

# Chas Roberts

## AIR CONDITIONING & HEATING

(602) 943-3426  
9828 North 19th Avenue  
Phoenix, AZ 85021-1992

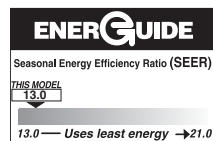
(520) 292-6858  
4065 East Illinois Street  
Tucson, AZ 85714-2106

www.ChasRoberts.com

# RUUD



## 13PJL SERIES



## 13 SEER HEAT PUMPS

### 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.
- Expansion Valves with Internal Check Valve—Provides for quieter refrigerant metering.
- 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 A.R.I. Standard 240.
- U.L listed.

### Accessories/Options

- 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 Ruud 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\*
- \*Available through the PROSTOCK® department.

### Applications

Ruud Value Series remote heat pumps offer comfort and dependability for single, multi-family and light commercial applications.

# Important Facts You Should Know About Your Heat Pump

**Chas Roberts**

AIR CONDITIONING & HEATING

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- During the cooling season, the heat pump operates like a conventional system.
- Do Not turn the air conditioning system off. Part-time cooling is poor economy. If the system is left off during the morning, the home will soak up heat and be more difficult to cool in the afternoon. You can actually save money by letting the thermostat determine when cooling is needed.
- During the hot, dry seasons, we recommend keeping the air conditioner blower on continuously. The air conditioning unit cools more evenly when the blower switch is in the ON position. The blower provides refreshing air movement and even temperatures throughout the home. The blower also circulates air through the filter, which helps remove dust, lint and other pollutants more efficiently.
- Shades, drapes, shutters, or screens should be installed on windows that are exposed to direct sunlight. Also, plant a tree or put up a canopy to protect your windows from the direct sun.
- **During the heating season**, the heat pump will deliver warm air, but not hot air like other systems, and will operate for long periods of time. THIS IS NORMAL. *Remember*, air which is 80 degrees is warm air and will heat the house even though it may feel cool to a hand, which is 98 degrees.
- During the cold weather, frost will accumulate on the outdoor coil. This will cause the heat pump to go into a defrost cycle. During this cycle, the outdoor fan will stop running and you will hear the humming of the compressor and feel cool air coming from the registers. You may also notice steam or water runoff from the outdoor unit and hear a “whooshing” sound. *THIS IS A NORMAL FUNCTION DURING THE DEFROST CYCLE*. Do not turn off the unit, change the temperature, or adjust the thermostat during this cycle. The defrost cycle will last from 1-10 minutes depending on the amount of ice on the coil. Then the unit will return to the heating mode.
- Night setback during the heating season is NOT recommended. The heat pump is not designed to raise space temperatures quickly.
- **For cooling and heating** . . . Leave your thermostat alone. When you have found a temperature that you prefer, it is best to leave the thermostat at that setting.
- Clean or replace the filters frequently. Dirty filters will lower performance and efficiency of your cooling. The filters are usually located at the return grille or at the indoor section of your unit.

# Model Identification Number

<b>13</b>	<b>P</b>	<b>J</b>	<b>L</b>	<b>18</b>	<b>A</b>	<b>01</b>
13 SEER	P = HEAT PUMP	VOLTAGE	L = R-410A	NOMINAL COOLING CAPACITY	CABINET	RUUD VALUE SERIES
	J = 208-230 SINGLE PHASE			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] 60 = 60,000 BTU/HR [17.58 kW]	A = FULL METAL JACKET	

## Performance Data ARI Standard Conditions

Note: Only these combinations of indoor/outdoor units are approved and any other combinations should not be used.

