

## Ruud *Achiever Plus*™ Series Two-Stage Air Conditioners





## **UA17 Series**

Efficiencies up to 17 SEER/13 EER 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."



- EcoNet<sup>™</sup> 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 Two Stage Copeland Scroll™ UltraTech™ Compressor modulates between two capacity settings – 67% and 100% – providing more precise temperature control, lower humidity and greater efficiency in comparison to single stage compressors. It uses 70% fewer moving parts which also increases efficiency and reliability.
- 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<sup>™</sup> Expanded Valve Space 3"-4"-5" service valve space – provides a minimum working area of 27-square inches for easier access

- PlusOne<sup>TM</sup> 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 high and low pressure.
- 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.
- 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	√	√	V	√
Maximum SEER	17	17	17	16
Maximum EER	13	13	13	12.5
EcoNet Enabled	$\sqrt{}$	V	√	V
Two Stage Copeland Scroll™ UltraTech™ Compressor	$\sqrt{}$	V	√	V
Field Installed Filter Drier	V	V	√	V
Front Seating Service Valves	$\sqrt{}$	V	V	V
Internal Pressure Relief Valve	V	V	√	V
Internal Thermal Overload	$\sqrt{}$	V	√	√
Long Line capability	$\sqrt{}$	V	√	V
Low Ambient capability with Kit	√	√	√	V
3-4-5 Expanded Valve Space	√	√	√	V
Composite Basepan	$\sqrt{}$	V	√	$\checkmark$
2 Screw Control Box Access	√	√	√	V
15" Access to Internal Components	$\sqrt{}$	V	V	$\checkmark$
Quick release louver panel design	√	√	√	V
No fasteners to remove along bottom	$\sqrt{}$	√	V	$\checkmark$
Optimized Venturi Airflow	$\sqrt{}$	√	√	$\checkmark$
Single row condenser coil	$\sqrt{}$	V	V	V
Powder coated paint	√	√	√	V
Rust resistant screws	V	√	V	V
QR code	√	√	√	√
External gauge ports	√	√	√	√
Service trays	V	V	V	V

 $<sup>\</sup>sqrt{}$  = Standard

## **Available SKUs**

Available Models	Description
UA1724AJ2CB	Achiever Plus™ Series 2 ton 17 SEER Two Stage Air Conditioner-208/230/1/60
UA1736AJ2CB	Achiever Plus™ Series 3 ton 17 SEER Two Stage Air Conditioner-208/230/1/60
UA1748AJ2CB	Achiever Plus™ Series 4 ton 17 SEER Two Stage Air Conditioner-208/230/1/60
UA1760AJ2CB	Achiever Plus™ Series 5 ton 17 SEER Two Stage Air Conditioner-208/230/1/60

## **Introduction to UA17 Air Conditioner**

The UA17 is our EcoNet Enabled 17 SEER Two-Stage Air Conditioner and is part of the Ruud Air Conditioner product line that extends from 13 to 20 SEER. This highly featured and reliable air conditioner 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 UA17 is exclusively designed to operate with the EcoNet Smart Home System. Developed by Ruud, 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.





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 their home's energy. EcoNet sets Ruud, our distributor and contactor customers apart in the industry with a unique, advanced and efficient technology solution.



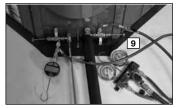








Our unique composite base ( $\boxed{3}$ ) reduces sound emission, eliminates rattles, significantly reduces fasteners, eliminates corrosion and has integrated brass compressor attachment inserts ( $\boxed{4}$ ). Furthermore it has incorporated into the design, water management features, means for hand placement ( $\boxed{5}$ ) for unit maneuvering, screw trays ( $\boxed{6}$ ) and inserts for lifting off unit pad. ( $\boxed{7}$ ) Service Valves ( $\boxed{8}$ ) 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



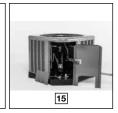


27 square-inches around the service valves allows ample room to remove service valve schrader prior to brazing, plenty of clearance for easy brazing of the suction and discharge lines to service valve outlets, easy access and hookup of low loss refrigerant gauges (③), and access to the service valve caps for opening. For applications with long-line lengths up to 250 feet total equivalent length, up to 200 feet condenser above evaporator, or up to 80 feet evaporator above condenser, the long-line instructions in the installation manual should be followed.

