Ruud *Achiever Plus*® Series Three-Stage Heat Pump



UP17 Series

Efficiencies: up to 18.5 SEER/13 EER/8.5 HSPF
Nominal Sizes 2, 3, 4 & 5 Ton
[70.3, 10.6, 12.7 & 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."

EcoNet®

- EcoNet® Enabled product. The EcoNet Smart Home System provides advanced air & water control for maximum energy savings and ideal comfort.
- Copeland Scroll™ Variable Speed compressor. This inverter driven compressor provides three stages of heating and cooling operation for maximum comfort and energy savings. The overdrive feature in heating provides heating down to 7°F.
- Equipped with electronic expansion valve to precisely control variable refrigerant flow.
- New composite base pan – dampens sound, captures louver panels, eliminates corrosion and reduces number of fasteners needed
- 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
- Powder coat paint system – for a long lasting professional finish
- 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
- Modern cabinet aesthetics – increased curb appeal with visually appealing design
- 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
- PlusOne® **Expanded Valve Space** – 3"-4"-5" service valve space – provides a minimum working area of 27-square inches for easier access
- Integrated heat pump lift receptacle – allows standard CPVC stands to be inserted into the base
- PlusOne® **Triple Service Access** – 15" wide, industry leading corner service access – makes repairs easier and faster. The two 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
- Diagnostic service window with two-fastener opening – provides access to the TXV valves and the heat pump reversing valve before opening the unit.
- External gauge port access – allows easy connection of "low-loss" gauge ports
- Single-row condenser coil – 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

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Standard Feature Table

Feature	24	36	48	60
R-410a Refrigerant	√	√	√	√
Maximum SEER	18.5	17.5	17.0	17.0
Maximum EER	13.0	11.5	10.5	9.5
Maximum HSPF	8.2	8.5	8.5	8.5
EcoNet™ Enabled	√	√	√	√
Electronic Expansion Valve	√	√	√	√
Copeland Scroll™ Variable Speed compressor	√	√	√	√
Field Installed Filter Drier	√	√	√	√
Front Seating Service Valves	√	√	√	√
High Pressure Switch	√	√	√	√
Low Pressure Transducer	√	√	√	√
Internal Pressure Relief Valve	√	√	√	√
Low Ambient capability	√	√	√	√
3-4-5 Service Valve Access	√	√	√	√
Composite Basepan	√	√	√	√
1 Screw Control Box Access	√	√	√	√
15" Access to Internal Components	√	√	√	√
Quick release louver panel design	√	√	√	√
No fasteners to remove along bottom	√	√	√	√
Optimized Venturi Airflow	√	√	√	√
Single row condenser coil	√	√	√	√
Powder coated paint	√	√	√	√
Rust resistant screws	√	√	√	√
QR code	√	√	√	√
External gauge ports	√	√	√	√
Service trays	√	√	√	√

√ = Standard

Available SKU

Available Models	Description
UP1724AJVCA	EcoNet® Enabled inverter driven Ruud® *Achiever Plus*® Series Three-Stage Heat Pump 208/230/1/60
UP1736AJVCA	EcoNet® Enabled inverter driven Ruud® *Achiever Plus*® Series Three-Stage Heat Pump 208/230/1/60
UP1748AJVCA	EcoNet® Enabled inverter driven Ruud® *Achiever Plus*® Series Three-Stage Heat Pump 208/230/1/60
UP1760AJVCA	EcoNet® Enabled inverter driven Ruud® *Achiever Plus*® Series Three-Stage Heat Pump 208/230/1/60

Introduction to UP17 Heat Pump

The UP17 is our EcoNet® Enabled, inverter driven *Achiever Plus*® Series Three-Stage Heat Pump and is part of the Ruud 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 Ruud indoor aluminum evaporator coils and furnaces or air handler units with aluminum evaporators.

The EcoNet Smart Home System is the first 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 Ruud, and our distributor and contractor customers, apart in the industry with a unique, advanced and efficient technology solution.

The UP17 *Achiever Plus*® Series inverter-driven Three-Stage Heat Pump is exclusively designed to operate with the EcoNet® Smart Home System. Developed by Ruud, The EcoNet Smart Home System allows homeowners to manage select high-efficiency, 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.

1

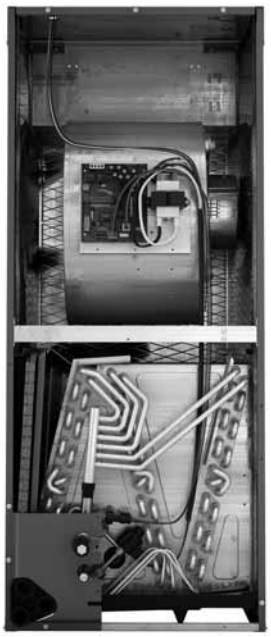


2



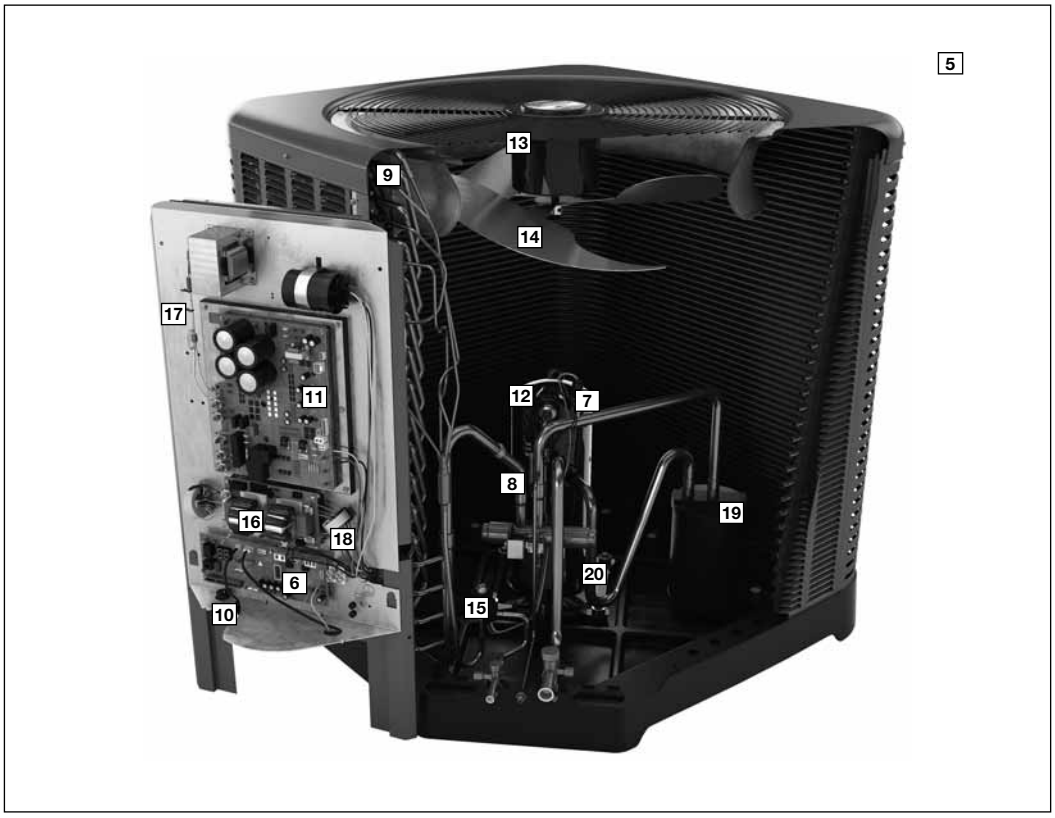
Along with the EcoNet Smart Home System the UP17 is matched with the RH2T Constant Torque Two-Stage EcoNet Enabled Air Handler (3) or can be applied in a Dual Fuel application with the EcoNet Enabled Two-Stage Variable Speed U802V or U96V, or the modulating U97V Gas Furnaces and RCF Aluminum Cased Furnace Coils with EEV (4). See individual specification documents for more details of the indoor products.

3



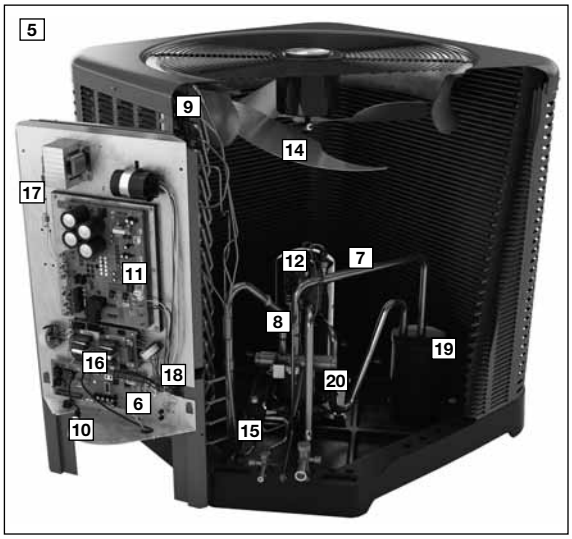
4





How It Works

The UP17 *Achiever Plus*® Series Inverter Driven Three-Stage 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 (8), 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 output to the 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 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 UP17. 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 UP17 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.

