The new degree of comfort.™

Rheem *Prestige*™ Series Variable Speed Heat Pumps



RP20 Series

Efficiencies up to 20 SEER/14.5 EER/13 HSPF Nominal Sizes 2, 3, 4 & 5 Ton [7.03, 10.6, 14.06 & 17.6 kW] Cooling Capacities 17.3 to 60.5 kBTU [5.7 to 17.7 kW]











"Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet Energy Star. Ask your Contractor for details or visit www.energystar.gov."



- PlusOne™ Energy Efficiency offers a minimum of 20 SEER and 13 HSPF system performance across all capacities. The RP20 achieves these performance measurements with RHMV variable speed air handlers, R802V two-stage, variable-speed 80% furnaces, R96V two-stage, variablespeed 96% furnaces and R97V modulating furnaces.
- PlusOne[™] Expanded Valve Space 3"-4"-5" service valve space – provides a minimum working area of 27-square inches for easier access
- PlusOne[™] Triple Service Access 15" wide, industry leading corner service access makes repairs easier and faster.
 The three fastener removable corner allows optimal access to internal unit components. Individual louver panels come out once fastener is removed, for faster coil cleaning and easier cabinet reassembly
- EcoNet[™] Enabled product. The EcoNet Smart Home System provides advanced air & water control for maximum energy savings and ideal comfort.
- New composite base pan dampens sound, captures louver panels, eliminates corrosion and reduces number of fasteners needed
- Powder coat paint system for a long lasting professional finish
- The Copeland Scroll[™] Variable Speed Compressor has a modulating technology which provides more precise temperature control, lower humidity and greater efficiency. The overdrive feature provides cooling load up to 107°F and heating load down to 7°F.
- Modern cabinet aesthetics increased curb appeal with visually appealing design
- Equipped with electronic expansion valve to precisely control variable refrigerant flow.
- Improved tubing design reduces vibration and stress, making unit quieter and reducing opportunity for leaks

- Optimized defrost characteristics decrease defrosting and provide better home comfort
- Optimized reversing valve sizing improves shifting performance for quieter unit operation and increased life of the system
- Enhanced mufflers help to dissipate vibration energy for quieter unit operation
- Integrated heat pump lift receptacle allows standard CPVC stands to be inserted into the base
- Curved louver panels provide ultimate coil protection, enhance cabinet strength, and increased cabinet rigidity
- Optimized fan orifice optimizes airflow and reduces unit sound
- Rust resistant screws confirmed through 1500-hour salt spray testing
- Diagnostic service window with two-fastener opening provides access to the high and low pressure.
- External gauge port access allows easy connection of "low-loss" gauge ports
- Single-row condenser coil (up thru 4 tons) makes unit lighter and allows thorough coil cleaning to maintain "out of the box" performance
- 35% fewer cabinet fasteners and fastener-free base allow for faster access to internal components and hassle-free panel removal
- Service trays hold fasteners or caps during service calls
- QR code provides technical information on demand for faster service calls
- Fan motor harness with extra long wires allows unit top to be removed without disconnecting fan wire.
- High and low pressure standard on all models.

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Standard Feature Table

STANDARD FEATURES							
Feature	24	36	48	60			
R-410A Refrigerant	√	√	√				
Maximum SEER	20	20	20	20			
Maximum EER	14.5	14	13	13			
EcoNet Enabled	√	√	$\sqrt{}$				
Copeland Scroll™ Variable Speed Compressor	√	√	√				
Compressor Sound Blanket	√	√	√				
Variable speed outdoor fan motor	√	√					
Swept wing fan blade	√	√					
Field Installed Filter Drier	√	√	$\sqrt{}$				
Front Seating Service Valves	√	√	$\sqrt{}$				
Internal Pressure Relief Valve	√	√	√				
Internal Thermal Overload	√	$\sqrt{}$	√	$\sqrt{}$			
Low Ambient capability	√	√	√				
3-4-5 Expanded Valve Space	√	√	√	√			
Composite Basepan	√	√	√				
1" Screw Control Box Access	√	√	√	√			
15" Access to Internal Components		√		$\sqrt{}$			
Quick release louver panel design			$\sqrt{}$	$\sqrt{}$			
No fasteners to remove along bottom			$\sqrt{}$	$\sqrt{}$			
Optimized Venturi Airflow		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			
Single row condenser coil			$\sqrt{}$	2 Row			
Powder coated paint	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			
Rust resistant screws		$\sqrt{}$		$\sqrt{}$			
QR code		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			
External gauge ports		$\sqrt{}$					
Service trays			$\sqrt{}$	$\sqrt{}$			

 $[\]sqrt{}$ = Standard

Available SKUs

Available Models	Description
RP2024AJVCA	2 ton EcoNet [™] Enabled inverter driven Rheem <i>Prestige</i> [™] Series Variable Speed Heat Pump-208/230/1/60
RP2036AJVCA	3 ton EcoNet [™] Enabled inverter driven Rheem <i>Prestige</i> [™] Series Variable Speed Heat Pump-208/230/1/60
RP2048AJVCA	4 ton EcoNet™ Enabled inverter driven Rheem <i>Prestige</i> ™ Series Variable Speed Heat Pump-208/230/1/60
RP2060AJVCA	5 ton EcoNet™ Enabled inverter driven Rheem <i>Prestige</i> ™ Series Variable Speed Heat Pump-208/230/1/60

Introduction to RP20 Heat Pump

The RP20 is our EcoNet™ Enabled, Inverter Driven *Prestige™* Series Variable Speed Heat Pump and is part of the Rheem Heat Pump product line that extends from 13 to 20 SEER. This highly featured and reliable heat pump is designed for years of reliable, efficient operation when matched with Rheem indoor aluminum evaporator coils and furnaces or air handler units with aluminum evaporators.

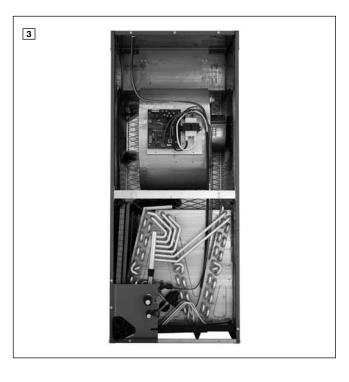
The EcoNet Smart Home System is an integrated system for a home's Heating, Cooling and Water Heating equipment – allowing homeowners to manage the products that consume up to 65% of the their home's energy. EcoNet sets Rheem, and our distributor and contractor customers, apart in the industry with a unique, advanced and efficient technology solution.

The RP20 *Prestige*™ Series inverter driven Variable Speed Heat Pump is exclusively designed to operate with the EcoNet™ Smart Home System. Developed by Rheem, The EcoNet Smart Home System allows homeowners to manage select highefficiency, EcoNet Enabled air conditioners, heat pumps, gas furnaces, air handlers and water heaters from anywhere. EcoNet Enabled products in a home are connected through standard HVAC wiring; then contractors have the option of adding an EcoNet WiFi Kit (1) so the homeowner can access everything remotely through a free mobile app or mobile-friendly website. The Control Center (2) acts as both a thermostat for the heating and cooling system, and a remote control for connected water heaters.





Along with the EcoNet Smart Home System the RP20 is matched with the RHMV Constant CFM Variable Speed EcoNet Enabled Air Handler (3) or can be applied in a Furnace application with the EcoNet Enabled Two-Stage Variable Speed R802V or R96V Gas Furnaces or the fully modulating R97V and RCF Aluminum Cased Furnace Coils with EEV (4). See individual specification documents for more details of the indoor products.