Controls are accessed from the corner of the unit by removing only two fasteners from the control access cover, revealing the industry's largest 15" wide and 14" 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 contractor lugs for connection. The low voltage control wires (12) are easily connected to the units low voltage wiring. If contactor or capacitor (13) needs to be replaced there is more than adequate space to make the repair. The service window (14) can be removed by removing two screws, to access the high and low pressure switches and view interior of unit. (15) (High and low pressure is standard on UA17 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. With minimal effort the plug can be removed from the compressor and the outdoor fan wires can be removed from the capacitor to allow even more uncluttered access to the interior of the unit ([17]). Outdoor coil heights range from as short as 35" to 51". Disassembly to this degree and complete reassembly only takes a first time service technician less than 10 minutes. ([17])







All units utilize strong 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 UA17 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.



Two Stage Copeland Scroll™ UltraTech™ 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 models come standard with high and low pressure controls. 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 UA17 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 10). Each unit has been ran in cooling operation at 95°F and 82°F and sound ratings for the UA17 range from as low as 72.3 dBA to 76.7 dBA.

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

As manufactured, all units in the UA17 family have cooling capability to 55 °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 UA17 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 #)

## **Compressor Crankcase Heater**

Protects against refrigerant migration that can occur during low ambient operation

## **Compressor Sound Cover**

- Reinforced vinyl compressor cover containing a 1½ inch thick batt of fiberglass insulation
- Open edges are sealed with a one-inch wide hook and loop fastening tape

## **Compressor Hard Start Kit**

- Single-phase units are equipped with a PSC compressor motor, this type of motor normally does not need a potential relay and start capacitor
- Kit may be required to increase the compressor starting torque, in conditions such as low voltage

## **Low Ambient Kit**

- Air conditioners operate satisfactorily in the cooling mode down to 55°F outdoor air temperature without any additional controls
- This Kit can be added in the field enabling unit to operate properly down to 0° in the cooling mode
- Crankcase heater and freezestat should be installed on compressors equipped with a low ambient kit

## 3"/6"/12"

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

## **Decorative Top**

• Can be installed on fan grille

## 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.

**UEWRA630SYS** 

Air	r Conditioners*	rs*							
⊃	<b>V</b>	17	24	$\overline{A}$	<u> </u>	2	O	Θ	*
Brand	Product Category	SEER	Capacity BTU/HR	Major Series*	Voltage	Type	Controls	Minor Series** Option Code	Option Code
Ruud	A - Air Conditioners	13 - 13 SEER 18 14 - 14 SEER 24 16 - 16 SEER 30 17 - 17 SEER 36 20 - 20 SEER 42 60	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	1 - Single-stage 2 - Two-stage V - Inverter	Ruud 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 A - 1st Design L - 3ph, 208-230/60 2 - Two-stage N - Non-Communicating B - High 16 - 16 SEER 30 - 30,000 [8.79 kW] and lox V - Inverter V - Inverter and lox Design C - 3ph, 208-230/60 2 - Two-stage N - Non-Communicating B - High and lox I7 - 17 SEER 36 - 36,000 [10.55 kW] pressu 20 - 20 SEER 42 - 42,000 [12.31 kW] contro 60 - 60,000 [14.07 kW]	A - 1st Design B - High and Iow pressure control	N/A
*See pag	*See page 3 for available SKU's.		•						

	* I	Option Code	N/A
	۷I	Minor Series**	A - 1st Design
	Ol	Controls	C - Communicating N - Non-Communicating
	<b>&gt;</b> I	Туре	1 - Single-stage 2 - Two-stage V - Inverter P - Piston
	٦١	Voltage	J - 1ph, 208-230/60 C - 3ph, 208-230/60 D - 3ph, 460/60
	۷I	Major Series*	A - 1st Design
	24	Capacity BTU/HR	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]
eference)**	17	SEER	13 - 13 SEER 14 - 14 SEER 15 - 15 SEER 17 - 17 SEER 20 - 20 SEER
<b>t Pumps</b> (For Reference)**	۵۱	Product Category	P - Heat Pump
Heat	ɔ١	Brand	Rund

Furn	ace Coils	rnace Coils (For Reference)	**								
<b>c</b>	Ol	шı	24	17	ØI	ш	۷I	∑l	Ol	۷I	*
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 - Multipoise V - Vertical only/ convertible H - Ded. Horizontal only	C - Cased U - Uncased	A - 1st Design	N/A

<sup>\*\*</sup>Model number ID's are for reference only. See available SKU page of applicable spec sheet for table of available SKU's for a specific model.

