



Featuring
New Industry Standard
R-410A Refrigerant

R-410A

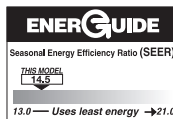


TZPL SERIES

Manufactured for
Thermal Zone®
Philadelphia, PA



(IN CERTAIN
MATCHED SYSTEMS)



14.5 SEER HEAT PUMPS

Features

- Coils constructed with copper tubing and enhanced aluminum fins.
- Strong, attractive cabinet—louvered design protects the coil from damage.
- Expansion Valves with Internal Check Valve—Provides for quieter refrigerant metering.
- Enhanced Demand Defrost Control
- Factory Installed Low Pressure 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 A.R.I. Standard 240.
- U.L listed.

Accessories/Options

- Low Ambient Control (Model No. RXAD-A08)
- Outdoor Thermostats (Model No. RXPT-A01, A02, A03 or A04)
- Heat Pump Monitor (Model No. RXPM-B01)
- Thermostats and Subbases
(Available through the PROSTOCK® department)
- Compressor Time Delay Control (Model No. RXMD-B01)
- Blower Time Delay Control (Model No. RXMD-C04)
RXMD-C04 is not required if the outdoor unit is matched with a Thermal Zone® furnace or air handler, or if the furnace or air handler used has a blower off time delay built-in.
- Sound Enclosure*
- High Pressure Control (Model No. RXAB-A07)
- Start Components*
- Heat Pump Thermostat Warning Light Kit (Model No. RXPX-D01)

*Available through the PROSTOCK® department.

Applications

Thermal Zone® remote heat pumps offer comfort and dependability for single, multi-family and light commercial applications.

Model Identification Number

TZ	P	L	4	18	2	B
THERMAL ZONE®	P = HEAT PUMP	VOLTAGE L = R-410A	4 = 14.5 SEER	NOMINAL COOLING CAPACITY 18 = 18,000 BTU/HR [5.28 kW] 24 = 24,000 BTU/HR [7.03 kW] 30 = 30,000 BTU/HR [8.79 kW] 36 = 36,000 BTU/HR [10.55 kW] 42 = 42,000 BTU/HR [12.31 kW] 48 = 48,000 BTU/HR [14.07 kW] 60 = 60,000 BTU/HR [17.58 kW]	2 = 208/230V – 1PH – 60 Hz	DESIGN SERIES

Performance Data ARI Standard Conditions

Note: Only these combinations of indoor/outdoor units are approved and any other combinations should not be used.

