



Endeavor® Line Achiever® Series iM Air Conditioners



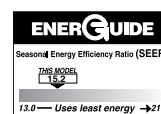
RA14AY

Cooling Efficiencies up to: 15.2 SEER2 / 12 EER2

Nominal Sizes: 1.5 to 5 Tons [5.28 to 17.6 kW]

Cooling Capacities: 17.1 to 55.5 kBTU [5.0 to 16.3 kW]

Refrigerant Type: R-454B



¹Proper 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.

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Features and Benefits

- **7mm Condenser Copper Coil:** Requires less refrigerant allowing for a smaller and lighter footprint while enhancing reliability
- **Swept Wing Fan Technology¹:** Features quieter operation and improved unit acoustics
- **PlusOne® Triple Service Access:** 15 in. wide, industry leading corner service access, two fastener, removable corner and individual louver panels — makes repairs easier and faster
- **Designing for Sustainability with Low GWP:** For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%² lower GWP than previous-generation refrigerants — with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort
- **PlusOne® Refrigerant Detection System^{TM3}:** An integrated one-box, patented design featuring the A2L sensor and mitigation board, offering easier commissioning with a single component and simplified wiring configuration, compatibility with any 24V thermostat application and system protection by automatically pausing outdoor unit operation — if excess refrigerant is detected

¹Does not apply to 1.5- and 2-ton models. ²When comparing the GWP of R-454B to R-410A refrigerant. ³Factory or field installed in the furnace coil or air handler and is applicable to the complete heating and cooling system featuring Low GWP Refrigerant (A2L).

Air Conditioners

<u>R</u>	<u>A</u>	<u>14</u>	<u>A</u>	<u>Y</u>	<u>18</u>	<u>A</u>	<u>J</u>	<u>1</u>	<u>N</u>	<u>A</u>	<u>LHP¹</u>
Brand	Product Category	SEER2	Region	Refrigerant	Capacity BTU/HR	Major Series	Voltage	Type	Controls	Minor Series	Option Code
R - Ruud	A - Air Conditioners	14 - 13.8/14.3 SEER2	A - All	Y - R-454B	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	N - Non-Communicating	A - 1st Design	LHP - w/HLPC

¹LHP pressure Switches are standard on 3 phase models.

[] Designates Metric Conversions

AVAILABLE MODELS	DESCRIPTION
RA14AY18AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 1 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY18AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 1 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY24AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY24AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY24BJ1NA	Endeavor® Line <i>Achiever</i> ® Series 2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY24BJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY30AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 2 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY30AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 2 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY36AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 3 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY36AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 3 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY36AC1NA	Endeavor® Line <i>Achiever</i> ® Series 3 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/3/60
RA14AY36AD1NA	Endeavor® Line <i>Achiever</i> ® Series 3 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-460/3/60
RA14AY42AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 3 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY42AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 3 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY42AC1NA	Endeavor® Line <i>Achiever</i> ® Series 3 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/3/60
RA14AY42AD1NA	Endeavor® Line <i>Achiever</i> ® Series 3 1/2 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-460/3/60
RA14AY48AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 4 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY48AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 4 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY48AC1NA	Endeavor® Line <i>Achiever</i> ® Series 4 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner -208/230/3/60
RA14AY48AD1NA	Endeavor® Line <i>Achiever</i> ® Series 4 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-460/3/60
RA14AY60AJ1NA	Endeavor® Line <i>Achiever</i> ® Series 5 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/1/60
RA14AY60AJ1NALHP	Endeavor® Line <i>Achiever</i> ® Series 5 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA14AY60AC1NA	Endeavor® Line <i>Achiever</i> ® Series 5 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-208/230/3/60
RA14AY60AD1NA	Endeavor® Line <i>Achiever</i> ® Series 5 ton 13.8/14.3 SEER2 Single-Stage Air Conditioner-460/3/60

Standard Equipment	
R-454B Refrigerant	2 Screw Control Box Access
Scroll Compressor	15" Access to Internal Components
Field Installed Filter Drier	Quick release louver panel design
Front Seating Service Valves	No fasteners to remove along bottom
Internal Pressure Relief Valve	Optimized Venturi Airflow
Internal Thermal Overload	Powder coated paint
Long Line capability	Rust resistant screws
Low Ambient capability with Kit	QR code
3-4-5 Expanded Valve Space	External gauge ports
Composite Basepan	Service trays

