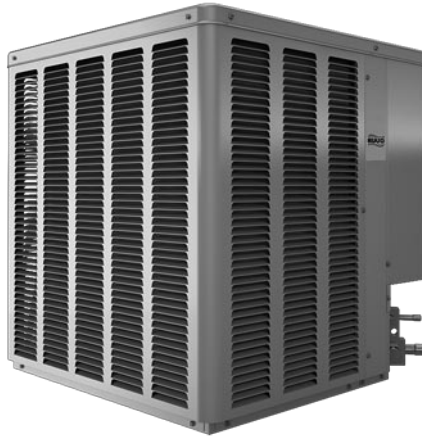




Ruud Choice™ Series 14 SEER Heat Pumps



WP14**F Series

Efficiency 14 SEER/11.5 EER 8.5 HSPF

Nominal Sizes: 1½ to 2½ Ton [5.28 to 8.79 kW]



- Coils constructed with copper tubing and enhanced aluminum fins.
- Includes factory installed low pressure control.
- Strong, attractive cabinet—louvered design protects the coil from damage.
- Expansion Valves with Internal Check Valve—Provides for quieter refrigerant metering.
- Demand Defrost Control
- Non-Cycling Reversing Valve

- Hot Gas Muffler
- Service Valves
- Grille/motor mount for quiet fan operation.
- Easily accessible control box.
- Bi-Directional Filter Drier (shipped – not installed)
- Certified and rated under AHRI Standard 240.
- U.L listed.

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Heat Pumps (For Reference)**

<u>W</u>	<u>P</u>	<u>14</u>	<u>24</u>	<u>F</u>	<u>J</u>	<u>1</u>	<u>N</u>	<u>A</u>	<u>*</u>
Brand	Product Category	SEER	Capacity BTU/HR	Major Series*	Voltage	Type	Controls	Minor Series**	Option Code
Ruud	P - Heat Pump	14 - 14 SEER	24 - 24,000 [7.03 kW] 30 - 30,000 [8.79 kW]	A - 1st Design F - Front Return Matchup	J - 1ph, 208-230/60	1 - Single-stage	N - Non-Communicating	A - 1st Design	N/A

