



FRIEDRICH

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Endeavor® Line F-Series™ iM Air Conditioners



FRA15AY

Cooling Efficiencies up to: 16.0 SEER2 / 13.0 EER2

Nominal Sizes: 1.5 to 5 Tons [5.3 to 17.6 kW]

Cooling Capacities: 17.1 to 56.0 kBTU [5.0 to 16.4 kW]

Refrigerant Type: R-454B

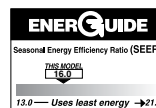


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Features and Benefits

- **7mm Condenser Copper Coil:** Requires less refrigerant allowing for a smaller and lighter footprint while enhancing reliability
- **PlusOne® Expanded Valve Space:** 3 in. – 4 in. – 5 in. service valve space – provides a minimum working area of 27-square inches for easier access
- **PlusOne Triple Service Access:** 15 in. wide, industry leading corner service access, two fastener, removeable corner and individual louver panels – makes repairs easier and faster
- **Swept Wing Fan Technology¹:** Features quieter operation and improved unit acoustics.
- **PlusOne Refrigerant Detection System^{TM2}:** 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. ²Factory 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>FR</u>	<u>A</u>	<u>15</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
FR - Friedrich®	A - Air Conditioners	15 - 15.2 SEER2	A - All Regions	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	J - 1ph, 208/230/1/60 C - 3ph, 208/230/60 D - 3ph, 460/60	1 - 1-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
FRA15AY18AJ1NA	Endeavor® Line F-Series™ 1 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY18AJ1NALHP	Endeavor® Line F-Series™ 1 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY24AJ1NA	Endeavor® Line F-Series™ 2 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY24AJ1NALHP	Endeavor® Line F-Series™ 2 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY30AJ1NA	Endeavor® Line F-Series™ 2 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY30AJ1NALHP	Endeavor® Line F-Series™ 2 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY36AJ1NA	Endeavor® Line F-Series™ 3 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY36AJ1NALHP	Endeavor® Line F-Series™ 3 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY36AC1NA	Endeavor® Line F-Series™ 3 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/3/60
FRA15AY36AD1NA	Endeavor® Line F-Series™ 3 ton 15.2 SEER2 Single-Stage Air Conditioner-460/3/60
FRA15AY42AJ1NA	Endeavor® Line F-Series™ 3 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY42AJ1NALHP	Endeavor® Line F-Series™ 3 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY42AC1NA	Endeavor® Line F-Series™ 3 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/3/60
FRA15AY42AD1NA	Endeavor® Line F-Series™ 3 1/2 ton 15.2 SEER2 Single-Stage Air Conditioner-460/3/60
FRA15AY48AJ1NA	Endeavor® Line F-Series™ 4 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY48AJ1NALHP	Endeavor® Line F-Series™ 4 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY48AC1NA	Endeavor® Line F-Series™ 4 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/3/60
FRA15AY48AD1NA	Endeavor® Line F-Series™ 4 ton 15.2 SEER2 Single-Stage Air Conditioner-460/3/60
FRA15AY60AJ1NA	Endeavor® Line F-Series™ 5 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/1/60
FRA15AY60AJ1NALHP	Endeavor® Line F-Series™ 5 ton 15.2 SEER2 Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
FRA15AY60AC1NA	Endeavor® Line F-Series™ 5 ton 15.2 SEER2 Single-Stage Air Conditioner-208/230/3/60
FRA15AY60AD1NA	Endeavor® Line F-Series™ 5 ton 15.2 SEER2 Single-Stage Air Conditioner-460/3/60