General Data

MODEL NO.	RA14AY18	RA14AY24A	RA14AY24B	RA14AY30	RA14AY36	RA14AY42	RA14AY48	RA14AY60
Nominal Tonnage	1.5	2.0	2.0	2.5	3.0	3.5	4.0	5.0
Valve Connections								
Liquid Line O.D. – in.	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Suction Line O.D. – in.	3/4	3/4	3/4	3/4	3/4	7/8	7/8	7/8
Refrigerant R-454B furnished oz. ¹	97	112	82	112	116	142	142	192
Compressor Type	Scroll							
Outdoor Coil								
Net face area – Outer Coil	10.9	13.3	13.3	13.3	13.3	19.5	19.5	27.9
Net face area – Inner Coil	—	—	—	—	12.9	18.8	18.8	27.1
Tube diameter – in.	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276
Number of rows	1	1	1	1	2	2	2	2
Fins per inch	24	24	24	24	24	24	24	24
Outdoor Fan								
Diameter – in.	20	24	24	24	24	24	24	26
Number of blades	2	3	3	3	2	3	3	3
Motor hp	1/7	1/6	1/6	1/6	1/6	1/5	1/5	1/5
CFM	1765	3146	3439	3146	2760	3431	3606	4169
RPM	1075	825	825	825	825	850	850	850
Watts	154	197	197	197	188	225	251	245
Shipping weight – lbs.	148	170	170	170	193	259	250	273
Operating weight – lbs.	141	163	163	163	186	252	243	266

Electrical Data

Line Voltage Data (Volts-Phase-Hz)	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Maximum overcurrent protection (amps) ²	15	25	20	25	30	30	50	50
Minimum circuit ampacity ³	12	17	14	17	18	20	30	31
Compressor								
Rated load amps	8.3	12.7	10	12.7	13.5	14.7	22.4	23.7
Locked rotor amps	45	67	60	67	75	109	126	157
Condenser Fan Motor								
Full load amps	0.75	0.8	0.8	0.8	0.8	1.0	1.0	1.0
Locked rotor amps	1.50	1.7	1.7	1.7	1.7	2.6	2.6	2.6
Line Voltage Data (Volts-Phase-Hz)	—	—	—	—	208/230-3-60	208/230-3-60	208/230-3-60	208/230-3-60
Maximum overcurrent protection (amps) ²	—	—	—	—	20.0	25.0	25.0	35.0
Minimum circuit ampacity ³	—	—	—	—	14.4	20.0	18.0	22.0
Compressor								
Rated load amps	—	—	—	—	9.0	12.2	12.0	16.0
Locked rotor amps	—	—	—	—	70.0	102.8	123.0	156.4
Condenser Fan Motor								
Full load amps	—	—	—	—	0.8	1.0	1.0	1.0
Locked rotor amps	—	—	—	—	1.7	2.6	2.6	2.6
Line Voltage Data (Volts-Phase-Hz)	—	—	—	—	460-3-60	460-3-60	460-3-60	460-3-60
Maximum overcurrent protection (amps) ²	—	—	—	—	20.0	15.0	15.0	15.0
Minimum circuit ampacity ³	—	—	—	—	12.0	9.0	9.0	10.0
Compressor								
Rated load amps	—	—	—	—	9.0	5.8	6.3	7.1
Locked rotor amps	—	—	—	—	70.0	50.0	60.0	69.0
Condenser Fan Motor								
Full load amps	—	—	—	—	0.50	0.80	0.80	0.80
Locked rotor amps	—	—	—	—	0.90	1.40	1.40	1.40

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

²HACR type circuit breaker or fuse.

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

Accessories

MODEL NO.		RA14AY18	RA14AY24	RA14AY30	RA14AY36	RA14AY42	RA14AY48	RA14AY60
Compressor crankcase heater (with temperature thermostat)		44-101884-08	44-101884-08	44-101884-08	208/230V: 44-101884-08 460V: 44-101884-09	208/230V: 44-103663-16 ¹ 460V: 44-101884-06 ¹	208/230V: 44-103663-16 460V: 44-101884-06	208/230V: 44-103663-16 ² 460V: 44-101884-06 ²
Compressor crankcase heater (without temperature thermostat)		44-17402-44	44-17402-44	44-17402-44	208/230V: 44-17402-44 460V: 442040	208/230V: 44-17402-45 460V: 44-17402-46	208/230V: 44-17402-45 460V: 44-17402-46	208/230V: 44-17402-45 460V: 44-17402-46
Low ambient control		RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08
Compressor sound cover		68-23427-26	68-23427-26	68-23427-26	68-23427-26	68-23427-25	68-23427-25	68-23427-25
Compressor hard start kit		SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1
Compressor time delay		RXMD-B01	RXMD-B02	RXMD-B03	RXMD-B04	RXMD-B01	RXMD-B01	RXMD-B01
Low pressure control		RXAC-A10	RXAC-A10	RXAC-A10	RXAC-A10	RXAC-A10	RXAC-A10	RXAC-A10
High pressure control		RXAB-A08	RXAB-A08	RXAB-A08	RXAB-A08	RXAB-A08	RXAB-A08	RXAB-A08
Liquid Line Solenoid (24 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC
	Solenoid Coil	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V
Liquid Line Solenoid (120/240 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC
	Solenoid Coil	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V

¹RA14AY42 models with LG come with 44-101884-08 factory-installed. ²RA14AY60 models come with 44-103663-16 factory-installed.

