VARIABLE REFRIGERANT FLOW
(VRF) SYSTEMS PRODUCT CATALOG

bryant®
Heating & Cooling Systems

WHATEVER IT TAKES.®

Two-Pipe Heat Recovery
and Heat Pump Systems

Spring 2018 Edition

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Variable Refrigerant Flow

IT TAKES
a More Flexible Solution.

Give buildings the ultimate in heating and cooling flexibility with a Bryant® Variable Refrigerant Flow (VRF) system. A great solution for virtually any commercial or large residential project, a Bryant VRF system moves refrigerant to the specific zone that needs to be heated or cooled, delivering just what each zone needs. In addition, Bryant VRF Heat Recovery systems can cool one room while heating another or simply provide comfort to the zones that are in use.

In addition to ultimate heating and cooling flexibility, a Bryant VRF system also provides the following benefits:

Smart Comfort | **Superior Performance** | **Excellent Reliability** | **Small Footprint**

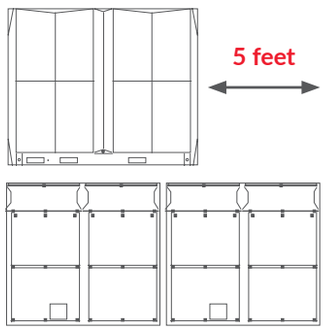
BRYANT® VRF ADVANTAGES

- Utilizes a 2-pipe system for both heat recovery and heat pump
- A single outdoor VRF condenser can power up to 64 independent indoor units
- Software calculates the amount of refrigerant required to ensure desired comfort level for each and every room
- Small footprint and fewer piping connections
- External spot-check function for easy servicing
- Heat Recovery has single point electrical connection, making maintenance easy and helps minimize installation cost.
- No manual port assignment, easy addressing and quick connects
- Single heat recovery system eliminates intricate twinning piping
- Simplified piping arrangement for ease of future expansion, perfect for tenant fit-out applications
- Simplified start-up and addressing process
- Quick-connect communication wires

REVOLUTIONARY DESIGN

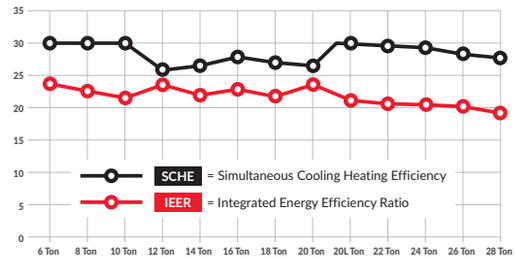
Small Footprint

VRF systems provide several installation advantages by eliminating the need to install large distribution fans, water pumps and large pipes. VRF systems do not require dedicated maintenance rooms or service shafts, freeing up valuable real estate space in the buildings. The Bryant® VRF Heat Recovery requires less space because of its non-modular design. For example, a 20 ton system is 40% smaller compared to other VRF outdoor units in the marketplace.



High Efficiency

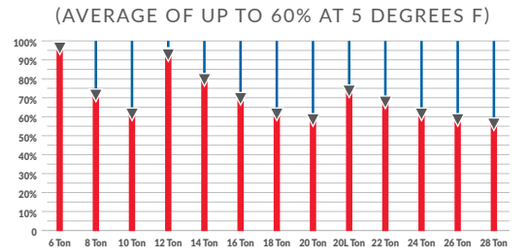
Bryant VRF achieves high efficiency in cooling and heating through the use of all DC Inverter compressors and all DC fan motors as well as high-efficiency heat exchangers. The cooling IEER is 24.6, and the heating SCHE is 30.0.



Bryant VRF HR with non-ducted indoor units under AHRI rating

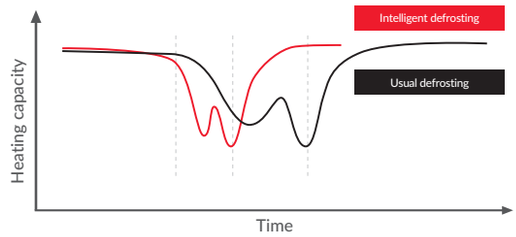
High Heating Performance

The Bryant VRF system provides heating down to -13° F with up to 60% of the rated heating capacity. This is just one more way it delivers comfort solutions for any indoor space, anytime of the year.



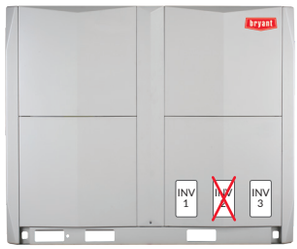
Enhanced Defrost Control

The enhanced defrost control can adjust the defrosting cycle time based on system operating environments. This reduces the time the system spends in defrost, improving overall heating performance. In addition, feeding hot gas through the bottom row of the outdoor coil eliminates the need for basepan heater accessories, improving system reliability.



ADVANCED TECHNOLOGY

FAULTY
COMPRESSOR
easily isolated

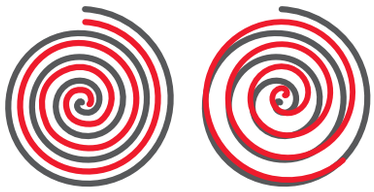


Multiple Inverter-driven Compressors*

Inverter-driven compressors remove inrush currents, eliminating on/off power surges as the system adjusts to the building's cooling and heating demands. Compressors operate the majority of the time within the most efficient frequency range, 50 ~ 80Hz.

Multiple Inverter-driven compressors means greater backup capability in case of a faulty compressor. If that happens, the faulty compressor can be easily isolated while the system continues to operate, maintaining comfort until the faulty compressor is addressed.

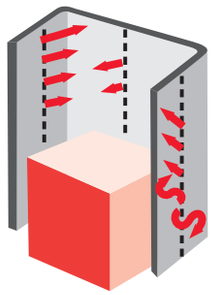
* Some outdoor units only have one compressor.



Symmetric Scroll Wrap | Asymmetric Scroll Wrap

Asymmetric Scroll Compressor Design

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



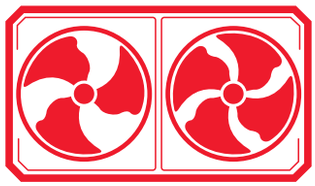
Heat Exchanger

High Performance Heat Exchanger

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

Reliability

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



Condenser Fans

Advanced Silent Technology Fan Blade Design

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

* The average business office is about 60 dB(A).

Hinged Electrical and Control Design

Hinged Electrical and Control Design

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

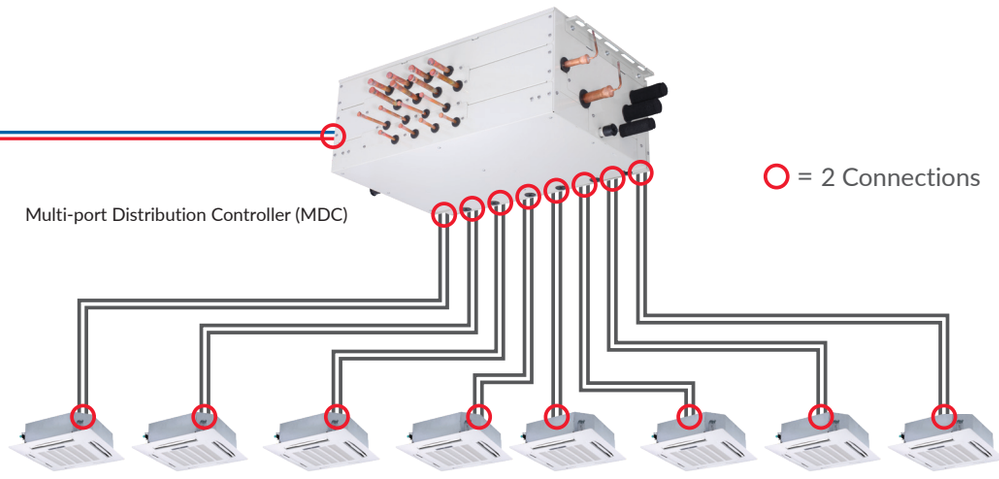
Flexibility

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

Reduced Piping Connections

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

Two-pipe Heat Recovery system

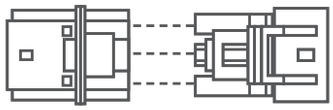


INSTALLATION MADE SIMPLE

Two-pipe Heat Recovery

Single Chassis Design (Heat Recovery Only)

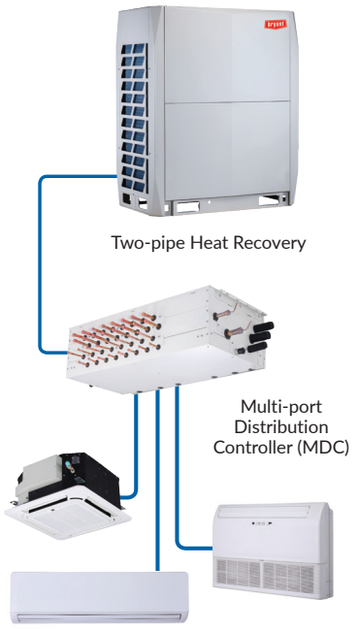
The single chassis design reduces the footprint of the outdoor unit. It reduces electrical connections by providing a single-point power connection. And, thanks to a non-modular design that eliminates the need to twin outdoor units together in the field, it reduces the amount of piping work that has to be done on site.