# [ ] Designates Metric Conversions

<del>-</del> %06	- AFUE Gas	<b>%+ AFUE Gas Furnaces</b> (For Reference	Reference)**							
Π	96	<b>&gt;</b>	۷	<u>70</u>	2	€	17	M	SI	Ψ
Brand	Series	Motor	Major Rev	Input BTU/HR	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	X - Low Nox S - Standard	A - 1st Design

	۷	Minor Rev	A - 1st Design
	SI	Nox	X - Low Nox S - Standard
	M	Configuration	4" M - Multi 7.5" D - Down 8 1" Z - Down & zero clearance down flow
	17	Cabinet Width	14 - 14" 17 - 17.5" 21 - 21" 24 - 24.5"
	ह	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]
	۷	Major Rev	A - 1st Design
or Reference)**	<b>&gt;</b>	Motor	V - Variable speed T - Constant Torque (X-13) P - PSC premium S - PSC standard
:0% AFUE Gas Furnaces (For Reference)	<u>5</u>	Stages	1 - Single-stage 2 - Two-stage
<b>AFUE Gas</b>	80	Series	80 - 80+ AFUE
<b>%08</b>	)	Brand	Ruud

Air	Handle	ir Handlers (For Reference)**	ence)**										
⊃	ΣI	7	<b>⊢</b> Ι	<u>36</u>	17	ø۱	ш	Α	O	Ā	۷	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 Option Cap Code	Option Code
Ruud		1 - Single-Stage V - Variable 2- 2 - Two-Stage Speed 34 M - Modulating T - Constant 44 Torque 66 P - PSC	V - Variable 2 Speed 3 T - Constant 4 Torque 6 P - PSC	4 - 24,000 [7.03 kW] 5 - 36,000 [10.55 kW] 8 - 48,000 [14.07 kW] 0 - 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 - TEV E - EEV P - Piston	A - 1st Design	C -Communicating N -Non-comm	S-Standard T-TEV A-1st Design C-Communicating A-1ph, 115/60 Eff. E-EEV N-Non-comm J-1ph, 208-240/60 M-Mid Eff. P-Piston D-3ph, 480/60 H-High Eff.	A - 1st Design 00 - no factory heat with option code	00 - no factory heat with option code	*TBD

<sup>\*\*</sup>Model number ID's are for reference only. See available SKU page of applicable spec sheet for table of available SKU's for a specific model.

## [ ] Designates Metric Conversions

Physical Data				
Model No.	UA1724A	UA1736A	UA1748A	UA1760A
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. <sup>1</sup>	128	151	204	223
Compressor Type		So	croll	
Outdoor Coil				
Net face area – Outer Coil	19.8	22.2	32.3	32.3
Net face area – Inner Coil	_	_	_	_
Tube diameter – in.	0.375	0.375	0.375	0.375
Number of rows	1	1	1	1
Fins per inch	20	22	22	22
Outdoor Fan				
Diameter – in.	24	24	26	26
Number of blades	3	3	3	3
Motor hp	1/5	1/5	1/2	1/2
CFM	3326	3540	4251	5133
RPM	850	820	646	825
watts	112	112	132	113
Shipping weight – lbs.	200	209	297	298
Operating weight – lbs.	193	202	290	291
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) <sup>2</sup>	25	35	50	70
Minimum circuit ampacity <sup>3</sup>	16	21	32	42
Compressor				
Rated load amps	11.7	15.3	21.2	28.8
Locked rotor amps	58.3	83	104	152.9
Condenser Fan Motor				•
Full load amps	1.4	1.2	5.3	5.3
Locked rotor amps	_	_	_	_

<sup>&</sup>lt;sup>1</sup>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.

<sup>2</sup>HACR type circuit breaker of fuse.

<sup>&</sup>lt;sup>3</sup>Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

## **Accessories**

Model No.		UA1724	UA1736	UA1748	UA1760
EcoNet Control Center		RETST601SYS	RETST601SYS	RETST601SYS	RETST601SYS
WiFi Kit for Heating & Cooling		REWRA630SYS	REWRA630SYS	REWRA630SYS	REWRA630SYS
Compressor crankcase heater*		44-17402-49	44-17402-49	44-101884-05	44-101884-05
Low ambient control		RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08
Freeze Stat		50313	50313	50313	50313
Compressor sound cover		68-23427-26	68-23427-26	68-25217-10	68-25217-10
Compressor hard start kit		SK-A1	SK-A1	SK-A1	SK-A1
Heat pump Riser 6 in.		686020	686020	686020	686020
Liquid Line Solenoid Solenoid Valve		200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
(24 VAC, 50/60 Hz)	Solenoid Coil	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V
Liquid Line Solenoid	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
(120/240 VAC, 50/60 Hz)	Solenoid Coil	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V

<sup>\*</sup>Crankcase Heater recommended with Low Ambient Kit.

