

Featuring  
Earth-Friendly  
R-410A Refrigerant



## 13 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.
- 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 A.R.I. Standard 240.
- U.L listed.

### Accessories/Options

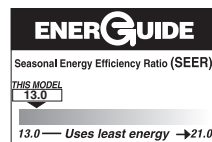
- Low Ambient Control (Model No. RXAD-A08)
  - Outdoor Thermostats (Model No. RXPT-A01, A02, A03 or A04)
  - Heat Pump Monitor (Model No. RXPM-B01)
  - Thermostats and Subbases  
(Available through the PROSTOCK® department)
  - Compressor Time Delay Control (Model No. RXMD-B01)
  - Blower Time Delay 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\*
- \*Available through the PROSTOCK® department.

### Applications

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

## TZPL-3 SERIES

Manufactured for  
**Thermal Zone®**  
Philadelphia, PA



# Model Identification Number

<b>TZ</b>	<b>P</b>	<b>L</b>	<b>3</b>	<b>18</b>	<b>2</b>	<b>A</b>
THERMAL ZONE®	P = HEAT PUMP	L = R410A	3 = 13 SEER	NOMINAL COOLING CAPACITY	2 = 208-230 SINGLE PHASE	DESIGN SERIES
				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]		

## 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-3	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. 1/10/2008  18	TZHSL-1817 (RCSL-H*2417A*) ①	18,200 [5.3]	13,100 [3.8]	5,100 [1.5]	11.35	13.00	76	600 [283]	16,900 [5.0]	3.42	8,700 [2.5]	2.18	7.7
	TCFL-H*2414A*	18,100 [5.3]	12,950 [3.8]	5,150 [1.5]	11.10	13.00	76	600 [283]	17,000 [5.0]	3.36	8,800 [2.6]	2.08	7.7
	TCFL-H*2417A*	18,100 [5.3]	12,950 [3.8]	5,150 [1.5]	11.10	13.00	76	600 [283]	17,000 [5.0]	3.36	8,800 [2.6]	2.08	7.7
	TZHLL-2417 (RCSL-H*2417A*)	18,600 [5.4]	13,450 [3.9]	5,150 [1.5]	12.00	14.00	76	600 [283]	16,500 [4.8]	3.62	8,300 [2.4]	2.30	8.2
	TZHKL-2417 (RCSL-H*2417A*)	18,800 [5.5]	13,750 [4.0]	5,050 [1.5]	12.00	14.00	76	615 [290]	16,500 [4.8]	3.62	8,300 [2.4]	2.22	8.2
24	TZHSL-2417 (RCSL-H*2417A*) ①	24,200 [7.1]	17,050 [5.0]	7,150 [2.1]	10.90	13.00	74	800 [378]	22,800 [6.7]	3.50	13,600 [4.0]	2.24	7.7
	TCFL-H*2414A*	24,200 [7.1]	17,050 [5.0]	7,150 [2.1]	10.75	13.00	74	800 [378]	22,800 [6.7]	3.44	13,800 [4.0]	2.22	7.7
	TCFL-H*2417A*	24,200 [7.1]	17,050 [5.0]	7,150 [2.1]	10.75	13.00	74	800 [378]	22,800 [6.7]	3.44	13,800 [4.0]	2.22	7.7
	TZHLL-2417 (RCSL-H*2417A*)	24,800 [7.3]	17,650 [5.2]	7,150 [2.1]	12.00	14.00	74	800 [378]	22,200 [6.5]	3.72	13,100 [3.8]	2.36	8.2
	TZHKL-2417 (RCSL-H*2417A*)	24,800 [7.3]	17,850 [5.2]	6,950 [2.0]	12.00	14.00	74	840 [396]	22,400 [6.6]	3.64	13,200 [3.9]	2.32	8.2
30	TZHSL-3017 (RCSL-H*3617A*) ①	28,600 [8.4]	21,450 [6.3]	7,150 [2.1]	11.40	13.00	73	1,000 [472]	27,800 [8.1]	3.74	15,600 [4.6]	2.52	7.7
	TCFL-H*3617A*	28,200 [8.3]	21,050 [6.2]	7,150 [2.1]	11.00	13.00	73	1,000 [472]	27,400 [8.0]	3.58	15,000 [4.4]	2.36	7.7
	TCFL-H*3617A*	28,200 [8.3]	21,050 [6.2]	7,150 [2.1]	11.00	13.00	73	1,000 [472]	27,400 [8.0]	3.58	15,000 [4.4]	2.36	7.7
	TZHLL-3617 (RCSL-H*3617A*)	28,800 [8.4]	21,650 [6.3]	7,150 [2.1]	12.00	14.00	73	1,000 [472]	26,800 [7.9]	3.78	14,400 [4.2]	2.44	8.2
	TZHKL-3617 (RCSL-H*3617A*)	28,800 [8.4]	21,650 [6.3]	7,150 [2.1]	12.00	14.00	73	1,000 [472]	26,800 [7.9]	3.78	14,400 [4.2]	2.44	8.2