Quick Connects Controls

Quick Connects Controls

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



Controls Wiring Method

The controls wiring method more closely follows the piping arrangement. Heat pump systems use a daisy chain control wire configuration, while heat recovery systems use a hub and spoke design to wire from the outdoor unit to the MDC and then from the MDC to each indoor unit. By allowing the control wire to follow the piping design, installation becomes more intuitive for the contractor.

Ease of Maintenance and Installation

Bryant® VRF systems require little maintenance beyond an annual inspection, changing indoor filters, inspecting and cleaning condensate drains, and cleaning the outdoor condenser coil with water. In addition to simplified maintenance, Bryant VRF systems are constantly monitoring to ensure that the system is operating within design parameters and will provide feedback and error codes when they occur. Bryant VRF outdoor units were engineered for ease of accessibility, allowing all of the major components to be serviced and replaced quickly.

Simple Wired Remote Controller

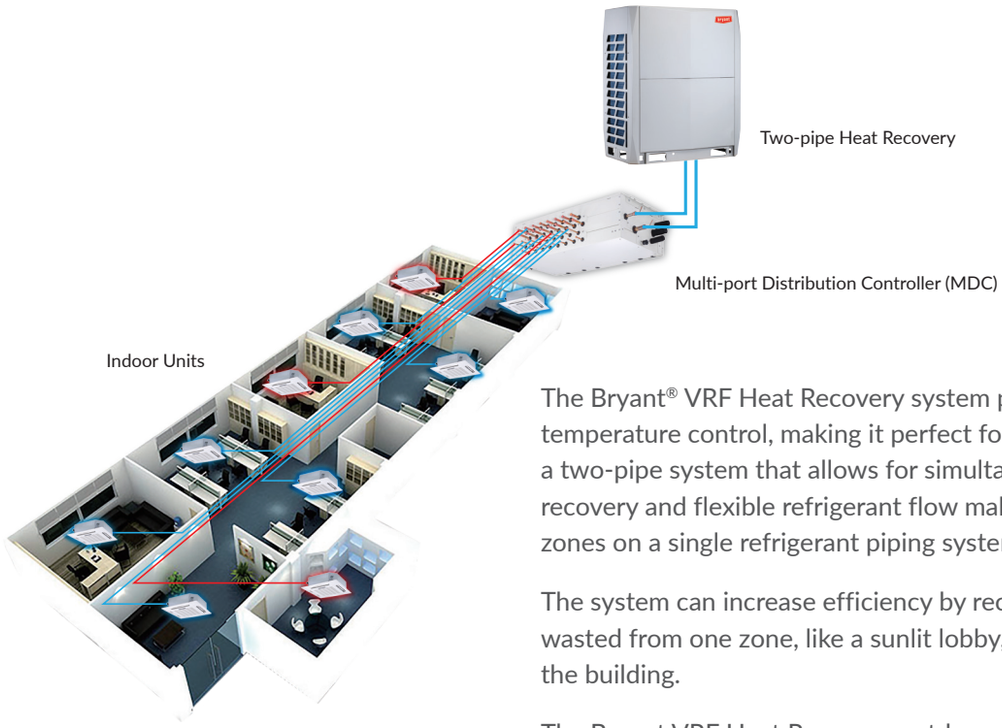
Wireless Remote Controller

Scheduling Wired Remote Controller

System Setup

There's no need to access tight spaces above a ceiling to adjust rotary dials or dip switches in order to adjust or set functions on indoor units. All wired remote controller functions are written in an easy-to-understand format, which greatly reduces the time needed for system setup. Startup and addressing can be done with the wireless remote control.

HEAT RECOVERY BENEFITS



The Bryant® VRF Heat Recovery system provides true, independent zone temperature control, making it perfect for design-build office buildings. It utilizes a two-pipe system that allows for simultaneous heating and cooling. Heat recovery and flexible refrigerant flow make it possible to heat and cool different zones on a single refrigerant piping system at any given time.

The system can increase efficiency by recovering energy that might otherwise be wasted from one zone, like a sunlit lobby, and reuse it in another cooler part of the building.

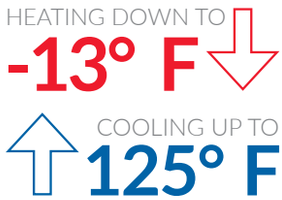
The Bryant VRF Heat Recovery outdoor unit lineup is a single module up to 28 tons, which saves space compared to the competition. There are three different cabinet sizes available for this product line. Heat recovery boosts efficiency and green scores, making it ideal for regions with energy-building certification incentives or requirements.

Multi-port Distribution Controller (MDC)

Multi-port Distribution Controller (MDC)

The heat recovery system uses an outdoor multi-port distribution controller (MDC) with options from 6 to 16 ports, which acts as a central location allowing better refrigerant distribution to all indoor units. This controller can connect up to 32 different indoor units, and configuration typically takes less piping and connections.

The main MDC can connect up to two sub MDC controllers, allowing for up to 64 indoor units to be connected to a VRF system.



Operating Ranges

The operating ranges for Bryant® VRF Heat Recovery systems provide heating down to -13° with cooling up to 125° F.

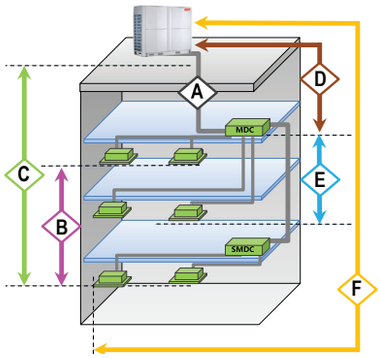
Outdoor Air Temperature	Level 1 (Default)	Level 2	Level 3	Level 4	Level 5	Level 6
to 5° F	100%	100%	100%	100%	100%	100%
6° F to 15° F						90%
16° F to 25 F					90%	80%
26° F to 35° F				90%	80%	70%
36° F to 45° F			90%	80%	70%	
46° F to 55° F		90%	80%	70%		
56° F to 65° F		80%	70%			
66° F to 75° F		70%				
> 75° F						

Heating Refrigerant Temperature Reset

The heating refrigerant temperature reset allows the user to set the schedule based on outdoor temperature and the maximum capacity that the outdoor unit will deliver. This means you can save energy during warmer temperatures and get the heat you need when temperatures are colder. This results in optimized energy and building performance throughout the entire heating season.

Heating Flexibility with Upsize

Many areas of the country need extreme heating performance in low ambient conditions. Bryant VRF Heat Recovery gives you the best of both worlds by providing heating when you need it. To achieve this, simply upsize the outdoor unit only to improve the heating performance of the entire system in low ambient operation.



Piping Length and Height Difference

The Bryant VRF Heat Recovery system includes the multi-port distribution controller (MDC) that can be used as main or sub for greater piping flexibility. The main multi-port distribution controller can connect up to two sub multi-port distribution controllers to provide longer piping runs. The combination of a smaller equipment footprint and longer piping lengths delivers up to 3,280 feet, making it easier for design.

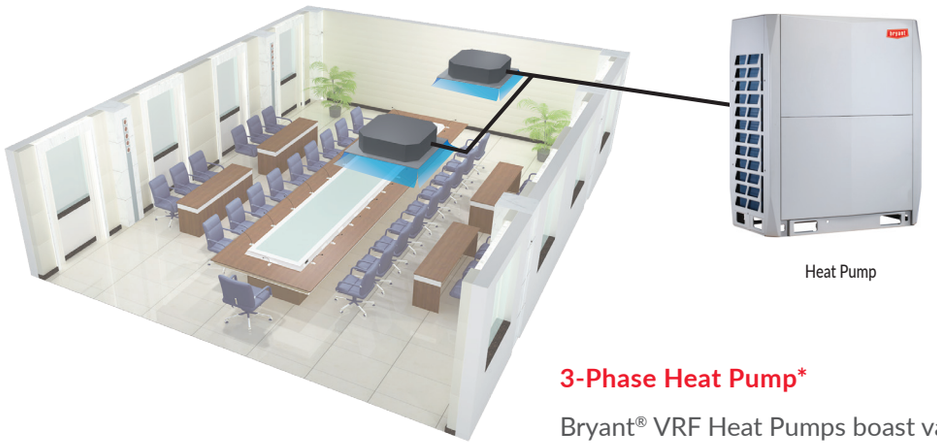
		Heat Recovery
A	Total Length	3,280 ft*
B	Height between IDU-IDU	98 ft
C	Height between ODU-IDU - outdoor unit above - outdoor unit below	 164 ft 131 ft
D	Distance between ODU-MDC	360 ft
E	Height between MDC-IDU	49 ft
F	Farthest equivalent length	541 ft

* Total piping length for 28 ton unit

Electrical

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

HEAT PUMP BENEFITS

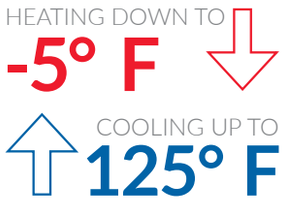


Heat Pump

3-Phase Heat Pump*

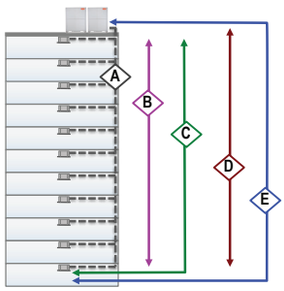
Bryant® VRF Heat Pumps boast variable speed technology with multiple inverter compressors. This significantly improves system efficiency and reliability. Bryant VRF Heat Pump capacity ranges from 6 tons up to 36 tons in a modular design, available as single, double or triple module. Heat pump systems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

* 6, 8, and 10 ton systems only have one compressor.



