Ruud *Achiever*® Series Dedicated Horizontal Package Heat Pump

RQPM- 14-SEER Series
Nominal Sizes 2-5 Tons [7-17.6 kW]

RQRM- 15/16-SEER Series
Nominal Sizes 2-5 Tons [7-17.6 kW]

ISO 9001:2008

c UL us LISTED

ENERGY STAR
(15 SEER/12.0 EER AND ABOVE ONLY)

AHRI CERTIFIED

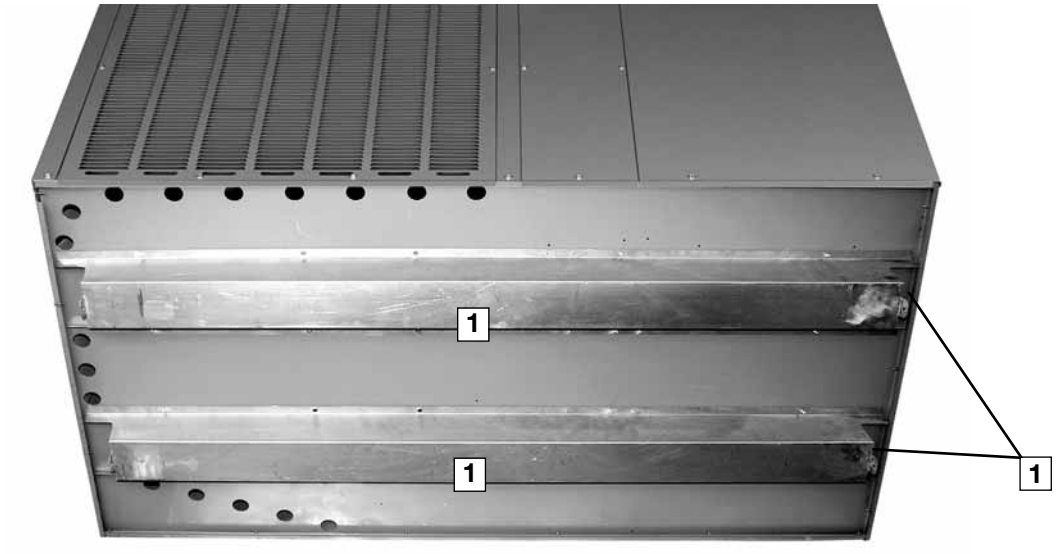
"Proper sizing and installation of equipment is critical to achieve optimal performance. Ask your Contractor for details or visit www.energystar.gov."

TABLE OF CONTENTS

The RQPM & RQRM series of Package Heat Pumps are designed to be the most efficient, quickest to install, easiest to service, and most reliable units in the industry – while still maintaining an affordable price. This platform provides you with a full line of nominal capacities from 2 through 5 tons. RQPM models are 14 SEER and RQRM models are 15/16 SEER, each AHRI-certified.

As with all units offered by Ruud, we started our design process with input from the customer. From fan grille to the base rails, Ruud has combined 30 years worth of package unit design experience with input from Dealers to meet the latest application requirements.