[] Designates Metric Conversions

Available SKU's

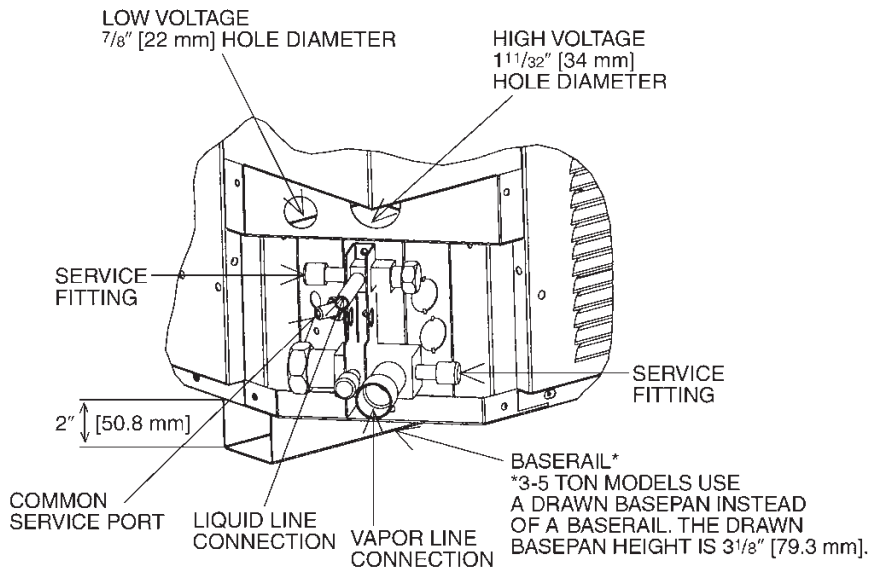
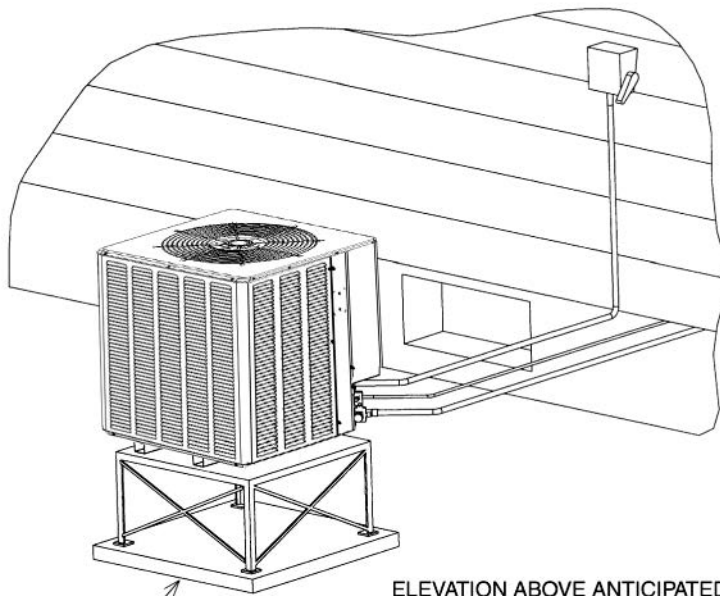
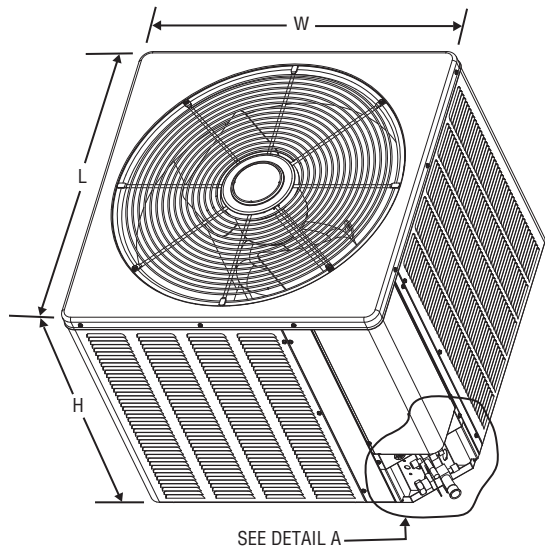
Available Models
WP1418FJ1NA
WP1424FJ1NA
WP1430FJ1NA

Electrical and Physical Data

Model Number	ELECTRICAL DATA							PHYSICAL DATA					
	Phase Frequency (Hz) Voltage (Volts)	Compressor		Fan Motor Full Load Amperes (FLA)	Minimum Circuit Ampacity Amperes	Fuse or HACR Circuit Breaker		Outdoor Coil			Refrig. Per Circuit Oz. [g]	Weight	
		Rated Load Amperes (RLA)	Locked Rotor Amperes (LRA)			Minimum Amperes	Maximum Amperes	Face Area Sq. Ft. [m ²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
18F	1-60-208-230	9/9	48	0.8	13/13	15/15	20/20	13.72 [1.27]	1	2590 [1222]	106 [3005]	154 [69.9]	164 [74.4]
24F	1-60-208-230	13.5/13.5	58.3	0.8	18/18	25/25	30/30	13.72 [1.27]	1	2590 [1222]	104 [2948]	155 [70.3]	165 [74.8]
30F	1-60-208-230	12.8/12.8	64	1.2	18/18	25/25	30/30	16.39 [1.52]	1	2595 [1225]	114 [3232]	169 [76.7]	181 [82.1]

