



Russell[®]
By Rheem

PROJECT NAME _____
LOCATION _____
ARCHITECT _____
ENGINEER _____
CONTRACTOR _____
SUBMITTED BY _____ DATE _____

UNIT SUMMARY

Quantity						
Unit Designation						
Model No.						
Total Cooling						
Sensible Cooling						
Air Ent. Evaporator						
Air Lvg. Evaporator						
Heating Input						
Heating Output						
CFM/ESP						
EER/SEER						
Electrical						
Minimum Ampacity						
Min.-Max. Breaker						
Net Unit Weight						
Accessory						
Catalog Form Number						

ACCESSORIES:

NOTES:

Vantix™ Line RF1PY Air Handlers
Nominal Sizes: 1.5 to 3 Tons [5.0 to 16.3 kW]
PSC Motor with Single-Stage Airflow
Expansion Device: Thermal Expansion Valve (TXV)
Efficiencies: 13.4 to 14.3 SEER2
Refrigerant Type: R-454B

JOB NAME _____ LOCATION _____
 CONTRACTOR _____ ORDER NO. _____
 ENGINEER _____ UNIT MODEL NO. _____
 SUBMITTED FOR APPROVAL RECORD COIL MODEL NO. _____
 DATE _____ AIR HANDLER MODEL NO. _____

UNIT DATA

COOLING PERFORMANCE

EFFICIENCY SEER
 TOTAL CAPACITY* MBH [kW]
 SENSIBLE CAPACITY* MBH [kW]
 OUTDOOR DESIGN TEMP..... °F [°C] DB
 TEMP. OF AIR ENTERING
 EVAPORATOR COIL °F [°C] DB
 °F [°C] WB
 POWER INPUT REQUIREMENT kW
 (*uses blower motor heat)

HEATING PERFORMANCE

EFFICIENCY HSPF
 TOTAL CAPACITY* MBH [kW]
 OUTDOOR DESIGN TEMP..... °F [°C] DB
 TEMP. OF AIR ENTERING
 EVAPORATOR COIL °F [°C] DB

SUPPLY AIR BLOWER PERFORMANCE

TOTAL AIR SUPPLY..... CFM [L/s]
 TOTAL RESISTANCE EXTERNAL
 TO UNIT IWG
 BLOWER SPEED..... RPM
 POWER OUTPUT REQUIREMENT BHP
 MOTOR RATING HP [W]
 POWER INPUT REQUIREMENT kW

ELECTRICAL DATA

POWER SUPPLY Hz
 TOTAL UNIT AMPACITY..... AMPS
 MINIMUM WIRE SIZE AWG
 MAXIMUM OVERCURRENT DEVICE
 FUSES/HACR BREAKER AMPS

CLEARANCES

ACCESS SIDE 24" [609.6 mm]
 AIR INLETS 12" [304.8 mm]
 ABOVE UNIT 60" [1524 mm]

FEATURES

- **Quiet Operation¹:** Provided by a cabinet construction with 1.0 inch of foil faced insulation for quieter sound characteristics
- **Front or Bottom Return with Aluminum Indoor Coil Design:** Are constructed of aluminum fins bonded to internally grooved aluminum tubing and are more corrosion resistant
- **Rugged Steel Cabinet Construction:** Designed for added strength and versatility
- **Most Compact Unit Design Available:** All standard air handler models are only 36" [915mm] in height
- **Field-installed Auxiliary Heater Kits:** Provide exact heat for indoor comfort and include circuit breakers which meet UL and cUL requirements for service disconnect
- **Less than 2% Cabinet Air Leakage at 1-inch H₂O:** When tested in accordance with ASHRAE Standard 193
- **Designing for Sustainability with Low GWP:** For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%² lower GWP than previous-generation refrigerants – with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort
- **Refrigerant Detection System³:** An integrated one-box, patented design featuring the A2L sensor and mitigation board, offering easier commissioning with a single component and simplified wiring configuration, compatibility with any 24V thermostat application and system protection by automatically pausing outdoor unit operation – if excess refrigerant is detected

[] Designates Metric Conversions

¹Based on manufacturer's air handler offering, and the product's airflow stages, motor type and cabinet insulation. Sound levels are also dependent on air handler location and installation.

²When comparing the GWP of R-454B to R-410A refrigerant.

³Factory or field installed in the furnace coil or air handler and is applicable to the complete heating and cooling system featuring Low GWP Refrigerant (A2L).