## **Weighted Sound Power Level (dBA)**

Unit Size Veltage Series	Standard		TYPICAL	OCTAVE BAND S	PECTRUM (dBA	without tone adj	ustment)	
Unit Size - Voltage, Series	Rating (dBA)	125	250	500	1000	2000	4000	8000
UA1724A	72.5	48.6	53.7	62.9	63.0	60.5	57.3	54.6
UA1736A	72.3	53.1	52.7	60.9	62.4	61.2	58.4	51.6
UA1748A	73.0	46.1	50.4	59.5	64.6	59.6	55.8	54.6
UA1760A	76.7	58.8	60.5	65.6	65.2	62.9	62.4	55.5

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

## **Integrated Controls**



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<sup>™</sup>, 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%<sup>††</sup>

## **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<sup>†††</sup>
- 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

UFTST601SYS

## **EcoNet Control Center Compatibility**

OFFERINGS					Н	IEATING & (	COOLING	1					W	ATER HEATII	NG
Product Categories	Gas Fı	ırnaces	Air Hai	ndlers		Air Cond	litioners			Heat Pun	nps	WiFi Kit for HVAC UEWRA630SYS		Hybrid Tank HB50	
Models	U96V	U802V	RHMV*	RH2T* (EEV**)	RA20*	UASL-JEC	RA17	UARL-JEC	UP20*	UP17*	UPRL-JEC		Ending in EC2	Models	Tank Models
UETST601SYS	V	V	V	V	V	√★	√	√★	$\sqrt{}$	V	√★	√	V	V	

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

## ★ Comfort Control<sup>2</sup> System<sup>™</sup> Translator for EcoNet Required

Installation of the RETRN620CC2 Comfort Control<sup>2</sup> System™ Translator on the outdoor unit's control board is required to operate Comfort Control<sup>2</sup> 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<sup>™</sup> WiFi Kit for Heating & Cooling Systems (UEWRA630SYS) 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<sup>™</sup> based smart phones and tablets using Android<sup>™</sup> 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

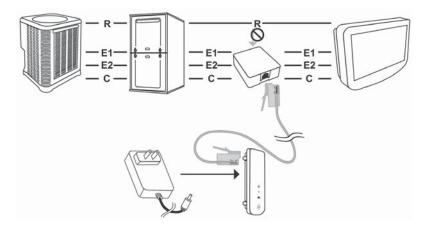
- 24" Port-to-Port Connection Cable
- 1" x 2" Double Adhesive Mounting Tape



## EcoNet WiFi Kit for Heating & Cooling Systems

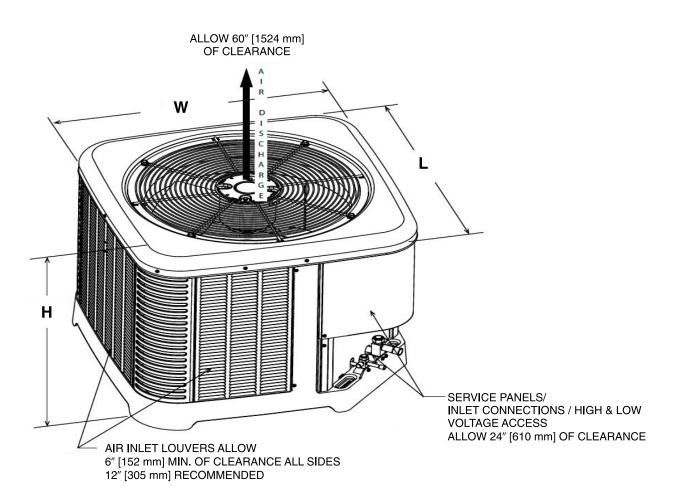
UEWRA630SYS

## **HVAC Connection Illustration**



## **Unit Dimensions**

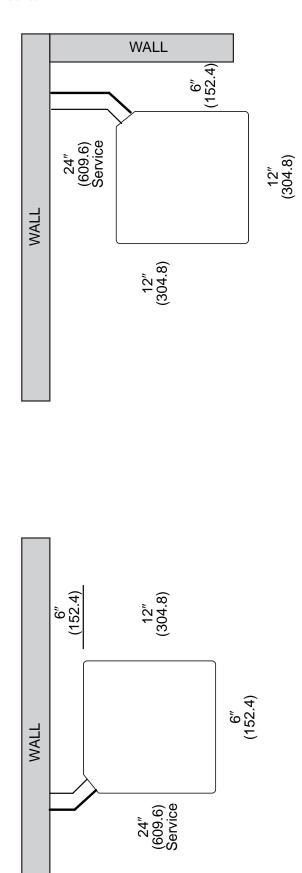
			0PER	ATING					SHIP	PING		
MODEL NO.	H (He	eight)	L (Le	ngth)	W (W	/idth)	H (He	eight)	L (Le	ngth)	W (W	(idth)
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
UA1724	35	889	33.75	857	33.75	857	36.75	933	36.38	924	36.38	924
UA1736	39	990	33.75	857	33.75	857	40.75	1035	36.38	924	36.38	924
UA1748	51	1295	35.75	908	35.75	908	52.75	1339	38.38	974	38.38	974
UA1760	51	1295	35.75	908	35.75	908	52.75	1339	38.38	974	38.38	974