Maximum System Charge Values RA14AY

MAXIMUM SYSTEM CHARGE VALUES – RA14AY		
MODEL NO.	CHARGE LIMIT WITHOUT CRANKCASE	
	COPELAND	LG
RA14AY18	9.6 lbs [4.4kg]	8.4 lbs [3.8 kg]
RA14AY24		
RA14AY30		
RA14AY36		
RA14AY42 ¹	12 lbs [5.4kg]	11.9 lbs [5.4 kg]
RA14AY48		
RA14AY60 ¹		

¹RA14AY42 models with LG compressors and RA14AY60 ton models have factory-installed crankcase heaters.

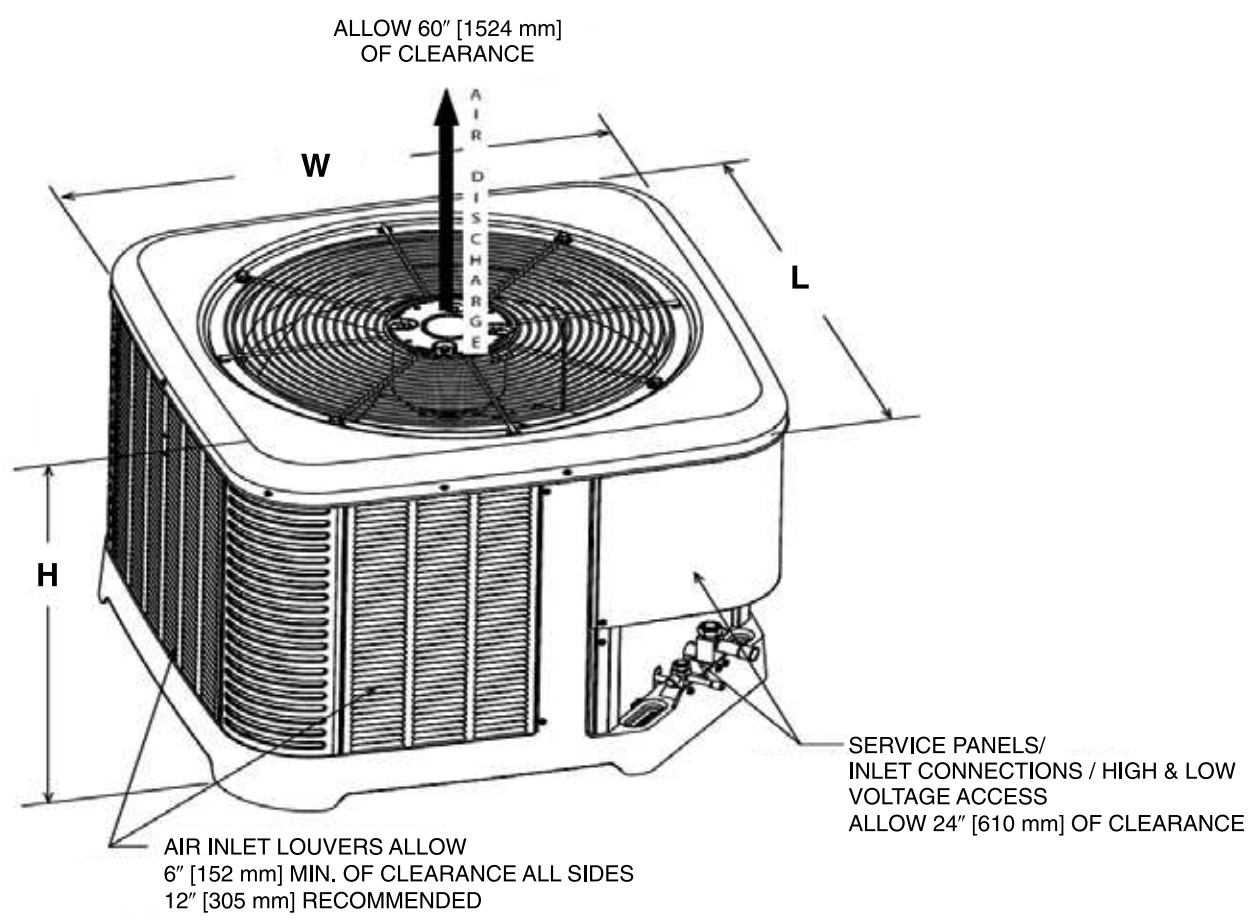
Weighted Sound Power Level (dBA)

