



## Vantix™ Line iM Air Conditioners



### SA14AY

Cooling Efficiencies up to: 15.2 SEER2 / 12 EER2

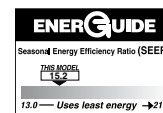
Nominal Sizes: 1.5 to 5 Tons [5.28 to 17.6 kW]

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

Refrigerant Type: R-454B



9001:2015



<sup>1</sup>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](http://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 Technology<sup>1</sup>:** Features quieter operation and improved unit acoustics
- **Triple Service Access:** 15 in. wide, industry leading access 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%<sup>2</sup> 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
- **Refrigerant Detection System<sup>TM3</sup>:** 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

<sup>1</sup>Does not apply to 1.5- and 2-ton models. <sup>2</sup>When comparing the GWP of R-454B to R-410A refrigerant. <sup>3</sup>Factory 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>S</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>LHP</u> <sup>1</sup>
Brand	Product Category	SEER2	Region	Refrigerant	Capacity BTU/HR	Major Series	Voltage	Type	Controls	Minor Series	Option Code
S - Sure Comfort	A - Air Conditioners	14 - 13.8/14.3 SEER2	A - All	Y - R-454B	18 - 18,000 [5.28 kW]	A - 1st Design	J - 1ph, 208/230/60	1 - Single Stage	N - Non-Communicating	A - 1st Design	LHP - w/HLPC
					24 - 24,000 [7.03 kW]	B - 2nd Design	C - 3ph, 208/230/60				
					30 - 30,000 [8.79 kW]		D - 3ph, 460/60				
					36 - 36,000 [10.55 kW]						
					42 - 42,000 [12.31 kW]						
					48 - 48,000 [14.07 kW]						
					60 - 60,000 [17.58 kW]						

<sup>1</sup>LHP Pressure switches are standard on 3 Phase models

[ ] Designates Metric Conversions

AVAILABLE MODELS	
SA14AY18AJ1NA	SA14AY42AJ1NA
SA14AY18AJ1NALHP	SA14AY42AJ1NALHP
SA14AY18AJ1NAA40	SA14AY42AJ1NAA40
SA14AY18AJ1NAA41	SA14AY42AJ1NAA41
SA14AY24AJ1NA	SA14AY42AC1NA
SA14AY24AJ1NALHP	SA14AY42AC1NAA40
SA14AY24AJ1NAA40	SA14AY42AD1NA
SA14AY24AJ1NAA41	SA14AY42AD1NAA40
SA14AY24BJ1NA	SA14AY48AJ1NA
SA14AY24BJ1NALHP	SA14AY481J1NALHP
SA14AY24BJ1NAA40	SA14AY48AJ1NAA40
SA14AY24BJ1NAA41	SA14AY48AJ1NAA41
SA14AY30AJ1NA	SA14AY48AC1NA
SA14AY30AJ1NALHP	SA14AY48AC1NAA40
SA14AY30AJ1NAA40	SA14AY48AD1NA
SA14NY30AJ1NAA41	SA14AY48AD1NAA40
SA14AY36AJ1NA	SA14AY60AJ1NA
SA14AY36AJ1NALHP	SA14AY60AJ1NALHP
SA14AY36AJ1NAA40	SA14AY60AJ1NAA40
SA14AY36AJ1NAA41	SA14AY60AJ1NAA41
SA14AY36AC1NA	SA14AY60AC1NA
SA14AY36AC1NAA40	SA14AY60AC1NAA40
SA14AY36AD1NA	SA14AY60AD1NA
SA14AY36AD1NAA40	SA14AY60AD1NAA40



A40/A41 Vertical Louver option

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

<b>General Data</b>								
MODEL NO.	SA14AY18	SA14AY24A	SA14AY24B	SA14AY30	SA14AY36	SA14AY42	SA14AY48	SA14AY60
Nominal Tonnage	1.5	2.0	2.0	2.5	3.0	3.5	4.0	5.0
<b>Valve Connections</b>								
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. <sup>1</sup>	97	112	82	112	116	142	142	192
Compressor Type	Scroll							
<b>Outdoor Coil</b>								
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
<b>Outdoor Fan</b>								
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
<b>Electrical Data</b>								
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) <sup>2</sup>	15	25	20	25	30	30	50	50
Minimum circuit ampacity <sup>3</sup>	12	17	14	17	18	20	30	31
<b>Compressor</b>								
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
<b>Condenser Fan Motor</b>								
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) <sup>2</sup>	—	—	—	—	20.0	25.0	25.0	35.0
Minimum circuit ampacity <sup>3</sup>	—	—	—	—	14.4	20.0	18.0	22.0
<b>Compressor</b>								
Rated load amps	—	—	—	—	9.0	12.2	12.0	16.0
Locked rotor amps	—	—	—	—	70.0	102.8	123.0	156.4
<b>Condenser Fan Motor</b>								
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) <sup>2</sup>	—	—	—	—	20.0	15.0	15.0	15.0
Minimum circuit ampacity <sup>3</sup>	—	—	—	—	12.0	9.0	9.0	10.0
<b>Compressor</b>								
Rated load amps	—	—	—	—	9.0	5.8	6.3	7.1
Locked rotor amps	—	—	—	—	70.0	50.0	60.0	69.0
<b>Condenser Fan Motor</b>								
Full load amps	—	—	—	—	0.50	0.80	0.80	0.80
Locked rotor amps	—	—	—	—	0.90	1.40	1.40	1.40