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 [126.5°C] DB/67°F [119.5°C] WB Indoor Air 95°F [135.0°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-3	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. 1/10/2008	TZHSL-3617 (RCSL-H*3617A*) ①	34,400 [10.1]	25,350 [7.4]	9,050 [2.7]	11.10	13.00	75	1,200 [566]	34,600 [10.1]	3.44	22,600 [6.6]	2.40	7.7	
	36	TCFL-H*3617A*	33,800 [9.9]	24,750 [7.3]	9,050 [2.7]	10.95	13.00	75	1,075 [507]	34,400 [10.1]	3.46	22,400 [6.6]	2.40	7.7
		TCFL-H*3617A*	33,800 [9.9]	24,750 [7.3]	9,050 [2.7]	10.95	13.00	75	1,075 [507]	34,400 [10.1]	3.46	22,400 [6.6]	2.40	7.7
		TZHLL-3617 (RCSL-H*3617A*)	35,000 [10.3]	25,950 [7.6]	9,050 [2.7]	12.00	14.00	75	1,200 [566]	34,000 [10.0]	3.58	22,000 [6.4]	2.46	8.2
		TZHKL-3617 (RCSL-H*3617A*)	35,000 [10.3]	26,150 [7.7]	8,850 [2.6]	12.00	14.00	75	1,225 [578]	34,000 [10.0]	3.56	22,000 [6.4]	2.46	8.2
42	TZHSL-4221 (RCSL-H*4821A*) ①	41,000 [12.0]	30,350 [8.9]	10,650 [3.1]	11.05	13.00	77	1,400 [661]	41,500 [12.2]	3.60	27,600 [8.1]	2.54	7.7	
		TCFL-H*4821A*	41,000 [12.0]	30,350 [8.9]	10,650 [3.1]	10.90	13.00	77	1,400 [661]	41,500 [12.2]	3.56	27,800 [8.1]	2.54	7.7
		TCFL-H*4824A*	41,000 [12.0]	30,350 [8.9]	10,650 [3.1]	10.90	13.00	77	1,400 [661]	41,500 [12.2]	3.56	27,800 [8.1]	2.54	7.7
		TZHLL-4821 (RCSL-H*4821A*)	42,000 [12.3]	31,350 [9.2]	10,650 [3.1]	12.00	14.00	77	1,400 [661]	41,000 [12.0]	3.74	27,000 [7.9]	2.66	8.2
		TZHKL-4821 (RCSL-H*4821A*)	41,500 [12.2]	30,900 [9.1]	10,600 [3.1]	12.00	14.00	77	1,400 [661]	41,000 [12.0]	3.74	27,000 [7.9]	2.66	8.2
48	TZHSL-4821 (TCFL-H*4821A*) ①	46,500 [13.6]	33,950 [9.9]	12,550 [3.7]	10.90	13.00	77	1,600 [755]	46,000 [13.5]	3.54	30,600 [9.0]	2.60	7.7	
		TCFL-H*4821A*	46,000 [13.5]	33,450 [9.8]	12,550 [3.7]	10.85	13.00	77	1,475 [696]	46,000 [13.5]	3.58	30,400 [8.9]	2.58	7.7
		TCFL-H*4824A*	46,000 [13.5]	33,450 [9.8]	12,550 [3.7]	10.85	13.00	77	1,475 [696]	46,000 [13.5]	3.58	30,400 [8.9]	2.58	7.7
		TZHLL-4821 (RCSL-H*4821A*)	47,500 [13.9]	34,950 [10.2]	12,550 [3.7]	12.00	14.00	77	1,600 [755]	45,500 [13.3]	3.72	29,800 [8.7]	2.68	8.2
		TZHKL-4821 (RCSL-H*4821A*)	47,000 [13.8]	35,350 [10.4]	11,650 [3.4]	11.45	13.50	77	1,575 [743]	45,500 [13.3]	3.68	30,000 [8.8]	2.64	8.2
		TZHLL-4824 (RCSL-H*4824A*)	47,000 [13.8]	34,450 [10.1]	12,550 [3.7]	11.70	14.00	77	1,625 [767]	44,000 [12.9]	4.00	28,600 [8.4]	2.90	8.2
		TZHSL-4824 (RCSL-H*4824A*)	46,500 [13.6]	33,950 [9.9]	12,550 [3.7]	10.90	13.00	77	1,600 [755]	46,000 [13.5]	3.54	30,600 [9.0]	2.60	7.7
60	TZHLL-6024 (RCSL-H*6024A*)	58,500 [17.1]	41,750 [12.2]	16,750 [4.9]	10.90	13.00	77	1,875 [885]	56,000 [16.4]	3.64	34,400 [10.1]	2.50	7.7	
		TZHKL-6024 (RCSL-H*6024A*)	58,000 [17.0]	41,500 [12.2]	16,500 [4.8]	10.95	13.00	77	1,800 [849]	55,500 [16.3]	3.70	34,200 [10.0]	2.54	7.7