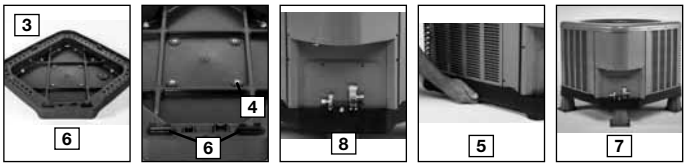
Ferrite Rings – (18) are iron cores through which AC power is looped keeping any electrical noise contained. They also reduce the induction of electrical transient into the DC drive.

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

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

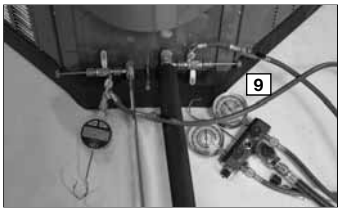
Features

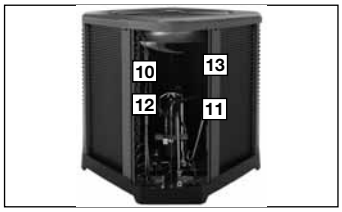
In addition all UP17 Achiever Plus Series Inverter Driven Three-Stage Heat Pumps have the following features:



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)

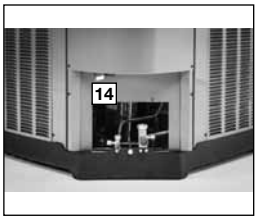
Service Valves (8) are rigidly mounted in the composite base with 3" between suction and discharge valves, 4" clearance below service valves and a minimum of 5" above the service valves, creating industry leading ease of installation. The minimum





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.

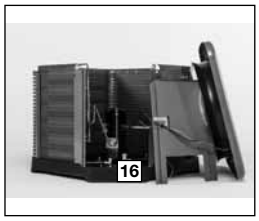
Controls are accessed from the corner of the unit by removing only one fastener from the control access cover, revealing the industry's largest 15" wide and 22" tall control area (10). With all this room in the control area the high voltage electrical whip (11) can easily be inserted through the right 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 UP17 models).

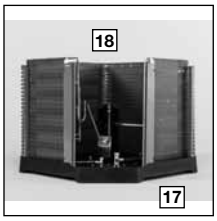






If in the rare event, greater access is needed to internal components, such as the compressor, the entire corner of the unit can be removed along with the top cover assembly to have unprecedented access to interior of the unit (16). Extra wire length is incorporated into each outdoor fan and compressor 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 45". 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 UP17 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.

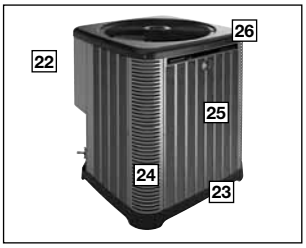


The outdoor fan motor has ball bearings and is inherently protected. The motor is totally enclosed for maximum protection from weather, dust and corrosion. (20) Access to the outdoor fan is made by removing four fasteners from the fan grille. The outdoor fan can be removed from the fan grille by removing 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 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 UP17 Heat Pump come standard with high and low pressure controls reinforced vinyl compressor sound covers containing a 1½ 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 UP17 capacity has undergone rigorous psychometric testing to assure performance ratings of capacity, SEER, EER and HSPF 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 47°F and sound ratings for the UP17 range from as low as 67 dBA to 74.3 dBA.

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

As manufactured, all units in the UP17 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 UP17 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.

UETST601SYS

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

Heat Pumps

U	P	17	24	A	J	V	C	A	*
Brand	**Product Category**	**SEER**	**Capacity BTU/HR**	**Major Series***	**Voltage**	**Type**	**Controls**	**Minor Series****	**Option Code**
Ruud	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 B - 2nd Design	J - 1ph, 208-230/60 C - 3ph, 208-230/60 D - 3ph, 460/60	1 - Single-stage V - Inverter P - Piston	C - Communicating N - Non-communicating	A - 1st Design	N/A

Air Conditioners (For Reference)

U	A	17	24	A	J	2	C	B	*
Brand	**Product Category**	**SEER**	**Capacity BTU/HR [kW]**	**Major Series***	**Voltage**	**Type**	**Controls**	**Minor Series****	**Option Code**
Ruud	A - Air Conditioners	13 - 13 SEER 14 - 14 SEER 16 - 16 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	C - Communicating N - Non-communicating	A - 1st Design	N/A

Furnace Coils (For Reference)

R	C	F	24	17	S	E	A	M	C	A	*
Brand	**Product Category**	**Type**	**Capacity BTU/HR**	**Width**	**Efficiency**	**Metering Device**	**Major Series***	**Orientation**	**Casing**	**Minor Series****	**Option Code**
Ruud	C - Evap Coil	F - Furn Coil H - Air-Handler Coil	24 - 24,000 [7.03 kW] 36 - 36,000 [10.55 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"	S- Standard Eff. M- Mid Eff. H- High Eff.	T-TXV E-EEV P-Piston	A -1st Design	M - Multi-poise	C - Cased U - Uncased	A - 1st Design	N/A

[ ] Designates Metric Conversions

90%+ AFUE Gas Furnaces (For Reference)

U	96	V	A	70	2	3	17	M	S	A
Brand	**Series**	**Motor**	**Major Rev**	**Input BTU/HR [kW]**	**Stages**	**Air Flow**	**Cabinet Width**	**Configuration**	**Nox**	**Minor Rev**
Ruud	90 - 90 AFUE 92 - 92 AFUE 95 - 95 AFUE 96 - 96 AFUE 97 - 97 AFUE	V - Variable speed T - Constant Torque (X-13) P - PSC	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-poise	X - Low Nox S - Standard	A - 1st Design

80% AFUE Gas Furnaces (For Reference)

U	80	2	V	A	075	3	17	M	S	A
Brand	**Series**	**Stages**	**Motor**	**Major Rev**	**Input BTU/HR [kW]**	**Air Flow**	**Cabinet Width**	**Configuration**	**Nox**	**Minor Rev**
Ruud	80 - 80+ AFUE	1 - Single-stage 2 - Two-stage	V - Variable speed T - Constant Torque (X-13) P - PSC premium S - PSC standard	A - 1st Design	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]	3 - up to 3 ton 4 - 2 1/2 to 4 ton 5 - 3 1/2 up to 5 ton	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"	M - Multi D - Down Z - Down & zero clearance down flow	X - Low Nox S - Standard	A - 1st Design

Air Handlers (For Reference)

R	H	2	T	36	17	S	E	A	C	A	A	000	*
Brand	**Product Category**	**Stages of Airflow**	**Motor Type**	**Capacity BTU/HR**	**Width**	**Coil Size**	**Metering Device**	**Major Series***	**Controls**	**Voltage**	**Minor Series****	**Factory Heat Cap**	**Option Code**
Ruud	H - Air Handler	1 - Single-stage 2 - Two-stage M - Modulating	V - Variable Speed T - Constant Torque P - PSC	24 - 24,000 [7.03 kW] 36 - 36,000 [10.55 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"	S - Standard Efficiency M - Mid Efficiency H - High Efficiency	T - TEV E - EEV P - Piston	A -1st Design	C - Communicating N - Non-communicating	A - 1ph, 115/60 J - 1ph, 208-240/60 D - 3ph, 480/60	A -1st Design	00 - no factory heat with option code	N/A

[ ] Designates Metric Conversions

Physical Data

Model No.#	UP1724	UP1736	UP1748	UP1760
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 (R410A) furnished oz.[1]	130	140	209	210
Compressor Type	Copeland Scroll™ Variable Speed Compressor			
Outdoor Coil				
Net face area – Outer Coil	19.8	19.8	24.2	28.3
Net face area – Inner Coil	—	—	—	—
Tube diameter – in.	3/8	3/8	3/8	3/8
Number of rows	1	1	1	1
Fins per inch	18	20	20	20
Outdoor Fan				
Diameter – in.	24	24	26	26
Number of blades	2	2	3	3
Motor hp	1/6	1/6	1/5	1/5
CFM	3250	3270	4000	4280
RPM	1075	910	870	850
watts	167	145	194	187
Shipping weight – lbs.	230	230	257	289
Operating weight – lbs.	223	223	250	282

Electrical Data

Line Voltage Data (Volts-Phase-Hz)	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Minimum overcurrent protection (amps)[2]	25	30	35	50
Maximum overcurrent protection (amps)[2]	35	35	45	60
Minimum circuit ampacity[3]	21	22	28	44
Compressor				
Rated load amps	16.0	16.3	21.6	33.8
Locked rotor amps	35	35	35	50
Condenser Fan Motor				
Full load amps	0.8	0.8	1.0	1.0
Locked rotor amps	1.5	1.5	1.5	2.4

[1]Refrigerant 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.
[2]HACR type circuit breaker of fuse.
[3]Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

Accessories

Model No.		UP1724	UP1736	UP1748	UP1760
EcoNet Control Center		UETST601SYS	UETST601SYS	UETST601SYS	UETST601SYS
WIFI Kit for Heating and Cooling		REWRA630SYS	REWRA630SYS	REWRA630SYS	REWRA630SYS
Compressor sound blanket		Factory Standard	Factory Standard	Factory Standard	Factory Standard
Low Ambient to 40		Factory Standard	Factory Standard	Factory Standard	Factory Standard
Low pressure control		Factory Standard	Factory Standard	Factory Standard	Factory Standard
High pressure control		Factory Standard	Factory Standard	Factory Standard	Factory Standard
Liquid Line Solenoid (24 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V
	Bi-flow kit*	KS30387	KS30387	KS30387	KS30387
Liquid Line Solenoid (120/240 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V
	Bi-flow kit*	KS30387	KS30387	KS30387	KS30387
Heat Pump Riser – 6 inch		686020	686020	686020	686020

*Bi-flow kits are required when installing a liquid line solenoid on a heat pump.