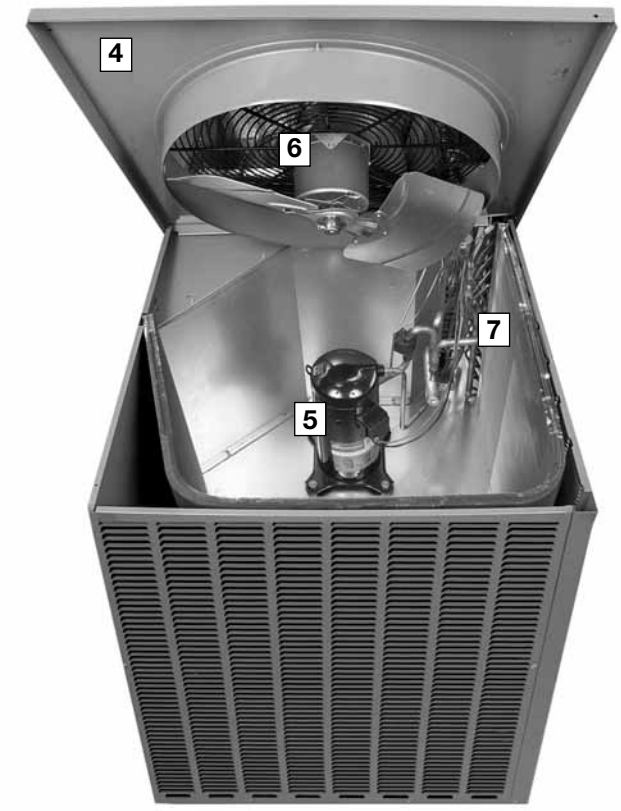
Starting at the bottom, the base rails (1) allow for separation between the unit base and the ground level, protecting the base from ground moisture and providing air circulation around the unit. Constructed from sturdy 18-gauge G-90 sheet metal, the base rails also allow for easier maneuverability during installation.

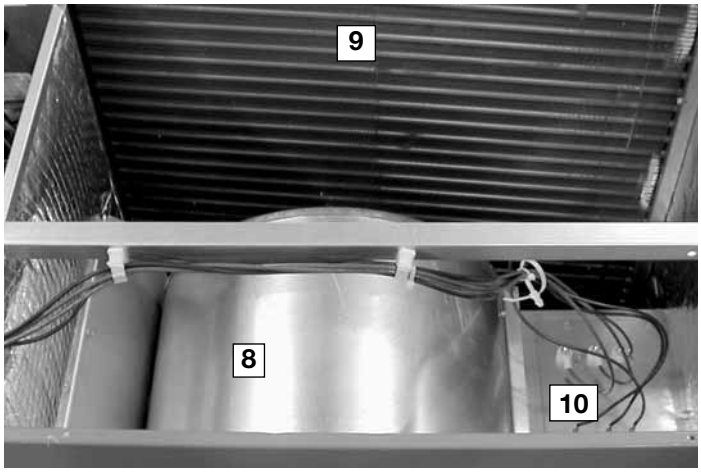


To provide flexibility in space-limited installations, the unit can be installed flush to the structure without blocking airflow over the outdoor coil or making any screws inaccessible for maintenance. Furthermore, the cabinet is a slim 33" wide. Full-louver coil protection **(2)** makes Ruud unique in the industry and also totally protects the outdoor coil from vandalism and weather extremes.

Two round 14" duct collar **(3)** are included with the unit, which makes attaching duct a snap. The collar is crimped around the leading edge, making it easier to install duct onto the collar. A metal bead around the circumference prevents the attached ducting from sliding off after installation.

Keeping service technicians in mind, Ruud takes pride providing easy access to internal components. The outdoor-section top cover **(4)** is easily removed to allow access to the scroll compressor **(5)**, outdoor fan motor **(6)**, and refrigerant tubing **(7)**.