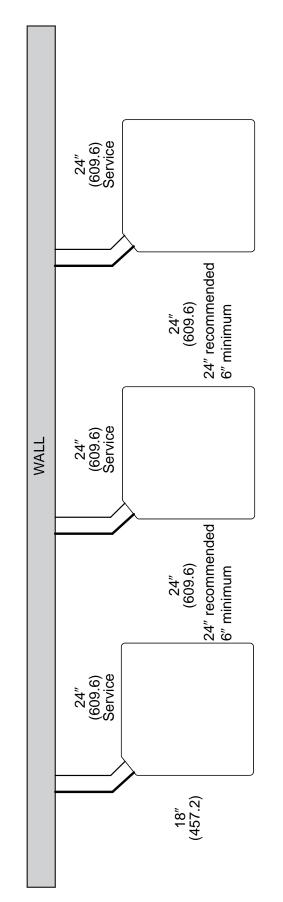


[ ] Designates Metric Conversions

ST-A1226-02-00

## **CLEARANCES**

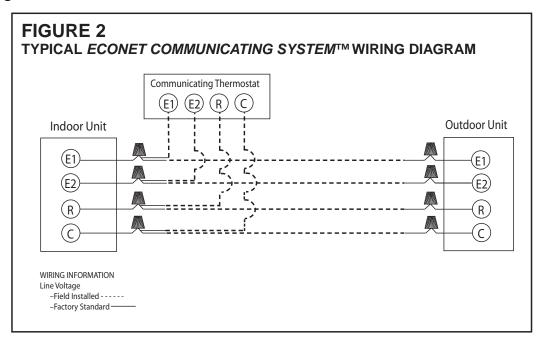




NOTE: NUMBERS IN () = mm

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**



## **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.

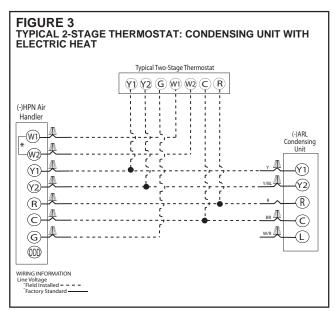
The following figures show the typical wiring diagrams with (-)HPN air handler and (-)ARL condensing unit. Cooling and heat pump airflows may need to be adjusted for homeowner comfort once the system is operational.

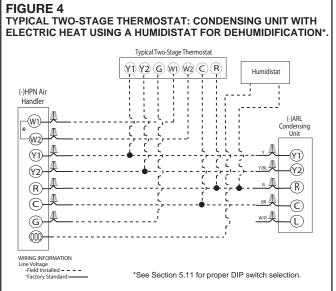
### COLOR CODE

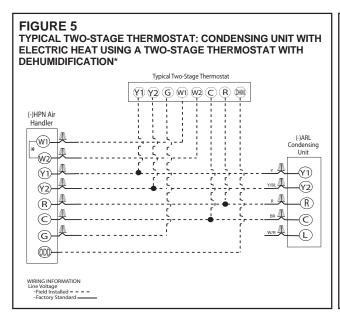
BK - BLACK G - GREEN PR - PURPLE Y - YELLOW

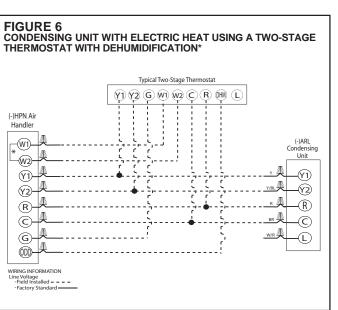
BR - BROWN GY - GRAY R - RED

BL - BLUE 0 - ORANGE W - WHITE









\*If maximum outlet temperature rise is desired, it is recommended that W1 and W2 be jumpered together.