Weighted Sound Power Level (dBA)

UP17 Sound Power Level									
Model	Sound Power Level [dB(A)] High Speed/Low Speed	Full Octave Linear Sound Power Level dB - Center Frequency - Hz							
		125	250	500	1000	2000	4000	6300	8000
UP1724	68.2	54.1	54.9	58.5	57.6	56.3	53.2	47.8	44.1
	71.3	52.1	54.4	59.7	61.9	58.1	54.3	49.1	48.3
UP1736	66.8	48.9	47.3	56.8	56.4	54	52.1	47.0	44.5
	73.5	50.2	52.6	60.9	63.2	58.1	58.5	54.7	58.1
UP1748	73.8	63.9	57.1	67.9	61.3	57.9	54.9	50.8	48.6
	74.3	59.8	55.4	65.2	65.0	60.4	55.6	51.2	49.5
UP1760	69.4	57.3	52.4	64.3	56.1	54.3	49.7	47.6	44.4
	75.6	52.8	55.6	64.5	63.2	62.3	62.9	55.1	52.0

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

EcoNet is smart, new technology developed exclusively by Ruud 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 over-cool 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

Warranty

- 5-Year limited warranty from date of installation

† 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

UETST601SYS

EcoNet Control Center Compatibility

OFFERINGS	HEATING & COOLING											WiFi Kit for HVAC REWRA630SYS	WATER HEATING		
Product Categories	Gas Furnaces		Air Handlers		Air Conditioners				Heat Pumps				Electric Tank Models Ending in EC2	Hybrid Tank HB50 Models	Gas Powered Damper Tank Models
Models	U96V	U802V	RHMV*	RH2T* (EEV**)	UA20*	UASL-JEC	UA17	UARL-JEC	UP20*	UP17*	UPRL-JEC				
UETST601SYS	√	√	√	√	√	√★	√	√★	√	√	√★	√	√	√	

*Available in 2015
**Electronic Expansion Valve (EEV) Models

★ Comfort Control² System™ Translator for EcoNet Required

Installation of the RETRN620CC2 Comfort Control² System™ Translator on the outdoor unit's control board is required to operate Comfort Control² System™ Air Conditioner and Heat Pump models (****-JEC) with an EcoNet Control Center in a fully communicating mode when matched with EcoNet Enabled Furnaces or Air Handlers*.

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
- 24" Port-to-Port Connection Cable
- 1" x 2" Double Adhesive Mounting Tape
- RJ12 Y Splitter (for use with communicating electric water heaters)

Compatibility

- Works with any HVAC System which includes an EcoNet Enabled furnace or air handler and an EcoNet control center.