Model Numbers		ARI Cooling Performance							ARI Htg. Performance (70°F [21.0°C] Indoor)				
		80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35.0°C] DB Outdoor Air							Outdoor Air 47°F DB/43°F WB [8.5°C/6.0°C] DOE High Temp.		Outdoor Air 17°F DB/15°F WB [-8.5°C/-9.5°C] DOE Low Temp.		DOE Region IV HSPF
		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	
Outdoor Unit 13PJL	Indoor Coil and/or Air Handler												
Rev. 3/31/09  18	RHSL-HM1817 (RCSL-H*2417A*) ①	18,200 [5.3]	13,100 [3.8]	5,100 [1.5]	11.35	13.00	76	600 [283]	16,900 [5.0]	3.42	8,700 [2.5]	2.18	7.70
	RCFL-H*2414A*	18,100 [5.3]	12,950 [3.8]	5,150 [1.5]	11.10	13.00	76	600 [283]	17,000 [5.0]	3.36	8,800 [2.6]	2.08	7.70
	RCFL-H*2417A*	18,100 [5.3]	12,950 [3.8]	5,150 [1.5]	11.10	13.00	76	600 [283]	17,000 [5.0]	3.36	8,800 [2.6]	2.08	7.70
	RBHP-17 (RCHL-24A2)	17,800 [5.2]	12,900 [3.8]	4,900 [1.4]	12.00	14.00	76	600 [283]	16,500 [4.8]	3.64	9,100 [2.7]	2.44	8.20
	RHLL-HM2417 (RCSL-H*2417A*)	18,900 [5.5]	13,750 [4.0]	5,150 [1.5]	12.00	14.00	76	615 [290]	16,500 [4.8]	3.62	8,300 [2.4]	2.22	8.20
24	RHSL-HM2417 (RCSL-H*2417A*) ①	24,200 [7.1]	17,050 [5.0]	7,150 [2.1]	10.90	13.00	74	800 [378]	22,800 [6.7]	3.50	13,600 [4.0]	2.24	7.70
	RCFL-H*2414A*	24,200 [7.1]	17,050 [5.0]	7,150 [2.1]	10.75	13.00	74	800 [378]	22,800 [6.7]	3.44	13,800 [4.0]	2.22	7.70
	RCFL-H*2417A*	24,200 [7.1]	17,050 [5.0]	7,150 [2.1]	10.75	13.00	74	800 [378]	22,800 [6.7]	3.44	13,800 [4.0]	2.22	7.70
	RBHP-17 (RCHL-24A2)	22,400 [6.6]	15,850 [4.6]	6,550 [1.9]	11.00	13.00	74	800 [378]	22,200 [6.5]	3.60	14,500 [4.2]	2.54	7.70
	RHLL-HM2417 (RCSL-H*2417A*)	24,800 [7.3]	17,650 [5.2]	7,150 [2.1]	12.00	14.00	74	800 [378]	22,200 [6.5]	3.72	13,100 [3.8]	2.36	8.20
30	RHSL-HM3017 (RCSL-H*3617A*) ①	28,600 [8.4]	21,450 [6.3]	7,150 [2.1]	11.40	13.00	73	1,000 [472]	27,800 [8.1]	3.74	15,600 [4.6]	2.52	8.50
	RCFL-H*3617A*	28,400 [8.3]	21,250 [6.2]	7,150 [2.1]	11.00	13.00	73	1,000 [472]	27,400 [8.0]	3.58	15,000 [4.4]	2.36	8.00
	RCFL-H*3617C*	28,400 [8.3]	21,250 [6.2]	7,150 [2.1]	11.00	13.00	73	1,000 [472]	27,400 [8.0]	3.58	15,000 [4.4]	2.36	8.00
	RCFL-H*3621A*	28,400 [8.3]	21,250 [6.2]	7,150 [2.1]	11.00	13.00	73	1,000 [472]	27,400 [8.0]	3.58	15,000 [4.4]	2.36	8.00
	RCFL-H*3621C*	28,400 [8.3]	21,250 [6.2]	7,150 [2.1]	11.00	13.00	73	1,000 [472]	27,400 [8.0]	3.58	15,000 [4.4]	2.36	8.00
	RBHP-21 (RCHL-36A1)	28,600 [8.4]	21,200 [6.2]	7,400 [2.2]	12.00	14.00	73	1,000 [472]	26,800 [7.9]	3.82	14,500 [4.2]	2.56	9.00
	RHLL-HM3617 (RCSL-H*3617A*)	28,800 [8.4]	21,650 [6.3]	7,150 [2.1]	12.00	14.00	73	1,000 [472]	26,800 [7.9]	3.78	14,400 [4.2]	2.44	9.00
	RHLL-HM3617 (RCSL-H*3617C*)	28,800 [8.4]	21,650 [6.3]	7,150 [2.1]	12.00	14.00	73	1,000 [472]	26,800 [7.9]	3.78	14,400 [4.2]	2.44	9.00
	RHSL-HM3017 (RCSL-H*3617C*)	28,600 [8.4]	21,450 [6.3]	7,150 [2.1]	11.40	13.00	73	1,000 [472]	27,800 [8.1]	3.74	15,600 [4.6]	2.52	8.50