Operating Ranges

The operating ranges for Bryant VRF Heat Pump systems provide heating down to -5° with cooling up to 125° F.



Piping Length and Height Difference

If you need design flexibility, know that Bryant VRF gives you plenty. Our total piping length for heat pumps is up to 3,280 feet with up to 164 feet from the outdoor to the indoor unit, making it easier to design floors with lots of small rooms or to change the design later as needed. Plus, Bryant VRF Heat Pumps offer the most versatile piping designs from ground level up to the roof, depending on the design. Don't worry about consistent comfort. Y-shaped branching joints on the gas pipes between outdoor units ensure that refrigerant flow is equalized to each branch for enhanced system reliability.

		Heat Pump
A	Total Length	3,280 ft
B	Height between IDU-IDU	98 ft
C	Farthest pipe from 1st branch	295 ft
D	Height between ODU-IDU - outdoor unit above - outdoor unit below	 164 ft 131 ft
E	Farthest equivalent length	738 ft

Note: Not applicable to Single-phase.

Single-phase Heat Pump

Ideal for light commercial or large residential applications, a Bryant® Single-phase VRF Heat Pump system delivers the efficiency, flexibility and control of VRF, but in a smaller capacity package and with a lower power requirement. The system allows for a long line length between the outdoor and indoor units, offering more options for installation between floors of your home. It utilizes the centralized controls network with an expanded line of ten indoor unit styles.

Single-phase Heat Pump Applications

Single-phase VRF Heat Pump systems offer design flexibility when a building needs to be divided into smaller units or expand usable space in size. This system is a perfect choice for applications like one- to two-story office buildings, strip malls and retail spaces, fire and police stations, and banks, to name just a few.

bryant®

Heating & Cooling Systems

VRF SYSTEMS:
OUTDOOR UNITS

Overview

Tonnage	Heat Pump Single-phase	Heat Recovery* 3-phase	Heat Pump 3-phase		
Combo	1 Module	1 Module	1	2	3
3	3				
4	4				
5	5				
6		6	6		
8		8	8		
10		10	10		
12		12	12		
14		14		8 + 6	
16		16		8 + 8	
18		18		10 + 8	
20		20		10 + 10	
22		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

* For use with MDC on page 19

38VMR Heat Recovery*

OUTDOOR UNIT – 208/230V-3-60

Single module

Outdoor unit model name				38VMA072RDS5-1	38VMA096RDS5-1	38VMA120RDS5-1
Nominal tons			Ton	6	8	10
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	72	96	120
		Rated	kBtu/h	69	92	114
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	80	108	126
		Rated	kBtu/h	77	103	120
With non-ducted indoor units	Power supply [2]			208/230V, 3-Phase, 60Hz		
Electrical characteristics (Nominal) [1]	Cooling	Power consumption	kW	4.2	6.2	9.3
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.6	23.7	22.8
	Heating	Power consumption	kW	4.4	7.2	9.5
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	30.0	30.0	30.0
With ducted indoor units	Power supply [2]			208/230V, 3-Phase, 60Hz		
Electrical characteristics (Nominal) [1]	Cooling	Power consumption	kW	5.0	7.1	9.5
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.2	24.3	23.2
	Heating	Power consumption	kW	5.7	8.0	9.8
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	27.4	27.7	26.7
External dimensions		Height	in	64-3/8		
		Width	in	52-3/4		
		Depth	in	31-1/8		
Total weight	Unit		lb	672		
Compressor	Type			Inverter-driven Hermetic Scroll/1		
Fan unit	Air volume		cfm	6,900	7,600	8,100
Refrigerant (R410A) [3] (Charged refrigerant amount)			lb	26.5	26.5	26.5
Electrical specifications	Unit	MCA [4]	A	43	45	46
		Recommended fuse size	A	45	50	50
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	3/4	7/8	1-1/8
		Liquid side (main pipe) (brazing)	in	5/8	3/4	3/4
Operation temperature range		Cooling	° F DB	5 to 125		
		Heating	° F WB	–13 to 64		
External static pressure			in WG	0.24 Max		
Number of connected indoor units				15	20	24
Allowed capacity of combined indoor units				50% to 150%		
Sound pressure level cooling/heating [5]			dB(A)	58.4	61.7	62.7

*All Heat Recovery outdoor units require an MDC

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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

38VMR Heat Recovery*

OUTDOOR UNIT – 208/230V-3-60

Single module

Outdoor unit model name				38VMA144RDL5-1	38VMA168RDS5-1	38VMA192RDS5-1	38VMA216RDS5-1	38VMA240RDS5-1
Nominal tons			Ton	12	14	16	18	20
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	144	168	192	216	240
		Rated	kBtu/h	136	158	182	204	220
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	160	188	215	243	257
		Rated	kBtu/h	150	180	204	222	236
Electrical characteristics (Nominal) [1]	Power supply [2]			208/230V, 3-Phase, 60Hz				
With non-ducted indoor units	Cooling	Power consumption	kW	9.0	11.9	14.7	16.8	19.7
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.4	23.1	23.9	23.0	22.4
	Heating	Power consumption	kW	9.6	13.3	16.2	18.0	20.2
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	26.5	27.0	28.2	27.3	27.0
Electrical characteristics (Nominal) [1]	Power supply [2]			208/230V, 3-Phase, 60Hz				
With ducted indoor units	Cooling	Power consumption	kW	10.6	13.3	15.9	17.9	20.4
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.0	22.9	23.6	21.7	21.0
	Heating	Power consumption	kW	11.8	14.4	17.4	19.1	20.9
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	26.5	25.2	25.5	26.5	26.5
External Dimensions		Height	in	64-3/8				
		Width	in	78-3/8				
		Depth	in	31-1/8				
Total weight	Unit		lb	1137				
Compressor	Type/Qty			Inverter-driven Hermetic Scroll/2				
Fan unit	Air volume		cfm	10,100	10,100	11,300	12,300	12,300
Refrigerant (R410A) [3] (Charged refrigerant amount)			lb	44.2	44.2	44.2	44.2	44.2
Electrical specifications	Unit	MCA [4]	A	70	70	71	81	81
		Recommended fuse size	A	80	80	80	90	90
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8
		Liquid side (main pipe) (brazing)	in	7/8	7/8	7/8	1-1/8	1-1/8
Operation temperature range		Cooling	° F DB	5 to 125				
		Heating	° F WB	–13 to 64				
External static pressure			in WG	0.24 Max				
Number of connected indoor units				29	34	39	44	49
Allowed capacity of combined indoor units				50% to 150%				
Sound pressure level cooling/heating [5]			dB(A)	63.3	63.3	64.9	67.1	67.1

*All Heat Recovery outdoor units require an MDC

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb. Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

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

38VMR Heat Recovery*

OUTDOOR UNIT – 208/230V

Single module

Outdoor unit model name				38VMA240RDL5-1	38VMA264RDS5-1	38VMA288RDS5-1	38VMA312RDS5-1	38VMA336RDS5-1
Nominal tons			Ton	20	22	24	26	28
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	240	264	288	312	336
		Rated	kBtu/h	228	248	274	296	308
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	270	295	323	343	357
		Rated	kBtu/h	256	282	298	314	322
Electrical characteristics (Nominal) [1]	Power supply [2]			208/230V, 3-Phase, 60Hz				
With non-ducted indoor units	Cooling	Power consumption	kW	20.4	23.2	26.4	31.8	33.1
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	22.4	22.0	21.0	20.2	19.5
	Heating	Power consumption	kW	20.2	23.5	25.8	28.9	29.6
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	30.0	29.6	29.3	28.5	28.0
Electrical characteristics (Nominal) [1]	Power supply [2]			208/230V, 3-Phase, 60Hz				
With ducted indoor units	Cooling	Power consumption	kW	20.7	23.2	28.0	31.2	33.1
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	21.1	21.0	20.5	19.8	19.0
	Heating	Power consumption	kW	21.0	23.7	25.5	27.4	29.2
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	28.0	27.5	27.0	26.5	25.5
External Dimensions		Height	in	64-3/8				
		Width	in	105-7/8				
		Depth	in	31-1/8				
Total weight	Unit		lb	1627				
Compressor	Type/Qty			Inverter-driven Hermetic Scroll/3				
Fan unit	Air volume		cfm	14,500	15,500	15,500	16,500	16,500
Refrigerant (R410A) [3] (Charged refrigerant amount)			lb	77.2	77.2	77.2	77.2	77.2
Electrical specifications	Unit	MCA [4]	A	101	104	104	106	106
		Recommended fuse size	A	110	110	110	110	110
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8
		Liquid side (main pipe) (brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Operation temperature range		Cooling	° F DB	5 to 125				
		Heating	° F WB	-13 to 64				
External static pressure			in WG	0.24 Max				
Number of connected indoor units				49	54	59	64	64
Allowed capacity of combined indoor units				50% to 150%				
Sound pressure level cooling/heating [5]			dB(A)	63.9	64.8	64.8	66.4	67.2

