

HEAT PUMPS

Comfort Control² System™

Equipped with

Comfort Control² System™

- Serial communication enabled
- Increased system reliability and efficiency
- 37+ on-board diagnostic and operating codes
- *Active Protection*TM with homeowner "Call for Service" alert
- Exclusive Design with dual 7-segment LED display

RPRR-JEC
featuring
P410A

RPRR-JEC

Two-Stage Cooling/Three Stage Heating
Efficiencies ranging up to 17 SEER/13 EER/9.8 HSPF
in certain matched systems.

Four Models

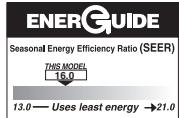
Nominal Sizes 2, 3, 4 & 5 Tons
[7.03, 10.5, 14.07 & 17.6 kW]



Rheem®
Prestige®
SERIES

The Rheem Prestige Series™ High Efficiency Two-Stage RPRR-JEC Heat Pump can provide year-round heating and cooling comfort. The Rheem RHPL air-handler, equipped with auxiliary heating elements for supplementary heat was designed especially for use with the *Prestige Series*™ heat pump. Together they deliver 3 stages of heat and 2 stages of cooling for precise temperature control and optimal energy efficiency.

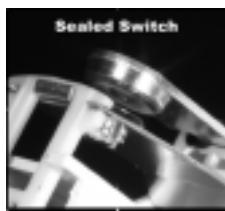
- Industry's lowest profile design: 33" maximum height
- The *Comfort Control² System*TM provides over 37+ on-board diagnostics and fault history codes for condensing units with single-phase compressors by detecting system and electrical problems. The integrated diagnostics with *Active Protection*TM prevents compressor operation when potentially harmful conditions are detected. Sends "Call for Service" alert notification to the thermostat to alert the homeowner of required service.
- Serial Communication Enhanced – When installed with a Serial Communicating Air Handler (RHPL-HM****JC) and user interface control (RHC-TST501CMMS) Series 500 thermostat this unit offers 4 or 2 wire installation, auto-configuration, and diagnostic messaging with full communicating capability.
- Legacy Enabled – Unit can be conventionally wired using 24VAC with non-communicating Rheem air-handlers or furnaces with non-communicating thermostat.
- Features a 10-year conditional unit replacement warranty and 10-year parts warranty when properly installed with a new Rheem air handler or Rheem indoor coil with a Rheem gas furnace. See product warranty card for additional information.
- Reliable Two-Stage operation for precise temperature control and On-Demand dehumidification. When matched with ECM gas furnace or air-handler, the system adjusts airflow to help control humidity for unsurpassed comfort in the cooling mode.
- All controls are accessible by removing one service panel. Removable top grille provides access to the condenser fan motor and condenser coil.
- Attractive, louvered wrap-around jacket protects the coil from yard hazards and weather extremes. Top grille is steel reinforced for extra strength. Cabinet is powder painted for all-weather protection.
- For quiet operation and improved efficiency, models feature an ECM two-speed condenser fan motor with a 3-blade outdoor fan.
- All models meet or exceed a 1000-hour salt spray test per ASTM B117 Standard Practice for Operating Salt Spray Testing Apparatus.
- Dual Fuel capable with select thermostats.



"Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your Contractor for details or visit www.energystar.gov."

FEATURES & BENEFITS OF THE *COMFORT CONTROL² SYSTEM*[™]

- The Rheem Exclusive Dual 7 Segment LED Display easily shows system status codes and conditions.



- A Sealed Switch replaces the standard contactor and features optical control and latching mechanism. The sealed switch prevents infiltration of insects and dust. A minimal switching arc, by the optical control, offers greater reliability. The latching mechanism consumes less power while reducing chatter.

- The Status Indication and System Diagnostics feature thermostat communication capability, built-in diagnostics, current sensing and high & low switch monitoring. The thermostat communication capability alerts the homeowner of any necessary service requirements.

Faster, more accurate service is provided with the built-in diagnostics, by providing the HVAC professional with dependable information. In addition, high and low pressure-switch monitoring prevents the system from operating when damage could occur.