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

[ ] Designates Metric Conversions

# Performance Data ARI Standard Conditions (cont.)

Note: Only these combinations of indoor/outdoor units are approved and any other combinations should not be used.

Model Numbers		ARI Cooling Performance							ARI Htg. Performance (70°F [21.0°C] Indoor)					
		80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35.0°C] DB Outdoor Air							Outdoor Air 47°F DB/43°F WB [8.5°C/6.0°C] DOE High Temp.		Outdoor Air 17°F DB/15°F WB [-8.5°C/-9.5°C] DOE Low Temp.		DOE Region IV HSPF	
Outdoor Unit 13PJL	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. 3/31/09	RHSL-HM3617 (RCSL-H*3617A*) ①	34,400 [10.1]	25,350 [7.4]	9,050 [2.7]	11.10	13.00	75	1,200 [566]	34,600 [10.1]	3.44	22,600 [6.6]	2.40	8.50	
	RCFL-H*3617A*	33,400 [9.8]	24,350 [7.1]	9,050 [2.7]	10.95	13.00	75	1,075 [507]	34,400 [10.1]	3.46	22,400 [6.6]	2.40	8.50	
	RCFL-H*3617C*	33,400 [9.8]	24,350 [7.1]	9,050 [2.7]	10.95	13.00	75	1,075 [507]	34,400 [10.1]	3.46	22,400 [6.6]	2.40	8.50	
	RCFL-H*3621A*	33,400 [9.8]	24,350 [7.1]	9,050 [2.7]	10.95	13.00	75	1,075 [507]	34,400 [10.1]	3.46	22,400 [6.6]	2.40	8.50	
	RCFL-H*3621C*	33,400 [9.8]	24,350 [7.1]	9,050 [2.7]	10.95	13.00	75	1,075 [507]	34,400 [10.1]	3.46	22,400 [6.6]	2.40	8.50	
	36	RBHP-21 (RCHL-36A1)	35,400 [10.4]	25,650 [7.5]	9,750 [2.9]	11.75	13.50	75	1,175 [554]	36,000 [10.5]	3.50	23,400 [6.9]	2.36	8.20
		RHLL-HM3617 (RCSL-H*3617A*)	35,000 [10.3]	25,950 [7.6]	9,050 [2.7]	12.00	14.00	75	1,200 [566]	34,000 [10.0]	3.58	22,000 [6.4]	2.46	9.00
		RHLL-HM3617 (RCSL-H*3617C*)	35,000 [10.3]	25,950 [7.6]	9,050 [2.7]	12.00	14.00	75	1,200 [566]	34,000 [10.0]	3.58	22,000 [6.4]	2.46	9.00
		RHSL-HM3617 (RCSL-H*3617C*)	34,400 [10.1]	25,350 [7.4]	9,050 [2.7]	11.10	13.00	75	1,200 [566]	34,600 [10.1]	3.44	22,600 [6.6]	2.40	8.50
		RHSL-HM3621 (RCSL-H*3621A*)	34,400 [10.1]	25,350 [7.4]	9,050 [2.7]	11.10	13.00	75	1,200 [566]	34,600 [10.1]	3.44	22,600 [6.6]	2.40	8.50