Warranty

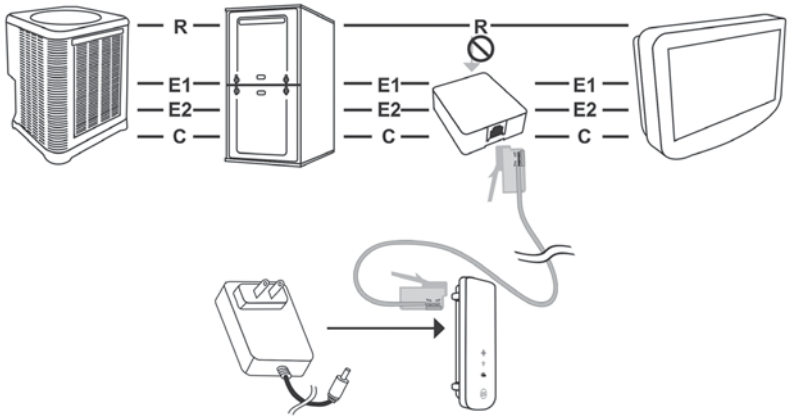
- 1 Year from installation date



EcoNet WiFi Kit for Heating & Cooling Systems

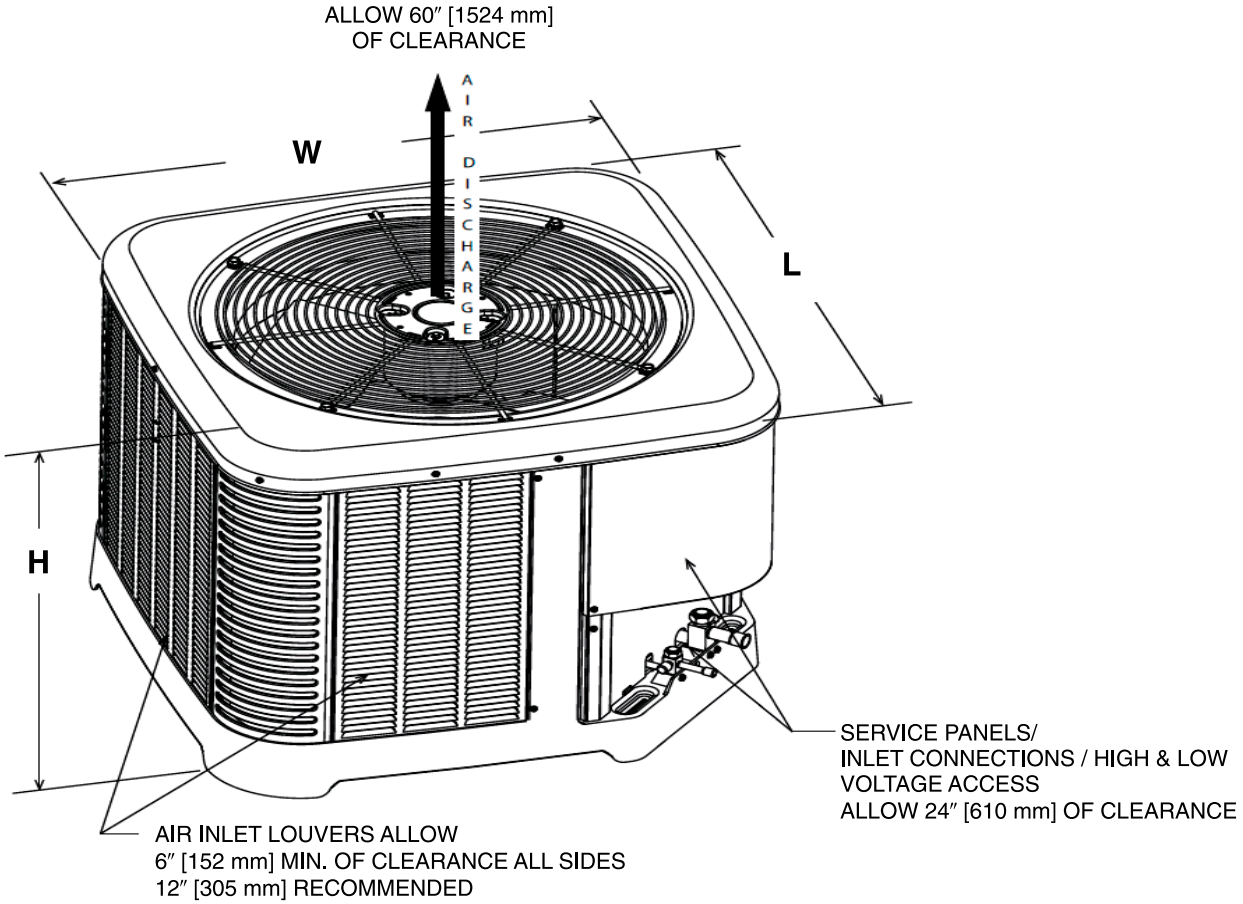
REWRA630SYS

HVAC Connection Illustration



Unit Dimensions

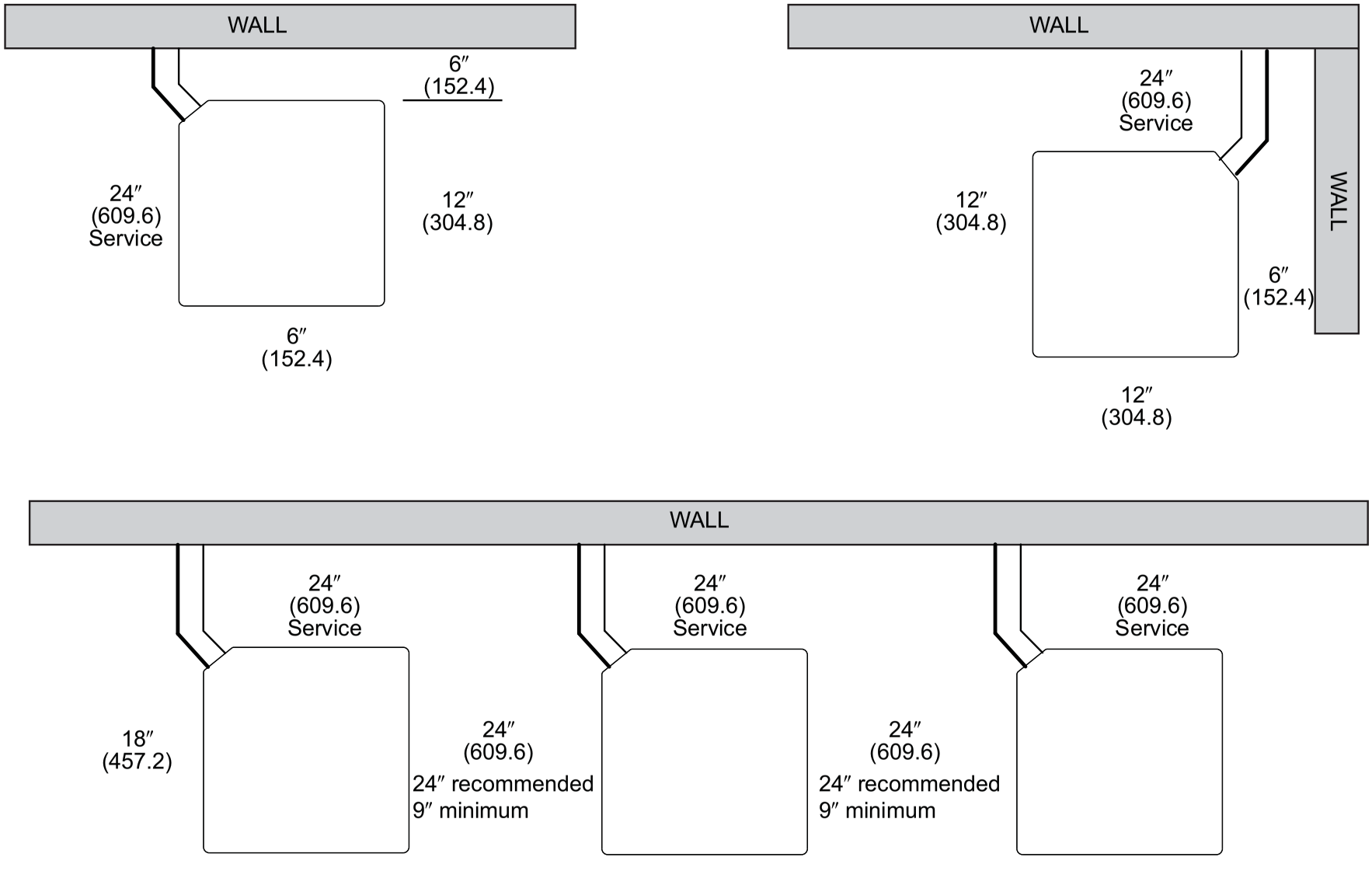
MODEL NUMBER	OPERATING						SHIPPING					
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
UP1724	35	889	33.75	357	33.75	857	35.75	908	36.38	924	36.38	924
UP1736	35	889	33.75	857	33.75	857	36.75	933	36.38	924	36.38	924
UP1748	39	990	35.75	908	35.75	908	40.75	1035	38.38	974	38.38	974
UP1760	45	1143	35.75	908	35.75	908	46.75	1187	38.38	974	38.38	974



[ ] Designates Metric Conversions

ST-A1226-02-00

CLEARANCES

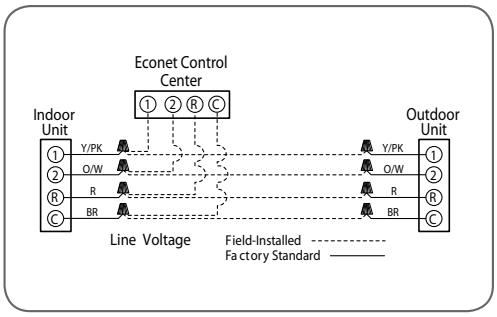


NOTE: NUMBERS IN () = mm

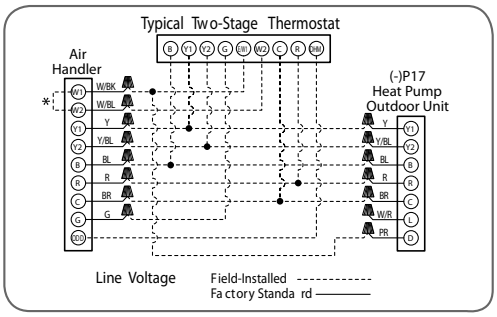
IMPORTANT: When installing multiple units in an alcove, roof well or partially enclosed area, ensure there is adequate ventillation to prevent re-circulation of discharge air.

Control Wiring

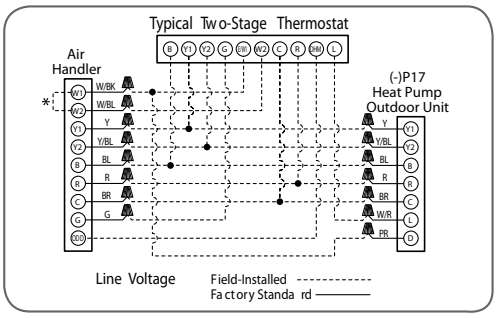
TYPICAL ECONET CONTROL CENTER HOOKUP



TYPICAL 2-STAGE THERMOSTAT: (-)P17 HEAT PUMP WITH ELECTRIC HEAT USING A HUMIDISTAT FOR DEHUMIDIFICATION

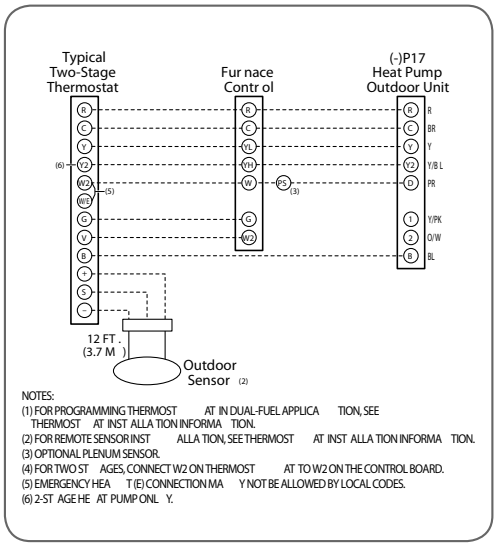


TYPICAL 2-STAGE THERMOSTAT: (-)P17 HEAT PUMP WITH ELECTRIC HEAT USING A TWO-STAGE THERMOSTAT WITH DEHUMIDIFICATION AND A MALFUNCTION LIGHT

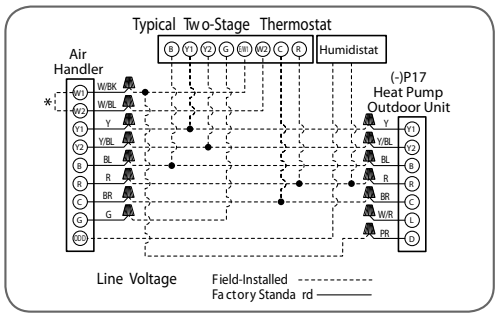


*Add jumper between W1 and W2 for maximum temperature rise if desired.

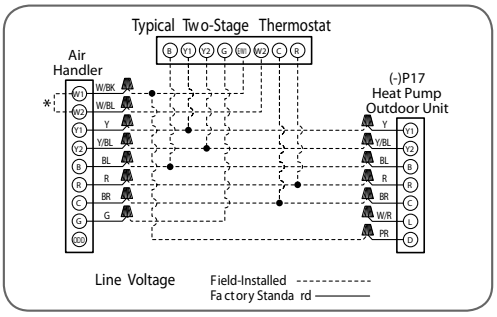
TYPICAL 2-STAGE THERMOSTAT AND DUAL-FUEL APPLICATION



TYPICAL TWO-STAGE THERMOSTAT: (-)P17 HEAT PUMP WITH ELECTRIC HEAT USING A HUMIDISTAT FOR HUMIDIFICATION



TYPICAL TWO-STAGE THERMOSTAT: HEAT PUMP WITH ELECTRIC HEAT



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.