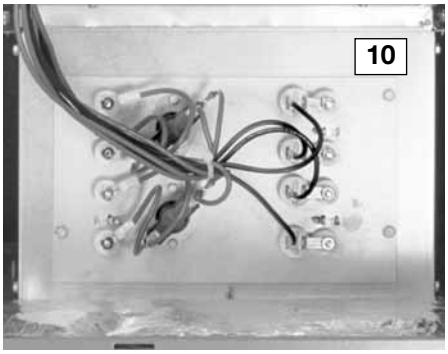




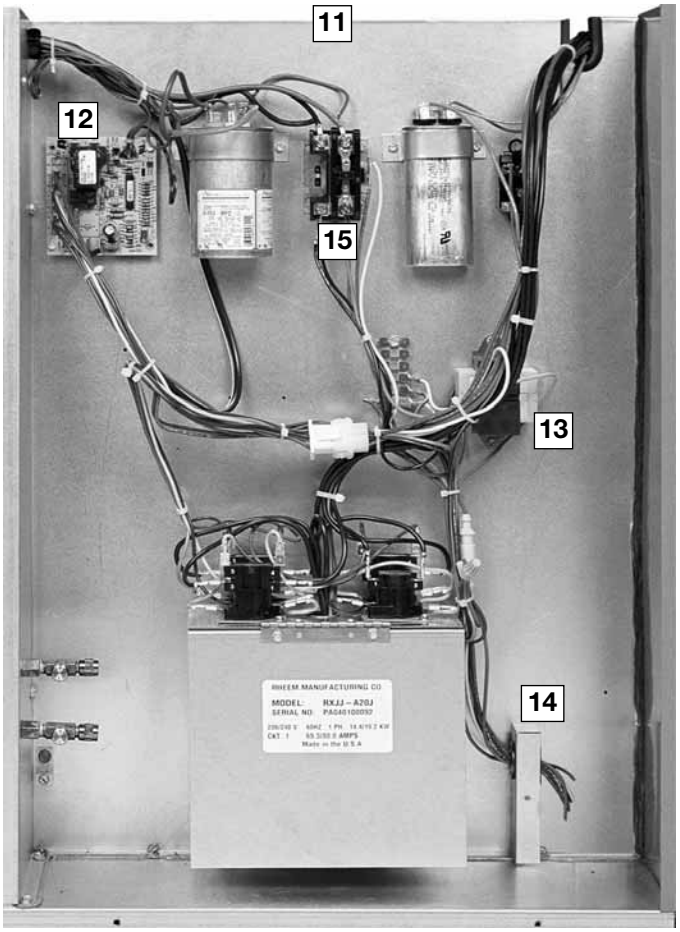
The indoor-section top cover also easily opens to access the removable blower housing and motor **(8)**. This also gains total access to the indoor coil for cleaning and service **(9)**.

The indoor motor and blower system will achieve nominal 400 CFM per ton up to a minimum of .8 inches of static pressure, which helps to eliminate customer dissatisfaction over poor air-flow brought about by high-static duct designs.

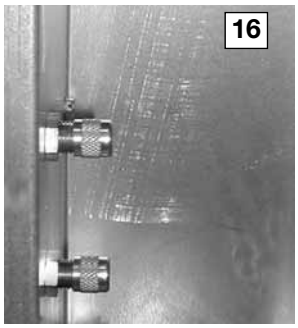
Optional electric heat **(10)** can be easily installed in the field, with either dual- or single-point power, and is designed to easily install into the unit. Electric heat can also be specified as factory installed.



The controls are located in a large, easy-to-access control box **(11)**, which provides plenty of space in which to troubleshoot. A demand defrost control **(12)** is used to manage the defrost cycle. The transformer **(13)** is protected by a in-line fuse, which protects the transformer during a low-voltage electrical short. The low-voltage **(14)** and high-voltage **(15)** wiring connections are easily accessed and have ample room around which to maneuver. Troubleshooting is further aided with number- and color-coded wiring, which corresponds with the large, easy-to-read wiring diagram located on the inside of the control box access panel.



High and low pressure can easily and accurately be measured using the two gauge ports **(16)** located inside the control box.



A small side panel grants access to a removable, sloped drain pan **(17)**, which helps to ensure indoor air quality (IAQ) throughout the life of the unit. A 3/4" drain trap **(18)** assembly is provided for convenience.

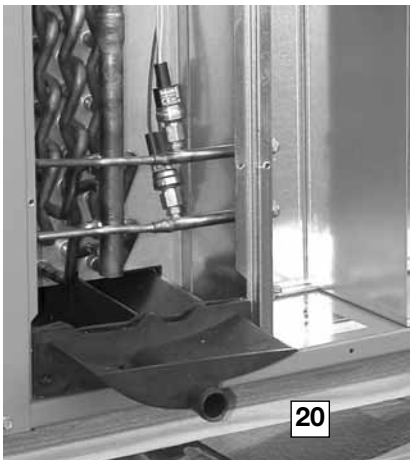
"Patent 7,430,877"

