

CONDENSING UNITS

Rheem
Prestige[®]
S E R I E S

for air conditioning
R-410A
earth friendly refrigerant

RASL- SERIES

Efficiencies up to 18 SEER
Nominal Size 3 Ton [10.5 kW]



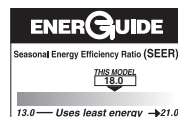
One Model

Cooling Capacity
34,400 to 38,000 BTU/HR
[10.08 kW] to [11.13 kW]

The *Rheem Prestige Series*[®] High Efficiency RASL- Condensing Unit was designed with performance in mind. These units offer comfort, energy conservation and dependability for single, multi-family and light commercial applications.

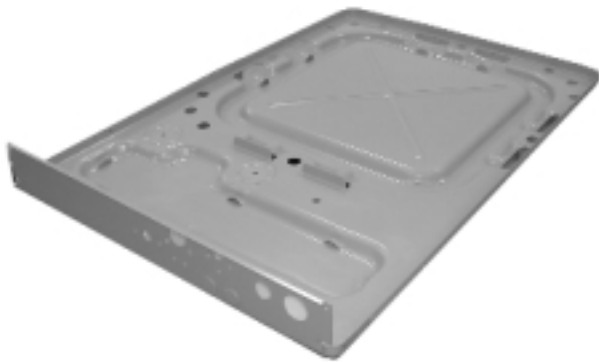
The *Rheem Prestige Series*[®] RASL- Condensing Units are the result of an ongoing development program for improved efficiencies. With system SEER's ranging to 18.00, these units continue a tradition of high efficiency.

- Reliable Copeland Two-Stage Scroll™ Compressor for precise temperature control providing ultimate comfort.
- Comfort Alert™ Diagnostics comes installed in each Rheem Prestige Series model.
- 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.
- Air is discharged upward away from bushes and shrubs. The discharge pattern of the top grille provides minimum air restriction, resulting in quiet fan operation.
- Exclusive Combination Grille/Motor Mount secures the motor to the underside of the discharge grille. The grille protects the motor windings and bearings from rain and snow.
- For quiet operation and improved efficiency, the 3 ton model feature the GE[®] ECM two-speed 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.
- On-demand dehumidification terminal, when matched with a Prestige Series Air Handler or premium ECM Gas Furnace products, adjusts airflow to help control humidity for unsurpassed comfort in the cooling mode.





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



Drawn Painted Base Pan.

Engineering Features

RASL- Series Condensing Units

1. Copeland Scroll UltraTech™ 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.
2. Compressors have an internal pressure relief assembly to protect against excessive pressure differential.
3. All refrigerant connections are on the exterior of the unit, located close to the ground for neat appearing installations.
4. Cabinet is constructed of powder painted galvanized steel. The full wrap-around louvered grille protects the coil from damage.
5. Copper Tube—Aluminum Fin coils are used on all models.
6. The control box is located in the top corner of the cabinet providing for easy access through a service panel.
7. Service valves are standard on all models.
8. Power and control wiring are kept separate.
9. Every unit is factory charged and tested.
10. Separate compressor compartment for easy service access.
11. Drawn, painted base pan for extra corrosion resistance and sound reduction.
12. **RASL** has a **10 year compressor limited warranty** and a liquid line filter drier. The RASL Series also has factory installed low pressure control, high pressure control, and time delay control.
13. **Hard Start Kits**—Standard on all models.
14. Enhanced Compressor sound wrap is standard
15. For quiet operation and improved efficiency, the 3 ton model features the GE® ECM two-speed motor with a 3-blade outdoor fan.
16. Control Box Cover

COPELAND SCROLL ULTRATECH™ COMPRESSOR

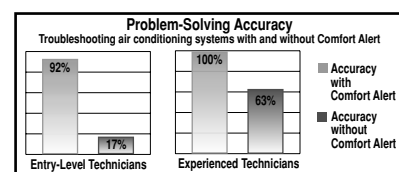
The Copeland Scroll UltraTech™ compressor is the key to efficiency for this Rheem model. It's the latest in high-efficiency compressor technology. The advanced scroll compressor offers low noise and vibration characteristics and features tolerance to liquid refrigerant and system contamination. The Copeland Scroll UltraTech™ also has low start torque, eliminating start problems in the field. And its unique design enables the RASL- condensing unit to perform efficiently, quietly and reliably.