UNIT SIZE– VOLTAGE, SERIES	STANDARD RATING (DBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
RA14AY18	70	47	55	61	60	58	53	47
RA14AY24	71	47	62	63	59	57	56	47
RA14AY30	71	47	62	63	59	57	56	47
RA14AY36	71	46	58	64	59	57	52	48
RA14AY42	73	47	55	64	62	59	55	48
RA14AY48	74	45	56	64	63	61	57	51
RA14AY60	76	43	60	67	66	63	59	53

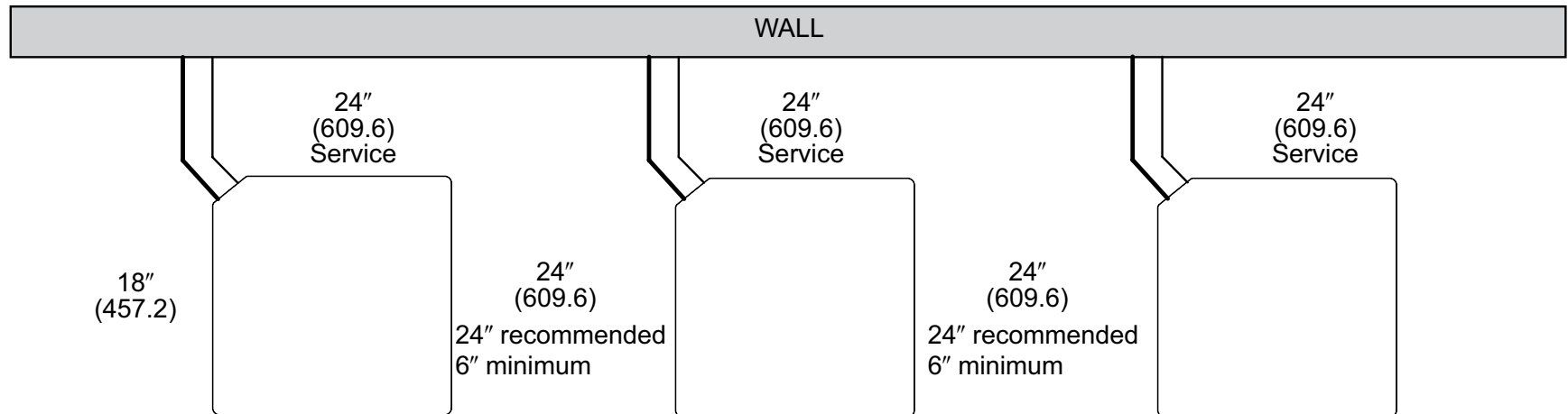
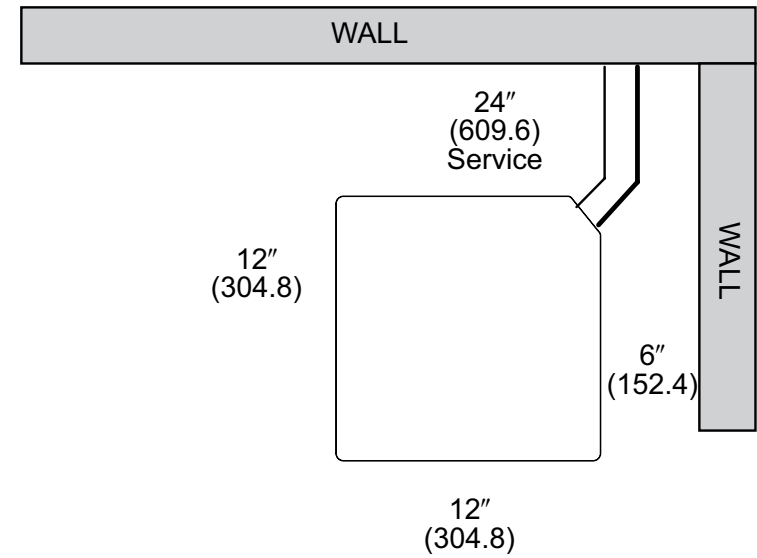
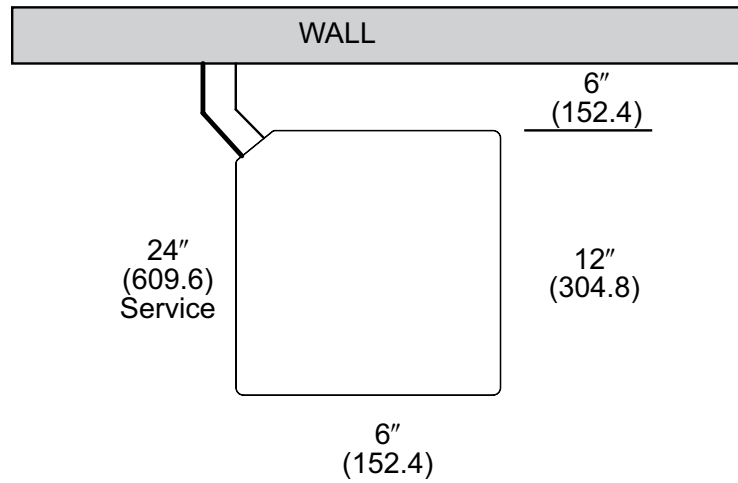
NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI)