Model Numbers		ARI Cooling Performance							ARI Htg. Performance (70°F 21.0°C) Indoor				
		80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35.0°C] DB Outdoor Air							Outdoor Air 47°F DB/43°F WB [8.5°C/6.0°C] DOE High Temp.		Outdoor Air 17°F DB/15°F WB [-8.5°C/-9.5°C] DOE Low Temp.		DOE Region IV HSPF
Outdoor Unit TZPL	Indoor Coil and/or Air Handler	Total Capacity BTU/H [kW]	Net Sens. BTU/H [kW]	Net Latent BTU/H [kW]	EER	SEER	Snd. Rate dB	Indoor CFM [L/s]	BTU/H [kW]	COP	BTU/H [kW]	COP	
Rev. 7/29/09 418-2B	TZHLL-2417 (RCSL-H*2417) ①	18,600 [5.4]	13,550 [4.0]	5,050 [1.5]	12.00	14.50	76	600 [283]	17,800 [5.2]	3.68	10,900 [3.2]	2.36	8.50
	TCFL-H*2414	18,200 [5.3]	13,150 [3.9]	5,050 [1.5]	11.00	13.50	76	600 [283]	18,300 [5.4]	3.42	11,400 [3.3]	2.24	8.20
	TCFL-H*2417	18,200 [5.3]	13,150 [3.9]	5,050 [1.5]	11.00	13.50	76	600 [283]	18,300 [5.4]	3.42	11,400 [3.3]	2.24	8.20
	-Z92UP453TA (TCFL-H*2417)	18,500 [5.4]	13,500 [4.0]	5,000 [1.5]	12.50	15.00	76	575 [271]	17,800 [5.2]	3.64	10,900 [3.2]	2.34	8.50
	-Z92UP603TA (TCFL-H*2417)	18,500 [5.4]	13,450 [3.9]	5,050 [1.5]	12.50	15.00	76	600 [283]	17,800 [5.2]	3.66	10,900 [3.2]	2.34	8.50
	-Z92UP753TA (TCFL-H*2417)	18,400 [5.4]	13,400 [3.9]	5,000 [1.5]	12.00	14.50	76	625 [295]	17,900 [5.2]	3.60	11,000 [3.2]	2.32	8.50
	TZHSL-1817 (RCSL-H*2417)	18,200 [5.3]	13,250 [3.9]	4,950 [1.5]	11.50	14.00	76	600 [283]	18,200 [5.3]	3.48	11,300 [3.3]	2.26	8.20
424-2B	TZHLL-2417 (RCSL-H*2417) ①	23,800 [7.0]	17,150 [5.0]	6,650 [1.9]	12.00	14.50	74	800 [378]	22,800 [6.7]	3.64	14,400 [4.2]	2.44	9.00
	TCFL-H*2414	23,400 [6.9]	16,750 [4.9]	6,650 [1.9]	11.00	13.00	74	800 [378]	23,400 [6.9]	3.42	15,000 [4.4]	2.30	8.20
	TCFL-H*2417	23,400 [6.9]	16,750 [4.9]	6,650 [1.9]	11.00	13.00	74	800 [378]	23,400 [6.9]	3.42	15,000 [4.4]	2.30	8.20
	-Z92UP453TA (TCFL-H*2417)	23,600 [6.9]	17,000 [5.0]	6,600 [1.9]	11.50	14.00	74	800 [378]	23,000 [6.7]	3.56	14,600 [4.3]	2.38	9.00
	-Z92UP603TA (TCFL-H*2417)	23,600 [6.9]	17,000 [5.0]	6,600 [1.9]	11.50	14.00	74	825 [389]	23,000 [6.7]	3.56	14,600 [4.3]	2.38	9.00
	-Z92UP753TA (TCFL-H*2417)	23,800 [7.0]	17,350 [5.1]	6,450 [1.9]	11.50	13.50	74	850 [401]	23,200 [6.8]	3.52	14,700 [4.3]	2.36	8.20
	TZHSL-2417 (RCSL-H*2417)	23,400 [6.9]	16,850 [4.9]	6,550 [1.9]	11.00	13.50	74	800 [378]	23,200 [6.8]	3.46	14,900 [4.4]	2.34	8.20
430-2B	TZHLL-3617 (RCSL-H*3617) ①	29,600 [8.7]	22,050 [6.5]	7,550 [2.2]	12.00	14.50	73	1,000 [472]	28,800 [8.4]	3.62	17,900 [5.2]	2.40	9.00
	TCFL-H*3617	29,200 [8.6]	21,650 [6.3]	7,550 [2.2]	11.00	13.00	73	1,000 [472]	29,400 [8.6]	3.44	18,500 [5.4]	2.28	8.50
	-Z92UP453TA (TCFL-H*3617)	29,000 [8.5]	21,600 [6.3]	7,400 [2.2]	11.50	13.50	73	1,025 [484]	29,200 [8.6]	3.48	18,300 [5.4]	2.30	8.50
	-Z92UP603TA (TCFL-H*3617)	29,200 [8.6]	21,750 [6.4]	7,450 [2.2]	11.50	13.50	73	1,000 [472]	29,200 [8.6]	3.50	18,200 [5.3]	2.32	8.50

① Highest sales volume tested combination required by D.O.E. test procedures.

[] Designates Metric Conversions

Performance Data ARI Standard Conditions (cont.)

Note: Only these combinations of indoor/outdoor units are approved and any other combinations should not be used.