Comfort Alert™ Diagnostics

- In operation, Comfort Alert Diagnostics monitors vital data from the Copeland Scroll UltraTech™ compressor and thermostat, quickly pinpointing the root cause(s) of any cooling system malfunction—including common electrical problems, compressor defects and broad system faults.

[] Designates Metric Conversions



Accessories

Low Ambient Control—Cycles outdoor fan to maintain adequate condensing pressures assuring liquid refrigerant flow to the coil. Allows indoor cooling with outdoor temperatures down to 0°F [-17.8°C]. (Model No. RXAD-A07). It is recommended that this control be installed in units to be operated at outdoor ambient temperatures under 70°F [21°C].

Compressor Crankcase Heater (Model No. 44-17402-44CCH) Add to minimize refrigeration migration and to help eliminate any startup noise or bearing “wash out”.

Dual Function White Rodgers Thermostat (Model No. 41-1F95CA-391) Humidity & Temperature Control. It provides Active Comfort Alert™ protection.

Model Number Identification

R	A	S	L	—	036	J	A	Z
RHEEM	REMOTE CONDENSING UNIT	18-SEER	DESIGN SERIES		COOLING CAPACITY	ELECTRICAL DESIGNATION	VARIATIONS A = STANDARD	COOLING CONNECTION FITTING
			L = FIRST DESIGN SERIES	036 = 36,000 BTU/HR [10.55 kW]		J = 208/230V-1-60		Z = SWEAT W/SCROLL

