31
	Low	cfm	143	143	180	213	309	387	408
Indoor Airflow	Medium	cfm	174	181	226	266	345	429	472
	High	cfm	198	227	273	310	379	472	517
	Low	dB(A)	28.5	29.4	32.5	36.1	36.3	40.8	42.2
Indoor Unit Sound Level	Medium	dB(A)	29.6	32.0	36.0	41.0	38.1	43.1	43.3
000110 20101	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	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			
Offic	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
Daniel / Crillia	Dimensions, W x H x D	in	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			
Panel / Grille	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 Typ	e		R410a						
Expansion Devi	ce		Electronic Expansion Valve						
Design Pressur	e, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	1/4	3/8	3/8
Piping	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						
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG						
Condensate Pip	oe Diameter, OD	in	1	1	1	1	1	1	1
Condensate Life	t		Included						
Electrical	MCA	A	0.29	0.29	0.29	0.37	0.44	0.58	0.58
Data	MOPD	Α	15	15	15	15	15	15	15

Note: Limits connected capacity at 30%.

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		40VML0073	40VML0093	40VML0123	40VML0153	40VML0183	40VML0243
Power Supply			208/230V, 1-Phase, 60Hz					
Total Cooling Cap	pacity	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	1	Btu/H	8,000	10,000	13,500	17,000	21,000	27,000
Indoor Fan	Туре		DC	DC	DC	DC	DC	DC
Motor	Input	W	25	25	32	43	56	68
	Low	cfm	224	224	236	306	353	471
Indoor Airflow	Medium	cfm	253	253	294	367	424	565
	High	cfm	283	283	353	459	530	701
Indoor External S	tatic Pressure	in WG	0-0.20	0-0.20	0-0.20	0-0.20	0-0.20	0-0.20
	Low	dB(A)	31.4	31.0	33.0	33.2	36.0	37.0
Indoor Unit Sound Level	Medium	dB(A)	32.0	32.0	34.6	35.2	38.0	38.8
Oodild Level	High	dB(A)	34.0	34.5	37.0	36.7	40.2	41.3
11-2	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
Unit	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	е		Electronic Expansion Valve					
Design Pressure,	, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	3/8	3/8
Piping (in)	Suction Side, OD (Flare)	in	1/2	1/2	1/2	1/2	5/8	5/8
Connecting	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
Wiring	Signal Wiring		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
Floatrias! Date	MCA	Α	0.50	0.50	0.60	0.80	0.95	1.18
Electrical Data	MOPD	Α	15	15	15	15	15	15



40VMMMedium 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

muoor	Unit Model Nam	е	40VMM007A3	40VMM009A3	40VMM012A3	40VMM015A3	40VMM018A3	40VMM024A3	40VMM030A3	40VMM036A3	40VMM048A3
Power Supply			208/230V, 1-Phase, 60Hz								
Total Cooling Ca	pacity	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	у	Btu/H	8,000	10,000	13,600	17,000	21,000	27,000	34,000	42,000	54,000
Indoor Fan	Туре		DC								
Motor	Input	W	50	50	135	145	185	230	290	325	370
	Low	cfm	220	220	320	400	480	570	780	860	980
Indoor Airflow	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 S	Static Pressure	in WG	0.32	0.32	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	Low	dB(A)	31.8	31.8	32.7	31.4	31.9	34.2	39.4	40.8	41.2
Indoor Unit Sound Level	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
11-2	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
Unit	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								
Expansion Device	e		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	Liquid Side, OD (Flare)	in	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8
Piping	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								
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG								
Condensate Pipe	e Diameter, OD	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Condensate Lift			Included								
Electrical Data	MCA	Α	1.25	1.25	3.13	3.13	3.13	3.13	5.00	5.00	5.00
LIGULIUAI DALA	MOPD	Α	15	15	15	15	15	15	15	15	15

