FORM NO. P11-765 REV. 10
Supersedes Form No. P11-765 Rev. 9

13 SEER HEAT PUMPS

13P*A SERIES
***J, C, D**

IMPORTANT:

This product is shipped with a nitrogen holding charge that must be vented prior to evacuation and charging.

This product is only intended for condensing change-out in existing R-22 systems. New R-22 system installations are prohibited by EPA.

This product must be charged with R-22 refrigerant meeting AHRI 700 purity standard.

Features

- Coils constructed with copper tubing and enhanced aluminum fins.
- 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.
- Certified and rated under AHRI Standard 240.
- U.L listed.

Accessories/Options

- Low Ambient Control (Model No. RXPZ-C01)
- 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 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-A03)
- Bi-Directional Filter Drier*
- Start Components*

*Available through the PROSTOCK® department.

Applications

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

Accredited by the RvA
ABS Quality Evaluations, Inc. Management System Certification
ANAB ACCREDITED
ISO 9001:2008
Certificate Number: 30164

c UL us LISTED

ENERGUIDE
Seasonal Energy Efficiency Ratio (SEER)
THIS MODEL 13.0
13.0 — Uses least energy →21.0

Model Identification Number

13	P	J	A	18	C	01
13 SEER	P = HEAT PUMP	VOLTAGE J = 208-230 SINGLE PHASE C = 3-60-208/230 THREE PHASE D = 3-60-460 THREE PHASE	DESIGN SERIES A = 1ST DESIGN	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] 60 = 60,000 BTU/HR [17.58 kW]	CABINET MINOR DESIGN SERIES	RHEEM VALUE SERIES

Performance Data AHRI Standard Conditions – Single Phase

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

Model Numbers		AHRI Cooling Performance 80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35°C] DB Outdoor Air							AHRI Heating Performance (70°F [21°C] Indoor)				
									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 13PJA	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. 5/9/11 18	RHSA-HM1817(RCSA-H*2417A*) ①	18,000 [5.3]	13,100 [3.8]	4,900 [1.4]	11.95	13.00	76	600 [283]	15,900 [4.7]	3.46	8,500 [2.5]	2.26	7.7
24	RHSA-HM2417(RCSA-H*2417A*) ①	23,800 [7.0]	17,300 [5.1]	6,500 [1.9]	12.00	13.00	74	800 [378]	20,800 [6.1]	3.40	11,000 [3.2]	2.06	7.7
30	RHSA-HM3017(RCSA-H*3617A*) ①	28,600 [8.4]	21,200 [6.2]	7,400 [2.2]	11.70	13.00	73	1,000 [472]	27,600 [8.1]	3.60	15,700 [4.6]	2.44	7.7
36	RHSA-HM3617(RCSA-H*3617A*) ①	35,400 [10.4]	25,900 [7.6]	9,500 [2.8]	11.55	13.00	75	1,200 [566]	36,600 [10.7]	3.50	21,200 [6.2]	2.44	7.7
42	RHSA-HM4221(RCSA-H*4821A*) ①	41,000 [12.0]	29,700 [8.7]	11,300 [3.3]	11.20	13.00	77	1,400 [661]	40,000 [11.7]	3.52	23,800 [7.0]	2.24	7.7
48	RHLA-HM4821(RCSA-H*4821A*) ①	48,000 [14.1]	35,100 [10.3]	12,900 [3.8]	11.55	13.00	77	1,525 [720]	44,000 [12.9]	3.56	28,000 [8.2]	2.50	7.7
60	RHLA-HM6024(RCSA-H*6024A*) ①	58,500 [17.1]	42,300 [12.4]	16,200 [4.7]	11.80	13.00	77	1,825 [861]	54,500 [16.0]	3.76	33,600 [9.8]	2.60	7.7

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

Performance Data AHRI Standard Conditions – Three Phase 208/230V

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

Model Numbers		AHRI Cooling Performance 80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35°C] DB Outdoor Air							AHRI Heating Performance (70°F [21°C] Indoor)				
									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 13PCA	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. 5/9/11 36	RHSA-HM3617(RCSA-H*3617A*) ①	35,400 [10.4]	25,900 [7.6]	9,500 [2.8]	11.55	13.00	76	1,200 [566]	36,600 [10.7]	3.50	21,200 [6.2]	2.44	7.7
42	RHSA-HM4221(RCSA-H*4821A*) ①	41,000 [12.0]	29,700 [8.7]	11,300 [3.3]	11.20	13.00	77	1,400 [661]	40,000 [11.7]	3.52	23,800 [7.0]	2.24	7.7
48	RHLA-HM4821(RCSA-H*4821A*) ①	48,000 [14.1]	35,100 [10.3]	12,900 [3.8]	11.55	13.00	77	1,525 [720]	44,000 [12.9]	3.56	28,000 [8.2]	2.50	7.7
60	RHLA-HM6024(RCSA-H*6024A*) ①	58,500 [17.1]	42,300 [12.4]	16,200 [4.7]	11.80	13.00	77	1,825 [861]	54,500 [16.0]	3.76	33,600 [9.8]	2.60	7.7