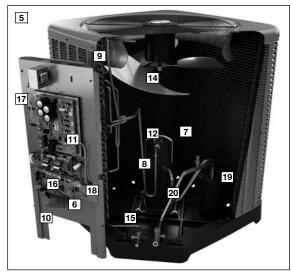




How It Works

The EcoNet™ Enabled, Inverter Driven Rheem® *Prestige™* Series Variable Speed Heat Pump's (⑤) variable speed outdoor unit control (VSODU) (⑥) continuously monitors the EcoNet control temperature and humidity set point, suction pressure (⑦), suction temperature (⑥), outdoor coil temperature (⑨) and outdoor temperature (⑩) and feeds this information to the Copeland Inverter Control Motor Drive (11). The Copeland Inverter Control Motor Drive converts AC to DC power, sends it to the Copeland Scroll™ variable speed compressor (12) Brushless Permanent Magnet motor (BPM), dynamically adjusting its speed. Simultaneously the VSODU provides input to the ECM outdoor fan motor (13) which is equipped with the latest

swept wing fan technology (14) and the Electronic Expansion Valve (EEV) (15) which syncs up with the compressor speed to deliver the exact capacity the home needs to meet its comfort requirements. The result of this advanced technology is significantly improved energy efficiency and comfort. Energy efficiency is improved by precise load matching, less cycling on and off and low amp gradual compressor, outdoor and indoor motor operation. Comfort is improved by precise temperature control, precise humidity control and extra capacity during extreme summer and cold weather conditions.







System Component Descriptions

EcoNet Control Center – (1): The EcoNet Control Center serves as the hub of communication for a home's Heating, Cooling and Water Heating systems and is required to operate an EcoNet Enabled Heating and Cooling system in a fully communicating mode. The EcoNet Control center displays detail diagnostic from outdoor and indoor connected units. See individual specification documents for more details of the EcoNet Control Center.

EcoNet Cooling and Heating WiFi Module – (2) is required to remotely operate an EcoNet Enabled Heating and Cooling system from the EcoNet web portal and mobile apps. See individual specification documents for more details of the EcoNet Control Center.

Variable Speed Outdoor Unit Control (VSODU) – (6) is where control wiring is hooked to the RP20. The VSODU control takes input from the EcoNet Control Center, outdoor suction temperature and pressure sensors, outdoor air and coil temperatures and communicates to the Copeland Inverter Control Motor Drive, EEV, reversing valve, outdoor fan and indoor blower to precisely control system capacity output of the heat pump in heating and cooling modes. It also is equipped with Dual Seven-Segment Display for technician interface, operation status and fault code communication. Two momentary buttons allow technician to initiate various operating modes. Various LED's communicate active EcoNet communication, microprocessor activity and EEV operation. See I&O for more details.

The Copeland Inverter Control Motor Drive – ([11]) converts incoming single-phase AC power to 3 phase DC simulated sine wave power. Once power is converted the Copeland Inverter Control Motor Drive varies frequency of the power to the compressor varying the compressor speed. The Copeland Inverter Control Motor Drive has active protection algorithms that keep the compressor safely inside its operating envelope.

The Copeland Scroll™ Variable Speed compressor – (12) utilizes a Brushless Permanent Magnet Motor (BPM) that varies the Scroll speed, thus, varying the refrigerant flow. The robust scroll design has proven reliability over competing compressor technologies.

Swept Wing Fan Blade – (14) is the latest technology in outdoor fans that increase efficiency and reduces air noise.

The Electronic Expansion Valve (EEV) – (15) is an electronically driven refrigerant control valve. A small stepper motor is used to open and close valve to precisely control refrigerant flow. It is controlled by the VSODU, which receives input from the pressure transducer and suction line temperature sensor to control the RP20 in the heating mode. The VSODU drives it fully open in the cooling mode. The EEV is superior to a TXV (thermostatic expansion valve) because the EEV controls superheat at the evaporator coil under varying load and refrigerant flow conditions, more precisely than traditional TXV's.

The Filter – (16) is an electrical device that "cleans" the AC power component. This low pass filter only permits the passage of 60-Hertz signal to the inverter drive.

The Pressure Transducer – (7) is used to measure suction pressure in the outdoor heat pump. The VSODU takes this input to operate the EEV and make decisions on system operation such as low ambient cooling.

Various temperature sensors – are located on the Heat Pump. There is an outdoor air sensor (10), an outdoor coil sensor (9), a discharge line temperature sensor (not shown, located on discharge line), a suction line temperature sensor (8) and a compressor sump temperature sensor (not shown, located bottom of compressor). The VSODU uses these temperature measurements to operate the system.

The Choke – (17) is provided to absorb power spikes that might occur on the DC line.

Ferrite Rings – (18) are iron cores through which AC power is looped keeping any electrical noise contained. They also reduce the induction of electrical transient into the DC drive.

The Suction Accumulator – (19) prevents liquid refrigerant from entering the compressor.

The Reversing Valve – (20) reverses the flow of refrigerant in cooling versus heating.

Features

In addition all RP20 Prestige Series Inverter Driven Variable Speed Heat Pumps have the following features:





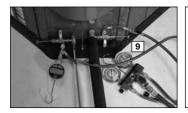






Our unique composite base (3) reduces sound emission, eliminates rattles, significantly reduces fasteners, eliminates corrosion and has integrated brass compressor attachment inserts (4). Furthermore it has incorporated into the design, water management features, means for hand placement (5) for unit maneuvering, screw trays (6) and inserts for lifting off unit pad. (7)

Service Valves (8) are rigidly mounted in the composite base with 3" between suction and discharge valves, 4" clearance below service valves and a minimum of 5" above the service valves, creating industry leading ease of installation. The minimum





27 square-inches around the service valves allows ample room to remove service valve schrader prior to brazing, plenty of clearance for easy brazing of the suction and discharge lines to service valve outlets, easy access and hookup of low loss refrigerant gauges (9), and access to the service valve caps for opening.

Controls are accessed from the corner of the unit by removing only one fastener from the control access cover, revealing the industry's largest 15" wide and 22" tall control area (10). With all this room in the control area the high voltage electrical whip (11) can easily be inserted through the right size opening in the bottom of the control area. Routing it leads directly to lugs for connection. The low voltage control wires (12) are easily connected to the units VSODU terminal strip. The service window (14) can be removed by removing two screws, to access the EEV and view interior of unit. (15) (High and low pressure is standard on RP20 models).







If in the rare event, greater access is needed to internal components, such as the compressor, the entire corner of the unit can be removed along with the top cover assembly to have unprecedented access to interior of the unit (16). Extra wire length is incorporated into each outdoor fan and compressor so top cover and control panel can be positioned next to the unit. Or with minimal effort the plug can be removed from the compressor and the outdoor fan wires can be removed from the VSODU to allow even more uncluttered access to the interior of the unit







(17). Outdoor coil heights range from as short as 35" to 48". Disassembly to this degree and complete reassembly only takes a first time service technician less than 10 minutes. (17)

All units utilize formed louver panels which provide industry leading coil protection. Louver removal for coil cleaning is accomplished by removing one screw and lifting the panel out of the composite base pan. (19) All RP20 units utilize single row coils (18) making cleaning easy and complete, restoring the performance of the air conditioner back to out of the box performance levels year after year.



