



The new degree of comfort.®

Endeavor™ Line Select® Series iC Heat Pumps



WP14AZ

Cooling Efficiency: 14.3 SEER2/9.0 EER2

Heating Efficiency: 7.5 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 Compressor¹:** 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

¹Does not apply to the 1.5 ton 1-stage model

Heat Pumps

<u>W</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
W - Rheem Select	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
WP14AZ18AJ1NA
WP14AZ18AJ2NA
WP14AZ24AJ2NA
WP14AZ30AJ2NA
WP14AZ36AJ2NA
WP14AZ42AJ2NA
WP14AZ48AJ2NA
WP14AZ60AJ2NA

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
Optimized Venturi Airflow
Rust resistant screws
QR code
External gauge ports

General Data								
MODEL NO.	WP14AZ18**1	WP14AZ18**2	WP14AZ24	WP14AZ30	WP14AZ36	WP14AZ42	WP14AZ48	WP14AZ60
Nominal Tonnage	1.5	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	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.¹	84	88	88	108	118	148	148	247
Compressor Type	Scroll							
Outdoor Coil								
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
Outdoor Fan								
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.	157	157	158	196	209	239	245	285
Operating weight – lbs.	150	150	151	189	202	232	238	278

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	20	15	20	25	25	35	35	40
Minimum circuit ampacity³	11	11	15	18	21	26	29	31
Compressor								
Rated load amps	10	8	11	13	15	20	22	24
Locked rotor amps	46	56	66	71	78	151	127	118
Condenser Fan Motor								
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

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.	WP14AZ18**1	WP1418AZ18**2	WP14AZ24	WP14AZ30	WP14AZ36	WP14AZ42	WP14AZ48	WP14AZ60	
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

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

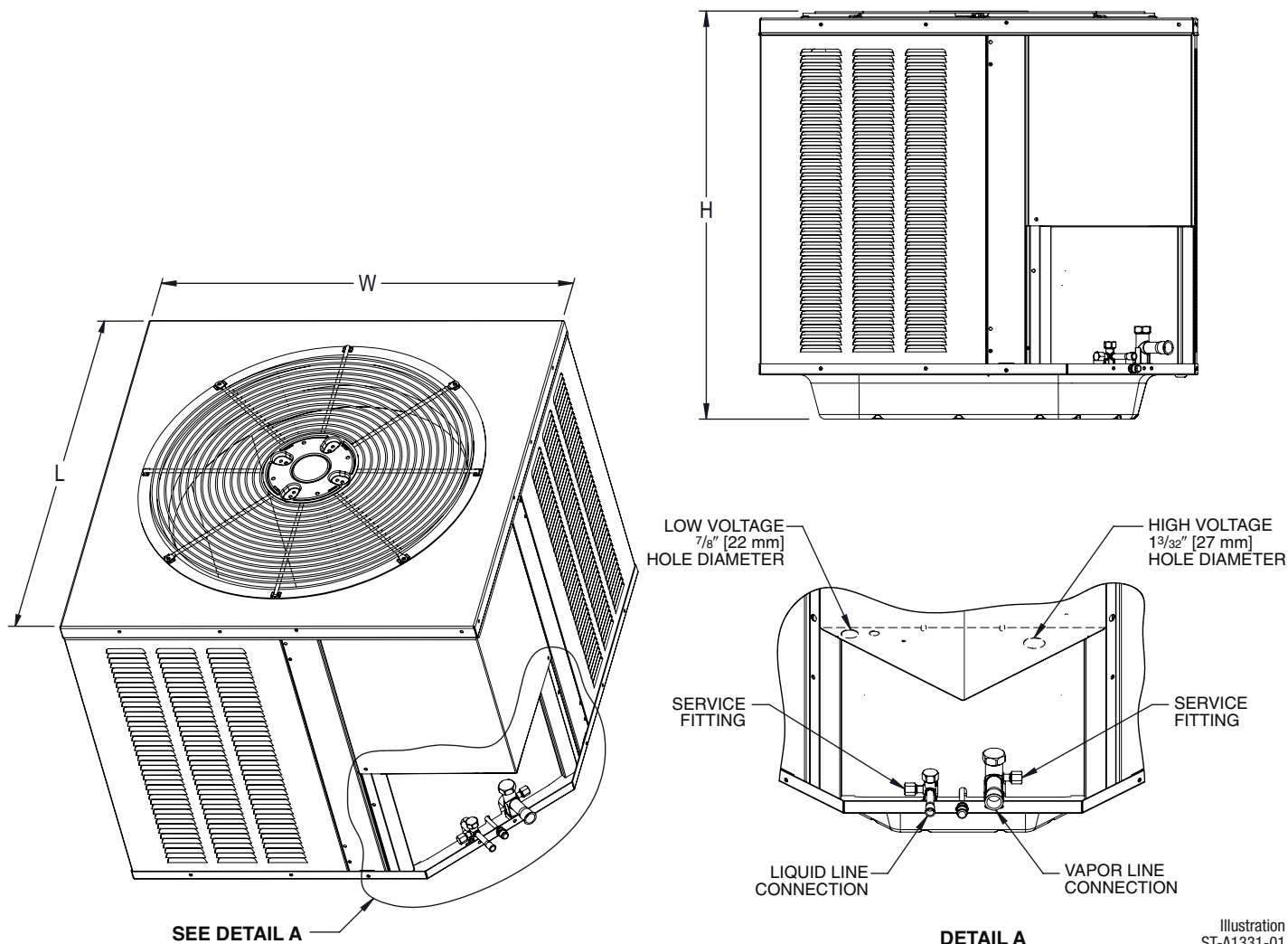
Weighted Sound Power Level (dBA)

