



The new degree of comfort.™

## Rheem Value Series Heat Pumps



### 13PJP- Series

Efficiencies up to 13 SEER

Nominal Sizes 1.5-4 Ton [5.28 to 14.7 kW]

Cooling Capacities 17.7 to 48.5 kBTU

[5.19 to 14.2 kW]



*"Proper sizing and installation of equipment is critical to achieve optimal performance. Ask your Contractor for details or visit [www.energystar.gov](http://www.energystar.gov)."*

- Outdoor heat pump designed for ground level or rooftop installations. These units offer comfort and dependability for single, multi-family and light commercial applications
- Painted louvered steel cabinet
- Easily accessible control box
- Suction line accumulator
- Piston metering device
- Condenser coils constructed with copper tubing and enhanced aluminum fins
- Grille/Motor mount for quiet fan operation
- Filter Drier (shipped – not installed)

## TABLE OF CONTENTS

Model Features .....	3
Model Number Identification .....	4
Accessories.....	4
Scroll Compressor .....	4
Performance Data .....	5
Electrical & Physical Data .....	6
Unit Dimensions .....	7
Refrigerant Line Size Information.....	8
Limited Warranty .....	9

## Model Features:

- Coils constructed with copper tubing and enhanced aluminum fins.
- Includes factory installed low pressure control.
- Strong, attractive cabinet—louvered design protects the coil from damage.
- Piston metering device with suction line accumulator.
- Demand Defrost Control
- Non-Cycling Reversing Valve
- Hot Gas Muffler
- Service Valves
- Grille/motor mount for quiet fan operation.
- Easily accessible control box.
- Bi-Directional Filter Drier (shipped – not installed)
- Certified and rated under AHRI Standard 240.
- U.L listed.



## Model Number Identification

<b>13</b>	<b>P</b>	<b>J</b>	<b>P</b>	<b>18</b>	<b>A</b>	<b>01</b>
13 SEER	P = HEAT PUMP	VOLTAGE J = 208-230 SINGLE PHASE	P = R-410A/ PISTON	NOMINAL COOLING CAPACITY 18 = 18,000 BTU/HR [5.28 kW] 24 = 24,000 BTU/HR [7.03 kW] 30 = 30,000 BTU/HR [8.79 kW] 36 = 36,000 BTU/HR [10.55 kW] 42 = 42,000 BTU/HR [12.31 kW] 48 = 48,000 BTU/HR [14.07 kW]	CABINET A = FULL METAL JACKET	RHEEM VALUE SERIES

## Accessories

- Heat Pump Thermostat Warning Light Kit (Model No. RXPX-D01)
- Low Ambient Control (Model No. RXAD-A08)
- Outdoor Thermostats (Model No. RXPT-A01, A02, A03 or A04)
- Heat Pump Monitor (Model No. RXPM-B01)
- Thermostats and Subbases (Available through the PROSTOCK® department)
- Compressor Time Delay Control (Model No. RXMD-B01)
- Blower Time Delay Control (Model No. RXMD-C04)  
RXMD-C04 is not required if the outdoor unit is matched with a Rheem Value Series furnace or air handler, or if the furnace or air handler used has a blower off time delay built-in.
- Sound Enclosure\*
- High Pressure Control (Model No. RXAB-A07)
- Start Components\*

## Thermostats



**200-Series \***  
Programmable



**300-Series \***  
Deluxe  
Programmable

**400-Series \***  
Special Applications/  
Programmable



**500-Series \***  
Communicating/  
Programmable

Brand	Descriptor (3 Characters)	Series (3 Characters)	System (2 Characters)	Type (2 Characters)
RHC	-	TST	213	UN
RHC=Rheem	TST=Thermostat	200=Programmable 300=Deluxe Programmable 400=Special Applications/ Programmable 500=Communicating/ Programmable	GE=Gas/Electric UN=Universal (AC/HP/GE) MD=Modulating Furnace DF=Dual Fuel 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.

## Scroll® Compressor

The reliable 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 compressor also has low start torque, reducing start problems in the field. And its unique design enables heat pumps to perform efficiently and quietly.