The outdoor fan motor has sleeve bearings and is inherently protected. The motor is totally enclosed for maximum protection from weather, dust and corrosion. (20) Access to the outdoor fan is made by removing four fasteners from the fan grille. The outdoor fan can be removed from the fan grille by removing 4 fasteners in the rare case outdoor fan motor fails.

Each cabinet has optimized composite (21) fan orifice assuring efficient and quiet airflow.



The entire cabinet has post powder paint (22) achieving 1000 hour salt spray rating, allowing the cabinet to retain its aesthetics throughout its life.



The Copeland Scroll™ Variable Speed compressors ([28]) with standard internal pressure relief and internal thermal overload are used on all capacities assuring longevity of high efficient and quiet operation for the life of the product. All RP20 Heat Pump come standard with high and low pressure switches reinforced vinyl compressor sound covers containing a 1¹/₂ inch thick batt of fiberglass insulation and open edges are sealed with a 1 inch wide hook and loop fastening tape for superior sound quality.

Features (con't.)

Each unit is shipped with filter drier for field installation and will trap any moisture or dirt that could contaminate the refrigerant system.



All cabinets have industry leading structural strength due to the composite base pan (23), interlocking corner post (24), formed curved louver panels (25) and drawn top cover (26) making it the most durable cabinet on the market today.

Each RP20 capacity has undergone rigorous psychometric testing to assure performance ratings of capacity, SEER and EER per AHRI Standard 210/240 rating conditions. Also each unit bears the UL mark and each unit is certified to UL 1995 safety standards.

Each unit has undergone specific strain and modal testing to assure tubing ([27]) is outside the units natural frequency and that the suction and discharge lines connected to the compressor withstand any starting, steady state operation, or shut down forces imposed by the compressor.

All units have been sound tested in sound chamber to AHRI 270 rating conditions, and A-weighted Sound Power Level tables produced, assuring units have acceptable noise qualities (see page 12). Each unit has been ran in cooling operation at 95°F and sound ratings for the RP20 range from as low as 56 dBA at low speed and as high as 76 dBA at 95°F rated conditions.

All units have been ship tested to assure units meet stringent "over the road" shipping conditions.

As manufactured, all units in the RP20 family have cooling capability to 40°F. Addition of low ambient control will allow the unit to operate down to 0°F. Factory testing is performed on each unit. All component parts meet well defined specification and continually go through receiving inspections. Each component installed on a unit is scanned, assuring correct component utilization for a given unit capacity and voltage. All condenser coils are leak tested with pressurization test to 550#'s and once installed and assembled, each units' complete refrigerant system is helium leak tested. All units are fully charged from the factory for up to 15 feet of piping. All units are factory run tested. The RP20 has a 10-year conditional unit replacement warranty (registration required) and a 10 year limited parts warranty.

Optional Accessories (Refer to accessory chart for model #)

3"/6"/12"

 Gray high density polyethylene feet are available to raise unit off of mounting surface away from moisture

Accessories EcoNet Control Center



The EcoNet Control Center serves as the hub of communication for a home's Heating, Cooling and Water Heating systems, and is required to operate an EcoNet Enabled Heating & Cooling system in a fully communicating mode.

RETST601SYS

WiFi Kit for Heating and Cooling Systems



The WiFi kit is required to remotely operate EcoNet Enabled Heating and Cooling Systems from the EcoNet Web portal and mobile apps.

REWRA630SYS

Thermistor Kit - RXHT-A02

Heat	leat Pumps (For Reference)**	eference)**							
c	۵۱	<u>20</u>	24	۷I	اد	>	Ol	ΥI	*
Brand	Product Category	SEER	Capacity† BTU/HR	Major Series*	Voltage	Туре	Controls	Minor Series**	Option Code
Rheem	P - Heat Pump	13 - 13 SEER 14 - 14 SEER 15 - 15 SEER 17 - 17 SEER 20 - 20 SEER	18 - 18,000 [5.28 kW] 24 - 24,000 [7.03 kW] 30 - 30,000 [8.79 kW] 36 - 36,000 [10.55 kW] 42 - 42,000 [12.31 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]	A - 1st Design	J - 1ph, 208-230/60 C - 3ph, 208-230/60 D - 3ph, 460/60	1 - Single-stage 2 - Two-stage V - Inverter P - Piston	C - Communicating N - Non-Communicating	A - 1st Design	N/A
*Con page 3	*Coo nada 2 for available CKH's								

*See page 3 for available SKU's. †Two-stage and inverter available in whole capacities only.

	*	Option Code	N/A
	B I	Minor Series** Option Code	B - High and low pressure control
	O	Controls	Rheem A - Air Conditioners 13 - 13 SEER 18 - 18,000 [5.28 kW] A - 1st Design J - 1ph, 208-230/60 1 - Single-stage C - Communicating 14 - 14 SEER 24 - 24,000 [7.03 kW] B - 2nd Design C - 3ph, 208-230/60 2 - Two-stage N - Non-Communicating 16 - 16 SEER 30 - 30,000 [8.79 kW] V - Inverter 17 - 17 SEER 36 - 36,000 [10.55 kW] 20 - 20 SEER 42 - 42,000 [12.31 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]
	<u>\(\) \(\)</u>	Туре	1 - Single-stage 2 - Two-stage V - Inverter
	7⁻	Voltage	1 - 1ph, 208-230/60
	Ā	Major Series*	A - 1st Design J B - 2nd Design C
	24	Capacity† BTU/HR	R 18 - 18,000 [5.28 kW] <i>I</i> R 24 - 24,000 [7.03 kW] <i>I</i> R 30 - 30,000 [8.79 kW] <i>I</i> R 36 - 36,000 [10.55 kW] <i>I</i> R 42 - 42,000 [12.31 kW] 60 - 60,000 [17.58 kW]
'S*	<u>20</u>	SEER	13 - 13 SEER 14 - 14 SEER 16 - 16 SEER 17 - 17 SEER 20 - 20 SEER
r Conditioners*	\overline{A}	Product Category	A - Air Conditioners
Air (Œ	Brand	Rheem A

*See page 3 for available SKU's. †Two-stage and inverter available in whole capacities only.

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*	Option Code	N/A
4	Minor Series**	A - 1st Design
Ol	Casing	C - Cased U - Uncased
M	Orientation	M - Multipoise V - Vertical only/ convertible H - Ded. Horizontal only
۷I	Major Series*	A - 1st Design
ш		T-TXV E-EEV P-Piston
ဖ ျ	Efficiency	S- Standard Eff. M- Mid Eff. H- High Eff.
17	Width	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"
24	Capacity BTU/HR	24 - 24,000 [7.03 kW] 36 - 36,000 [10.55 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]
ш	Type	F - Furn Coil H - Air-Handler Coil
O	Product Category	C - Evap Coil
αι	Brand	Rheem

NOTE: The above Model Number ID's are for reference only. Available SKU's are listed on the standard features/available SKU page of model spec sheet.