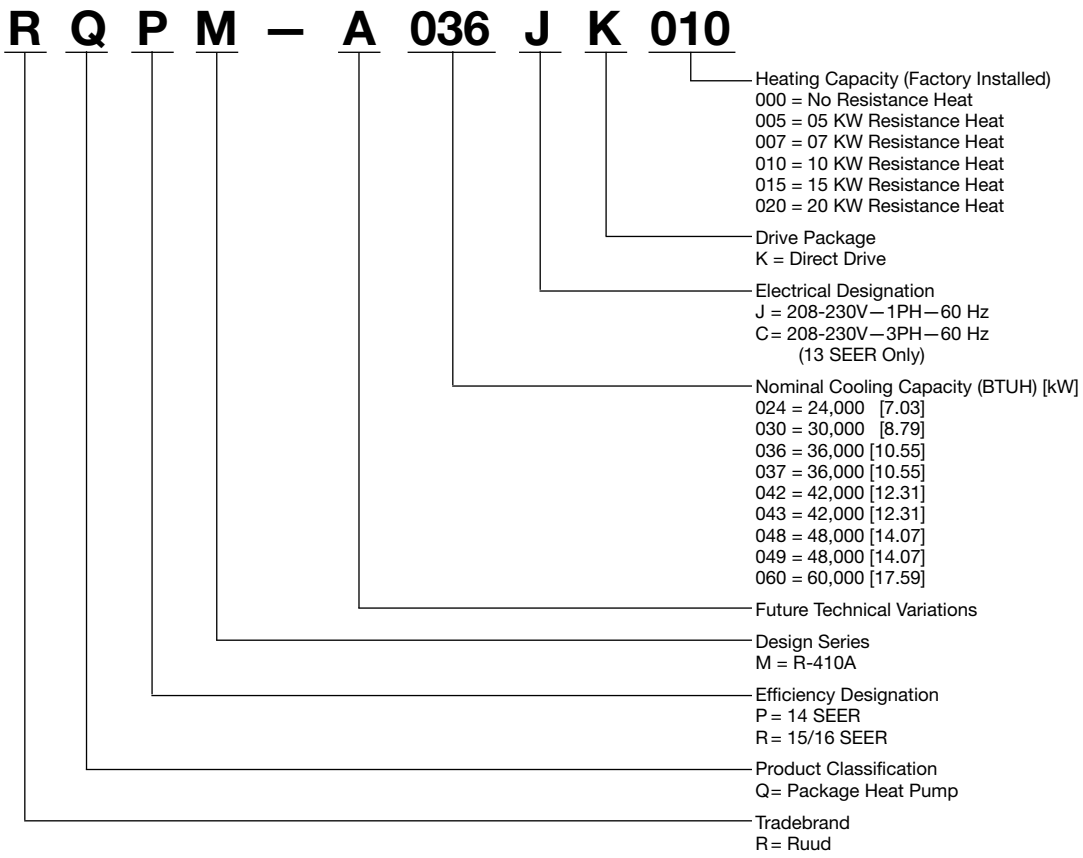
Foil-faced insulation is securely glued and captured to the cabinet. On the base of the unit, closed-cell insulation is used to prevent moisture from being absorbed and help reduce mold content to provide better indoor air quality.

For reliability and long-lasting operation, Ruud uses 100% scroll compressor technology **(19)** on all package platforms. With over 18 years of history, the scroll compressor has proven to be reliable, efficient, and quiet during operation.

(Note: The RQRM- A060 uses a two stage scroll compressor).

Low pressure control standard on all models **(20)**. High pressure control standard on -060 model.