UNIT SIZE - VOLTAGE, SERIES	STANDARD RATING (DBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
WP14AZ18A	73	39.8	55	62.1	67.0	60.0	57.4	51.2
WP14AZ24A	73	40.4	55.4	62.5	65.9	58.7	56.4	48.9
WP14AZ30A	72	48.9	55.3	63.6	61.0	59.1	56.5	48.7
WP14AZ36A	72	50.1	55.8	64.4	61.5	58.7	55.1	50.9
WP14AZ42A	72	48.6	56.2	63.1	61.7	60.0	56	50.0
WP14AZ48A	74	49.3	56	64.5	64.5	60.1	54.9	47.7
WP14AZ60A	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

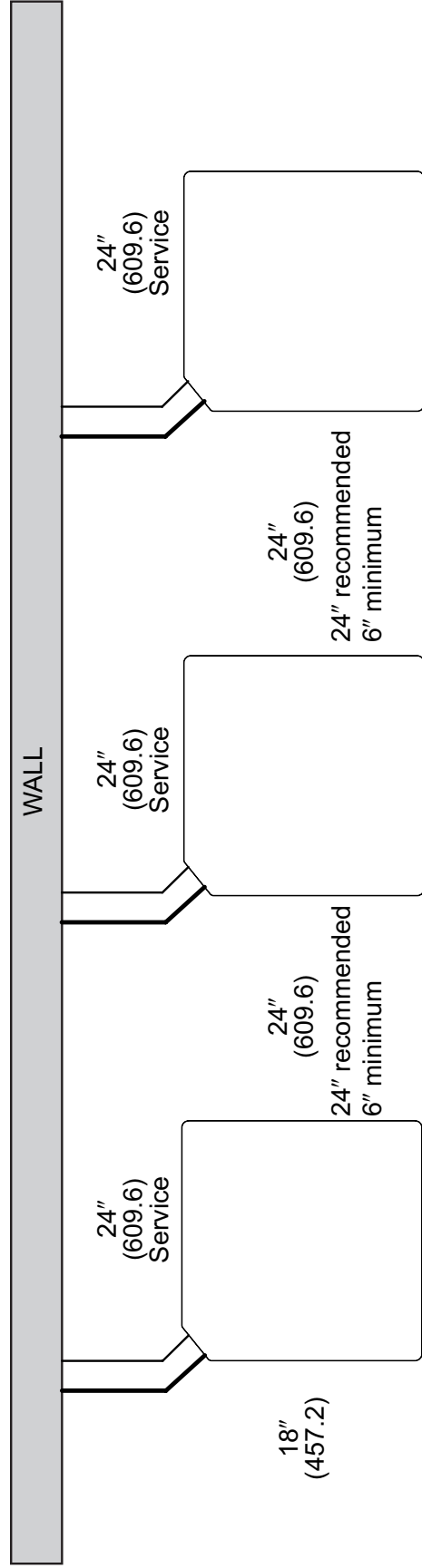
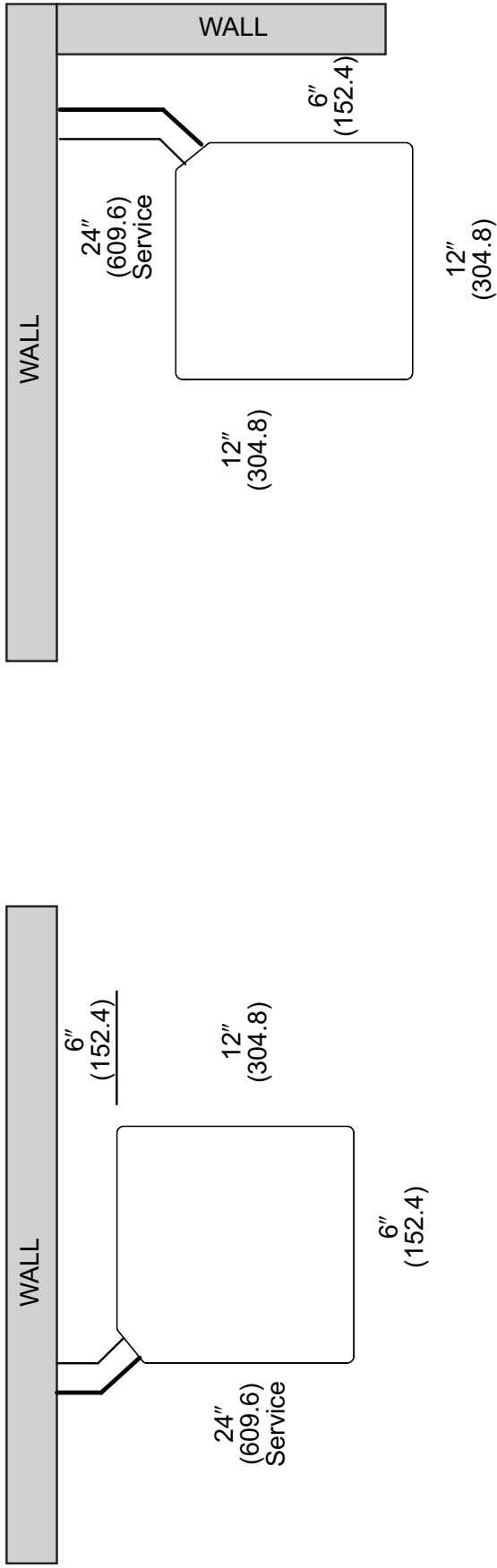
MODEL NO.	OPERATING						SHIPPING							
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)		OP. WEIGHT LBS	SHIPPING WEIGHT LBS
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm		