Model Numbers		ARI Cooling Performance							ARI Htg. Performance (70°F 21.0°C) Indoor				
		80°F [26.5°C] DB/67°F [19.5°C] WB Indoor Air 95°F [35.0°C] DB Outdoor Air							Outdoor Air 47°F DB/43°F WB [8.5°C/6.0°C] DOE High Temp.		Outdoor Air 17°F DB/15°F WB [-8.5°C/-9.5°C] DOE Low Temp.		DOE Region IV HSPF
Outdoor Unit TZPL	Indoor Coil and/or Air Handler	Total Capacity BTU/H [kW]	Net Sens. BTU/H [kW]	Net Latent BTU/H [kW]	EER	SEER	Snd. Rate dB	Indoor CFM [L/s]	BTU/H [kW]	COP	BTU/H [kW]	COP	
Rev. 729/09 430-2B	-Z92UP753TA (TCFL-H*3617)	29,000 [8.5]	21,600 [6.3]	7,400 [2.2]	11.00	13.00	73	1,025 [484]	29,400 [8.6]	3.44	18,500 [5.4]	2.28	8.50
	TCFL-H*3621	29,200 [8.6]	21,650 [6.3]	7,550 [2.2]	11.00	13.00	73	1,000 [472]	29,400 [8.6]	3.44	18,500 [5.4]	2.28	8.50
	-Z92UP453TA (TCFL-H*3621)	29,200 [8.6]	21,800 [6.4]	7,400 [2.2]	11.50	13.50	73	1,025 [484]	29,200 [8.6]	3.48	18,300 [5.4]	2.32	8.50
	-Z92UP603TA (TCFL-H*3621)	29,200 [8.6]	21,750 [6.4]	7,450 [2.2]	11.50	13.50	73	1,000 [472]	29,000 [8.5]	3.52	18,200 [5.3]	2.34	8.50
	-Z92UP754TA (TCFL-H*3621)	29,000 [8.5]	21,600 [6.3]	7,400 [2.2]	11.50	13.50	73	975 [460]	29,200 [8.6]	3.50	18,300 [5.4]	2.32	8.50
	TZHSL-3017 (RCSL-H*3617)	28,800 [8.4]	21,200 [6.2]	7,600 [2.2]	11.00	13.50	73	950 [448]	29,200 [8.6]	3.48	18,300 [5.4]	2.32	8.50
436-2B	TZHLL-3617 (RCSL-H*3617) ①	35,600 [10.4]	25,700 [7.5]	9,900 [2.9]	12.00	14.50	75	1,175 [554]	35,000 [10.3]	3.58	23,000 [6.7]	2.44	9.00
	TCFL-H*3617	34,400 [10.1]	24,500 [7.2]	9,900 [2.9]	11.00	13.50	75	1,075 [507]	35,400 [10.4]	3.48	23,400 [6.9]	2.42	8.50
	TCFL-H*3621	34,400 [10.1]	24,500 [7.2]	9,900 [2.9]	11.00	13.50	75	1,075 [507]	35,400 [10.4]	3.48	23,400 [6.9]	2.42	8.50
	-Z92UP105TA (TCFL-H*3621)	35,800 [10.5]	26,300 [7.7]	9,500 [2.8]	11.50	14.00	75	1,150 [543]	35,200 [10.3]	3.52	23,200 [6.8]	2.46	8.50
	TZHSL-3617 (RCSL-H*3617)	35,200 [10.3]	25,450 [7.5]	9,750 [2.9]	11.00	13.50	75	1,100 [519]	35,600 [10.4]	3.46	23,600 [6.9]	2.42	8.50
442-2B	TZHLL-4821 (RCSL-H*4821) ①	40,000 [11.7]	29,250 [8.6]	10,750 [3.1]	12.25	14.50	77	1,350 [637]	39,000 [11.4]	3.86	25,600 [7.5]	2.74	9.00