RHSL-HM3621 (RCSL-H*3621C*)		34,400 [10.1]	25,350 [7.4]	9,050 [2.7]	11.10	13.00	75	1,200 [566]	34,600 [10.1]	3.44	22,600 [6.6]	2.40	8.50	
42	RHSL-HM4221 (RCSL-H*4821A*) ①	41,000 [12.0]	30,350 [8.9]	10,650 [3.1]	11.05	13.00	77	1,400 [661]	41,500 [12.2]	3.60	27,600 [8.1]	2.54	8.50	
	RCFL-H*4821A*	41,000 [12.0]	30,350 [8.9]	10,650 [3.1]	10.90	13.00	77	1,400 [661]	41,500 [12.2]	3.56	27,800 [8.1]	2.54	8.50	
	RCFL-H*4824A*	41,000 [12.0]	30,350 [8.9]	10,650 [3.1]	10.90	13.00	77	1,400 [661]	41,500 [12.2]	3.56	27,800 [8.1]	2.54	8.50	
	RBHP-24 (RCHL-48A1)	40,000 [11.7]	28,250 [8.3]	11,750 [3.4]	12.00	14.00	77	1,400 [661]	41,500 [12.2]	3.60	28,000 [8.2]	2.66	9.00	
	RHLL-HM4821 (RCSL-H*4821A*)	42,000 [12.3]	31,350 [9.2]	10,650 [3.1]	12.00	14.00	77	1,400 [661]	41,000 [12.0]	3.74	27,000 [7.9]	2.66	9.00	
48	RHSL-HM4821 (RCFL-H*4821A*) ①	46,500 [13.6]	33,950 [9.9]	12,550 [3.7]	10.90	13.00	77	1,600 [755]	46,000 [13.5]	3.54	30,600 [9.0]	2.60	8.50	
	RHSL-HM4821 (RCSL-H*4821A*) ①	46,500 [13.6]	33,950 [9.9]	12,550 [3.7]	10.90	13.00	77	1,600 [755]	46,000 [13.5]	3.54	30,600 [9.0]	2.60	7.70	
	RCFL-H*4821A*	45,500 [13.3]	32,950 [9.7]	12,550 [3.7]	10.85	13.00	77	1,475 [696]	46,000 [13.5]	3.58	30,400 [8.9]	2.58	8.50	
	RCFL-H*4824A*	45,500 [13.3]	32,950 [9.7]	12,550 [3.7]	10.85	13.00	77	1,475 [696]	46,000 [13.5]	3.58	30,400 [8.9]	2.58	8.50	
	RHLL-HM4821 (RCSL-H*4821A*)	47,500 [13.9]	34,950 [10.2]	12,550 [3.7]	12.00	14.00	77	1,600 [755]	45,500 [13.3]	3.72	29,800 [8.7]	2.68	9.00	
	RHLL-HM4824 (RCSL-H*4824A*)	48,000 [14.1]	36,500 [10.7]	11,500 [3.4]	12.00	14.00	77	1,625 [767]	45,500 [13.3]	3.74	29,800 [8.7]	2.68	9.00	
	RHSL-HM4824 (RCSL-H*4824A*)	46,500 [13.6]	33,950 [9.9]	12,550 [3.7]	10.90	13.00	77	1,600 [755]	46,000 [13.5]	3.54	30,600 [9.0]	2.60	8.50	
60	RHLL-HM6024 (RCSL-H*6024A*) ①	58,500 [17.1]	41,750 [12.2]	16,750 [4.9]	10.90	13.00	77	1,875 [885]	56,000 [16.4]	3.64	34,400 [10.1]	2.50	8.50	