30%+	- Arue Gas	90%+ AFUE GaS Furnaces (For Reference)	Reference)**							
&	96	>	۷	<u>70</u>	2	ပေ	17	Σ	S I	Υ
Brand	Series	Motor	Major Rev	Input BTU/HR	Stages	Air Flow	Cabinet Width	Configuration	Nox	Minor Rev
Rheem	90 - 90 AFUE 92 - 92 AFUE 95 - 95 AFUE 96 - 96 AFUE 97 - 97 AFUE	V - Variable speed V - Constant Torque (X-13)	A - 1st Design	040 - 42,000 [12.31 kW] 060 - 56,000 [16.41 kW] 070 - 70,000 [20.51 kW] 085 - 84,000 [24.62 kW] 100 - 98,000 [28.72 kW] 115 - 112,000 [32.82 kW]	1 - Single-stage 2 - Two-stage M - Modulating	3 - up to 3 ton 5 - 3 1/2 up to 5 ton	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"	M - Multi	X - Low Nox S - Standard	A - 1st Design

	۷	Minor Rev	A - 1st Design
	S	Nox	X - Low Nox S - Standard
	W	Configuration	7.5" M - Multi X 7.5" D - Down S 1" Z - Down & zero clearance down flow
	17	Cabinet Width	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"
	<u>8</u>	Air Flow	3 - up to 3 ton 4 - 2 1/2 to 4 ton 5 - 3 1/2 up to 5 ton
	<u>075</u>	Input BTU/HR	050 - 50,000 [15 kW] 075 - 75,000 [22 kW] 100 - 100,000 [29 kW] 125 - 125,000 [37 kW] 150 - 150,000 [44 kW]
	Υ	Major Rev	A - 1st Design
or Reference)**	⊼ī	Motor	V - Variable speed T - Constant Torque (X-13) P - PSC premium S - PSC standard
0% AFUE Gas Furnaces (For Reference)	7	Stages	80 - 80+ AFUE 1 - Single-stage 2 - Two-stage
AFUE Gas	08	Series	80 - 80+ AFUE
80%	c l	Brand	Rheem

	*	ation ode	180
		eat Op Cc	*1 ion
	000	Factory Heat Option Cap Code	00 - no factory heat with option code
	۷	Minor Series**	A - 1st Design
	Ē	Voltage	A - 1st Design C -Communicating J - 1ph, 208-240/60 A - 1st Design N -Non-comm
	O	Controls	C -Communicating N -Non-comm
	۷	Major Series*	A - 1st Design
	ш	Metering Device	T - TEV E - EEV P - Piston
	SI	Coil Size	S - Standard Eff. M - Mid Eff. H - High Eff.
	<u>17</u>	Width	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"
	36	Capacity BTU/HR	1 - Single-Stage V - Variable 24 - 24,000 [7.03 kW] 2 - Two-Stage Speed 36 - 36,000 [10.55 kW] M - Modulating T - Constant 48 - 48,000 [14.07 kW] Torque 60 - 60,000 [17.58 kW] P - PSC
ence)**	>	Motor Type	V - Variable Speed T - Constant Torque P - PSC
ir Handlers (For Reference)**	M	Stages of Airflow	1 - Single-Stage 2 - Two-Stage M - Modulating
Handle	I I	Product Category	
Air	c	Brand	Rheem

NOTE: The above Model Number ID's are for reference only. Available SKU's are listed on the standard features/available SKU page of model spec sheet.

Model No.	RP2024A	RP2036A	RP2048A	RP2060A
Nominal Tonnage	2.0	3.0	4.0	5.0
Valve Connections			,	
Liquid Line O.D. – in.	3/8	3/8	3/8	3/8
Suction Line O.D. – in.	3/4	3/4	7/8	7/8
Refrigerant (R-410A) furnished oz. ¹	135.2	169	215.2	321
Compressor Type		Sc	roll	
Outdoor Coil				
Net face area – Outer Coil	21.5	28.3	32.5	32.5
Net face area – Inner Coil	_	_	_	29.0
Tube diameter – in.	0.375	0.375	0.375	0.375
Number of rows	1	1	1	2
Fins per inch	20	20	20	20
Outdoor Fan				
Diameter – in.	26	26	26	26
Number of blades	3	3	3	3
Motor hp	1/5	1/2	1/2	1/2
CFM	4375	4250	4995	6240
RPM	731	784	842	1118
watts	95	290	108	290
Shipping weight – lbs.	231	280	301	362
Operating weight – lbs.	223	273	293	355
Electrical Data				
Line Voltage Data (Volts-Phase-Hz)	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Maximum overcurrent protection (amps) ²	45	50	70	70
Minimum overcurrent protection	35	40	60	60
Minimum circuit ampacity ³	28	33	46	45
Compressor		1		
Rated load amps	20.7	21.9	32.2	31.7
Locked rotor amps	35	35	50	50
Condenser Fan Motor		1		
Full load amps	1.4	5.3	5.3	5.3
· <u>· </u>	N/A	N/A	N/A	N/A

¹Refrigerant charge sufficient for 15 ft. length of refrigerant lines. For longer line set requirements see the installation instructions for information about set length and additional refrigerant charge required.

²HACR type circuit breaker of fuse.

³Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.



Accessories

Model No.	RP2024	RP2036	RP2048	RP2060
EcoNet Control Center	RETST601SYS	RETST601SYS	RETST601SYS	RETST601SYS
WiFi Kit for Heating & Cooling	REWRA630SYS	REWRA630SYS	REWRA630SYS	REWRA630SYS
Compressor sound cover	STD	STD	STD	STD
Heat pump Riser 6 in.	686020	686020	686020	686020
Supply Return Sensor	RXHT-A02	RXHT-A02	RXHT-A02	RXHT-A02
Rheem Show Unit Shell	RXHD-CU4	RXHD-CU4	RXHD-CU4	RXHD-CU4

Weighted Sound Power Level (dBA)

				RP20 S	ound Power Lo	evel				
Model	Sound Power Level [dB(A)]		Full	Octave Linear	Sound Power	Level dB - Ce	nter Frequenc	y - Hz		Sound Power Level [dB(A)]
Monei	Low Speed/ High Speed	125	250	500	1000	2000	4000	6300	8000	with Sound Blanket
RP2024	59	38.6	35.9	42.2	43.3	39.2	44.8	55.1	40.4	
NP2024	69	44.8	52.5	60.1	58.7	57.5	49	49.9	44.2	
DDOOOC	64	33.7	45.1	51.6	53.5	51.8	45.4	48.4	42.4	
RP2036	70	50.3	53.3	58.9	58	55.9	49.5	49.2	45.4	Sound
RP2048	59	29.9	38.3	43.1	49.4	42.7	46.4	40.9	38.9	Blankets - Standard
NP2040	72	41.1	47.9	61.2	59.4	57.4	50.6	48.9	45.8]
DDOOGO	59	41.1	40.8	45.6	48.6	43.4	41	40.2	38.9	1
RP2060	71	45	54.1	61.1	57.5	55.9	50.1	48	47.3	1

NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI)

Integrated Controls



EcoNet is smart, new technology developed exclusively by Rheem that allows Heating, Cooling, and Water Heating products to communicate with each other on one integrated network.