STANDARD FEATURES

RPRR- JEC Heat Pumps

1. 2-stage operation in both cooling and heating mode.
2. Scroll compressor is hermetically sealed and incorporates internal high temperature motor overload protection, and durable insulation on the motor windings. It is externally mounted on rubber grommets to reduce vibration and noise.
3. Compressors have an internal pressure relief assembly to protect against excessive pressure differential.
4. All refrigerant connections are on the exterior of the unit, located close to the ground for neat appearing installations.
5. Cabinet is constructed of powder painted galvanized steel. The full wraparound louvered grille protects the coil from damage.
6. Copper Tube—Aluminum Fin coils are used on all models.
7. The control box is located in the top corner of the cabinet providing for easy access through a service panel.
8. Service valves are standard on all models.
9. Field connections for power and control wiring are kept separate.
10. Every unit is factory charged and run-tested.
11. Separate compressor compartment for easy service access.
12. Drawn, painted base pan for extra corrosion resistance and sound reduction.
13. The **RPRR- JEC** has a 10 year limited parts warranty, plus a 10 year conditional unit replacement warranty. See the General Terms of Limited Warranty for more details.
14. **Hard Start Kits**—Standard on all JEC models.
15. Enhanced compressor sound wrap is standard.
16. Control Box Cover.
17. The RPRR- JEC is shipped with a liquid line filter drier, (not-installed).
18. The RPRR- JEC features factory-installed auto-reset low and high pressure controls.

- The Fault Recall feature will allow for the last six fault-codes to be displayed, and will retain these codes even if power failure occurs.

- Built-in short-cycle protection allows the compressor to restart easily without removing the oil from the compressor.

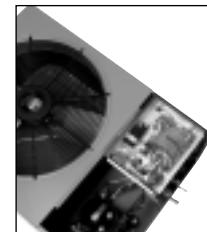
- A 30-second minimum run-time for every compressor call allows the oil to return to the compressor.

- *Active Protection* prevents the compressor from operating if damage could occur.

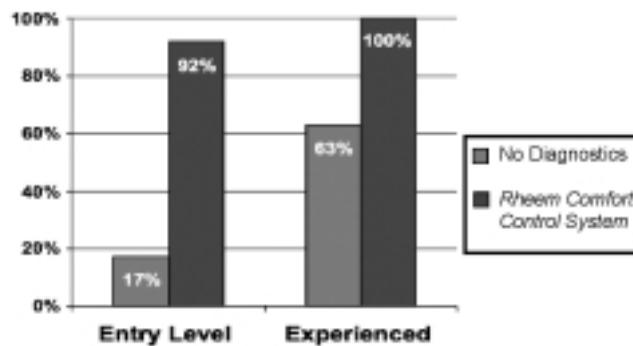
- The compressor and fan are controlled independently, which reduces the starting load and light dimming.

- A manual push-button is offered to operate the compressor and fan for 5 seconds to allow for an operation check.

- In order to save time and money, replacement automotive fuses can be utilized instead of replacing the entire control board.



Problem-Solving Accuracy



TWO-STAGE SCROLL[®] COMPRESSOR

The scroll compressor is the key to efficiency for this Rheem model. It's the latest in high-efficiency compressor technology.

The advanced scroll compressor offers low noise and vibration characteristics and features tolerance to liquid refrigerant and system contamination. The scroll also has low start torque, eliminating start problems in the field. And its unique design enables the RPRR- JEC Heat Pump to perform efficiently, quietly and reliably. All models have a 10-year compressor warranty as standard.



All controls and compressor are accessible for servicing by removal of the service panel.

Accessories

■ Outdoor Thermostats—

RXPT-A01—One outdoor thermostat in box.

RXPT-A02—One outdoor thermostat for mounting in box for use with RXPT-A01 or A03.

RXPT-A03—One outdoor thermostat with emergency Heat Relay wired and mounted in box.

RXPT-A04—Two outdoor thermostats with emergency Heat Relay wired and mounted in box.

■ Thermostats



100-Series *
Non-Programmable



200-Series *
Programmable



300-Series *
Deluxe
Programmable



400-Series *
Special Applications/
Programmable

500-Series *
Communicating/
Programmable

Brand	Unique Model Number Prefix	Descriptor (3 Characters)	Series (3 Characters)	System (2 Characters)	Type (2 Characters)
RHC	-	TST	101	GE	MS
RHC=Rheem		TST=Thermostat	100=Non-Programmable 200=Programmable 300=Deluxe Programmable 400=Special Applications/ Programmable 500=Communicating/ Programmable	GE=Gas/Oil/Electric HP=Heat Pump MD=Modulating Furnace DF=Dual Fuel UN=Universal AC/HP/GE CM=Communicating	SS=Single-Stage MS=Multi-Stage

* Photos are representative. Actual models may vary.

For detailed thermostat match-up information,
see specification sheet form number T11-001.

NOTE: Requires "3 Heat/2 Cool" thermostat for Maximum Comfort.

■ Blower Time Delay Control—RXMD-C06.

Fossil Fuel Kits—Not required. See Rheem Thermostats Specification Sheet (T11-001).