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

[ ] Designates Metric Conversions

Performance Data AHRI Standard Conditions – Three Phase 460V

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

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 13PDA	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. 5/9/11 36	RHSA-HM3617(RCSA-H*3617A*) ①	35,400 [10.4]	25,900 [7.6]	9,500 [2.8]	11.55	13.00	75	1,200 [566]	36,600 [10.7]	3.50	21,200 [6.2]	2.44	7.7
42	RHSA-HM4221(RCSA-H*4821A*) ①	41,000 [12.0]	29,700 [8.7]	11,300 [3.3]	11.20	13.00	77	1,400 [661]	40,000 [11.7]	3.52	23,800 [7.0]	2.24	7.7
48	RHLA-HM4821(RCSA-H*4821A*) ①	48,000 [14.1]	35,100 [10.3]	12,900 [3.8]	11.55	13.00	77	1,525 [720]	44,000 [12.9]	3.56	28,000 [8.2]	2.50	7.7
60	RHLA-HM6024(RCSA-H*6024A*) ①	58,500 [17.1]	42,300 [12.4]	16,200 [4.7]	11.80	13.00	77	1,825 [861]	54,500 [16.0]	3.76	33,600 [9.8]	2.60	7.7

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

[ ] Designates Metric Conversions

Electrical and Physical Data – Single Phase

Model Number 13PJA	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. [m²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
Rev. 5/9/2011													
18	1-60-208/230	9/9	41	0.6	12/12	15/15	20/20	11.06 [1.03]	1	1700 [802]	81 [2296]	142 [64.4]	150 [64.4]
24	1-60-208/230	14.1/14.1	54	0.8	19/19	25/25	30/30	13.72 [1.27]	1	2370 [1118]	99 [2807]	180 [81.6]	190 [81.6]
30	1-60-208/230	14.6/14.6	67	0.8	20/20	25/25	30/30	16.39 [1.52]	1	2800 [1321]	115 [3260]	210 [95.3]	222 [95.3]
36	1-60-208/230	18/18	83	1.2	24/24	30/30	40/40	21.85 [2.03]	1	3575 [1687]	134 [3799]	210.5 [95.5]	222.5 [95.5]
42	1-60-208/230	19.2/19.2	105	1.2	26/26	35/35	40/40	21.85 [2.03]	1	3575 [1687]	150 [4252]	201.5 [91.4]	213.5 [91.4]
48	1-60-208/230	26.1/26.1	137	1.2	34/34	45/45	50/50	21.85 [2.03]	1	3575 [1687]	154 [4366]	215 [97.5]	227 [97.5]
60	1-60-208/230	25.3/25.3	150	1.2	33/33	40/40	50/50	21.85 [2.03]	2	3365 [1588]	256 [7258]	275.5 [125]	287.5 [125]

Electrical and Physical Data – Three Phase 208/230V

Model Number 13PCA	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. [m²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
Rev. 5/9/2011													
36	3-60-208/230	10.4/10.4	77	1.2	15/15	20/20	20/20	21.85 [2.03]	1	3575 [1687]	134 [3799]	220 [99.8]	228 [99.8]
42	3-60-208/230	13.5/13.5	89	1.2	19/19	25/25	30/30	21.85 [2.03]	1	3575 [1687]	150 [4252]	212 [96.2]	224 [96.2]
48	3-60-208/230	16/16	115	1.2	22/22	30/30	35/35	21.85 [2.03]	1	3575 [1687]	154 [4366]	215 [97.5]	227 [97.5]
60	3-60-208/230	17.3/17.3	123	1.2	23/23	30/30	40/40	21.85 [2.03]	2	3365 [1588]	256 [7258]	277 [125.6]	289 [125.6]

Electrical and Physical Data – Three Phase 460V

Model Number 13PDA	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. [m²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
Rev. 5/9/2011													
36	3-60-460	5.8	45	0.6	8	15	15	21.85 [2.03]	1	3575 [1687]	134 [3799]	220 [99.8]	228 [99.8]
42	3-60-460	6.4	45	0.6	9	15	15	21.85 [2.03]	1	3575 [1687]	150 [4252]	202 [91.6]	214 [91.6]
48	3-60-460	7.7	50	0.6	11	15	15	21.85 [2.03]	1	3575 [1687]	154 [4366]	215 [97.5]	227 [97.5]
60	3-60-460	8.4	70	0.6	12	15	15	21.85 [2.03]	2	3365 [1588]	256 [7258]	276 [125.2]	288 [125.2]

NOTE: Refrigerant charge shown is for 15 feet of standard line set. Units are shipped with a nitrogen holding charge and must be charged with R-22 in the field.