[] Designates Metric Conversions

Unit Dimensions



DETAIL A

Model	Operating						Shipping					
	Height		Length		Width		Height		Length		Width	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
WP1418FJ1NA	26.25	667	27.625	702	27.625	702	26.25	667	27.625	702	27.625	702
WP1424FJ1NA	26.25	667	27.625	702	27.625	702	26.25	667	27.625	702	27.625	702
WP1430FJ1NA	27.375	695	31.625	803	31.625	803	27.375	695	31.625	803	31.625	803

Model	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18F	77	44.9	58.3	60.8	71.6	60.0	53.0	45.4
24F	76	47.5	58.2	64.4	68.3	64.5	57.3	53.1
30F	75	50.4	57.4	64.1	69.2	61.2	56.3	51.9

Heat Pump Refrigerant Line Size Information

Unit Size		Allowable Vapor Line Size		Allowable Liquid Line Size		Use Long Line Guidelines for Linear Line Lengths Greater Than Shown Below (Feet)		Outdoor Unit ABOVE or BELOW Indoor Unit								
		Line Size		Line Size		WP14-A		WP14-F		Equivalent Length (Feet)						
		Line Size	Vapor Line Size	Line Size	Vapor Line Size	Line Size	Vapor Line Size	Line Size	Vapor Line Size	Maximum Vertical Separation / Capacity Multiplier	101-125	126-150	151-175	176-200	201-225	226-250
1.5 Ton *SEE NOTE 3	1/4"	5/8"	n/a	n/a	n/a	25/1.00	50/0.99	62/0.98	43/0.98	24/0.97	5/0.97	NR	NR	NR	NR	
	5/16"	5/8"	n/a	n/a	195	25/1.00	50/0.99	75/0.98	98/0.98	93/0.97	88/0.97	83/0.96	78/0.96	73/0.95	68/0.94	
	3/8"	5/8"	130	n/a	130	25/1.00	50/0.99	75/0.98	100/0.98	100/0.97	100/0.97	100/0.96	100/0.96	100/0.95	100/0.94	
	1/4"	3/4**	n/a	n/a	n/a	25/1.00	50/1.00	62/0.99	43/0.99	24/0.99	5/0.99	NR	NR	NR	NR	
	5/16"	3/4**	195	n/a	130	25/1.00	50/1.00	75/0.99	98/0.99	93/0.99	88/0.99	83/0.99	78/0.98	73/0.98	68/0.98	
	3/8"	3/4**	130	n/a	130	25/1.00	50/1.00	75/1.00	100/0.99	100/0.99	100/0.99	100/0.99	100/0.98	100/0.98	100/0.98	
2 Ton	1/4"	5/8"	n/a	n/a	n/a	25/0.99	50/0.98	21/0.97	NR	NR	NR	NR	NR	NR	NR	
	5/16"	5/8"	140	140	195	25/0.99	50/0.98	75/0.97	87/0.96	77/0.95	69/0.94	61/0.93	53/0.92	45/0.91	37/0.90	
	3/8"	5/8"	130	93	130	25/0.99	50/0.98	75/0.97	100/0.96	100/0.95	100/0.94	98/0.93	95/0.92	93/0.91	90/0.90	
	1/4"	3/4"	n/a	n/a	n/a	25/1.00	50/1.00	21/0.99	NR	NR	NR	NR	NR	NR	NR	
	5/16"	3/4"	195	140	130	25/1.00	50/1.00	75/0.99	87/0.99	77/0.98	69/0.98	61/0.98	53/0.97	45/0.97	37/0.96	
	3/8"	3/4"	130	93	130	25/1.00	50/1.00	75/0.99	100/0.99	100/0.98	100/0.98	98/0.98	95/0.97	93/0.97	90/0.96	
2.5 Ton	5/16"	5/8"	150	103	150	25/0.99	50/0.98	75/0.96	70/0.94	59/0.93	48/0.91	36/0.90	NR	NR	NR	
	3/8"	5/8"	100	68	100	25/0.99	50/0.98	75/0.96	100/0.94	98/0.93	94/0.91	90/0.90	NR	NR	NR	
	5/16"	3/4"	150	103	150	25/1.00	50/0.99	75/0.99	70/0.98	59/0.98	48/0.97	36/0.96	25/0.96	13/0.95	NR	
	3/8"	3/4"	100	68	100	25/1.00	50/0.99	75/0.99	100/0.98	98/0.98	94/0.97	90/0.96	86/0.96	82/0.95	78/0.95	