Unit Dimensions

MODEL NO.	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
RA14AY18	25.00	635	29.75	756	29.75	756	26.50	673	32.38	822	32.38	822
RA14AY24	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
RA14AY30	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
RA14AY36	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
RA14AY42	35.00	889	33.75	857	33.75	857	36.50	927	36.38	924	36.38	924
RA14AY48	35.00	889	33.75	857	33.75	857	36.50	927	36.38	924	36.38	924
RA14AY60	45.00	1143	35.75	908	35.75	908	46.50	1181	38.38	975	38.38	975



CLEARANCES



NOTE: NUMBERS IN () = mm

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

Refrigerant Line Size Information

14.3 SEER2 AC R-454B												
UNIT SIZE	ALLOWABLE LIQUID LINE SIZE	ALLOWABLE SUCTION LINE SIZE	EQUIVALENT LENGTH (FEET)									
			0-25	26-50	51-75	76-100	101-125	126-150	151-175	176-200	201-225	226-250
			MAXIMUM VERTICAL RISE (OUTDOOR UNIT BELOW INDOOR UNIT) */ CAPACITY MULTIPLIER									
1.5 Ton	1/4"	5/8"	25/1	50/0.99	61/0.99	41/0.98	21/0.98	1/0.98	0/0.98	0/0.98	0/0.97	0/0.97
	5/16	5/8"	25/1	50/0.99	75/0.99	100/0.98	98/0.98	93/0.98	87/0.98	82/0.98	78/0.97	75/0.97
	3/8"	5/8"	25/1	50/0.99	75/0.99	100/0.98	117/0.98	115/0.98	114/0.98	112/0.98	111/0.97	110/0.97
	1/4"	3/4"	25/1	50/1	61/1	41/0.99	21/0.99	1/0.99	0/0.99	0/0.99	0/0.99	0/0.98
	5/16	3/4"	25/1	50/1	75/1	100/0.99	98/0.99	93/0.99	87/0.99	82/0.99	78/0.99	75/0.98
	3/8"	3/4"	25/1	50/1	75/1	100/0.99	117/0.99	115/0.99	114/0.99	112/0.99	111/0.99	110/0.98
2 Ton	1/4"	5/8"	25/1	50/0.99	25/0.98	0/0.98	0/0.98	0/0.97	0/0.96	0/0.97	0/0.96	0/0.95
	5/16	5/8"	25/1	50/0.99	75/0.98	88/0.98	79/0.98	70/0.97	62/0.96	53/0.97	46/0.96	40/0.95
	3/8"	5/8"	25/1	50/0.99	75/0.98	100/0.98	109/0.98	106/0.97	103/0.96	100/0.97	97/0.96	94/0.95
	1/4"	3/4"	25/1	50/1	25/0.99	0/0.99	0/0.99	0/0.98	0/0.98	0/0.99	0/0.99	0/0.98
	5/16	3/4"	25/1	50/1	75/0.99	88/0.99	79/0.99	70/0.98	62/0.98	53/0.99	46/0.99	40/0.98
	3/8"	3/4"	25/1	50/1	75/0.99	100/0.99	109/0.99	106/0.98	103/0.98	100/0.99	97/0.99	94/0.98
2.5 Ton	5/16	5/8"	25/0.99	50/0.98	75/0.98	69/0.97	56/0.98	43/0.96	30/0.94	17/0.93	6/0.92	0/0.93
	3/8"	5/8"	25/0.99	50/0.98	75/0.98	100/0.97	101/0.98	96/0.96	92/0.94	87/0.93	83/0.92	78/0.93
	5/16	3/4"	25/1	50/0.99	75/0.99	69/0.98	56/0.98	43/0.99	30/0.98	17/0.98	6/0.97	0/0.97
