



The new degree of comfort.™

Rheem Value Series Two-Stage Air Conditioners

16AJL- Series

Efficiencies up to 16 SEER/13 EER

Nominal Sizes 2-5 Ton [7.03 to 17.6 kW]

Cooling Capacities 25,400 to 57,000 BTU/H
[7.44 to 16.70 kW]



Note: Above image does not show deep drawn basepan.

- Outdoor air conditioner designed for ground level or rooftop installations. These units offer comfort and dependability for single, multi-family and light commercial applications.
- 10 easy-to-read diagnostic alert codes
- Painted louvered steel cabinet
- Easily accessible control box
- Condenser coils constructed with copper tubing and enhanced aluminum fins (2-4 Tons)/MicroChannel (5 Ton)
- Grille/Motor mount for quiet fan operation
- Filter Drier (shipped – not installed)



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Model Number Identification

<u>16</u>	<u>A</u>	<u>J</u>	<u>L</u>	<u>24</u>	<u>A</u>	<u>01</u>
16 SEER	A = AIR CONDITIONER	<u>VOLTAGE</u> J = 208-230 SINGLE PHASE	<u>DESIGN SERIES</u> L = 1ST DESIGN R-410A	<u>NOMINAL COOLING CAPACITY</u> 24 = 24,000 BTU/HR [7.03 kW] 36 = 36,000 BTU/HR [10.55 kW] 48 = 48,000 BTU/HR [14.07 kW] 60 = 60,000 BTU/HR [17.58 kW]	<u>CABINET</u> A = FULL METAL JACKET	RHEEM VALUE SERIES

Accessories

- Low Pressure Control (RXAC-A07)
- High Pressure Control (RXAB-A07)
- Low Ambient Control (RXAD-A08)
- Compressor Time Delay Control
- Crankcase Heater
- Sound Enclosure

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	MS
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 air conditioners to perform efficiently and quietly.

[] Designates Metric Conversions



Performance Data @ AHRI Standard Conditions—Cooling

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

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Performance Data @ AHRI Standard Conditions—Cooling

Outdoor Unit 16AJL-	Model Numbers		Stage	AHRI Cooling Performance 80°F [26.5°C] / 67°F [19.5°C] WB Indoor Air 95°F [35°C] DB Outdoor Air							
				Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	AHRI Ratings			Indoor Airflow CFM [L/s]	Sound Rating dB	
	ID Coil	ID Air Mover				Total Capacity BTU/H [kW]	SEER	EER			
Rev. 5/8/2012 36	RCFN-H*3624	ROLA-115E05	1	22300 [6.5]	8300 [2.4]	38500 [11.3]	16	13	900 [425]	0	
			2	29000 [8.5]	9500 [2.8]				1200 [566]	77	
	RCFN-H*3624+RXMD-C04	Coil Only	1	20800 [6.1]	8600 [2.5]	37200 [10.9]	14.5	12	800 [378]	0	
			2	27000 [7.9]	10200 [3.0]				1050 [495]	77	
	RCSL-H*3821	RHPL-HM3821	1	20700 [6.1]	8700 [2.5]	35800 [10.5]	16	12.5	950 [448]	0	
			2	25300 [7.4]	10500 [3.1]				1150 [543]	77	
	RCSN-H*3624	RHPN-HM3624	1	20900 [6.1]	8900 [2.6]	38500 [11.3]	16	13	725 [342]	0	
			2	29000 [8.5]	9500 [2.8]				1200 [566]	77	
	48	RCSL-H*4824 ①	RHML-HM4824	1	26900 [7.9]	12100 [3.5]	48500 [14.2]	16	13	1050 [495]	0
				2	34700 [10.2]	13800 [4.0]				1400 [661]	77
1 - dehumid				0 [0.0]	0 [0.0]	0 [0]					
2 - dehumid				0 [0.0]	0 [0.0]	0 [0]					
RCFL-H*4821		RGFE-10?ZCM?	1	24000 [7.0]	12600 [3.7]	45500 [13.3]	15	11.5	1025 [484]	0	
			2	30600 [9.0]	14900 [4.4]				1425 [672]	77	
		RGFG-09?ZCM?	1	24000 [7.0]	12600 [3.7]	45500 [13.3]	15	11.5	1025 [484]	0	
			2	30600 [9.0]	14900 [4.4]				1400 [661]	77	
		RGFG-10?ZCM?	1	23800 [7.0]	12600 [3.7]	45500 [13.3]	15	11.5	1050 [495]	0	
			2	30600 [9.0]	14900 [4.4]				1400 [661]	77	
		RGGE-09?ZCM?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15	11.5	1025 [484]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGGE-10?ZCM?	1	24000 [7.0]	12600 [3.7]	45500 [13.3]	15	11.5	1050 [495]	0	
			2	30600 [9.0]	14900 [4.4]				1400 [661]	77	
		RGJF-09?ZCM?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15	11.5	1025 [484]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGJF-10?ZCM?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15	11.5	1050 [495]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGLE-07?BRQ?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15	11.5	1025 [484]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGLE-10?BRM?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15.5	12	1050 [495]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGPE-07?BRQ?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15	12	1050 [495]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGPE-10?BRM?	1	24000 [7.0]	12600 [3.7]	46000 [13.5]	15	12	1075 [507]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	
		RGRM-07?YBG?	1	23600 [6.9]	12600 [3.7]	45000 [13.2]	14	10.5	1050 [495]	0	
			2	30100 [8.8]	14900 [4.4]				1400 [661]	77	
		RGRM-09?ZAJ?	1	23800 [7.0]	12600 [3.7]	45500 [13.3]	14.5	11.5	1075 [507]	0	
			2	30600 [9.0]	14900 [4.4]				1400 [661]	77	
		RGRM-10?ZAJ?	1	23800 [7.0]	12600 [3.7]	45500 [13.3]	14.5	11	1025 [484]	0	
			2	30600 [9.0]	14900 [4.4]				1425 [672]	77	
		RGTM-07?RBG?	1	24700 [7.2]	12300 [3.6]	46000 [13.5]	15	11.5	1125 [531]	0	
			2	31600 [9.3]	14400 [4.2]				1475 [696]	77	
		RGTM-09?ZAJ?	1	24400 [7.1]	12400 [3.6]	46000 [13.5]	15	11.5	1100 [519]	0	
			2	31100 [9.1]	14900 [4.4]				1400 [661]	77	

