

Submittal Data Sheet

12-Ton VRV-WIII Heat Recovery Unit RWEYQ144PYDN -HR

FEATURES

- Compact lightweight casing (Height: 39-3/8â€, Weight: 330 lbs.) allows flexibility in system layout and installation
- Modular can be installed in double-decker style if needed
- Larger single system capacity ensures wider application range for satisfying floor-by-floor loads of commercial buildings
- Modular and flexible 7 combinations of condensing unit, up to 21-ton serving up to 32 indoor units
- Continuous operation allows for cold climate capability delivering comfortable heating performance with no defrost
- Operates with closed loop cooling tower, dry cooler, boiler, and geothermal solutions for optimum flexibility in system layout
- Standard Limited Warranty: 10-year warranty on compressor and all parts

BENEFITS

- Connects to the full suite of advanced Daikin Control Solutions including I-Touch Controller and I-Touch Manager for complete system control
- BMS flexibility with integration capabilities to Open Protocol Building Management Systems via the Daikin BACnet® and LonWorks® interfaces
- Flexible piping layout up to 980 feet of pipe (390 feet max. linear liquid piping length) and 164 feet height difference
- Maximum system diversity with up to 130% connectivity of nominal capacity
- Flexibility with optimum water flow rates per module of 16 gpm or greater (operable range13.2 ~ 39.5 gpm).
- The advanced, self-diagnostic, auto-check function will detect a malfunction and immediately display the type and location so it can be resolved quickly and effectively.













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| PERFORMANCE | | | |
|----------------------------------|------------------|--------------------------------------|---|
| Outdoor Unit Model No. | RWEYQ144PYDN -HR | Outdoor Unit Name: | 12-Ton VRV-WIII Heat Recovery Unit |
| Type: | Heat Recovery | Unit Combination: | RWEYQ72PYDN(x2) |
| Rated Cooling Capacity (Btu/hr): | 138,000 | Rated Cooling Conditions: | Indoor (°F DB/WB): 81 / 66 Ambient (°F DB/WB): 95 / 75 |
| Nom Cooling Capacity (Btu/hr): | | Rated Heating Conditions: | Indoor (°F DB/WB): 68 / 68 Ambient (°F DB/WB): 47 / 43 |
| Cooling Input Power (kW): | 8.40 | Rated Piping Length(ft): | |
| Rated Heating Capacity (Btu/hr): | 154,000 | Rated Height Difference (ft): | 0.00 |
| Heating Input Power (kW): | 8.00 | IEER (Non-Ducted/Ducted): | 23.70 / 23.70 |
| Nom Heating Capacity (Btu/hr): | | Heating COP 17F (Non-Ducted/Ducted): | 1 |
| | | Heating COP (Non-Ducted/Ducted): | 5.0 / 5.0 |

| OUTDOOR UNIT DETAILS | | | |
|---------------------------------------|----------------------------|---------------------------------|----------|
| Power Supply (V/Hz/Ph): | 460 / 60 / 3 | Compressor Type | Inverter |
| Power Supply Connections: | L1, L2, L3 Ground | Gas Pipe Connection (in): | 1-1/8 |
| Min. Circuit Amps MCA (A): | 10.2 + 10.2 | Liquid Pipe Connection (in): | 1/2 |
| Max Overcurrent Protection (MOP) (A): | 15 + 15 | H/L Pressure Connection (in): | 7/8 |
| Max Starting Current MSC(A): | | H/L Equalizing Connection (in): | |
| Rated Load Amps RLA(A): | 5.3 + 5.3 | Water Inlet Connection (in): | 1-1/4 |
| Dimensions (HxWxD) (in): | 39-3/8 x 62-1/4 x 21-11/16 | Water Outlet Connection (in): | 1-1/4 |
| Net Weight (lb): | 343+343 | Condensate Drain Outlet (in): | 1/2 |
| Capacity Control Range (%): | 11 - 100 | Sound Pressure (H) (dBA): | 53 |
| Capacity Index Limit (Btu\hr): | 72 - 187 | Sound Power Level (dBA): | |
| Unit Heat Rejection (kW): | 1.28 | Max. No. of Indoor Units: | 20 |
| | | | |



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| SYSTEM DETAILS | | | |
|--|---------|---|----------|
| Refrigerant Type: | R-410A | Cooling Operation Range (°F DB): | 35 - 104 |
| Holding Refrigerant Charge (lbs): | 9.9+9.9 | Heating Operation Range (°F WB): | 35 - 104 |
| Additional Charge (lb/ft): | | Max. Pipe Length (Vertical) (ft): | 164 |
| Pre-charge Piping (Length) (ft): | | Cooling Inlet Water Temp (Standard) (°F DB): | 59 / 113 |
| Max. Pipe Length (Total) (ft): | 390 | Heating Inlet Water Temp (Standard) (°F WB): | 50 / 113 |
| Max Height Separation (Ind to Ind ft): | 0 | Cooling Inlet Water Temp (Geothermal) (°F DB): | 1 |
| Water Flow Range (GPM): | 13 - 40 | Heating Inlet Water Temp (Geothermal) (°F WB): | 1 |

DIMENSIONAL DRAWING