[ ] Designates Metric Conversions

NOMINAL SIZES 2-5 TONS [7-17.6 kW]

Model RQPM- Series	A049CK	A049JK	A060CK	A060JK
Cooling Performance[1]				
Gross Cooling Capacity Btu [kW]	49,000 [14.36]	49,000 [14.36]	61,000 [17.87]	61,000 [17.87]
EER/SEER[2]	12/14	12/14	12.0/14	12.0/14
Nominal CFM/AHRI Rated CFM [L/s]	1600/1550 [755/731]	1600/1550 [755/731]	2000/1900 [944/897]	2000/1900 [944/897]
AHRI Net Cooling Capacity Btu [kW]	48,000 [14.06]	48,000 [14.06]	59,500 [17.43]	59,500 [17.43]
Net Sensible Capacity Btu [kW]	36,800 [10.78]	36,800 [10.78]	45,300 [13.27]	45,300 [13.27]
Net Latent Capacity Btu [kW]	11,200 [3.28]	11,200 [3.28]	14,200 [4.16]	14,200 [4.16]
Net System Power kW	4	4	5.00	5.00
Heating Performance (Heat Pumps)[3]				
Heating Input Btu [kW] Rating	42,000 [12.31]	42,000 [12.31]	59,500 [17.43]	59,500 [17.43]
System Power KW/COP	3.59/3.66	3.59/3.66	4.74/3.72	4.74/3.72
Low Temp. Btuh [kW] Rating	25,400 [7.44]	25,400 [7.44]	36,600 [10.72]	36,600 [10.72]
System Power KW/COP	3.22/2.3	3.22/2.3	4.26/2.54	4.26/2.54
HSPF (Btu/Watts-hr)	8	8	8	8
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)[4]	78	78	78	78
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.54 [1.54]	16.54 [1.54]	16.54 [1.54]	16.54 [1.54]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	2 / 18 [7]	2 / 18 [7]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	5.78 [0.54]	5.78 [0.54]	5.78 [0.54]	5.78 [0.54]
Rows / FPI [FPcm]	3 / 13 [5]	3 / 13 [5]	4 / 13 [5]	4 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4200 [1982]	4200 [1982]	4000 [1888]	4000 [1888]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	908	908	1075	1075
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11x9 [279x229]	1/11x9 [279x229]	1/11x9 [279.4x228.6]	1/11x9 [279.4x228.6]
Drive Type/No. Speeds	Direct/2	Direct/2	Direct/2	Direct/2
No. Motors	1	1	1	1
Motor HP	3/4	3/4	1	1
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No	No	No	No
(No.) Size Recommended in. [mm]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
Refrigerant Charge Oz. [g]	120 [3402]	120 [3402]	193 [5472]	193 [5472]
Weights				
Net Weight lbs. [kg]	429 [195]	429 [195]	481 [218]	481 [218]
Ship Weight lbs. [kg]	455 [206]	455 [206]	507 [230]	507 [230]

See Page 15 for Notes.

[ ] Designates Metric Conversions

ELECTRICAL DATA – RQPM SERIES

		-A043CK	-A043JK	-A048CK	-A048JK	-A049CK	-A049JK	-A060CK	-A060JK
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	187-253	187-253	187-253	187-253
	Minimum Circuit Ampacity	25/25	31/31	26/26	36/36	26/26	36/36	32/32	43/43
	Minimum Overcurrent Protection Device Size	25/25	35/35	30/30	45/45	30/30	45/45	40/40	50/50
	Maximum Overcurrent Protection Device Size	35/35	45/45	35/35	50/50	35/35	50/50	45/45	60/60
Compressor Motor	No.	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	3	1	3	1	3	1	3	1
	HP	3450	3450	4	4	3450	3450	4.5	4.5
	RPM	3 1/2	3 1/2	3450	3450	4	4	3450	3450
	Amps (RLA)	13.5/13.5	17.9/17.9	13.7/13.7	21.8/21.8	13.7/13.7	21.8/21.8	17.9/17.9	26.4/26.4
	Amps (LRA)	88/88	112/112	110/110	117/117	110/110	117/117	120/120	150/150
Condenser Motor	No.	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	1.9/1.9	1.9/1.9	1.9	1.9	1.9/1.9	1.9/1.9	1.9	1.9
	Amps (LRA)	4/4	4/4	4	4	4/4	4/4	4	4
Evaporator Fan	No.	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1	1	1
	HP	3/4	3/4	3/4	3/4	3/4	3/4	1	1
	Amps (FLA)	6/6	6/6	6	6	6/6	6/6	7.6	7.6