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

[ ] Designates Metric Conversions

# Electrical and Physical Data

Model Number 13PJL	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. 3/31/09													
18	1-60-208/230	9/9	48	0.6	12/12	15/15	20/20	11.06 [1.03]	1	1700 [802]	91 [2580]	144 [65.3]	152 [68.9]
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]	91 [2580]	130 [59.0]	138 [62.6]
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]	101 [2863]	198 [89.8]	208 [94.3]
36	1-60-208/230	17/17	96.7	1.2	23/23	30/30	35/35	16.39 [1.52]	1	3575 [1687]	109 [3090]	215 [97.5]	227 [103]
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]	150 [4252]	202 [91.6]	214 [97.1]
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]	141 [3997]	205 [93.0]	217 [98.4]
60	1-60-208/230	26.3/26.3	134	1.2	35/35	45/45	60/60	21.85 [2.03]	1	3575 [1687]	228 [6464]	209 [94.8]	221 [100.2]

NOTES:  
 ① 20 Fins per inch.  
 ② Factory charged for 15 ft. line set.

[ ] Designates Metric Conversions

**BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.**

## GENERAL TERMS OF LIMITED WARRANTY

Ruud will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods 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 visit [www.Ruud.com](http://www.Ruud.com).

Condenser Coil leaks caused by  
 factory defects .....Five (5) Years  
 Conditional Compressor\* .....Ten (10) Years  
 Any Other Part.....Five (5) Years

\*See Product Warranty Card for Details.

# Chas Roberts

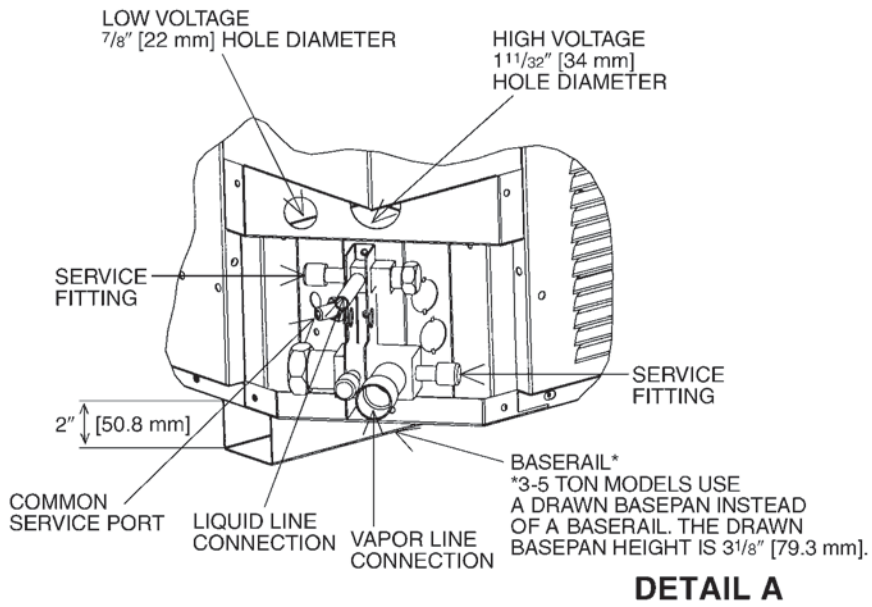
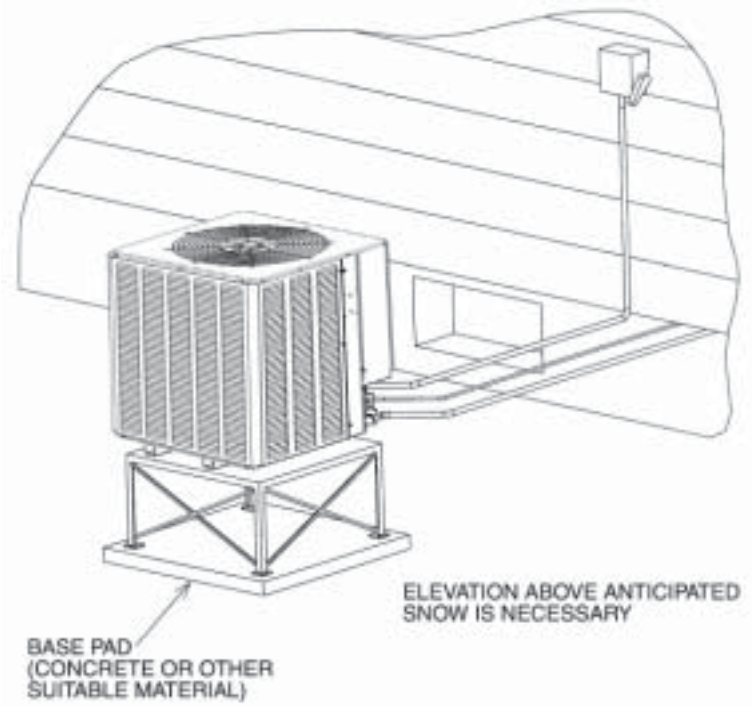
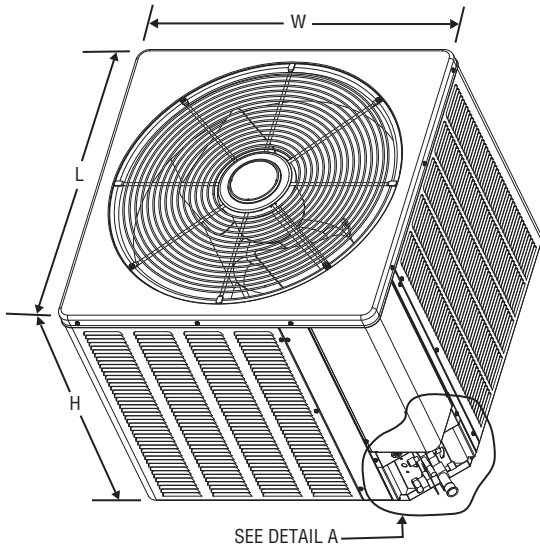
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# Unit Dimensions