	3/8"	3/4"	25/1	50/0.99	75/0.99	100/0.98	101/0.98	96/0.99	92/0.98	87/0.98	83/0.97	78/0.97
3 Ton	5/16	5/8"	25/0.99	50/0.98	65/0.97	47/0.97	28/0.94	11/0.93	0/0.92	0/0.91	0/0.9	0/0.9
	3/8"	5/8"	25/0.99	50/0.98	75/0.97	97/0.97	91/0.94	85/0.93	78/0.92	72/0.91	66/0.9	60/0.9
	5/16	3/4"	25/1	50/0.99	65/0.98	47/0.99	28/0.98	11/0.98	0/0.97	0/0.96	0/0.96	0/0.98
	3/8"	3/4"	25/1	50/0.99	75/0.98	97/0.99	91/0.98	85/0.98	78/0.97	72/0.96	66/0.96	60/0.98
	1/2"	3/4"	25/1	50/0.99	75/0.98	100/0.99	118/0.98	117/0.98	115/0.97	115/0.96	114/0.96	112/0.98
	5/16	7/8"	25/1	50/1	65/0.99	47/0.99	28/0.99	11/0.98	0/0.98	0/0.99	0/0.99	0/0.99
	3/8"	7/8"	25/1	50/1	75/0.99	97/0.99	91/0.99	85/0.98	78/0.98	72/0.99	66/0.99	60/0.99
	1/2"	7/8"	25/1	50/1	75/0.99	100/0.99	118/0.99	117/0.98	115/0.98	115/0.99	114/0.99	112/0.99
3.5 Ton	3/8"	3/4"	25/0.99	50/0.99	75/0.99	88/0.98	80/0.97	72/0.96	64/0.98	55/0.96	47/0.95	39/0.95
	1/2"	3/4"	25/0.99	50/0.99	75/0.99	100/0.98	116/0.97	114/0.96	112/0.98	111/0.96	109/0.95	108/0.95
	3/8"	7/8"	25/1	50/0.99	75/0.99	88/0.99	80/0.98	72/0.99	64/0.99	55/0.98	47/0.98	39/0.98
	1/2"	7/8"	25/1	50/0.99	75/0.99	100/0.99	116/0.98	114/0.99	112/0.99	111/0.98	109/0.98	108/0.98
4 Ton	3/8"	3/4"	25/0.99	50/0.98	75/0.98	78/0.97	68/0.96	57/0.97	46/0.95	36/0.94	25/0.93	15/0.93
	1/2"	3/4"	25/0.99	50/0.98	75/0.98	100/0.97	113/0.96	111/0.97	109/0.95	107/0.94	105/0.93	104/0.93
	3/8"	7/8"	25/1	50/0.99	75/0.99	78/0.98	68/0.99	57/0.98	46/0.98	36/0.98	25/0.97	15/0.97
	1/2"	7/8"	25/1	50/0.99	75/0.99	100/0.98	113/0.99	111/0.98	109/0.98	107/0.98	105/0.97	104/0.97
5 Ton	3/8"	3/4"	25/0.99	50/0.98	70/0.97	54/0.97	38/0.94	22/0.93	6/0.92	0/0.9	0/0.89	0/0.89
	1/2"	3/4"	25/0.99	50/0.98	75/0.97	100/0.97	107/0.94	104/0.93	101/0.92	97/0.9	95/0.89	93/0.89
	3/8"	7/8"	25/0.99	50/0.99	70/0.98	54/0.98	38/0.98	22/0.97	6/0.96	0/0.98	0/0.97	0/0.96
	1/2"	7/8"	25/0.99	50/0.99	75/0.98	100/0.98	107/0.98	104/0.97	101/0.96	97/0.98	95/0.97	93/0.96
	3/8"	1-1/8"	25/1	50/1	70/1	54/0.99	38/0.99	22/0.99	6/0.99	0/0.99	0/0.99	0/0.98
	1/2"	1-1/8"	25/1	50/1	75/1	100/0.99	107/0.99	104/0.99	101/0.99	97/0.99	95/0.99	93/0.98

NOTES:

- 1) Maximum Equivalent Line Length may not exceed 250'.
- 2) Maximum Actual Line Length may not exceed 200'.
- 3) Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.
- 4) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