NOTES:

- Do not exceed 200 ft linear line length.
- Do not exceed 100 ft vertical separation between indoor and outdoor units.
- *3/4" vapor line should only be used for 1.5 ton systems if outdoor unit is below or at same level as indoor to assure proper oil return.
- Always use the smallest liquid line allowable to minimize refrigerant charge.
- Applications shaded in light gray indicate capacity multipliers between 0.90 and 0.96 which are not recommended, but are allowed.
- Applications shaded in dark gray are not recommended due to excessive liquid or suction line pressure drop.

Heat Pump Refrigerant Line Size Information

Unit Size		14 SEER Single-Stage Heat Pumps										Outdoor Unit ABOVE or BELOW Indoor Unit							
		Allowable Liquid Line Size mm [in.]		Allowable Vapor Line Size mm [in.]		Use Long Line Guidelines for Linear Line Lengths Greater Than Shown Below (Meters)		Equivalent Length (Meters)						Maximum Vertical Separation / Capacity Multiplier					
		WP14-A		WP14-F		WP14-F		< 8	8-15	16-23	24-30	31-38	39-46	47-53	54-61	62-69	70-76		
5.3 KW [1.5 Ton] *SEE NOTE 3	6.35 [1/4]	15.88 [5/8]	n/a	n/a	8 / 1.00	15 / 0.99	19 / 0.98	13 / 0.98	7 / 0.97	2 / 0.97	NR	NR	NR	NR	NR	NR			
	7.94 [5/16]	15.88 [5/8]	59	n/a	8 / 1.00	15 / 0.99	23 / 0.98	30 / 0.98	28 / 0.97	27 / 0.97	25 / 0.96	24 / 0.96	22 / 0.95	21 / 0.94	21 / 0.94	21 / 0.94			
	9.53 [3/8]	15.88 [5/8]	40	n/a	8 / 1.00	15 / 0.99	23 / 0.98	30 / 0.98	30 / 0.97	30 / 0.97	30 / 0.96	30 / 0.96	30 / 0.95	30 / 0.94	30 / 0.94	30 / 0.94			
	6.35 [1/4]	19.05 [3/4]*	n/a	n/a	8 / 1.00	15 / 1.00	19 / 0.99	13 / 0.99	7 / 0.99	2 / 0.99	NR	NR	NR	NR	NR	NR	NR		
	7.94 [5/16]	19.05 [3/4]*	59	n/a	8 / 1.00	15 / 1.00	23 / 0.99	30 / 0.99	28 / 0.99	27 / 0.99	25 / 0.99	24 / 0.98	22 / 0.98	21 / 0.98	21 / 0.98	21 / 0.98			
7.0 KW [2 Ton]	6.35 [1/4]	15.88 [5/8]	n/a	n/a	8 / 0.99	15 / 0.98	6 / 0.97	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
	7.94 [5/16]	15.88 [5/8]	59	43	8 / 0.99	15 / 0.98	23 / 0.97	27 / 0.96	23 / 0.95	21 / 0.94	19 / 0.93	16 / 0.92	14 / 0.91	11 / 0.90	11 / 0.90	11 / 0.90			
	9.53 [3/8]	15.88 [5/8]	40	28	8 / 0.99	15 / 0.98	23 / 0.97	30 / 0.96	30 / 0.95	30 / 0.94	30 / 0.93	29 / 0.92	28 / 0.91	27 / 0.90	27 / 0.90	27 / 0.90			
	6.35 [1/4]	19.05 [3/4]	n/a	n/a	8 / 1.00	15 / 1.00	6 / 0.99	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
	7.94 [5/16]	19.05 [3/4]	59	43	8 / 1.00	15 / 1.00	23 / 0.99	27 / 0.99	23 / 0.98	21 / 0.98	19 / 0.98	16 / 0.97	14 / 0.97	11 / 0.96	11 / 0.96	11 / 0.96			
8.8 KW [2.5 Ton]	6.35 [1/4]	15.88 [5/8]	46	31	8 / 0.99	15 / 0.98	23 / 0.96	21 / 0.94	18 / 0.93	15 / 0.91	11 / 0.90	NR	NR	NR	NR	NR	NR		
	7.94 [5/16]	15.88 [5/8]	30	21	8 / 0.99	15 / 0.98	23 / 0.96	30 / 0.94	30 / 0.93	29 / 0.91	27 / 0.90	NR	NR	NR	NR	NR	NR		
	9.53 [3/8]	19.05 [3/4]	46	31	8 / 1.00	15 / 0.99	23 / 0.99	21 / 0.98	18 / 0.98	15 / 0.97	11 / 0.96	8 / 0.96	4 / 0.95	NR	NR	NR			
	6.35 [1/4]	19.05 [3/4]	30	21	8 / 1.00	15 / 0.99	23 / 0.99	30 / 0.98	30 / 0.98	29 / 0.97	27 / 0.96	26 / 0.96	25 / 0.95	24 / 0.95	24 / 0.95	24 / 0.95			
	7.94 [5/16]	19.05 [3/4]	59	43	8 / 1.00	15 / 0.99	23 / 0.99	30 / 0.99	30 / 0.98	29 / 0.97	28 / 0.97	27 / 0.96	26 / 0.96	25 / 0.95	24 / 0.95	24 / 0.95			