	TCFL-H*4821	39,000 [11.4]	28,250 [8.3]	10,750 [3.1]	11.20	13.00	77	1,350 [637]	40,000 [11.7]	3.64	26,400 [7.7]	2.60	8.50
	-Z92UP905TA (TCFL-H*4821)	39,000 [11.4]	28,800 [8.4]	10,200 [3.0]	11.20	13.00	77	1,400 [661]	40,000 [11.7]	3.66	26,400 [7.7]	2.60	8.50
	-Z92UP105TA (TCFL-H*4821)	39,500 [11.6]	29,450 [8.6]	10,050 [2.9]	11.15	13.00	77	1,425 [672]	40,000 [11.7]	3.62	26,400 [7.7]	2.58	8.50
	TCFL-H*4824	39,000 [11.4]	28,250 [8.3]	10,750 [3.1]	11.20	13.00	77	1,350 [637]	40,000 [11.7]	3.64	26,400 [7.7]	2.60	8.50
	-Z92UP905TA (TCFL-H*4824)	39,000 [11.4]	28,800 [8.4]	10,200 [3.0]	11.20	13.00	77	1,400 [661]	40,000 [11.7]	3.64	26,400 [7.7]	2.60	8.50
	-Z92UP105TA (TCFL-H*4824)	39,500 [11.6]	29,450 [8.6]	10,050 [2.9]	11.10	13.00	77	1,425 [672]	40,000 [11.7]	3.62	26,600 [7.8]	2.58	8.50
	-Z92UP125TA (TCFL-H*4824)	39,500 [11.6]	29,350 [8.6]	10,150 [3.0]	11.50	13.50	77	1,425 [672]	39,500 [11.6]	3.70	26,200 [7.7]	2.64	8.50
	TZHSL-4221 (RCSL-H*4821)	39,000 [11.4]	28,500 [8.4]	10,500 [3.1]	11.20	13.00	77	1,350 [637]	40,000 [11.7]	3.62	26,600 [7.8]	2.58	8.50
448-2B	TZHLL-4821 (RCSL-H*4821) ①	47,500 [13.9]	33,450 [9.8]	14,050 [4.1]	12.30	14.50	77	1,500 [708]	47,500 [13.9]	3.72	33,200 [9.7]	2.76	9.00
	TCFL-H*4821	47,000 [13.8]	32,950 [9.7]	14,050 [4.1]	11.60	13.50	77	1,500 [708]	48,000 [14.1]	3.46	33,800 [9.9]	2.68	8.50
	TCFL-H*4824	47,000 [13.8]	32,950 [9.7]	14,050 [4.1]	11.60	13.50	77	1,500 [708]	48,000 [14.1]	3.46	33,800 [9.9]	2.68	8.50
	TZHSL-4821 (RCSL-H*4821)	47,000 [13.8]	33,150 [9.7]	13,850 [4.1]	11.65	13.50	77	1,525 [720]	48,000 [14.1]	3.44	34,000 [10.0]	2.66	8.50
	TZHLL-4824 (RCSL-H*4824)	48,000 [14.1]	34,750 [10.2]	13,250 [3.9]	12.55	14.50	77	1,625 [767]	47,500 [13.9]	3.60	33,000 [9.7]	2.78	9.00
	TZHSL-4824 (RCSL-H*4824)	47,000 [13.8]	33,150 [9.7]	13,850 [4.1]	11.65	13.50	77	1,500 [708]	48,000 [14.1]	3.44	34,000 [10.0]	2.66	8.50
460-2B	TZHLL-6024 (RCSL-H*6024A*) ①	59,500 [17.4]	42,950 [12.6]	16,550 [4.8]	12.35	14.50	77	1,800 [849]	61,000 [17.9]	3.80	40,000 [11.7]	2.62	8.50
	TCFL-H*6024A*	57,500 [16.8]	40,950 [12.0]	16,550 [4.8]	11.70	13.50	77	1,675 [790]	61,500 [18.0]	3.72	40,500 [11.9]	2.70	8.20