Low Ambient Control—Cycles outdoor fan to maintain adequate condensing pressures assuring liquid refrigerant flow to the coil. Allows low temperature operation in the cooling cycle down to 0°F [-17.8°C] outdoor temperature. It is recommended that this control be installed in units to be operated at outdoor ambient temperatures under 70°F [21°C] (Model No. RXAD-A08)

■ Dual Fuel High Pressure Control—RXME-A01.

This kit is required if this heat pump is installed in a dual fuel application.

■ Communicating 2 Wire Kit —RXME-A02.

This kit will allow the outdoor unit to communicate to the system with only 2 wires.

IMPORTANT:

The *Comfort Control² System*TM requires a communicating RPRRL-JEC Heat Pump, the RHPL-HM***JC Air Handler and the 500-Series Thermostat.

Model Number Identification

R	P	R	L	—	024	J	EC
RHEEM	REMOTE HEAT PUMP	EFFICIENCY 16 SEER	DESIGN SERIES R-410A		COOLING CAPACITY	ELECTRICAL DESIGNATION	VARIATIONS
					024 = 24,000 BTU/HR [7.03 kW]	J = 208/230V-1-60	EC = EQUIPPED WITH THE COMFORT CONTROL ² SYSTEM TM
					036 = 36,000 BTU/HR [10.55 kW]		
					048 = 48,000 BTU/HR [14.07 kW]		
					060 = 60,000 BTU/HR [17.58 kW]		

[] Designates Metric Conversions

Rheem Heat Pump System

For all season home comfort, performance and energy conservation, choose a Rheem Prestige SeriesTM RPRL- JEC Series Heat Pump and with an RHPL-HM***JC or RHPL-HM**JA Air Handler.

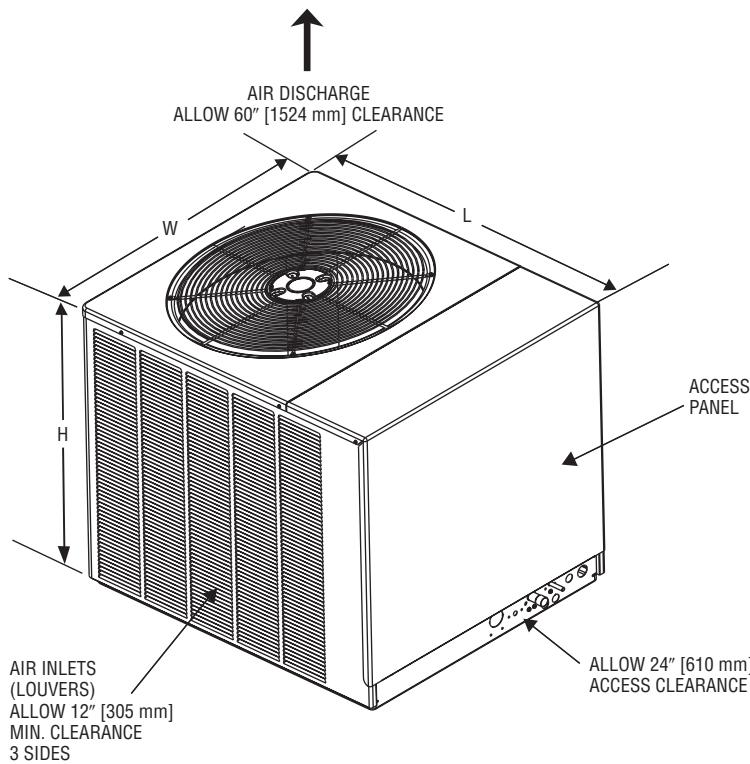
More than a reverse cycle air conditioner, it's a specially designed combination Winter/Summer comfort system using an indoor coil for heating and cooling.

To choose an RHPL-HM***JC or RHPL-HM**JA Air Handler designed for use with the RPRL- JEC Heat Pump, refer to the Performance Data Tables and/or the air handler specification sheet.