Model Number	Height "H" (Inches) [mm]	Length "L" (Inches) [mm]	Width "W" (Inches) [mm]
13PJL			
18, 24	26 $\frac{1}{4}$ [666.75]	23 $\frac{5}{8}$ [600.07]	23 $\frac{5}{8}$ [600.07]
30	26 $\frac{1}{4}$ [666.75]	27 $\frac{5}{8}$ [701.67]	27 $\frac{5}{8}$ [701.67]
36	27 $\frac{3}{8}$ [695.32]	31 $\frac{5}{8}$ [803.27]	31 $\frac{5}{8}$ [803.27]
42, 48, 60	35 $\frac{3}{8}$ [898.52]	31 $\frac{5}{8}$ [803.27]	31 $\frac{5}{8}$ [803.27]

[ ] Designates Metric Conversions

# 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]
5 Ton	3/8" [9.53]	3/8* [9.53]	25 [7.62]	50 [15.24]	56 [17.07]	44 [13.41]	32 [9.75]	20 [6.10]
		1/2 [12.7]	25 [7.62]	50 [15.24]	75 [22.86]	81 [24.69]	79 [24.08]	76 [23.16]

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	5 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 Standard: 1.00 Optional: —	Optional: 1.00 Standard: 1.00 Optional: —	Optional: 1.00 Standard: 1.00 Optional: 1.00	Optional: 1.00 Standard: 1.00 Optional: —	Optional: 1.00 Standard: 1.00 Optional: —	Optional: 1.00 Standard: 1.00 Optional: —	Optional: 1.00 Standard: 1.00 Optional: —	
50' [15.24]	Optional: 0.98 Standard: 0.99 Optional: —	Optional: 0.98 Standard: 0.99 Optional: —	Optional: 0.96 Standard: 0.98 Optional: 0.99	Optional: 0.98 Standard: 0.99 Optional: —	Optional: 0.99 Standard: 0.99 Optional: —	Optional: 0.99 Standard: 0.99 Optional: —	Optional: 0.99 Standard: 0.99 Optional: —	
100' [30.48]	Optional: 0.95 Standard: 0.96 Optional: —	Optional: 0.95 Standard: 0.96 Optional: —	Optional: 0.94 Standard: 0.96 Optional: 0.97	Optional: 0.96 Standard: 0.97 Optional: —	Optional: 0.96 Standard: 0.98 Optional: —	Optional: 0.96 Standard: 0.98 Optional: —	Optional: 0.97 Standard: 0.98 Optional: —	
150' [45.72]	Optional: 0.92 Standard: 0.93 Optional: —	Optional: 0.92 Standard: 0.94 Optional: —	Optional: 0.91 Standard: 0.93 Optional: 0.95	Optional: 0.94 Standard: 0.95 Optional: —	Optional: 0.94 Standard: 0.96 Optional: —	Optional: 0.95 Standard: 0.96 Optional: —	Optional: 0.94 Standard: 0.97 Optional: —	