*All Heat Recovery outdoor units require an MDC

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb. Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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

38VMR Heat Recovery*

OUTDOOR UNIT – 460V-3-60

Single module

Outdoor unit model name				38VMA072RDS6-1	38VMA096RDS6-1	38VMA120RDS6-1
Nominal tons			Ton	6	8	10
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	72	96	120
		Rated	kBtu/h	69	92	114
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	80	108	126
		Rated	kBtu/h	77	103	120
With non-ducted indoor units Electrical characteristics (Nominal) [1]	Power supply [2]			460V, 3-Phase, 60Hz		
	Cooling	Power consumption	kW	4.2	6.2	9.3
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.6	23.7	22.8
	Heating	Power consumption	kW	4.4	7.2	9.5
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	30.0	30.0	30.0
With ducted indoor units Electrical characteristics (Nominal) [1]	Power supply [2]			460V, 3-Phase, 60Hz		
	Cooling	Power consumption	kW	5.0	7.1	9.6
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.2	24.3	23.2
	Heating	Power consumption	kW	5.7	8.0	9.8
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	27.4	27.7	26.7
External dimensions		Height	in	64-3/8		
		Width	in	52-3/4		
		Depth	in	31-1/8		
Total weight	Unit		lb	672		
Compressor	Type/Qty			Inverter-driven Hermetic Scroll/1		
Fan unit	Air volume		cfm	6,900	7,600	8,100
Refrigerant (R410A) [3] (Charged refrigerant amount)			lb	26.5	26.5	26.5
Electrical specifications	Unit	MCA [4]	A	20	22	22
		Recommended fuse size	A	25	25	25
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	3/4	7/8	1-1/8
		Liquid side (main pipe) (brazing)	in	5/8	3/4	3/4
Operation temperature range		Cooling	° F DB	5 to 125		
		Heating	° F WB	–13 to 64		
External static pressure			in WG	0.24 Max		
Number of connected indoor units				15	20	24
Allowed capacity of combined indoor units				50% to 150%		
Sound pressure level cooling/heating [5]			dB(A)	58.4	61.7	62.7

*All Heat Recovery outdoor units require an MDC

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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

38VMR Heat Recovery*

OUTDOOR UNIT – 460V-3-60

Single module

Outdoor unit model name				38VMA144RDL6-1	38VMA168RDS6-1	38VMA192RDS6-1	38VMA216RDS6-1	38VMA240RDS6-1
Nominal tons			Ton	12	14	16	18	20
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	144	168	192	216	240
		Rated	kBtu/h	136	158	182	204	220
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	160	188	215	243	257
		Rated	kBtu/h	150	180	204	222	236
With non-ducted indoor units	Power supply [2]			460V, 3-Phase, 60Hz				
Electrical characteristics (Nominal) [1]	Cooling	Power consumption	kW	9.0	11.9	14.7	16.8	19.7
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.4	23.1	23.9	23.0	22.4
	Heating	Power consumption	kW	9.6	13.3	16.2	18.0	20.2
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	26.5	27.0	28.2	27.3	27.0
With ducted indoor units	Power supply [2]			460V, 3-Phase, 60Hz				
Electrical characteristics (Nominal) [1]	Cooling	Power consumption	kW	10.6	13.3	15.9	17.9	20.4
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	24.0	22.9	23.6	21.7	21.0
	Heating	Power consumption	kW	11.8	14.4	17.4	19.1	20.9
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	26.5	25.2	25.5	26.5	26.5
External Dimensions		Height	in	64-3/8				
		Width	in	78-3/8				
		Depth	in	31-1/8				
Total weight	Unit		lb	1,137				
Compressor	Type/Qty			Inverter-driven Hermetic Scroll/2				
Fan unit	Air volume		cfm	10,100	10,100	11,300	12,300	12,300
Refrigerant (R410A) [3] (Charged refrigerant amount)			lb	44.2	44.2	44.2	44.2	44.2
Electrical specifications	Unit	MCA [4]	A	35	35	35	38	38
		Recommended fuse size	A	40	40	40	40	40
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8
		Liquid side (main pipe) (brazing)	in	7/8	7/8	7/8	1-1/8	1-1/8
Operation temperature range		Cooling	° F DB	5 to 125				
		Heating	° F WB	–13 to 64				
External static pressure			in WG	0.24 Max				
Number of connected indoor units				29	34	39	44	49
Maximum capacity of combined indoor units				50% to 150%				
Sound pressure level cooling/heating [5]			dB(A)	63.3	63.3	64.9	67.1	67.1

*All Heat Recovery outdoor units require an MDC

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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

38VMR Heat Recovery*

OUTDOOR UNIT – 460V-3-60

Single module

Outdoor unit model name				38VMA240RDL6-1	38VMA264RDS6-1	38VMA288RDS6-1	38VMA312RDS6-1	38VMA336RDS6-1
Nominal tons			Ton	20	22	24	26	28
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	240	264	288	312	336
		Rated	kBtu/h	228	248	274	296	308
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	270	295	323	343	357
		Rated	kBtu/h	256	282	298	314	322
With non-ducted indoor units	Power supply [2]			460V, 3-Phase, 60Hz				
Electrical characteristics (Nominal) [1]	Cooling	Power consumption	kW	20.4	23.2	26.4	31.8	33.1
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	22.4	22.0	21.0	20.2	19.5
	Heating	Power consumption	kW	20.2	23.5	25.8	28.9	29.6
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	30.0	29.6	29.3	28.5	28.0
With ducted indoor units	Power supply [2]			460V, 3-Phase, 60Hz				
Electrical characteristics (Nominal) [1]	Cooling	Power consumption	kW	20.7	23.9	28.0	31.2	33.2
		IEER (Integrated Energy Efficiency Ratio)	Btu/W	21.1	21.0	20.5	19.8	19.0
	Heating	Power consumption	kW	21.0	23.7	25.5	27.4	29.2
		SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	28.0	27.5	27.0	26.5	25.5
External Dimensions		Height	in	64-3/8				
		Width	in	105-7/8				
		Depth	in	31-1/8				
Total weight	Unit		lb	1627				
Compressor	Type/Qty			Inverter-driven Hermetic Scroll/3				
Fan unit	Air volume		cfm	14,500	15,500	15,500	16,500	16,500
Refrigerant (R410A) [3] (Charged refrigerant amount)			lb	77.2	77.2	77.2	77.2	77.2
Electrical specifications	Unit	MCA [4]	A	52	54	54	55	55
		Recommended fuse size	A	60	60	60	60	60
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	1-3/8	1-3/8	1-3/8	1-5/8	1-5/8
		Liquid side (main pipe) (brazing)	in	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8
Operation temperature range		Cooling	° F DB	5 to 125				
		Heating	° F WB	-13 to 64				
External static pressure			in WG	0.24 Max				
Number of connected indoor units				49	54	59	64	64
Maximum capacity of combined indoor units				50% to 150%				
Sound pressure level cooling/heating [5]			dB(A)	64	65.8	65.8	66.7	67.2

*All Heat Recovery outdoor units require an MDC

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb. Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

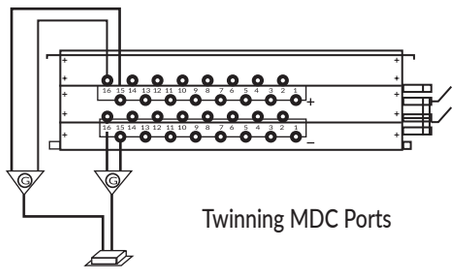
[2] The source voltage must not fluctuate more than ±10%.

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

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

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

40VMD Multi-port Distribution Controller (MDC) for Heat Recovery



Twinning MDC Ports

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

40VMD

Main MDC		40VMD006M--3	40VMD008M--3	40VMD010M--3	40VMD016M--3	40VMD016ML-3
Power supply (V-Ph-Hz)		208/230-1-60				
Number of ports		6	8	10	16	16
Unit	Unit dimensions, W x H x D (in)	37 x 12-3/4 x 22-5/8			46-1/2 x 12-3/4"x 22-5/8	
	Packing dimensions, W x H x D (in)	44-1/2 x 18 x 33-1/8			53-7/8 x 18 x 33-1/8	
	Net/gross weight (lb)	132/205	137/209	143/216	190/269	190/273
Design Pressure, High/Low (psig)		580 / 320				
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data				
	Signal wiring	2-core shielded twisted pair cable 18 AWG				
Condensate Pipe Diameter, OD (in.)		1				
MCA (A)		0.73	0.89	1.05	1.54	
Capacity per port	kBtu	54				