① Highest sales volume tested combination required by D.O.E. test procedures.

[] Designates Metric Conversions

Electrical and Physical Data

Model Number TZPL	ELECTRICAL							PHYSICAL						
	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]	
Rev. 7/29/09														
418-2B	1-60-208/230	9/9	48	0.08	13/13	15/15	20/20	13.72 [1.27]	1	2590 [1222]	101.6 [2880]	154 [69.9]	164 [74.4]	
424-2B	1-60-208/230	12.8/12.8	58.3	0.08	17/17	25/25	25/25	13.72 [1.27]	1	2590 [1222]	100.8 [2858]	155 [70.3]	165 [74.8]	
430-2B	1-60-208/230	14.1/14.1	73	1.23	19/19	25/25	30/30	16.39 [1.52]	1	2595 [1225]	117.8 [3340]	118.5 [53.8]	181 [82.1]	
436-2B	1-60-208/230	16.7/16.7	79	1.30	23/23	30/30	35/35	21.85 [2.03]	1	3575 [1687]	136.5 [3870]	193 [87.5]	207 [93.9]	
442-2B	1-60-208/230	17.9/17.9	112	1.33	24/24	30/30	40/40	21.85 [2.03]	1	3575 [1687]	162.4 [4604]	193 [87.5]	208 [94.3]	
448-2B	1-60-208/230	21.8/21.8	117	2.80	31/31	40/40	50/50	21.85 [2.03]	2	3360 [1586]	258.4 [7326]	265 [120.2]	280 [127]	
460-2B	1-60-208/230	26.4/26.4	134	2.80	36/36	45/45	60/60	21.85 [2.03]	2	3360 [1586]	284 [8051]	265 [120.2]	280 [127]	

- NOTES:
 ① 20 Fins per inch.
 ② Factory charged for 15 ft. line set.

[] Designates Metric Conversions

BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

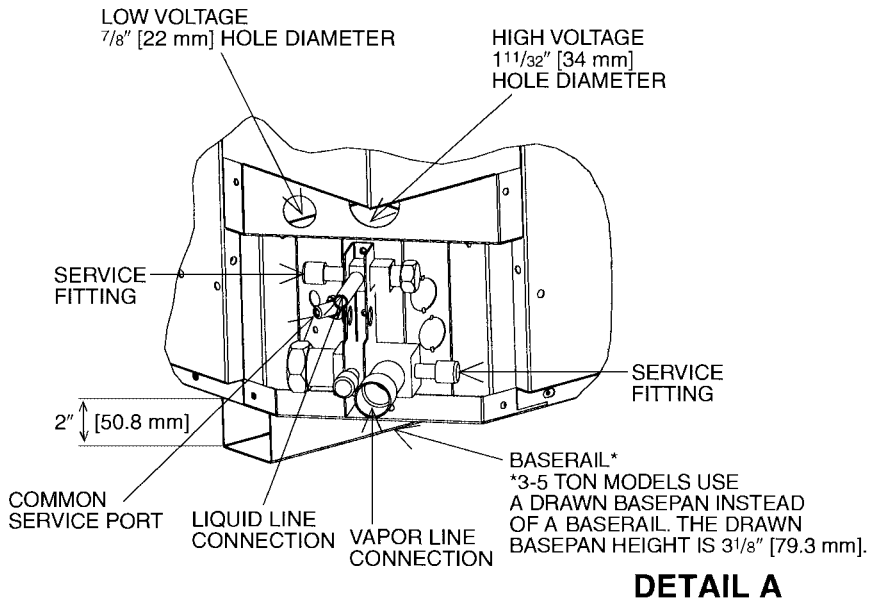
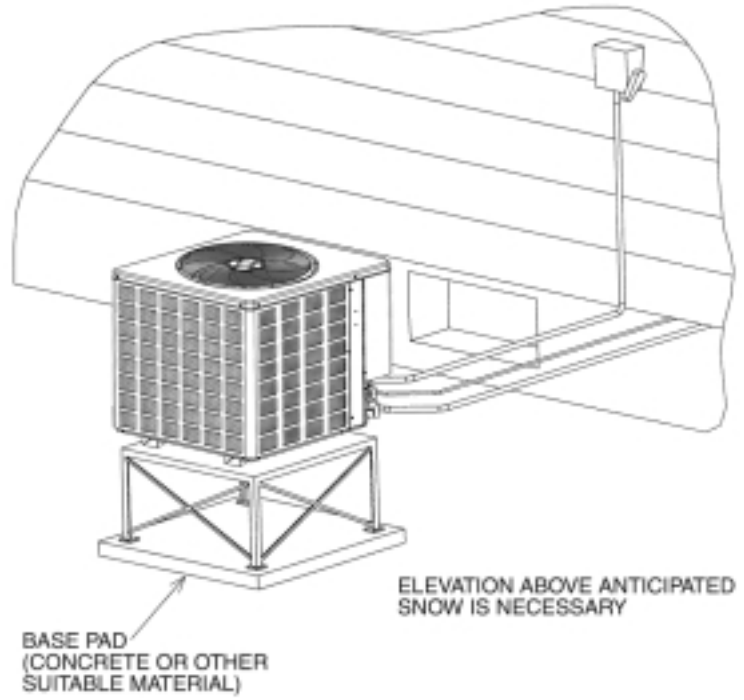
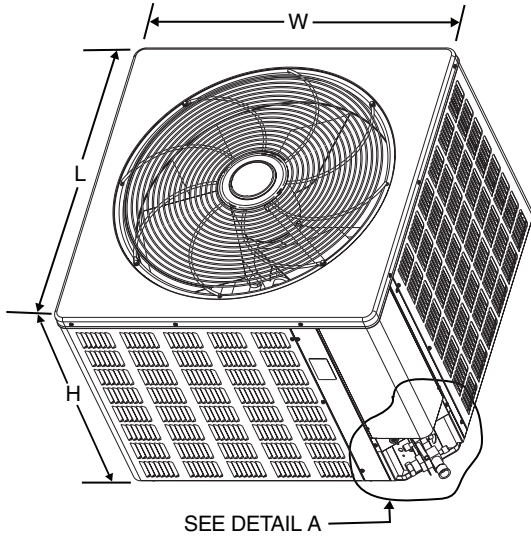
GENERAL TERMS OF LIMITED WARRANTY