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

General Data							
MODEL NO.	FRA15AY18	FRA15AY24	FRA15AY30	FRA15AY36	FRA15AY42	FRA15AY48	FRA15AY60
Nominal Tonnage	1.5	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
Suction Line O.D. – in.	3/4	3/4	3/4	3/4	7/8	7/8	7/8
Refrigerant (R-454B) furnished oz. ¹	92	112	92	104	142	142	192
Compressor Type	Scroll						
Outdoor Coil							
Net face area – Outer Coil	10.9	13.3	14.3	16.4	19.5	19.5	27.9
Net face area – Inner Coil	10.5	12.9	13.9	15.9	18.8	18.8	27.1
Tube diameter – in.	0.276	0.276	0.276	0.276	0.276	0.276	0.276
Number of rows	2	2	2	2	2	2	2
Fins per inch	24	24	24	24	24	24	24
Outdoor Fan							
Diameter – in.	20	24	24	24	24	24	26
Number of blades	2	2	2	2	3	3	3
Motor hp	1/7	1/6	1/6	1/6	1/5	1/5	1/5
CFM	2156	2723	2813	2944	3431	3606	4169
RPM	1075	825	825	825	850	850	850
Watts	152	161	170	174	225	251	245
Shipping weight – lbs.	151	185	197	217	259	250	273
Operating weight – lbs.	144	178	190	210	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
Maximum overcurrent protection (amps) ²	15	20	25	30	30	50	50
Minimum circuit ampacity ³	12	13	17	18	20	30	31
Compressor							
Rated load amps	8	9	13	14	15	22	24
Locked rotor amps	42	59	76	75	109	126	157
Condenser Fan Motor							
Full load amps	0.8	0.8	0.8	0.8	1.0	1.0	1.0
Locked rotor amps	1.5	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	—	—	—	13.0	17.0	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	—	—	—	15.0	15.0	15.0	15.0
Minimum circuit ampacity ³	—	—	—	6.0	9.0	9.0	10.0
Compressor							
Rated load amps	—	—	—	3.8	5.8	6.3	7.1
Locked rotor amps	—	—	—	39.0	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.		FRA15AY18	FRA15AY24	FRA15AY30	FRA15AY36	FRA15AY42	FRA15AY48	FRA15AY60
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-B01	RXMD-B01	RXMD-B01	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

¹FRA15AY42: 208/230V LG models come with 44-101884-08 factory-installed. 460V LG models come with 44-101884-09 factory-installed.

²FRA15AY60: All 208/230V models come with 44-103663-16 factory-installed. All 460V models come with 44-101884-06 factory-installed.

Maximum System Charge Values

Maximum System Charge Values - FRA15AY		
Model No.	Charge Limit Without Crankcase Heater	
	Copeland	LG
FRA15AY18	9.6 lbs [4.4kg]	8.4 lbs [3.8 kg]
FRA15AY24		
FRA15AY30		
FRA15AY36		
FRA15AY42 ¹	12 lbs [5.4kg]	11.9 lbs [5.4 kg]
FRA15AY48		
FRA15AY60 ¹		

¹FRA15AY42 models with LG compressors and RA15AY60 ton models have factory-installed crankcase heaters.

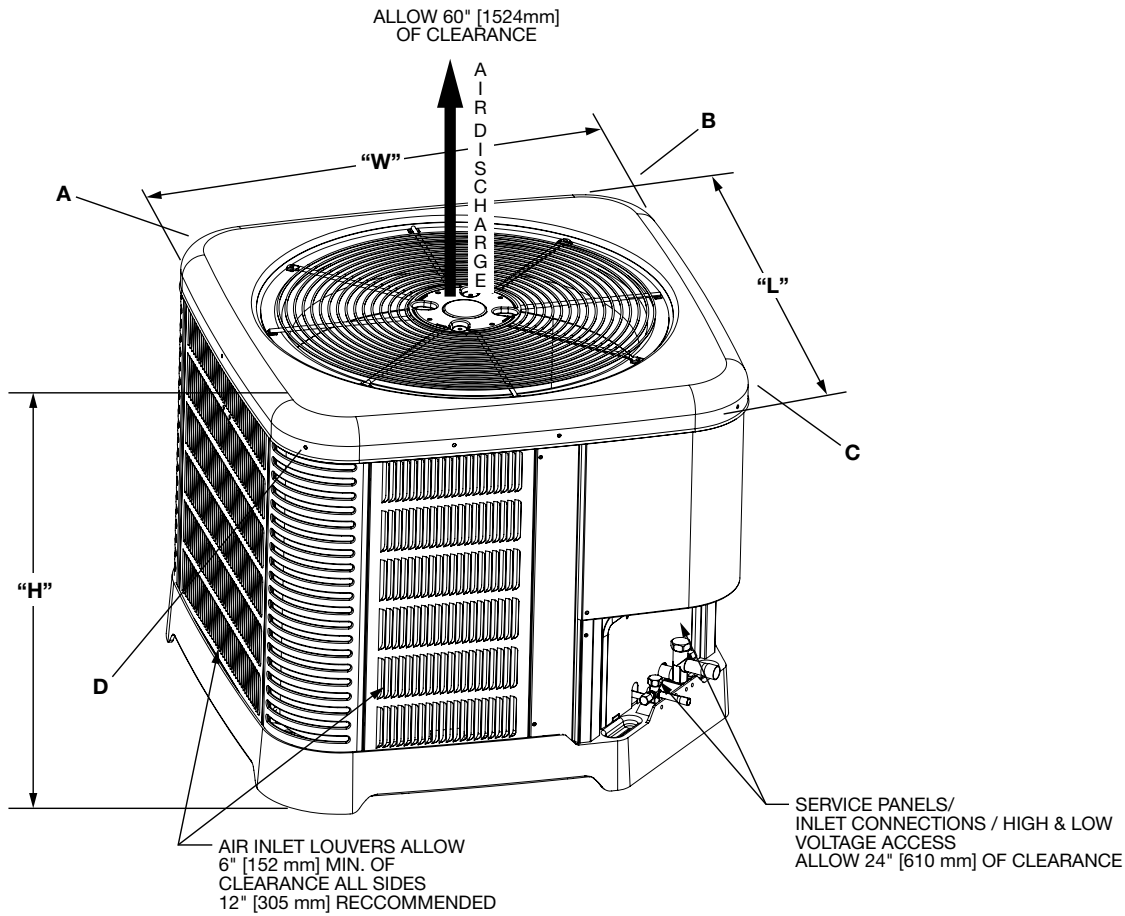
Weighted Sound Power Level (dBA)