Sub MDC		40VMD006S--3	40VMD008S--3	40VMD010S--3	40VMD016S--3
Power supply (V-Ph-Hz)		208/230-1-60			
Number of ports		6	8	10	16
Unit	Unit dimensions, W x H x D (in)	37 x 12-3/4 x 22-5/8			46-1/2 x 12-3/4 x 22-5/8
	Packing dimensions, W x H x D (in)	44-1/2 x 18 x 33-1/8			53-7/8 x 18 x 33-1/8
	Net/gross weight (lb)	126/168	130/203	137/209	183/262
Design Pressure, High/Low (psig)		580 / 320			
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data			
	Signal wiring	2-core shielded twisted pair cable 18 AWG			
Condensate Pipe Diameter, OD (in.)		1			
MCA (A)		0.69	0.85	1.01	1.49
Capacity per port	kBtu	54			

38VMH Single-phase Heat Pump

OUTDOOR UNIT – 208/230V-1-60

Outdoor unit model name				38VMA036HDS3-1	38VMA048HDS3-1	38VMA060HDS3-1
Nominal tons			Ton	3	4	5
Cooling capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	36	48	60
		Rated	kBtu/h	36	48	60
Heating capacity [1] (with non-ducted indoor units/ducted)		Nominal	kBtu/h	40	52.5	66
		Rated	kBtu/h	40	52.5	66
With non-ducted indoor units Electrical characteristics (Nominal) [1]	Power supply [2]			208/230V, 1-Phase, 60Hz		
	Cooling	Power consumption	kW	3.1	4.6	6.1
		SEER (Seasonal Energy Efficiency Ratio)	Btu/W	18.0	18.0	18.6
	Heating	Power consumption	kW	3.1	4.3	5.8
		HSPF (Heating Seasonal Performance Factor)	Btu/W	9.2	9.2	9.60
With ducted indoor units Electrical characteristics (Nominal) [1]	Power supply [2]			208/230V, 1-Phase, 60Hz		
	Cooling	Power consumption	kW	2.9	4.7	6.1
		SEER (Seasonal Energy Efficiency Ratio)	Btu/W	17.8	17.8	18.6
	Heating	Power consumption	kW	3.0	4.2	5.7
		HSPF (Heating Seasonal Performance Factor)	Btu/W	9.6	9.6	10.0
External dimensions		Height	in	52-1/4		
		Width	in	35-1/2		
		Depth	in	15-3/4		
Total weight	Unit		lb	220		
Compressor	Type / Qty			Inverter-driven Hermetic Rotary/1		
Fan unit	Air volume		cfm	4,100		
Refrigerant [3] (Charged refrigerant amount)			lb	8.6		
Electrical specifications	Unit	MCA [4]	A	36	38	40
		Recommended fuse size	A	40	40	45
Refrigerant piping	Connecting port diameter	Gas side (main pipe) (brazing)	in	5/8		3/4
		Liquid side (main pipe) (brazing)	in	3/8		
Operation temperature range		Cooling	° F DB	-13 to 118		
		Heating	° F WB	-13 to 64		
Number of connected indoor units				5	7	9
Maximum capacity of combined indoor units				50% to 130%		
Sound pressure level cooling/heating [5]			dB(A)	58.7	60.1	60.7

[1] Rated conditions. Cooling: Indoor air temperature 80°F dry bulb / 67°F wet bulb, Outdoor air temperature 95°F dry bulb
Heating: Indoor air temperature 70°F dry bulb, Outdoor air temperature 47°F dry bulb / 43°F wet bulb

[2] The source voltage must not fluctuate more than +/- 10%.
[3] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
[4] Select wire size based on larger value of MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
[5] These values, measured in anechoic chamber, at a point 3.3 ft (1m) in front of the unit at a height of 4.6 ft (1.4m).

38VMH Heat Pump

OUTDOOR UNIT – 208/230V-3-60

Single module

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

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.
[2] The source voltage must not fluctuate more than ±10%.
[3] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
[4] Select wire size based on larger value of MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
[5] These values, measured in anechoic chamber, at a point 3.3 ft (1m) in front of the unit at a height of 4.6 ft (1.4m).

38VMH Heat Pump

OUTDOOR UNIT – 208/230V-3-60

Dual module (Combination)

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

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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

38VMH Heat Pump

OUTDOOR UNITS – 208/230V-3-60

Triple module (Combination)

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

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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

38VMH Heat Pump

OUTDOOR UNIT – 460V-3-60

Single module

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

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.
[2] The source voltage must not fluctuate more than ±10%.
[3] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
[4] Select wire size based on larger value of MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
[5] These values, measured in anechoic chamber, at a point 3.3 ft (1m) in front of the unit at a height of 4.6 ft (1.4m).

38VMH Heat Pump

OUTDOOR UNIT – 460V-3-60

Dual module (Combination)

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

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.
[2] The source voltage must not fluctuate more than ±10%.
[3] The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
[4] Select wire size based on larger value of MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
[5] These values, measured in anechoic chamber, at a point 3.3 ft (1m) in front of the unit at a height of 4.6 ft (1.4m).

38VMH Heat Pump

OUTDOOR UNIT – 460V-3-60

Triple module (Combination)

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

[1] Rated conditions. Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb.
Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

[2] The source voltage must not fluctuate more than ±10%.

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

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

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


EMERGENCY

bryant®
Heating & Cooling Systems

VRF SYSTEMS:
INDOOR UNITS

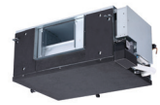
Overview



NON-DUCTED MODELS

Cooling Capacity kBtu/h (Ton)	4-Way Cassette	Compact 4-Way Cassette	High Wall Indoor Unit	Underceiling / Floor Console (Exposed)	Floor Console (Recessed)
5,000			●		
7,000		●	●		●
9,000	●	●	●		●
12,000	●	●	●	●	●
15,000	●	●	●	●	●
18,000	●		●	●	●
24,000	●		●	●	●
30,000	●		●	●	
36,000	●			●	
48,000	●			●	





DUCTED MODELS

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

40VMF 4-Way Cassette

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

- Integrated condensate lift up to 29.5"
- Required panel - model #40VMF001----

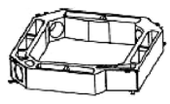
Unit model number		40VMF009A--3	40VMF012A--3	40VMF015A--3	40VMF018A--3	40VMF024A--3	40VMF030A--3	40VMF036A--3	40VMF048A--3
Power supply (V-Ph-Hz)		208/230-1-60							
Cooling capacity (Btuh)		9,000	12,000	15,000	19,100	24,000	30,000	36,000	48,000
Heating capacity (Btuh)		10,900	13,600	17,000	21,500	27,000	34,000	40,000	54,000
Indoor fan motor	Type	DC							
	Input (W)	40	54	67	153.5	85.4	131.7	182.7	202.3
Indoor airflow (cfm)	Low	330	390	460	610	610	680	800	950
	Medium	390	460	560	700	700	800	950	1,100
	High	460	560	680	1,000	800	950	1,100	1,200
Indoor unit sound level dB(A)	Low	32.1	33.0	37.0	40.2	40.2	42.1	47.3	50.5
	Medium	34.0	37.3	41.5	43.1	42.5	45.1	50.4	54.0
	High	36.7	41.4	45.6	52.5	44.7	49.5	53.9	55.4
Unit	Unit dimension, W x H x D (in)	33-1/8 x 9 x 33-1/8			33-1/8 x 11-3/4 x 33-1/8				
	Panel/grille dimension, W x H x D (in)	37-3/8 x 1-3/4 x 37-3/8							
	Unit Net/Gross Weight (lb) w/Packaging	54/71		69/86					
	Panel/grille net/gross weight (lb)	13.2/20							
Refrigeration type		R410a							
Expansion device		Electronic Expansion Valve							
Design pressure, high/low (psig)		580/320							
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4			3/8				
	Suction side, OD (Flare)	1/2			5/8				
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data							
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG							
Condensate drain pipe diameter, OD (in)		1-1/4							
Condensate pump		Included (Up to 29.5")							
Electrical data	MCA (A)	0.73	0.91	1.10	2.00	1.30	1.70	2.30	2.40
	MOPD (A)	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.

Options:

2" Filter Rack
40VMF002----

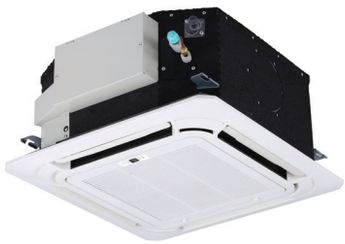
The filter rack accessory allows for 2-inch MERV 13 filter to be installed without increasing the height of the unit.



Outside Air Kit
40VMF003----

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

40VMC Compact 4-Way Cassette



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

- Integrated condensate lift up to 23.5"
- Required panel - model #40VMC001----

Unit model number		40VMC007---3	40VMC009---3	40VMC012---3	40VMC015---3
Power supply (V-Ph-Hz)		208/230-1-60			
Cooling capacity (Btuh)		7,000	9,000	12,000	15,000
Heating capacity (Btuh)		8,000	10,000	13,000	17,000
Indoor fan motor	Type	DC			
	Input (W)	16		24	
Indoor airflow (cfm)	Low	229		253	
	Medium	282		306	
	High	306		359	
Indoor unit sound level dB(A)	Low	34.7		38.1	
	Medium	38.5		42.3	
	High	40.4		45.5	
Unit	Unit dimension, W x H x D (in)	24-7/8 x 10-1/4 x 22-7/16			
	Packing dimension, W x H x D (in)	27-5/8 x 12-5/8 x 26			
	Panel/grille dimension, W x H x D (in)	25-1/2 x 2 x 25-1/2			
	Panel/grille packing dimension, W x H x D (in)	28-1/8 x 4-7/8 x 28-1/8			
	Unit Net/Gross Weight (lb) w/Packaging	40/51		53/53	
	Panel/grille net/gross weight (lb)	5.5/9.9			
Refrigeration type		R410a			
Expansion device		Electronic Expansion Valve			
Design pressure, high/low (psig)		580/320			
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4			
	Suction side, OD (Flare)	1/2			
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data			
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG			
Condensate drain pipe diameter, OD (in)		1			
Condensate pump		Included (up to 23.5")			
Electrical data	MCA (A)	0.38		0.53	
	MOPD (A)	15			

Note: Testing Condition AHRI rated conditions: Cooling: Indoor air temperature 80° F dry bulb/67° F wet bulb, outdoor air temperature 95° F dry bulb.
Heating: Indoor air temperature 70° F dry bulb, outdoor air temperature 47° F dry bulb/43° F wet bulb.