## **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.

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							93	Liquid Line Selection Chart	Liquid Line Selection Chart	nart				
R-410A System	Liquid Line Size Connection Size	Liquid Line Size						Total Equivale	rauun (Auove or berow) muoor Total <b>Equivalent</b> Length - Feet [m	et [m]				
capacity model			25 [7.62]	25 [7.62]   50 [15.24]	75 [22.86]	75 [22.86]   100 [30.48]	125 [45.72]	150 [45.72]   175 [53.34]	175 [53.34]	200 [60.96]	225 [68.58]	250 [76.20]	275 [83.82]	300 [91.44]
							Ma	<b>Maximum</b> Vertical Separation – Feet [m]	al Separation -	- Feet [m]				
		1/4 [6.35]	25 [7.62]	25 [7.62] 45 [13.72]	20 [6.1]	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]	70 [21.34]	65 [19.81]	55 [16.76]	50 [15.24]	45 [13.72]	40 [12.19]	30 [9.14]	25 [7.62]	20 [6.1]
24	3/8" [9.53]	3/8 [9.53]	25 [7.62]	25 [7.62] 50 [15.24]	75 [22.86]	85 [25.91]	85 [25.91]	80 [24.38]	80 [24.38]	80 [24.38]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]
			25 [7.62]	25 [7.62] 50 [15.24]	75 [22.86]	90 [27.43]	90 [27.43]	90 [27.43]	90 [27.43]	90 [27.43]	85 [25.91]	85 [25.91]	85 [25.91]	85 [25.91]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	95 [28.96]	95 [28.96]	95 [28.96]	90 [27.43]	90 [27.43]	90 [27.43]	90 [27.43]	90 [27.43]	90 [27.43]
		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]	45 [13.72]	35 [10.67]	20 [6.1]	5 [1.52]	N/R	N/R	N/R	N/R	N/R	N/R
36	3/8" [9.53]	3/8 [9.53]	25 [7.62]	25 [7.62] 50 [15.24]	70 [21.34]	65 [19.81]	60 [18.29]	60 [18.29]	55 [16.76]	50 [15.24]	45 [13.72]	40 [12.19]	35 [10.67]	30 [9.14]
		7/16 [11.12]	25 [7.62]	25 [7.62] 50 [15.24]	75 [22.86]	75 [22.86]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]	70 [21.34]	65 [19.81]	65 [19.81]	60 [18.29]
		1/2 [12.71]	25 [7.62]	50 [15.24]	75 [22.86]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]	80 [24.38]	75 [22.86]	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]	50 [15.24]	25 [7.62]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	NR	N/R
48	3/8" [9.53]	[6.53]	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]	80 [24.38]	75 [22.86]	75 [22.86]	70 [21.34]	65 [19.81]	65 [19.81]	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]	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]	30 [9.14]	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
09	3/8" [9.53]	3/8 [9.53]	25 [7.62]	50 [15.24]	55 [16.76]	45 [13.72]	35 [10.67]	25 [7.62]	15 [4.57]	5 [1.52]	N/R	N/R	N/R	N/R
		7/16 [11.12]	25 [7.62]	50 [15.24]	75 [22.86]	70 [21.34]	65 [19.81]	60 [18.29]	55 [16.76]	55 [16.76]	50 [15.24]	45 [13.72]	40 [12.19]	35 [10.67]
		1/2 [12.71]	25 [7.62]	25 [7.62]   50 [15.24]	75 [22.86]	80 [24.38]	75 [22.86]	75 [22.86]	70 [21.34]	70 [21.34]	70 [21.34]	65 [19.81]	65 [19.81]	60 [18.29]
NOTES:	7										_	[ ] Designates Metric Conversions	tes Metric C	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.)

R-410A System	Vapor Line Connection Size							Vapor Line Selection Chart Capacity Multiplier Table Total Equivalent Length - Feet [m]	Vapor Line Selection Charl Capacity Multiplier Table al Equivalent Length - Feet	<b>iart</b> Ile et [m]				
capacity model	(Inch I.D.) [mm]	(INCH 0.0.)	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]
		5/8 [15.88]	0.99	1.00	0.97	0.98	0.98	96:0	96.0	0.95	0.94	0.95	0.94	0.93
		3/4 [19.05]	1.00	1.00	0.99	0.99	0.98	1.00	0.99	0.99	0.99	0.97	0.98	0.98
24	3/4" [19.06]	7/8 [22.23]	1.01	1.01	1.00	1.00	1.00	66.0	66.0	66.0	66'0	66'0	66.0	66.0
		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	MR	M.	NR	N/R
		5/8 [15.88]	66.0	96.0	26.0	0.95	0.95	0.93	0.91	0.91	06.0	0.88	0.87	98.0
		3/4 [19.05]	1.00	0.99	0.99	0.99	0.98	96.0	0.97	0.97	96.0	96.0	0.95	0.95
36	3/4" [19.06]	7/8 [22.23]	1.01	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	66.0	0.99	0.99
		1 [25.4]	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		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
		[88.11] 8/2	26.0	96.0	0.93	0.91	68'0	0.88	0.87	0.85	0.83	0.82	0.82	N/R
		3/4 [19.05]	66.0	0.98	0.98	96.0	96.0	0.95	0.94	0.94	0.93	0.92	0.92	N/R
48	3/4" [19.06]	7/8 [22.23]	1.00	1.00	0.99	0.99	96'0	0.98	0.98	0.97	26.0	96.0	96.0	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]	96.0	0.93	0.91	0.88	0.86	0.84	0.83	0.83	N/R	N/R	N/R	N/R
		3/4 [19.05]	0.99	0.97	96.0	0.95	0.94	0.93	0.92	0.91	N/R	N/R	N/R	N/R
09	3/4" [19.06]	7/8 [22.23]	1.00	0.99	0.98	0.98	0.97	0.97	96.0	0.96	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/D – Application not recommended	popular											[ ] Designa	ates Metric (	] Designates Metric Conversions