Easy to Setup, Easy to Use, Easy to Save

- Built with our 360°+1 design philosophy, it is optimized for Installability[™], Performance, Integration & Serviceability
- Controls 65%† or more of a typical home's energy use from a single device
- Can reduce energy costs by up to 30%^{††}

Features

- Added support for new EEV (Electronic Expansion Valve) Air Handlers, Air Conditioners and Heat Pumps*
- Rapid installation with standard 4-wire configuration
- Automatically configures communicating equipment with optimal settings
- Adapts to home décor through interchangeable faceplates and adjustable background coloring
- Full-color, 4.7" LCD touchscreen display with easy-to-read icons and text
- Convenient date, time and indoor/outdoor temperature indications
- 5 operating modes with short-cycle protection (Heat, Cool, Auto, Emergency Heat, Fan Only)

- 7-Day programmable schedule with Smooth Arrival & Whole Home Vacation options
- Detailed operating status, alarm history, and audible alerts
- Supports humidifier accessories or overcool based dehumidification
- One-touch access to Water Heater Management^{†††}
- Easily manage from anywhere in the world with the compatible WiFi Module & EcoNet app for smart phones and tablets
- † Source Department of Energy
- †† When compared to non-programmable thermostats. Source: ENERGY STAR® for Programmable Thermostats
- ††† Requires wired connection to EcoNet Enabled Electric or Hybrid Water Heaters



EcoNet™ Control Center

Home control with intuitive LCD touchscreen navigation

RETST601SYS

EcoNet Control Center Compatibility

OFFERINGS				HE	ATING & CO	OLING					WA	TER HEAT	ING
Product Categories	Ga	as Furna	ces	Air Ha	ndlers	Air Con	ditioners	Heat I	Pumps	WiFi Kit for HVAC REWRA630SYS	Electric Tank Models Ending in	Hybrid Tank HB50	Gas Powered Damper
Models	R97V	R96V	R802V	RHMV*	RH2T (EEV**)	RA20*	RA17	RP20*	RP17*		EC2	Models	Tank Models
RETST601SYS	√	V	√	V	V	√	V	√	√	√	√	√	

*Available in 2016

**Electronic Expansion Valve (EEV) Models



The EcoNet™ WiFi Kit for Heating & Cooling Systems (REWRA630SYS) provides remote control of EcoNet Enabled air and water products from smart phones, tablets, and personal computers using the home's internet connection.

Features

- Enables remote operation from:
- The EcoNet App on Apple® mobile devices (iPhone®, iPad®, & iPod® Touch) using iOS version 7.0 or later
- The EcoNet App on Android[™] based smart phones and tablets using Android[™] version 4.4 or later
- Recent versions of popular web browsers such as Internet Explorer, Chrome, Safari, etc.
- Designed for use with EcoNet communicating HVAC Systems
- Compatible with 802.11 b/g/n WiFi networks
- WPA-2 Security using AES/CCMP
- Status LEDs:
- Power & Equipment Connection Status
- Home Network WiFi Status
- Internet Connection Status
- "WLAN SETUP" factory reset button

WiFi Kit Components

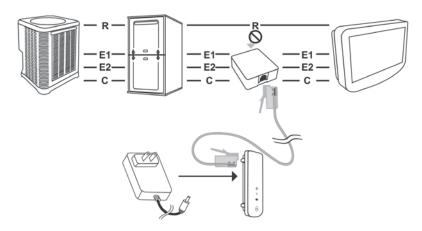
- EcoNet WiFi Module
- Installation Instructions
- V Power Adapter
- Junction Box



EcoNet WiFi Kit for Heating & Cooling Systems

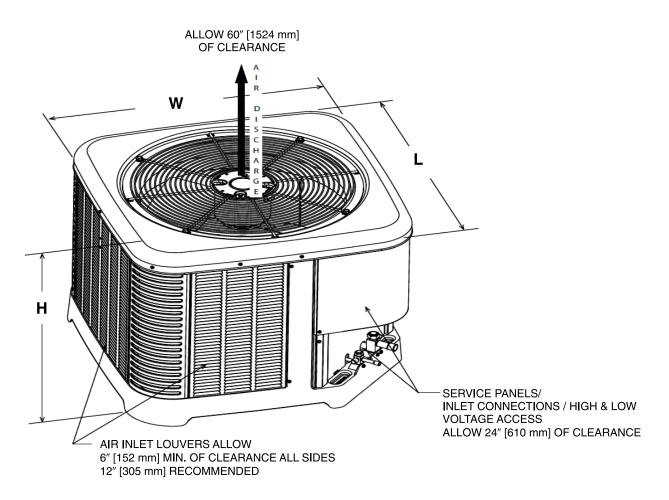
REWRA630SYS

HVAC Connection Illustration



Unit Dimensions

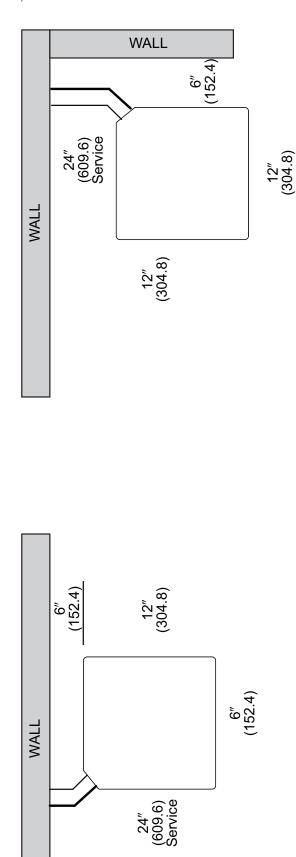
			OPER	ATING					SHIP	PING		
MODEL No.	H (He	eight)	L (Le	ngth)	W (W	/idth)	H (He	eight)	L (Le	ngth)	W (W	(idth)
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
RP2024	35	990	35.75	908	35.75	908	37.56	1055	39.37	999	39.64	1006
RP2036	39	990	35.75	908	35.75	908	41.56	1056	39.37	999	39.64	1006
RP2048	51	1295	35.75	908	35.75	908	53.56	1360	39.37	999	39.64	1006
RP2060	51	1295	35.75	908	35.75	908	53.56	1360	39.37	999	39.64	1006

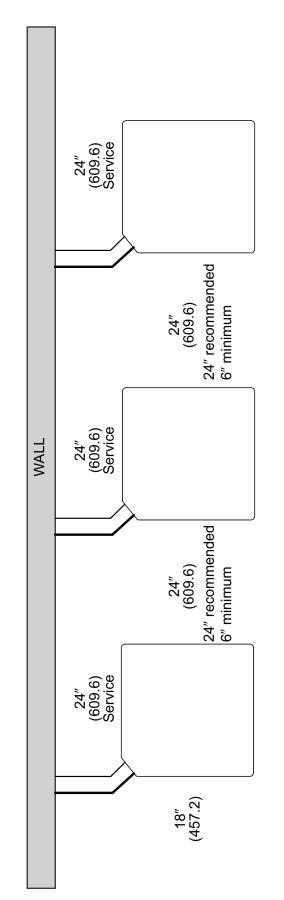


[] Designates Metric Conversions

ST-A1226-02-00

CLEARANCES

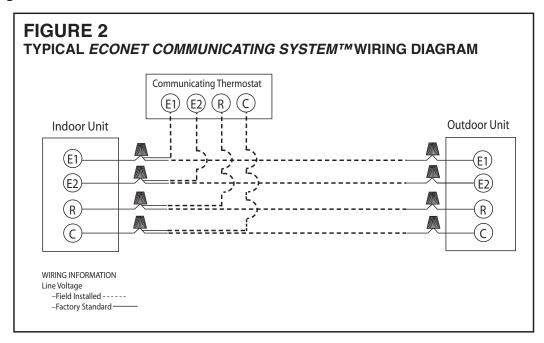




NOTE: NUMBERS IN () = mm

IMPORTANT: When installing multiple units in an alcove, roof well or partially enclosed area, ensure there is adequate ventillation to prevent re-circulation of discharge air.