40VMW High Wall Unit

The Bryant® VRF High Wall unit provides conditioning where it wasn't possible before. The compact unit mounts on the wall, perfect for areas where there is no space above the ceiling.

- Flared refrigerant pipe connections
- Filter is washable

Unit model number		40VMW005---3	40VMW007---3	40VMW009---3	40VMW012---3	40VMW015---3	40VMW018---3	40VMW024---3	40VMW030---3
Power supply (V-Ph-Hz)		208/230-1-60							
Cooling capacity (Btuh)		5,000	7,500	9,500	12,000	15,000	18,000	24,000	30,000
Heating capacity (Btuh)		6,000	8,500	10,900	13,500	17,000	21,000	27,000	34,000
Indoor fan motor	Type	DC							
	Input (W)	11	25		30	35	45	75	85
Indoor airflow (cfm)	Low	245	245		250	380	440	460	480
	Medium	245	270		280	420	470	530	600
	High	245	320		360	480	560	650	770
Indoor unit sound level dB(A)	Low	31.7	31.2	31.8	32.8	38.4	38.9	36.8	38.1
	Medium	31.7	32.2	32.6	34.6	39.6	40.2	42.0	43.6
	High	31.7	34.0	34.5	36.4	41.7	41.8	43.2	48.3
Unit	Unit dimension, W x H x D (in)	36 x 11-3/8 x 9				42-1/4 x 12-3/8 x 9		47 x 13-1/2 x 10-1/8	
	Packing dimension, W x H x D (in)	40-1/8 x 15-3/8 x 12-3/8				46-1/2 x 17-1/8 x 12-7/8		50-3/4 x 15-1/8 x 18-1/8	
	Unit Net/Gross Weight (lb) w/Packaging	28/35				32/40.5		38/50.5	
Refrigeration type		R410a							
Expansion device		Electronic Expansion Valve							
Design pressure, high/low (psig)		580/320							
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4					3/8		
	Suction side, OD (Flare)	1/2					5/8		
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data							
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG							
Condensate drain pipe diameter, OD (in)		3/4							
Condensate pump		Not included (field supplied, field installed)							
Electrical data	MCA (A)	0.29	0.45					0.86	
	MOPD (A)	15							

Note: Testing Condition AHRI rated conditions: Cooling: Indoor air temperature 80° F dry bulb/67° F wet bulb, outdoor air temperature 95° F dry bulb.
Heating: Indoor air temperature 70° F dry bulb, outdoor air temperature 47° F dry bulb/43° F wet bulb.

40VMU Underceiling - Floor Console (Exposed)

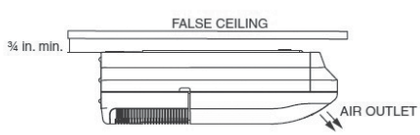
The Bryant® VRF Underceiling unit can be installed exposed below the ceiling or floor standing as an exposed Floor Console unit.

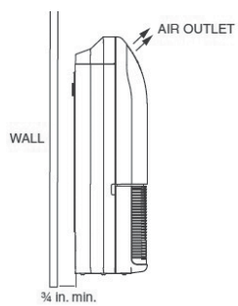
- Condensate pump is accessory
- Filter is washable

Unit model number		40VMU012---3	40VMU015---3	40VMU018---3	40VMU024---3	40VMU030---3	40VMU036---3	40VMU048---3
Power supply (V-Ph-Hz)		208/230-1-60						
Cooling capacity (Btuh)		12,000	15,000	18,000	24,000	30,000	36,000	48,000
Heating capacity (Btuh)		13,500	17,000	21,000	27,000	34,000	40,000	54,000
Indoor fan motor	Type	DC Motor						
	Input (W)	24	47	53	80	107	67 x 2	115 x 2
Indoor airflow (cfm)	Low	259	359	394	494	624	906	929
	Medium	294	412	424	529	676	976	1,000
	High	335	441	471	571	729	1,094	1,353
Indoor unit sound level dB(A)	Low	35.8	41.7	44.1	50.2	50.4	48.4	50.6
	Medium	37.7	45.4	46.5	52.0	52.1	50.3	52.3
	High	40.5	47.2	48.5	53.8	53.9	53.0	59.8
Unit	Unit dimension, W x H x D (in)	39 x 26 x 8				50-1/2 x 26 x 8	66 x 27 x 10	
	Packing dimension, W x H x D (in)	43 x 29-1/2 x 12				55 x 29-1/2 x 12	75-1/2 x 30 x 13	
	Unit Net/Gross Weight (lb) w/Packaging	57/71	62/75			77/90	106/128	
Refrigeration type		R410a						
Expansion device		Electronic Expansion Valve						
Design pressure, high/low (psig)		580/320						
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4"		3/8"				
	Suction side, OD (Flare)	1/2"		5/8"				
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data						
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG						
Condensate drain pipe diameter, OD (in)		5/8						
Condensate pump		Not included (field supplied, field installed)						
Electrical data	MCA (A)	0.44	0.73	0.87	1.20	1.40	1.80	2.80
	MOPD (A)	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.

Installation





40VMR Floor Console (Recessed)

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

- Adjustable filter rack 1”– 2”
- Filter is washable
- External static pressure up to 0.15

Unit model number		40VMR007---3	40VMR009---3	40VMR012---3	40VMR015---3	40VMR018---3	40VMR024---3
Power supply (V-Ph-Hz)		208/230-1-60					
Cooling capacity (Btuh)		7,000	9,000	12,000	15,000	18,000	24,000
Heating capacity (Btuh)		8,000	10,000	13,000	17,000	20,000	27,000
Indoor fan motor	Type	DC					
	Input (W)	19		25	41	27	79
Indoor airflow (cfm)	Low	253		271	347	365	553
	Medium	276		335	424	418	635
	High	300		400	500	488	776
Indoor external static pressure	in. wg	0.15					
Indoor unit sound level dB(A)	Low	35.7	35.8	32.5	36.8	32.8	42.5
	Medium	38.2	37.9	36.3	41.7	35.5	45.2
	High	39.9	39.8	40.3	45.3	39.0	49.9
Unit	Unit dimension, W x H x D (in)	35-1/4 x 24 x 8-3/8		43-1/8 x 24 x 8-3/8		55 x 24 x 8-3/8	
	Packing dimension, W x H x D (in)	44-3/4 x 10-7/8 x 26-3/4		52-5/8 x 10-7/8 x 26-3/4		64-3/8 x 10-7/8 x 26-3/4	
	Unit Net/Gross Weight (lb) w/Packaging	48.9/80		59.1/91.5		69.2/102.1	
Refrigeration type		R410a					
Expansion device		Electronic Expansion Valve					
Design pressure, high/low (psig)		580/320					
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4				3/8	
	Suction side, OD (Flare)	1/2				5/8	
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data					
	Signal wiring	2-core shielded twisted pair cable 18AWG					
Condensate drain pipe diameter, OD (in)		5/8					
Condensate pump		Not included (field supplied, field installed)					
Electrical data	MCA (A)	0.55		0.63	0.83	0.72	1.38
	MOPD (A)	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.