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

## Performance Data @ AHRI Standard Conditions - Cooling

High Sales Vol	ume Tested Combinatio	n (HSVTC)						
Outdoor Unit	Indoor Coil or Air Handler	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	SEER	EER	Indoor CFM [L/s]	AHRI#
UA1724AJ2	RH2T2421MEAC	24000 [7.0]	17100 [5.0]	6900 [2.0]	17.00	13.00	700 [330.4]	8231639
UA1736AJ2	RH2T3621MEAC	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8231642
UA1748AJ2	RH2T4821MEAC	47000 [13.8]	34000 [10.0]	13000 [3.8]	17.00	13.00	1400 [660.7]	8231644
UA1760AJ2	RH2T6024MEAC	56000 [16.4]	39300 [11.5]	16700 [4.9]	16.00	12.50	1550 [731.5]	8231646

Coil Only Rati	ings							
Outdoor Unit	Indoor Coil	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	SEER	EER	Indoor CFM [L/s]	AHRI#
UA1724AJ2	RCF2421MEAM+RXMD-C04	24000 [7.0]	17100 [5.0]	6900 [2.0]	15.10	12.50	800 [377.6]	8234324
UA1736AJ2	RCF3621MEAM+RXMD-C04	36000 [10.6]	26000 [7.6]	10000 [2.9]	15.10	12.50	1200 [566.3]	8231640
UA1730AJ2	RCF6021SEAM+RXMD-C04	36000 [10.6]	26000 [7.6]	10000 [2.9]	15.50	12.50	1200 [566.3]	8231641
UA1748AJ2	RCF6021SEAM+RXMD-C04	48000 [14.1]	34600 [10.1]	13400 [3.9]	15.50	12.50	1550 [731.5]	8231643
UA1760AJ2	RCF6024MEAM+RXMD-C04	55500 [16.3]	38100 [11.2]	17400 [5.1]	14.50	11.70	1600 [755.1]	8231645

U802V: Ultra	2-Stage 80% ECM Furn	ace 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]	AHRI#
UA1724AJ2	U802VA050317MSA	RCF2421MEAM	24000 [7.0]	17100 [5.0]	6900 [2.0]	17.00	13.00	725 [342.2]	8234319
UA1724AJ2	U802VA075317MSA	RCF2421MEAM	24000 [7.0]	17100 [5.0]	6900 [2.0]	17.00	13.00	675 [318.6]	8234320
UA1724AJ2	U802VA075317ZSA	RCF2421MEAM	24000 [7.0]	17100 [5.0]	6900 [2.0]	17.00	13.00	725 [342.2]	8234321
1141700410	11000\/A075047MCA	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1075 [507.3]	8232069
UA1736AJ2	U802VA075317MSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1075 [507.3]	8232078
1144700410	1100014075047704	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232070
UA1736AJ2	U802VA075317ZSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232079
1141700410	11000\/A07540470A	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1075 [507.3]	8232071
UA1736AJ2	U802VA075421ZSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1075 [507.3]	8232080
1144700410	11000744000041404	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1025 [483.7]	8232072
UA1736AJ2	U802VA100521MSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1025 [483.7]	8232081
1144700410	110001/4400504704	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	16.50	13.00	1050 [495.5]	8232073
UA1736AJ2	U802VA100521ZSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232082
UA1748AJ2	U802VA075421ZSA	RCF6021SEAM	47500 [13.9]	35400 [10.4]	12100 [3.5]	17.00	12.50	1550 [731.5]	8232087
UA1748AJ2	U802VA100521MSA	RCF6021SEAM	48000 [14.1]	35800 [10.5]	12200 [3.6]	17.00	13.00	1525 [719.7]	8232088
UA1748AJ2	U802VA100521ZSA	RCF6021SEAM	47000 [13.8]	33900 [9.9]	13100 [3.8]	17.00	13.00	1400 [660.7]	8232089
UA1760AJ2	U802VA075421MSA	RCF6024MEAM	55000 [16.1]	37300 [10.9]	17700 [5.2]	16.00	12.50	1425 [672.5]	8232096
UA1760AJ2	U802VA075421ZSA	RCF6021SEAM	54000 [15.8]	37200 [10.9]	16800 [4.9]	15.50	11.70	1600 [755.1]	8232092
1144700410	11000//44005048404	RCF6021SEAM	55000 [16.1]	39200 [11.5]	15800 [4.6]	16.00	12.00	1725 [814.1]	8232093
UA1760AJ2	U802VA100521MSA	RCF6024MEAM	55500 [16.3]	38800 [11.4]	16700 [4.9]	16.00	12.50	1575 [743.3]	8232097
1141700410	11000\/A100E0170A	RCF6021SEAM	54000 [15.8]	36900 [10.8]	17100 [5.0]	15.50	12.00	1550 [731.5]	8232094
UA1760AJ2	U802VA100521ZSA	RCF6024MEAM	55500 [16.3]	38700 [11.3]	16800 [4.9]	16.00	12.00	1550 [731.5]	8232098
UA1760AJ2	U802VA125524MSA	RCF6024MEAM	55500 [16.3]	38800 [11.4]	16700 [4.9]	16.00	12.50	1575 [743.3]	8232099
UA1760AJ2	U802VA125524ZSA	RCF6024MEAM	55500 [16.3]	38800 [11.4]	16700 [4.9]	16.00	12.00	1575 [743.3]	8232100

