## Featuring R-407C Refrigerant







# 13 SEER CONDENSING UNITS

### **Features**

- Painted louvered steel cabinet.
- Easily accessible control box.
- Condenser coils constructed with copper tubing and enhanced aluminum fins.
- Grille/Motor mount for quiet fan operation.
- Filter Drier (not installed)

## **Applications**

Outdoor condensing unit designed for ground level or rooftop installations. These units offer comfort and dependability for single, multi-family and light commercial applications.

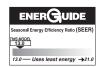
#### **Accessories**

- Low Pressure Control (RXAC-A03)
- High Pressure Control (RXAB-A03)
- Low Ambient Control (RXAD-A04)
- Compressor Time Delay Control
- Crankcase Heater
- Sound Enclosure









## **Model Number Identification**

ΤZ В <u>3</u> <u>18</u> 2 Α Α DESIGN SERIES THERMAL A = AIR CONDITIONER 3 = 13 SEER NOMINAL COOLING CAPACITY VOLTAGE **CABINET** ZONE® 18 = 18,000 BTU/HR [5.28 kW] 24 = 24,000 BTU/HR [7.03 kW] 30 = 30,000 BTU/HR [8.79 kW] 2 = 208-230 SINGLE PHASE A = FULL METAL JACKET B = 1ST DESIGN 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 @ AHRI Standard Conditions—Cooling

Model N	lumbers		Sound	Indoor				
Outdoor Unit TZAB	Indoor Coil and/or Air Handler	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	EER	SEER	Rating dB	CFM [L/s]
318-2A	TCFA-H*2417	18,200 [5.33]	13,550 [3.97]	4,650 [1.36]	11.30	13.00	74	650 [306]
324-2A	TCFA-H*2417	24,000 [7.03]	17,400 [5.10]	6,600 [1.93]	11.25	13.00	76	775 [365]
330-2A	TCFA-H*3617	28,800 [8.44]	20,750 [6.08]	8,050 [2.36]	11.25	13.00	76	950 [448]
336-2A	TCFA-H*4821	35,600 [10.43]	24,850 [7.28]	10,750 [3.15]	11.10	13.00	76	1075 [507]
342-2A	TCFA-H*4821	41,600 [12.19]	29,850 [8.75]	11,750 [3.44]	11.05	13.00	77	1350 [637]
348-2A	TCFA-H*4821	44,200 [12.95]	32,100 [9.41]	12,100 [3.55]	10.95	13.00	77	1525 [720]
360-2A	TCFA-H*6024	53,000 [15.53]	36,950 [10.83]	16,050 [4.70]	11.45	13.00	77	1525 [720]

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

<sup>[ ]</sup> Designates Metric Conversions

# **Electrical and Physical Data**

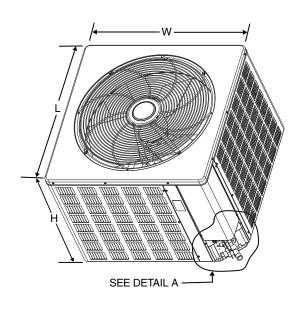
			ELEC.		PHYSICAL								
Model	Phase Frequency (HZ) Voltage (Volts)	Compressor		Fan Motor	Minimum	Fuse or HACR		Ou	tdoor (	Coil	Refrig. Per	Weight	
Number TZAB		Rated Load Locked Roto		Amperes Ar	Circuit		Breaker			· · · · · · · · · · · · · · · · · · ·	Circuit		
IZAD		Amperes (RLA)	Amperes (LRA)		Ampacity Amperes	Minimum Amperes	Maximum Amperes	Face Area Sq. Ft. [m²]	No. Rows	CFM [L/s]	Oz. [g]	Net Lbs. [kg]	Shipping Lbs. [kg]
318-2A	1-60-208-230	8.3/8.3	40.3	0.8	11/11	15/15	15/15	13.72 [1.27]	1	2370 [1118]	107 [3033]	136 [61.59]	146 [66.1]
324-2A	1-60-208-230	12.0/12.0	56	0.8	16/16	20/20	20/20	16.39 [1.52]	1	2905 [1371]	109 [3090]	152 [68.8]	162 [73.3]
330-2A	1-60-208-230	15.0/15.0	68	0.8	21/21	25/25	30/30	16.39 [1.52]	1	2805 [1324]	116 [3288]	155 [70.2]	165 [74.7]
336-2A	1-60-208-230	17.1/17.1	87	0.8	24/24	25/25	30/30	21.85 [2.03]	1	2995 [1413]	140 [3968]	177 [80.4]	188 [85.4]
342-2A	1-60-208-230	21.4/21.4	112	1.2	30/30	35/35	40/40	21.85 [2.03]	2	3360 [1586]	269 [7626]	225 [102]	247 [112]
348-2A	1-60-208-230	22.1/22.1	104	1.2	31/31	35/35	40/40	21.85 [2.03]	2	3360 [1586]	283 [8022]	229 [103.8]	251 [113.8]
360-2A	1-60-208-230	24.3/24.3	137	1.2	34/34	35/35	50/50	21.85 [2.03]	2	3360 [1586]	286 [8107]	231 [104.6]	253 [114.6]