NOTES:

- Do not exceed 61 meters linear line length.
- Do not exceed 30 meters vertical separation between indoor and outdoor units.
- *19.05 mm [3/4 in.] vapor line should only be used for 1.5 ton systems if outdoor unit is below or at same level as indoor to assure proper oil return.
- Always use the smallest liquid line allowable to minimize refrigerant charge.
- Applications shaded in light gray indicate capacity multipliers between 0.90 and 0.96 which are not recommended, but are allowed.
- Applications shaded in dark gray are not recommended due to excessive liquid or suction pressure drop.

[] Designates Metric Conversions

Performance Data @ AHRI Standard Conditions – Heat Pump

Designated Tested Combination (DTC)		AHRI Cooling Performance						AHRI Heating Performance (70°F [21°C] Indoor)				
Model Numbers		80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35°C] DB Outdoor Air						Outdoor Air 47°F [8.5°C] DB/ 43°F [6°C] WB DOE High Temp.		Outdoor Air 17°F [-8.5°C] DB 15°F [6°C] WB DOE Low Temp.		DOE Region IV HSPF
Outdoor Unit	Air Mover	Total Capacity BTU/H	Net Sensible BTU/H	Net Latent BTU/H	SEER	EER	Indoor CFM [L/s]	BTU/H [kW]	COP	BTU/H [kW]	COP	
WP1418F	RF1T2421MTAN	17100 [5.0]	13200 [3.9]	3900 [1.1]	14.00	11.50	575 [271.4]	17100 [5.0]	3.60	10300 [3.0]	2.30	8.2
WP1424F	RF1T2421MTAN	22800 [6.7]	17800 [5.2]	5000 [1.5]	14.00	11.50	850 [399.5]	22400 [6.6]	3.65	14100 [4.1]	2.40	8.2
WP1430F	RF1T3624MTAN	28600 [8.4]	23600 [6.9]	5000 [1.5]	14.00	11.50	1100 [517.0]	28200 [8.3]	3.85	16800 [4.9]	2.40	8.2

[] 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.

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.



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

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