Control Wiring



Application Guidelines

- 1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01 -in. wc.
- 2. Minimum outdoor operation air temperature for cooling mode without low-ambient operation accessory is 55°F (12.8°C).
- 3. Maximum outdoor operating air temperature is 125°F (51.7°C).
- 4. For reliable operation, unit should be level in all horizontal planes.
- 5. Use only copper wire for electric connections at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
- 6. Do not apply capillary tube indoor coils to these units.
- 7. Factory supplied filter drier must be installed.

Refrigerant Line Size Information

							i	Liquid Line	Liquid Line Selection Chart	art				
R-410A System	Liquid Line Size Connection Size						EIG	evation (Above Total Equivale	Elevation (Above or Below) Indoor Coll Total Equivalent Length - Feet [m]	100r COII et [m]				
Capacity Mouel	(Inch I.D.) [mm]	(IIICII O.D.) [IIIIII]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [45.72]	150 [45.72]	175 [53.34]	200 [60.96]	225 [68.58]	250 [76.20]	275 [83.82]	300 [91.44]
							Ma	ximum Vertica	Maximum Vertical Separation – Feet [m	Feet [m]				
		1/4 [6.35]	25 [7.62] 50 [15.24	50 [15.24]	25 [7.62]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/16 [7.94]	25 [7.62] 50 [15.24	50 [15.24]	75 [22.86]	75 [22.86]	70 [21.34]	[19.81]	60 [18.29]	50 [15.24]	45 [13.72]	40 [12.19]	30 [9.14]	25 [7.62]
RP2024A	3/8" [9.53]	3/8 [9.53]	25 [7.62] 50 [15.24	50 [15.24]	75 [22.86]	92 [58.96]	90 [27.43]	90 [27.43]	85 [25.91]	85 [25.91]	85 [25.91]	80 [24.38]	80 [24.38]	75 [22.86]
		7/16 [11.12]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	100 [30.48]	95 [28.96]	95 [28.96]	95 [28.96]	95 [28.96]	95 [28.96]	95 [28.96]	90 [27.43]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	100 [30.48]	100 [30.48]	100 [30.48]	100 [30.48]	100 [30.48]	100 [30.48]	100 [30.48]	100 [30.48]
		1/4 [6.35]	25 [7.62]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/16 [7.94]	25 [7.62]	50 [15.24]	50 [15.24]	40 [12.19]	30 [9.14]	15 [4.57]	N/R	N/R	N/R	N/R	N/R	N/R
RP2036A	3/8" [9.53]	3/8 [9.53]	25 [7.62] 50 [15.24	50 [15.24]	75 [22.86]	70 [21.34]	65 [19.81]	65 [19.81]	60 [18.29]	55 [16.76]	50 [15.24]	45 [13.72]	45 [13.72]	40 [12.19]
		7/16 [11.12]	25 [7.62]	50 [15.24]	75 [22.86]	80 [24.38]	80 [24.38]	80 [24.38]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]	70 [21.34]	65 [19.81]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	85 [25.91]	85 [25.91]	85 [25.91]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]
		1/4 [6.35]	10 [3.05]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/16 [7.94]	25 [7.62]	50 [15.24]	30 [9.14]	10 [3.05]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
RP2048A	3/8" [9.53]	3/8 [9.53]	25 [7.62] 50 [15.24	50 [15.24]	70 [21.34]	65 [19.81]	55 [16.76]	50 [15.24]	45 [13.72]	35 [10.67]	30 [9.14]	25 [7.62]	15 [4.57]	10 [3.05]
		7/16 [11.12]	25 [7.62]	50 [15.24]	75 [22.86]	80 [24.38]	75 [22.86]	75 [22.86]	70 [21.34]	65 [19.81]	65 [19.81]	60 [18.29]	60 [18.29]	55 [16.76]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	85 [25.91]	85 [25.91]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]	75 [22.86]	75 [22.86]	75 [22.86]
		1/4 [6.35]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/16 [7.94]	25 [7.62]	35 [10.67]	10 [3.05]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
RP2060A	3/8" [9.53]	3/8 [9.53]	25 [7.62] 50 [15.24	50 [15.24]	60 [18.29]	50 [15.24]	40 [12.19]	30 [9.14]	25 [7.62]	15 [4.57]	5 [1.52]	N/R	N/R	N/R
		7/16 [11.12]	25 [7.62] 50 [15.24	50 [15.24]	75 [22.86]	70 [21.34]	65 [19.81]	65 [19.81]	60 [18.29]	55 [16.76]	50 [15.24]	50 [15.24]	45 [13.72]	40 [12.19]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	80 [24.38]	75 [22.86]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]	65 [19.81]	65 [19.81]	65 [19.81]
NOTES:	7] Designa] Designates Metric Conversions	onversions

NOTES:
N/R = Application not recommended.
Grey = This application is acceptable, but the long line guidelines must be followed. Reference Long Line Set section in the I&O

Refrigerant Line Size Information (con't.)

				,										
	Vapor Line Connection Size	Vapor Line Size						Vapor Line Selection Chart Capacity Multiplier Table Total Equivalent Length - Feet [m	Vapor Line Selection Chart Capacity Multiplier Table al Equivalent Length - Feet	art le et [m]				
Capacity Model	(Inch I.D.) [mm]	(Inch O.D.) [mm]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [45.72]	150 [45.72]	175 [53.34]	200 [60.96]	225 [68.58]	250 [76.20]	275 [83.82]	300 [91.44]
		6/9 [16 99]	00 0	00 0	0.07	90 0	30.0	000	000	000	60	60	000	000
	•	0/0 [10.00]	6.00	66.0	6.0	0.30	6.9	10.0	0.93	0.92	6.0	16.0	60.0	0.03
RP2024A	3/4" [19 06]	3/4 [19.05]	N/B	00. M	0.99 N/R	0.99 N/R	N/8	0.30 N/R	0.97 N/R	N.B.	0.30 N/R	0.90 N/R	0.90 N/R	0.95 N/R
		1 [25.4]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		1-1/8 [28.58]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/8 [15.88]	0.98	0.97	0.95	0.93	0.92	6.0	0.89	0.87	98'0	0.85	0.84	0.84
		3/4 [19.05]	1.00	0.99	0.98	0.98	0.97	0.97	96.0	0.95	0.95	0.94	0.93	0.93
RP2036A	3/4" [19.06]	7/8 [22.23]	1.00	1.01	1.01	0.99	0.99	0.99	0.98	86.0	86.0	86.0	26.0	0.97
		1 [25.4]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		1-1/8 [28.58]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/8 [15.88]	0.99	26.0	76.0	96.0	0.95	0.93	0.93	0.92	0.91	6.0	68.0	0.88
		3/4 [19.05]	96.0	0.94	0.91	0.89	0.86	0.84	0.82	0.82	0.81	0.81	8.0	0.81
RP2048A	7/8" [22.23]	7/8 [22.23]	1.00	0.99	0.98	0.97	0.97	0.97	96.0	96.0	0.95	0.95	0.95	0.94
		1 [25.4]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		1-1/8 [28.58]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		5/8 [15.88]	0.99	0.98	0.96	0.95	0.94	0.92	0.91	6.0	0.89	N/R	N/R	N/R
		3/4 [19.05]	0.97	0.93	0.9	0.86	0.84	0.82	0.81	0.8	0.8	N/R	N/R	N/R
RP2060A	7/8" [22.23]	7/8 [22.23]	1.00	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	N/R	N/R	N/R
		1 [25.4]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
		1-1/8 [28.58]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

NOTES:

