



Submittal Data Sheet

12 Ton, 460V, VRV EMERION HP

RXYQ144AAYDB

FEATURES

- New Simple and Stylish design with expanded line up with single module units from
- Space-saving 16 - 20 T single module units provide up to 34% footprint and up to 500 lbs./unit weight reduction compared to previous series
- High energy efficiency with IEERs up to 28.5 delivers up to 30% efficiency increase
- Year-round comfort and energy saving with Daikin's Variable Refrigerant Temperature Technology (VRT)
- Heating down to -13°F as standard and high heating capacities at 17°F make it an ideal choice for all-electric heat pump solutions
- Hot gas defrost circuit allows for installation without base pan heater
- High dust moisture protection with an IP55 rated sealed E-box
- Dual-Fuel ready with connectivity to Daikin communicating gas furnace or all-electric heat pump heating for optimized operational cost based on utility rates
- Increased piping lengths of up to 361 ft. vertical separation between ODU and IDU provide additional application flexibility compared to previous VRV systems
- Design flexibility to enlarge system from single to a dual-module without changes to installed main pipe sizes for phased installation or tenant fit-out buildings
- Local code compliance-ready from factory via alignment with compliance needs, such as OSHPD Seismic, Miami Dade Wind, and Chicago Pressure relief code
- Reduced wiring costs with up to 27.4% reduction in MCA values compared to previous series
- Engineered for ease of installation and service with three-segment panel design
- Factory ships with increase space for easy field piping connection to service valves
- Built-in data recorder to store up to 40 minutes of operational data
- Integrates with new Daikin HERO ecosystem, an IoT -based remote monitoring and diagnostics platform
- Connect non standard VRV terminal units and AHUs with Daikin VRV EMERION leveraging Daikin Air Handling Unit Integration Kit to extend benefits of inverter technology to custom terminal units and AHUs. A kit consists of One Control Box and One EEV box. Offered via EKEQMCAV3-US and EKEQFCBAV3-US.





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PERFORMANCE

Outdoor Unit Model No.	RXYQ144AAYDB	Outdoor Unit Name:	12 Ton, 460V, VRV EMERION HP
Type:	Heat Pump	Unit Combination:	
Rated Cooling Conditions:	Indoor (°F DB/WB): 80 / 67 Ambient (°F DB/WB): 95 / 75	Rated Heating Conditions:	Indoor (°F DB/WB): 70 / 60 Ambient (°F DB/WB): 47 / 43
Rated Piping Length(ft):			
Rated Height Difference (ft):			
Rated Cooling Capacity (Btu/hr):	138,000	Rated Heating Capacity (Btu/hr):	138,000
Nom Cooling Capacity (Btu/hr):	144,000	Nom Heating Capacity (Btu/hr):	162,000
Cooling Input Power (kW):		Heating Input Power (kW):	
EER (Non-Ducted/Ducted):	11.00 / 10.90	Heating COP (Non-Ducted/Ducted):	3.3 / 3.4
IEER (Non-Ducted/Ducted):	21.80 / 18.80	Heating COP 17F (Non-Ducted/Ducted):	2.1 / 2.1

OUTDOOR UNIT DETAILS

Power Supply (V/Hz/Ph):	460 / 60 / 3	Compressor Stage:	Inverter
Power Supply Connections:	L1, L2, L3, Ground	Capacity Control Range (%):	3 - 100
Min. Circuit Amps MCA (A):	21.3	Capacity Index Limit:	-
Max Overcurrent Protection (MOP) (A):	25	Airflow Rate (H) (CFM):	9935
Max Starting Current MSC(A):		Gas Pipe Connection (inch):	1-1/8
Rated Load Amps RLA(A):		Liquid Pipe Connection (inch):	1/2
Dimensions (Height) (in):	65-3/8		
Dimensions (Width) (in):	48-13/16		
Dimensions (Depth) (in):	30-1/8	Sound Pressure (H) (dBA):	65
Net Weight (lb):	761	Sound Power Level (dBA):	

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SYSTEM DETAILS

Refrigerant Type:	R-410A	Cooling Operation Range (°F DB):	23 - 122
Holding Refrigerant Charge (lbs):	25.8	Heating Operation Range (°F WB):	-13 - 60
Additional Charge (oz/ft):		Max. Pipe Length (Vertical) (ft):	164
Pre-charge Piping (Length) (ft):		Cooling Range w/Baffle (°F DB):	-
Max. Pipe Length (Total) (ft):	3,280		
Max Height Separation (Ind to Ind ft):	98		

DIMENSIONAL DRAWING