40VML Low Static Ducted (Slim Profile)

The Bryant® 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

Unit model number		40VML007---3	40VML009---3	40VML012---3	40VML015---3	40VML018---3	40VML024---3
Power supply (V-Ph-Hz)		208/230-1-60					
Cooling capacity (Btuh)		7,000	9,000	12,000	15,000	18,000	24,000
Heating capacity (Btuh)		8,000	10,000	13,500	17,000	21,000	27,000
Indoor fan motor	Type	DC					
	Input (W)	25		32	43	56	68
Indoor airflow (cfm)	Low	224		236	306	353	471
	Medium	253		294	367	424	565
	High	283		353	459	530	701
Indoor external static pressure	in. wg	0-0.20					
Indoor unit sound level dB(A)	Low	31.4	31.0	33.0	33.2	36.0	37.0
	Medium	32.0	32.0	34.6	35.2	38.0	38.8
	High	34.0	34.5	37.0	36.7	40.2	41.3
Unit	Unit dimension, W x H x D (in)	30-3/4 x 8-1/4 x 19-3/4			39-1/4 x 8-1/4 x 19-3/4		48 x 8-1/4 x 19-3/4
	Packing dimension, W x H x D (in)	36-1/4 x 11-1/2 x 22			44-7/8 x 11-1/2 x 22		53-1/2 x 11-1/2 x 22
	Unit Net/Gross Weight (lb) w/Packaging	41/48.5			48.5/57.5		59.5/71.5
Refrigeration type		R410a					
Expansion device		Electronic Expansion Valve					
Design pressure, high/low (psig)		580/320					
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4				3/8	
	Suction side, OD (Flare)	1/2				5/8	
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data					
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG					
Condensate drain pipe diameter, OD (in)		1					
Condensate pump		Included (up to 27.5")					
Electrical data	MCA (A)	0.50		0.60	0.80	0.95	1.18
	MOPD (A)	15					

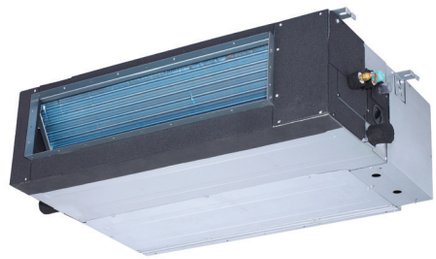
Note: Testing Condition AHRI rated conditions: Cooling: Indoor air temperature 80° F dry bulb/67° F wet bulb, outdoor air temperature 95° F dry bulb.
Heating: Indoor air temperature 70° F dry bulb, outdoor air temperature 47° F dry bulb/43° F wet bulb.

40VMM Medium Static Ducted

The Bryant® 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.

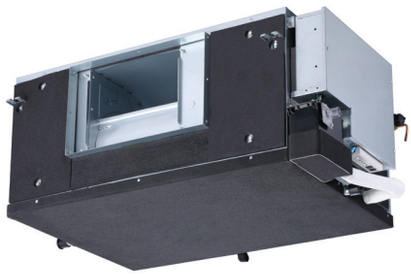
- Integrated condensate lift up to 27.5”
- Filter is washable



Unit model number		40VMM007A--3	40VMM009A--3	40VMM012A--3	40VMM015A--3	40VMM018A--3	40VMM024A--3	40VMM030A--3	40VMM036A--3	40VMM048A--3
Power supply (V-Ph-Hz)		208/230-1-60								
Cooling capacity (Btuh)		7,000	9,000	12,000	15,000	19,000	24,000	30,000	38,000	48,000
Heating capacity (Btuh)		8,000	10,000	13,600	17,000	21,000	27,000	34,000	42,000	54,000
Indoor fan motor	Type	DC								
	Input (W)	50		135	145	185	230	290	325	370
Indoor airflow (cfm)	Low	220		320	400	480	570	780	860	980
	Medium	220	260	360	450	540	640	900	980	1,100
	High	260	330	430	535	640	800	1,070	1,200	1,370
Indoor external static pressure	in. wg	0.3		0.6						
Indoor unit sound level dB(A)	Low	31.8	31.8	32.7	31.4	31.9	34.2	39.4	40.8	41.2
	Medium	32.1	32.4	33.7	32.7	33.6	36.3	42.3	43.8	43.8
	High	33.2	32.7	36.7	35.9	38.6	42.0	46.7	47.8	48
Unit	Unit dimension, W x H x D (in)	39-1/4 x 8-1/4 x 19-3/4		39-3/4 x 10-5/8 x 25	48-1/2 x 10-5/8 x 30-1/2			50-3/4 x 11-7/8 x 34-1/8		
	Unit Net/Gross Weight (lb) w/ Packaging	50.7/57.5		76/88	99.2/115			124/143		
Refrigeration type		R410a								
Expansion device		Electronic Expansion Valve								
Design pressure, high/low (psig)		580/320								
Refrigerant piping (in)	Liquid side, OD (Flare)	1/4				3/8				
	Suction side, OD (Flare)	1/2				5/8				
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data								
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG								
Condensate drain pipe diameter, OD (in)		3/4								
Condensate pump		Included (up to 27.5”)								
Electrical data	MCA (A)	1.25		3.13					5.00	
	MOPD (A)	15								

Note: Testing Condition AHRI rated conditions: Cooling: Indoor air temperature 80° F dry bulb/67° F wet bulb, outdoor air temperature 95° F dry bulb.
Heating: Indoor air temperature 70° F dry bulb, outdoor air temperature 47° F dry bulb/43° F wet bulb.

40VMH High Static Ducted



The Bryant® 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

Unit model number		40VMH024---3	40VMH030---3	40VMH036---3	40VMH048---3	40VMH054---3	40VMH072---3	40VMH0964---3
Power supply (V-Ph-Hz)		208/230-1-60						
Cooling Capacity (Btuh)		24,000	30,000	36,000	48,000	53,500	72,000	96,000
Heating Capacity (Btuh)	Cooling Capacity (Btuh)	27,000	34,000	40,000	54,000	60,000	81,000	108,000
Indoor fan motor	Type	DC						
	Input (W)	81	140	190	220	420	245*2	395*2
Indoor airflow (cfm)	Low	524	647	882	1,041	1,412	1,559	2,076
	Medium	600	753	1,029	1,200	1,618	1,794	2,400
	High	735	971	1,188	1,429	1,835	2,235	2,824
Indoor external static pressure	in. wg	0.8					1.0	
Indoor unit sound level dB(A)	Low	44.7	43.3	49.1	48.3	52.0	48.7	52.4
	Medium	47.8	46.9	52.8	51.8	55.7	52.2	54.7
	High	50.9	51.2	55.5	54.9	58.1	55.9	56.4
Unit	Unit dimension, W x H x D (in)	37-1/2 x 16-1/2 x 27-3/16			51-3/16 x 16-1/2 x 27-3/16		56-3/4 x 20 x 36-7/16	
	Unit Net/Gross Weight (lb) w/ Packaging	110 / 168.4	114.6 / 171		159.2 / 231.5		254.2 / 342.8	
Refrigeration type		R410a						
Expansion device		Electronic Expansion Valve						
Design pressure, high/low (psig)		580/320						
Refrigerant piping (in)	Liquid side, OD (Flare)	3/8						
	Suction side, OD (Flare)	5/8					7/8	
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data						
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG						
Condensate pipe diameter, OD (in.)		1					1-5/8	
Condensate pump		Included (up to 27.5")					Not included (field supplied, field installed)	
Electrical data	MCA (A)	5.70	7.10	7.30	7.60	7.80	9.70	10.20
	MOPD (A)	15						

Note: Testing Condition AHRI rated conditions: Cooling: Indoor air temperature 80° F dry bulb/67° F wet bulb, outdoor air temperature 95° F dry bulb.
Heating: Indoor air temperature 70° F dry bulb, outdoor air temperature 47° F dry bulb/43° F wet bulb.

40VMV Vertical AHU

The Bryant® 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.

Unit model number		40VMV012---3	40VMV018---3	40VMV024---3	40VMV030---3	40VMV036---3	40VMV048---3	40VMV054---3
Power supply (V-Ph-Hz)		208/230-1-60						
Cooling capacity (Btuh)		12,000	18,000	24,000	30,000	36,000	48,000	53,500
Heating capacity (Btuh)		13,500	21,000	27,000	34,000	40,000	54,000	60,000
Indoor fan motor	Type	DC						
	Input (W)	43	60	100	151	187	355	466
Indoor airflow (cfm)	Low	320	420	560	700	840	1,120	1,260
	Medium	320	510	680	850	1,020	1,360	1,530
	High	400	600	800	1,000	1,200	1,600	1,800
Indoor external static pressure	in. wg	0.8						
Indoor unit sound level dB(A)	Low	34.5	34.4	37.9	44.4	39.3	43.8	47.9
	Medium	34.5	37.1	42.3	48.4	44.1	48.5	52.6
	High	37.6	41.6	46.2	52.2	46.9	53.0	57.1
Unit	Unit dimension, W x H x D (in)	19-5/8 x 46-1/2 x 20-5/8				22 x 54-1/2 x 24		
	Packing dimension, W x H x D (in)	22-5/8 x 50-5/8 x 25-3/8				24-5/8 x 58-5/8 x 27-3/4		
	Unit Net/Gross Weight (lb) w/Packaging	119/143	123/147			163/189		
Refrigeration type		R410a						
Expansion device		Electronic Expansion Valve						
Design pressure, high/low (psig)		580/320						
Refrigerant piping (in)	Liquid side, OD (Sweat)	1/4	3/8					
	Suction side, OD (Sweat)	1/2	5/8					
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data						
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG						
Condensate drain pipe diameter, OD (in)		3/4 NPT						
Electrical data	MCA (A)	1.5	3.80			5.30		7.20
	MOPD (A)	15						

40VMA Outside Air Ducted

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

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

Unit model number		40VMA036---3	40VMA048---3	40VMA054---3	40VMA072---3	40VMA096---3
Power supply (V-Ph-Hz)		208/230-1-60				
Cooling capacity (Btuh)		36,000	48,000	53,500	72,000	96,000
Heating capacity (Btuh)		24,000	30,000	36,000	47,000	59,000
Indoor fan motor	Type	DC				
	Input (W)	64	71	87	60*2	80*2
Indoor airflow (cfm)	Low	441	471	529	882	1,029
	Medium	529	559	647	971	1,176
	High	588	647	765	1,059	1,294
Indoor external static pressure	in. wg	0.8			1.0	
Indoor unit sound level dB(A)	Low	43.8	43.4	43.9	48.5	47.7
	Medium	47.8	47.8	47.8	50.0	50.8
	High	49.5	50.4	51.4	52.1	53.5
Unit	Unit Dimension, W x H x D (in.)	51-3/16 x 16-1/2 x 27-3/16			56-3/4 x 20 x 36-7/16	
	Unit Net/Gross Weight (lb) w/Packaging	161.4 / 233.7			255.7 / 346.2	
Refrigeration type		R410a				
Expansion device		Electronic Expansion Valve				
Design pressure, high/low (psig)		580/320				
Refrigerant piping (in)	Liquid side, OD (Flare) (Braze)	3/8			3/8	
	Suction side, OD (Flare) (Braze)	5/8			7/8	
Connecting wiring	Power wiring	Sized per NEC and local codes based on nameplate electrical data				
	Signal wiring	2-core stranded shielded twisted pair cable 18AWG				
Condensate pipe diameter, OD (in)		1			1-5/8	
Condensate pump		Included (up to 27.5")			Not included (field supplied, field installed)	
Electrical data	MCA (A)	5.70	6.30	6.90	8.50	10.00
	MOPD (A)	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.