Refrigerant Line Size Information

14.3 SEER2 AC R-454B												
UNIT SIZE	ALLOWABLE LIQUID LINE SIZE	ALLOWABLE SUCTION LINE SIZE	EQUIVALENT LENGTH (METERS)									
			0-7.6	7.9-15.2	15.5-22.9	23.2-30.5	30.8-38.1	38.4-45.7	46-53.3	53.6-61	61.3-68.6	68.9-76.2
			MAXIMUM VERTICAL RISE (OUTDOOR UNIT BELOW INDOOR UNIT) */ CAPACITY MULTIPLIER									
1.5 Ton	1/4"	5/8"	8/1	15/0.99	19/0.99	12/0.98	6/0.98	0/0.98	0/0.98	0/0.98	0/0.97	0/0.97
	5/16	5/8"	8/1	15/0.99	23/0.99	30/0.98	30/0.98	28/0.98	27/0.98	25/0.98	24/0.97	23/0.97
	3/8"	5/8"	8/1	15/0.99	23/0.99	30/0.98	36/0.98	35/0.98	35/0.98	34/0.98	34/0.97	34/0.97
	1/4"	3/4"	8/1	15/1	19/1	12/0.99	6/0.99	0/0.99	0/0.99	0/0.99	0/0.99	0/0.98
	5/16	3/4"	8/1	15/1	23/1	30/0.99	30/0.99	28/0.99	27/0.99	25/0.99	24/0.99	23/0.98
	3/8"	3/4"	8/1	15/1	23/1	30/0.99	36/0.99	35/0.99	35/0.99	34/0.99	34/0.99	34/0.98
2 Ton	1/4"	5/8"	8/1	15/0.99	8/0.98	0/0.98	0/0.98	0/0.97	0/0.96	0/0.97	0/0.96	0/0.95
	5/16	5/8"	8/1	15/0.99	23/0.98	27/0.98	24/0.98	21/0.97	19/0.96	16/0.97	14/0.96	12/0.95
	3/8"	5/8"	8/1	15/0.99	23/0.98	30/0.98	33/0.98	32/0.97	31/0.96	30/0.97	30/0.96	29/0.95
	1/4"	3/4"	8/1	15/1	8/0.99	0/0.99	0/0.99	0/0.98	0/0.98	0/0.99	0/0.99	0/0.98
	5/16	3/4"	8/1	15/1	23/0.99	27/0.99	24/0.99	21/0.98	19/0.98	16/0.99	14/0.99	12/0.98
	3/8"	3/4"	8/1	15/1	23/0.99	30/0.99	33/0.99	32/0.98	31/0.98	30/0.99	30/0.99	29/0.98
2.5 Ton	5/16	5/8"	8/0.99	15/0.98	23/0.98	21/0.97	17/0.98	13/0.96	9/0.94	5/0.93	2/0.92	0/0.93
	3/8"	5/8"	8/0.99	15/0.98	23/0.98	30/0.97	31/0.98	29/0.96	28/0.94	27/0.93	25/0.92	24/0.93
	5/16	3/4"	8/1	15/0.99	23/0.99	21/0.98	17/0.98	13/0.99	9/0.98	5/0.98	2/0.97	0/0.97
	3/8"	3/4"	8/1	15/0.99	23/0.99	30/0.98	31/0.98	29/0.99	28/0.98	27/0.98	25/0.97	24/0.97
3 Ton	5/16	5/8"	8/0.99	15/0.98	20/0.97	14/0.97	9/0.94	3/0.93	0/0.92	0/0.91	0/0.9	0/0.9
	3/8"	5/8"	8/0.99	15/0.98	23/0.97	30/0.97	28/0.94	26/0.93	24/0.92	22/0.91	20/0.9	18/0.9
	5/16	3/4"	8/1	15/0.99	20/0.98	14/0.99	9/0.98	3/0.98	0/0.97	0/0.96	0/0.96	0/0.98
	3/8"	3/4"	8/1	15/0.99	23/0.98	30/0.99	28/0.98	26/0.98	24/0.97	22/0.96	20/0.96	18/0.98
	1/2"	3/4"	8/1	15/0.99	23/0.98	30/0.99	36/0.98	36/0.98	35/0.97	35/0.96	35/0.96	34/0.98
	5/16	7/8"	8/1	15/1	20/0.99	14/0.99	9/0.99	3/0.98	0/0.98	0/0.99	0/0.99	0/0.99
	3/8"	7/8"	8/1	15/1	23/0.99	30/0.99	28/0.99	26/0.98	24/0.98	22/0.99	20/0.99	18/0.99
	1/2"	7/8"	8/1	15/1	23/0.99	30/0.99	36/0.99	36/0.98	35/0.98	35/0.99	35/0.99	34/0.99
3.5 Ton	3/8"	3/4"	8/0.99	15/0.99	23/0.99	27/0.98	24/0.97	22/0.96	20/0.98	17/0.96	14/0.95	12/0.95
	1/2"	3/4"	8/0.99	15/0.99	23/0.99	30/0.98	35/0.97	35/0.96	34/0.98	34/0.96	33/0.95	33/0.95
	3/8"	7/8"	8/1	15/0.99	23/0.99	27/0.99	24/0.98	22/0.99	20/0.99	17/0.98	14/0.98	12/0.98
	1/2"	7/8"	8/1	15/0.99	23/0.99	30/0.99	35/0.98	35/0.99	34/0.99	34/0.98	33/0.98	33/0.98
4 Ton	3/8"	3/4"	8/0.99	15/0.98	23/0.98	24/0.97	21/0.96	17/0.97	14/0.95	11/0.94	8/0.93	5/0.93
	1/2"	3/4"	8/0.99	15/0.98	23/0.98	30/0.97	34/0.96	34/0.97	33/0.95	33/0.94	32/0.93	32/0.93
	3/8"	7/8"	8/1	15/0.99	23/0.99	24/0.98	21/0.99	17/0.98	14/0.98	11/0.98	8/0.97	5/0.97
	1/2"	7/8"	8/1	15/0.99	23/0.99	30/0.98	34/0.99	34/0.98	33/0.98	33/0.98	32/0.97	32/0.97
5 Ton	3/8"	3/4"	8/0.99	15/0.98	21/0.97	16/0.97	12/0.94	7/0.93	2/0.92	0/0.9	0/0.89	0/0.89
	1/2"	3/4"	8/0.99	15/0.98	23/0.97	30/0.97	33/0.94	32/0.93	31/0.92	30/0.9	29/0.89	28/0.89
	3/8"	7/8"	8/0.99	15/0.99	21/0.98	16/0.98	12/0.98	7/0.97	2/0.96	0/0.98	0/0.97	0/0.96
	1/2"	7/8"	8/0.99	15/0.99	23/0.98	30/0.98	33/0.98	32/0.97	31/0.96	30/0.98	29/0.97	28/0.96
	3/8"	1-1/8"	8/1	15/1	21/1	16/0.99	12/0.99	7/0.99	2/0.99	0/0.99	0/0.99	0/0.98
	1/2"	1-1/8"	8/1	15/1	23/1	30/0.99	33/0.99	32/0.99	31/0.99	30/0.99	29/0.99	28/0.98