Performance Data @ ARI Standard Conditions—Cooling

Outdoor Unit RASL-	Model Numbers		Stage	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor Airflow		EER	ARI Rating		Sound Rating	
	ID Coil	ID Air Mover				1st Stage CFM [L/s]	2nd Stage CFM [L/s]		Total Capacity BTU/H [kW]	SEER		
036J	RCQD-3624A	-BHN-24J ①	1	20,600 [6.0]	6,300 [1.8]	925 [437]		15.05	38,000 [11.1]	18.00	6.9	
			2	28,100 [8.2]	9,900 [2.9]		1,150 [543]	13.61			7.2	
			1 - dehumid	19,950 [5.8]	6,550 [1.9]	800 [378]		15.14			6.9	
			2 - dehumid	26,050 [7.6]	10,550 [3.1]		975 [460]	13.61			7.2	
		COIL ONLY			27,300 [8.0]	9,900 [2.9]	850 [401]	1,150 [543]	12.20	37,200 [10.9]	15.65	7.2
		-GFD-06?MCK?			27,500 [8.1]	9,700 [2.8]	875 [413]	1,175 [555]	12.20	37,200 [10.9]	16.55	7.2
		-GFD-07?MCK?			27,450 [8.0]	9,750 [2.9]	900 [425]	1,200 [566]	12.14	37,200 [10.9]	16.70	7.2
		-GFD-09?ZCM?			27,900 [8.2]	9,900 [2.9]	850 [401]	1,150 [543]	13.08	37,800 [11.1]	17.65	7.2
		-GFD-10?ZCM?			27,800 [8.1]	9,800 [2.9]	850 [401]	1,175 [555]	12.90	37,600 [11.0]	17.55	7.2
		-GFD-12?ZCM?			27,850 [8.2]	9,750 [2.9]	900 [425]	1,225 [578]	12.97	37,600 [11.0]	17.50	7.2
		-GPL-05?BMK			27,500 [8.1]	9,700 [2.8]	900 [425]	1,200 [566]	12.27	37,200 [10.9]	16.60	7.2
		-GPL-07?BRK			27,750 [8.1]	9,850 [2.9]	900 [425]	1,200 [566]	12.72	37,600 [11.0]	17.20	7.2
		-GPL-07?BRQ			27,950 [8.2]	9,850 [2.9]	875 [413]	1,200 [566]	13.24	37,800 [11.1]	17.90	7.2
	-GPL-10?BRM			27,900 [8.2]	9,900 [2.9]	925 [437]	1,225 [578]	13.04	37,800 [11.1]	17.55	7.2	
	-GPL-12?ARM			28,050 [8.2]	9,950 [2.9]	1,000 [472]	1,225 [578]	13.44	38,000 [11.1]	17.50	7.2	
	RCQD-3621A	COIL ONLY		27,300 [8.0]	9,900 [2.9]	850 [401]	1,150 [543]	12.20	37,200 [10.9]	15.65	7.2	
	-GFD-06?MCK?			27,450 [8.0]	9,750 [2.9]	875 [413]	1,175 [555]	12.13	37,200 [10.9]	16.50	7.2	
	-GFD-07?MCK?			27,400 [8.0]	9,600 [2.8]	900 [425]	1,200 [566]	12.07	37,000 [10.8]	16.65	7.2	
	-GFD-09?ZCM?			27,850 [8.2]	9,750 [2.9]	850 [401]	1,150 [543]	13.00	37,600 [11.0]	17.60	7.2	
	-GFD-10?ZCM?			27,800 [8.1]	9,800 [2.9]	850 [401]	1,175 [555]	12.81	37,600 [11.0]	17.50	7.2	
	-GPL-05?BMK			27,500 [8.1]	9,700 [2.8]	900 [425]	1,200 [566]	12.18	37,200 [10.9]	16.50	7.2	
	-GPL-07?BRK			27,700 [8.1]	9,700 [2.8]	900 [425]	1,200 [566]	12.63	37,400 [11.0]	17.15	7.2	
	-GPL-07?BRQ			27,950 [8.2]	9,850 [2.9]	875 [413]	1,200 [566]	13.16	37,800 [11.1]	17.85	7.2	
	-GPL-10?BRM			27,850 [8.2]	9,750 [2.9]	925 [437]	1,225 [578]	12.95	37,600 [11.0]	17.45	7.2	
	RCHL-36	COIL ONLY		24,650 [7.2]	9,750 [2.9]	900 [425]	1,150 [543]	11.33	34,400 [10.1]	14.30	7.2	
	-GFD-06?MCK?			24,700 [7.2]	9,700 [2.8]	875 [413]	1,175 [555]	11.42	34,400 [10.1]	15.45	7.2	
	-GFD-07?MCK?			24,700 [7.2]	9,700 [2.8]	900 [425]	1,200 [566]	11.38	34,400 [10.1]	15.55	7.2	
	-GFD-09?ZCM?			25,300 [7.4]	9,700 [2.8]	850 [401]	1,150 [543]	12.30	35,000 [10.3]	16.45	7.2	
	-GFD-10?ZCM?			25,200 [7.4]	9,800 [2.9]	850 [401]	1,175 [555]	12.13	35,000 [10.3]	16.35	7.2	
	-GPL-05?BMK			24,800 [7.3]	9,800 [2.9]	900 [425]	1,200 [566]	11.51	34,600 [10.1]	15.45	7.2	
	-GPL-07?BRK			25,050 [7.3]	9,750 [2.9]	900 [425]	1,200 [566]	11.95	34,800 [10.2]	16.05	7.2	
	-GPL-07?BRQ			25,400 [7.4]	9,800 [2.9]	875 [413]	1,200 [566]	12.45	35,200 [10.3]	16.65	7.2	
	-GPL-10?BRM			25,250 [7.4]	9,750 [2.9]	925 [437]	1,225 [578]	12.27	35,000 [10.3]	16.35	7.2	
-GGD-06?MCK			24,800 [7.3]	9,800 [2.9]	900 [425]	1,225 [578]	11.56	34,600 [10.1]	15.80	7.2		
-GGD-07?MCK			24,750 [7.3]	9,650 [2.8]	925 [437]	1,225 [578]	11.45	34,400 [10.1]	15.65	7.2		
-GGD-09?ZCM			25,250 [7.4]	9,750 [2.9]	800 [378]	1,175 [555]	12.24	35,000 [10.3]	16.65	7.2		
-GGD-10?ZCM			25,250 [7.4]	9,750 [2.9]	825 [389]	1,175 [555]	12.24	35,000 [10.3]	16.55	7.2		