N/R = Application not recommended.
All calculations assume a 3/8" liquid line

Performance Data @ AHRI Standard Conditions – Heat Pump

High Sales V	High Sales Volume Tested Combination (HSVTC)	ation (HSVTC)											
Outdoor Unit	Air Handler	Total Capacity BTU/H [kW]	Total Capacity Net Sensible Net BTU/H [kW] BTU/H [kW]	Net Latent BTU/H [kW]	SEER	EER	Indoor CFM [L/s]	Indoor CFM 47 Degree Heating 47 Degree 17 Degree Heating 17 Degree LLs] Capacity BTU/H [kW] COP Capacity BTU/H [kW] COP	47 Degree COP	17 Degree Heating Capacity BTU/H [kW]	17 Degree COP	Region IV HSPF	AHRI#
RP2024AJV	RHMV2421HEAC 24000 [7.0] 18500 [5.4] 5500 [1.6] 20.5	24000 [7.0]	18500 [5.4]	5500 [1.6]	20.5	14.5	850 [401.2]	19500 [5.7]	4.60	28000 [8.2]	2.40	13.00 89	8950569
RP2036AJV	RHMV6021SEAC 35400 [10.4] 27200 [8.0] 8200 [2.4] 20.0 14.5	35400 [10.4]	27200 [8.0]	8200 [2.4]	20.0	14.5	1175 [554.5]	29400 [8.6]	4.56	43500 [12.7]	2.46	13.00	9047392
RP2048AJV	RHMV6021SEAC 46500 [13.6] 36200 [10.6] 10300 [3.0] 20.0 12.5	46500 [13.6]	36200 [10.6]	10300 [3.0]	20.0	12.5	1650 [778.7]	35600 [10.4]	4.50	45500 [13.3]	2.40	13.00	8950570
RP2060AJV	RP2060AJV RHMV6024MEAC 55500 [16.3] 40100 [11.8] 15400 [4.5] 20.5 13.0 1750 [825.9]	55500 [16.3]	40100 [11.8]	15400 [4.5]	20.5	13.0	1750 [825.9]	41500 [12.2]	4.30	45000 [13.2]	2.26	13.00	9047406

R802V: Pi	R802V: Prestige 2-Stage 80% ECM Furnace Ratings	ECM Furnace Ra	ntings											
Outdoor Unit	Furnace	Indoor Coil	Total Capacity Net Sensible BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	SEER	E	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [KW]	47 Degree COP	17 Degree Heating Capacity BTU/H [kW]	17 Degree COP	Region IV HSPF	AHRI#
RP2024AJV	RP2024AJV R802VA050317M RCF3621MEA 24600 [7.2] 18900	RCF3621MEA	24600 [7.2]	18900 [5.5]	5700 [1.7]	20.0	14.5	850 [401.2]	19700 [5.8]	4.50	28200 [8.3]	2.34	13.00	9047375
RP2024AJV	RP2024AJV R802VA075317M RCF3621MEA 24800 [7.3] 19100	RCF3621MEA	24800 [7.3]	19100 [5.6]	5700 [1.7]	20.0	14.5	850 [401.2]	19600 [5.7]	4.60	28000 [8.2]	2.40	13.00	9047376
RP2024AJV	RP2024AJV R802VA100521M RCF3621MEA 24800 [7.3] 19100	RCF3621MEA	24800 [7.3]	19100 [5.6]	5700 [1.7]	20.0	14.5	850 [401.2]	19500 [5.7]	4.66	28000 [8.2]	2.40	13.00	9047377
RP2036AJV	RP2036AJV R802VA050317M RCF6021SEA 34800 [10.2] 26500	RCF6021SEA	34800 [10.2]	26500 [7.8]	8300 [2.4]	19.5	13.5	1150 [542.7]	30000 [8.8]	4.34	44000 [12.9]	2.40	13.00	9047382
RP2036AJV	R802VA075317M RCF6021SEA	RCF6021SEA	35200 [10.3]	26900 [7.9]	8300 [2.4]	20.0	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047383
RP2036AJV	RP2036AJV R802VA100521M RCF6021SEA 35400 [10.4] 27100	RCF6021SEA	35400 [10.4]	27100 [7.9]	8300 [2.4]	20.0	14.5	1150 [542.7]	29200 [8.6]	4.76	43500 [12.7]	2.46	13.00	9047384
RP2036AJV	RP2036AJV R802VA125524M RCF6021SEA 35400 [10.4] 27100	RCF6021SEA	35400 [10.4]	27100 [7.9]	8300 [2.4]	19.5	14.5	1150 [542.7]	29200 [8.6]	4.76	43500 [12.7]	2.46	13.00	9047385
RP2048AJV	RP2048AJV R802VA075421M RCF6021SEA 46000 [13.5] 35700 [10.5]	RCF6021SEA	46000 [13.5]	35700 [10.5]	10300 [3.0]	20.0	12.0	1675 [790.5]	36000 [10.6]	4.40	46000 [13.5]	2.40	13.00	9047393
RP2048AJV	RP2048AJV R802VA100521M RCF6021SEA 46500 [13.6] 36200 [10.6]	RCF6021SEA	46500 [13.6]	36200 [10.6]	10300 [3.0]	20.0	12.5	1675 [790.5]	35200 [10.3]	4.76	45500 [13.3]	2.46	13.00	9047394
RP2048AJV	R802VA125524M RCF6021SEA 46500 [13.6] 36200 [10.6]	RCF6021SEA	46500 [13.6]	36200 [10.6]	10300 [3.0]	20.0	12.5	1675 [790.5]	35200 [10.3]	4.76	45500 [13.3]	2.46	13.00	9047395
RP2060AJV	RP2060AJV R802VA100521M RCF6024MEA 55000 [16.1] 39500 [11.6]	RCF6024MEA	55000 [16.1]	39500 [11.6]	15500 [4.5]	20.0	12.5	1725 [814.1]	41500 [12.2]	4.30	45000 [13.2]	2.26	13.00	9047402
RP2060AJV	RP2060AJV R802VA125524M RCF6024MEA 55000 [16.1] 39500 [11.6]	RCF6024MEA	55000 [16.1]	39500 [11.6]	15500 [4.5]	20.0	13.0	1725 [814.1]	41500 [12.2]	4.34	45000 [13.2]	2.26	13.00	9047403

Performance Data @ AHRI Standard Conditions – Heat Pump (con't.)