NOTES:

- 1) Maximum Equivalent Line Length may not exceed 76 meters.
- 2) Maximum Actual Line Length may not exceed 61 meters.
- 3) Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.
- 4) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

Performance Data @ AHRI Standard Conditions – Cooling

DESIGNATED TESTED COMBINATION (DTC)							
OUTDOOR UNIT	INDOOR COIL	TOTAL CAPACITY BTU/H [KW]	NET SENSIBLE BTU/H [KW]	NET LATENT BTU/H [KW]	SEER2	EER2	INDOOR CFM [L/s]
RA14AY18AJ1	RCFY2421HTANM	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	11.7	600 [283.2]
RA14AY24AJ1	RCFY3621HTAAM	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	11.7	735 [346.9]
RA14AY24BJ1	RCFY2421HTANM	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	11.7	750 [354.0]
RA14AY30AJ1	RCFY3621HTAAM	28,600 [8.4]	21,800 [6.4]	6,800 [2.0]	14.3	11.7	910 [429.5]
RA14AY36AJ1	RCFY3621HTAAM	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	14.3	11.7	1,030 [486.1]
RA14AY42AJ1	RCFY4221HTAAM	40,000 [11.7]	29,500 [8.6]	9,000 [2.6]	14.3	11.7	1,300 [613.5]
RA14AY48AJ1	RCFY4821HTAAM	45,500 [13.3]	34,500 [10.1]	10,500 [3.1]	13.8	11.7	1,425 [672.5]
RA14AY60AJ1	RCFY6024HTANM	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.8	11.7	1,575 [743.3]
RA14AY36AC1	RCFY3621HTAAM	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	14.3	11.7	1,030 [486.1]
RA14AY42AC1	RCFY4221HTAAM	40,000 [11.7]	29,500 [8.6]	9,000 [2.6]	14.3	11.7	1,300 [613.5]
RA14AY48AC1	RCFY4821HTAAM	45,500 [13.3]	34,500 [10.1]	10,500 [3.1]	13.8	11.7	1,425 [672.5]
RA14AY60AC1	RCFY6024HTANM	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.8	11.7	1,575 [743.3]
RA14AY36AD1	RCFY3621HTAAM	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	14.3	11.7	1,030 [486.1]
RA14AY42AD1	RCFY4221HTAAM	40,000 [11.7]	29,500 [8.6]	9,000 [2.6]	14.3	11.7	1,300 [613.5]
RA14AY48AD1	RCFY4821HTAAM	45,500 [13.3]	34,500 [10.1]	10,500 [3.1]	13.8	11.7	1,425 [672.5]
RA14AY60AD1	RCFY6024HTANM	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.8	11.7	1,575 [743.3]

NOTE: This data includes DTC (Designated Test Combination) ratings and is for reference purposes only. A full listing of official ratings and system match-ups, along with downloadable certificates, can be accessed from the AHRI website: www.ahridirectory.org.

[] Designates Metric Conversions



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 Parts
(Registration Required)..... Ten (10) Years

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

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

5600 Old Greenwood Road
Fort Smith, Arkansas 72908 • www.ruud.com

125 Edgeware Road, Unit 1
Brampton, Ontario • L6Y 0P5 • ruud-canada.ca