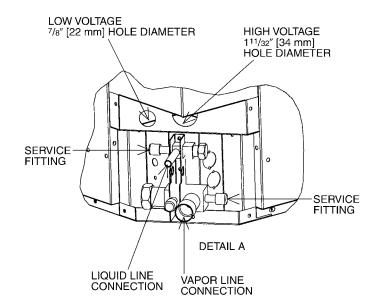
NOTE: Refrigerant charge shown is for 25 feet of standard line set. Units are shipped with a nitrogen holding charge.

## **Unit Dimensions**

Model No.	Unit Dimensions									
TZAB-3	Width "W" Inches	Length "L" Inches	Height "H" Inches							
18	275/8 [702]	275/8 [702]	24 <sup>1</sup> /4 [616]							
24, 30	315/8 [803]	315/8 [803]	27 <sup>15</sup> /16 [710]							
36, 42, 48, 60	315/8 [803]	315/8 [803]	35 <sup>15</sup> /16 [913]							

#### [ ] Designates Metric Conversions





## **Condensing Unit Refrigerant Line Size Information**

	Liquid Line Sizing													
		Line Size (Inch O.D.) [mm]	Liquid Line Size – Outdoor Unit Above Indoor Coil					Liquid Line Size – Outdoor Unit Below Indoor Coil						
System	Line Size		Total Equivalent Length—Feet [m]							Total Equivalent Length—Feet [m]				
Capacity	Connection (Inch I.D.)		25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]
				Minimum Vertical Separation—Feet [m] Maximum Vertical Separation—Feet [m]										
		1/4* [6.35]	0	0	5 [1.52]	18 [5.49]	31 [9.45]	44 [13.41]	21 [6.40]	8 [2.44]	N/A	N/A	N/A	N/A
11/2 Ton	3/8"	5/16 [7.94]	0	0	0	0	0	0	25 [7.62]	27 [8.23]	24 [7.32]	21 [6.40]	17 [5.18]	14 [4.27]
		3/8 [9.53]	0	0	0	0	0	0	25 [7.62]	40 [12.19]	39 [11.89]	38 [11.58]	37 [11.28]	35 [10.67]
		1/4* [6.35]	0	5 [1.52]	27 [8.23]	48 [14.63]	69 [21.03]	91 [27.74]	16 [4.88]	N/A	N/A	N/A	N/A	N/A
2 Ton	3/8"	5/16 [7.94]	0	0	0	0	0	0	25 [7.62]	26 [7.92]	21 [6.40]	15 [4.57]	10 [3.05]	5 [1.52]
		3/8 [9.53]	0	0	0	0	0	0	25 [7.62]	38 [11.58]	36 [10.97]	35 [10.67]	33 [10.06]	31 [9.45]
		1/4* [6.35]	0	34 [10.36]	69 [21.03]	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
21/2 Ton	3/8"	5/16 [7.94]	0	0	0	0	9 [2.74]	18 [5.49]	25 [7.62]	17 [5.18]	8 [2.44]	0	N/A	N/A
		3/8 [9.53]	0	0	0	0	0	0	25 [7.62]	37 [11.28]	34 [10.36]	31 [9.45]	29 [8.84]	26 [7.92]
3 Ton	3/8"	5/16* [7.94]	0	0	0	6 [1.83]	17 [5.18]	28 [8.53]	25 [7.62]	15 [4.57]	4 [1.22]	N/A	N/A	N/A
3 1011	3/0	3/8 [9.53]	0	0	0	0	0	0	25 [7.62]	30 [9.14]	26 [7.92]	23 [7.01]	19 [5.79]	16 [4.88]