Heat Pump Refrigerant Line Size Information

R-410A System Capacity Model	Liquid Line Size Connection Size (Inch I.D.) [mm]	Liquid Line Size (Inch O.D.) [mm]	Liquid Line Size Elevation (Above or Below) Indoor Coil Total **Equivalent** Length - Feet [m]											
			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]
			Maximum Vertical Separation – Feet [m]											
24	3/8" [9.53]	1/4 [6.35]	25 [7.62]	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]	75 [22.86]	75 [22.86]	70 [21.34]	65 [19.81]	55 [16.76]	50 [15.24]	40 [12.19]	35 [10.67]	30 [9.14]	20 [6.1]
		3/8 [9.53]	25 [7.62]	50 [15.24]	75 [22.86]	95 [28.96]	90 [27.43]	90 [27.43]	90 [27.43]	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]	100 [30.48]	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]
36	3/8" [9.53]	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]	60 [18.29]	50 [15.24]	35 [10.67]	25 [7.62]	10 [3.05]	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**
		3/8 [9.53]	25 [7.62]	50 [15.24]	75 [22.86]	85 [25.91]	80 [24.38]	75 [22.86]	70 [21.34]	65 [19.81]	60 [18.29]	55 [16.76]	50 [15.24]	45 [13.72]
		7/16 [11.12]	25 [7.62]	50 [15.24]	75 [22.86]	95 [28.96]	90 [27.43]	90 [27.43]	85 [25.91]	85 [25.91]	85 [25.91]	80 [24.38]	80 [24.38]	80 [24.38]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	95 [28.96]	95 [28.96]	95 [28.96]	95 [28.96]	95 [28.96]	90 [27.43]	90 [27.43]	90 [27.43]	90 [27.43]
48	3/8" [9.53]	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]	45 [13.72]	25 [7.62]	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**
		3/8 [9.53]	25 [7.62]	50 [15.24]	70 [21.34]	60 [18.29]	55 [16.76]	45 [13.72]	40 [12.19]	30 [9.14]	25 [7.62]	15 [4.57]	10 [3.05]	**N/R**
		7/16 [11.12]	25 [7.62]	50 [15.24]	75 [22.86]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]	65 [19.81]	60 [18.29]	60 [18.29]	55 [16.76]	55 [16.76]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	85 [25.91]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]	75 [22.86]	75 [22.86]	75 [22.86]	70 [21.34]
60	3/8" [9.53]	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]	20 [6.1]	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**
		3/8 [9.53]	25 [7.62]	50 [15.24]	50 [15.24]	40 [12.19]	30 [9.14]	20 [6.1]	10 [3.05]	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**
		7/16 [11.12]	25 [7.62]	50 [15.24]	70 [21.34]	65 [19.81]	60 [18.29]	55 [16.76]	50 [15.24]	50 [15.24]	45 [13.72]	40 [12.19]	35 [10.67]	30 [9.14]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]	65 [19.81]	65 [19.81]	60 [18.29]	60 [18.29]	60 [18.29]

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

[ ] Designates Metric Conversions

Heat Pump Refrigerant Line Size Information (con't.)

R-410A System Capacity Model	Vapor Line Connection Size (Inch I.D.) [mm]	Vapor Line Size (Inch O.D.) [mm]	Vapor Line Selection Chart Capacity Multiplier Table Total **Equivalent** Length - Feet [m]											
			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]
24	3/4" [19.06]	5/8 [15.88]	1.00	0.97	0.96	0.96	0.95	0.92	0.92	0.91	0.89	0.89	0.88	0.87
		3/4 [19.05]	1.00	1.00	1.00	0.99	0.98	0.98	0.98	0.97	0.96	0.96	0.96	0.96
		7/8 [22.23]	**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 [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**
36	3/4" [19.06]	5/8 [15.88]	0.98	0.96	0.95	0.93	0.90	0.88	0.87	0.86	0.84	0.84	0.85	0.81
		3/4 [19.05]	1.00	1.00	0.98	0.98	0.96	0.96	0.96	0.95	0.94	0.94	0.93	0.93
		7/8 [22.23]	**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 [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**
46	3/4" [19.06]	5/8 [15.88]	0.98	0.96	0.94	0.92	0.91	0.89	0.87	0.87	0.84	0.85	0.84	**N/R**
		3/4 [19.05]	0.94	0.90	0.89	0.89	0.80	0.88	0.88	0.87	0.87	0.86	0.86	**N/R**
		7/8 [22.23]	1.00	0.98	0.98	0.97	0.96	0.96	0.94	0.93	0.93	0.92	0.91	**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**
60	3/4" [19.06]	5/8 [15.88]	0.98	0.96	0.94	0.92	0.91	0.89	0.89	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**
		3/4 [19.05]	0.95	0.94	0.94	0.93	0.92	0.90	0.90	**N/R**	**N/R**	**N/R**	**N/R**	**N/R**
		7/8 [22.23]	1.00	0.99	0.97	0.98	0.96	0.95	0.95	**N/R**	**N/R**	**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

[ ] Designates Metric Conversions

Performance Data @ AHRI Standard Conditions – Heat Pump

High Sales Volume Tested Combination (HSVTC)													
Outdoor Unit	Air Handler	Total Capacity 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]	47 Degree COP	Region IV HSPF	AHRI#
UP1724AJV	RH2T2417SEAC	24000 [7.0]	17300 [5.1]	6700 [2.0]	18.5	13.0	750 [354.0]	24500 [7.2]	3.46	15600 [4.6]	1.96	8.2	8377583
UP1736AJV	RH2T3617SEAC	35200 [10.3]	26800 [7.9]	8400 [2.5]	17.5	11.5	1225 [578.1]	31000 [9.1]	3.76	19400 [5.7]	2.30	8.5	8377571
UP1748AJV	RH2T4821MEAC	48000 [14.1]	34400 [10.1]	13600 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377584
UP1760AJV	RH2T6021SEAC	58500 [17.1]	39400 [11.5]	19100 [5.6]	17.0	9.5	1575 [743.3]	62000 [18.2]	3.30	41500 [12.2]	2.46	8.5	8377585

[ ] Designates Metric Conversions

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

U802V: Ultra 2-Stage 80% ECM Furnace Ratings

Outdoor Unit	Furnace	Indoor Coil	Total Capacity 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]	47 Degree COP	Region IV HSPF	AHRI#
UP1724AJV	U802VA050317MSA	RCF2417SEAM	26200 [7.7]	18700 [5.5]	7500 [2.2]	18.5	13.0	725 [342.2]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377587
UP1724AJV	U802VA050317MXA	RCF2417SEAM	26200 [7.7]	18700 [5.5]	7500 [2.2]	18.5	13.0	725 [342.2]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377588
UP1724AJV	U802VA075317MSA	RCF2417SEAM	27600 [8.1]	20800 [6.1]	6800 [2.0]	18.5	13.0	975 [460.1]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377557
UP1724AJV	U802VA075317MXA	RCF2417SEAM	27600 [8.1]	20800 [6.1]	6800 [2.0]	18.5	13.0	975 [460.1]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377558
UP1724AJV	U802VA075317ZSA	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	18.5	13.0	875 [413.0]	24500 [7.2]	3.46	15600 [4.6]	1.96	8.2	8377589
UP1724AJV	U802VA075317ZSB	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	18.5	13.0	875 [413.0]	24500 [7.2]	3.46	15600 [4.6]	1.96	8.2	8377590
UP1724AJV	U802VA075317ZXA	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	18.5	13.0	875 [413.0]	24500 [7.2]	3.46	15600 [4.6]	1.96	8.2	8377591
UP1724AJV	U802VA075317ZXB	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	18.5	13.0	875 [413.0]	24500 [7.2]	3.46	15600 [4.6]	1.96	8.2	8377592
UP1724AJV	U802VA075421ZSA	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	18.0	13.0	975 [460.1]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377593
UP1724AJV	U802VA075421ZSB	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	18.0	13.0	975 [460.1]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377594
UP1724AJV	U802VA075421ZXA	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	18.0	13.0	975 [460.1]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377595
UP1724AJV	U802VA075421ZXB	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	18.0	13.0	975 [460.1]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377596
UP1736AJV	U802VA050317M	RCF3621SEA	34600 [10.1]	26100 [7.6]	8500 [2.5]	17.0	11.0	1225 [578.1]	32000 [9.4]	3.50	31600 [9.3]	2.26	8.5	9961212
UP1736AJV	U802VA050317MSA	RCF3617SEAM	33800 [9.9]	24300 [7.1]	9500 [2.8]	17.0	11.0	975 [460.1]	29400 [8.6]	3.50	19400 [5.7]	2.10	8.5	8377604
UP1736AJV	U802VA050317MXA	RCF3617SEAM	33800 [9.9]	24300 [7.1]	9500 [2.8]	17.0	11.0	975 [460.1]	29400 [8.6]	3.50	19400 [5.7]	2.10	8.5	8377605
UP1736AJV	U802VA075317M	RCF3621SEA	34800 [10.2]	26500 [7.8]	8500 [2.5]	17.5	11.0	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961213
UP1736AJV	U802VA075317MSA	RCF3617SEAM	34600 [10.1]	25800 [7.6]	8800 [2.6]	17.0	11.5	1150 [542.7]	30400 [8.9]	3.70	19400 [5.7]	2.26	8.5	8377559
UP1736AJV	U802VA075317MXA	RCF3617SEAM	34600 [10.1]	25800 [7.6]	8800 [2.6]	17.0	11.5	1150 [542.7]	30400 [8.9]	3.70	19400 [5.7]	2.26	8.5	8377560
UP1736AJV	U802VA075317Z	RCF3621SEA	34600 [10.1]	26300 [7.7]	8500 [2.5]	17.5	11.0	1225 [578.1]	31800 [9.3]	3.54	19400 [5.7]	2.26	8.5	9961214
UP1736AJV	U802VA075317ZSA	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	17.0	11.5	1100 [519.1]	30200 [8.9]	3.60	19400 [5.7]	2.20	8.5	8377606
UP1736AJV	U802VA075317ZSB	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	17.0	11.5	1100 [519.1]	30200 [8.9]	3.60	19400 [5.7]	2.20	8.5	8377607
UP1736AJV	U802VA075317ZXA	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	17.0	11.5	1100 [519.1]	30200 [8.9]	3.60	19400 [5.7]	2.20	8.5	8377608
UP1736AJV	U802VA075317ZXB	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	17.0	11.5	1100 [519.1]	30200 [8.9]	3.60	19400 [5.7]	2.20	8.5	8377609
UP1736AJV	U802VA075421M	RCF3621SEA	35000 [10.3]	26500 [7.8]	8500 [2.5]	17.5	11.5	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961215
UP1736AJV	U802VA075421Z	RCF3621SEA	35000 [10.3]	26500 [7.8]	8500 [2.5]	17.5	11.5	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961216
UP1736AJV	U802VA075421ZSA	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	17.0	11.5	1200 [566.3]	30800 [9.0]	3.70	19400 [5.7]	2.26	8.5	8377610
UP1736AJV	U802VA075421ZSB	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	17.0	11.5	1200 [566.3]	30800 [9.0]	3.70	19400 [5.7]	2.26	8.5	8377611
UP1736AJV	U802VA075421ZXA	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	17.0	11.5	1200 [566.3]	30800 [9.0]	3.70	19400 [5.7]	2.26	8.5	8377612
UP1736AJV	U802VA075421ZXB	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	17.0	11.5	1200 [566.3]	30800 [9.0]	3.70	19400 [5.7]	2.26	8.5	8377613
UP1736AJV	U802VA100521M	RCF3621SEA	35200 [10.3]	26700 [7.8]	8500 [2.5]	17.5	11.5	1225 [578.1]	31400 [9.2]	3.70	19400 [5.7]	2.26	8.5	9961217