WP14AZ18AJ1NA	25.65	651.51	29.54	750	29.54	750	27.0625	687.3875	32.625	828.675	32.625	828.675	152	159
WP14AZ18AJ2NA	25.65	651.51	29.54	750	29.54	750	27.0625	687.3875	32.625	828.675	32.625	828.675	152	159
WP14AZ24AJ2NA	25.65	651.51	29.54	750	29.54	750	27.0625	687.3875	32.625	828.675	32.625	828.675	145	152
WP14AZ30AJ2NA	27.65	702.31	33.66	855	33.66	855	29.0625	738.1875	36.625	930.275	36.625	930.275	201	208
WP14AZ36AJ2NA	35.65	905.51	33.66	855	33.66	855	37.0625	941.3875	36.625	930.275	36.625	930.275	187	187
WP14AZ42AJ2NA	35.65	905.51	33.66	855	33.66	855	37.0625	941.3875	36.625	930.275	36.625	930.275	221	228
WP14AZ48AJ2NA	35.65	905.51	33.66	855	33.66	855	37.0625	941.3875	36.625	930.275	36.625	930.275	227	234
WP14AZ60AJ2NA	45.65	1159.51	35.54	903	35.54	903	47.0625	1195.3875	38.625	981.075	38.625	981.075	262	269