<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 or fuse.

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

## Accessories

MODEL NO.		SA14AY18	SA14AY24	SA14AY30	SA14AY36	SA14AY42	SA14AY48	SA14AY60
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 <sup>1</sup> 460V: 44-101884-06 <sup>1</sup>	208/230V: 44-103663-16 460V: 44-101884-06	208/230V: 44-103663-16 <sup>2</sup> 460V: 44-101884-06 <sup>2</sup>
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

<sup>1</sup>SA14AY42 models with LG come with 44-101884-08 factory-installed.

<sup>2</sup>SA14AY60 models come with 44-103663-16 factory-installed.

## Maximum System Charge Values SA14AY

MAXIMUM SYSTEM CHARGE VALUES – SA14AY		
MODEL NO.	CHARGE LIMIT WITHOUT CRANKCASE	
	COPELAND	LG
SA14AY18	9.6 lbs [4.4kg]	8.4 lbs [3.8 kg]
SA14AY24		
SA14AY30		
SA14AY36		
SA14AY42 <sup>1</sup>	12 lbs [5.4kg]	11.9 lbs [5.4 kg]
SA14AY48		
SA14AY60 <sup>1</sup>		

<sup>1</sup>SA14AY42 models with LG compressors and SA14AY60 ton models have factory-installed crankcase heaters.

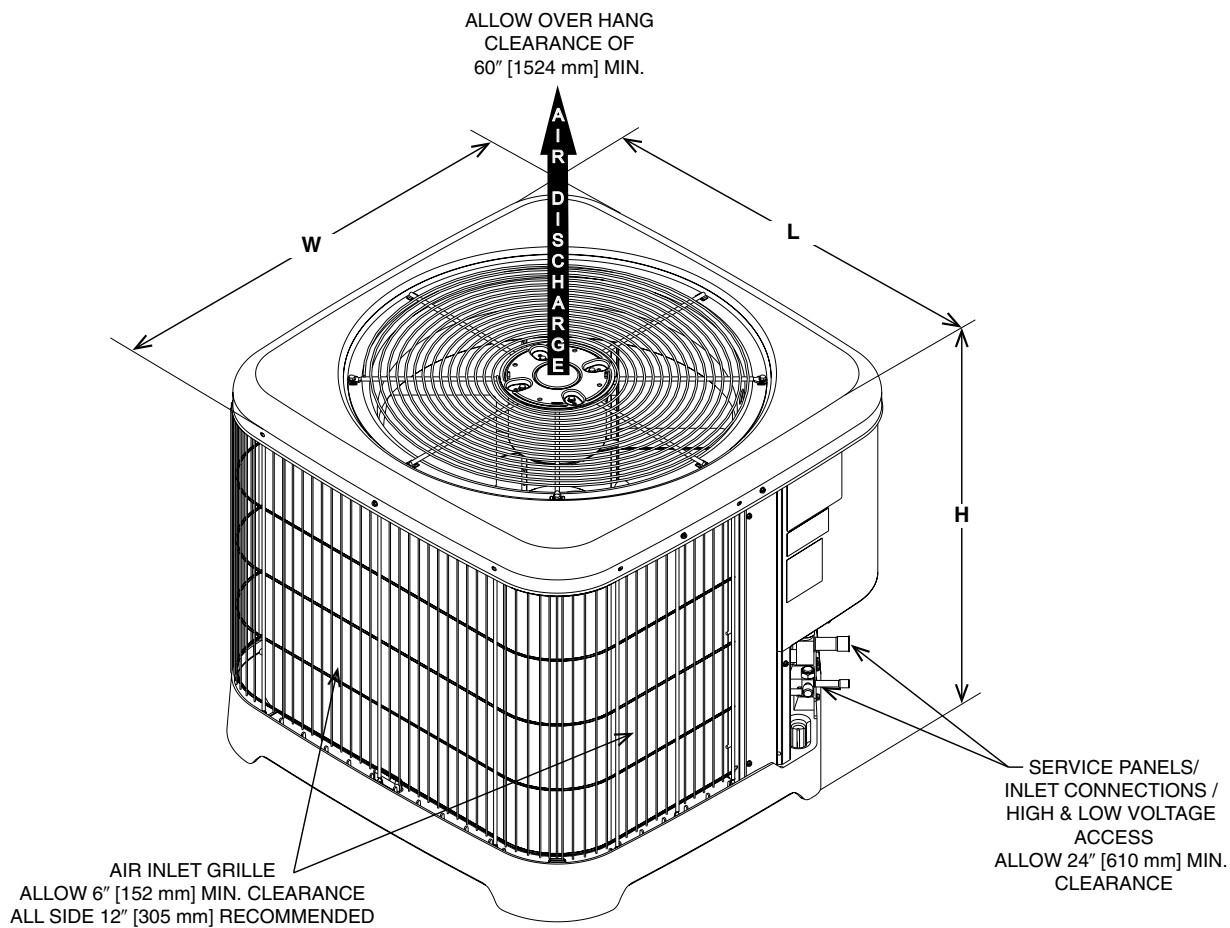
## Weighted Sound Power Level (dBA)