[ ] Designates Metric Conversions

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

U802V: Ultra 2-Stage 80% ECM Furnace Ratings

Outdoor Unit	Furnace	Indoor Coil	Total Capacity 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]	47 Degree COP	Region IV HSPF	AHRI#
UP1736AJV	U802VA100521Z	RCF3621SEA	35000 [10.3]	26500 [7.8]	8500 [2.5]	17.5	11.5	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961218
UP1736AJV	U802VA125524Z	RCF3621SEA	35000 [10.3]	26700 [7.8]	8500 [2.5]	17.5	11.5	1225 [578.1]	31400 [9.2]	3.66	19400 [5.7]	2.26	8.5	9961219
UP1748AJV	U802VA075421MSA	RCF6021SEAM	48500 [14.2]	35800 [10.5]	12700 [3.7]	17.0	10.5	1550 [731.5]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377622
UP1748AJV	U802VA075421MXA	RCF6021SEAM	48500 [14.2]	35800 [10.5]	12700 [3.7]	17.0	10.5	1550 [731.5]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377623
UP1748AJV	U802VA075421ZSA	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	16.5	10.5	1450 [684.3]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377624
UP1748AJV	U802VA075421ZSB	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	16.5	10.5	1450 [684.3]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377625
UP1748AJV	U802VA075421ZXA	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	16.5	10.5	1450 [684.3]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377626
UP1748AJV	U802VA075421ZXB	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	16.5	10.5	1450 [684.3]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377627
UP1748AJV	U802VA100521MSA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	11.0	1400 [660.7]	46500 [13.7]	3.54	29000 [8.5]	2.26	8.5	8377628
UP1748AJV	U802VA100521MXA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	11.0	1400 [660.7]	46500 [13.7]	3.54	29000 [8.5]	2.26	8.5	8377629
UP1748AJV	U802VA100521ZSA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377630
UP1748AJV	U802VA100521ZSB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377631
UP1748AJV	U802VA100521ZXA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377632
UP1748AJV	U802VA100521ZXB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377633
UP1748AJV	U802VA125524MSA	RCF6021SEAM	48500 [14.2]	35600 [10.4]	12900 [3.8]	17.0	11.0	1525 [719.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377634
UP1748AJV	U802VA125524MXA	RCF6021SEAM	48500 [14.2]	35600 [10.4]	12900 [3.8]	17.0	11.0	1525 [719.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377635
UP1748AJV	U802VA125524ZSA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377636
UP1748AJV	U802VA125524ZSB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377637
UP1748AJV	U802VA125524ZXA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377638
UP1748AJV	U802VA125524ZXB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	17.0	10.5	1400 [660.7]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8377639
UP1760AJV	U802VA075421MSA	RCF6021SEAM	59000 [17.3]	42700 [12.5]	16300 [4.8]	16.5	9.0	1925 [908.5]	63000 [18.5]	3.16	41500 [12.2]	2.34	8.5	8377647
UP1760AJV	U802VA075421MXA	RCF6021SEAM	59000 [17.3]	42700 [12.5]	16300 [4.8]	16.5	9.0	1925 [908.5]	63000 [18.5]	3.16	41500 [12.2]	2.34	8.5	8377648
UP1760AJV	U802VA100521MSA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	17.0	9.5	1725 [814.1]	62000 [18.2]	3.30	41500 [12.2]	2.40	8.5	8377649
UP1760AJV	U802VA100521MXA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	17.0	9.5	1725 [814.1]	62000 [18.2]	3.30	41500 [12.2]	2.40	8.5	8377650
UP1760AJV	U802VA100521ZSA	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	16.0	9.0	1750 [825.9]	62500 [18.3]	3.26	41500 [12.2]	2.40	8.5	8377563
UP1760AJV	U802VA100521ZSB	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	16.0	9.0	1750 [825.9]	62500 [18.3]	3.26	41500 [12.2]	2.40	8.5	8377564
UP1760AJV	U802VA100521ZXA	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	16.0	9.0	1750 [825.9]	62500 [18.3]	3.26	41500 [12.2]	2.40	8.5	8377565
UP1760AJV	U802VA100521ZXB	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	16.0	9.0	1750 [825.9]	62500 [18.3]	3.26	41500 [12.2]	2.40	8.5	8377566
UP1760AJV	U802VA125524MSA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	17.0	9.5	1725 [814.1]	62000 [18.2]	3.30	41500 [12.2]	2.40	8.5	8377651
UP1760AJV	U802VA125524MXA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	17.0	9.5	1725 [814.1]	62000 [18.2]	3.30	41500 [12.2]	2.40	8.5	8377652

[ ] Designates Metric Conversions

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

U96V: 96% AFUE 2-stage Variable Speed Multipoise Gas Furnace Ratings

Outdoor Unit	Furnace	Indoor Coil	Total Capacity 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]	47 Degree COP	Region IV HSPF	AHRI#
UP1724AJV	U96VA0402317MSA	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	18.5	13.0	875 [413.0]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377601
UP1724AJV	U96VA0602317MSA	RCF2417SEAM	27000 [7.9]	20000 [5.9]	7000 [2.1]	18.0	12.5	900 [424.8]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8377602
UP1736AJV	U96VA0402317M	RCF3621SEA	34800 [10.2]	26300 [7.7]	8500 [2.5]	17.5	11.0	1225 [578.1]	31800 [9.3]	3.54	19400 [5.7]	2.26	8.5	9961220
UP1736AJV	U96VA0402317MSA	RCF3617SEAM	34000 [10.0]	24700 [7.2]	9300 [2.7]	17.0	11.5	1025 [483.7]	29600 [8.7]	3.54	19400 [5.7]	2.16	8.5	8377618
UP1736AJV	U96VA0602317MSA	RCF3617SEAM	33800 [9.9]	24100 [7.1]	9700 [2.8]	16.5	11.5	950 [448.4]	29200 [8.6]	3.50	19400 [5.7]	2.10	8.5	8377619
UP1736AJV	U96VA0702317M	RCF3617SEA	33800 [9.9]	24100 [7.1]	9700 [2.8]	17.0	11.5	950 [448.4]	29000 [8.5]	3.50	19400 [5.7]	2.10	8.5	8715777
UP1736AJV	U96VA0852521MSB	RCF3617SEAM	34600 [10.1]	25700 [7.5]	8900 [2.6]	16.5	11.5	1125 [530.9]	30400 [8.9]	3.66	19400 [5.7]	2.20	8.5	8377561
UP1736AJV	U96VA1002521MSA	RCF3617SEAM	34600 [10.1]	25800 [7.6]	8800 [2.6]	17.0	11.5	1150 [542.7]	30400 [8.9]	3.70	19400 [5.7]	2.26	8.5	8377620
UP1748AJV	U96VA0852521MSB	RCF6021SEAM	48000 [14.1]	35300 [10.3]	12700 [3.7]	16.5	10.5	1550 [731.5]	46500 [13.7]	3.40	29000 [8.5]	2.20	8.5	8377644
UP1748AJV	U96VA1002521MSA	RCF6021SEAM	47500 [13.9]	33500 [9.8]	14000 [4.1]	17.0	10.5	1350 [637.1]	46500 [13.7]	3.46	29000 [8.5]	2.20	8.5	8377645
UP1748AJV	U96VA1152524MSA	RCF6021SEAM	48500 [14.2]	35600 [10.4]	12900 [3.8]	17.0	10.5	1525 [719.7]	46500 [13.7]	3.50	29000 [8.5]	2.20	8.5	8377646
UP1760AJV	U96VA1002521MSA	RCF6021SEAM	58000 [17.0]	40300 [11.8]	17700 [5.2]	16.5	9.0	1750 [825.9]	63000 [18.5]	3.20	41500 [12.2]	2.34	8.5	8377569
UP1760AJV	U96VA1152524MSA	RCF6021SEAM	58500 [17.1]	40600 [11.9]	17900 [5.2]	16.5	9.0	1725 [814.1]	62500 [18.3]	3.26	41500 [12.2]	2.40	8.5	8377570