[] Designates Metric Conversions

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

CLEARANCES

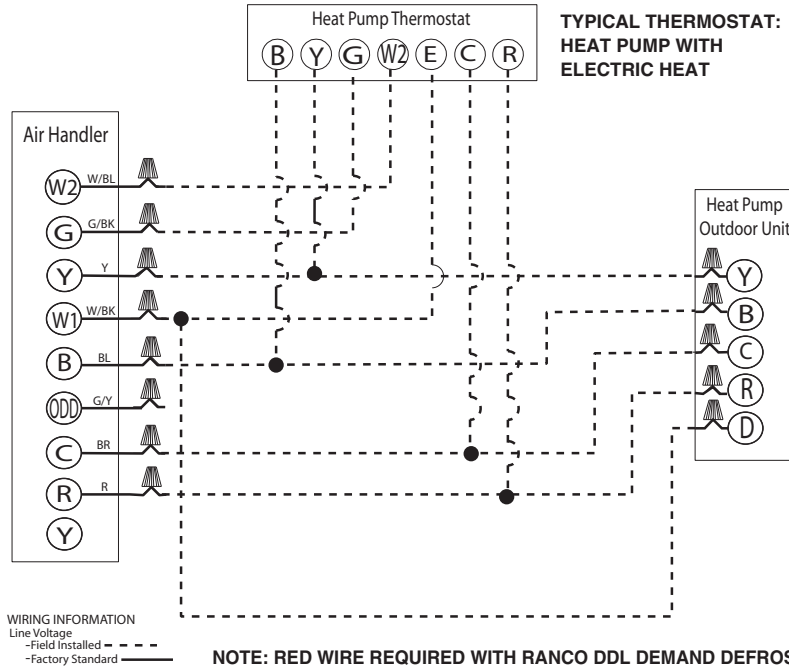


NOTE: NUMBERS IN () = mm

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

SINGLE AND TWO-STAGE HEAT PUMPS									
UNIT SIZE	MAX. LIQUID LINE SIZE	SUCTION LINE SIZE	OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT EQUIVALENT LENGTH IN FEET						
			0-15	16-25	26-50	51-80	81-100	101-125	126-150
			MAXIMUM VERTICAL SEPARATION/CAPACITY MULTIPLIER						
1.5 TON	3/8"	1/2"	15 / 1	25 / 1	50 / 0.99	80 / 0.97	100 / 0.97	115 / 0.96	115 / 0.95
		5/8"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	115 / 0.99	115 / 0.98
		3/4"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	115 / 0.99	115 / 0.98
2 TON	3/8"	5/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.98	100 / 0.97	100 / 0.96	95 / 0.95
		3/4"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	100 / 0.99	95 / 0.98
2.5 TON	3/8"	5/8"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	95 / 0.96	90 / 0.94	85 / 0.93
		3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	95 / 0.98	90 / 0.98	85 / 0.97
3 TON	3/8"	5/8"	15 / 1	25 / 0.99	50 / 0.97	80 / 0.95	85 / 0.94	80 / 0.92	75 / 0.9
		3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.98	85 / 0.98	80 / 0.97	75 / 0.96
		7/8"	15 / 1	25 / 1	50 / 1	80 / 0.99	85 / 0.99	80 / 0.99	75 / 0.98
3.5 TON	3/8"	3/4"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	80 / 0.97	70 / 0.96	65 / 0.95
		7/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	80 / 0.99	70 / 0.98	65 / 0.98
4 TON	3/8"	3/4"	15 / 1	25 / 0.99	50 / 0.98	75 / 0.97	70 / 0.96	60 / 0.95	50 / 0.94
		7/8"	15 / 1	25 / 1	50 / 0.99	75 / 0.99	70 / 0.98	60 / 0.98	50 / 0.97
5 TON	3/8"	3/4"	15 / 1	25 / 0.99	50 / 0.97	65 / 0.95	45 / 0.94	30 / 0.92	15 / 0.9
		7/8"	15 / 1	25 / 0.99	50 / 0.99	65 / 0.98	45 / 0.97	30 / 0.96	15 / 0.96

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) Refer to supplemental Long Line Set Guide for applications that require liquid line size other than 3/8".
- 5) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

Refrigerant Line Size Information (Con't.)