R96V: 96%	R96V: 96% AFUE 2-stage Variable Speed Multipoise Gas Furnace Ratings	able Speed Multi	poise Gas Furna	ce Ratings										
Outdoor Unit	Furnace	Indoor Coil	Indoor Coil Total Capacity Net Sensible BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	SEER	EER	Indoor CFM 47 [L/s]	47 Degree Heating 47 Degree Capacity BTU/H COP	47 Degree COP	I7 Degree Heatin Capacity BTU/H [kW]	17 Degree COP	Region IV HSPF	AHRI#
RP2024AJV	RP2024AJV R96VA0402317M RCF3621MEA 24800 [7.3] 19100	RCF3621MEA	24800 [7.3]	19100 [5.6]	5700 [1.7] 20.0 14.5	20.0		850 [401.2]	19600 [5.7]	4.56	28200 [8.3]	2.34	13.00	9047378
RP2024AJV	RP2024AJV R96VA0602317M RCF3621MEA 24800 [7.3] 19100	RCF3621MEA	24800 [7.3]	19100 [5.6]	5700 [1.7]	20.0	14.5	850 [401.2]	19700 [5.8]	4.50	28200 [8.3]	2.34	13.00	9047379
RP2036AJV	RP2036AJV R96VA0852521M RCF6021SEA 35200 [10.3] 26900	RCF6021SEA	35200 [10.3]	26900 [7.9]	8300 [2.4] 19.5	19.5	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047386
RP2036AJV	RP2036AJV R96VA1002521M RCF6021SEA 35200 [10.3] 26900	RCF6021SEA	35200 [10.3]	26900 [7.9]	8300 [2.4] 20.0	20.0	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047387
RP2036AJV	RP2036AJV R96VA1152524M RCF6021SEA 35200 [10.3] 26900	RCF6021SEA	35200 [10.3]	26900 [7.9]	8300 [2.4] 19.5 14.5	19.5	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047388
RP2048AJV	RP2048AJV R96VA0852521M RCF6021SEA 46000 [13.5] 35700 [10.5]	RCF6021SEA	46000 [13.5]	35700 [10.5]	10300 [3.0] 19.5	19.5	12.0	12.0 1675 [790.5]	36000 [10.6]	4.40	46000 [13.5]	2.40	13.00	9047396
RP2048AJV	RP2048AJV R96VA1002521M RCF6021SEA 46000 [13.5] 35700 [10.5]	RCF6021SEA	46000 [13.5]	35700 [10.5]	10300 [3.0] 20.0	20.0	12.0	12.0 1675 [790.5]	36000 [10.6]	4.40	46000 [13.5]	2.40	13.00	9047397
RP2048AJV	RP2048AJV R96VA1152524M RCF6021SEA 46000 [13.5] 35700 [10.5]	RCF6021SEA	46000 [13.5]	35700 [10.5]	10300 [3.0] 19.5	19.5	12.0	12.0 1675 [790.5]	35800 [10.5]	4.44	46000 [13.5]	2.40	13.00	9047398
RP2060AJV	RP2060AJV R96VA1152524M RCF6024MEA 54500 [16.0] 39000 [11.4]	RCF6024MEA	54500 [16.0]	39000 [11.4]	15500 [4.5] 20.0	20.0	12.0	12.0 1725 [814.1]	42500 [12.5]	4.10	45500 [13.3]	2.20	13.00	9047404

R97V: 97%	R97V: 97% AFUE 2-stage Variable Speed Multipoise Gas Furnace Ratings	ble Speed Multip	oise Gas Furna	ce Ratings										
Outdoor Unit	Furnace	Indoor Coil	Total Capacity Net Sensible BTU/H [kW] BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	SEER	EER	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [KW]	47 Degree COP	17 Degree Heating Capacity BTU/H [kW]	17 Degree COP	Region IV HSPF	AHRI#
RP2024AJV	RP2024AJV R97VA060M317U RCF3621MEA 24800 [7.3] 19100	RCF3621MEA	24800 [7.3]	19100 [5.6]	5700 [1.7]	20.0	14.5	850 [401.2]	19700 [5.8]	4.50	28200 [8.3]	2.34	13.00	9047380
RP2024AJV	RP2024AJV R97VA070M317U RCF3621MEA 24600 [7.2] 18900	RCF3621MEA	24600 [7.2]	18900 [5.5]	5700 [1.7]	20.0	14.5	850 [401.2]	19700 [5.8]	4.50	28200 [8.3]	2.34	13.00	9047381
RP2036AJV	RP2036AJV R97VA085M521U RCF6021SEA 35200 [10.3] 26900	RCF6021SEA	35200 [10.3]	[6.2] 26900	8300 [2.4]	19.5	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047389
RP2036AJV	RP2036AJV R97VA100M521U RCF6021SEA	RCF6021SEA	35200 [10.3]	26900 [7.9]	8300 [2.4]	20.0	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047390
RP2036AJV	RP2036AJV R97VA115M524U RCF6021SEA	RCF6021SEA	35200 [10.3]	26900 [7.9]	8300 [2.4]	19.5	14.5	1150 [542.7]	29600 [8.7]	4.56	43500 [12.7]	2.46	13.00	9047391
RP2048AJV	RP2048AJV R97VA085M521U RCF6021SEA	RCF6021SEA	46000 [13.5] 35700 [10.5]	35700 [10.5]	10300 [3.0]	19.5	12.0	1675 [790.5]	36000 [10.6]	4.40	46000 [13.5]	2.40	13.00	9047399
RP2048AJV	RP2048AJV R97VA100M521U RCF6021SEA	RCF6021SEA	46000 [13.5] 35700 [10.5]	35700 [10.5]	10300 [3.0]	20.0	12.0	1675 [790.5]	36000 [10.6]	4.40	46000 [13.5]	2.40	13.00	9047400
RP2048AJV	RP2048AJV R97VA115M524U RCF6021SEA 46000 [13.5] 35700 [10.5]	RCF6021SEA	46000 [13.5]	35700 [10.5]	10300 [3.0]	19.5	12.0	1675 [790.5]	35800 [10.5]	4.44	46000 [13.5]	2.40	13.00	9047401
RP2060AJV	RP2060AJV R97VA115M524U RCF6024MEA 54500 [16.0] 39000 [11.4]	RCF6024MEA	54500 [16.0]	39000 [11.4]	15500 [4.5]	20.0	12.0	20.0 12.0 1725 [814.1]	42500 [12.5]	4.10	45500 [13.3]	2.20	13.00	9047405

GUIDE SPECIFICATIONS

General

System Description

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, composite basepan, an air-cooled coil, propellertype condenser fan, suction and liquid line service valve, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a coil unit.

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 210.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have c-UL-us approval.
- Unit cabinet will be capable of withstanding ASTM B117 1000hr salt spray test.
- Air-cooled condenser coils will be leak tested at 150 psig and pressure tested at 550 psig.
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer) — U.S. and Canada only.

Products

Equipment

Factory assembled, single piece, air-cooled heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge R-410A, and special features required prior to field start-up.

Unit Cabinet

- Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.
- All units constructed with louver coil protection and corner post. Louver can be removed by removing one fastener per louver panel.

AIR-COOLED, SPLIT-SYSTEM HEAT PUMP

1-1/2 TO 5 NOMINAL TONS

Fans

- Condenser fan will be direct-drive propeller type, discharging air upward.
- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings. Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

Compressor

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.
- Compressor will be Copeland fully variable speed.

Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes.

Refrigeration Components

- Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of R-410A refrigerant, and compressor oil.
- Unit will be equipped with filter drier for R-410A refrigerant for field installation.

Operating Characteristics

_	The capacity of the unit will meet or exceed Btuh at a
	suction temperature of °F/°C. The power consumption
	at full load will not exceed kW.
_	Combination of the unit and the evaporator or fan coil unit will
	have a total net cooling capacity of Btuh or greater at
	conditions of CFM entering air temperature at the evap-
	orator at °F/°C wet bulb and °F/°C dry bulb, and

_	The system	will have	a SEER	of	Btuh/watt	or	greater	at
	DOE conditi	ions.						

Electrical Requirements

air entering the unit at ____ °F/°C.

_	Nominal	unit	electrical	chara	acteris	tics v	will be		٧,	single
	phase, 6	0 hz.	The unit v	vill be	capab	ole of	satisfa	ctory	ope	ration
	within vo	Itage	limits of _		v to		V.			

- Nominal unit electrical characteristics will be phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to ____ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.

Special Features

 Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

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 Unit Replacement	
(Registration Required)	Ten (10) Years
Parts	Ten (10) Years



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

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