U97V: 97% AFUE 2-stage Variable Speed Multipoise Gas Furnace Ratings

Outdoor Unit	Furnace	Indoor Coil	Total Capacity 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]	47 Degree COP	Region IV HSPF	AHRI#
UP1724AJV	U97VA060M317U	RCF2417SEA	27000 [7.9]	20000 [5.9]	7000 [2.1]	18.0	12.5	900 [424.8]	24500 [7.2]	3.40	15600 [4.6]	1.96	8.2	8950359
UP1724AJV	U97VA070M317U	RCF2417SEA	26400 [7.7]	19000 [5.6]	7400 [2.2]	18.0	13.0	750 [354.0]	24500 [7.2]	3.46	15600 [4.6]	1.96	8.2	9967105
UP1736AJV	U97VA060M317U	RCF3617SEA	33800 [9.9]	24300 [7.1]	9500 [2.8]	16.5	11.5	975 [460.1]	29400 [8.6]	3.50	19400 [5.7]	2.10	8.5	8950360
UP1736AJV	U97VA070M317U	RCF3617SEA	33800 [9.9]	24100 [7.1]	9700 [2.8]	17.0	11.5	950 [448.4]	29000 [8.5]	3.50	19400 [5.7]	2.10	8.5	8950361
UP1736AJV	U97VA085M521U	RCF3621SEA	35000 [10.3]	26500 [7.8]	8500 [2.5]	17.5	11.0	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961221
UP1736AJV	U97VA100M521U	RCF3617SEA	34600 [10.1]	25800 [7.6]	8800 [2.6]	17.0	11.5	1150 [542.7]	30400 [8.9]	3.70	19400 [5.7]	2.26	8.5	8950362
		RCF3621SEA	34800 [10.2]	26500 [7.8]	8500 [2.5]	17.5	11.0	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961222
UP1736AJV	U97VA115M524U	RCF3621SEA	35000 [10.3]	26500 [7.8]	8500 [2.5]	17.5	11.5	1225 [578.1]	31600 [9.3]	3.60	19400 [5.7]	2.26	8.5	9961223
UP1748AJV	U97VA115M524U	RCF6021SEA	48500 [14.2]	35600 [10.4]	12900 [3.8]	17.0	10.5	1525 [719.7]	46500 [13.7]	3.50	29000 [8.5]	2.20	8.5	8950363
UP1760AJV	U97VA085M521U	RCF6021SEA	58000 [17.0]	40100 [11.8]	17900 [5.2]	16.0	9.0	1725 [814.1]	62500 [18.3]	3.20	41500 [12.2]	2.34	8.5	8975652
UP1760AJV	U97VA100M521U	RCF6021SEA	58000 [17.0]	40300 [11.8]	17700 [5.2]	16.5	9.0	1750 [825.9]	63000 [18.5]	3.20	41500 [12.2]	2.34	8.5	8975653
UP1760AJV	U97VA115M524U	RCF6021SEA	58500 [17.1]	40600 [11.9]	17900 [5.2]	16.5	9.0	1725 [814.1]	62500 [18.3]	3.26	41500 [12.2]	2.40	8.5	8975654

[ ] Designates Metric Conversions

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

Air Handler Ratings													
Outdoor Unit	Air Handler	Total Capacity 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]	47 Degree COP	Region IV HSPF	AHRI#
UP1724AJV	RHMV2417SEAC	26400 [7.7]	19000 [5.6]	7400 [2.2]	18.5	13.0	750 [354.0]	24500 [7.2]	3.50	15600 [4.6]	2.00	8.2	8953019
UP1736AJV	RHMV3617SEAC	35000 [10.3]	26600 [7.8]	8400 [2.5]	17.5	11.5	1225 [578.1]	31200 [9.1]	3.76	19400 [5.7]	2.30	8.5	8953020
UP1748AJV	RHMV6021SEAC	47500 [13.9]	33900 [9.9]	13600 [4.0]	17.0	10.5	1425 [672.5]	46500 [13.7]	3.50	29000 [8.5]	2.26	8.5	8953021
UP1760AJV	RHMV6021SEAC	58000 [17.0]	38900 [11.4]	19100 [5.6]	16.5	9.0	1575 [743.3]	62000 [18.2]	3.30	41500 [12.2]	2.40	8.5	8953022

[ ] Designates Metric Conversions

Performance Data @ OD Unit Overdrive (Max.) Conditions – Heat Pump

High Sales Volume Tested Combination (HSVTC)							
Outdoor Unit	Air Handler	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1724AJV	RH2T2417SEAC	24000 [7.0]	17300 [5.1]	6700 [2.0]	750 [354.0]	25800 [7.6]	24600 [7.2]
UP1736AJV	RH2T3617SEAC	35200 [10.3]	26800 [7.9]	8400 [2.5]	1225 [578.1]	31000 [9.1]	31600 [9.3]
UP1748AJV	RH2T4821MEAC	48000 [14.1]	34400 [10.1]	13600 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1760AJV	RH2T6021SEAC	58500 [17.1]	39400 [11.5]	19100 [5.6]	1575 [743.3]	62000 [18.2]	47500 [13.9]

Coil Only Ratings							
Outdoor Unit	Indoor Coil	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1724AJV	RCF2417SEAM	26400 [7.7]	18700 [5.5]	7700 [2.3]	800 [377.6]	27000 [7.9]	25800 [7.6]
UP1736AJV	RCF3617SEAM	33000 [9.7]	23200 [6.8]	9800 [2.9]	1075 [507.3]	32400 [9.5]	33000 [9.7]
UP1748AJV	RCF6021SEAM	48500 [14.2]	34400 [10.1]	14100 [4.1]	1550 [731.5]	49500 [14.5]	44000 [12.9]
UP1760AJV	RCF6021SEAM	57000 [16.7]	36600 [10.7]	20400 [6.0]	1525 [719.7]	64500 [18.9]	50500 [14.8]

[ ] Designates Metric Conversions

Performance Data @ OD Unit Overdrive (Max.) Conditions – Heat Pump (con't.)

U802V: Ultra 2-Stage 80% ECM Furnace Ratings

Outdoor Unit	Furnace	Indoor Coil	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1724AJV	U802VA050317MSA	RCF2417SEAM	26200 [7.7]	18700 [5.5]	7500 [2.2]	725 [342.2]	25600 [7.5]	24400 [7.2]
UP1724AJV	U802VA050317MXA	RCF2417SEAM	26200 [7.7]	18700 [5.5]	7500 [2.2]	725 [342.2]	25600 [7.5]	24400 [7.2]
UP1724AJV	U802VA075317MSA	RCF2417SEAM	27600 [8.1]	20800 [6.1]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VA075317MXA	RCF2417SEAM	27600 [8.1]	20800 [6.1]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VA075317ZSA	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U802VA075317ZSB	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U802VA075317ZXA	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U802VA075317ZXB	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U802VA075421ZSA	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VA075421ZSB	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VA075421ZXA	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VA075421ZXB	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VB075317ZSB	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U802VB075317ZXB	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U802VB075421ZSB	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1724AJV	U802VB075421ZXB	RCF2417SEAM	27400 [8.0]	20600 [6.0]	6800 [2.0]	975 [460.1]	26200 [7.7]	24800 [7.3]
UP1736AJV	U802VA050317MSA	RCF3617SEAM	33800 [9.9]	24300 [7.1]	9500 [2.8]	975 [460.1]	29400 [8.6]	30000 [8.8]
UP1736AJV	U802VA050317MXA	RCF3617SEAM	33800 [9.9]	24300 [7.1]	9500 [2.8]	975 [460.1]	29400 [8.6]	30000 [8.8]
UP1736AJV	U802VA075317MSA	RCF3617SEAM	34600 [10.1]	25800 [7.6]	8800 [2.6]	1150 [542.7]	30400 [8.9]	31200 [9.1]
UP1736AJV	U802VA075317MXA	RCF3617SEAM	34600 [10.1]	25800 [7.6]	8800 [2.6]	1150 [542.7]	30400 [8.9]	31200 [9.1]
UP1736AJV	U802VA075317ZSA	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	1100 [519.1]	30200 [8.9]	30800 [9.0]
UP1736AJV	U802VA075317ZSB	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	1100 [519.1]	30200 [8.9]	30800 [9.0]
UP1736AJV	U802VA075317ZXA	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	1100 [519.1]	30200 [8.9]	30800 [9.0]
UP1736AJV	U802VA075317ZXB	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	1100 [519.1]	30200 [8.9]	30800 [9.0]
UP1736AJV	U802VA075421ZSA	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	1200 [566.3]	30800 [9.0]	31600 [9.3]
UP1736AJV	U802VA075421ZSB	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	1200 [566.3]	30800 [9.0]	31600 [9.3]
UP1736AJV	U802VA075421ZXA	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	1200 [566.3]	30800 [9.0]	31600 [9.3]
UP1736AJV	U802VA075421ZXB	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	1200 [566.3]	30800 [9.0]	31600 [9.3]
UP1736AJV	U802VB075317ZSB	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	1100 [519.1]	30200 [8.9]	30800 [9.0]
UP1736AJV	U802VB075317ZXB	RCF3617SEAM	34400 [10.1]	25400 [7.4]	9000 [2.6]	1100 [519.1]	30200 [8.9]	30800 [9.0]
UP1736AJV	U802VB075421ZSB	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	1200 [566.3]	30800 [9.0]	31600 [9.3]
UP1736AJV	U802VB075421ZXB	RCF3617SEAM	34800 [10.2]	26300 [7.7]	8500 [2.5]	1200 [566.3]	30800 [9.0]	31600 [9.3]
UP1748AJV	U802VA075421MSA	RCF6021SEAM	48500 [14.2]	35800 [10.5]	12700 [3.7]	1550 [731.5]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA075421MXA	RCF6021SEAM	48500 [14.2]	35800 [10.5]	12700 [3.7]	1550 [731.5]	47500 [13.9]	42000 [12.3]

[ ] Designates Metric Conversions

Performance Data @ OD Unit Overdrive (Max.) Conditions – Heat Pump (con't.)