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

# Chas Roberts

AIR CONDITIONING & HEATING

(602) 943-3426  
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Tucson, AZ 85714-2106

[www.ChasRoberts.com](http://www.ChasRoberts.com)

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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Cooling and  
Water Heating**

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



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# ACHIEVER® Series & Value Series



LIMITED WARRANTY GUIDE							
MODEL	10-YEAR CONDITIONAL PARTS WARRANTY <sup>2</sup>	LIMITED 5-YEAR PARTS WARRANTY <sup>1</sup>	10-YEAR COMPRESSOR WARRANTY <sup>7</sup>	10-YEAR CONDITIONAL COMPRESSOR WARRANTY <sup>6</sup>	10-YEAR CONDITIONAL UNIT REPLACEMENT WARRANTY <sup>3</sup>	20-YEAR HEAT EXCHANGER WARRANTY <sup>4</sup>	LIMITED LIFETIME HEAT EXCHANGER WARRANTY <sup>5</sup>
<b>AIR HANDLERS</b>							
RBHP	✓	✓	—	—	—	—	—
RHKA	✓	✓	—	—	—	—	—
RHKL	✓	✓	—	—	—	—	—
RHLA	✓	✓	—	—	—	—	—
RHLL	✓	✓	—	—	—	—	—
RHSA	✓	✓	—	—	—	—	—
RHSL	✓	✓	—	—	—	—	—
<b>COILS</b>							
RCHL	✓	✓	—	—	—	—	—
RCFA	✓	✓	—	—	—	—	—
RCFL	✓	✓	—	—	—	—	—
RCFM	✓	✓	—	—	—	—	—
RCFN	✓	✓	—	—	—	—	—
RCQD	✓	✓	—	—	—	—	—
<b>CONDENSING UNITS</b>							
UAKB 3-phase	—	✓	—	—	—	—	—
UAND 3-phase	—	✓	—	—	—	—	—
UANL-*AZ	✓	✓	✓	—	—	—	—
UAPL-*AZ	✓	✓	✓	—	—	—	—
UAPM-*AZ	✓	✓	✓	—	—	—	—
13AJL	✓	✓	—	✓	—	—	—
14AJL	✓	✓	—	✓	—	—	—
13AJM	✓	✓	—	✓	—	—	—
14AJM	✓	✓	—	✓	—	—	—
13AJA	—	✓	—	—	—	—	—
<b>HEAT PUMPS</b>							
UPNE 3-phase	—	✓	—	—	—	—	—
UPNL-*AZ	✓	✓	✓	—	—	—	—
UPQL-*AZ	✓	✓	✓	—	—	—	—
13PJL	✓	✓	—	✓	—	—	—
14PJL	✓	✓	—	✓	—	—	—
14PJM	✓	✓	—	✓	—	—	—
13PJA	—	✓	—	—	—	—	—
<b>GAS FURNACES</b>							
UGLN	✓	✓	—	—	—	✓	—
UGLQ	✓	✓	—	—	—	✓	—
UGPN	✓	✓	—	—	—	✓	—
UGPQ	✓	✓	—	—	—	✓	—
UGRA	✓	✓	—	—	—	✓	—
UGRB	✓	✓	—	—	—	✓	—
UGRC	✓	✓	—	—	—	✓	—
UGRK	✓	✓	—	—	—	✓	—
UGRL	✓	✓	—	—	—	✓	—
UGRM	✓	✓	—	—	✓	✓	—
UGTA	✓	✓	—	—	—	✓	—
UGTC	✓	✓	—	—	—	✓	—
UGTK	✓	✓	—	—	—	✓	—
80LS	✓	✓	—	—	—	✓	—
80PS	✓	✓	—	—	—	✓	—
90RS	✓	✓	—	—	—	✓	—
90RT	✓	✓	—	—	—	✓	—
90TS	✓	✓	—	—	—	✓	—
<b>OIL FURNACES</b>							
UOBF	—	✓	—	—	—	—	✓
UOPF	—	✓	—	—	—	—	✓