SINGLE AND TWO-STAGE HEAT PUMPS									
UNIT SIZE	MAX. LIQUID LINE SIZE	SUCTION LINE SIZE	OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT EQUIVALENT LENGTH IN METERS						
			0-5	5.5-8	8.5-15	15.5-24	24.5-30	30.5-38	38.5-46
			MAXIMUM VERTICAL SEPARATION/CAPACITY MULTIPLIER						
1.5 TON	3/8"	1/2"	5 / 1	8 / 1	15 / 0.99	24 / 0.97	30 / 0.97	35 / 0.96	35 / 0.95
		5/8"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	35 / 0.99	35 / 0.98
		3/4"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	35 / 0.99	35 / 0.98
2 TON	3/8"	5/8"	5 / 1	8 / 1	15 / 0.99	24 / 0.98	30 / 0.97	30 / 0.96	29 / 0.95
		3/4"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	30 / 0.99	29 / 0.98
2.5 TON	3/8"	5/8"	5 / 1	8 / 0.99	15 / 0.98	24 / 0.97	29 / 0.96	27 / 0.94	26 / 0.93
		3/4"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	29 / 0.98	27 / 0.98	26 / 0.97
3 TON	3/8"	5/8"	5 / 1	8 / 0.99	15 / 0.97	24 / 0.95	26 / 0.94	24 / 0.92	23 / 0.9
		3/4"	5 / 1	8 / 1	15 / 0.99	24 / 0.98	26 / 0.98	24 / 0.97	23 / 0.96
		7/8"	5 / 1	8 / 1	15 / 1	24 / 0.99	26 / 0.99	24 / 0.99	23 / 0.98
3.5 TON	3/8"	3/4"	5 / 1	8 / 0.99	15 / 0.98	24 / 0.97	24 / 0.97	21 / 0.96	20 / 0.95
		7/8"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	24 / 0.99	21 / 0.98	20 / 0.98
4 TON	3/8"	3/4"	5 / 1	8 / 0.99	15 / 0.98	23 / 0.97	21 / 0.96	18 / 0.95	15 / 0.94
		7/8"	5 / 1	8 / 1	15 / 0.99	23 / 0.99	21 / 0.98	18 / 0.98	15 / 0.97
5 TON	3/8"	3/4"	5 / 1	8 / 0.99	15 / 0.97	20 / 0.95	14 / 0.94	9 / 0.92	5 / 0.9
		7/8"	5 / 1	8 / 0.99	15 / 0.99	20 / 0.98	14 / 0.97	9 / 0.96	5 / 0.96

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) Refer to supplemental Long Line Set Guide for applications that require liquid line size other than 3/8".
- 5) **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	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	
WP14AZ18AJ1NA	RH2TZ2417STANN	17100 [5.0]	13100 [3.8]	4000 [1.2]	14.3	9.0	575 [271.4]	17100 [5.0]	3.78	11100 [3.3]	2.56	7.5	
WP14AZ18AJ2NA	RH2TZ2417STANN	17100 [5.0]	13100 [3.8]	4000 [1.2]	14.3	9.0	550 [259.6]	17100 [5.0]	3.58	11000 [3.2]	2.52	7.5	
WP14AZ24AJ2NA	RH2TZ2417STANN	22800 [6.7]	17500 [5.1]	5300 [1.6]	14.3	9.0	775 [365.8]	22800 [6.7]	3.51	14600 [4.3]	2.55	7.5	
WP14AZ30AJ2NA	RH2TZ3617STANN	28600 [8.4]	21900 [6.4]	6700 [2.0]	14.3	9.0	950 [448.4]	28600 [8.4]	3.56	18200 [5.3]	2.57	7.5	
WP14AZ36AJ2NA	RH2TZ3617STANN	34200 [10.0]	26200 [7.7]	8000 [2.3]	14.3	9.0	1050 [495.5]	34200 [10.0]	3.27	23600 [6.9]	2.49	7.5	
WP14AZ42AJ2NA	RH2TZ4821STANN	39500 [11.6]	30300 [8.9]	9200 [2.7]	14.3	9.0	1275 [601.7]	39500 [11.6]	3.69	25500 [7.5]	2.67	7.5	
WP14AZ48AJ2NA	RH2TZ4821STANN	45500 [13.3]	34900 [10.2]	10600 [3.1]	14.3	9.0	1450 [684.3]	45500 [13.0]	3.65	27500 [8.1]	2.54	7.5	
WP14AZ60AJ2NA	RH2TZ6024STANN	55500 [16.3]	42600 [12.5]	12900 [3.8]	14.3	9.0	1800 [849.5]	55500 [16.3]	2.66	34000 [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.

[] Designates Metric Conversions



The new degree of comfort.®

GENERAL TERMS OF LIMITED WARRANTY*

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

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