[ ] Designates Metric Conversions



## Performance Data @ AHRI Standard Conditions

Model Numbers		AHRI Cooling Performance							AHRI Heating Performance (70°F [21°C] Indoor)				
		80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35°C] DB Outdoor Air							Outdoor Air 47°F [8.5°C] DB/ 43°F [6°C] WB DOE High Temp.		Outdoor Air 17°F [-8.5°C] DB/ 15°F [-9.5°C] WB DOE Low Temp.		DOE Region IV HSPF
Outdoor Unit 13PJP	Indoor Coil and/or Air Handler	Total Capacity BTU/H [kW]	Net Sens. BTU/H [kW]	Net Latent BTU/H [kW]	EER	SEER	Snd. Rate dB	Indoor CFM [L/s]	BTU/H [kW]	COP	BTU/H [kW]	COP	
Rev. 10/4/12 18	RHLP-HM2417(RCSP-H*2417) ①	17,700 [5.2]	13,500 [4.0]	4,200 [1.2]	11.00	13.00	76	600 [283]	16,400 [4.8]	3.64	8,600 [2.5]	2.08	7.70
24	RHLP-HM2417(RCSP-H*2417) ①	23,000 [6.7]	17,800 [5.2]	5,200 [1.5]	11.00	13.00	74	775 [366]	22,200 [6.5]	3.68	13,100 [3.8]	2.48	7.70
30	RHLP-HM3617(RCSP-H*3617) ①	28,800 [8.4]	21,500 [6.3]	7,300 [2.1]	11.00	13.00	73	1,000 [472]	27,600 [8.1]	3.76	17,400 [5.1]	2.70	7.70
36	RHLP-HM3617(RCSP-H*3617) ①	34,800 [10.2]	26,100 [7.6]	8,700 [2.5]	11.00	13.00	75	1,175 [554]	34,600 [10.1]	3.54	21,800 [6.4]	2.58	7.70
42	RHLP-HM4821(RCSP-H*4821) ①	40,500 [11.9]	30,300 [8.9]	10,200 [3.0]	11.00	13.00	77	1,350 [637]	39,500 [11.6]	3.72	25,000 [7.3]	2.68	7.70
48	RHLP-HM4821(RCSP-H*4821) ①	48,500 [14.2]	36,700 [10.8]	11,800 [3.5]	11.00	13.00	77	1,550 [731]	46,000 [13.5]	3.66	29,200 [8.6]	2.66	7.70

① Highest sales volume tested combination required by D.O.E. test procedures.

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## Electrical and Physical Data

Model Number 13PJP	ELECTRICAL							PHYSICAL					
	Phase Frequency (Hz) Voltage (Volts)	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 <sup>2</sup> ]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
Rev. 10/4/2012													
18	1-60-208/230	9/9	48	0.6	12/12	15/15	20/20	11.06 [1.03]	1	1700 [802]	90 [2552]	144 [65.3]	152 [65.3]
24	1-60-208/230	12.8/12.8	58.3	0.6	17/17	20/20	25/25	11.06 [1.03]	1	2370 [1118]	101 [2863]	130 [59]	138 [59]
30	1-60-208/230	14.1/14.1	73	0.8	19/19	25/25	30/30	13.72 [1.27]	1	2800 [1321]	117 [3317]	198 [89.8]	208 [89.8]
36	1-60-208/230	17/17	96.7	1.2	23/23	30/30	35/35	16.39 [1.52]	1	3575 [1687]	117 [3317]	215 [97.5]	227 [97.5]
42	1-60-208/230	21.8/21.8	112	1.2	29/29	35/35	50/50	21.85 [2.03]	1	3575 [1687]	156 [4423]	202 [91.6]	214 [91.6]
48	1-60-208/230	21.8/21.8	117	1.2	29/29	35/35	50/50	21.85 [2.03]	1	3575 [1687]	156 [4423]	205 [93]	217 [93]