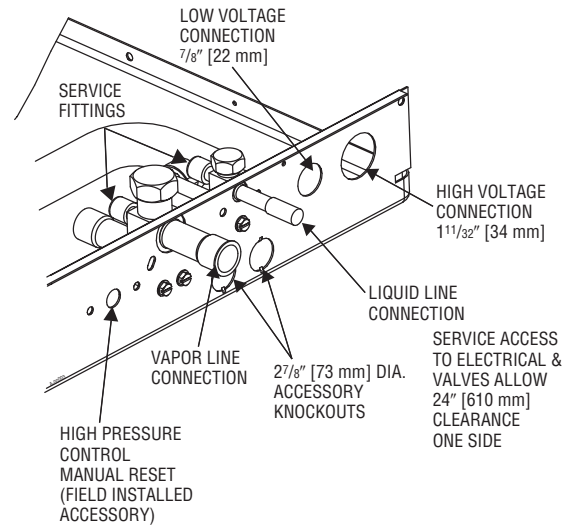
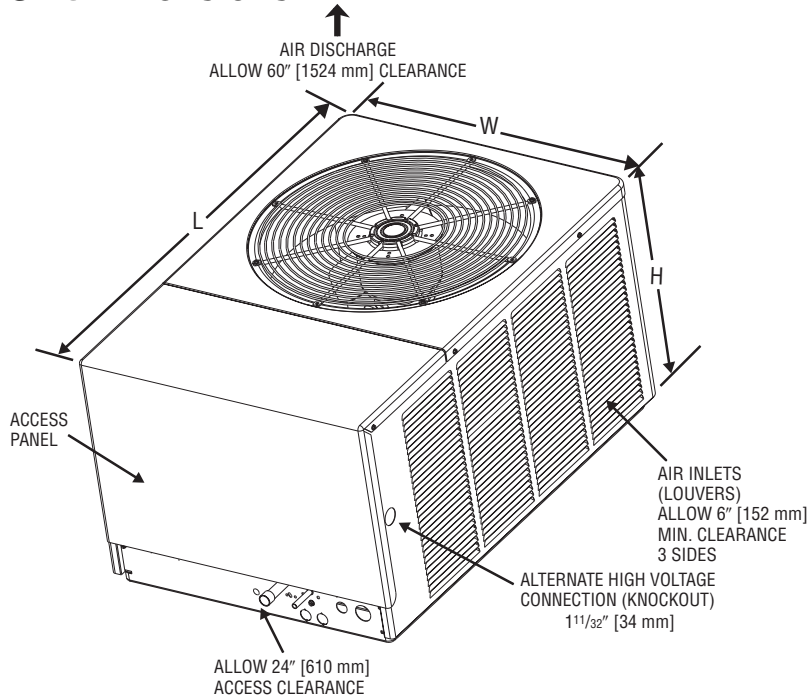
NOTES: ① Highest sales volume tested combination required by D.O.E. test procedures.