31/2 Ton	3/8"	5/16* [7.94]	0	0	0	13 [3.96]	28 [8.53]	43 [13.11]	25 [7.62]	17 [5.18]	2 [0.61]	N/A	N/A	N/A
31/2 1011	3/0	3/8 [9.53]	0	0	0	0	0	0	25 [7.62]	37 [11.28]	32 [9.75]	28 [8.53]	23 [7.01]	18 [5.49]
4 Ton	3/8"	3/8* [9.53]	0	0	0	0	0	0	25 [7.62]	33 [10.06]	27 [8.23]	21 [6.40]	15 [4.57]	9 [2.74]
	3/8	1/2 [12.57]	0	0	0	0	0	0	25 [7.62]	43 [13.11]	42 [12.80]	40 [12.19]	39 [11.89]	38 [11.58]
5 Ton	3/8"	3/8* [9.53]	0	0	0	0	0	9 [2.74]	25 [7.62]	25 [7.62]	17 [5.18]	8 [2.44]	0	N/A
	3/0	1/2 [12.57]	0	0	0	0	0	0	25 [7.62]	39 [11.89]	37 [11.28]	36 [10.97]	34 [10.36]	32 [9.75]

NOTES: \*Standard line size

N/A = Application not recommended.

	Suction Line Length/Size versus Capacity Multiplier										
Unit Siz	Unit Size		2 Ton	21/2 Ton	3 Ton	31/2 Ton	4 Ton	5 Ton			
Suction Line Connection Size			<sup>3</sup> /4" [19.05 mm] I.D.		<sup>7</sup> /8" [22.23 mm] I.D.						
Suction Line Run— Feet [m]		3/4"	[15.88 mm] O.D. O [19.05 mm] O.D. St [22.23 mm] O.D. O	d.*		nm] O.D. Opt. nm] O.D. Std.* nm] O.D. Std.	7/8" [22.23 mm] O.D. Opt. 11/8" [28.58 mm] O.D. Std.* 13/8" [34.92 mm] O.D. Std.				
25' [7.62]	Optional	0.99	0.99	0.98	0.99	0.99	0.99	0.99			
	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	Optional	N/A	1.00	1.00	N/A	1.00	N/A	N/A			
50' [15.24]	Optional	0.97	0.96	0.96	0.98	0.97	0.98	0.97			
	Standard	0.99	0.99	0.98	0.99	0.98	0.99	0.99			
	Optional	N/A	0.99	0.99	N/A	1.00	N/A	N/A			
100' [30.48]	Optional	0.94	0.92	0.94	0.95	0.93	0.95	0.95			
	Standard	0.96	0.96	0.96	0.96	0.96	0.98	0.98			
	Optional	N/A	0.97	0.97	N/A	0.98	N/A	N/A			
150' [45.72]	Optional	0.90	0.89	0.92	0.93	0.92	0.93	0.93			
	Standard	0.93	0.93	0.93	0.94	0.94	0.96	0.96			
	Optional	N/A	0.95	0.95	N/A	0.96	N/A	N/A			

NOTES: \*Standard line size.

N/A = Line size not recommended due to inadequate oil return.

#### [ ] 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 period 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.

Parts Five (5) Year

# **NOTES**

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# **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.