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Air

Electrical and Physical Data

Model Number 16AJL	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. 2/29/2012													
24	1-60-208/230	13/13	58.3	0.8	14/14	20/20	20/20	16.39 [1.52]	1	2805[1324]	105.4 [2988]	154 [69.9]	171 [69.9]
36	1-60-208/230	17/17	83	1.9	22/22	30/30	35/35	21.85 [2.03]	1	3435[1621]	147 [4167]	181 [82.1]	201 [82.1]
48	1-60-208/230	23.6/23.6	104	1	28/28	35/35	45/45	21.85 [2.03]	1	3615[1706]	171 [4847]	249 [112.9]	269 [112.9]
60	1-60-208/230	28.8/28.8	152.9	2.8	35/35	45/45	60/60	21.85 [2.03]	1	3500[1652]	131.3 [3722]	254 [115.2]	274 [115.2]

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

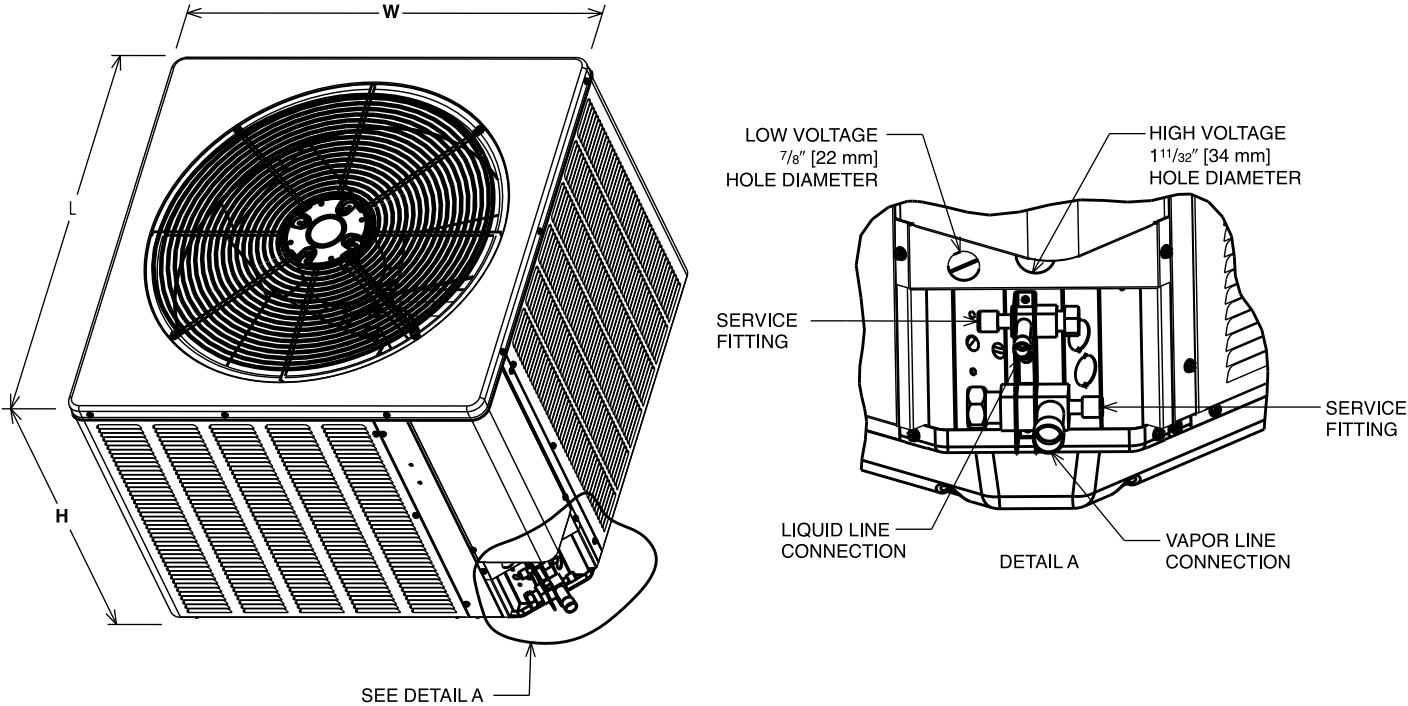
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Unit Dimensions