Unit Size - Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
FRA15AY18	71	48	56	62	61	57	54	46
FRA15AY24	69	45	54	59	58	56	51	46
FRA15AY30	71	45	55	60	59	57	54	46
FRA15AY36	72	45	53	60	61	59	56	48
FRA15AY42	73	47	55	64	62	59	55	48
FRA15AY48	74	45	56	64	63	61	57	51
FRA15AY60	76	43	60	67	66	63	59	53

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

Unit Dimensions

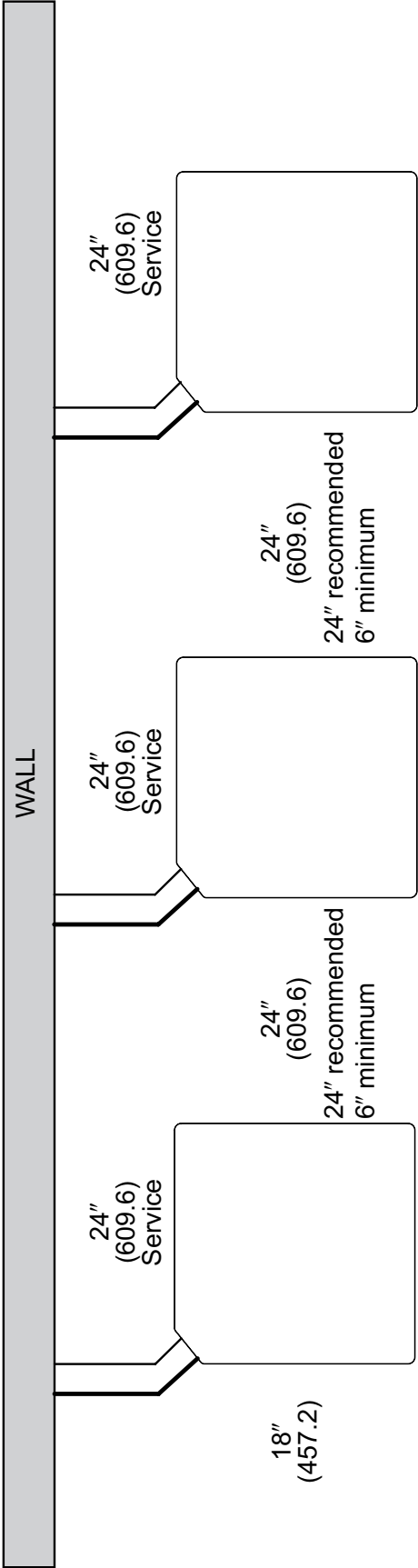
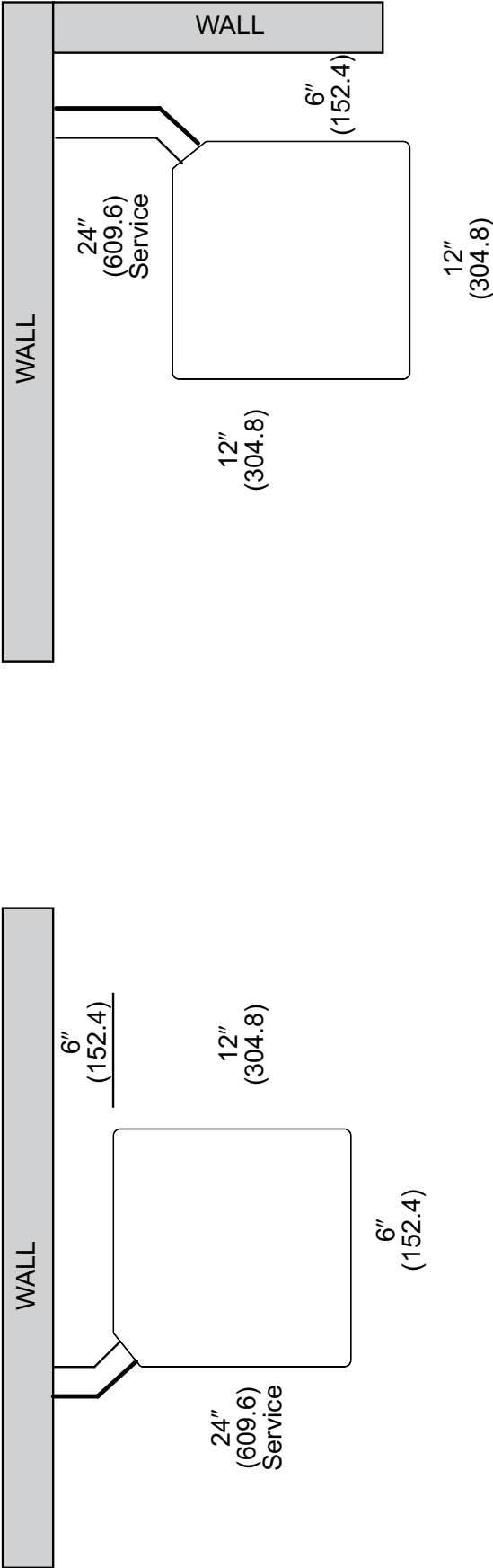
Model No.	OPERATING						SHIPPING					
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
FRA15AY18	25.00	635	29.75	756	29.75	756	26.50	673	32.38	822	32.38	822
FRA15AY24	25.00	635	33.75	857	33.75	857	26.50	673	36.38	924	36.38	924
FRA15AY30	27.00	686	33.75	857	33.75	857	28.50	724	36.38	924	36.38	924
FRA15AY36	31.00	787	33.75	857	33.75	857	32.50	826	36.38	924	36.38	924
FRA15AY42	35.00	889	33.75	857	33.75	857	36.50	927	36.38	924	36.38	924
FRA15AY48	35.00	889	33.75	857	33.75	857	36.50	927	36.38	924	36.38	924
FRA15AY60	45.00	1143	35.75	908	35.75	908	46.50	1181	38.38	975	38.38	975