[ ] Designates Metric Conversions

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

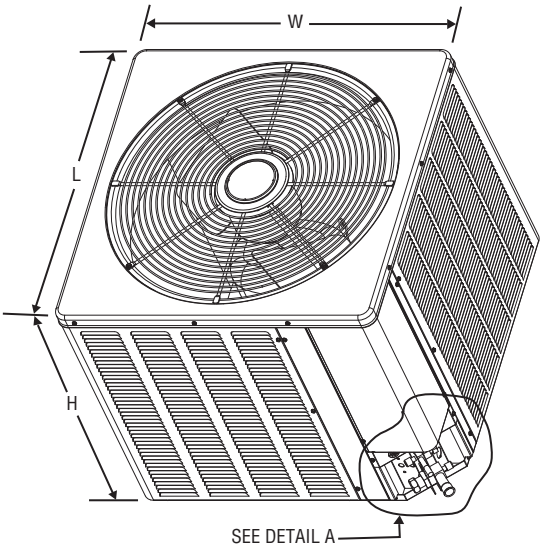
GENERAL TERMS OF LIMITED WARRANTY

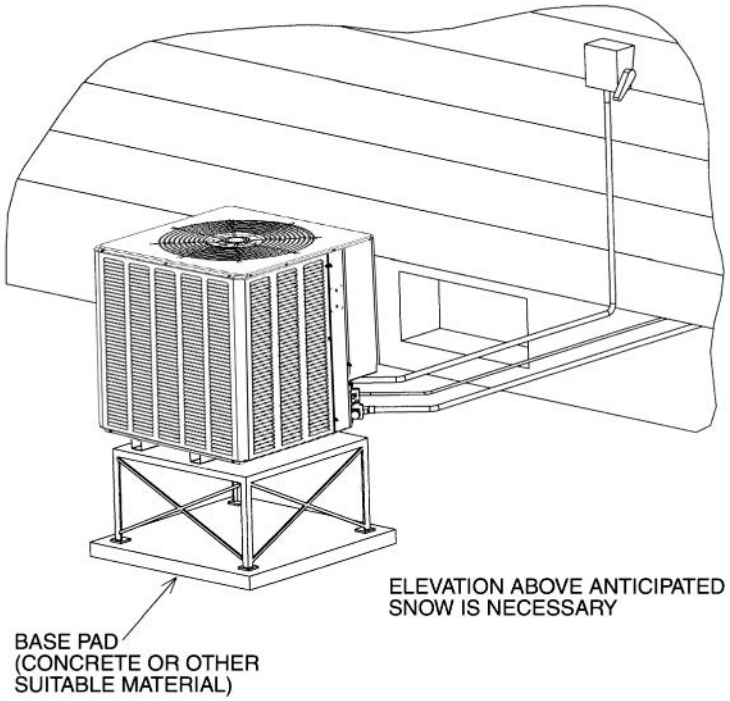
Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods stated, in accordance with the terms of the limited warranty.

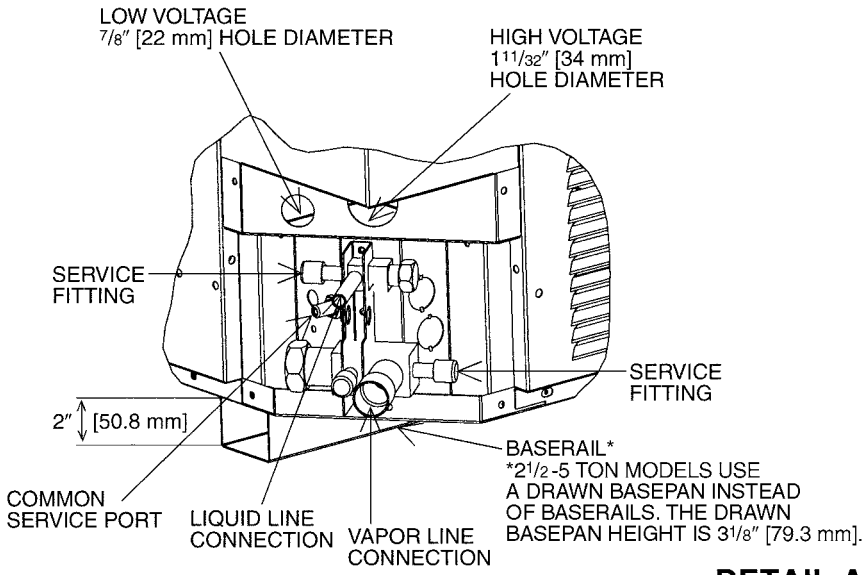
For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer.