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

[ ] Designates Metric Conversions

# Electrical and Physical Data

Model Number TZPL-3	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 <sup>2</sup> ]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
Rev. 1/10/2008													
18	1-60-208/230	9/9	48	0.6	12/12	15/15	20/20	11.06 [1.03]	1	1700 [802]	91 [2580]	144 [65.3]	152 [68.9]
24	1-60-208/230	12.8/12.8	58.3	0.6	17/17	20/20	25/25	11.06 [1.03]	1	2370 [1118]	91 [2580]	130 [59.0]	138 [62.6]
30	1-60-208/230	14.1/14.1	73	0.8	19/19	25/25	30/30	13.72 [1.27]	1	2800 [1321]	101 [2863]	198 [89.8]	208 [94.3]
36	1-60-208/230	17/17	96.7	1.2	23/23	30/30	35/35	16.39 [1.52]	1	3575 [1687]	109 [3090]	215 [97.5]	227 [103.0]
42	1-60-208/230	21.8/21.8	112	1.2	29/29	35/35	50/50	21.85 [2.03]	1	3575 [1687]	150 [4252]	202 [91.6]	214 [97.1]
48	1-60-208/230	21.8/21.8	117	1.2	29/29	35/35	50/50	21.85 [2.03]	1	3575 [1687]	141 [3997]	205 [93.0]	217 [98.4]
60	1-60-208/230	26.3/26.3	134	1.2	35/35	45/45	60/60	21.85 [2.03]	1	3575 [1687]	228 [6464]	209 [94.8]	221 [100.2]

