



## Submittal Data Sheet

12-Ton VRV-III Heat Pump Unit

RXYQ144PBYD

### FEATURES

- Extended operating range with the ability to operate at outdoor ambient conditions down to -4°F in heating and 23°F in cooling mode
- Fans and grilles designed for low sound level and efficient operation
- Long refrigerant piping lengths with up to 3,280 ft. of total “one-way” piping in the complete piping network
- Automatic charge function
- Automatic check of wiring, shut off valves, sensors and refrigerant volume
- Automatic diagnose of errors and malfunctions to speed up troubleshooting
- Standard Limited Warranty: 10-year warranty on compressor and all parts

### BENEFITS

- Can operate up to 62 indoor units on a single piping network
- Integrated inverter technology deliver maximum efficiency during part load conditions and provide precise individual zone control
- Very low sound levels allows flexibility in layout of systems
- Modular and lightweight - enables flexibility in system layout and installation
- DC fan motors improves efficiency, especially at low fan speed
- Fans and grilles designed for low sound level and efficient operation



VRV III

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### PERFORMANCE

Outdoor Unit Model No.	RXYQ144PBYD	Outdoor Unit Name:	12-Ton VRV-III Heat Pump Unit
Type:	Heat Pump	Unit Combination:	RXYQ72PBYD(x2)
Rated Cooling Capacity (Btu/hr):	138,000	Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75
Nom Cooling Capacity (Btu/hr):		Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 70 Ambient (°F DB/WB): 47 / 43
Cooling Input Power (kW):	10.87	Rated Piping Length(ft):	
Rated Heating Capacity (Btu/hr):	154,000	Rated Height Difference (ft):	0.00
Nom Heating Capacity (Btu/hr):		IEER (Non-Ducted/Ducted):	21.50 / 21.50
Heating Input Power (kW):	13.27	Heating COP (Non-Ducted/Ducted):	3.9 / 3.7
		Heating COP 17F (Non-Ducted/Ducted):	2.6 / 2.5

### OUTDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	460 / 60 / 3	Compressor Type	Inverter
Power Supply Connections:	L1, L2, L3 Ground	Capacity Control Range (%):	10 - 100
Min. Circuit Amps MCA (A):	16+16	Capacity Index Limit:	72.0 - 187.0
Max Overcurrent Protection (MOP) (A):	25 + 25	Airflow Rate (H) (CFM):	6,350+6,350
Max Starting Current MSC(A):		Gas Pipe Connection (inch):	1-1/8
Rated Load Amps RLA(A):	7.1 + 7.1	Liquid Pipe Connection (inch):	1/2
Dimensions (Height) (in):	66-1/8	H/L Pressure Connection (inch)	
Dimensions (Width) (in):	73-1/4	H/L Equalizing Connection (inch)	
Dimensions (Depth) (in):	30-1/8	Sound Pressure (H) (dBA):	60
Net Weight (lb):	433+433	Sound Power Level (dBA):	
		Max. No. of Indoor Units:	25



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### SYSTEM DETAILS

Refrigerant Type:	R-410A	Cooling Operation Range (°F DB):	23 - 122
Holding Refrigerant Charge (lbs):	16.5+16.5	Heating Operation Range (°F WB):	0 - 77
Additional Charge (lb/ft):		Max. Pipe Length (Vertical) (ft):	295
Pre-charge Piping (Length) (ft):		Cooling Range w/Baffle (°F DB):	-
Max. Pipe Length (Total) (ft):	540	Heating Range w/Baffle (°F WB):	4 - 60
Max Height Separation (Ind to Ind ft):	0		

## DIMENSIONAL DRAWING