U802V: Ultra 2-Stage 80% ECM Furnace Ratings								
Outdoor Unit	Furnace	Indoor Coil	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1748AJV	U802VA075421ZSA	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	1450 [684.3]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA075421ZSB	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	1450 [684.3]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA075421ZXA	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	1450 [684.3]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA075421ZXB	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	1450 [684.3]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA100521MSA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47000 [13.8]	41500 [12.2]
UP1748AJV	U802VA100521MXA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47000 [13.8]	41500 [12.2]
UP1748AJV	U802VA100521ZSA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA100521ZSB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA100521ZXA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA100521ZXB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA125524MSA	RCF6021SEAM	48500 [14.2]	35600 [10.4]	12900 [3.8]	1525 [719.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA125524MXA	RCF6021SEAM	48500 [14.2]	35600 [10.4]	12900 [3.8]	1525 [719.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA125524ZSA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA125524ZSB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA125524ZXA	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VA125524ZXB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VB075421ZSB	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	1450 [684.3]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VB075421ZXB	RCF6021SEAM	48000 [14.1]	34600 [10.1]	13400 [3.9]	1450 [684.3]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VB125524ZSB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1748AJV	U802VB125524ZXB	RCF6021SEAM	48000 [14.1]	34200 [10.0]	13800 [4.0]	1400 [660.7]	47500 [13.9]	42000 [12.3]
UP1760AJV	U802VA075421MSA	RCF6021SEAM	59000 [17.3]	42700 [12.5]	16300 [4.8]	1925 [908.5]	63000 [18.5]	49000 [14.4]
UP1760AJV	U802VA075421MXA	RCF6021SEAM	59000 [17.3]	42700 [12.5]	16300 [4.8]	1925 [908.5]	63000 [18.5]	49000 [14.4]
UP1760AJV	U802VA100521MSA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	1725 [814.1]	62000 [18.2]	48000 [14.1]
UP1760AJV	U802VA100521MXA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	1725 [814.1]	62000 [18.2]	48000 [14.1]
UP1760AJV	U802VA100521ZSA	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	1750 [825.9]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VA100521ZSB	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	1750 [825.9]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VA100521ZXA	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	1750 [825.9]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VA100521ZXB	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	1750 [825.9]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VA125524MSA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	1725 [814.1]	62000 [18.2]	48000 [14.1]
UP1760AJV	U802VA125524MXA	RCF6021SEAM	59000 [17.3]	41100 [12.0]	17900 [5.2]	1725 [814.1]	62000 [18.2]	48000 [14.1]
UP1760AJV	U802VB100521ZSB	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	1750 [825.9]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VB100521ZXB	RCF6021SEAM	58500 [17.1]	40800 [12.0]	17700 [5.2]	1750 [825.9]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VB125524ZSB	RCF6021SEAM	58500 [17.1]	40600 [11.9]	17900 [5.2]	1725 [814.1]	62500 [18.3]	48500 [14.2]
UP1760AJV	U802VB125524ZXB	RCF6021SEAM	58500 [17.1]	40600 [11.9]	17900 [5.2]	1725 [814.1]	62500 [18.3]	48500 [14.2]

[ ] Designates Metric Conversions

Performance Data @ OD Unit Overdrive (Max.) Conditions – Heat Pump (con't.)

U96V: 96% AFUE 2-stage Variable Speed Multipoise Gas Furnace Ratings								
Outdoor Unit	Furnace	Indoor Coil	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1724AJV	U96VA0402317MSA	RCF2417SEAM	27000 [7.9]	19900 [5.8]	7100 [2.1]	875 [413.0]	26000 [7.6]	24800 [7.3]
UP1724AJV	U96VA0602317MSA	RCF2417SEAM	27000 [7.9]	20000 [5.9]	7000 [2.1]	900 [424.8]	26200 [7.7]	24800 [7.3]
UP1736AJV	U96VA0402317MSA	RCF3617SEAM	34000 [10.0]	24700 [7.2]	9300 [2.7]	1025 [483.7]	29600 [8.7]	30200 [8.9]
UP1736AJV	U96VA0602317MSA	RCF3617SEAM	33800 [9.9]	24100 [7.1]	9700 [2.8]	950 [448.4]	29200 [8.6]	29800 [8.7]
UP1736AJV	U96VA0852521MSB	RCF3617SEAM	34600 [10.1]	25700 [7.5]	8900 [2.6]	1125 [530.9]	30400 [8.9]	31000 [9.1]
UP1736AJV	U96VA1002521MSA	RCF3617SEAM	34600 [10.1]	25800 [7.6]	8800 [2.6]	1150 [542.7]	30400 [8.9]	31200 [9.1]
UP1748AJV	U96VA0852521MSB	RCF6021SEAM	48000 [14.1]	35300 [10.3]	12700 [3.7]	1550 [731.5]	48000 [14.1]	42500 [12.5]
UP1748AJV	U96VA1002521MSA	RCF6021SEAM	47500 [13.9]	33500 [9.8]	14000 [4.1]	1350 [637.1]	47000 [13.8]	41500 [12.2]
UP1748AJV	U96VA1152524MSA	RCF6021SEAM	48500 [14.2]	35600 [10.4]	12900 [3.8]	1525 [719.7]	47500 [13.9]	42000 [12.3]
UP1760AJV	U96VA1002521MSA	RCF6021SEAM	58000 [17.0]	40300 [11.8]	17700 [5.2]	1750 [825.9]	63000 [18.5]	48500 [14.2]
UP1760AJV	U96VA1152524MSA	RCF6021SEAM	58500 [17.1]	40600 [11.9]	17900 [5.2]	1725 [814.1]	62500 [18.3]	48000 [14.1]

Ratings								
Outdoor Unit	Furnace	Indoor Coil	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1724AJV	U97VA060M317U	RCF2417SEA	27000 [7.9]	20000 [5.9]	7000 [2.1]	900 [424.8]	26200 [7.7]	24800 [7.3]
UP1736AJV	U97VA060M317U	RCF3617SEA	33800 [9.9]	24300 [7.1]	9500 [2.8]	975 [460.1]	29400 [8.6]	30000 [8.8]
UP1736AJV	U97VA070M317U	RCF3617SEA	33800 [9.9]	24100 [7.1]	9700 [2.8]	950 [448.4]	29000 [8.5]	29800 [8.7]
UP1736AJV	U97VA100M521U	RCF3617SEA	34600 [10.1]	25800 [7.6]	8800 [2.6]	1150 [542.7]	30400 [8.9]	31200 [9.1]
UP1748AJV	U97VA115M524U	RCF6021SEA	48500 [14.2]	35600 [10.4]	12900 [3.8]	1525 [719.7]	47500 [13.9]	42000 [12.3]
UP1760AJV	U97VA085M521U	RCF6021SEA	58000 [17.0]	40100 [11.8]	17900 [5.2]	1725 [814.1]	62500 [18.3]	48500 [14.2]
UP1760AJV	U97VA100M521U	RCF6021SEA	58000 [17.0]	40300 [11.8]	17700 [5.2]	1750 [825.9]	63000 [18.5]	48500 [14.2]
UP1760AJV	U97VA115M524U	RCF6021SEA	58500 [17.1]	40600 [11.9]	17900 [5.2]	1725 [814.1]	62500 [18.3]	48000 [14.1]

Air Handler Ratings							
Outdoor Unit	Air Handler	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	Indoor CFM [L/s]	47 Degree Heating Capacity BTU/H [kW]	17 Degree Heating Capacity BTU/H [kW]
UP1724AJV	RHMV2417SEAC	26400 [7.7]	19000 [5.6]	7400 [2.2]	750 [354.0]	25800 [7.6]	24600 [7.2]
UP1736AJV	RHMV3617SEAC	35000 [10.3]	26600 [7.8]	8400 [2.5]	1225 [578.1]	31200 [9.1]	31800 [9.3]
UP1748AJV	RHMV6021SEAC	47500 [13.9]	33900 [9.9]	13600 [4.0]	1425 [672.5]	47500 [13.9]	42000 [12.3]
UP1760AJV	RHMV6021SEAC	58000 [17.0]	38900 [11.4]	19100 [5.6]	1575 [743.3]	62000 [18.2]	48000 [14.1]

[ ] Designates Metric Conversions

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, propeller-type 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 1000-hr 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
UP17
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.

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 evaporator at _____ °F/°C wet bulb and _____ °F/°C dry bulb, and air entering the unit at _____ °F/°C.
- — The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

- — Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- — Nominal unit electrical characteristics will be _____ v, three 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*

Ruud 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, Ruud reserves the right to make changes without notice.

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