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		40VMH0243	40VMH0303	40VMH0363	40VMH0483	40VMH0543	40VMH0723	40VMH09643
Power Supply			208/230V, 1-Phase, 60Hz						
Total Cooling Ca	apacity	Btu/H	24,000	30,000	36,000	48,000	53,500	72,000	96,000
Sensible Cooling	g Capacity	Btu/H	16,520	20,500	24,420	32,600	38,790	50,920	64,570
Heating Capacit	ty	Btu/H	27,000	34,000	40,000 54,000		60,000	81,000	108,000
Indoor Fan	Туре		DC						
Motor	Input	W	81	140	190	220	420	245*2	395*2
	Low	cfm	524	647	882	1,041	1,412	1,559	2,076
Indoor Airflow	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
	Low	dB(A)	44.7	43.3	49.1	48.3	52.0	48.7	52.4
Indoor Unit Sound Level	Medium	dB(A)	47.8	46.9	52.8	51.8	55.7	52.2	54.7
oodiid Lovoi	High	dB(A)	50.9	51.2	55.5	54.9	58.1	55.9	56.4
11.2	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
Unit	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	е		R410a						
Expansion Devi	се		Electronic Expansion Valve						
Design Pressure	e, High / Low	psig	580/320	580/320	580/320	580/320	580/320	580/320	580/320
Refrigerant	Liquid Side, OD (Flare Braze)	in	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Piping	Suction Side, OD (Flare Braze)	in	5/8	5/8	5/8	5/8	5/8	7/8	7/8
Connecting	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
Wiring	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 Pip	e Diameter, OD	in	1	1	1	1	1	1-5/8	1-5/8
Condensate Pur	mp		Included	Included	Included	Included	Included	Not included (field supplied, field installed)	Not included (field supplied, field installed)
Electrical Data	MCA	Α	5.70	7.10	7.30	7.60	7.80	9.70	10.20
eiechicai data	MOPD	Α	15	15	15	15	15	15	15



40VMV Vertical AHU

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

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

Indoor Unit Model Name			40VMV0123	40VMV0183	40VMV0243	40VMV0303	40VMV0363	40VMV0483	40VMV0543
Power Supply			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	<u> </u>		13,500	21,000	27,000	34,000	40,000	54,000	60,000
Indeed For Makes	Туре		DC						
Indoor Fan Motor	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 Stati	c 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
Souria Level	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	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						
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						
	Signal Wiring		2-Core Stranded Shielded Cable 18AWG						
Condensate Pipe Diameter, OD in		in	3/4" NPT						
Flootrical data	MCA	Α	1.5	3.80	3.80	3.80	5.30	5.30	7.20
Electrical data	MOPD	Α	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)							•	•

40VMAOutside 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			40VMA0363	40VMA0483	40VMA0543	40VMA0723	40VMA0963
Power Supply			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	Туре		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 W		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				
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				
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	Α	5.7	6.30	6.9	8.5	10.0
	MOPD	Α	15	15	15	15	15

Note: Limits connected capacity at 30%

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.

ON / OFF Mode setting

 Clock and timer setting Fan speed setting

 Setpoint display Lock function

Louver swing setting 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

Touch button

Mode setting

Backlight

Fan speed setting

Group control (max 16 indoor units)

Dual setpoint control

Addressing capability

Louver swing setting

Error display

ON / OFF



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





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, setpoint and scheduling of indoor units.

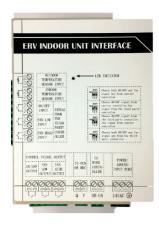
- management for up to 20 users
- Remote access to the system
- Alarm notification via email
- Dual setpoint control
- Weekly scheduling
- Three levels of account Settings: mode, fan speed, swing, temperature range and dual setpoint control
 - Digital input and digital output
 - Controls up to 384 indoor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

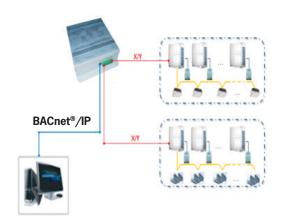


Building Automation

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

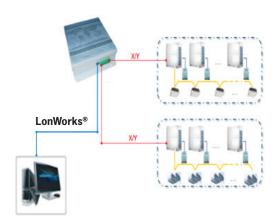
- Outdoor unit
- Mode
- Outdoor temperature
- Error code
- Compressor monitoring system



LONWORKS® - 40VM900053

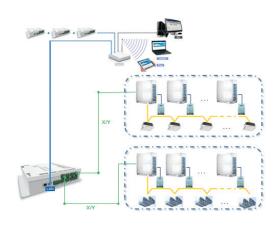
- Can support up to 64 indoor units
- Indoor unit
- Temperature set
- Indoor temperature
- Operate mode
- Fault code

- 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**.

Service, Support & Product Training

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

For more product information visit **CarrierVRF.com**



Since 1902, Carrier has been the brand you've trusted for all your heating and cooling solutions. We've continued to make innovative products that meet the demands of tomorrow. Carrier's family of Ductless and VRF systems deliver efficiency, performance and control thanks to advanced Inverter technology.

When it comes to creating comfort, one size or system may not fit all, but one name does: **Carrier.**



CarrierVRF.com | 1-800-CARRIER

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