<sup>1</sup> A Limited Parts Warranty of Five (5) Years after the Effective Date applies to the heating and cooling models noted above that are installed in residential applications. A Warranty Period of Five (5) Years after the Effective Date will apply to compressors in all three-phase products and all single phase products installed in commercial applications.

<sup>2</sup> A Conditional Parts Warranty of Ten (10) Years after the Effective Date applies to the models noted above, if the following additional conditions are satisfied:  
a) coils and Air Handlers must be installed and properly matched with an outdoor unit from the Manufacturer, as specified by the Manufacturer and AHRI published ratings; AND  
b) unit is installed in a residential application, is still owned by the original purchaser, in the original installation; AND  
c) warranty is registered with the Manufacturer within 60 days of original installation or closing of the purchase of your residence. Product registration is available online at [www.registermyunit.com](http://www.registermyunit.com). Please refer to the Limited Warranty Exclusions on the product warranty card for additional information.

<sup>3</sup> A Conditional Unit Replacement Warranty of Ten (10) Years after the Effective Date applies to the models noted above, for the Manufacturer to provide a replacement model to the original purchaser if the heat exchanger fails during the first ten (10) years AND if the following additional conditions are satisfied:

a) unit is installed in a residential application, is still owned by the original purchaser, in the original installation; AND  
b) warranty is registered with the Manufacturer within 60 days of original installation or closing of the purchase of your residence. Product registration is available online at [www.registermyunit.com](http://www.registermyunit.com). Please refer to the Limited Warranty Exclusions on the product warranty card for additional information.

<sup>4</sup> A Warranty Period of Twenty (20) Years after the Effective Date will apply on the heat exchangers for the models noted above that are installed in residential applications.

<sup>5</sup> A Limited Lifetime Heat Exchanger Warranty applies to the models noted above that are installed in residential applications. The Manufacturer warrants the primary heat exchanger and the secondary heat exchanger (condensing coil) to the original owner for his or her lifetime, provided the furnace is installed and used in the original owner's principal residence, subject to proof of purchase and such installation. For any subsequent owner (or the original owner where the above lifetime limited warranty conditions are not met or cease being met), or if the furnace is installed for non-residential use, the Manufacturer's warranty on the primary heat exchanger and the secondary heat exchanger (condensing coil) is for an Applicable Warranty Period of Twenty (20) Years after the Effective Date.

<sup>6</sup> A Conditional Compressor Warranty will apply Ten (10) Years after the Effective Date on the compressors in the noted models above if the following conditions are satisfied:

a) unit is installed in a residential\* application; is still owned by the original purchaser; in the original installation location; AND  
b) warranty is registered with the Manufacturer within 60 days of original installation or closing of the purchase of your residence. Product registration is available online at [www.RegisterMyUnit.com](http://www.RegisterMyUnit.com). Please refer to the Limited Warranty Coverage and Exclusions on the reverse side of this warranty card for additional information.

<sup>7</sup> A Warranty Period Ten (10) Years after the Effective Date will apply on the compressors in the models noted above installed in residential applications.