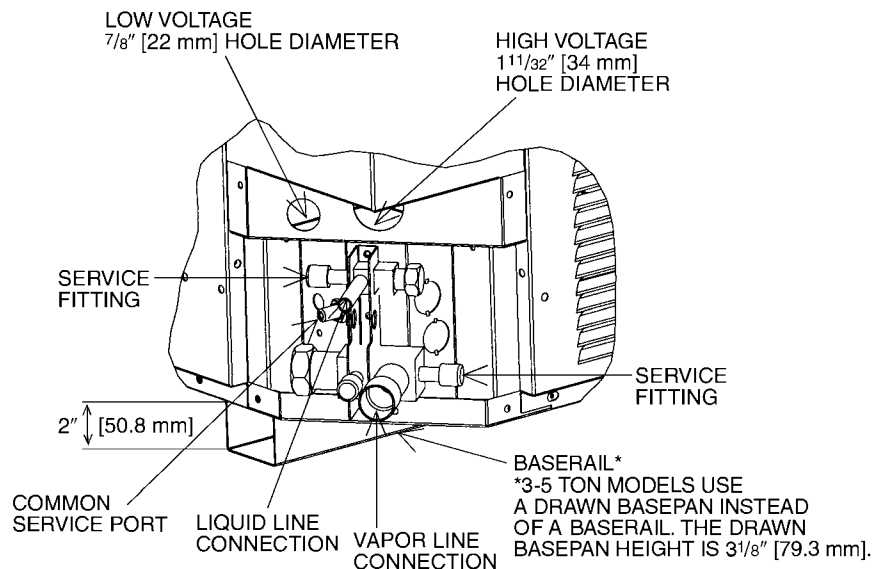
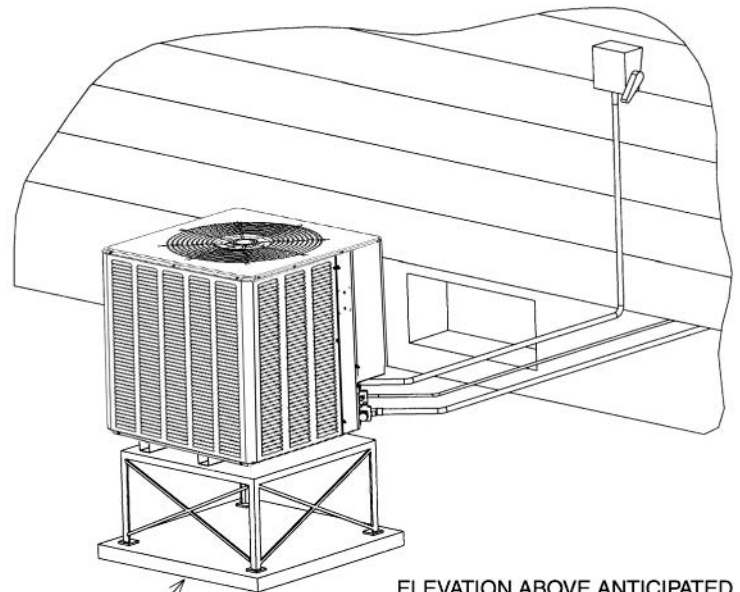
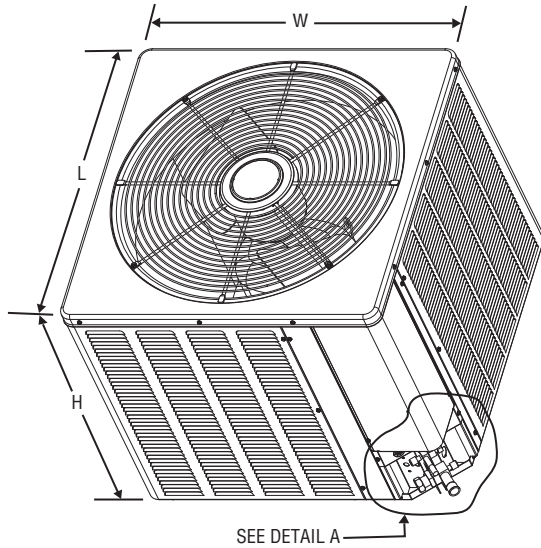
NOTE: Factory Refrigerant Charge includes refrigerant for 15 feet of standard line set.

[ ] Designates Metric Conversions

## Unit Dimensions

Model Number 13PJP	Height "H" (Inches) [mm]	Length "L" (Inches) [mm]	Width "W" (Inches) [mm]
18, 24	26 <sup>1</sup> / <sub>4</sub> [666.75]	23 <sup>5</sup> / <sub>8</sub> [600.07]	23 <sup>5</sup> / <sub>8</sub> [600.07]
30	26 <sup>1</sup> / <sub>4</sub> [666.75]	27 <sup>5</sup> / <sub>8</sub> [701.67]	27 <sup>5</sup> / <sub>8</sub> [701.67]
36	27 <sup>3</sup> / <sub>8</sub> [695.32]	31 <sup>5</sup> / <sub>8</sub> [803.27]	31 <sup>5</sup> / <sub>8</sub> [803.27]
42, 48	35 <sup>3</sup> / <sub>8</sub> [898.52]	31 <sup>5</sup> / <sub>8</sub> [803.27]	31 <sup>5</sup> / <sub>8</sub> [803.27]