Parts .....Five (5) Years

Unit Dimensions







DETAIL A

Model Number 13P*A	Height "H" (Inches) [mm]	Length "L" (Inches) [mm]	Width "W" (Inches) [mm]
18	26 1/4 [666.75]	23 5/8 [600.07]	23 5/8 [600.07]
24	26 1/4 [666.75]	27 5/8 [701.67]	27 5/8 [701.67]
30	27 3/8 [695.33]	31 5/8 [803.27]	31 5/8 [803.27]
36/42/48/60	35 3/8 [898.53]	31 5/8 [803.27]	31 5/8 [803.27]

[ ] Designates Metric Conversions

Heat Pump Refrigerant Line Size Information

System Capacity	Liquid Line Connection Size (Inch I.D.) [mm]	Line Size (Inch O.D.) [mm]	Liquid Line Size (R-22) 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]	21 [6.40]	8 [2.44]	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	27 [8.23]	24 [7.32]	21 [6.40]	17 [5.18]	14 [4.27]
		3/8* [9.53]	25 [7.62]	40 [12.19]	39 [11.89]	38 [11.58]	37 [11.28]	35 [10.67]
2 Ton	3/8" [9.53]	1/4 [6.35]	16 [4.88]	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	26 [7.92]	21 [6.40]	15 [4.57]	10 [3.05]	5 [1.52]
		3/8* [9.53]	25 [7.62]	38 [11.58]	36 [10.97]	35 [10.67]	33 [10.06]	31 [9.45]
2½ Ton	3/8" [9.53]	1/4 [6.35]	0	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	17 [5.18]	8 [2.44]	0	N/A	N/A
		3/8* [9.53]	25 [7.62]	37 [11.28]	34 [10.36]	31 [9.45]	29 [8.84]	26 [7.92]
3 Ton	3/8" [9.53]	5/16 [7.94]	25 [7.62]	15 [4.57]	4 [1.22]	N/A	N/A	N/A
		3/8* [9.53]	25 [7.62]	30 [9.14]	26 [7.92]	23 [7.01]	19 [5.79]	16 [4.88]
3½ Ton	3/8" [9.53]	5/16 [7.94]	25 [7.62]	17 [5.18]	2 [0.61]	N/A	N/A	N/A
		3/8* [9.53]	25 [7.62]	37 [11.28]	32 [9.75]	28 [8.53]	23 [7.01]	18 [5.49]
4 Ton	3/8" [9.53]	3/8* [9.53]	25 [7.62]	33 [10.06]	27 [8.23]	21 [6.40]	15 [4.57]	9 [2.74]
		1/2 [12.7]	25 [7.62]	43 [13.11]	42 [12.80]	40 [12.19]	39 [11.89]	38 [11.58]
5 Ton	3/8" [9.53]	3/8* [9.53]	25 [7.62]	25 [7.62]	17 [5.18]	8 [2.44]	0	N/A
		1/2 [12.7]	25 [7.62]	39 [11.89]	37 [11.28]	36 [10.97]	34 [10.36]	32 [9.75]

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

Suction Line Length/Size versus Capacity Multiplier (R-22)								
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.*	3/4" [19.05 mm] O.D. Opt. 7/8" [22.23 mm] O.D. Std.* 1 1/8" [28.58 mm] O.D. Opt.	7/8" [22.23 mm] O.D. Opt. 1 1/8" [28.58 mm] O.D. Std.*	
25' [7.62]	Optional	.99	.99	.98	.99	.99	.99	.99
	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Optional	—	1.00	1.00	—	1.00	—	—
50' [15.24]	Optional	.97	.96	.96	.98	.97	.98	.97
	Standard	.99	.99	.98	.99	.98	.99	.99
	Optional	—	.99	.99	—	1.00	—	—
100' [30.48]	Optional	.94	.92	.94	.95	.93	.95	.95
	Standard	.96	.96	.96	.96	.96	.98	.98
	Optional	—	.97	.97	—	.98	—	—
150' [45.72]	Optional	.90	.89	.92	.93	.92	.93	.93
	Standard	.93	.93	.93	.94	.94	.96	.96
	Optional	—	.95	.95	—	.96	—	—

NOTES: *Standard line size
Using suction line larger than shown in chart will result in poor oil return and is not recommended.

[ ] Designates Metric Conversions

NOTES

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."

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