Electrical and Physical Data

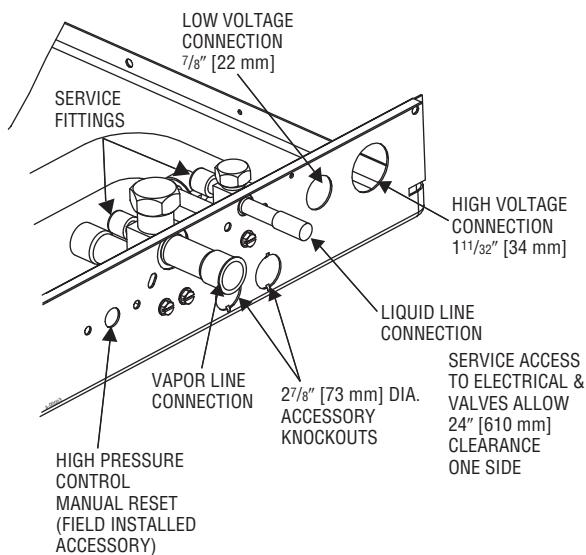
Model Number RPRL-	ELECTRICAL								PHYSICAL				
	Phase Frequency (Hz)	Compressor		Fan Motor Full Load Amperes (FLA)	Minimum Circuit Ampacity Amperes	Fuse or HACR Circuit Breaker		Outdoor Coil			Refrig. Per Circuit Oz. [g]	Weight	
		Rated Load Amperes (RLA)	Locked Rotor Amperes (LRA)			Minimum Amperes	Maximum Amperes	Face Area Sq. Ft. [m ²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
Rev. 2/24/2010													
024JEC	1-60-208/230	10.3/10.3	52	1.0	14/14	20/20	20/20	23 [2.14]	1	2300/2800 [1085/1321]	152 [4309]	257 [116.6]	264 [119.8]
036JEC	1-60-208/230	16.7/16.7	82	1.7	23/23	30/30	35/35	22.22 [2.06]	2	2800/3700 [1321/1746]	245 [6946]	311 [141.1]	315 [142.9]
048JEC	1-60-208/230	21.2/21.2	96	2.0	29/29	40/40	45/45	22.22 [2.06]	2	2800/3500 [1321/1652]	256 [7258]	300 [136.1]	322 [146.1]
060JEC	1-60-208/230	25.6/25.6	118	2.2	35/35	45/45	50/50	22.22 [2.06]	2	3800 [1793]	284 [8051]	316 [143.3]	343 [155.6]

Unit Dimensions



Model Number RPRL-	Height "H" (Inches) [mm]	Length "L" (Inches) [mm]	Width "W" (Inches) [mm]
024JEC/036JEC/ 048JEC/060JEC	33 [838]	443/8 [1127]	311/2 [800]

[] Designates Metric Conversions



Vapor Line Capacity Multiplier

(-)PRL- Unit Vapor Line Connection Size (Inches I.D.) [mm]	024	036	048	060
	3/4" [19.05] I.D. Sweat	7/8" [22.23] I.D. Sweat	7/8" [22.23] I.D. Sweat	7/8" [22.23] I.D. Sweat
Vapor Line Run Feet [m]				Vapor Line Diameter (inches O.D.) [mm]
5/8" [15.88] Optional	5/8" [15.88] Optional	5/8" [15.88] Optional	3/4" [19.05] Optional	
3/4" [19.05] Standard	3/4" [19.05] Standard	3/4" [19.05] Standard	7/8" [22.23] Standard	
—	—	7/8" [22.23] Optional	11/8" [28.58] Optional	
25' [7.62]	Optional	1.00	0.99	0.98
	Standard	1.00	1.00	1.00
	Optional	N/A	N/A	1.01
50' [15.24]	Optional	0.99	0.98	0.96
	Standard	1.00	1.00	0.99
	Optional	N/A	N/A	1.00
75' [22.86]	Optional	0.98	0.96	0.93
	Standard	1.00	0.99	0.98
	Optional	N/A	N/A	1.00
100' [30.48]	Optional	0.97	0.95	0.92
	Standard	N/A	N/A	0.97
	Optional	N/A	N/A	N/A
125' [38.10]	Optional	0.97	0.94	0.90
	Standard	N/A	N/A	0.97
	Optional	N/A	N/A	N/A
150' [45.72]	Optional	0.96	0.93	0.88
	Standard	N/A	N/A	0.96
	Optional	N/A	N/A	N/A

NOTES:

1. Do NOT exceed the limits in the liquid and suction line sizing charts.
2. Do NOT use 7/8 OD suction lines in 2 or 3-ton applications.
3. 1-1/8 OD suction line approved for 5-ton applications only but has length restrictions. Reference the liquid and suction line sizing charts.

[] Designates Metric Conversions

GENERAL TERMS OF LIMITED WARRANTY

Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy.

Limited Parts Warranty:

Rheem Prestige Series™ equipment features a 10-year limited parts warranty.*

*This ten-year limited parts warranty is applicable only to single-phase products installed in residential applications.

RPRL- JEC Conditional Replacement Warranty:

Rheem will provide a replacement RPRL-JEC Heat Pump to the original purchaser if the compressor fails within 10 years (providing the unit is installed with a new Rheem Air Handler OR Rheem Indoor Coil with a Rheem Gas Furnace, and is properly matched according to Rheem specifications), and if additional conditions are satisfied. See product warranty card for additional information.

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.

**Rheem Heating,
Cooling and
Water Heating**

P.O. Box 17010, Fort Smith, AR 72917



"In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice."