



**FRIEDRICH**

1 8 8 3

## Endeavor™ Line *E-Series* iC Heat Pumps



### **FWP14AZ**

Cooling Efficiencies up to: 14.3 SEER2/10.4 EER2

Heating Efficiencies up to: 7.6 HSPF2

Nominal Sizes: 1½ to 5 Ton [5.28 to 17.6 kW]

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



9001:2015



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## Features and Benefits

- **Fully Louvered Steel Cabinet:** Features durable construction to add protection from yard hazards, weather corrosion
- **Two-Stage Scroll Compressor<sup>1</sup>:** Features two speeds (high and low) of cooling and heating, providing more precise temperature control, lower humidity and greater efficiency when compared to single stage compressors
- **Inverted Reversing Valve:** Allows for faster heat transfer with gravity assist shifting and reduced joint stress for increased reliability
- **Easily Accessible Control Box:** Ease of installation and serviceability

<sup>1</sup>Does not apply to the 1.5 ton 1-stage model

# Heat Pumps

<u>FW</u>	<u>P</u>	<u>14</u>	<u>A</u>	<u>Z</u>	<u>18</u>	<u>A</u>	<u>J</u>	<u>1</u>	<u>N</u>	<u>A</u>
Brand	Product Category	SEER2	Region	Refrigerant	Capacity	Major Series	Voltage	Type	Controls	Minor Series
FW - Friedrich®	P - Heat Pump	14 - 14.3 SEER2	A - All Regions	Z - R-410A	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 - 208/230/1/60	1 - Single-Stage 2 - 2-Stage	N - Non-Communicating	A - 1st Design

[ ] Designates Metric Conversions

AVAILABLE MODELS
FWP14AZ18AJ1NA
FWP14AZ18AJ2NA
FWP14AZ24AJ2NA
FWP14AZ30AJ2NA
FWP14AZ36AJ2NA
FWP14AZ42AJ2NA
FWP14AZ48AJ2NA
FWP14AZ60AJ2NA

STANDARD EQUIPMENT
R-410A Refrigerant
Scroll Compressor
Field Installed Filter Drier
Front Seating Service Valves
Internal Pressure Relief Valve
Internal Thermal Overload
Long Line capability
Low Ambient capability with Kit
3-4-5 Expanded Valve Space
Composite Basepan
2 Screw Control Box Access
15" Access to Internal Components
Quick release louver panel design
No fasteners to remove along bottom
Optimized Venturi Airflow
Single row condenser coil
Powder coated paint
Rust resistant screws
QR code
External gauge ports
Service trays

<b>General Data</b>								
MODEL NO.	FWP14AZ18**1	FWP14AZ18**2	FWP14AZ24	FWP14AZ30	FWP14AZ36	FWP14AZ42	FWP14AZ48	FWP14AZ60
Nominal Tonnage	1.5	1.5	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 (R410A) furnished oz. <sup>1</sup>	84	88	88	108	118	148	148	247
Compressor Type	Scroll							
<b>Outdoor Coil</b>								
Net face area – Outer Coil	10.9	10.9	10.9	14.4	19.5	19.5	19.5	28.4
Net face area – Inner Coil								
Tube diameter – in.	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.375
Number of rows	1	1	1	1	1	1	1	1
Fins per inch	22	22	22	22	22	22	24	20
<b>Outdoor Fan</b>								
Diameter – in.	20	20	20	24	24	24	24	26
Number of blades	3	3	3	3	3	3	3	3
Motor hp	1/7	1/7	1/6	1/5	1/5	1/5	1/5	1/5
CFM	2401	2401	2620	3391	4077	4077	4096	4686
RPM	1075	1075	1075	850	850	850	850	850
watts	146	141	145	175	234	222	236	239
Shipping weight – lbs.	<b>COMING SOON</b>							
Operating weight – lbs.								

<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>	20	15	20	25	25	35	35	40
Minimum circuit ampacity <sup>3</sup>	11	11	15	18	21	26	29	31
<b>Compressor</b>								
Rated load amps	10	8	11	13	15	20	22	24
Locked rotor amps	46	56	66	71	78	151	0	118
<b>Condenser Fan Motor</b>								
Full load amps	0.75	0.75	0.75	1.0	1.0	1.0	1.0	1.0
Locked rotor amps	1.4	1.4	1.5	2.6	2.56	2.56	2.56	2.6

<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.		FWP14AZ18**1	FWP14AZ18**2	FWP14AZ24	FWP14AZ30	FWP14AZ36	FWP14AZ42	FWP14AZ48	FWP14AZ60
Compressor crankcase heater*		44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-45	44-17402-45	Factory Standard
Low ambient control		RXAD-A08	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	68-23427-26	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	SK-A1
Low pressure control		Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard
High pressure control		Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard
Liquid Line Solenoid (24 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG24V	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	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V
Classic Top Cap w/Label		91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21

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

## 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
FWP14AZ18A	73	39.8	55	62.1	67.0	60.0	57.4	51.2
FWP14AZ24A	73	40.4	55.4	62.5	65.9	58.7	56.4	48.9
FWP14AZ30A	72	48.9	55.3	63.6	61.0	59.1	56.5	48.7
FWP14AZ36A	72	50.1	55.8	64.4	61.5	58.7	55.1	50.9
FWP14AZ42A	72	48.6	56.2	63.1	61.7	60.0	56	50.0
FWP14AZ48A	74	49.3	56	64.5	64.5	60.1	54.9	47.7
FWP14AZ60A	74	43.9	55.2	63.4	65.8	61.7	57.9	52.9

**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
FWP14AZ18**1	25.17	639	29.543	750	29.543	750	27.0625	687	32.625	829	32.625	829
FWP14AZ18**2	25.17	639	29.543	750	29.543	750	27.0625	687	32.625	829	32.625	829
FWP14AZ24	25.17	639	29.543	750	29.543	750	27.0625	687	32.625	829	32.625	829
FWP14AZ30	27.17	690	33.655	855	33.655	855	29.0625	738	36.625	930	36.625	930
FWP14AZ36	35.17	893	33.655	855	33.655	855	37.0625	941	36.625	930	36.625	930
FWP14AZ42	35.17	893	33.655	855	33.655	855	37.0625	941	36.625	930	36.625	930
FWP14AZ48	35.17	893	33.655	855	33.655	855	37.0625	941	36.625	930	36.625	930
FWP14AZ60	45.17	1147	35.543	903	35.543	903	47.0625	1195	38.625	981	38.625	981

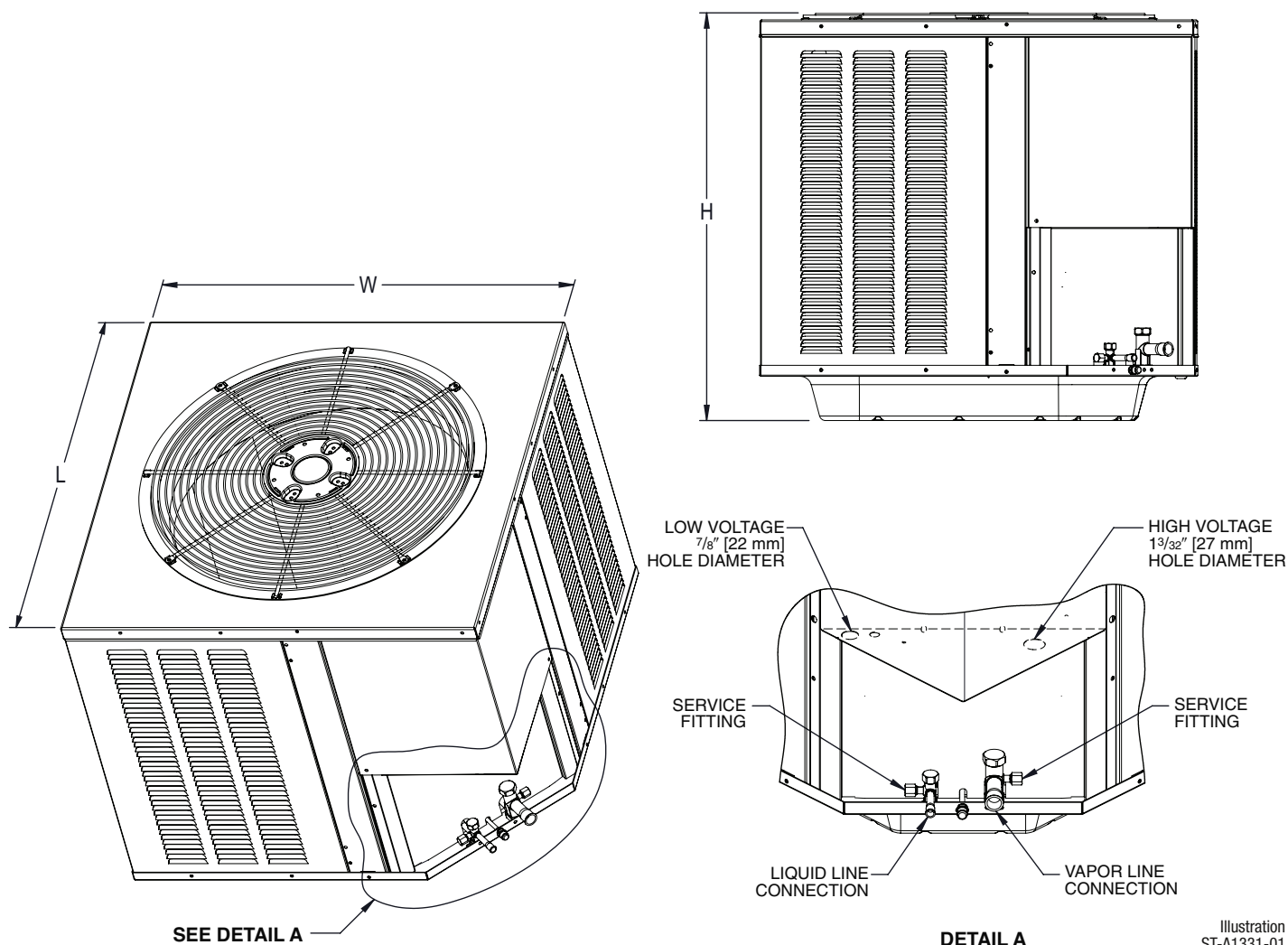
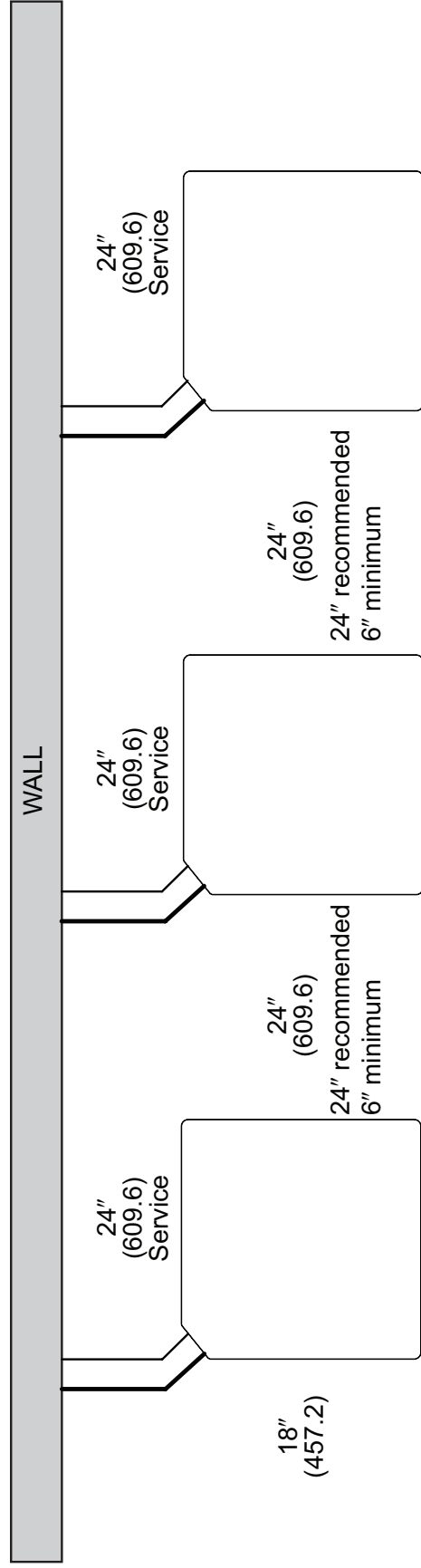
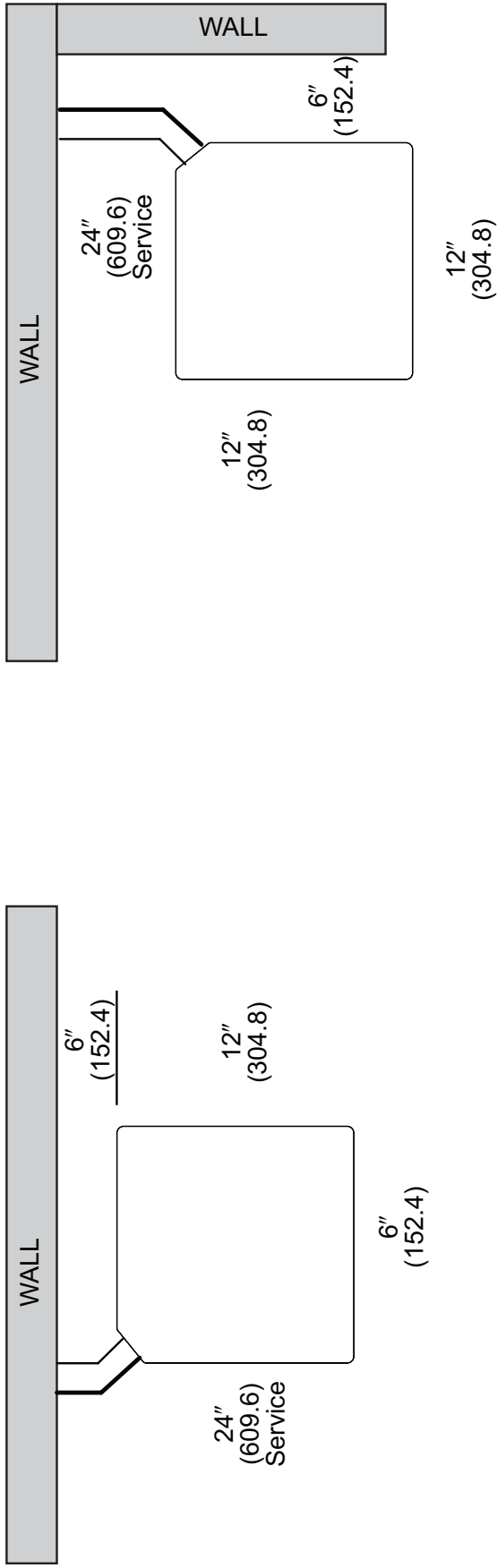


Illustration  
ST-A1331-01  
Rev. 10-20-2022

[ ] Designates Metric Conversions

# CLEARANCES



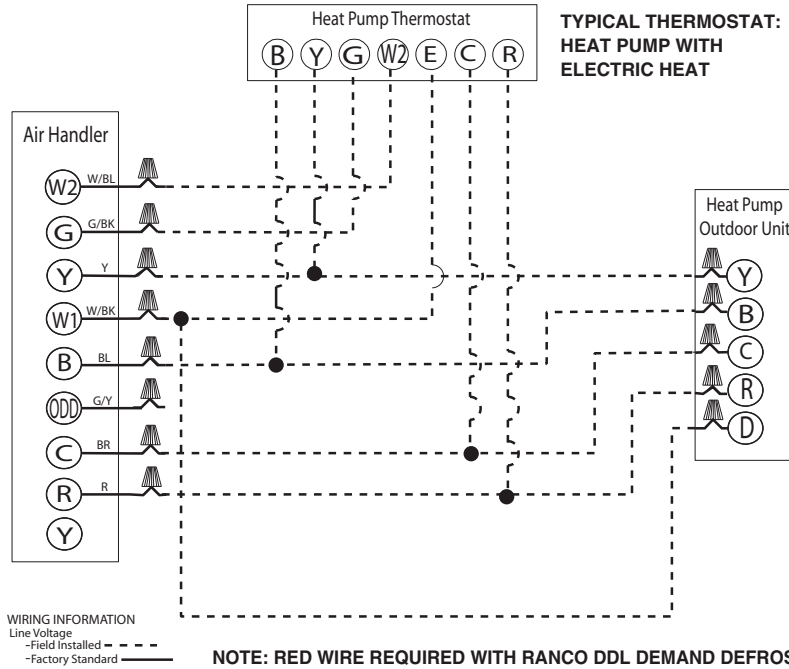
**NOTE: NUMBERS IN ( ) = mm**

**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.



## Control Wiring

**FIGURE 4**  
**CONTROL WIRING FOR AIR HANDLER**



**TYPICAL THERMOSTAT:  
HEAT PUMP WITH  
ELECTRIC HEAT**

**NOTES:**

1. Jumper "E" to "W2" to transfer control of supplemental heat to 1st stage when the emergency heat switch is on.
2. This wire turns on heat for defrost, omit for most economical operation.
3. Wire with colored tracing stripe.

## 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.

## Refrigerant Line Size Information

14.3 SEER2 HEAT PUMPS									
UNIT SIZE	MAX. LIQUID LINE SIZE	SUCTION LINE SIZE	EQUIVALENT LENGTH (FEET)						
			<15	16-25	26-50	51-80	81-100	101-125	126-150
			MAXIMUM VERTICAL SEPARATION/CAPACITY MULTIPLIER						
1.5 Ton Single-Stage	1/4"	5/8"	15 / 1.00	25 / 1.00	50 / 0.99	60 / 0.97	45 / 0.96	10 / 0.95	N/A
	5/16"	5/8"	15 / 1.00	25 / 1.00	50 / 0.99	75 / 0.97	90 / 0.96	45 / 0.95	N/A
	3/8"	5/8"	15 / 1.00	25 / 1.00	50 / 0.99	75 / 0.97	95 / 0.96	80 / 0.95	N/A
1.5 Ton Two-Stage	1/4"	1/2"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	N/A	N/A
	5/16"	1/2"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	N/A	N/A
	3/8"	1/2"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	N/A	N/A
	1/4"	5/8"	15 / 0.99	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94
	5/16"	5/8"	15 / 0.99	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94
	3/8"	5/8"	15 / 0.99	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94
2 Ton Two-Stage	1/4"	5/8"	15 / 0.99	25 / 0.99	50 / 0.99	31 / 0.97	3 / 0.97	N/A	N/A
	5/16"	5/8"	15 / 0.99	25 / 0.99	50 / 0.99	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.95
	3/8"	5/8"	15 / 0.99	25 / 0.99	50 / 0.99	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.95
2.5 Ton Two-Stage	1/4"	5/8"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	46 / 0.95	50 / 0.94	N/A
	5/16"	5/8"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94	N/A
	3/8"	5/8"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94	N/A
	1/4"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.96	50 / 0.95
	5/16"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.96	50 / 0.95
	3/8"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.96	50 / 0.95
3 Ton Two-Stage	5/16"	5/8"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	3/8"	5/8"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	5/16"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.96
	3/8"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.96
	1/2"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.96
3.5 Ton Two-Stage	3/8"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.96
	1/2"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.96
	3/8"	7/8"	15 / 1.00	25 / 0.99	15 / 1.00	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.97
	1/2"	7/8"	15 / 1.00	25 / 0.99	15 / 1.00	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.97
4 Ton Two-Stage	3/8"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.95	50 / 0.94	50 / 0.93
	1/2"	3/4"	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.95	50 / 0.94	50 / 0.93
	3/8"	7/8"	15 / 1.00	25 / 0.99	50 / 1.00	50 / 0.97	50 / 0.98	50 / 0.98	50 / 0.97
	1/2"	7/8"	15 / 1.00	25 / 0.99	50 / 1.00	50 / 0.97	50 / 0.98	50 / 0.98	50 / 0.97
5 Ton Two-Stage	3/8"	3/4"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	1/2"	3/4"	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	3/8"	7/8"	15 / 1.00	25 / 0.99	40 / 0.99	15 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96
	1/2"	7/8"	15 / 1.00	25 / 0.99	50 / 1.00	50 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96

**NOTES:**

- 1) Do not exceed 200 ft linear line length.
- 2) \*Do not exceed 100 ft vertical separation if outdoor unit is above indoor unit.
- 3) Always use the smallest liquid line allowable to minimize refrigerant charge.
- 4) Applications shaded in light gray indicate capacity multipliers between 0.90 and 0.96 which are not recommended, but are allowed.
- 5) Applications shaded in dark gray are not recommended due to excessive liquid or suction pressure drop.

## Refrigerant Line Size Information (Con't.)

14.3 SEER2 HEAT PUMPS									
UNIT SIZE	MAX. LIQUID LINE SIZE mm [in.]	SUCTION LINE SIZE mm [in.]	EQUIVALENT LENGTH (METERS)						
			0-4.5	5-7.5	8-15	15.5-23	23.5-30	30.5-38	38.5-46
			MAXIMUM VERTICAL SEPARATION/CAPACITY MULTIPLIER						
5.3 KW [1.5 Ton] Single-Stage	6.35 [1/4]	15.88 [5/8]	15 / 1.00	25 / 1.00	50 / 0.99	60 / 0.97	45 / 0.96	10 / 0.95	N/A
	7.94 [5/16]	15.88 [5/8]	15 / 1.00	25 / 1.00	50 / 0.99	75 / 0.97	90 / 0.96	45 / 0.95	N/A
	9.53 [3/8]	15.88 [5/8]	15 / 1.00	25 / 1.00	50 / 0.99	75 / 0.97	95 / 0.96	80 / 0.95	N/A
5.3 KW [1.5 Ton] Two-Stage	6.35 [1/4]	12.70 [1/2]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	N/A	N/A
	7.94 [5/16]	12.70 [1/2]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	N/A	N/A
	9.53 [3/8]	12.70 [1/2]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	N/A	N/A
	6.35 [1/4]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94
	7.94 [5/16]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94
	9.53 [3/8]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94
7.0 KW [2 Ton] Two-Stage	6.35 [1/4]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.99	31 / 0.97	3 / 0.97	N/A	N/A
	7.94 [5/16]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.99	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.95
	9.53 [3/8]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.99	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.95
8.8 KW [2.5 Ton] Two-Stage	6.35 [1/4]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	46 / 0.95	50 / 0.94	N/A
	7.94 [5/16]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94	N/A
	9.53 [3/8]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.96	50 / 0.95	50 / 0.94	N/A
	6.35 [1/4]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.96	50 / 0.95
	7.94 [5/16]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.96	50 / 0.95
	9.53 [3/8]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.96	50 / 0.95
10.6 KW [3 Ton] Two-Stage	7.94 [5/16]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	9.53 [3/8]	15.88 [5/8]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	7.94 [5/16]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.96
	9.53 [3/8]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.96
	12.70 [1/2]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.96
12.3 KW [3.5 Ton] Two-Stage	9.53 [3/8]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.96
	12.70 [1/2]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.97	50 / 0.96	50 / 0.96
	9.53 [3/8]	22.23 [7/8]	15 / 1.00	25 / 0.99	15 / 1.00	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.97
	12.70 [1/2]	22.23 [7/8]	15 / 1.00	25 / 0.99	15 / 1.00	50 / 0.98	50 / 0.98	50 / 0.97	50 / 0.97
14.1 KW [4 Ton] Two-Stage	9.53 [3/8]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.95	50 / 0.94	50 / 0.93
	12.70 [1/2]	19.05 [3/4]	15 / 1.00	25 / 0.99	50 / 0.98	50 / 0.97	50 / 0.95	50 / 0.94	50 / 0.93
	9.53 [3/8]	22.23 [7/8]	15 / 1.00	25 / 0.99	50 / 1.00	50 / 0.97	50 / 0.98	50 / 0.98	50 / 0.97
	12.70 [1/2]	22.23 [7/8]	15 / 1.00	25 / 0.99	50 / 1.00	50 / 0.97	50 / 0.98	50 / 0.98	50 / 0.97
17.6 KW [5 Ton] Two-Stage	9.53 [3/8]	19.05 [3/4]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	12.70 [1/2]	19.05 [3/4]	15 / 0.99	25 / 0.99	50 / 0.97	50 / 0.95	50 / 0.93	50 / 0.91	N/A
	9.53 [3/8]	22.23 [7/8]	15 / 1.00	25 / 0.99	40 / 0.99	15 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96
	12.70 [1/2]	22.23 [7/8]	15 / 1.00	25 / 0.99	50 / 1.00	50 / 0.99	50 / 0.98	50 / 0.97	50 / 0.96

**NOTES:**

- 1) Do not exceed 61m linear line length.
- 2) \*Do not exceed 30m vertical separation if outdoor unit is above indoor unit.
- 3) Always use the smallest liquid line allowable to minimize refrigerant charge.
- 4) Applications shaded in light gray indicate capacity multipliers between 0.90 and 0.96 which are not recommended, but are allowed.
- 5) Applications shaded in dark gray are not recommended due to excessive liquid or suction pressure drop.

## Performance Data @ AHRI Standard Conditions – Cooling

DESIGNATED TESTED COMBINATION (DTC)													
OUTDOOR UNIT	AIR HANDLER	TOTAL CAPACITY BTU/H [kW]	NET SENSIBLE BTU/H [kW]	NET LATENT BTU/H [kW]	SEER2	EER2	INDOOR CFM [L/S]	47 DEGREE HEATING CAPACITY BTU/H [KW]	47 DEGREE COP	17 DEGREE HEATING CAPACITY BTU/H [KW]	17 DEGREE COP	REGION IV HSPF2	
FWP14AZ18AJ1	RH2TZ2417STANN	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	9.0	575 [271.4]	17,100 [5.0]	3.78	11,100 [3.3]	2.56	7.5	
FWP14AZ18AJ2	RH2TZ2417STANN	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	9.0	550 [259.6]	17,100 [5.0]	3.58	11,000 [3.2]	2.52	7.5	
FWP14AZ24AJ2	RH2TZ2417STANN	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	9.0	775 [365.8]	22,800 [6.7]	3.51	14,600 [4.3]	2.55	7.5	
FWP14AZ30AJ2	RH2TZ3617STANN	28,600 [8.4]	21,900 [6.4]	6,700 [2.0]	14.3	9.0	950 [448.4]	28,600 [8.4]	3.56	18,200 [5.3]	2.57	7.5	
FWP14AZ36AJ2	RH2TZ3617STANN	34,200 [10.0]	26,200 [7.7]	8,000 [2.3]	14.3	9.0	1,050 [495.5]	34,200 [10.0]	3.27	23,600 [6.9]	2.49	7.5	
FWP14AZ42AJ2	RH2TZ4821STANN	39,500 [11.6]	30,300 [8.9]	9,200 [2.7]	14.3	9.0	1,275 [601.7]	39,500 [11.6]	3.69	25,500 [7.5]	2.67	7.5	
FWP14AZ48AJ2	RH2TZ4821STANN	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	14.3	9.0	1,450 [684.3]	45,500 [13.0]	3.65	27,500 [8.1]	2.54	7.5	
FWP14AZ60AJ2	RH2TZ6024STANN	55,500 [16.3]	42,600 [12.5]	12,900 [3.8]	14.3	9.0	1,800 [849.5]	55,500 [16.3]	2.66	34,000 [10.0]	2.56	7.5	

**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









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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.

Parts ..... Five (5) 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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