## [ ] Designates Metric Conversions

## Performance Data @ AHRI Standard Conditions - Cooling (con't.)

U96V: 96% A	FUE 2-stage Variable Sp	eed Multipoise Gas	Furnace Uatings						
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]	AHRI#
UA1724AJ2	U96VA0602317MSA	RCF2421MEAM	24000 [7.0]	17100 [5.0]	6900 [2.0]	17.00	13.00	775 [365.8]	8234322
UA1724AJ2	U96VA0702317MSA	RCF2421MEAM	24000 [7.0]	17100 [5.0]	6900 [2.0]	17.00	13.00	700 [330.4]	8234323
UA1736AJ2	U96VA0602317MSA	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	16.50	13.00	1050 [495.5]	8232074
UA1730AJZ	U90VAU0UZ317IVISA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232083
1141700410	1100\/\0700047\\0	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	16.50	13.00	1050 [495.5]	8232075
UA1736AJ2	U96VA0702317MSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232084
1141700410	LIOCY/ACOEOEOA/MCD	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	16.50	13.00	1075 [507.3]	8232076
UA1736AJ2	U96VA0852521MSB	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1075 [507.3]	8232085
1141700410	LIOCY/A1OOOEO1MCA	RCF3621MEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232077
UA1736AJ2	U96VA1002521MSA	RCF6021SEAM	36000 [10.6]	26000 [7.6]	10000 [2.9]	17.00	13.00	1050 [495.5]	8232086
UA1748AJ2	U96VA0852521MSB	RCF6021SEAM	47500 [13.9]	35400 [10.4]	12100 [3.5]	17.00	12.50	1550 [731.5]	8232090
UA1748AJ2	U96VA1002521MSA	RCF6021SEAM	47500 [13.9]	35400 [10.4]	12100 [3.5]	17.00	12.50	1550 [731.5]	8232091
UA1760AJ2	U96VA0852521MSB	RCF6024MEAM	55000 [16.1]	38200 [11.2]	16800 [4.9]	15.50	12.00	1550 [731.5]	8232101
1101760010	1106//410005011464	RCF6021SEAM	53000 [15.5]	34800 [10.2]	18200 [5.3]	15.50	12.00	1400 [660.7]	8232095
UA1760AJ2	U96VA1002521MSA	RCF6024MEAM	55000 [16.1]	38200 [11.2]	16800 [4.9]	15.50	12.00	1550 [731.5]	8232102
UA1760AJ2	U96VA1152524MSA	RCF6024MEAM	54500 [16.0]	36700 [10.8]	17800 [5.2]	16.00	12.50	1400 [660.7]	8232103

<sup>[ ]</sup> Designates Metric Conversions

## **GUIDE SPECIFICATIONS**

## General

## **System Description**

Outdoor-mounted, air-cooled, split-system air conditioner composite base pan unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, suction and legend 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 air conditioner 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 AIR CONDITIONER UA17

## 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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