ST-A1348-01-00

[] Designates Metric Conversions

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

15.2 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:

Maximum Equivalent Line Length may not exceed 250'.

Maximum Actual Line Length may not exceed 200'.

Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.

DO NOT use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

[] Designates Metric Conversions

Refrigerant Line Size Information (Con't.)

15.2 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:

Maximum Equivalent Line Length may not exceed 76 meters.

Maximum Actual Line Length may not exceed 61 meters.

Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.

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]
FRA15AY18AJ1	TCFY2417STAN	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	11.7	600 [283.2]
FRA15AY24AJ1	TCFY2417STAN	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	11.7	735 [346.9]
FRA15AY30AJ1	TCFY3621MTAN	28,600 [8.4]	21,800 [6.4]	6,800 [2.0]	14.3	11.7	910 [429.5]
FRA15AY36AJ1	TCFY3621MTAN	34,000 [10.0]	26,000 [7.6]	8,000 [2.3]	14.3	11.7	1,030 [486.1]
FRA15AY42AJ1	TCFY4821STAA	40,000 [11.7]	30,700 [9.0]	9,300 [2.7]	14.3	11.7	1,300 [613.5]
FRA15AY48AJ1	TCFY4821STAA	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	13.8	11.7	1,425 [672.5]
FRA15AY60AJ1	TCFY6024STAN	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.8	11.7	1,575 [743.3]
FRA15AY36AC1	TCFY3621MTAN	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	13.4	9.0	1,030 [486.1]
FRA15AY42AC1	TCFY4221STAA	40,000 [11.7]	30,700 [9.0]	9,300 [2.7]	13.4	9.0	1,300 [613.5]
FRA15AY48AC1	TCFY4821STAA	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	13.4	9.0	1,425 [672.5]
FRA15AY60AC1	TCFY6024STAN	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.4	9.0	1,575 [743.3]
FRA15AY36AD1	TCFY3621MTAN	33,600 [9.8]	25,200 [7.4]	8,400 [2.5]	13.4	9.0	1,030 [486.1]
FRA15AY42AD1	TCFY4221STAA	40,000 [11.7]	30,700 [9.0]	9,300 [2.7]	13.4	9.0	1,300 [613.5]
FRA15AY48AD1	TCFY4821STAA	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	13.4	9.0	1,425 [672.5]
FRA15AY60AD1	TCFY6024STAN	56,000 [16.4]	42,900 [12.6]	13,100 [3.8]	13.4	9.0	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.

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GENERAL TERMS OF LIMITED WARRANTY*

Friedrich® 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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