UNIT SIZE– VOLTAGE, SERIES	STANDARD RATING (DBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
SA14AY18	70	47	55	61	60	58	53	47
SA14AY24	71	47	62	63	59	57	56	47
SA14AY30	71	47	62	63	59	57	56	47
SA14AY36	71	46	58	64	59	57	52	48
SA14AY42	73	47	55	64	62	59	55	48
SA14AY48	74	45	56	64	63	61	57	51
SA14AY60	76	43	60	67	66	63	59	53

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

## Unit Dimensions

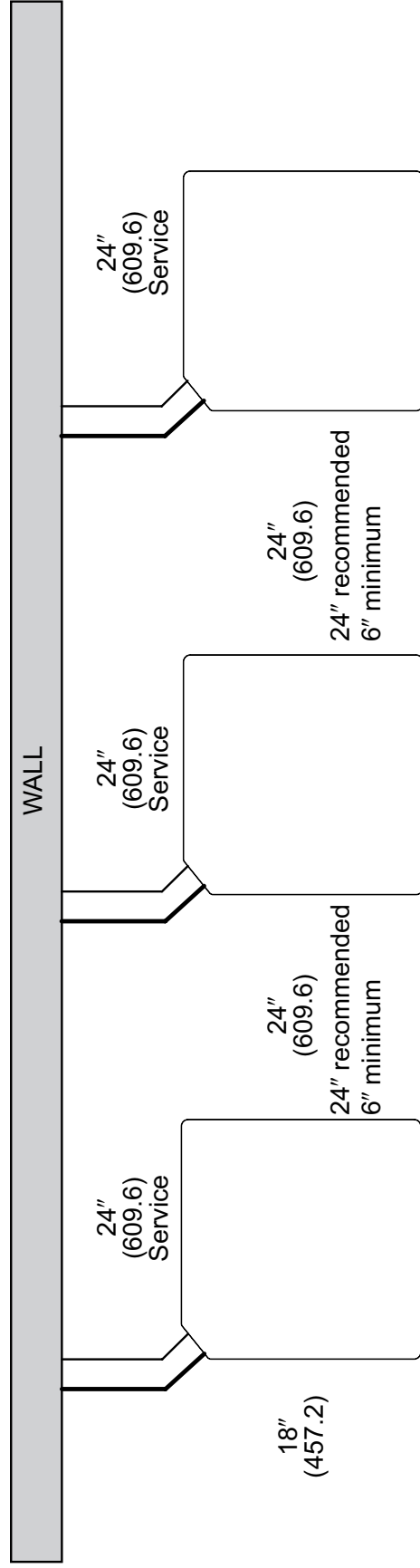
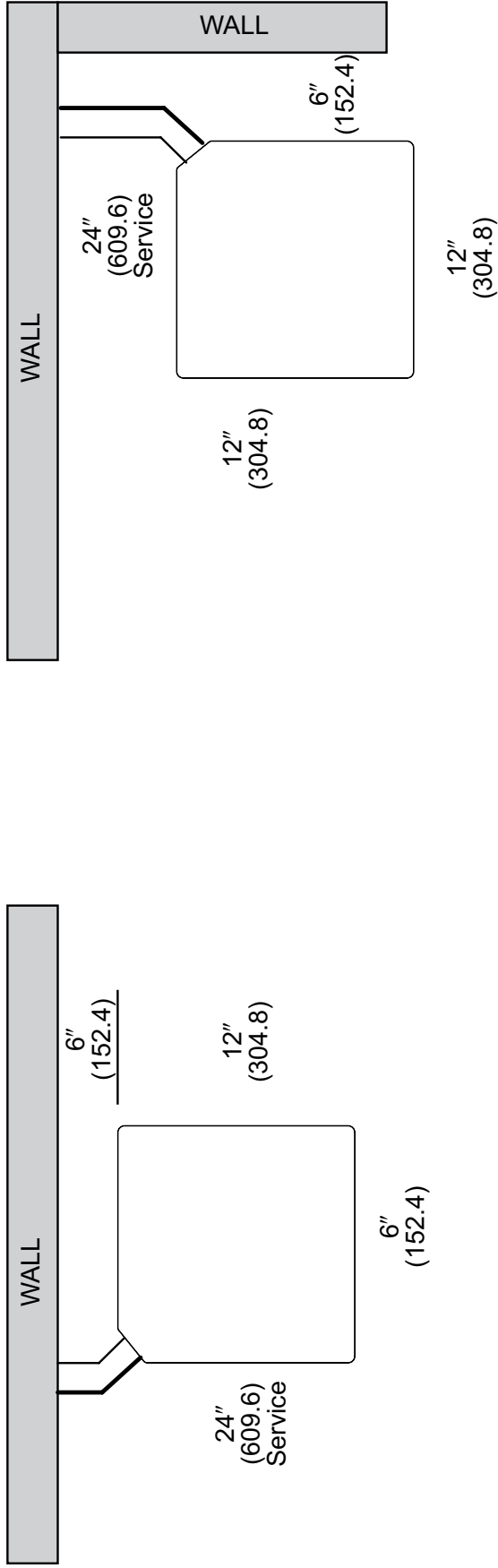
MODEL NO.	OPERATING						SHIPPING					
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
SA14AY18	25.00	635	29.75	756	29.75	756	26.50	673	32.38	822	32.38	822
SA14AY24	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
SA14AY30	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
SA14AY36	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
SA14AY42	35.00	889	33.75	857	33.75	857	36.50	927	36.38	924	36.38	924
SA14AY48	35.00	889	33.75	857	33.75	857	36.50	927	36.38	924	36.38	924
SA14AY60	45.00	1143	35.75	908	35.75	908	46.50	1181	38.38	975	38.38	975