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.**

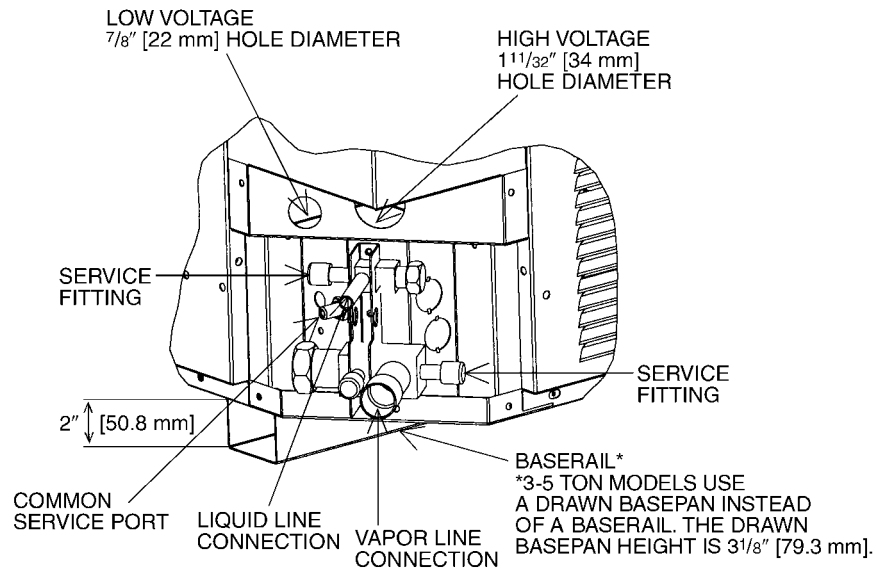
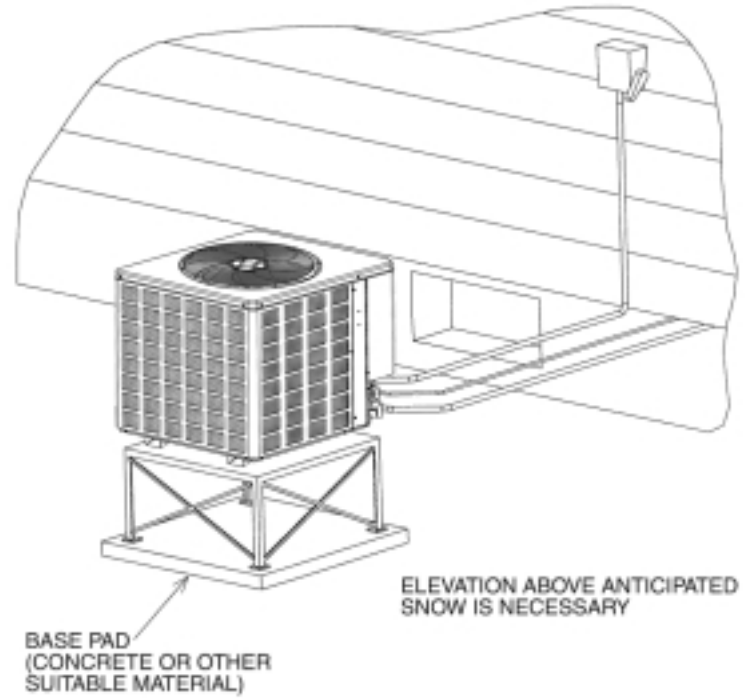
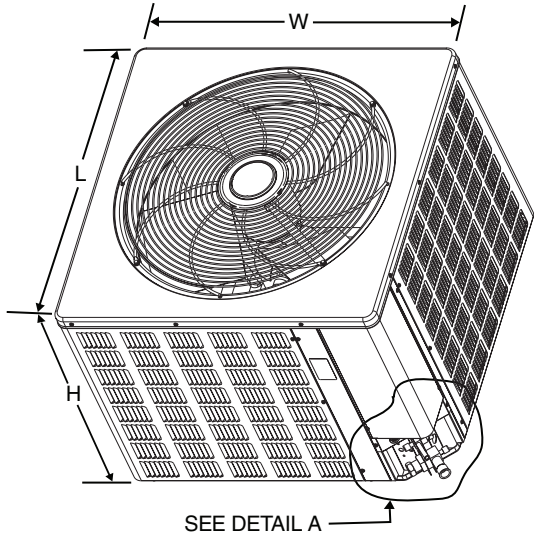
## GENERAL TERMS OF LIMITED WARRANTY

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 Thermal Zone® Warranty Card.**

Condenser Coil leaks caused by  
 factory defects .....Five (5) Years  
 Compressor .....Five (5) Years  
 Any Other Part.....Five (5) Years

# Unit Dimensions



**DETAIL A**

Model Number TZPL-3	Height "H" (Inches) [mm]	Length "L" (Inches) [mm]	Width "W" (Inches) [mm]
18, 24	26 <sup>1</sup> / <sub>4</sub> [666.75]	23 <sup>5</sup> / <sub>8</sub> [600.07]	23 <sup>5</sup> / <sub>8</sub> [600.07]
30	26 <sup>1</sup> / <sub>4</sub> [666.75]	27 <sup>5</sup> / <sub>8</sub> [701.67]	27 <sup>5</sup> / <sub>8</sub> [701.67]
36	27 <sup>3</sup> / <sub>8</sub> [695.33]	31 <sup>5</sup> / <sub>8</sub> [803.27]	31 <sup>5</sup> / <sub>8</sub> [803.27]
42, 48, 60	35 <sup>3</sup> / <sub>8</sub> [898.53]	31 <sup>5</sup> / <sub>8</sub> [803.27]	31 <sup>5</sup> / <sub>8</sub> [803.27]

[ ] 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]								
1½ 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]
2½ 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]
3½ 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	1½ Ton	2 Ton	2½ Ton	3 Ton	3½ 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 —	
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 —	
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 —	0.97 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 —	0.94 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

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**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, the right is reserved to make changes without notice."*