Model No. 16AJL	Unit Dimensions		
	Width "W" Inches [mm]	Length "L" Inches [mm]	Height "H" Inches [mm]
24	31 ⁵ / ₈ [803]	31 ⁵ / ₈ [803]	27 ³ / ₈ [695]
36, 48, 60	31 ⁵ / ₈ [803]	31 ⁵ / ₈ [803]	35 ³ / ₈ [899]

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Air

Condensing Unit Refrigerant Line Size Information

Liquid Line Sizing (R-410A)														
System Capacity	Liquid Line Connection Size (Inch I.D.)	Line Size (Inch O.D.) [mm]	Liquid Line Size – Outdoor Unit Above Indoor Coil (Cooling Only—Does not apply to Heat Pumps)						Liquid Line Size – Outdoor Unit Below Indoor Coil					
			Total Equivalent Length—Feet [m]						Total Equivalent Length—Feet [m]					
			25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]
			Minimum Vertical Separation—Feet [m]						Maximum Vertical Separation—Feet [m]					
2 Ton	3/8" [9.53]	1/4 [6.35]	0	3 [0.91]	29 [8.84]	55 [16.76]	81 [24.69]	108 [32.92]	23 [7.01]	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	0	0	0	0	0	0	25 [7.62]	36 [10.97]	29 [8.84]	23 [7.01]	16 [4.88]	9 [2.74]
		3/8* [9.53]	0	0	0	0	0	0	25 [7.62]	50 [15.24]	72 [21.95]	70 [21.34]	68 [20.73]	65 [19.81]
3 Ton	3/8" [9.53]	5/16 [7.94]	0	0	0	0	0	9 [2.74]	25 [7.62]	50 [15.24]	37 [11.28]	22 [6.71]	7 [2.13]	N/A
		3/8* [9.53]	0	0	0	0	0	0	25 [7.62]	50 [15.24]	68 [20.73]	63 [19.20]	58 [17.68]	53 [16.15]
4 Ton	3/8" [9.53]	3/8* [9.53]	0	0	0	0	0	0	25 [7.62]	46 [14.02]	38 [11.58]	30 [9.14]	22 [6.71]	15 [4.57]
		1/2 [12.57]	0	0	0	0	0	0	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]	0	0	0	0	0	0	25 [7.62]	50 [15.24]	56 [17.07]	44 [13.41]	32 [9.75]	20 [6.10]
		1/2 [12.57]	0	0	0	0	0	0	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		2 Ton		3 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. Optional 3/4" [19.05 mm] O.D. Standard*		3/4" [19.05 mm] O.D. Optional 7/8" [22.23 mm] O.D. Standard*	7/8" [22.23 mm] O.D. Optional 1 1/8" [28.58 mm] O.D. Standard*
25' [7.62]	Optional	1.00		1.00	1.00
	Standard	1.00		1.00	1.00
	Optional	—		—	—
50' [15.24]	Optional	0.98		0.98	0.99
	Standard	0.99		0.99	0.99
	Optional	—		—	—
100' [30.48]	Optional	0.95		0.96	0.96
	Standard	0.96		0.97	0.98
	Optional	—		—	—
150' [45.72]	Optional	0.92		0.94	0.95
	Standard	0.94		0.95	0.97
	Optional	—		—	—

NOTES: *Standard line size

Using suction line larger than shown in chart will result in poor oil return and is not recommended.

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



The new degree of comfort.™

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

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