[ ] Designates Metric Conversions

ST-A1226-24-00

# 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]
SA14AY18AJ1	TCFY2421HTANM	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	11.7	600 [283.2]
SA14AY24AJ1	TCFY2421HTANM	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	11.7	735 [346.9]
SA14AY24BJ1	TCFY2421HTANM	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	11.7	750 [354.0]
SA14AY30AJ1	TCFY3621HTAAM	28,600 [8.4]	21,800 [6.4]	6,800 [2.0]	14.3	11.7	910 [429.5]
SA14AY36AJ1	TCFY3621HTAAM	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	14.3	11.7	1,030 [486.1]
SA14AY42AJ1	TCFY4221HTAAM	40,000 [11.7]	29,500 [8.6]	9,000 [2.6]	14.3	11.7	1,300 [613.5]
SA14AY48AJ1	TCFY4821HTAAM	45,500 [13.3]	34,500 [10.1]	10,500 [3.1]	13.8	11.7	1,425 [672.5]
SA14AY60AJ1	TCFY6024HTANM	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.8	11.7	1,575 [743.3]
SA14AY36AC1	TCFY3621HTAAM	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	14.3	11.7	1,030 [486.1]
SA14AY42AC1	TCFY4221HTAAM	40,000 [11.7]	29,500 [8.6]	9,000 [2.6]	14.3	11.7	1,300 [613.5]
SA14AY48AC1	TCFY4821HTAAM	45,500 [13.3]	34,500 [10.1]	10,500 [3.1]	13.8	11.7	1,425 [672.5]
SA14AY60AC1	TCFY6024HTANM	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.8	11.7	1,575 [743.3]
SA14AY36AD1	TCFY3621HTAAM	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	14.3	11.7	1,030 [486.1]
SA14AY42AD1	TCFY4221HTAAM	40,000 [11.7]	29,500 [8.6]	9,000 [2.6]	14.3	11.7	1,300 [613.5]
SA14AY48AD1	TCFY4821HTAAM	45,500 [13.3]	34,500 [10.1]	10,500 [3.1]	13.8	11.7	1,425 [672.5]
SA14AY60AD1	TCFY6024HTANM	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](http://www.ahridirectory.org).

[ ] Designates Metric Conversions



**GENERAL TERMS OF LIMITED WARRANTY\***

Sure Comfort® 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.

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

**\*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.**

**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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