Electrical and Physical Data

Model Number RASL-	ELECTRICAL						PHYSICAL						
	Phase Frequency (Hz) Voltage (Volts)	Compressor		Fan Motor Full Load Amperes (FLA)	Min. Circuit Ampacity Amperes	Fuse or HACR Circuit Breaker		Outdoor Coil			R-410A Oz. [g]	Weight	
		Rated Load Amperes (RLA)	Locked Rotor Amperes (LRA)			Min. Amperes	Max. Amperes	Face Area Sq. Ft. [m ²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
036JAZ	1-60-208/230	16.7/16.7	82	2.8	24/24	30/30	40/40	23.0 [2.14]	1.00	HS*3400 [1605] LS*2800 [1322]	155 [4394]	236 [107]	246 [111.6]

*HS = high speed
*LS = low speed

Unit Dimensions



Model Number RASL-	Height "H" (Inches) [mm]	Length "L" (Inches) [mm]	Width "W" (Inches) [mm]
036	33 [838]	44 ³ / ₈ [1127]	31 ¹ / ₂ [800]

[] 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.

RASL Conditional Replacement Warranty:

Rheem will provide a replacement RASL Condensing Unit to the original purchaser if the compressor fails within 5 years (providing the unit is installed with a new Rheem RBHN Air Handler OR Rheem RCQD-AS 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 PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

Condensing Unit Refrigerant Line Size Information

System Capacity Model	Line Size (Inch O.D.) [mm]	Standard Refrigerant Charge: Liquid Line Size RASL- Series Below Indoor Coil						System Capacity Model	Line Size (Inch O.D.) [mm]	Extended Line Lengths for use with Supplemental Refrigerant Charge: Liquid Line Size RASL- Series Below Indoor Coil					
		Total Length—Feet [m]								Total Length—Feet [m]					
		25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]				25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	
		Vertical Separation—Feet [m]								Vertical Separation—Feet [m]					
036	5/16 [7.94]	25 [7.62]	18 [5.48]	11 [3.35]				036	5/16 [7.94]	25 [7.62]	38 [11.5]	29 [8.83]	15 [4.50]		
	3/8* [9.53]	25 [7.62]	27 [8.22]	24 [7.31]	21 [6.40]	18 [5.48]			3/8* [9.53]	25 [7.62]	48 [14.6]	45 [13.7]	41 [12.4]	38 [11.5]	
*Standard line size NOTES: 1. Example 1: A 2-ton condensing unit with a total line length of 75 feet with a vertical separation of 15 feet requires a liquid line size of 3/8". 2. This chart may also be used to size horizontal runs. Example 2: A 3-ton condensing unit may have a total horizontal run of 100 feet if using a 3/8" liquid line. 3. If vertical separation exceeds this chart, use the extended line lengths chart. 4. Always use the smallest liquid line possible to minimize system charge.								*Standard Line Size IMPORTANT: Line sizing by this chart requires a supplemental refrigerant charge. Refer to charging chart on unit for proper charging with extended line sets. NOTES: 1. Example 1: A 2-ton condensing unit with a total line length of 75 feet with a vertical separation of 15 feet requires a minimum liquid line size of 5/16". 2. This chart may also be used to size horizontal runs. Example 2: A 3-ton condensing unit may have a total horizontal run of 100 feet if using a 5/16" liquid line. 3. The vertical separation indicated on this chart CANNOT be exceeded. 4. Always use the smallest liquid line possible to minimize system charge.							

Vapor Line Length Size and Capacity Multiplier		
RASL-		036'
Unit Vapor Line Connection Size		7/8" [22.23 mm] I.D. Sweat
Vapor Line Run Feet [m]		3/4" [19.05 mm] O.D. Std. 7/8" [22.23 mm] O.D. Opt.
25' [7.62]	Optional	.99
	Standard	1.00
	Optional	—
50' [15.24]	Optional	.98
	Standard	.99
	Optional	—
75' [22.86]	Optional	.97
	Standard	.98
	Optional	—
100' [30.48]	Optional	.96
	Standard	.97
	Optional	—

NOTES:
 1. Do **NOT** use 1 1/8" [28.58 mm] OD suction lines in 3-ton applications as they have insufficient velocity for oil return.

[] Designates Metric Conversions

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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
AIR CONDITIONING
DIVISION**

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