Note: Limits connected capacity at 30%.

Individual Zone Controls

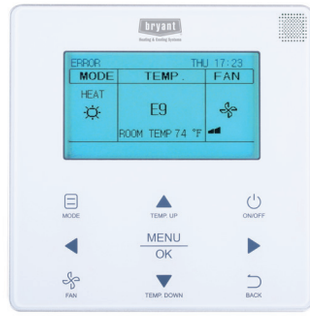
Wireless Remote Controller

- Mode
- Fan Speed
- Set Point
- Swing
- ON/OFF
- Clock
- Timer
- Lock Function
- 1° F Temperature Indication
- Addressing Capability
- Able to address each unit because infrared receivers are standard feature on all indoor units

40VM900001

Simple Wired Remote Controller

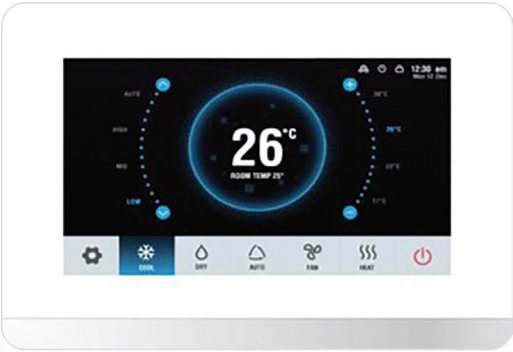
- Simple, Easy to Use
- Weekly Scheduling (40VM900013 only)
- ON/OFF
- Group Control (Max 16 indoor unit)
- Mode Setting
- Fan Speed Setting
- Set-point Display
- Swing Setting
- Addressing Capability
- Backlight
- Dual set-point control
- Set temperature range limiting
- Room Temperature Display
- Error Display
- Touch Button
- 1° F temperature indication
- Powered from indoor unit



Simple Wired Remote Controller
40VM900012

Scheduling Wired Remote Controller
40VM900013

Individual Zone Controls



40VM900005

Touchscreen Wired Remote Controller

- Display is 800x480 resolution
- ON/OFF
- Group Control (Max 16 indoor unit)
- Mode Setting
  - Fan Speed Setting
  - Swing Setting
- Dual set-point control
- Addressing Capability
- Backlight
- Set temperature range limiting
- Room Temperature Display
- Error Code Display
- Weekly Scheduling
- Touchscreen
- 1° F temperature indication
- Interface is powered from field-supplied 24VAC Power (installation)

Central Controls

24V Interface

- Works with all VRF indoor units
- Allows standard 24V thermostat connection
- Integration with thermostat features including Wi-Fi
- ON/OFF
- Mode Setting
- Fan Speed Setting
- Setpoint Display
- Backlight (dependent on thermostat)
- Room Temperature Display

Côr® Wi-Fi® Thermostat

- Vibrant, full-color touchscreen that's easy to navigate and view from any angle
- Built-in humidity sensor
- 7-day scheduling
- Remote access via Internet and iOS or Android apps for smartphone or tablet devices
- Wi-Fi® enabled
- Sold separately

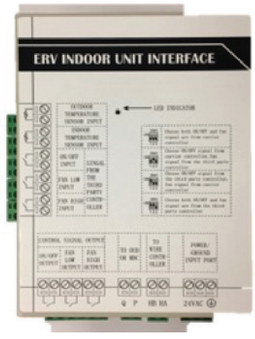
Individual Zone Controls

40VM900006

Touchscreen Central Controller

- Max 384 indoor units and 48 refrigerant systems
- 10.1” screen, 1200x800 resolution
- 3 levels of account management, can set up 20 users
- Remote access
- Alarm notification via email
- Fire alarm and interacting information
- 4-path DI and DO
- Recognize units automatically
- Field supplied 24V power is required
- ON/OFF
- Weekly scheduling
- Mode
- Fan Speed
- Set Point
- Swing
- Dual Set Point
- Set Temperature Range Limiting
- Error Display
- Remote Access and Web Control

Control Interfaces



40VM900007

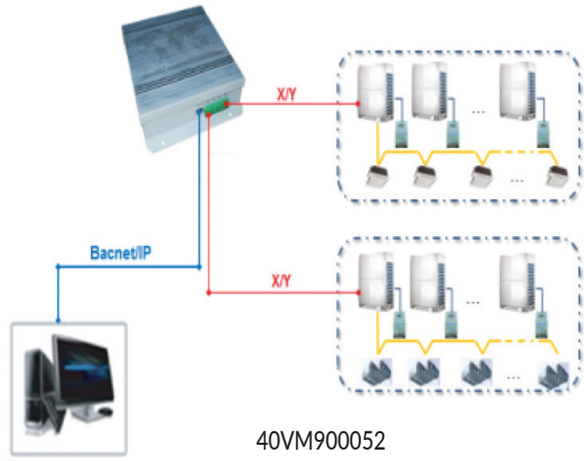
ERV Interface (DI/DO)

- Outdoor Temperature Sensor Input
- Indoor Temperature Sensor Input
- Compatible with 3rd-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

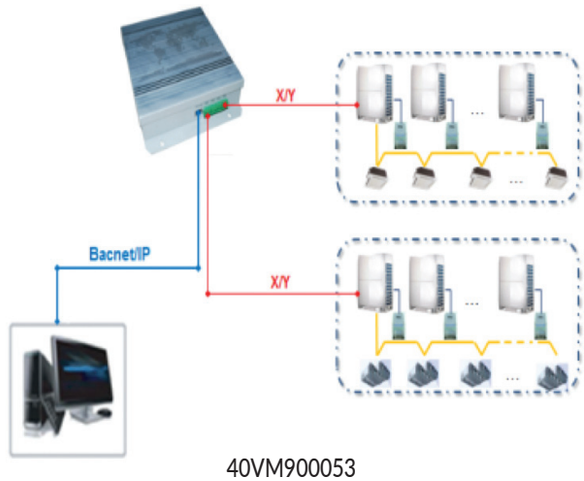
- Four 485 ports, each port can access 64 indoor units or 8 refrigeration systems
- WEB service allows log in through web
- Indoor unit
  - Temperature set
  - Indoor temperature
  - Operate mode
  - Error code
  - Set mode
- Outdoor unit
  - Mode
  - Outdoor temperature
  - Error code



40VM900052

LonWorks®

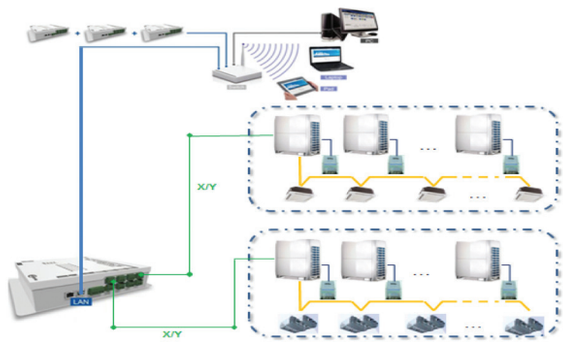
- Supports up to 64 indoor units
- Indoor unit
  - Temperature set
  - Indoor temperature
  - Operate mode
  - Fault code
- Outdoor unit
  - Mode
  - Outdoor temperature
  - Fault code



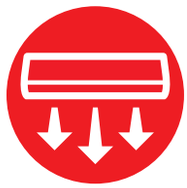
40VM900053

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 Select Software

VRoom Select Software enables engineers to easily design, layout and prepare VRF systems for quote.

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

Service Technical Tool

The Bryant® 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*.

For more than a century, homeowners have associated Bryant® heating and cooling products with the highest standards of indoor comfort and Bryant dealers as service leaders. Through commitment and dedication of our product development and manufacturing teams, we have consistently met every new challenge head-on and delivered the products to meet or exceed expectations. Our national network of passionate Bryant dealers is at the forefront of our success. Knowledgeable in the field, and equipped to address home comfort needs, our dealers deliver customized comfort solutions to homeowners by doing

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