Thermal Zone® will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods stated, in accordance with the terms of the limited warranty.

*For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See the Product Warranty Card.

Conditional Parts Warranty*
 (Registration Required) Ten (10) Years
 Conditional Compressor*
 (Registration Required) Ten (10) Years
 Any Other Part..... Five (5) Years

Unit Dimensions



14.5 SEER Cooling Capacity	18, 24	30	36, 42, 48, 60
Height "H" (In.) [mm]	26 ¹ / ₄ [666.7]	27 ³ / ₈ [695.3]	35 ³ / ₈ [898.5]
Length "L" (In.) [mm]	27 ⁵ / ₈ [701.6]	31 ⁵ / ₈ [803.2]	31 ⁵ / ₈ [803.2]
Width "W" (In.) [mm]	27 ⁵ / ₈ [701.6]	31 ⁵ / ₈ [803.2]	31 ⁵ / ₈ [803.2]

[] Designates Metric Conversions

Heat Pump Refrigerant Line Size Information

System Capacity	Line Size Connection Size (Inch I.D.) [mm]	Line Size (Inch O.D.) [mm]	Liquid Line Sizing (R410A) Outdoor Unit Above or Below Indoor Coil (Heat Pumps Only)					
			Total Equivalent Length—Feet [m]					
			25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]
			Maximum Vertical Separation—Feet [m]					
1 1/2 Ton	3/8" [9.53]	1/4 [6.35]	25 [7.62]	40 [12.19]	25 [7.62]	9 [2.74]	N/A	N/A
		5/16 [7.94]	25 [7.62]	50 [15.24]	62 [18.90]	58 [17.68]	53 [16.15]	49 [14.94]
		3/8* [9.53]	25 [7.62]	50 [15.24]	75 [22.86]	72 [21.95]	70 [21.34]	68 [20.73]
2 Ton	3/8" [9.53]	1/4 [6.35]	23 [7.01]	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	36 [10.97]	29 [8.84]	23 [7.01]	16 [4.88]	9 [2.74]
		3/8* [9.53]	25 [7.62]	50 [15.24]	72 [21.95]	70 [21.34]	68 [20.73]	65 [19.81]
2 1/2 Ton	3/8" [9.53]	1/4 [6.35]	25 [7.62]	N/A	N/A	N/A	N/A	N/A
		5/16 [7.94]	25 [7.62]	49 [14.94]	38 [11.58]	27 [8.23]	17 [5.18]	6 [1.83]
		3/8* [9.53]	25 [7.62]	50 [15.24]	68 [20.73]	65 [19.81]	62 [18.90]	58 [17.68]
3 Ton	3/8" [9.53]	5/16 [7.94]	25 [7.62]	50 [15.24]	37 [11.28]	22 [6.71]	7 [2.13]	N/A
		3/8* [9.53]	25 [7.62]	50 [15.24]	68 [20.73]	63 [19.20]	58 [17.68]	53 [16.15]
3 1/2 Ton	3/8" [9.53]	5/16 [7.94]	25 [7.62]	23 [7.01]	4 [1.22]	N/A	N/A	N/A
		3/8* [9.53]	25 [7.62]	50 [15.24]	43 [13.11]	36 [10.97]	30 [9.14]	24 [7.32]
4 Ton	3/8" [9.53]	3/8* [9.53]	25 [7.62]	46 [14.02]	38 [11.58]	30 [9.14]	22 [6.71]	15 [4.57]
		1/2 [12.7]	25 [7.62]	50 [15.24]	56 [17.07]	55 [16.76]	53 [16.15]	52 [15.85]
5 Ton	3/8" [9.53]	3/8* [9.53]	25 [7.62]	50 [15.24]	56 [17.07]	44 [13.41]	32 [9.75]	20 [6.10]
		1/2 [12.7]	25 [7.62]	50 [15.24]	75 [22.86]	81 [24.69]	79 [24.08]	76 [23.16]

NOTES:

*Standard line size

N/A = Application not recommended.

Suction Line Length/Size versus Capacity Multiplier (R-410A)								
Unit Size		1 1/2 Ton	2 Ton	2 1/2 Ton	3 Ton	3 1/2 Ton	4 Ton	5 Ton
Suction Line Connection Size		3/4" [19.05] I.D.			7/8" [22.23] I.D.			
Suction Line Run—Feet [m]		5/8" [15.88 mm] O.D. Opt. 3/4" [19.05 mm] O.D. Std.*		5/8" [15.88 mm] O.D. Opt. 3/4" [19.05 mm] O.D. Std.* 7/8" [22.23 mm] O.D. Opt.	3/4" [19.05 mm] O.D. Opt. 7/8" [22.23 mm] O.D. Std.*		7/8" [22.23 mm] O.D. Opt. 1 1/8" [28.58 mm] O.D. Std.*	
25' [7.62]	Optional Standard Optional	1.00 1.00 —	1.00 1.00 —	1.00 1.00 1.00	1.00 1.00 —	1.00 1.00 —	1.00 1.00 —	1.00 1.00 —
50' [15.24]	Optional Standard Optional	0.98 0.99 —	0.98 0.99 —	0.96 0.98 0.99	0.98 0.99 —	0.99 0.99 —	0.99 0.99 —	0.99 0.99 —
100' [30.48]	Optional Standard Optional	0.95 0.96 —	0.95 0.96 —	0.94 0.96 0.97	0.96 0.97 —	0.96 0.98 —	0.96 0.98 —	0.97 0.98 —
150' [45.72]	Optional Standard Optional	0.92 0.93 —	0.92 0.94 —	0.91 0.93 0.95	0.94 0.95 —	0.94 0.96 —	0.95 0.96 —	0.94 0.97 —

NOTES:

*Standard line size

N/A = Using suction line larger than shown in chart will result in poor oil return and is not recommended.

[] Designates Metric Conversions

NOTES

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.

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