RF1PY

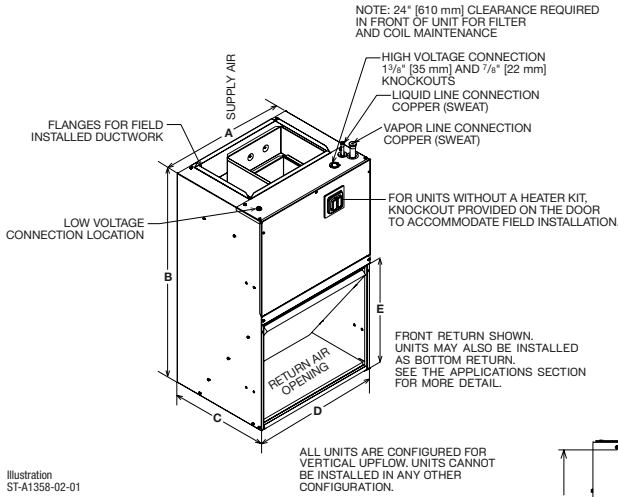
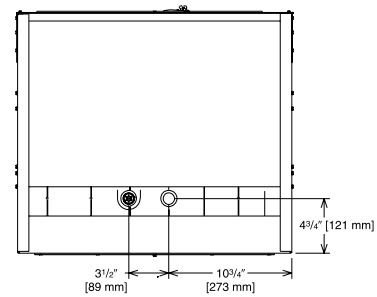
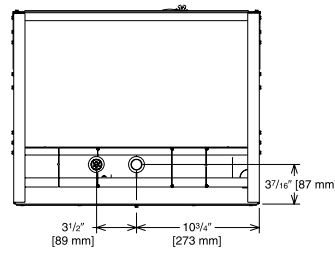
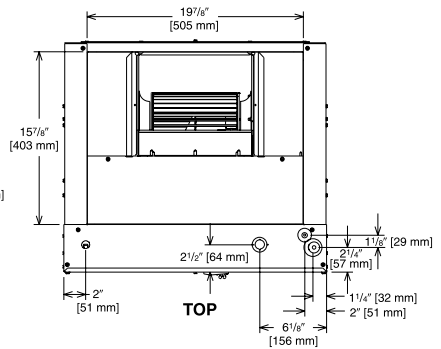
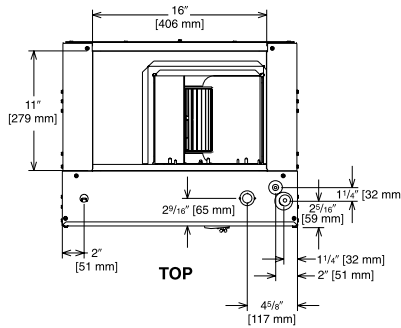


Illustration ST-A1358-02-01



1 1/2 & 2 TON [5.28 & 7.03 kW] MODELS

2 1/2 & 3 TON [8.79 & 10.6 kW] MODELS

Unit Dimensions

Model	(A) Unit Width In. [mm]	(B) Unit Height In. [mm]	(C) Unit Depth In. [mm]	(D) Return Air Opening Width In. [mm]	(E) Return Air Opening Height In. [mm]	Filter Size in. x in. x in. [mm x mm x mm]	Air Flow CFM (Nom.) [L/s]		Unit Weight/ Shipping Weight (Lbs.) [kg]
							Low	High	
RF1PY1821	21 1/2 [546.1]	36 [914.4]	17 [431.8]	20 [508.0]	17 7/16 [442.9]	20 X 20 X 1 [508 X 508 X 25.4]	600 [283]	—	80 [36] / 90 [41]
RF1PY2421	21 1/2 [546.1]	36 [914.4]	17 [431.8]	20 [508.0]	17 7/16 [442.9]	20 X 20 X 1 [508 X 508 X 25.4]	800 [378]	—	80 [36] / 90 [41]
RF1PY3024	24 [609.6]	36 [914.4]	21 [533.4]	23 [584.2]	21 3/8 [542.9]	20 X 25 X 1 [508 X 635 X 25.4]	1000 [472]	—	95 [43] x 105 [48]
RF1PY3624	24 [609.6]	36 [914.4]	21 [533.4]	23 [584.2]	21 3/8 [542.9]	20 X 25 X 1 [508 X 635 X 25.4]	1200 [566]	—	95 [43] x 105 [48]

[] Designates Metric Conversions

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

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