[ ] Designates Metric Conversions



**DETAIL A**

## Heat Pump Refrigerant Line Size Information

System Capacity	Line Size Connection Size (Inch I.D.) [mm]	Line Size (Inch O.D.) [mm]	Liquid Line Sizing (R410A) Outdoor Unit Above or Below Indoor Coil (Heat Pumps Only)					
			Total Equivalent Length—Feet [m]					
			25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]
			Maximum Vertical Separation—Feet [m]					
1½ Ton	3/8" [9.53]	1/4 [6.35]	25 [7.62]	40 [12.19]	25 [7.62]	9 [2.74]	N/A	N/A
		5/16 [7.94]	25 [7.62]	50 [15.24]	62 [18.90]	58 [17.68]	53 [16.15]	49 [14.94]
		3/8* [9.53]	25 [7.62]	50 [15.24]	75 [22.86]	72 [21.95]	70 [21.34]	68 [20.73]
2 Ton	3/8" [9.53]	1/4 [6.35]	23 [7.01]	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	36 [10.97]	29 [8.84]	23 [7.01]	16 [4.88]	9 [2.74]
		3/8* [9.53]	25 [7.62]	50 [15.24]	72 [21.95]	70 [21.34]	68 [20.73]	65 [19.81]
2½ Ton	3/8" [9.53]	1/4 [6.35]	25 [7.62]	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	49 [14.94]	38 [11.58]	27 [8.23]	17 [5.18]	6 [1.83]
		3/8* [9.53]	25 [7.62]	50 [15.24]	68 [20.73]	65 [19.81]	62 [18.90]	58 [17.68]
3 Ton	3/8" [9.53]	5/16 [7.94]	25 [7.62]	50 [15.24]	37 [11.28]	22 [6.71]	7 [2.13]	N/A
		3/8* [9.53]	25 [7.62]	50 [15.24]	68 [20.73]	63 [19.20]	58 [17.68]	53 [16.15]
3½ Ton	3/8" [9.53]	5/16 [7.94]	25 [7.62]	23 [7.01]	4 [1.22]	N/A	N/A	N/A
		3/8* [9.53]	25 [7.62]	50 [15.24]	43 [13.11]	36 [10.97]	30 [9.14]	24 [7.32]
4 Ton	3/8" [9.53]	3/8* [9.53]	25 [7.62]	46 [14.02]	38 [11.58]	30 [9.14]	22 [6.71]	15 [4.57]
		1/2 [12.7]	25 [7.62]	50 [15.24]	56 [17.07]	55 [16.76]	53 [16.15]	52 [15.85]

NOTES:  
\*Standard line size  
N/A = Application not recommended.

Suction Line Length/Size versus Capacity Multiplier (R-410A)							
Unit Size		1½ Ton	2 Ton	2½ Ton	3 Ton	3½ Ton	4 Ton
Suction Line Connection Size		3/4" [19.05] I.D.			7/8" [22.23] I.D.		
Suction Line Run—Feet [m]		5/8" [15.88 mm] O.D. Opt. 3/4" [19.05 mm] O.D. Std.*		5/8" [15.88 mm] O.D. Opt. 3/4" [19.05 mm] O.D. Std.* 7/8" [22.23 mm] O.D. Opt.	3/4" [19.05 mm] O.D. Opt. 7/8" [22.23 mm] O.D. Std.*		7/8" [22.23 mm] O.D. Opt. 1 1/8" [28.58 mm] O.D. Std.*
25' [7.62]	Optional	1.00	1.00	1.00	1.00	1.00	1.00
	Standard	1.00	1.00	1.00	1.00	1.00	1.00
	Optional	—	—	1.00	—	—	—
50' [15.24]	Optional	0.98	0.98	0.96	0.98	0.99	0.99
	Standard	0.99	0.99	0.98	0.99	0.99	0.99
	Optional	—	—	0.99	—	—	—
100' [30.48]	Optional	0.95	0.95	0.94	0.96	0.96	0.96
	Standard	0.96	0.96	0.96	0.97	0.98	0.98
	Optional	—	—	0.97	—	—	—
150' [45.72]	Optional	0.92	0.92	0.91	0.94	0.94	0.95
	Standard	0.93	0.94	0.93	0.95	0.96	0.96
	Optional	—	—	0.95	—	—	—

NOTES:  
\*Standard line size  
N/A = Using suction line larger than shown in chart will result in poor oil return and is not recommended. [ ] 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 and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Conditional Compressor (Registration Required) .....	Ten (10) Years
Conditional Parts (Registration Required) .....	Ten (10) Years







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

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PRINTED IN U.S.A 10/12 QG FORM NO. P11-805